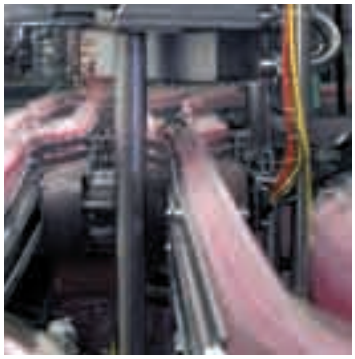


aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

Global Pneumatics

A complete range of pneumatic system components

Parker

Home

Need something ?

Using the Technical Catalogue CD

If you already have Adobe Acrobat 4.0
Insert the CD into your PC
Click on Parker Pneumatic PDF and the CD will run.
On the opening page are displayed the options available.

On the opening page are displayed the options available.

1. **Search.** You may search by Part Number, Name or Product type.
2. **Getting Started.** This displays a guide to Adobe Acrobat 4.0.
3. **View Bookshelf.** Simple to use navigation, click on the product type and the overview of all products in that type will open. Click on the product you require and the Technical Catalogue will be displayed
4. **Exit**
5. **Contact us.** Lists the main Sales Offices around Europe with Telephone and Fax numbers

Using the Technical Catalogue CD,
If you do not have Adobe Acrobat 4.0.

We recommend viewing this CD in Adobe Acrobat 4.0.
If you do not have Adobe Acrobat 4.0 it is available free on the CD for you to install. You will need to un-install older versions of Adobe Acrobat prior to installing version 4.0. Insert the CD into your PC
Click on Parker Pneumatic
PDF and the CD will run.

WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.
This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met. The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

SALE CONDITIONS

The items described in this document are available for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. Any sale contract entered into by Parker will be governed by the provisions stated in Parker's standard terms and conditions of sale (copy available upon request).

About Parker Hannifin Corporation

Parker Hannifin is a leading global motion-control company dedicated to delivering premier customer service.

A Fortune 500 corporation listed on the New York Stock Exchange (PH), our components and systems comprise over 1,400 product lines that control motion in some 1,000 industrial and aerospace markets.

Parker is the only manufacturer to offer its customers a choice of hydraulic, pneumatic, and electromechanical motion-control solutions. Our Company has the largest distribution network in its field, with over 7,500 distributors serving nearly 400,000 customers worldwide.

Parker's Charter

To be a leading worldwide manufacturer of components and systems for the builders and users of durable goods. More specifically, we will design, market and manufacture products controlling motion, flow and pressure. We will achieve profitable growth through premier customer service.

Product Information

Customers seeking product information, the location of a nearby distributor, or repair services will receive prompt attention by calling the Parker Product Information Centre. The Centre can be called toll free from France, Germany, Austria, Switzerland or the United Kingdom. You will be answered by a Parker employee in your own language. Call Freephone: 00800 27 27 5374 (00800 C PARKER).

The Aerospace Group
is a leader in the development, design, manufacture and servicing of control systems and components for aerospace and related high-technology markets, while achieving growth through premier customer service.

The Climate & Industrial Controls Group
designs, manufactures and markets system-control and fluid-handling components and systems to refrigeration, air-conditioning and industrial customers worldwide.

The Fluid Connectors Group
designs, manufactures and markets rigid and flexible connectors, and associated products used in pneumatic and fluid systems.

The Seal Group
designs, manufactures and distributes industrial and commercial sealing devices and related products by providing superior quality and total customer satisfaction.

The Hydraulics Group
designs, produces and markets a full spectrum of hydraulic components and systems to builders and users of industrial and mobile machinery and equipment.

The Filtration Group
designs, manufactures and markets quality filtration and clarification products, providing customers with the best value, quality, technical support, and global availability.

The Automation Group
is a leading supplier of pneumatic and electromechanical components and systems to automation customers worldwide.

The Instrumentation Group
is a global leader in the design, manufacture and distribution of high-quality critical flow components for worldwide process instrumentation, ultra-high-purity, medical and analytical applications.

Global Manufacture for Local Supply

Stocked Products

Many items in this catalogue are marked as 'Stocked Product', this means they are stocked for immediate delivery in the European Distribution Centre (EDC).

The 'stocked products' are the most popular items from each range and will be suitable for the vast majority of applications, however the Technical Catalogue CD located inside the front cover of this catalogue contains all the technical catalogues for the complete Parker Pneumatic range in pdf, with full details of models and options not shown on the following pages.

Part numbers not identified, as 'stocked products' are available but lead times vary and we advise that you consult the local sales office for specific details. Sales office telephone and fax numbers are located on the back cover.

Parker's Official Distributor Network

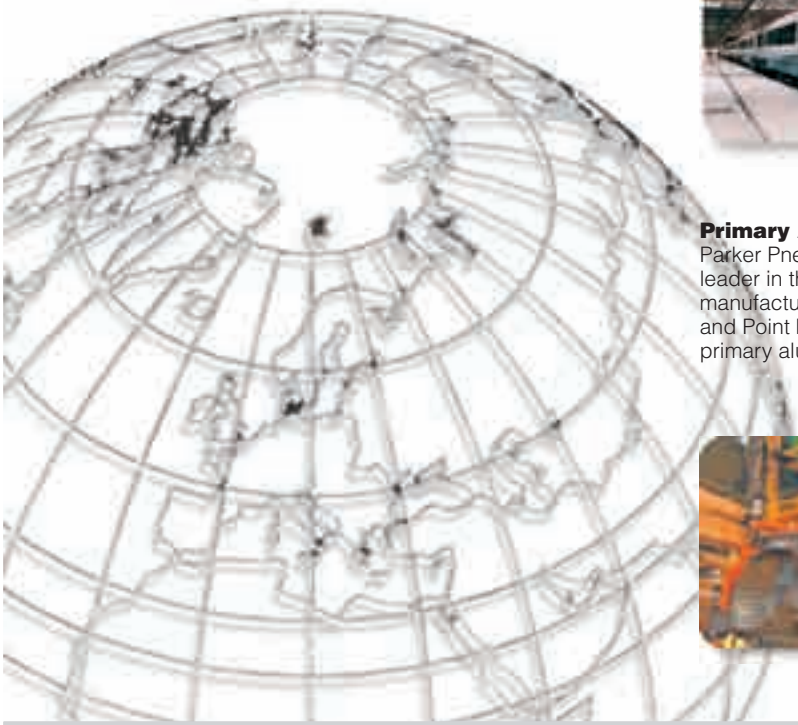
Our official distributors are always located close to the heart of industry, ensuring Parker products are available for rapid delivery and are supported by first class technical backup.

Parker has the largest distribution network in its field, with over 7500 distributors serving more than 350,000 customers worldwide.

From Standard Products to Custom Solutions

At Parker Pneumatic we recognise that future success will only be achieved by providing innovative, quality products coupled with '*Premier Customer Service*'. We maintain and develop our leading edge expertise by concentrating on a number of market segments, such as road transport, the food industry and aluminium smelters. We have developed pneumatic components that withstand abrasive aluminium oxide, desert heat, Nordic cold and strong detergents in washdown applications. Our knowledge and experience comes as standard in all our products.

Parker's objective is to keep one step ahead by developing tomorrow's solutions today.



Road Transport
From Nordic forests to suburban estates, Parker Pneumatic products are keeping all sorts of road vehicles... moving, lifting, loading and rolling.

Dairy Technology
Parker products are contributing to the future of dairy technology, delivering state of the art solutions to major manufacturers through out the world.

Food Process
Parker Pneumatic equips machines in all stages of food production from meat and cheese processing to carcass handling; supplying a wide selection of customised products.

Packaging Industry
Manufacturers of automated packaging machines are selecting Parker products, for reliable performance combined with world wide availability.

Rail Industry
From door control and actuation to braking systems and automatic coupling, you'll find innovative and reliable Parker Pneumatic components and systems.

Primary Aluminium
Parker Pneumatic is the world leader in the design and manufacture of Crustbreaker and Point Feed cylinders to the primary aluminium industry.

Automotive Industry
Major automotive manufacturers throughout the world are benefiting from Parker's global supply and local technical support, for a wide range of pneumatic components and systems.

Index of Products

Actuators

	Series	Page No.
Cartridge Cylinders	**P1G**	27
Pancake Cylinders	**C05**	29
Thrust Cylinders	**C0D/C0P**	31
Compact Cylinders	**P1J**	34
Short Build Cylinders	**P1M**	39
Profile Cylinders	**P1K**	48
Mini ISO 6432	**P1A**	55
Stainless Steel Cylinders ISO 6432	**P1S**	61
Stainless Steel Cylinders ISO 6431	**P1S**	66
P1D Cylinders	**P1D**	74
Rod Guidance Modules		85
VDMA Cylinders	**P1E**	88
Compact Cylinders	**P5T**	90
Precision Slide Tables	**P5SP**	95
Global Sensors		96
Magnetic Rodless Cylinders	**P1Z**	98
Rodless Cylinders	**P1R**	99
Rotary Actuators	**RA**	100
Rotary Actuators	**PRO - PRN**	102
Stainless Steel Air Motors	**P1V-S**	104
Large Air Motors	**P1V-A**	108
Hydraulic Clamp Cylinders	**VB**	109
Air Bellows	**9190**	111

Automation Actuators

Pneumatic 3D Linear Units	**3L CN**	114
Pneumatic Carrier Units	**3F AO**	115
Grippers	**P5GC**	116
Shock Adsorbers	**MC-SC**	117

Vacuum Products

Vacuum Pads		126
Vacuum Ejectors		128
Vacuum Sensors and Accessories		130

Valves and Logic Processing

Moduflex Valve System®	**P2M**	138
Interface	**PS1**	158
Compact Valves - Stackable	**PVL**	161
Interface	**Interface 2000**	165
Compact Stackable G1/8	**PVL-B10**	167
Compact Stackable G1/4	**PVL-C10**	170
ISO 15407-1 and VDMA 24563	**Compact Isomax**	176
ISO 5599/1	**Isomax**	178
ISO 15407-1 / 2 and ISO 5599/1 / 2	**Isys**	181
Metal Spool	**Viking Xtreme**	215
High performance Industrial	**B Series**	227
ADEX Directional Control Valves	**A05/A12**	243
Manual & Mechanically Operated Valves	**B43/53**	249
Control and Process Duty	**PXB**	263
Push Button Valves	**VA13/15-H/K**	266
Limit Switches	**PXC**	270
Logic Processing		272
Airline Isolator Valves	**VE22-83**	277
Two Hand Control Units	**PXP**	279

Air Preparation and Control Accessories

	Series	Page No.
Moduflex FRLs	**40/60/80 Series**	282
Electronic Pressure Regulators	**EPDN / MPT40**	301
Prep-Air II Miniature FRLs		304
1" FRL Series	**P3N**	306
Lockout Valves	**LV**	307
Standard Series FRLs		309
Stainless Steel FRLs		312
Precision Pressure Regulators		315
Cylinder Controls		317
Shuttle Valves and Quick Exhaust Valves		322

Fittings and Airline Accessories

Exhaust Silencers		326
Exhaust Air Contioning		327
Ball Valves and Sliding Sleeve Valves		328
Quick Acting Couplers		329
Push-in Fittings	**Prestolok 1, 2, Micro**	331
Flexible Tubing		336
Blowguns	**600**	337

Home

Linear Actuators

P1G Cylinders

Ø6, 10 & 16mm Bore sizes
Non-lube operation
Corrosion resistant design
Integral mounting thread
Compact construction
Single acting as standard.

Catalogue No. **PDE2571TCUK-ul**

See page 27 - 28

C05 Short Stroke Cylinders

Ø8 - 63mm bore sizes
Short stroke providing high clamping force
Compact dimensions for confined spaces
Single and double acting
Simple installation and mounting.

Catalogue No. **PDE2560TCUK-ul**

See page 29 - 30

P1J Compact Cylinders

Ø12 - 63mm
Stroke lengths up to 100mm
Single and double acting
Magnetic piston as standard
Compact dimensions for confined spaces
Complete range of mountings & sensors.

Catalogue No. **PDE2561TCUK-ul**

See page 34 - 38

P1M Short Build Cylinders

Ø12 - 100mm
Stroke lengths up to 500mm
Single and double acting
Magnetic piston as standard
Flexible porting options
Complete range of mountings & sensors.

Catalogue No. **PDE2562TCUK-ul**

See page 39 - 47

P5T Compact Cylinders

Ø12 - 100mm bore size
Complete cylinder with integral guidance
Plain bearing or twin recirculating bearings
End stop cushioning as standard
Magnetic as standard
Flexible porting and mounting
Standard strokes 10 - 200mm

Catalogue No. **PDE2557TCUK-ul**

See page 90 - 94

P1K Cylinders

Ø32 - 125mm Bore sizes
Single and double acting
Clean line profile design
Designed for dry piston rod operation
End stroke buffers for long service life
Position sensing versions.

Catalogue No. **PDE2577TCUK-ul**

See page 48 - 54

Home

P1A Mini ISO Cylinders

Ø10 - 25mm Bore size to ISO 6432
Magnetic piston as standard
End stroke buffers for long service life
Adjustable cushioning Ø16 - 25mm Bore sizes
Complete range of mountings & sensors
Piston rod guidance units available.

Catalogue No. **PDE2564TCUK-ul**

See page 55 - 60

7112 All Round Cylinders

Ø32, 40 & 50mm Bore size
Non-lube operation
All round clean line design
Magnetic piston as standard
Adjustable cushioning
Complete range of mountings & sensors.

Catalogue No. **2114GB-ca**

P1S Stainless Steel Cylinders

All stainless steel design
Mini ISO 6432 Ø10 - 25mm Bore sizes
Stanrdard ISO 6431 Ø32 - 125mm Bore sizes
Magnetic piston as standard
Clean design ideal for washdown
Adjustable end cushioning.
Initial lubrication with food grade grease.

Catalogue No. **PDE2535TCUK-ul**

See page 61 - 73

P1D ISO/VDMA Cylinders

Ø32 - 125mm Bore size ISO/VDMA standard
Double acting with adjustable end cushioning
Magnetic piston as standard
Flexible porting option
Non-lube operation
'Clean' version for food industry
Complete range of sensors and mountings

Catalogue No. **PDE2570TCUK-ul**

See page 74 - 84

Rod Guidance for ISO Cylinders

Ø32 - 100mm Bore size
Highly accurate guidance
Twin recirculating or plain bearing versions
High torque loading capacity

Catalogue No. **PDE2580TCUK-ul**

See page 85 - 87

P1E VDMA 24562 Cylinders

Ø160 - 200mm Bore sizes VDMA standard
Double acting with adjustable end cushioning
Magnetic piston as standard
Non-lube operation
Tie rod construction
Complete range of mountings & sensors.

Catalogue No. **PDE2580TCUK-ul**

See page 88 - 89

Linear Actuators

C41 ISO 6431 Cylinders

Ø160 - 200mm Bore sizes ISO standard
Heavy duty tie rod design
Magnetic piston as standard
Tandem cylinders
Thru-rod cylinders
3 and 4 position cylinders

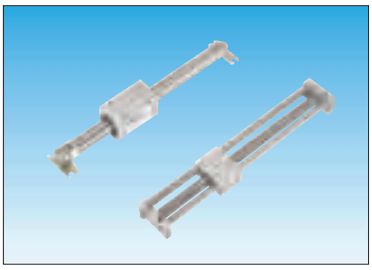
Catalogue No. **PDE2581TCUK-ul**

P1R Rodless Cylinders

Ø16 - 63mm Bore sizes
Stroke up to 7000mm
Built-in guidance
Integral magnets for sensors
Extended or twin-piston versions.
Complete range of mountings & sensors.

Catalogue No. **See CD**

See page 99



Magnetic Rodless cylinders

Ø16, 20 and 32mm strokes up to 2000 mm
Reduced dimensions
Easy mounting
Long life cycle
Mechanical protection
Position control

Catalogue No **: PDE2522TCUK-po**

See page 98

Air Bellows

10 sizes Ø70 - 660mm
Strokes from 45 - 430mm
High thrust frictionless movement
Single, double or triple convolutions
Maintenance free.

Catalogue No. **PDE2576TCUK-ul**

See page 111 - 112

C0D - C0P Thrust Cylinders

Short stroke high thrust design
Compact dimensions
Diaphragm or piston versions
Single or double acting.

Catalogue No. **PDE2563TCUK-ul**

See page 31 - 33

Air Clamp Cylinders

Range of imperial sizes
Single acting
Ideal for mechanical clamping
Compact design

Catalogue No. **PDE2521TCUK-ca**

Home

Hydrochecks

Range of imperial sizes
Gives smooth control feeds
Strokes up to 450mm

Catalogue No. **See CD**

P1V-S Air Motors

All stainless steel design
From 0.120kW - 1.2kW power
For arduous applications
Non-lube intermittent operation
External seals viton
Ideal for food industry applications.

Catalogue No. **PDE2554TCUK-ul**

CE Ex

See page 104 - 107

P1V-A Large Air Motors

Designed for arduous applications.
Wide range of optional gears
Wide speed and torque range
1.6kW, 2.6kW, 3.6kW

Catalogue No. **PDE2555TCUK-ul**

See page 108

P1V-B Large Vane Air Motors

Power 5,1 kW, 9 kW and 18 kW
For the very heavy applications
Free speed from 400 up to 300 rpm
High torque from 57 to 160 Nm by max ouput power

Catalogue No. **PDE2541TCUK-ul**

P1V-M Robust Vane Air Motors

Power 0,2 kW, 0,4 kW and 0,6 kW
Patented way for simple change of vanes
Free speeds from 28 up to 10000 rpm
Torque from 0,38 Nm up to 380NM by max output power
Standard equipped with flange mounting
Footmountings as accesories

Catalogue No. **PDE2539TCUK-ul**

P1V-P Radial Piston Air Motors

P1V-P piston motor
Power 0,73 kW, 0,125kW and 0,228kW
Low speed and high torque
Available as base and brake motors
Free speed from 2200 down to 7,4 rpm
High torque from 0,637Nm up to 500Nm
No wear parts necessary if supplied with oil mist

Catalogue No **: PDE2538TCUK-ul**

Home

Rotary Actuators

RA Rotary Actuators Rack & Pinion Type

High torque
Uniform torque in both directions
Compact design
90° or 180° rotation
Output shaft with key

Catalogue No. **PDE2556TCUK-ca**

See page 100 - 101

PV Rotary Actuators - Vane Type

Double acting actuators
Single or double vane
Compact smooth design
Uniform torque in both directions
Angle adjustment and sensors available.

Catalogue No. **See CD**

PRO - PRN Rotary actuators

Compact design
Durable construction
Long maintenance-free life
High output torque/weight ratio
Wide choice of torques available (up to 247 Nm)
Range of mounting option, hydro-cushioning and position sensors

Catalogue No **: PDE2502TCUK-ca**

See page 102 - 103

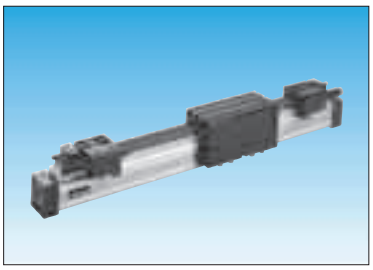
Home

3LCN Linear units

3 Basic sizes with strokes up to 800 mm
Loads up to 28 kg
Precision linear movement
Exceptional rigidity
Intregrated sensors and hydraulic cushioning
Mid position stop option
Gaiter option

Catalogue No **: See CD**

See page 114



3FA Carrier units

3 Basic sizes with strokes up to 5010 mm
Exceptional rigidity
High load & torque capability
Built-in guidance
Mid position stop, brake option

Catalogue No **: See CD**

See page 115

P5SP Precision Slide Tables

4 basic sizes with strokes up to 250 mm
Exceptional rigidity
Reduced dimensions
Excellent repeatability
Easy mounting
MPS option and numerous options

Catalogue No **: See CD**

See page 60

P5K Mounting kits

Provides Automation units assembly simple
Multiple arrangements possible
Quick setting
Accurate units positioning
Easy mounting and removing
Cable chain and conduit kits

Catalogue No **: See CD**

P5G-C Robotic Grippers

4 sizes available
Parallel or angular action
Square jaw carriers
One or two magneto-inductive sensor can be mounted on all sizes to provide signal to monitor gripper opening and closing.

Catalogue No **: PDE2532TCUK-po**

See page 116

Vacuum

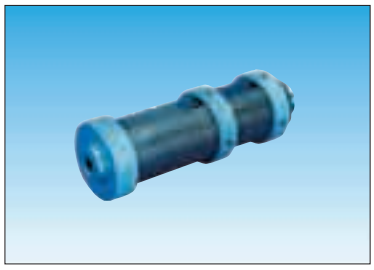
Mini vacuum generators
Compact "air saver" vacuum generators
Multi-function vacuum generators with holding
Valve and rapid release options
Wide range of suction cups
Wide range materials

Catalogue No. **PDE2507TCUK-ab**

See page 125 - 130

Home

Automation products

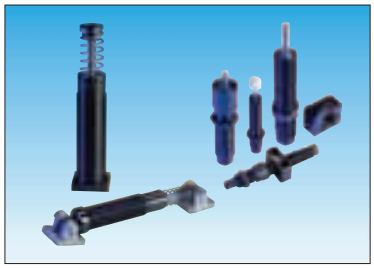


Hydraulic clamp

Single acting cylinders with built-in
hydro-pneumatic intensifier
Compact size for large forces (up to 2700 daN)
Operated using a compressed air supply,
no special installation required
Easy adjustment through a fully threaded body
Simple and rapid installation

Catalogue No **: See CD**

See page 109 - 110



MC-SC Shock aborbers

Compact and heavy duty versions
High energies absorption
Low return force
Long service life
Increases productivity
Reduces maintenance

Catalogue No **: See CD**

See page 117 - 123

P2M Moduflex Valves

High flow, compact size.
Mixable valve sizes.
Stand alone valves, modular islands with individual, multiconnector or bus connections.
Integrated selectable internal or external pilot supply and exhaust.
Optional peripheral modules.
Push-in connection.
DIN rail or block mounting.

Catalogue No. **PDE2536TCUK-CA**

See page 138 - 157

ADEX Valves

Miniature high flow body ported & manifold valves
5/2 and 5/3 configurations
Ultra fast response times
10mm & 15mm body widths
Threaded or push-in connection
Single sub-base or IEM manifolds
Low power solenoids.
Collective wiring system

Catalogue No. **PD0C20001GB01-ev**

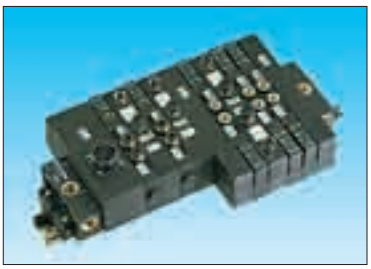
See page 243 - 248

Interface 2000

3/2 or 4/2 configuration
Push-in connections Ø4mm and Ø6mm
High performance 15mm solenoids
Building block type modules with DIN rail mounting
Electrical connection : Cable gland, Sub D25 or Industrial connector
Bus protocols: Interbus S, Profibus DP, Devicenet, ASI.

Catalogue No. **PDE2586TCUK-ev**

See page 165 - 166



PVL-B10 Valve Island

Compact lightweight, high flow valves
2 x 3/2,5/2 or 5/3 configuration
Push-in Ø6mm or G1/8 threaded connections
High performance 15mm solenoids
Stacking type modules with DIN rail mounting
Bus protocols: Interbus S, Profibus DP, Devicenet, ASI.

Catalogue No. **PDE2586TCUK-ev**

See page 167 - 169

PVL-C10 Valve Island

Compact lightweight, high flow valves
2 x 3/2,5/2 or 5/3 configuration
Push-in Ø8mm or G1/4 threaded connections
High performance 15mm solenoids
Stacking type modules with DIN rail mounting
Bus protocols: Interbus S, Profibus DP, Devicenet, ASI.

Catalogue No. **PDE2586TCUK-ev**

See page 170 - 173

PS1 Interface Valves

High speed poppet type valves
3/2 & 4/2 Electro-pneumatic modules
Push-in connections Ø4mm & Ø6mm
High performance 15mm solenoids
Building block type modules with DIN rail mounting
Built-in terminal blocks.

Catalogue No. **PD0C00027UK01ev**

See page 158 - 160

Home

Valves

PVL Inline and Stackable Valves

3 sizes: M5, G1/8 or G1/4 versions
High flow compact valves
Ultra light weight
Inline stand alone or stackable versions
Push-in or threaded connections
Low consumption solenoids.
DIN rail or block mounting.

Catalogue No. **PD0C00028UK01ev**

See page 161 - 164

B Valves

High performance industrial valves
G1/8 or G1/4 body ported
5/2 and 5/3 configurations
All metal rugged construction
Wear Compensating Seal system
IEM manifolds
Low power solenoids.

Catalogue No. **PDE2582TCUK-ca**

See page 227 - 242

P2L Viking Xtreme Valves

4 sizes: G1/8, G1/4, G3/8 and G1/2.
Wide operating temperature range
Compact design with good corrosion resistance.
Wide range of 5/2 and 5/3 versions.
High and low temperature versions available for transport applications.

Catalogue No. **PDE2569TCUK-ca**

See page 215 - 226

Isomax Valves - ISO 15407 / ISO 5599

Size 1, 2 and 3 ISO 5599-1
Size 01 and 02 (26 and 18 mm) ISO 15407-1
Ceramic technology for long live operation
From vacuum up to 12 bar applications
Internal or external pilot supply with same valves
Pressure supply possible on exhaust port

Catalogue No. **PDE2589TCUK-ca**

See page 174 - 180

ISYS Valves - ISO 15407 / ISO 5599

Size 1, 2 and 3 ISO 5599-1 / 2
Size 01 and 02 ISO 15407-1 / 2
Excellent reliability, long life in excess of 30 million operations.
Complete range, plug-in and non-plug-in
WCS Spool technology

Catalogue No. **PDE2568TCUK-ev**

See page 181 - 214

P2V Flowstar Valves - ISO 15407-1

Compact high flow design
To VDMA 24563, ISO 15407-1 standard
5/2 & 5/3 configurations
18mm & 26mm body widths
Single sub-base or manifold mounted
Air pilot and solenoid actuators
Suitable for Food Industry applications.

Catalogue No. **9127007212GB-ul**

PVD Everdure Ceramic Valves

Available in 3 sizes
4/2 Directional control valves
3/2 dump valves & 2/2 slow start valves
Stand alone or manifolds.
Built-in manual override
Ceramic slide provides extremely long life
DIN rail mounting.

Catalogue No. **See CD**

Midget Spool Valves

G1/8 body ported
Rugged die cast body
3/2 & 5/2 configurations
Stainless steel spool
Viton body seals as standard
Integral mounting holes
Manual, mechanical and automatic actuators.

Catalogue No. **See CD**

See page 249 - 262

Intermediate Spool Valves

G1/4 body ported
Rugged die cast body
3/2, 5/2 & 5/3 configurations
Stainless steel spool
Viton body seals as standard
Integral mounting holes
Manual, mechanical and automatic actuators.

Catalogue No. **See CD**

PXB - Push Buttons

Facia mounted operators
3/2 NO or NC versions
Pneumatic valves combinable with electrical switches
Modular construction
Wide choice of actuators.

Catalogue No. **PDE2587TCUK-ev**

See page 263 - 265

VA Series Heavy Duty Valves

G1/8 Body ported valves for heavy duty applications
3/2, 5/2 & 5/3 configurations
Rugged brass bodies with stainless steel spools
Integral mounting holes
Excellent corrosion resistance
Manual, mechanical & air pilot actuators
Suitable for Road transport applications.

Catalogue No. **9127003472GB-ul**

See page 266 - 269

Mini Poppet Valves

M5 body ported
3/2 NC spring return as standard
Manual and mechanical actuators
Light actuation forces.

Catalogue No. **See CD**

Home

Valves

Midget Poppet Valves

G1/8 body ported poppet design
3/2 NC spring return as standard
Manual, mechanical and air pilot actuators
Light actuation forces
Integral mounting holes.

Catalogue No. **See CD**

Heavy Duty Poppet Valves

G3/8 & G1/2 body ported
2/2 & 3/2 NC spring return as standard
High flow poppet design
Manual and mechanical and solenoid actuators
Light actuation forces
Integral mounting holes.

Catalogue No. **See CD**

PXC - Limit Switches

3/2 Nc spring return as standard
Ø4mm, M5 & G1/8 ported versions
Miniature and Compact designs
Wide choice of actuators include levers, rollers & ultra light whisker types.

Catalogue No. **See CD**

See page 270 - 271

VE Heavy Duty Isolator Valves

G1/4, G1/2 & G1 versions
2/2 or 3/2 option
Inline installation
High flow
Suitable as a remotely controlled main shut off valve.
Air or solenoid pilot

Catalogue No. **See CD**

See page 277 - 278

LV Series Lockout Valves

G1/4 - G1 Ported emergency shut-off valves
High flow G1 exhaust port
Manually operated
High visibility, rugged aluminium body
Detented spool with padlock 'lockout' facility.

Catalogue No. **See CD**

See page 307

VFQ Soft Start Dump Valves

3/2, G1/2 shut-off valve
Incorporates soft start function
Inline installation
High flow
Adjustable soft-start orifice
Suitable as a remotely controlled main shut off valve.

Catalogue No. **See CD**

Home

Ball Valves and Sliding Sleeve Valves

Ball valves

3 distinct series
Vented and non vented
Bubble tight shut-off
Positive 90 ° movement
Wide variety of fluids

Sliding sleeve valves

Linear sleeve operated
3/2 valve
Simple airline isolation
Compact
Minimum space for valve operation

Catalogue No. **PDE2566TCUK-ev**

See page 328

Logic Control

Complete range of logic processing modules
Stand alone or stackable and combinable units
Ultra fast response times
Visual indication
DIN rail mounting.

Catalogue No. **See CD**

See page 272 - 276

Two hand control units

Ergonomic design
Robust polymer or metal enclosure
Meets requirements for protection against accidental operation and tampering
Metal enclosure features a wrist rest bar which prevents illness due to repetative actions
Conforms to EN574 and EN954-1 requirements

Catalogue No. **See CD**

See page 279 - 280

Cylinder Control Accessories

Quick Exhaust and Shuttle Valves

Quick exhaust valves increase piston speeds
Extremely low operating differential
'Stiction' free operation
Shuttle valves allow two separate signals to be applied to one air pilot
Compact designs
low operating pressure.

Catalogue No. **PDE2566TCUK-ev**

See page 322 - 323

Inline Flow Regulators

Wide choice of push-in or threaded connections
Provides fine control of cylinder speeds
Panel mounting versions
Hand, screw driver or allen key adjustment.

Catalogue No. **PDE2566TCUK-ev**

See page 317 - 321

Banjo Flow Regulators

Wide choice of push-in or threaded connections
Provides fine control of cylinder speeds
Fit directly to cylinder ports
Hand, screw driver or allen key adjustment.

Catalogue No. **PDE2566TCUK-ev**

See page 317 - 321

Plug-in Sensors

Provides pneumatic or electrical signal
Reed switch or solid state sensors
Exhaust back pressure sensors
Fit directly to cylinder ports
Ø4mm push-in connection.

Catalogue No. **PDE2566TCUK-ev**

See page 317 - 321

Blockers

Threaded or push-in ports
Fit directly to cylinder ports
Wide range of sizes
Single or multifunction options.

Catalogue No. **PDE2566TCUK-ev**

See page 317 - 321

Home

Moduflex FRLs - 40 / 60 / 80 Series

Fully modular FRL series
Port sizes G1/8 & G1/4 (40mm body)
Port sizes G3/8 & G1/2 (60mm body)
Port sizes G1/2, G3/4 & G1" (80mm body)
Ultra modern design
Assemble combinations without tools
Marine grade aluminium construction

Catalogue No. **PDE2501TCUK-ca**

See page 282 - 300

Electronic Pressure Regulators

Very fast response times
Accurate output pressure
Micro parameter settings
Selectable I/O parameters
Quick, full flow exhaust.
LED display indicates output pressure
Auto enable function

Catalogue No. **PDE2534TCUK-ab**

See page 301 - 303

Prep-Air II Miniature FRLs

Compact body ported units.
Port sizes G1/8 and G1/4.
Unique deflector plate ensuring maximum water and particulate removal.
Solid control piston with lip seal for extended life.
Proportional oil delivery over a wide range of air flows.

Catalogue No. **PDE2591TCUK-ca**

See page 304 - 306

Standard Series FRLs

Individual body ported and mounted units

High flow with minimum pressure drop

Lubricator fillable under pressure

Catalogue No. **See CD**

See page 309 - 311

Stainless Steel FRLs

316 Stainless steel FRL design to withstand harsh, corrosive environments

Suitable for Marine & Offshore applications

Chemical / Petroleum and process industries

Coalescing filters are designed for removing oil and water aerosols down to 0.01µ

Catalogue No. **PDE2504TCUK-ca**

See page 312 - 314

Precision Pressure Regulators

High repeatability

High relief capacity on R220 model

High flow capacity on R230 model

Catalogue No. **PDE2542TCUK-ca**

See page 315 - 316

Home

Air Line Accessories

Push-in Fittings and Tubing

3 Distinct range of push-in pneumatic fittings
Prestolok Micro, ultra small lightweight range
Prestolok 2, thermoplastic compact range
Prestolok, nickel plated brass body range
Nylon and polyurethane tubing
Ready to use 25M & 100M boxes
For use with push-in & compression fittings.

Catalogue No. **PDE2566TCUK-ev**

See page 331 - 335

Quick Acting Couplers

4 complete ranges of pneumatic coupling
Wide range of self sealing couplers & adaptors

Schrader Original
InterCheck Series (Industrial Interchange Profile)
Mini Series
Euro Series (Industrial Interchange Profile.

Catalogue No. **2167GB-ca**

See page 329

Accessories and Silencers

M5 - G1 sizes
All metal or lightweight plastic silencers
Exhaust flow restrictor-mufflers
Excellent noise level reduction
Exhaust air reclassifiers, oil aerosol removal
Modular or stand alone units.

Catalogue No. **PDE2566TCUK-ev**

See page 326 - 327

Blow Guns

Brass and aluminium versions
6 different nozzle types

Catalogue No. **PDE2566TCUK-ev**

See page 337

Home

Actuators

Force Guide

Cylinder bore mm	Serie		Stroke	Bore mm	Piston rod mm	Area cm2	Max theoretical force in N 1.0 bar	2.0 bar	3.0 bar	4.0 bar	5.0 bar	6.0 bar	7.0 bar	8.0 bar	9.0 bar	10.0 bar
10/4	**P1A**	Double acting	+	10	4	0.8	8	15	23	31	39	**46**	54	62	69	77
	P1S		-	10	4	0.7	6	13	19	26	32	**39**	45	52	58	65
12/5	**C05**	Double acting	+	12	5	1.1	11	22	33	44	55	**67**	78	89	100	111
			-	12	5	0.9	9	18	28	37	46	**55**	64	73	83	92
12/6	**P1A**	Double acting	+	12	6	1.1	11	22	33	44	55	**67**	78	89	100	111
	P1J		-	12	6	0.8	8	17	25	33	42	**50**	58	67	75	83
	P1M															
	P1S															
16	**P1R**	Double acting	+/-	16	-	2.0	20	39	59	79	99	**118**	138	158	178	197
	P1Z	Rodless														
16/6	**P1A**	Double acting	+	16	6	2.0	20	39	59	79	99	**118**	138	158	178	197
	P1S		-	16	6	1.7	17	34	51	68	85	**102**	119	136	153	170
16/8	**P1M**	Double acting	+	16	8	2.0	20	39	59	79	99	**118**	138	158	178	197
			-	16	8	1.5	15	30	44	59	74	**89**	104	118	133	148
2 x 12/ 2x6	**P5SP**	Double acting	+	17	9	2.3	22	45	67	89	111	**134**	156	178	200	223
			-	17	9	1.6	16	32	48	64	80	**96**	112	128	144	160
20	**P1Z**	Double acting	+/-	20	-	3.1	31	62	92	123	154	**185**	216	247	277	308
		Rodless														
20/8	**P1A**	Double acting	+	20	8	3.1	31	62	92	123	154	**185**	216	247	277	308
	P1S		-	20	8	2.6	26	52	78	104	129	**155**	181	207	233	259
20/10	**C05**	Double acting	+	20	10	3.1	31	62	92	123	154	**185**	216	247	277	308
	P1J		-	20	10	2.4	23	46	69	92	116	**139**	162	185	208	231
	P1M															
	P5T															
2 x 16/ 2x8	**P5SP**	Double acting	+	23	12	4.2	41	82	122	163	204	**245**	285	326	367	408
			-	23	12	3.0	30	59	89	119	148	**178**	208	237	267	297
25	**P1R**	Double acting	+/-	25	-	4.9	48	96	144	193	241	**289**	337	385	433	482
		Rodless														
25/10	**P1A**	Double acting	+	25	10	4.9	48	96	144	193	241	**289**	337	385	433	482
	P1J		-	25	10	4.1	40	81	121	162	202	**243**	283	324	364	405
	P1M															
	P1S															
	P5T															
2 x 20/ 2x10	**P5SP**	Double acting	+	29	14	6.6	65	130	194	259	324	**389**	454	518	583	648
			-	29	14	5.1	50	99	149	199	249	**298**	348	398	447	497
32	**P1R**	Double acting	+/-	32	-	8.0	79	158	237	316	394	**473**	552	631	710	789
	P1Z	Rodless														
32/12	**C05**	Double acting	+	32	12	8.0	79	158	237	316	394	**473**	552	631	710	789
	P1D		-	32	12	6.9	68	136	203	271	339	**407**	475	542	610	678
	P1J															
	P1M															
	P1S															
32/16	**P5T**	Double acting	+	32	16	8.0	79	158	237	316	394	**473**	552	631	710	789
			-	32	16	6.0	59	118	178	237	296	**355**	414	473	533	592
2 x 25/ 2x12	**P5SP**	Double acting	+	36	17	10.2	100	200	300	399	499	**599**	699	799	899	999
			-	36	17	7.9	78	155	233	310	388	**466**	543	621	698	776
40	**P1R**	Double acting	+/-	40	-	12.6	123	247	370	493	616	**740**	863	986	1109	1233
		Rodless														

Home

Cylinder bore mm	Serie		Stroke	Bore mm	Piston rod mm	Area cm2	Max theoretical force in N 1.0 bar	2.0 bar	3.0 bar	4.0 bar	5.0 bar	6.0 bar	7.0 bar	8.0 bar	9.0 bar	10.0 bar
40/12	**P1J**	Double acting	+	40	12	12.6	123	247	370	493	616	**740**	863	986	1109	1233
			-	40	12	11.4	112	224	337	449	561	**673**	785	897	1010	1122
40/16	**P1M**	Double acting	+	40	16	12.6	123	247	370	493	616	**740**	863	986	1109	1233
			-	40	16	10.6	104	207	311	414	518	**621**	725	828	932	1036
50	**P1R**	Double acting Rodless	+/-	50	-	19.6	193	385	578	770	963	**1156**	1348	1541	1734	1926
50/16	**C05**	Double acting	+	50	16	19.6	193	385	578	770	963	**1156**	1348	1541	1734	1926
	P1J		-	50	16	17.6	173	346	519	692	865	**1037**	1210	1383	1556	1729
50/20	**P1D**	Double acting	+	50	20	19.6	193	385	578	770	963	**1156**	1348	1541	1734	1926
	P1M		-	50	20	16.5	162	324	485	647	809	**971**	1133	1295	1456	1618
	P1S															
	P5T															
63	**P1R**	Double acting Rodless	+/-	63	-	31.2	306	612	917	1223	1529	**1835**	2141	2446	2752	3058
63/16	**C05**	Double acting	+	63	16	31.2	306	612	917	1223	1529	**1835**	2141	2446	2752	3058
	P1J		-	63	16	29.2	286	572	858	1144	1430	**1717**	2003	2289	2575	2861
63/20	**P1D**	Double acting	+	63	20	31.2	306	612	917	1223	1529	**1835**	2141	2446	2752	3058
	P1M		-	63	20	28.0	275	550	825	1100	1375	**1650**	1925	2200	2475	2750
	P1S															
	P5T															
80/25	**P1D**	Double acting	+	80	25	50.3	493	986	1479	1972	2466	**2959**	3452	3945	4438	4931
	P1M		-	80	25	45.4	445	890	1335	1780	2225	**2670**	3115	3560	4005	4450
	P1S															
	P5T															
84/20	**C0D300**	Double acting	+	84	20	55.4	544	1087	1631	2175	2718	**3262**	3806	4349	4893	5436
			-	84	20	52.3	513	1026	1539	2051	2564	**3077**	3590	4103	4616	5128
100/25	**P1D**	Double acting	+	100	25	78.5	770	1541	2311	3082	3852	**4623**	5393	6164	6934	7705
	P1M		-	100	25	73.6	722	1445	2167	2889	3612	**4334**	5056	5779	6501	7223
	P1S															
	P5T															
114/20	**C0D600**	Double acting	+	114	20	101.9	1000	2000	3000	4000	5000	**6000**	7001	8001	9001	10001
			-	114	20	98.8	969	1939	2908	3877	4846	**5816**	6785	7754	8724	9693
125/32	**P1D**	Double acting	+	125	32	122.7	1204	2408	3612	4815	6019	**7223**	8427	9631	10835	12039
	P1S		-	125	32	114.7	1125	2250	3375	4500	5625	**6750**	7875	9000	10125	11250
161/25	**C0D1200**	Double acting	+	161	25	203.9	2000	4000	6000	8000	10000	**12000**	14000	16000	18000	20000
			-	161	25	199.0	1952	3904	5856	7808	9759	**11711**	13663	15615	17567	19519
160/40	**P1E**	Double acting	+	160	40	201.1	1972	3945	5917	7890	9862	**11835**	13807	15779	17752	19724
200/40	**P1E**	Double acting	+	200	40	314.2	3082	6164	9246	12328	15410	**18491**	21573	24655	27737	30819
250/28	**C0P2500**	Double acting	+	250	28	490.9	4815	9631	14446	19262	24077	**28893**	33708	38524	43339	48155
			-	250	28	484.7	4755	9510	14265	19020	23776	**28531**	33286	38041	42796	47551

+ = Outward stroke
- = Return stroke

Note!
Select a theoretical force 50-100% larger than the force required

The Force Guide is only for double acting cylinders, please look into the technical catalogue for every individual sigle acting cylinder to see the forces.

Note! For all single acting cylinders you have to reduce the force in the table with the spring force to get the theoretical force.
The spring force is not calculted to create any work, it is only to take the piston rod into the cylinder

Home

Options Guide

Cylinder Series	Description	Bore in mm	Double acting	Single acting cylinders with spring return for retract stroke (- stroke)	Single acting cylinders with spring return for advance stroke (+ stroke)	Low temp version	High temp version	Thru piston rod	Guided	Magnetic piston	Bumpers	Adjustable cushioning	Flexible porting	Clean	Rod lock	Built on valve	Page Number
			Max stroke in mm														
P1G	Cartridge cylinder	6, 10, 16		15													27
C05	Pancake cylinder	8, 12, 20, 32, 50, 63	25	10													29
C0P	Thrust cylinder	59, 81, 233	80	10													31
C0D	Thrust cylinder	81, 114, 161	50	50													31
P1J	Compact cylinder	12, 20, 25, 32, 40, 50, 63	100	50					■	■							34
P1M	Short build cylinder	12, 16, 20, 25, 32, 40, 50, 63, 80, 100	700	25	25		■	■		■	■		■				39
P1K	Profile cylinder	32,40,50, 63, 80, 100, 125	2800	■				■			■			■			48
P5T	Compact cylinder with guidence	16, 20, 25, 32, 40, 50, 63, 80, 100	200					■		■	■		■				90
P5SP	Precision slide table	2x12, 2x16, 2x20, 2x25	250						■	■		■	■				95
P1A	Mini ISO 6432	10, 12, 16, 20, 25	1000	80	80		■	■	■	■	■	■					55
P1S	Stainless steel cylinders ISO 6432	10, 12, 16, 20, 25	1000	80	80	■	■	■		■	■	■					61
P1S	Stainless steel cylinders ISO 6431	32, 40, 50, 63, 80, 100, 125	1000			■	■	■		■		■					66
P1D	ISO/VDMA cylinder	32, 40, 50, 63, 80, 100, 125	2800				■	■		■		■	■	■	■	■	74
P1E	ISO/VDMA cylinder	160, 200	2500				■	■		■		■					88
P1Z	Magnetic rodless cylinder	16, 20, 32	1000						■	■	■	■					98
P1R	Rodless cylinder	16, 25, 32, 40, 50, 63	3000							■		■	■				99

Home

Single acting, spring return cylinders ideal for applications where space is at a premium. The threaded body makes installation simple.

- Non - lube operation
- Corrosion resistant design
- Integral mounting
- Compact construction
- Single acting as standard

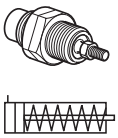
Operating information

Working pressure	2 - 7 bar
working temperature	-20 °C to +80 °C

Supplied complete with 1 rod nut and 2 fixing nuts

For technical information see CD

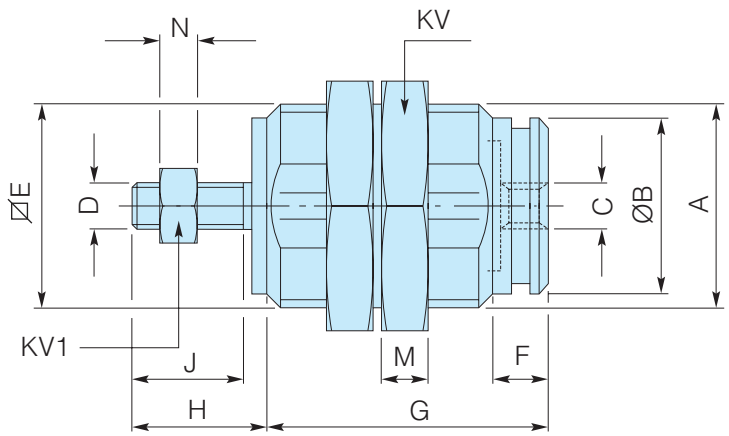
Single acting push type

Symbol	Cyl. bore mm	Rod thread mm	Body thread mm	Spring force Max N	Min N	Port size	Stroke mm	**Order code**
	6	M3	M10x1,0	3,8	1,2	M5	5	**P1G-S006SS-0005**
							10	**P1G-S006SS-0010**
							15	**P1G-S006SS-0015**
	10	M4	M15x1,5	7,3	2,7	M5	5	**P1G-S010SS-0005**
							10	**P1G-S010SS-0010**
							15	**P1G-S010SS-0015**
	16	M5	M22x1,5	6,6	3,3	M5	5	**P1G-S016SS-0005**
							10	**P1G-S016SS-0010**
							15	**P1G-S016SS-0015**

The spring forces in single acting cylinders are sufficient to return the piston without load.

Indicates stocked product.

Dimensions (mm)



Cylinder bore	A	ØB	C	D	E	F	G			H	J	KV	KV1	M	N
							5[1]	10[1]	15[1]						
	mm	mm	mm	mm mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
6	M10x1	8,5	M5	M3x0,5	9	5	19,5	26,5	33,5	8	8	14	5,5	3	2,4
10	M15x1,5	12	M5	M4x0,7	14	7	23	29.5	36.5	10,5	10.5	19	7	4	3,2
16	M22x1,5	19	M5	M5x0,8	20	6	27	32	37	13	12	27	8	5	4

1) Stroke length in mm

Caution
Avoid side loads on the piston rod
Avoid loading the piston rod during retraction
Do not operate the cylinders with excessive inertia.

Compact short stroke cylinders available in single as well as double acting versions. Ideally suited for clamping and locking operations. The compact design with mounting holes through the cylinder body makes the unit easy to install in confined spaces. The main body is machined from one piece thus providing an easy to clean unit. Fitted with stainless steel piston rod as standard for corrosion resistance.

- Short stroke cylinders providing high clamping forces
- Compact dimensions for confined spaces
- Single and double acting versions
- Simple installation and mounting

Operating information

Working pressure: Max 10 bar
Working temperature: -20°C to +70°C

Prelubricated, further lubrication is not normally necessary. If additional lubrication is introduced it must be continued.

For technical information see CD

C05 Double acting cylinders

Cyl. bore mm	Stroke mm	Port	Order code
12	10	M5	**C05-12-5-10**
20	10	M5	**C05-20-10-10**
32	10	G1/8	**C05-32-12-10**
32	25	G1/8	**C05-32-12-25**
50	25	G1/4	**C05-50-16-25**
63	25	G1/4	**C05-63-16-25**

C05S Single acting cylinders

Cyl. bore mm	Stroke mm	Port	Order code
8	4	M5	**C05S-8-4-4**
12	4	M5	**C05S-12-5-4**
20	4	G1/8	**C05S-20-10-4**
32	5	G1/8	**C05S-32-12-5**
50	10	G1/4	**C05S-50-16-10**
63	10	G1/4	**C05S-63-16-10**

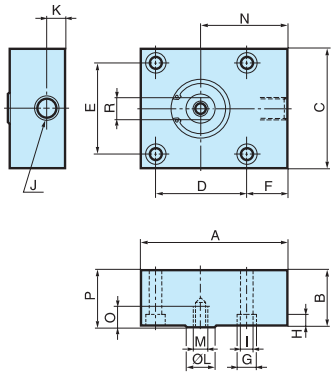
The spring forces in single acting cylinders are sufficient to return the piston without load.

Indicates stocked product.

Home

Dimensions (mm), basic cylinder

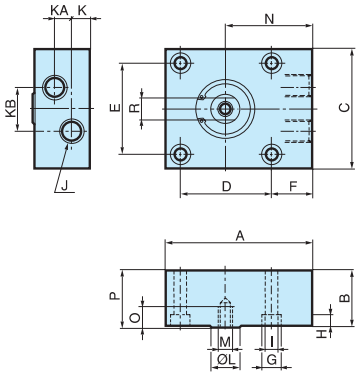
Single acting



Type	A	B	C	D	E	F	G	H	I	J	K	KA	KB	L
C05S-8-4-4	20	16	18	0*	11	5,5	6	3,4	3,4	M5	5,0	-	-	4
C05S-12-5-4	25	16	20	0*	13	7,0	6	3,4	3,4	M5	6,0	-	-	5
C05S-20-10-4	40	20	32	0*	20	9,0	10	5,0	5,5	G1/8	9,5	-	-	10
C05S-32-12-5	55	26	45	0*	32	14,0	10	5,0	5,5	G1/8	9,5	-	-	12
C05S-50-16-10	80	30	65	50	50	22,5	11	6,5	6,5	G1/4	11,0	-	-	16
C05S-63-16-10	90	35	80	62	62	19,0	15	9,0	9,0	G1/4	11,0	-	-	16

Type	M	N	O	P	R
C05S-8-4-4	-	13,5	-	17	-
C05S-12-5-4	-	15,0	-	17	-
C05S-20-10-4	M5	24,0	8	21	-
C05S-32-12-5	M6	32,0	12	27	9
C05S-50-16-10	M8	47,5	12	31	14
C05S-63-16-10	M8	50,0	14	36	14

Double acting



Type	A	B	C	D	E	F	G	H	I	J	K	KA	KB	L
C05-12-5-10	25	27	20	0*	13	7,0	6	3,4	3,4	M5	6,0	13,0	3	5
C05-20-10-10	40	30	32	0*	20	9,0	10	5,0	5,5	M5	6,0	16,0	6	10
C05-32-12-10	55	36	45	0*	32	14,0	10	5,0	5,5	G1/8	9,5	16,5	14	12
C05-32-12-25	55	51	45	0*	32	14,0	10	5,0	5,5	G1/8	9,5	31,5	0**	12
C05-50-16-25	80	50	65	50	50	22,5	11	6,5	6,5	G1/4	11,0	28,0	0**	16
C05-63-16-25	90	55	80	62	62	19,0	15	9,0	9,0	G1/4	11,0	33,0	0**	16

Type	M	N	O	p	R
C05-12-5-10	-	16,0	-	28	-
C05-20-10-10	M5	24,0	8	31	-
C05-32-12-10	M6	32,0	12	37	9
C05-32-12-25	M6	32,0	12	52	9
C05-50-16-25	M8	47,5	12	51	14
C05-63-16-25	M8	50,0	14	56	14

* Only two mounting holes (F).
** Connections in-line.

The thrust cylinders are linear actuators, designed for a high force to size ratio. This makes the cylinder ideal to use for clamping, riveting, punching and similar applications where a high force is required.

- Thrust cylinders provide large forces
- Compact dimensions
- C0D, diaphragm type
- C0P, piston type
- Available in single and double acting versions

Operating information

Working pressure: Max 8 bar
Working temperature: -20°C to +70°C

Stainless steel piston rod
Piston rod according to ISO 4395

Compressed air cylinders, types C0D and C0P should not be used in vertical applications without external stop.

For technical information see CD

C0D - Double acting

Force at 6 bar, N	Port size	Stroke mm	Order code
3000	G1/4	40	**C0D300-40**
6000	G1/4	50	**C0D600-50**
12000	G1/2	50	**C0D1200-50**
25000	G1/2	60	**C0P2500-60**
25000	G1/2	80	**C0P2500-80**

C0P - Single acting

Force at 6 bar, N	Spring N force Max N	Spring N force Min N	Port size	Stroke mm	Order code
1600	314	128	G1/4	50	**C0P160-50S**
1600	314	128	G1/4	80	**C0P160-80S**
3000	314	128	G1/4	50	**C0P300-50S**
3000	314	128	G1/4	80	**C0P300-80S**
3000	294	98	G1/4	40	**C0D300-40S**
6000	638	98	G1/4	50	**C0D600-50S**
12000	981	235	G1/2	50	**C0D1200-50S**
25000	2700	883	G1/2	60	**C0P2500-60S**
25000	2700	883	G1/2	100	**C0P2500-100S**

The spring forces in single acting cylinders are sufficient to return the piston rod without load

Accessories

Neck mounting nut

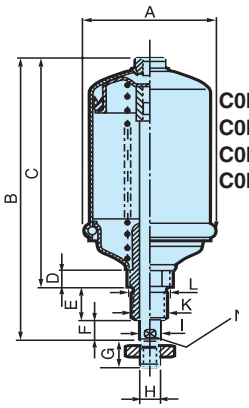
Lock nut thread	For cylinder	Order code
M24x2	C0D300	**9141100000**
M36x3	C0D600/1200	**9141100100**
M48x3	C0P2500	**9141100200**
M24x3	C0P160/300	**9141100300**

Indicates stocked product.

Piston rod nut (one nut is included)

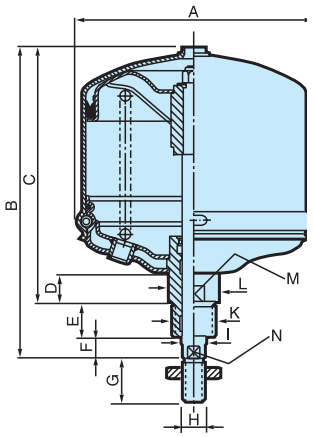
Piston rod nut thread	For cylinder	Order code
M12	C0P160/300 and C0D300	**0266211200**
M16	C0D600	**0266211400**
M20	C0D1200	**0266211600**
M24	C0P2500	**0266211800**

Dimensions (mm), piston type



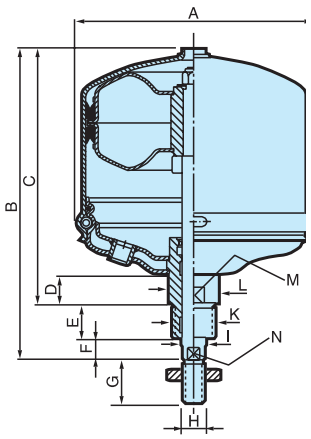
C0P160-50S
C0P160-80S
C0P300-50S
C0P300-80S

Single-acting



C0P2500-60S
C0P2500-100S

Single-acting

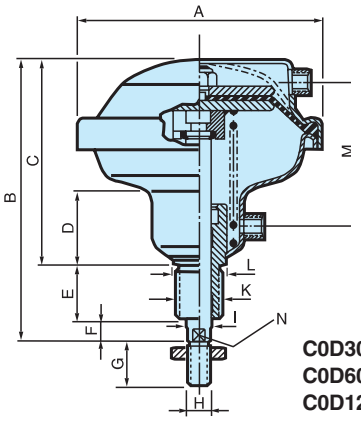


C0P2500-60
C0P2500-80

Double-acting

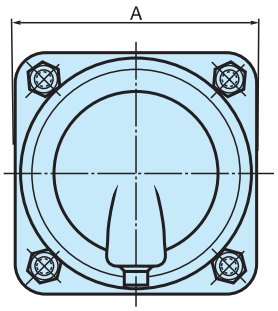
Type	Connection thread	A	B	C	D	E	F	G	H	I Ø	K	L Ø	M	N
C0P160-50S	G1/4	66	192	151	18	30	11	24	M12x1,75	14	M24x3	30	30	12
C0P160-80S	G1/4	66	222	181	18	30	11	24	M12x1,75	14	M24x3	30	30	12
C0P300-50S	G1/4	93	192	151	18	30	11	24	M12x1,75	14	M24x3	30	30	12
C0P300-80S	G1/4	93	222	181	18	30	11	24	M12x1,75	14	M24x3	30	30	12
C0P2500-60S	G1/2	268	345	285	33	40	20	48	M24x3	28	M48x3	56	50	25
C0P2500-100S	G1/2	268	385	325	33	40	20	48	M24x3	28	M48x3	56	50	25
C0P2500-60	G1/2	268	345	285	33	40	20	48	M24x3	28	M48x3	56	50	25
C0P2500-80	G1/2	268	385	325	33	40	20	48	M24x3	28	M48x3	56	50	25

Dimensions (mm), diaphragm type

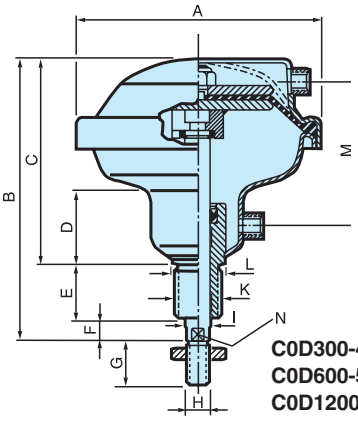


C0D300-40S
C0D600-50S
C0D1200-50S

Single-acting



C0D300-40S **C0D300-40**
C0D600-50S **C0D600-50**
C0D1200-50S **C0D1200-50**



C0D300-40
C0D600-50
C0D1200-50

Double-acting

Type	Connection thread	A	B	C	D	E	F	G	H	I Ø	K	L Ø	M	N
C0D300-40S	G1/4	150	183	131	48	38	14	24	M12x1,75	16	M24x2	30	90	13
C0D300-40	G1/4	150	183	131	48	38	14	24	M12x1,75	16	M24x2	30	90	13
C0D600-50S	G1/4	195	212	154	55	38	20	32	M16x2	20	M36x3	43	107	17
C0D600-50	G1/4	195	212	154	55	38	20	32	M16x2	20	M36x3	43	107	17
C0D1200-50S	G1/2	261	243	178	58	45	20	40	M20x2,5	25	M36x3	43	117	22
C0D1200-50	G1/2	261	243	178	58	45	20	40	M20x2,5	25	M36x3	43	117	22

Press stand for thrust cylinders

A simple press for efficient mounting and pressing can easily be built by screwing the thrust cylinders into the threaded holes in the very stable and strong steel press stand. The stand is available in two versions with different fastening threads for the cylinders.

The top plate has two different threads, and can be rotated through 180 degrees to present the correct thread for nose fitting of the cylinders.

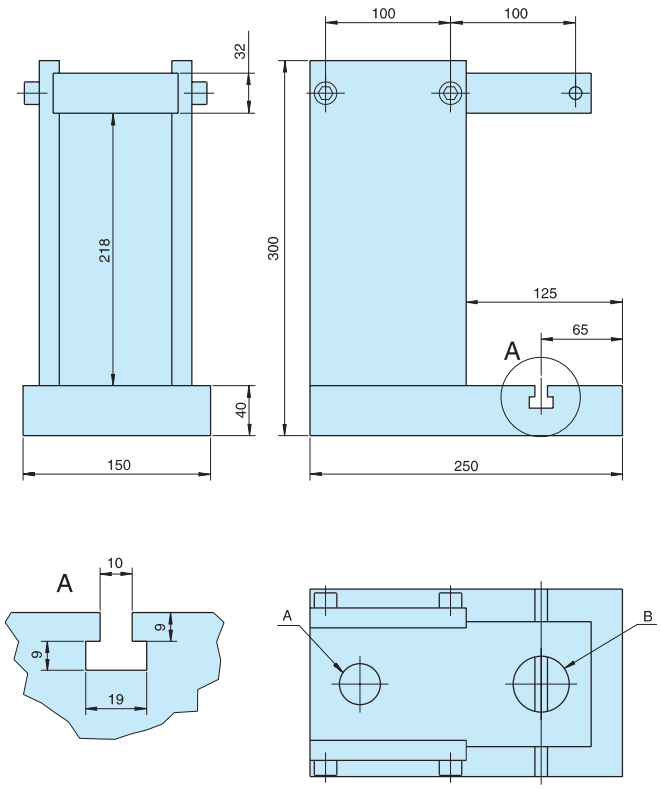
The sub-base is fitted with a T-track for easy mounting of accessories. It also has two through holes for simple and secure fitting to a work bench.

NOTE! Remember that an approved two-handed press control must be used with the cylinders and the press stand to prevent crush injuries.
We recommend the use of our type PXP two-handed press control. It is available in a number of versions, and is simple, ergonomic and safe to incorporate in the press stand. It meets the requirements of safety standards EN574 and EN954-1.

For more information, see our website:
www.parker.com/euro_pneumatic

Description	Threads A/B	Weight kg	Order No.
Press stand for C0P160 / C0P300 / C0D300	M24x2/M24x3	24	**C0P-C0D-P01**
Press stand for C0D600 / C0D1200 / C0P2500	M36x3/M48x3	24	**C0P-C0D-P02**

Dimensions



The P1J cylinder is ideal for applications where you need compact dimensions and high overall performance. The versatile P1J cylinder range provides a long trouble-free operation in a variety of applications.

- Compact and versatile
- Magnetic piston for direct fit with electronic controls
- Fit flush global sensor range with many functions
- Patent press fit end cover for short axial length
- Choose from our wide range of double-acting, single-acting and double-acting with guide rod

Operating information

Working pressure:	Max 10 bar
Permissible fluid:	Air, with or without lubrication
Standard working temperature:	-20°C to +80°C

Prelubricated, further lubrication is not normally necessary. If additional lubrication is introduced it must be continued.

For technical information see CD

Double acting - Standard seals - Female threaded piston rod

Ø12mm - (M5)

Stroke mm	Order code
10	P1J-S012DS-0010
15	P1J-S012DS-0015
20	P1J-S012DS-0020
25	P1J-S012DS-0025

Ø20mm - (M5)

Stroke mm	Order code
10	P1J-S020DS-0010
15	P1J-S020DS-0015
20	P1J-S020DS-0020
25	P1J-S020DS-0025
30	P1J-S020DS-0030
40	P1J-S020DS-0040
50	P1J-S020DS-0050

Ø25mm - (M5)

Stroke mm	Order code
10	P1J-S025DS-0010
15	P1J-S025DS-0015
20	P1J-S025DS-0020
25	P1J-S025DS-0025
30	P1J-S025DS-0030
40	P1J-S025DS-0040
50	P1J-S025DS-0050

Ø32mm - (G1/8)

Stroke mm	Order code
10	P1J-S032DS-0010
15	P1J-S032DS-0015
20	P1J-S032DS-0020
25	P1J-S032DS-0025
30	P1J-S032DS-0030
40	P1J-S032DS-0040
50	P1J-S032DS-0050
80	P1J-S032DS-0080

Ø40mm - (G1/8)

Stroke mm	Order code
10	P1J-S040DS-0010
15	P1J-S040DS-0015
20	P1J-S040DS-0020
25	P1J-S040DS-0025
30	P1J-S040DS-0030
40	P1J-S040DS-0040
50	P1J-S040DS-0050
80	P1J-S040DS-0080

Ø50mm - (G1/8)

Stroke mm	Order code
10	P1J-S050DS-0010
15	P1J-S050DS-0015
20	P1J-S050DS-0020
25	P1J-S050DS-0025
30	P1J-S050DS-0030
40	P1J-S050DS-0040
50	P1J-S050DS-0050
80	P1J-S050DS-0080

Ø63mm - (G1/8)

Stroke mm	Order code
10	P1J-S063DS-0010
15	P1J-S063DS-0015
20	P1J-S063DS-0020
25	P1J-S063DS-0025
30	P1J-S063DS-0030
40	P1J-S063DS-0040
50	P1J-S063DS-0050
80	P1J-S063DS-0080
100	P1J-S063DS-0100

Indicates stocked product.

Single acting - Standard seals - Female threaded piston rod

Ø12mm - (M5)

Stroke mm	Order code
10	P1J-S012SS-0010
15	P1J-S012SS-0015

Ø20mm - (M5)

Stroke mm	Order code
5	P1J-S020SS-0005
10	P1J-S020SS-0010
15	P1J-S020SS-0015
20	P1J-S020SS-0020
25	P1J-S020SS-0025
30	P1J-S020SS-0030

Ø25mm - (M5)

Stroke mm	Order code
5	P1J-S025SS-0005
10	P1J-S025SS-0010
15	P1J-S025SS-0015
20	P1J-S025SS-0020
25	P1J-S025SS-0025
30	P1J-S025SS-0030
40	P1J-S025SS-0040
50	P1J-S025SS-0050

Ø32mm - (G1/8)

Stroke mm	Order code
5	P1J-S032SS-0005
10	P1J-S032SS-0010
15	P1J-S032SS-0015
20	P1J-S032SS-0020
25	P1J-S032SS-0025
30	P1J-S032SS-0030
40	P1J-S032SS-0040
50	P1J-S032SS-0050

Ø40mm - (G1/8)

Stroke mm	Order code
5	P1J-S040SS-0005
10	P1J-S040SS-0010
15	P1J-S040SS-0015
20	P1J-S040SS-0020
25	P1J-S040SS-0025
30	P1J-S040SS-0030
40	P1J-S040SS-0040
50	P1J-S040SS-0050

Ø50mm - (G1/8)

Stroke mm	Order code
5	P1J-S050SS-0005
10	P1J-S050SS-0010
15	P1J-S050SS-0015
20	P1J-S050SS-0020
25	P1J-S050SS-0025
30	P1J-S050SS-0030
40	P1J-S050SS-0040
50	P1J-S050SS-0050

Ø63mm - (G1/8)

Stroke mm	Order code
5	P1J-S063SS-0005
10	P1J-S063SS-0010
15	P1J-S063SS-0015
20	P1J-S063SS-0020
25	P1J-S063SS-0025
30	P1J-S063SS-0030
40	P1J-S063SS-0040
50	P1J-S063SS-0050

The spring forces in single acting cylinders are sufficient to return the piston without load.

Double acting - Guided

These cylinders feature twin guide rods connected to the piston rod by a flange plate. These are ideal for clamping and moving applications where turning of the piston rod must be avoided or side load is present.

Double Acting - Guided

Ø20mm - (M5)

Stroke mm	Order code
5	P1J-G020DS-0005
10	P1J-G020DS-0010
15	P1J-G020DS-0015
20	P1J-G020DS-0020
25	P1J-G020DS-0025
30	P1J-G020DS-0030
40	P1J-G020DS-0040
50	P1J-G020DS-0050

Ø25mm - (M5)

Stroke mm	Order code
5	P1J-G025DS-0005
10	P1J-G025DS-0010
15	P1J-G025DS-0015
20	P1J-G025DS-0020
25	P1J-G025DS-0025
30	P1J-G025DS-0030
40	P1J-G025DS-0040
50	P1J-G025DS-0050

Ø32mm - (G1/8)

Stroke mm	Order code
5	P1J-G032DS-0005
10	P1J-G032DS-0010
15	P1J-G032DS-0015
20	P1J-G032DS-0020
25	P1J-G032DS-0025
30	P1J-G032DS-0030
40	P1J-G032DS-0040
50	P1J-G032DS-0050
80	P1J-G032DS-0080

Ø40mm - (G1/8)

Stroke mm	Order code
5	P1J-G040DS-0005
10	P1J-G040DS-0010
15	P1J-G040DS-0015
20	P1J-G040DS-0020
25	P1J-G040DS-0025
30	P1J-G040DS-0030
40	P1J-G040DS-0040
50	P1J-G040DS-0050
80	P1J-G040DS-0080

Ø50mm - (G1/8)

Stroke mm	Order code
5	P1J-G050DS-0005
10	P1J-G050DS-0010
15	P1J-G050DS-0015
20	P1J-G050DS-0020
25	P1J-G050DS-0025
30	P1J-G050DS-0030
40	P1J-G050DS-0040
50	P1J-G050DS-0050
80	P1J-G050DS-0080

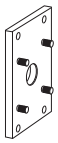
Ø63mm - (G1/8)

Stroke mm	Order code
5	P1J-G063DS-0005
10	P1J-G063DS-0010
15	P1J-G063DS-0015
20	P1J-G063DS-0020
25	P1J-G063DS-0025
30	P1J-G063DS-0030
40	P1J-G063DS-0040
50	P1J-G063DS-0050
80	P1J-G063DS-0080
100	P1J-G063DS-0100

Indicates stocked product.

Cylinder mountings

Flange MF1
Anodised aluminium



Cyl. dia.	Order code
12	**P1J-4DMB**
20	**P1J-4HMB**
25	**P1J-4JMB**
32	**P1J-4KMB**
40	**P1J-4LMB**
50	**P1J-4MMB**
63	**P1J-4NMB**

Foot bracket
Anodised aluminium

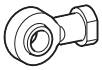
Cyl. dia.	Order code
12	**P1J-4DMF**
20	**P1J-4HMF**
25	**P1J-4JMF**
32	**P1J-4KMF**
40	**P1J-4LMF**
50	**P1J-4MMF**
63	**P1J-4NMF**

Piston rod mountings

Clevis *
Galvanised steel

Cyl. dia.	Order code
20	**P1J-4HRC**
25	**P1J-4HRC**
32	**P1A-4DRC**
40	**P1A-4DRC**
50	**P1A-4HRC**
63	**P1A-4HRC**

Swivel rod eye *
Galvanised steel



Cyl. dia.	Order code
12	**P1J-4DRS**
20	**P1J-4HRS**
25	**P1J-4HRS**
32	**P1A-4DRS**
40	**P1A-4DRS**
50	**P1A-4HRS**
63	**P1A-4HRS**

Male stud kit
Surface treated steel

Cyl. dia.	Order code
12	**P1J-6DS0**
20	**P1J-6HS0**
25	**P1J-6HS0**
32	**P1J-6KS0**
40	**P1J-6KS0**
50	**P1J-6MS0**
63	**P1J-6MS0**

* Used in connection with Male Stud Kit

Sensors

	Reed switch sensor	Solid state sensor
3m cable	**P8S-DRFLX**	**P8S-DPFLX**
8mm snap-on connector	**P8S-DRFLX**	**P8S-DPFLX**

Connecting cables with one connector

The cables have an integral snap-in female connector.

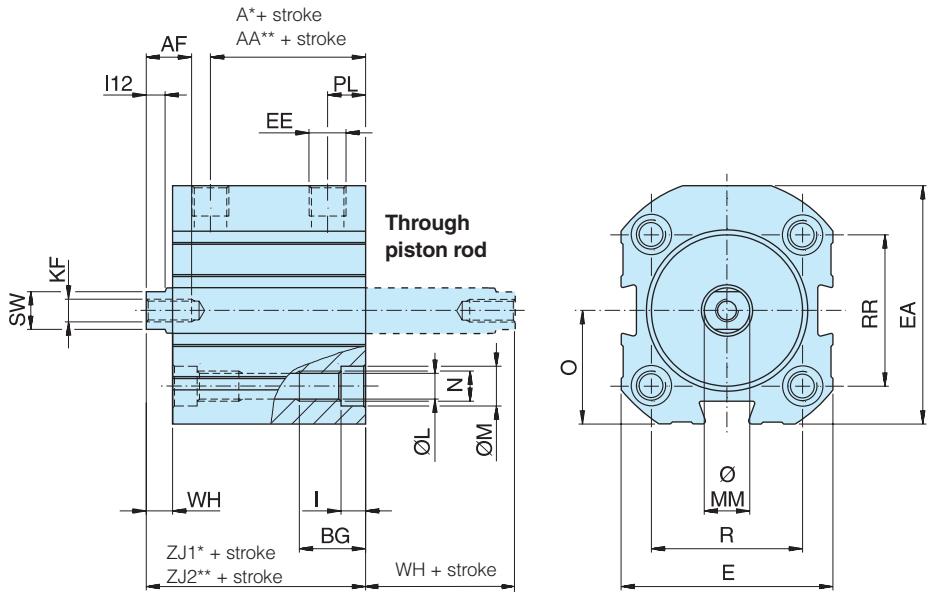
Type of cable	Cable length/connector	Weight kg	Order code
Cables for sensors, complete with female connector			
Cable, Flex PVC	3 m, 8 mm round connector	0,07	**9126344341**
Cable, Flex PVC	10 m, 8 mm round connector	0,21	**9126344342**
Cable, Super Flex PVC	3 m, 8 mm round connector	0,07	**9126344343**
Cable, Super Flex PVC	10 m, 8 mm round connector	0,21	**9126344344**
Cable, Polyuretan	3 m, 8 mm round connector	0,01	**9126344345**
Cable, Polyuretan	10 m, 8 mm round connector	0,20	**9126344346**
Cable, Polyuretan	3 m, M12 connector	0,07	**9126344348**
Cable, Polyuretan	10 m, M12 connector	0,20	**9126344349**

Indicates stocked product.

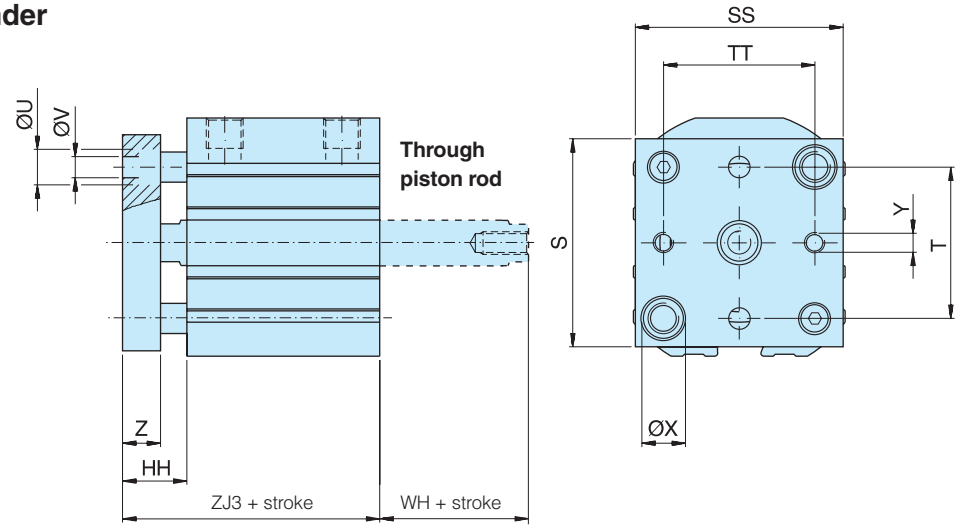
Home

Dimensions (mm),

Double and single acting cylinders



Guided cylinder



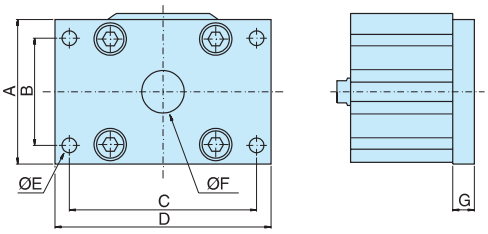
Cylinder bore	A*	AA**	AF	BG	E	EA	EE	HH	I	KF	L	I12	M	MM	N	O	PL
12	25,0	-	5	9	26	30,0	M5	-	3,5	M3	3,4	3,0	6,1	6	M4	15,0	6,5
20	31,5	-	10	15	33	43,0	M5	14,8	5,5	M5	5,3	4,5	9,2	10	M6	21,5	6,5
25	32,5	47,5	10	15	40	44,5	M5	16,0	5,5	M5	5,3	4,5	9,2	10	M6	22,5	6,5
32	32,6	50,6	12	15	46	54,0	G1/8	15,7	5,5	M6	5,3	5,0	9,2	12	M6	25,5	10,0
40	34,0	52,0	12	18	56	63,0	G1/8	17,0	6,5	M6	6,9	5,0	10,5	12	M8	30,0	10,0
50	38,5	56,5	12	18	66	73,0	G1/8	19,0	6,5	M8	6,9	5,5	10,5	16	M8	35,0	10,0
63	40,0	60,0	12	25	83	87,5	G1/8	20,0	9,0	M8	9,3	5,5	15,0	16	M10	41,5	10,0

Cylinder bore	R	RR	S	SS	SW	T	TT	U	V	WH	X	Y	Z	ZJ1*	ZJ2**	ZJ3
12	13	18	-	-	5	-	-	-	-	4,0	-	-	-	38,0	-	-
20	20	30	42	32	8	22	22	8,0	4,5	4,8	9,4	M4	10	42,8	-	52,8
25	27	27	40	39	8	28	26	8,0	4,5	6,0	9,4	M4	10	45,0	60,0	45,5
32	32	36	48	45	10	36	32	9,4	5,5	5,7	9,4	M4	10	45,5	63,5	55,5
40	40	40	55	55	10	40	40	9,4	5,5	7,0	11,5	M5	10	47,0	65,0	57,0
50	50	50	65	65	13	50	50	11,5	6,5	7,0	11,5	M6	12	53,0	71,0	65,0
63	62	62	80	80	13	62	62	14,5	9,0	8,0	14,5	M6	12	57,0	77,0	69,0

* A and ZJ1 = Double acting cylinders and single acting cylinders up to stroke length 30 mm
** AA and ZJ2 = Single acting cylinders, stroke length 31 to 50 mm
Length tolerances ±1 mm
Stroke length tolerances +1.5/0 mm

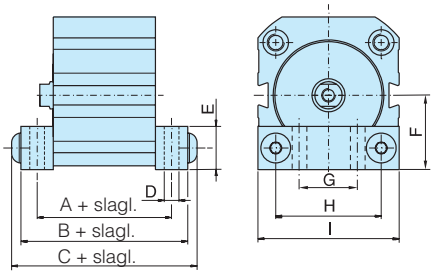
Dimensions (mm),

Flange, MF1



Cyl. Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm
12	25,4	18	38	46,0	3,6	10	4,8
20	38,0	24	50	58,0	3,6	15	6,0
25	40,0	28	54	63,5	4,6	15	6,0
32	48,0	36	66	76,0	4,6	15	6,0
40	63,5	42	78	92,0	6,6	20	9,5
50	70,0	50	90	102,0	6,6	25	9,5
63	85,0	63	110	127,0	8,6	25	12,7

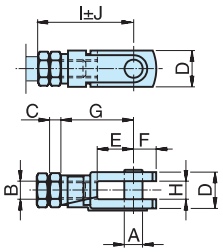
Foot bracket



Cyl. Ø mm	A1* mm	A2** mm	B1* mm	B2** mm	C1* mm	C2** mm	D mm	E mm	F mm	G mm	H mm	I mm
12	42,0	-	50,0	-	54,4	-	3,5	12,7	17,0	25	13	33
20	44,5	-	51,0	-	57,5	-	3,5	12,7	22,0	35	20	43
25	48,5	63,5	58,0	73,0	64,5	79,5	4,5	16,0	23,0	41	27	51
32	49,3	67,3	58,7	76,7	65,3	83,3	4,5	16,0	27,0	19	32	46
40	53,7	71,7	66,5	84,5	75,2	93,2	6,5	19,0	31,5	21	40	56
50	58,7	76,7	71,5	89,5	80,3	98,3	6,5	19,0	37,0	27	50	66
63	69,0	89,0	88,0	108,0	99,0	119,0	8,5	25,4	43,0	34	62	83

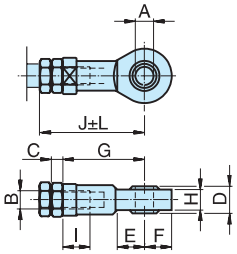
* Double acting cylinders and single acting cylinders up to stroke length 30 mm
** Single acting cylinders, stroke length 31 to 50 mm

Clevis



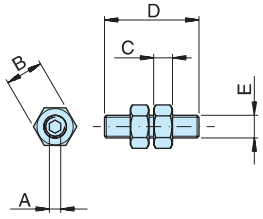
Cyl. Ø mm	A mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm
20	5	M5	2,5	10	10	6	20	5	25	2,0
25	5	M5	2,5	10	10	6	20	5	25	2,0
32	6	M6	3,0	12	12	7	24	6	30	3,0
40	6	M6	3,0	12	12	7	24	6	30	3,0
50	8	M8	5,0	16	16	10	32	8	42	3,5
63	8	M8	5,0	16	16	10	32	8	42	3,5

Swivel rod eye



Cyl. Ø mm	A mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	L mm
12	3	M3	1,6	6	10	7	21	4,5	4,5	24,2	1,0
20	5	M5	2,5	8	10	9	27	6,0	7,5	34,5	1,0
25	5	M5	2,5	8	10	9	27	6,0	7,5	34,5	1,0
32	6	M6	3,0	9	10	10	30	6,8	9,0	38,5	1,5
40	6	M6	3,0	9	10	10	30	6,8	9,0	38,5	1,5
50	8	M8	5,0	12	12	12	36	9,0	12,0	49,0	2,0
63	8	M8	5,0	12	12	12	36	9,0	12,0	49,0	2,0

Pin bolt



Cyl. Ø mm	A mm	B mm	C mm	D mm	E
12	1,5	5,5	1,6	10	M3
20	2,5	8,0	2,5	20	M5
25	2,5	8,0	2,5	20	M5
32	3,0	10,0	3,0	25	M6
40	3,0	10,0	3,0	25	M6
50	4,0	13,0	5,0	25	M8
63	4,0	13,0	5,0	25	M8

The versatile range of Short Build Cylinders, with unique porting options, integral sensor grooves and one of the shortest overall lengths on the market is suitable for a wide range of applications.

- 4 ported design - optional port configuration
- VDMA mounting centres 32mm to 100mm bore size
- Corrosion resistant design and low weight construction
- Magnetic piston as standard
- End of stroke buffers for long service life
- Lubricated with food grade grease

Operating information

Working pressure:	Max 10 bar
Permissible fluid:	Air, with or without lubrication
Standard working temperature:	-20°C to +80°C
High temperature:	-10°C to +150°C

Prelubricated, further lubrication is not normally necessary. If additional lubrication is introduced it must be continued.

For technical information see CD

Double acting - female threaded piston rod

Ø20mm - (M5)

Stroke mm	Order code
5	P1M020VDMA7G005
10	P1M020VDMA7G010
25	P1M020VDMA7G025
40	P1M020VDMA7G040
50	P1M020VDMA7G050
80	P1M020VDMA7G080
100	P1M020VDMA7G100
125	P1M020VDMA7G125
160	P1M020VDMA7G160
200	P1M020VDMA7G200

Ø25mm - (M5)

Stroke mm	Order code
5	P1M025VDMA7G005
10	P1M025VDMA7G010
25	P1M025VDMA7G025
40	P1M025VDMA7G040
50	P1M025VDMA7G050
80	P1M025VDMA7G080
100	P1M025VDMA7G100
125	P1M025VDMA7G125
160	P1M025VDMA7G160
200	P1M025VDMA7G200

Ø32mm - (G1/8)

Stroke mm	Order code
5	P1M032VDMA7G005
10	P1M032VDMA7G010
25	P1M032VDMA7G025
40	P1M032VDMA7G040
50	P1M032VDMA7G050
80	P1M032VDMA7G080
100	P1M032VDMA7G100
125	P1M032VDMA7G125
160	P1M032VDMA7G160
200	P1M032VDMA7G200
250	P1M032VDMA7G250
320	P1M032VDMA7G320

Ø40mm - (G1/8)

Stroke mm	Order code
5	P1M040VDMA7G005
10	P1M040VDMA7G010
25	P1M040VDMA7G025
40	P1M040VDMA7G040
50	P1M040VDMA7G050
80	P1M040VDMA7G080
100	P1M040VDMA7G100
125	P1M040VDMA7G125
160	P1M040VDMA7G160
200	P1M040VDMA7G200
250	P1M040VDMA7G250
320	P1M040VDMA7G320

Ø50mm - (G1/8)

Stroke mm	Order code
5	P1M050VDMA7G005
10	P1M050VDMA7G010
25	P1M050VDMA7G025
40	P1M050VDMA7G040
50	P1M050VDMA7G050
80	P1M050VDMA7G080
100	P1M050VDMA7G100
125	P1M050VDMA7G125
160	P1M050VDMA7G160
200	P1M050VDMA7G200
250	P1M050VDMA7G250
320	P1M050VDMA7G320

Ø63mm - (G1/8)

Stroke mm	Order code
5	P1M063VDMA7G005
10	P1M063VDMA7G010
25	P1M063VDMA7G025
40	P1M063VDMA7G040
50	P1M063VDMA7G050
80	P1M063VDMA7G080
100	P1M063VDMA7G100
125	P1M063VDMA7G125
160	P1M063VDMA7G160
200	P1M063VDMA7G200
250	P1M063VDMA7G250
320	P1M063VDMA7G320
400	P1M063VDMA7G400
500	P1M063VDMA7G500

Ø80mm - (G1/4)

Stroke mm	Order code
5	P1M080VDMA7G005
10	P1M080VDMA7G010
25	P1M080VDMA7G025
40	P1M080VDMA7G040
50	P1M080VDMA7G050
80	P1M080VDMA7G080
100	P1M080VDMA7G100
125	P1M080VDMA7G125
160	P1M080VDMA7G160
200	P1M080VDMA7G200
250	P1M080VDMA7G250
320	P1M080VDMA7G320
400	P1M080VDMA7G400
500	P1M080VDMA7G500

Ø100mm - (G1/4)

Stroke mm	Order code
5	P1M100VDMA7G005
10	P1M100VDMA7G010
25	P1M100VDMA7G025
40	P1M100VDMA7G040
50	P1M100VDMA7G050
80	P1M100VDMA7G080
100	P1M100VDMA7G100
125	P1M100VDMA7G125
160	P1M100VDMA7G160
200	P1M100VDMA7G200
250	P1M100VDMA7G250
320	P1M100VDMA7G320
400	P1M100VDMA7G400
500	P1M100VDMA7G500

Sensors

For sensors see page 96.

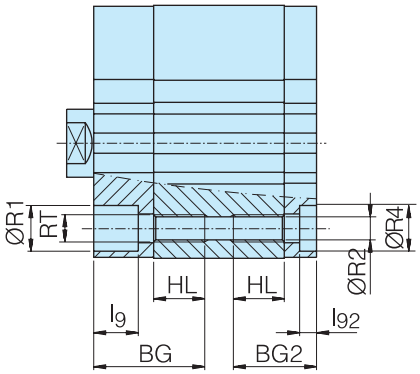
Indicates stocked product.

Home

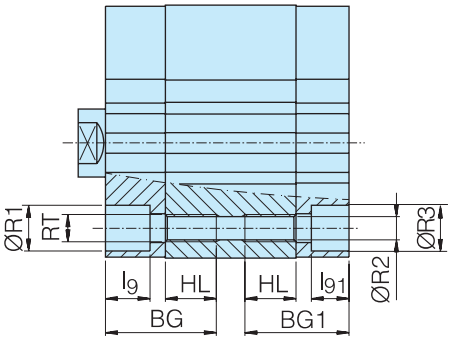
Dimensions (mm),

Double acting standard cylinders

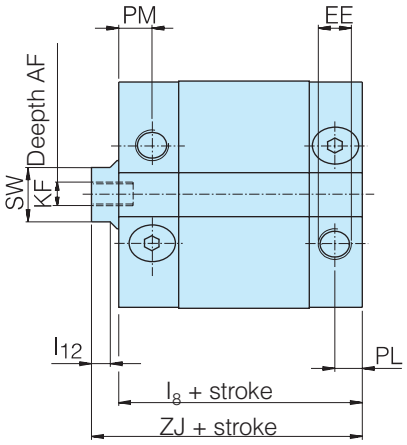
Port Position G, J



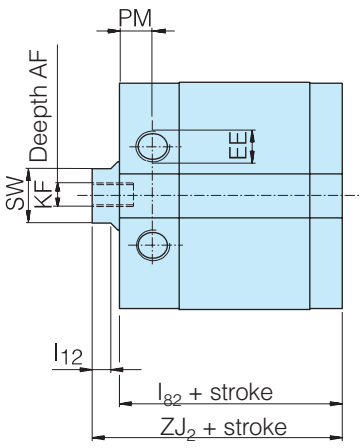
Port Position H



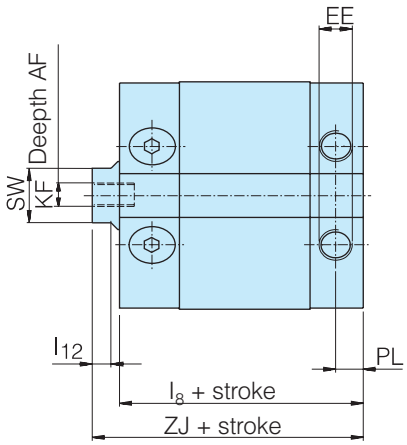
Port Position G



Port Position H



Port Position J



Cylinder designation	AF mm	BG mm	BG1 mm	BG2 mm	EE	HL mm	l8 mm	l9* mm	l12 mm	l82 mm	l91* mm	l92* mm	KF
P1M012	6	25,5	20,5	15,5	M5	12	40,0	3,5	3,0	35,0	3,5	3,5	M3
P1M016	8	26,0	21,0	15,5	M5	12	41,5	5,5	3,0	36,5	3,0	4,0	M4
P1M020	10	32,5	27,0	22,0	M5	18	42,5	10,5	4,0	37,5	5,0	4,5	M5
P1M025	12	32,5	29,0	23,0	M5	18	44,5	4,1	4,0	38,5	4,1	5,0	M6
P1M032	12	41,5	39,0	31,0	G1/8	24	49,0	4,5	5,0	41,0	4,5	4,0	M6
P1M040	12	41,5	39,5	31,0	G1/8	24	50,5	7,2	5,5	42,5	5,2	3,5	M6
P1M050	12	42,5	40,5	34,5	G1/8	25	51,0	5,2	5,5	44,5	5,2	5,0	M8
P1M063	12	43,5	40,5	35,0	G1/8	25	55,5	6,5	5,5	50,0	6,5	4,0	M8
P1M080	14	51,0	51,0	42,0	G1/4	30	63,5	9,5	6,0	54,5	9,5	8,5	M10
P1M100	16	52,0	52,0	43,5	G1/4	30	72,5	9,5	6,0	64,0	9,5	8,5	M12

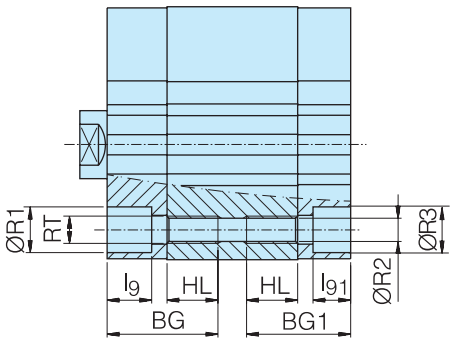
Cylinder designation	PL mm	PM mm	R1* mm	R2 mm	R3* mm	R4* mm	RT mm	SW mm	ZJ mm	ZJ2 mm
P1M012	5,0	8,0	6,0	3,5	6,0	6,0	M4	5	43,5	38,5
P1M016	5,0	9,0	7,5	3,5	6,0	6,0	M4	7	45,0	40,0
P1M020	5,0	9,0	10,5	5,0	9,0	9,0	M6	9	47,0	42,0
P1M025	7,0	9,0	10,5	5,0	9,0	9,0	M6	9	49,5	43,5
P1M032	8,0	10,5	10,5	5,0	9,5	9,5	M6	10	57,0	48,5
P1M040	7,5	9,5	10,5	5,0	10,5	10,5	M6	13	58,5	50,5
P1M050	8,0	10,0	14,5	7,0	14,5	11,0	M8	16	59,0	52,5
P1M063	8,0	11,0	10,5	7,0	10,5	10,5	M8	16	63,5	58,0
P1M080	11,5	11,5	14,0	8,5	14,0	14,0	M10	21	73,5	64,5
P1M100	12,0	12,0	14,0	8,5	14,0	14,0	M10	21	84,5	76,0

Length tolerances ±1 mm Stroke length tolerances +1,5/0 mm

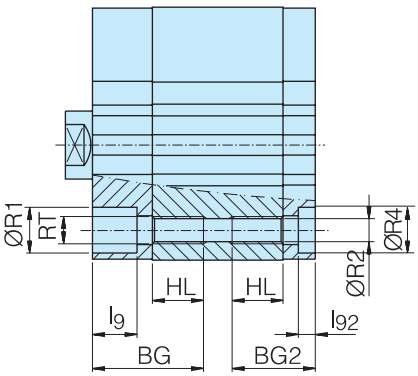
Dimensions (mm),

Single acting and High temperature variants

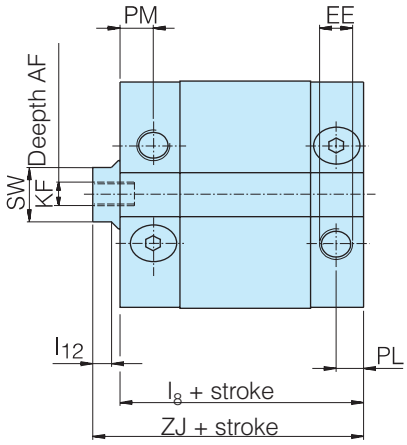
Port Position G, J



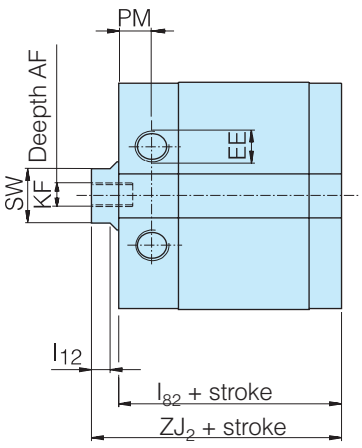
Port Position H



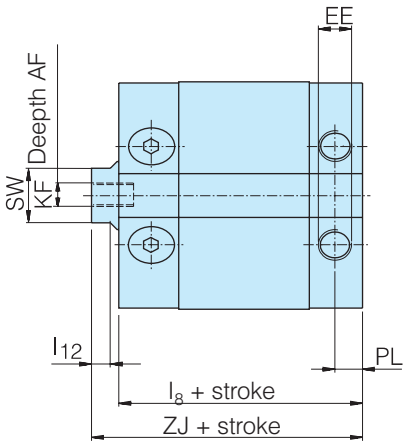
Port Position G



Port Position H



Port Position J



Cylinder designation	AF mm	BG mm	BG1 mm	BG2 mm	EE	HL mm	l8 mm	l9* mm	l12 mm	l82 mm	l91* mm	l92* mm	KF
P1M012	6	25,5	20,5	15,5	M5	12	40,0	3,5	3,0	35,0	3,5	3,5	M3
P1M016	8	26,0	21,0	15,5	M5	12	41,5	5,5	3,0	36,5	3,0	4,0	M4
P1M020	10	32,5	27,0	22,0	M5	18	42,5	10,5	4,0	37,5	5,0	4,5	M5
P1M025	12	32,5	29,0	23,0	M5	18	44,5	10,5	4,0	38,5	7,0	5,0	M6
P1M032	12	41,5	39,0	31,0	G1/8	24	49,0	14,5	5,0	41,0	12,5	4,0	M6
P1M040	12	41,5	39,5	31,0	G1/8	24	50,5	14,0	5,5	42,5	12,0	4,0	M6
P1M050	12	42,5	40,5	34,5	G1/8	25	51,0	13,0	5,5	44,5	11,0	5,0	M8
P1M063	12	43,5	40,5	35,0	G1/8	25	55,5	6,5	5,5	50,0	6,5	6,5	M8
P1M080	14	51,0	51,0	42,0	G1/4	30	63,5	9,5	6,0	54,5	9,5	8,5	M10
P1M100	16	52,0	52,0	43,5	G1/4	30	72,5	9,5	6,0	64,0	9,5	8,5	M12

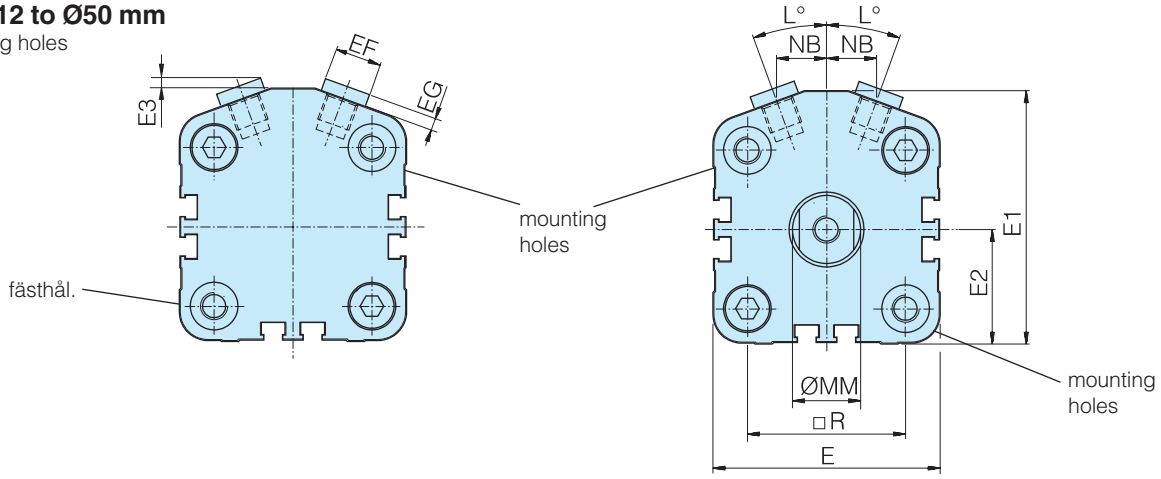
Cylinder designation	PL mm	PM mm	R1* mm	R2 mm	R3* mm	R4* mm	RT mm	SW	ZJ mm	ZJ2 mm
P1M012	5,0	8,0	6,0	3,5	6,0	6,0	M4	5	43,5	38,5
P1M016	5,0	9,0	7,5	3,5	6,0	6,0	M4	7	45,0	40,0
P1M020	5,0	9,0	10,5	5,0	9,0	9,0	M6	9	47,0	42,0
P1M025	7,0	9,0	10,5	5,0	9,0	9,0	M6	9	49,5	43,5
P1M032	8,0	10,5	10,5	5,0	10,5	10,5	M6	10	57,0	48,5
P1M040	7,5	9,5	10,5	5,0	10,5	10,5	M6	13	58,5	50,5
P1M050	8,0	10,0	13,5	7,0	13,5	13,5	M8	16	59,0	52,5
P1M063	8,0	11,0	10,5	7,0	10,5	10,5	M8	16	63,5	58,0
P1M080	11,5	11,5	14,0	8,5	14,0	14,0	M10	21	73,5	64,5
P1M100	12,0	12,0	14,0	8,5	14,0	14,0	M10	21	84,5	76,0

Length tolerances ±1 mm Stroke length tolerances +1,5/0 mm

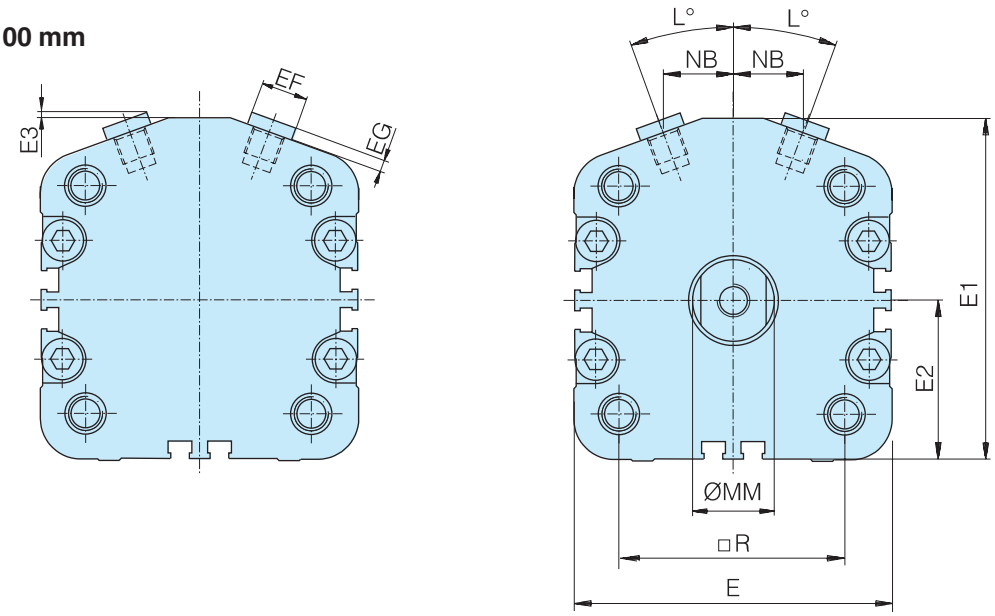
Dimensions (mm),

Port Position G, H, J

Bore Ø12 to Ø50 mm
2 mounting holes



Bore Ø63 to Ø100 mm
4 mounting holes



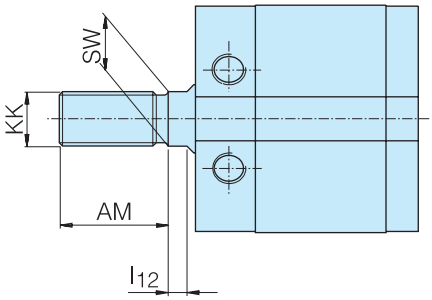
Cylinder designation	E mm	E1 mm	E2 mm	E3	EE mm	EF mm	EG mm	L	MM mm	NB mm	R mm
P1M 012	27,0	31,0	14,0	-	M5	-	-	26°	6	5,5	15,5
P1M 016	31,5	35,0	16,0	-	M5	-	-	20°	8	6,5	20,0
P1M 020	38,5	42,5	19,5	3,5	M5	7*	4,5	20°	10	7,5	25,5
P1M 025	41,5	45,5	21,0	3,5	M5	7*	4,5	20°	10	8,5	28,0
P1M 032	48,0	56,0	24,0	3,0	G1/8	14	2,5	20°	12	9,5	32,5
P1M 040	56,0	62,5	28,0	3,0	G1/8	14	2,5	20°	16	11,5	38,0
P1M 050	67,0	74,5	33,5	3,0	G1/8	14	2,5	20°	20	14,5	46,5
P1M 063	82,0	86,0	40,5	2,5	G1/8	14	2,5	20°	20	17,5	56,5
P1M 080	98,0	106,5	48,5	2,5	G1/4	17	3,0	20°	25	25,5	72,0
P1M 100	119,0	126,5	59,5	2,5	G1/4	17	3,0	20°	25	31,5	89,0

* * Hexagon head screw

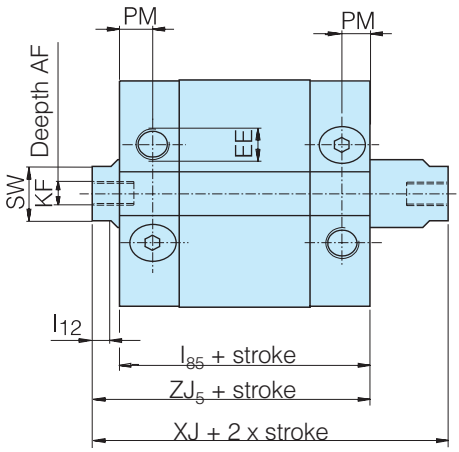
Dimensions (mm),

Cylinder variants

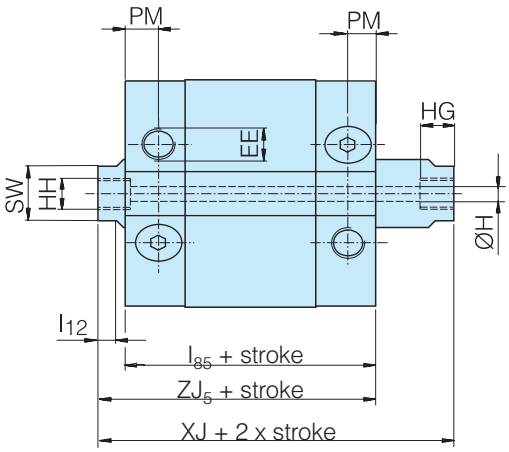
Piston rod thread 8
(external)



Cylinder type K
(through piston rod)



Cylinder type H
(hollow, through piston rod)

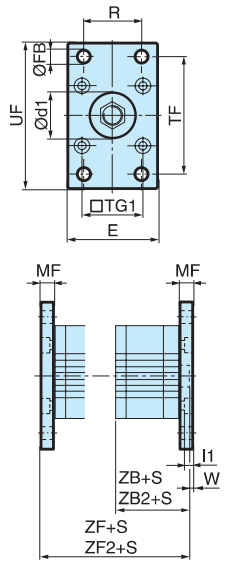


Cylinder designation	AF mm	AM mm	H* mm	HG mm	HH mm	I12 mm	I85 mm	KF	KK	PM mm	SW mm	XJ mm	ZJ5 mm
P1M 012	6	16	-	-	-	3,0	46,0	M3	M6	8,0	5	54,0	50,0
P1M 016	8	20	-	-	-	3,0	47,5	M4	M6	9,0	7	54,5	51,5
P1M 020	10	22	3	7	M5	4,0	49,5	M5	M8	9,0	9	58,5	54,0
P1M 025	12	22	3	7	M5	4,0	49,5	M6	M10X1,25	9,0	9	60,0	55,0
P1M 032	12	22	3	7	G1/8	5,0	51,5	M6	M10X1,25	10,5	10	67,5	59,5
P1M 040	12	24	4	8	G1/8	5,5	52,5	M6	M12X1,25	9,5	13	69,0	60,5
P1M 050	12	32	5	8	G1/8	5,5	53,0	M8	M16X1,5	10,0	16	69,0	61,0
P1M 063	12	32	5	8	G1/8	5,5	58,5	M8	M16X1,5	11,0	16	75,0	66,5
P1M 080	14	40	6	11	G1/4	6,0	63,5	M10	M20X1,5	11,5	21	84,0	73,5
P1M 100	16	40	6	11	G1/4	6,0	72,5	M12	M20X1,5	12,0	21	97,0	84,5

* Dimension H only for cylinder H
Length tolerances ±1 mm
Stroke length tolerances +1,5/0 mm

Dimensions (mm),

Flange MF1/MF2



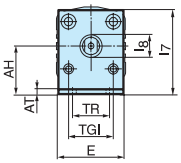
Cyl. bore mm	d1 H11 mm	FB H13 mm	TG1 mm	E JS14 mm	R JS14 mm	MF JS14 mm	TF -0,5 mm	UF mm	l1 mm	W mm	ZF* mm	ZB* mm	ZF2* mm	ZB2* mm	Order code
12	9,0	4,5	15,5	25	-	5,5	45,0	55	3,0	2,0	44,0	38,5	49,0	43,5	**P1M-4DMB**
16	11,5	4,5	20,0	30	-	5,5	45,0	55	3,0	2,0	45,5	40,0	50,5	45,0	**P1M-4FMB**
20	14,0	6,6	25,5	39	-	8,0	50,5	62	4,2	4,5	49,0	41,0	54,0	46,0	**P1M-4HMB**
25	14,0	6,6	28,0	42	-	8,0	53,0	65	4,2	3,0	51,5	43,5	56,5	49,5	**P1M-4JMB**
32	30,0	7,0	32,5	45	32	10,0	64,0	80	5,0	2,0	58,5	48,5	67,0	57,0	**P1C-4KMB**
40	35,0	9,0	38,0	52	36	10,0	72,0	90	5,0	2,0	60,5	50,5	68,5	58,5	**P1C-4LMB**
50	40,0	9,0	46,5	65	45	12,0	90,0	110	6,5	4,0	64,5	52,5	71,0	59,0	**P1C-4MMB**
63	45,0	9,0	56,5	75	50	12,0	100,0	120	6,5	4,0	70,0	58,0	75,5	63,5	**P1C-4NMB**
80	45,0	12,0	72,0	95	63	16,0	126,0	150	8,0	6,0	80,5	64,5	89,5	73,5	**P1C-4PMB**
100	55,0	14,0	89,0	115	75	16,0	150,0	170	8,0	4,0	92,0	76,0	100,5	84,5	**P1C-4QMB**

S = Stroke length

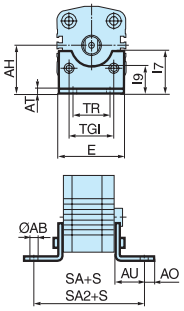
* ZF, ZB for cylinders with both ports in front end (type H)
ZF2, ZB2 for all other cylinders (type G, J, K)

Angle bracket MS1

Bore 12-50 mm



Bore 63-100 mm

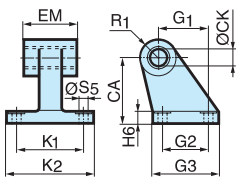


Cyl. bore mm	AB H14 mm	TG1 mm	E mm	TR JS14 mm	AO mm	AU JS15 mm	AH mm	l7 mm	AT JS14 mm	l9 mm	l8 mm	SA* mm	SA2* mm	Order code
12	4,5	15,5	44	35	5,5	8,0	17	29,5	2	-	8	51,0	56,0	**P1M-4DMF**
16	4,5	20,0	48	39	6,0	8,0	19	33,5	2	-	10	52,5	57,5	**P1M-4FMF**
20	6,6	25,5	62	50	7,5	9,0	24	42,0	3,2	-	12	59,5	64,5	**P1M-4HMF**
25	6,6	28,0	66	52	7,5	10,5	26	46,0	3,2	-	12	59,5	65,5	**P1M-4JMF**
32	7,0	32,5	45	32	11,0	24,0	32	54,5	8,0	-	30	88,5	97,0	**P1C-4KMZ**
40	9,0	38,0	52	36	7,0	28,0	36	62,0	8,0	-	35	98,5	106,5	**P1C-4LMZ**
50	9,0	46,5	65	45	13,0	32,0	45	77,5	10,0	-	40	108,5	115,0	**P1C-4MMZ**
63	9,0	56,5	75	50	13,0	32,0	50	35,0	5,5	27,5	-	114,0	119,5	**P1C-4NMF**
80	12,0	72,0	95	63	14,0	41,0	63	49,0	6,5	40,5	-	136,5	145,5	**P1C-4PMF**
100	14,0	89,0	115	75	15,0	41,0	71	54,0	6,5	43,5	-	146,0	154,5	**P1C-4QMF**

S = Stroke length

* SA for cylinders with both ports in front end (type H)
* SA2 for all other cylinders (type G, J, K)

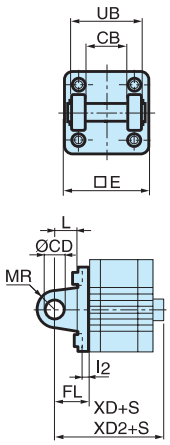
Pivot bracket with rigid bearing



Cyl. bore mm	CK H9 mm	S5 H13 mm	K1 JS14 mm	K2 mm	G1 JS14 mm	G2 JS14 mm	EM mm	G3 mm	CA JS15 mm	H6 mm	R1 mm	Order code
32	10	6,6	38	51	21	18	25,5	31	32	8	10	**P1C-4KMD**
40	12	6,6	41	54	24	22	27,0	35	36	10	11	**P1C-4LMD**
50	12	9,0	50	65	33	30	31,0	45	45	12	13	**P1C-4MMD**
63	16	9,0	52	67	37	35	39,0	50	50	12	15	**P1C-4NMD**
80	16	11,0	66	86	47	40	49,0	60	63	14	15	**P1C-4PMD**
100	20	11,0	76	96	55	50	59,0	70	71	15	19	**P1C-4QMD**

Dimensions (mm),

Clevis bracket MP2

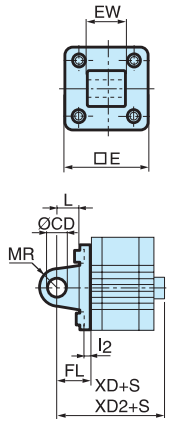


Cyl. bore mm	E h14 mm	UB H14 mm	CB ±0,2 mm	FL mm	L mm	l2 H9 mm	CD mm	MR mm	XD* mm	XD2* mm	Order code
12	27,0	10	5,2	14	7	-	5	6	52,5	57,5	**P1M-4DMT**
16	31,5	12	6,7	15	10	-	5	6	55,0	60,0	**P1M-4FMT**
20	38,5	16	8,2	18	12	-	8	9	59,0	65,0	**P1M-4HMT**
25	41,0	20	10,2	20	14	-	10	10	63,5	69,5	**P1M-4JMT**
32	45,0	45	26,0	22	13	5,5	10	10	70,5	79,0	**P1C-4KMT**
40	52,0	52	28,0	25	16	5,5	12	12	75,5	83,5	**P1C-4LMT**
50	65,0	60	32,0	27	16	6,5	12	12	79,5	86,0	**P1C-4MMT**
63	75,0	70	40,0	32	21	6,5	16	16	90,0	95,5	**P1C-4NMT**
80	95,0	90	50,0	36	22	10,0	16	16	100,5	109,5	**P1C-4PMT**
100	115,0	110	60,0	41	27	10,0	20	20	117,0	125,5	**P1C-4QMT**

S = Stroke length

* XD for cylinders with both ports in front end (type H)
XD2 for all other cylinders (type G, J, K)

Clevis bracket MP4

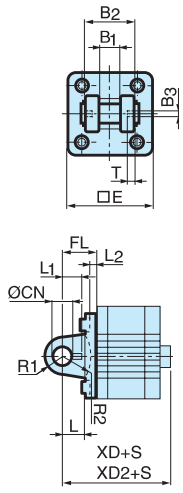


Cyl. bore mm	E mm	EW mm	FL ±0,2 mm	L mm	l2 mm	CD H9 mm	MR mm	XD* mm	XD2* mm	Order code
12	27,0	4,7	14	7	-	5	6	52,5	57,5	**P1M-4DME**
16	31,5	6,2	15	10	-	5	6	55,0	60,0	**P1M-4FME**
20	38,5	7,7	18	12	-	8	9	59,0	65,0	**P1M-4HME**
25	41,0	9,7	20	14	-	10	10	63,5	69,5	**P1M-4JME**
32	45,0	26,0	22	13	5,5	10	10	70,5	79,0	**P1C-4KME**
40	52,0	28,0	25	16	5,5	12	12	75,5	83,5	**P1C-4LME**
50	65,0	32,0	27	16	6,5	12	12	79,5	86,0	**P1C-4MME**
63	75,0	40,0	32	21	6,5	16	16	90,0	95,5	**P1C-4NME**
80	95,0	50,0	36	22	10,0	16	16	100,5	109,5	**P1C-4PME**
100	115,0	60,0	41	27	10,0	20	20	117,0	125,5	**P1C-4QME**

S = Stroke length

* XD for cylinders with both ports in front end (type H)
XD2 for all other cylinders (type G, J, K)

Clevis bracket GA



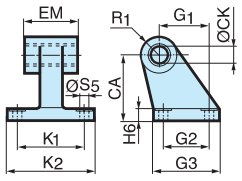
Cyl. bore mm	E mm	B2 d12 mm	B1 H14 mm	T mm	B3 mm	R2 mm	L1 mm	FL ±0,2 mm	l2 mm	L mm	CN F7 mm	R1 mm	XD* mm	XD2* mm	Order code
32	45	34	14	3	3,3	17	11,5	22	5,5	12	10	11	70,5	79,0	**P1C-4KMCA**
40	52	40	16	4	4,3	20	12,0	25	5,5	15	12	13	75,5	83,5	**P1C-4LMCA**
50	65	45	21	4	4,3	22	14,0	27	6,5	17	16	18	79,5	86,0	**P1C-4MMCA**
63	75	51	21	4	4,3	25	14,0	32	6,5	20	16	18	90,0	95,5	**P1C-4NMCA**
80	95	65	25	4	4,3	30	16,0	36	10,0	20	20	22	100,5	109,5	**P1C-4PMCA**
100	115	75	25	4	4,3	32	16,0	41	10,0	25	20	22	117,0	125,5	**P1C-4QMCA**

S = Stroke length

* XD for cylinders with both ports in front end (type H)
XD2 for all other cylinders (type G, J, K)

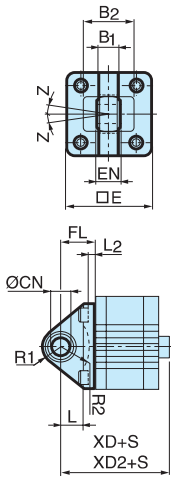
Dimensions (mm),

Pivot bracket with swivel bearing



Cyl. bore mm	CN H7 mm	S5 H13 mm	K1 JS14 mm	K2 mm	EU mm	G1 JS14 mm	G2 JS14 mm	EN mm	G3 mm	CH JS15 mm	H6 mm	ER mm	Z	Order code
32	10	6,6	38	51	10,5	21	18	14	31	32	10	16	4°	**P1C-4KMA**
40	12	6,6	41	54	12,0	24	22	16	35	36	10	18	4°	**P1C-4LMA**
50	16	9,0	50	65	15,0	33	30	21	45	45	12	21	4°	**P1C-4MMA**
63	16	9,0	52	67	15,0	37	35	21	50	50	12	23	4°	**P1C-4NMA**
80	20	11,0	66	86	18,0	47	40	25	60	63	14	28	4°	**P1C-4PMA**
100	20	11,0	76	96	18,0	55	50	25	70	71	15	30	4°	**P1C-4QMA**

Swivel eye bracket

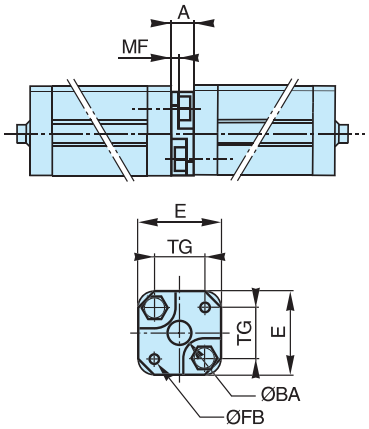


Cyl. bore mm	E mm	B1 mm	B2 mm	EN mm	R1 mm	R2 mm	FL mm	l2 mm	L H7 mm	CN mm	XD* mm	XD2* mm	Z	Order code
32	45	10,5	38	14	16	14	22	5,5	12	10	70,5	79,0	4°	**P1C-4KMSA**
40	52	12,0	44	16	18	16	25	5,5	15	12	75,5	83,5	4°	**P1C-4LMSA**
50	65	15,0	51	21	21	19	27	6,5	15	16	79,5	86,0	4°	**P1C-4MMSA**
63	75	15,0	56	21	23	22	32	6,5	20	16	90,0	95,5	4°	**P1C-4NMSA**
80	95	18,0	72	25	29	25	36	10,0	20	20	100,5	109,5	4°	**P1C-4PMSA**
100	115	18,0	82	25	31	27	41	10,0	25	20	117,0	125,5	4°	**P1C-4QMSA**

S=Stroke length

* XD for cylinders with both ports in front end (type H)
XD2 for all other cylinders (type G, J, K)

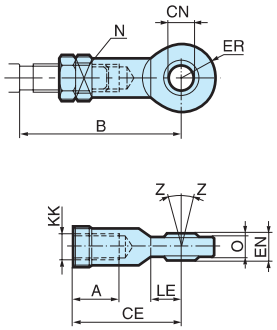
Mounting kit



Cyl. bore mm	E mm	TG mm	ØFB mm	MF mm	A mm	ØBA mm	Order code
32	50	32,5	6,5	5	16	30	**P1E-6KB0**
40	60	38,0	6,5	5	16	35	**P1E-6LB0**
50	66	46,5	8,5	6	20	40	**P1E-6MB0**
63	80	56,5	8,5	6	20	45	**P1E-6NB0**
80	100	72,0	10,5	8	25	45	**P1E-6PB0**
100	118	89,0	10,5	8	25	55	**P1E-6QB0**

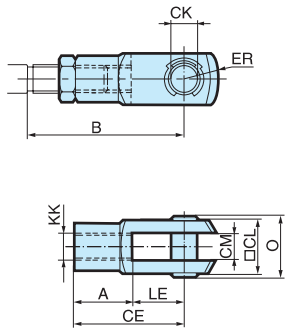
Dimensions (mm),

Swivel rod eye



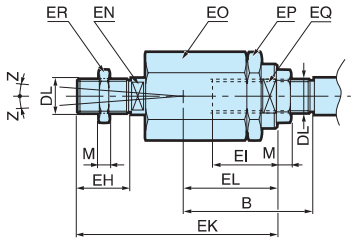
Cyl. bore mm	A mm	B min mm	B max mm	CE mm	CN H9 mm	EN h12 mm	ER mm	KK	LE min mm	M mm	N mm	O mm	Z	Order code
12	9	37	40	30	6	9	10	M6	10	3,2	10	6,8	10°	**P1A-4DRS**
16	9	37	40	30	6	9	10	M6	10	3,2	10	6,8	10°	**P1A-4DRS**
20	12	44	48	36	8	12	12	M8	12	4,0	13	9,0	12°	**P1A-4HRS**
25	15	48	55	43	10	14	14	M10X1,25	14	5,0	17	10,5	12°	**P1A-4JRS**
32	20	48	55	43	10	14	14	M10x1,25	15	5,0	17	10,5	12°	**P1C-4KRS**
40	22	56	62	50	12	16	16	M12x1,25	17	6,0	19	12,0	12°	**P1C-4LRS**
50	28	72	80	64	16	21	21	M16x1,5	22	8,0	22	15,0	15°	**P1C-4MRS**
63	28	72	80	64	16	21	21	M16x1,5	22	8,0	22	15,0	15°	**P1C-4MRS**
80	33	87	97	77	20	25	25	M20x1,5	26	10,0	32	18,0	15°	**P1C-4PRS**
100	33	87	97	77	20	25	25	M20x1,5	26	10,0	32	18,0	15°	**P1C-4PRS**

Clevis



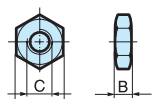
Cyl. bore mm	A mm	B min mm	B max mm	CE mm	CK h11/E9 mm	CL mm	CM mm	ER mm	KK	LE mm	M mm	O mm	Order code
12	12	28	34	24	6	12	6	7	M6	12	3,2	17,0	**P1A-4DRC**
16	12	28	34	24	6	12	6	7	M6	12	3,2	17,0	**P1A-4DRC**
20	16	37	44	32	8	16	8	10	M8	16	4,0	22,0	**P1A-4HRC**
25	20	45	52	40	10	20	10	12	M10X1,25	20	5,0	28,0	**P1A-4JRC**
32	20	45	52	40	10	20	10	16	M10x1,25	20	5,0	28,0	**P1C-4KRC**
40	24	54	60	48	12	24	12	19	M12x1,25	24	6,0	32,0	**P1C-4LRC**
50	32	72	80	64	16	32	16	25	M16x1,5	32	8,0	41,5	**P1C-4MRC**
63	32	72	80	64	16	32	16	25	M16x1,5	32	8,0	41,5	**P1C-4MRC**
80	40	90	100	80	20	40	20	32	M20x1,5	40	10,0	50,0	**P1C-4PRC**
100	40	90	100	80	20	40	20	32	M20x1,5	40	10,0	50,0	**P1C-4PRC**

Flexocoupling



Cyl. bore mm	B min mm	B max mm	DL	EH mm	EI mm	EK mm	EL mm	EN mm	EO mm	EP mm	EQ mm	M mm	Z	Order code
32	36	43	M10x1,25	20	23	70	31	12	30	30	19	5	4°	
40	37	43	M12x1,25	23	23	67	31	12	30	30	19	6	4°	
50	53	61	M16x1,5	40	32	112	45	19	41	41	30	8	4°	
63	53	61	M16x1,5	40	32	112	45	19	41	41	30	8	4°	
80	57	67	M20x1,5	39	42	122	56	19	41	41	30	10	4°	
100	57	67	M20x1,5	39	42	122	56	19	41	41	30	10	4°	

Nut



Cyl. bore mm	d	M mm	S mm	Order code
12	M6	3,2	10	**0261210800**
16	M6	3,2	10	**0261210800**
20	M8	4,0	13	**0261211000**
25	M10x1,25	5,0	17	**9128985601**
32	M10x1,25	5,0	17	**9128985601**
40	M12x1,25	6,0	19	**0261109910**
50	M16x1,5	8,0	24	**9128985603**
63	M16x1,5	8,0	24	**9128985603**
80	M20x1,5	10,0	30	**0261109911**
100	M20x1,5	10,0	30	**0261109911**

The P1K series cylinders are double acting with fixed end cushioning for light duty applications. The range is based upon the International ISO 6431 standard, but with considerably shorter overall length. They are available in bore sizes 32-125 mm with standard stroke lengths, 25-320 mm. The clean design with end plates that precisely line up with the unique housing tube profile means that a lot of P1K cylinders are used in the foodstuffs industry. With a few adaptations, such as fully anodised end plate screws, the P1K is the perfect cylinder for cheesemaking equipment.

- Ø32 - 125mm Bore sizes
- Single and double acting
- Clean line profile design
- Designed for dry piston rod operation
- End stroke buffers for long service life
- Position sensing versions.

Operating information

Working pressure: Max 10 bar
Temperature range: -20°C to +70°C

For technical information see CD

Double acting

Ø32mm

Stroke mm	Order code
25	**P1K-S032DA-S25**
50	**P1K-S032DA-S50**
80	**P1K-S032DA-S80**
100	**P1K-S032DA-S100**
125	**P1K-S032DA-S125**
160	**P1K-S032DA-S160**
200	**P1K-S032DA-S200**
250	**P1K-S032DA-S250**

Ø40mm

Stroke mm	Order code
25	**P1K-S040DA-S25**
50	**P1K-S040DA-S50**
80	**P1K-S040DA-S80**
100	**P1K-S040DA-S100**
125	**P1K-S040DA-S125**
160	**P1K-S040DA-S160**
200	**P1K-S040DA-S200**
250	**P1K-S040DA-S250**

Ø50mm

Stroke mm	Order code
25	**P1K-S050DA-S25**
50	**P1K-S050DA-S50**
80	**P1K-S050DA-S80**
100	**P1K-S050DA-S100**
125	**P1K-S050DA-S125**
160	**P1K-S050DA-S160**
200	**P1K-S050DA-S200**
250	**P1K-S050DA-S250**

Ø63mm

Stroke mm	Order code
25	**P1K-S063DA-S25**
50	**P1K-S063DA-S50**
80	**P1K-S063DA-S80**
100	**P1K-S063DA-S100**
125	**P1K-S063DA-S125**
160	**P1K-S063DA-S160**
200	**P1K-S063DA-S200**
250	**P1K-S063DA-S250**

Ø80mm

Stroke mm	Order code
25	**P1K-S080DA-S25**
50	**P1K-S080DA-S50**
80	**P1K-S080DA-S80**
100	**P1K-S080DA-S100**
125	**P1K-S080DA-S125**
160	**P1K-S080DA-S160**
200	**P1K-S080DA-S200**
250	**P1K-S080DA-S250**
320	**P1K-S080DA-S250**

Ø100mm

Stroke mm	Order code
25	**P1K-S0100DA-S25**
50	**P1K-S0100DA-S50**
80	**P1K-S0100DA-S80**
100	**P1K-S0100DA-S100**
125	**P1K-S0100DA-S125**
160	**P1K-S0100DA-S160**
200	**P1K-S0100DA-S200**
250	**P1K-S0100DA-S250**
320	**P1K-S0100DA-S250**

Ø125mm

Stroke mm	Order code
25	**P1K-S0125DA-S25**
50	**P1K-S0125DA-S50**
80	**P1K-S0125DA-S80**
100	**P1K-S0125DA-S100**
125	**P1K-S0125DA-S125**
160	**P1K-S0125DA-S160**
200	**P1K-S0125DA-S200**
250	**P1K-S0125DA-S250**
320	**P1K-S0125DA-S250**

Single acting - Push type

Ø32mm

Stroke mm	Order code
25	**P1K-S032ST-S25**
50	**P1K-S032ST-S50**

Ø40mm

Stroke mm	Order code
25	**P1K-S040ST-S25**
50	**P1K-S040ST-S50**

Ø50mm

Stroke mm	Order code
25	**P1K-S050ST-S25**
50	**P1K-S050ST-S50**

Ø63mm

Stroke mm	Order code
25	**P1K-S063ST-S25**
50	**P1K-S063ST-S50**

Ø80mm

Stroke mm	Order code
50	**P1K-S080ST-S50**

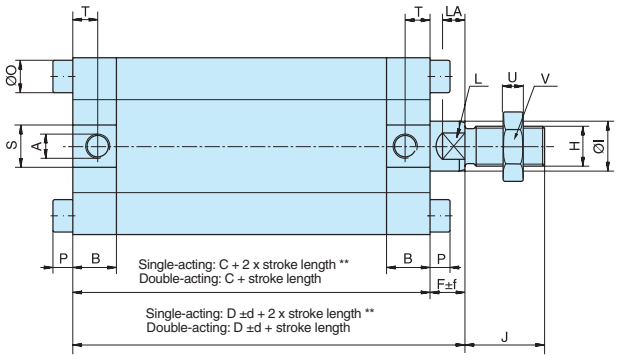
Ø100mm

Stroke mm	Order code
50	**P1K-S0100ST-S50**

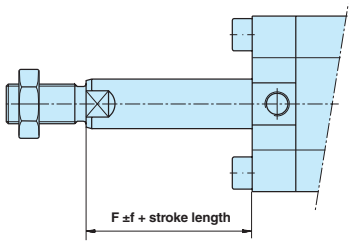
Ø125mm

Stroke mm	Order code
50	**P1K-S0125ST-S50**

Dimensions, basic cylinder



P1KU, through piston rod



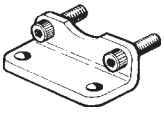
Cylinder bore	A	B	C	D	F	H	I	J	K	L	LA	M	N	O	OA
32	G1/8	17,0	65	75	10	M10x1,25	12	22	21,0	10	6	32,5	42,5	8,5	4
40	G1/8	17,0	65	78	13	M12x1,25	16	24	24,0	14	9	36,8	48,0	10,0	5
50	G1/8	17,5	71	85	14	M16x1,5	20	32	29,0	17	9	46,7	59,0	10,0	5
63	G1/8	17,5	72	86	14	M16x1,5	20	32	36,0	17	9	55,9	71,0	13,0	6
80	G1/4	21,5	85	101	16	M20x1,5	25	40	44,5	22	10	70,0	87,0	16,0	8
100	G1/4	21,5	87	108	21	M20x1,5	32	40	55,0	27	13	84,1	102,0	16,0	8
125	G3/8	25,5	94,5	115,5	21	M27x2	32	54	68,0	27	13	104,0	124,0	18,0	10

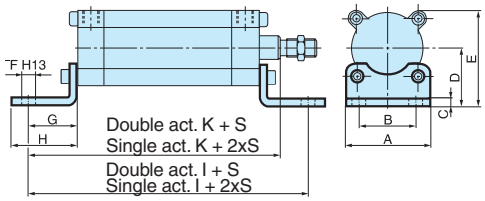
Cylinder bore	P	Q	S	T	U	V	Assembly tolerances d	Assembly tolerances f	Stroke length tolerances 0-320 (at 6 bar)
32	5	37	17	10	5	17	0,9	1,2	+2,0
40	6	45	17	10	6	19	0,9	1,2	+2,0
50	6	56	17	10	8	24	0,9	1,2	+2,0
63	8	70	17	10	8	24	1,2	1,6	+2,5
80	10	87	21	12	10	30	1,2	1,6	+2,5
100	10	108	21	12	10	30	1,2	1,6	+2,5
125	12	134	25	14	13,5	41	1,2	1,6	+2,5

* S = stroke length ** Stroke length for bore sizes 32-63 = 25 and 50 mm, for bore sizes 80-100 = 50 mm.

Cylinder mountings

Foot bracket MS1





Intended for fixed mounting of cylinder. This bracket can be fitted to front and rear end covers.

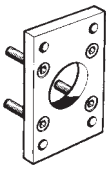
Material
Body galvanized steel. These brackets are supplied in pairs.

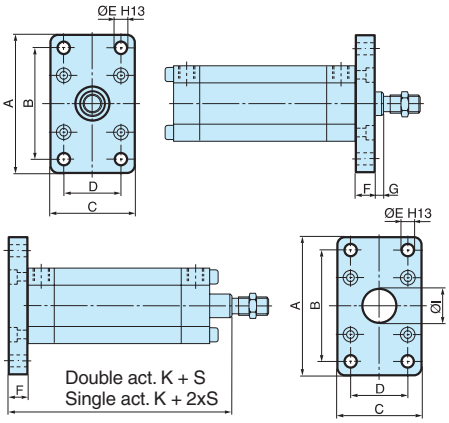
When fitting:
Remove the bolts from the cylinder end cover and fit the bracket, using the same bolts. The bolts supplied with the mount are intended for use with another range of cylinders and must not be used with the P1K range.

Cyl. Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	K mm	Weight kg	Order code
32	48	32	5,0	32	53	7	24	32	113,0	99,0	0,08	**9121644801**
40	54	36	5,0	36	60	9	31	42	127,0	109,0	0,11	**9121644802**
50	64	45	6,0	45	75	9	33	45	137,0	118,0	0,18	**9121644803**
63	76	50	6,0	50	86	9	36	48	144,0	122,0	0,26	**9121644804**
80	94	63	8,0	63	107	12	43	58	171,0	144,0	0,50	**9121644805**
100	110	75	10,5	71	122	14	43	60	173,0	151,0	0,80	**9121644806**
125	135	90	12,5	90	157	16	45	70	184,5	160,5	1,40	**9121644807**

S=stroke length

Flange MF1 and MF2





Intended for fixed mounting of cylinder. This bracket can be fitted to front and rear end covers.

Material
Diam. 32 - 63 mm: flange anodised aluminium
Diam. 80 - 125 mm: flange galvanized steel
The flange is supplied complete with screws for mounting on the cylinder.

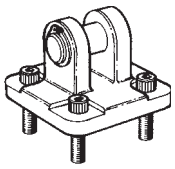
When fitting:
Remove the bolts from the cylinder end cover and fit the bracket, using the same bolts. The bolts supplied with the mount are intended for use with another range of cylinders and must not be used with the P1K range.

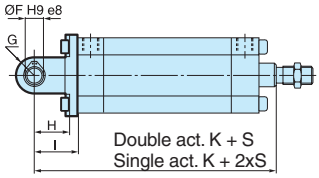
Cyl. Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Weight kg	Order code
32	80	64	48	32	7	10	0	86,0	27	0,26	**9121644901**
40	90	72	54	36	9	13	0	91,0	32	0,37	**9121644902**
50	110	90	64	45	9	13	1	98,0	40	0,52	**9121644903**
63	120	100	76	50	9	16	-2	102,0	40	0,90	**9121644904**
80	155	126	94	63	12	18	-2	119,0	50	1,59	**9121644905**
100	180	150	110	75	14	18	3	126,0	60	2,19	**9121644906**
125	220	180	135	90	16	20	1	135,5	72	3,90	**9121644907**

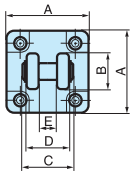
S=stroke length

Cylinder mountings

Clevis bracket MP4







Intended for flexible mounting of cylinder. This bracket can be combined with clevis bracket MP2 and swivel rod bracket.

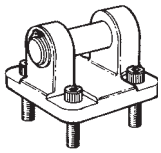
Materials:
Body anodised aluminium and shaft of hardened steel. The mount is supplied complete with shaft.

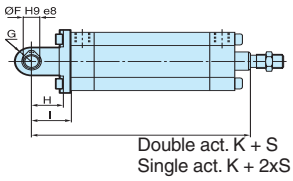
When fitting:
Remove the bolts from the cylinder end cover and fit the mount, using the same bolts. The bolts supplied with the mount are intended for use with another range of cylinders and must not be used with the P1K range.

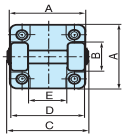
Cyl. Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	K mm	Weight kg	Order code
32	48	22	33	26	10	10	11	15,0	22	97,0	0,05	**9121644601**
40	54	24	35	28	12	12	12	21,0	28	106,0	0,13	**9121644602**
50	64	32	39	32	12	12	13	19,5	28	113,0	0,18	**9121644603**
63	76	39	47	40	16	16	17	26,0	36	122,0	0,34	**9121644604**
80	94	48	57	50	16	16	17	26,0	38	139,0	0,57	**9121644605**
100	110	62	67	60	20	20	21	29,0	43	151,0	0,91	**9121644606**
125	135	70	77	70	25	25	26	35,0	50	165,5	2,90	**9121644607**

S=stroke length

Clevis bracket MP2







Intended for flexible mounting of cylinder. This bracket can be combined with clevis bracket MP4.

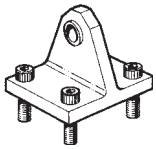
Materials:
Body anodised aluminium and shaft of hardened steel. The mount is supplied complete with shaft.

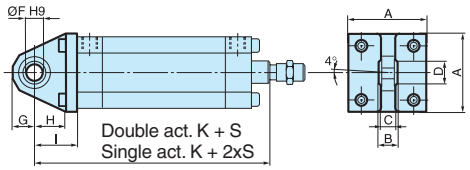
When fitting:
Remove the bolts from the cylinder end cover and fit the mount, using the same bolts. The bolts supplied with the mount are intended for use with another range of cylinders and must not be used with the P1K range.

Cyl. Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	K mm	Weight kg	Order code
32	48	22	52	45	26	10	11	15,0	22	97,0	0,13	**9121644701**
40	54	24	59	52	28	12	12	21,0	28	106,0	0,19	**9121644702**
50	64	32	67	60	32	12	13	19,5	28	113,0	0,22	**9121644703**
63	76	39	77	70	40	16	17	26,0	36	122,0	0,40	**9121644704**
80	94	48	97	90	50	16	17	26,0	38	139,0	0,65	**9121644705**
100	110	62	117	110	60	20	21	29,0	43	151,0	1,09	**9121644706**
125	135	70	137	130	70	25	26	35,0	50	165,5	3,60	**9121644707**

S=stroke length

Swivel rod bracket





Intended for flexible mounting of cylinder. The swivel rod permits lateral articulation. The bracket can be combined with clevis bracket MP4

Materials:
Body anodised aluminium and swivel bearing of hardened steel.

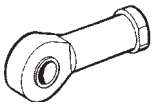
When fitting:
Remove the bolts from the cylinder end cover and fit the mount, using the same bolts. The bolts supplied with the mount are intended for use with another range of cylinders and must not be used with the P1K range.

Cyl. Ø mm	A mm	B mm	C mm	D mm	F mm	G mm	H mm	I mm	K mm	Weight kg	Order code
32	48	9	7,5	13,0	10	12,5	15,0	22	97,0	0,08	**9121568601**
40	54	12	9,0	15,5	12	15,5	21,0	28	106,0	0,12	**9121568602**
50	64	12	9,0	15,5	12	16,5	19,5	28	113,0	0,17	**9121568603**
63	76	16	12,5	20,0	16	19,5	26,0	36	122,0	0,30	**9121568604**
80	94	16	12,5	20,0	16	21,5	26,0	38	139,0	0,49	**9121568605**
100	110	20	16,0	25,0	20	25,5	29,0	43	151,0	0,73	**9121568606**
125	135	25	20,5	30,5	25	30,0	35,0	50	165,5	2,40	**9121568607**

S=stroke length

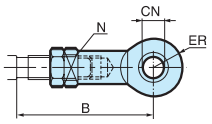
Cylinder mountings

Swivel rod eye

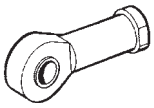


Intended for articulated mounting of the cylinder.
Maintenance-free PTFE.

Material:
Swivel rod eye, nut: galvanized steel.
Swivel bearing according to DIN 648K: Hardened steel.

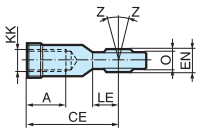


Stainless steel swivel rod eye



Stainless-steel swivel rod eye for articulated mounting of cylinder.
Maintenance-free.

Materials
Swivel rod eye: Stainless steel
Swivel bearing according to DIN 648K: Stainless steel
Use stainless steel nut with stainless steel swivel rod eye.

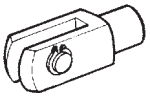


ISO 8139

Cyl.-dia. mm	A mm	B min mm	B max mm	CE mm	CN H9 mm	EN h12 mm	ER mm	KK	LE	N* min mm	O mm	Z mm	Weight kg	Order code Galvanised Steel	Order code Stainless Steel
32	20	48,0	55	43	10	14	14	M10x1,25	15	17	10,5	12°	0,08	**P1C-4KRS**	**P1S-4JRT**
40	22	56,0	62	50	12	16	16	M12x1,25	17	19	12,0	12°	0,12	**P1C-4LRS**	**P1S-4LRT**
50	28	72,0	80	64	16	21	21	M16x1,5	22	22	15,0	15°	0,25	**P1C-4MRS**	**P1S-4MRT**
63	28	72,0	80	64	16	21	21	M16x1,5	22	22	15,0	15°	0,25	**P1C-4MRS**	**P1S-4MRT**
80	33	87,0	97	77	20	25	25	M20x1,5	26	32	18,0	15°	0,46	**P1C-4PRS**	**P1S-4PRT**
100	33	87,0	97	77	20	25	25	M20x1,5	26	32	18,0	15°	0,46	**P1C-4PRS**	**P1S-4PRT**
125	51	123,5	137	110	30	37	35	M27x2	36	41	25,0	15°	1,28	**P1C-4RRS**	**P1S-4RRT**

*key grip

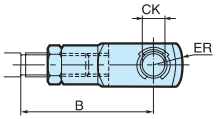
Clevis



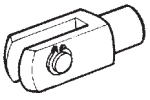
Intended for articulated mounting of the cylinder.

Material:
Clevis and clip galvanized steel.
Pin: Hardened steel

Supplied complete with axle.

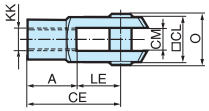


Stainless steel clevis



Stainless-steel clevis for articulated mounting of cylinder.

Material
Clevis: Stainless steel
Pin: Stainless steel
Circlips according to DIN 471: Stainless steel
Use stainless steel nut with stainless steel swivel rod eye.

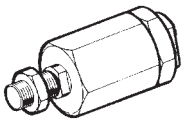


ISO 8140

Cyl.-dia. mm	A mm	B min mm	B max mm	CE mm	CK h11/E9 mm	CL mm	CM mm	ER mm	KK	LE mm	O mm	Weight kg	Order code Galvanised Steel	Order code Stainless Steel
32	20	45,0	52	40	10	20	10	16	M10x1,25	20	28,0	0,09	**P1C-4KRC**	**P1S-4JRD**
40	24	54,0	60	48	12	24	12	19	M12x1,25	24	32,0	0,15	**P1C-4LRC**	**P1S-4LRD**
50	32	72,0	80	64	16	32	16	25	M16x1,5	32	41,5	0,35	**P1C-4MRC**	**P1S-4MRD**
63	32	72,0	80	64	16	32	16	25	M16x1,5	32	41,5	0,35	**P1C-4MRC**	**P1S-4MRD**
80	40	90,0	100	80	20	40	20	32	M20x1,5	40	50,0	0,75	**P1C-4PRC**	**P1S-4PRD**
100	40	90,0	100	80	20	40	20	32	M20x1,5	40	50,0	0,75	**P1C-4PRC**	**P1S-4PRD**
125	56	123,5	137	110	30	55	30	45	M27x254	72,0		2,10	**P1C-4RRC**	**P1S-4RRD**

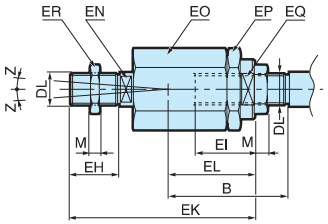
Cylinder mountings

Flexo coupling



Flexo coupling for articulated mounting of piston rod.
Flexo fitting is intended to take up axial angle errors within a range of ±4°.

Material
Flexo coupling, nut: Zinc-plated steel
Socket: Hardened steel
Supplied complete with galvanized adjustment nut.



Cyl.-bore mm	B min mm	B max mm	DL	EH mm	EI mm	EK mm	EL mm	EN mm	EO mm	EP mm	EQ mm	ER mm	M mm	Z	Weight kg	Order code
32	36,0	43	M10x1,25	20	23	70	31	12	30	30	19	30	5,0	4°	0,21	**P1C-4KRF**
40	37,0	43	M12x1,25	23	23	67	31	12	30	30	19	30	6,0	4°	0,22	**P1C-4LRF**
50	53,0	61	M16x1,5	40	32	112	45	19	41	41	30	41	8,0	4°	0,67	**P1C-4MRF**
63	53,0	61	M16x1,5	40	32	112	45	19	41	41	30	41	8,0	4°	0,67	**P1C-4MRF**
80	57,0	67	M20x1,5	39	42	122	56	19	41	41	30	41	10,0	4°	0,72	**P1C-4PRF**
100	57,0	67	M20x1,5	39	42	122	56	19	41	41	30	41	10,0	4°	0,72	**P1C-4PRF**
125	75,5	89	M27x2	48	48	145	60	24	55	55	32	55	13,5	4°	1,80	**P1C-4RRF**

Piston rod nut

Intended for fixed mounting of accessories to the piston rod.

Material: Zinc-plated steel

The cylinders are supplied complete with one zinc plated steel piston rod nut.

Stainless steel nut

Intended for fixed mounting of accessories to the piston rod.

Material: Stainless steel A2

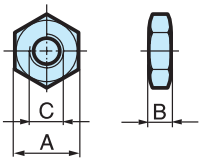
The cylinders are supplied complete with one zinc plated steel piston rod nut.

Acid-proof nut

Intended for fixed mounting of accessories to the piston rod.

Material: Acid-proof steel A4

Cylinders with acid-proof piston rod are supplied with nut of acid-proof steel

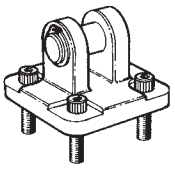


Enligt DIN 439 B

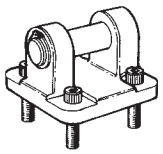
Cyl. Ø	A mm	B mm	C mm	Weight kg	Order code Piston rod nut	Order code Stainless steel nut	Order code Acid-proof nut
32	17	5,0	M10x1,25	0,007	**9128985601**	**9126725404**	**0261109919**
40	19	6,0	M12x1,25	0,010	**0261109910**	**9126725405**	**0261109920**
50	24	8,0	M16x1,5	0,021	**9128985603**	**9126725406**	**0261109917**
63	24	8,0	M16x1,5	0,021	**9128985603**	**9126725406**	**0261109917**
80	30	10,0	M20x1,5	0,040	**0261109911**	**0261109921**	**0261109916**
100	30	10,0	M20x1,5	0,040	**0261109911**	**0261109921**	**0261109916**
125	41	13,5	M27x2	0,100	**0261109912**	**0261109922**	**0261109918**

Cylinder mountings

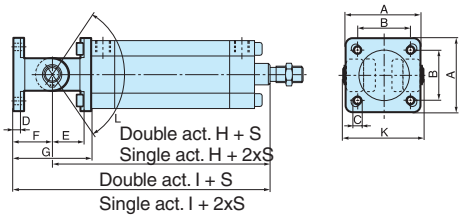
Clevis bracket MP4



Clevis bracketMP2



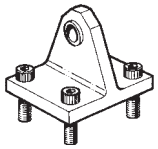
In this combination the clevis bracket MP4 is attached to the indicated cylinder.



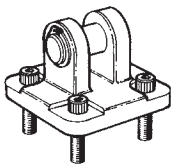
Cyl. Ø	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	K mm	L mm	Order code MP4	Order code MP2
32	48	32,5	5,5	7,0	15,0	22	44	97,0	119,0	52	104°	**9121644601**	**9121644701**
40	54	36,8	6,6	7,0	21,0	28	56	106,0	134,0	59	130°	**9121644602**	**9121644702**
50	64	46,7	6,6	8,5	19,5	28	56	113,0	141,0	67	120°	**9121644603**	**9121644703**
63	76	55,9	9,0	10,0	26,0	36	72	122,0	158,0	77	110°	**9121644604**	**9121644704**
80	94	70,0	11,0	12,0	26,0	38	76	139,0	177,0	97	80°	**9121644605**	**9121644705**
100	110	84,1	11,0	14,0	29,0	43	86	146,0	189,0	117	82°	**9121644606**	**9121644706**
125	135	104,0	14,0	15,0	35,0	50	100	165,5	215,5	137	82°	**9121644607**	**9121644707**

S=stroke length

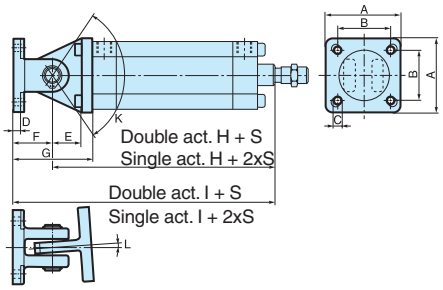
Swivel rod bracket



Clevis bracket MP4



In this combination the swivel rod bracket is attached to the indicated cylinder.



Cyl. Ø	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	K mm	L mm	Order code Swivel rod bracket	Order code MP2
32	48	32,5	5,5	7,0	15,0	22	44	97,0	119,0	104°	5,7°	**9121568601**	**9121644601**
40	54	36,8	6,6	7,0	21,0	28	56	106,0	134,0	130°	5,5°	**9121568602**	**9121644602**
50	64	46,7	6,6	8,5	19,5	28	56	113,0	141,0	120°	5,2°	**9121568603**	**9121644603**
63	76	55,9	9,0	10,0	26,0	36	72	122,0	158,0	110°	5,1°	**9121568604**	**9121644604**
80	94	70,0	11,0	12,0	26,0	38	76	139,0	177,0	80°	4,6°	**9121568605**	**9121644605**
100	110	84,1	11,0	14,0	29,0	43	86	146,0	189,0	82°	4,4°	**9121568606**	**9121644606**
125	135	104,0	14,0	15,0	35,0	50	100	165,5	215,5	82°	4,4°	**9121568607**	**9121644607**

S=stroke length

Home

The P1A range of cylinders is intended for use in a wide range of applications. The cylinders are particularly suitable for lighter duties in the packaging, food and textile industries.
Careful design and high quality manufacture throughout ensure long service life and optimum economy.
Mounting dimensions fully in accordance with ISO 6432 and CETOP RP52P greatly simplifies installation and world-wide interchangeability.

- Mini cylinder according to ISO 6432
- Available in 10 to 25 mm bores
- Corrosion resistant design and low weight construction
- Magnetic piston as standard
- End stroke buffers for long service life

Operating information

Working pressure: Max 10 bar
Temperature range: -20°C to +80°C Ø10-25mm

Prelubricated, further lubrication is not normally necessary.
If additional lubrication is introduced it must be continued.

For technical information see CD

Double acting buffer cushioning

Ø10mm - (M5)

Stroke mm	Order code
10	**P1A-S010DS-0010**
15	**P1A-S010DS-0015**
25	**P1A-S010DS-0025**
30	**P1A-S010DS-0030**
40	**P1A-S010DS-0040**
50	**P1A-S010DS-0050**
80	**P1A-S010DS-0080**
100	**P1A-S010DS-0100**
125	**P1A-S010DS-0125**

Ø12mm - (M5)

Stroke mm	Order code
10	**P1A-S012DS-0010**
15	**P1A-S012DS-0015**
25	**P1A-S012DS-0025**
30	**P1A-S012DS-0030**
40	**P1A-S012DS-0040**
50	**P1A-S012DS-0050**
80	**P1A-S012DS-0080**
100	**P1A-S012DS-0100**
125	**P1A-S012DS-0125**
160	**P1A-S012DS-0160**
200	**P1A-S012DS-0200**

Ø16mm - (M5)

Stroke mm	Order code
10	**P1A-S016DS-0010**
15	**P1A-S016DS-0015**
25	**P1A-S016DS-0025**
30	**P1A-S016DS-0030**
40	**P1A-S016DS-0040**
50	**P1A-S016DS-0050**
80	**P1A-S016DS-0080**
100	**P1A-S016DS-0100**
125	**P1A-S016DS-0125**
160	**P1A-S016DS-0160**
200	**P1A-S016DS-0200**

Ø20mm - (G1/8)

Stroke mm	Order code
10	**P1A-S020DS-0010**
15	**P1A-S020DS-0015**
25	**P1A-S020DS-0025**
30	**P1A-S020DS-0030**
40	**P1A-S020DS-0040**
50	**P1A-S020DS-0050**
80	**P1A-S020DS-0080**
100	**P1A-S020DS-0100**
125	**P1A-S020DS-0125**
160	**P1A-S020DS-0160**
200	**P1A-S020DS-0200**
250	**P1A-S020DS-0250**
320	**P1A-S020DS-0320**

Ø25mm - (G1/8)

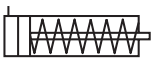
Stroke mm	Order code
10	**P1A-S025DS-0010**
15	**P1A-S025DS-0015**
25	**P1A-S025DS-0025**
30	**P1A-S025DS-0030**
40	**P1A-S025DS-0040**
50	**P1A-S025DS-0050**
80	**P1A-S025DS-0080**
100	**P1A-S025DS-0100**
125	**P1A-S025DS-0125**
160	**P1A-S025DS-0160**
200	**P1A-S025DS-0200**
250	**P1A-S025DS-0250**
320	**P1A-S025DS-0320**

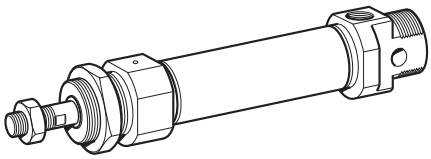
Sensors

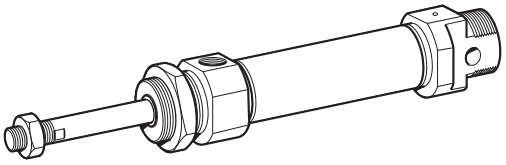
For sensors see page 96.

Indicates stocked product.

Single acting push type (Spring return for retract stroke)







Ø10mm - (M5)

Stroke mm	Order code
10	**P1A-S010SS-0010**
15	**P1A-S010SS-0015**
25	**P1A-S010SS-0025**
40	**P1A-S010SS-0040**
50	**P1A-S010SS-0050**
80	**P1A-S010SS-0080**

Ø16mm - (M5)

Stroke mm	Order code
10	**P1A-S016SS-0010**
15	**P1A-S016SS-0015**
25	**P1A-S016SS-0025**
40	**P1A-S016SS-0040**
50	**P1A-S016SS-0050**
80	**P1A-S016SS-0080**

Ø25mm - (G1/8)

Stroke mm	Order code
10	**P1A-S025SS-0010**
15	**P1A-S025SS-0015**
25	**P1A-S025SS-0025**
40	**P1A-S025SS-0040**
50	**P1A-S025SS-0050**
80	**P1A-S025SS-0080**

Ø12mm - (M5)

Stroke mm	Order code
10	**P1A-S012SS-0010**
15	**P1A-S012SS-0015**
25	**P1A-S012SS-0025**
40	**P1A-S012SS-0040**
50	**P1A-S012SS-0050**
80	**P1A-S012SS-0080**

Ø20mm - (G1/8)

Stroke mm	Order code
10	**P1A-S020SS-0010**
15	**P1A-S020SS-0015**
25	**P1A-S020SS-0025**
40	**P1A-S020SS-0040**
50	**P1A-S020SS-0050**
80	**P1A-S020SS-0080**

Single acting pull type (Spring return for advance stroke)

Ø16mm - (M5)

Stroke mm	Order code
10	**P1A-S016TS-0010**
15	**P1A-S016TS-0015**
25	**P1A-S016TS-0025**
40	**P1A-S016TS-0040**
50	**P1A-S016TS-0050**

Ø20mm - (G1/8)

Stroke mm	Order code
10	**P1A-S020TS-0010**
15	**P1A-S020TS-0015**
25	**P1A-S020TS-0025**
40	**P1A-S020TS-0040**
50	**P1A-S020TS-0050**
80	**P1A-S020TS-0080**

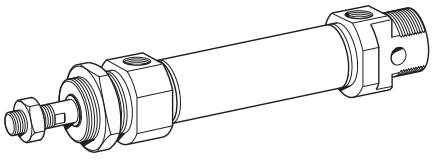
Ø25mm - (G1/8)

Stroke mm	Order code
10	**P1A-S025TS-0010**
15	**P1A-S025TS-0015**
25	**P1A-S025TS-0025**
40	**P1A-S025TS-0040**
50	**P1A-S025TS-0050**
80	**P1A-S025TS-0080**

Double acting adjustable cushioning

Effective cushioning

The Mini ISO range is available with fixed end cushioning or with adjustable pneumatic cushioning, controlled by simple bleed screws for fine adjustment. The adjustable cushioned cylinders can be operated with higher mass loads and at higher speeds than those with fixed end cushioning, reducing overall cycle times.



Ø16mm - (M5)

Stroke mm	Order code
20	**P1A-S016MS-0020**
25	**P1A-S016MS-0025**
30	**P1A-S016MS-0030**
40	**P1A-S016MS-0040**
50	**P1A-S016MS-0050**
80	**P1A-S016MS-0080**
100	**P1A-S016MS-0100**
125	**P1A-S016MS-0125**
160	**P1A-S016MS-0160**
200	**P1A-S016MS-0200**

Ø20mm - (G1/8)

Stroke mm	Order code
20	**P1A-S020MS-0020**
25	**P1A-S020MS-0025**
30	**P1A-S020MS-0030**
40	**P1A-S020MS-0040**
50	**P1A-S020MS-0050**
80	**P1A-S020MS-0080**
100	**P1A-S020MS-0100**
125	**P1A-S020MS-0125**
160	**P1A-S020MS-0160**
200	**P1A-S020MS-0200**
250	**P1A-S020MS-0250**
320	**P1A-S020MS-0320**

Ø25mm - (G1/8)

Stroke mm	Order code
20	**P1A-S025MS-0020**
25	**P1A-S025MS-0025**
30	**P1A-S025MS-0030**
40	**P1A-S025MS-0040**
50	**P1A-S025MS-0050**
80	**P1A-S025MS-0080**
100	**P1A-S025MS-0100**
125	**P1A-S025MS-0125**
160	**P1A-S025MS-0160**
200	**P1A-S025MS-0200**
250	**P1A-S025MS-0250**
320	**P1A-S025MS-0320**

Indicates stocked product.

Home

Design Variants

Working temperatures

High temperature

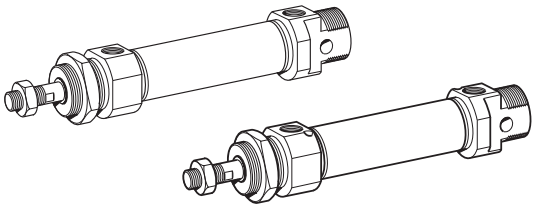
Ø10, 12 and 16mm	-10°C to +120°C Non-magnetic piston
Ø20 and 25mm	-10°C to +150°C Non-magnetic piston

External seals

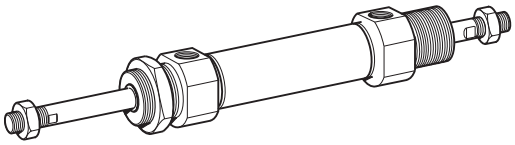
flourinated rubber	-20°C to +80°C Magnetic piston

Double acting options

Double-acting adjustable cushioning	Ø16 - Ø25 (not for seal material type F and L)
Double-acting non-adjustable cushioning	Ø10 - Ø25

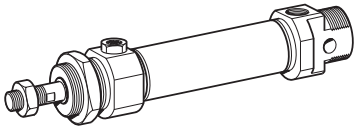


Double-acting, adjustable cushioning through rod	Ø16 - Ø25 (not for seal material type F and L)
Double-acting, non-adjustable cushioning through rod	Ø10 - Ø25
Double-acting, adjustable cushioning through rod, hollow	Ø16 - Ø25 (not for seal material type F and L)
Double-acting, non-adjustable cushioning through rod, hollow	Ø10 - Ø25



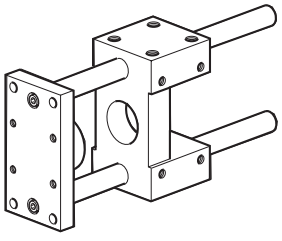
Single acting options

Single-acting, non-adjustable cushioning, spring return for retract stroke	Ø16 - Ø25
Single-acting, push type	Ø10 - Ø25



"U" style rod guidance modules, plain bearings

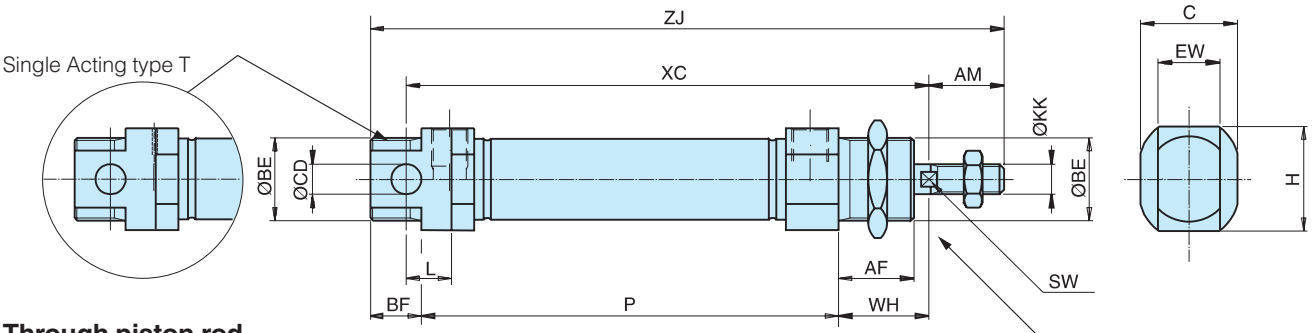
The P1A series cylinders can be equipped with an external guiding device to prevent the piston rod from turning. When fitted the guide provides a guided piston movement enabling the cylinder to resist turning moments on the piston rod, as well as greater transverse forces.



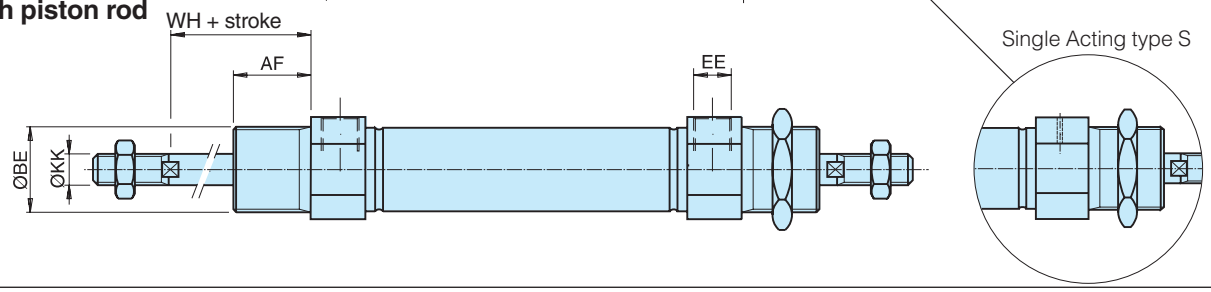
Home

Dimensions

Double and single acting cylinders



Through piston rod



Cylinder bore mm	AM 0/-2 mm	BE	AF mm	BF mm	C mm	CDH9 mm	EE	EW mm	H mm	KK	L mm	SW mm	WH±1,2 mm
10	12	M12x1,25	12	10	13,0	4	M5	8	13,0	M4	6	–	16
12	16	M16x1,5	18	13	17,8	6	M5	12	17,8	M6	9	5	22
16[1)]	16	M16x1,5	18	13	17,8	6	M5	12	17,8	M6	9	5	22
16[2)]	16	M16x1,5	18	13	23,8	6	M5	12	23,8	M6	9	5	22
20	20	M22x1,5	20	14	23,8	8	G1/8	16	23,8	M8	12	7	24
25	22	M22x1,5	22	14	26,8	8	G1/8	16	26,8	M10x1,25	12	9	28

1) P1A-S016DS/SS/TS
2) P1A-S016MS

Double acting cylinders

Cylinder bore mm	XC mm	ZJ mm	P mm
10	64 + stroke	84 + stroke	46 + stroke
12	75 + stroke	99 + stroke	48 + stroke
16	82 + stroke	104 + stroke	53 + stroke
20	95 + stroke	125 + stroke	67 + stroke
25	104 + stroke	132 + stroke	68 + stroke

Single-acting, spring return, type SS

Stroke/ Cylinder bore mm	10 XC mm	15 XC mm	25 XC mm	40 XC mm	50 XC mm	80 XC mm	10 ZJ mm	15 ZJ mm	25 ZJ mm	40 ZJ mm	50 ZJ mm	80 ZJ mm	10 P mm	15 P mm	25 P mm	40 P mm	50 P mm	80 P mm
10	74	79	89	126	136	174	94	99	109	146	156	194	56	61	71	108	118	156
12	85	90	100	132	142	185	109	114	124	156	166	209	58	63	73	105	115	158
16	92	97	107	122	132	184	114	119	129	144	154	206	63	68	78	93	103	155
20	105	110	120	135	145	191	135	140	150	165	175	221	77	82	92	107	117	163
25	114	119	129	144	154	201	142	147	157	172	182	229	78	83	93	108	118	165

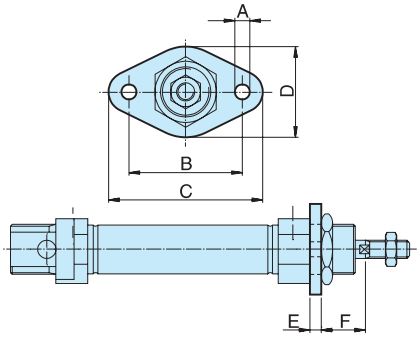
Single-acting, spring-extended, type TS

Stroke/ Cylinder bore mm	10 XC[3)] mm	15 XC[3)] mm	25 XC[3)] mm	40 XC[3)] mm	50 XC[3)] mm	80 XC[3)] mm	10 ZJ[3)] mm	15 ZJ[3)] mm	25 ZJ[3)] mm	40 ZJ[3)] mm	50 ZJ[3)] mm	80 ZJ[3)] mm	10 P mm	15 P mm	25 P mm	40 P mm	50 P mm	80 P mm
16	107	112	122	137	147	–	129	134	144	159	169	–	78	83	93	108	118	–
20	120	125	135	150	160	195	150	155	165	180	190	225	92	97	107	122	132	167
25	129	134	144	159	169	205	157	162	172	187	197	233	93	98	108	123	133	169

3) With piston rod retracted, as shown in the dimension drawing

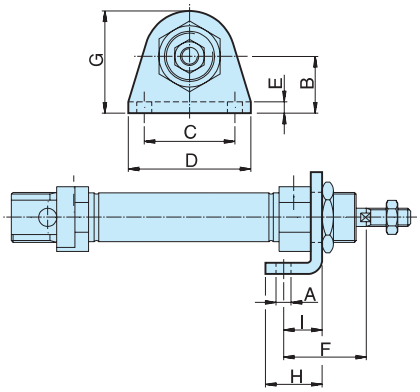
Length tolerances ±1 mm
Stroke length tolerances +1,5/0 mm

Cylinder Mountings



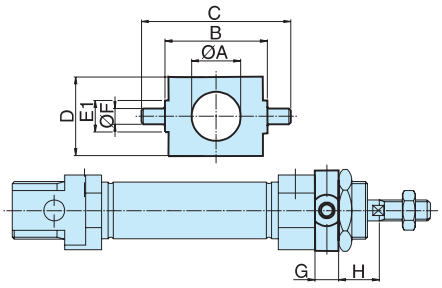
Flange-MF8

Cylinder Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	Order code
10	4,5	30	40	22	3	13	**P1A-4CMB**
12-16	5,5	40	52	30	4	18	**P1A-4DMB**
20	6,6	50	66	40	5	19	**P1A-4HMB**
25	6,6	50	66	40	5	23	**P1A-4HMB**



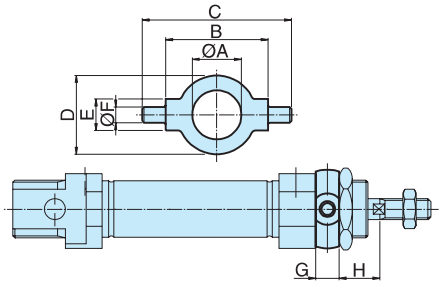
Foot-MS3

Cylinder Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Order code
10	4,5	16	25	35	3	24	26,0	16	11	**P1A-4CMF**
12-16	5,5	20	32	42	4	32	32,5	20	14	**P1A-4DMF**
20	6,5	25	40	54	5	36	45,0	25	17	**P1A-4HMF**
25	6,5	25	40	54	5	40	45,0	25	17	**P1A-4HMF**



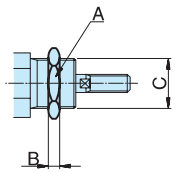
Cover trunnion

Cylinder Ø mm	A mm	B h14 mm	C mm	D mm	E1 mm	F e9 mm	G mm	H mm	Order code
10	12,5	26	38	20	9	4	6	10	**P1A-4CMZ**
12-16	16,5	38	58	25	13	6	8	14	**P1A-4DMZ**
20	22,5	46	66	30	13	6	8	16	**P1A-4HMZ**
25	22,5	46	66	30	13	6	8	20	**P1A-4HMZ**



Cover trunnion Stainless steel

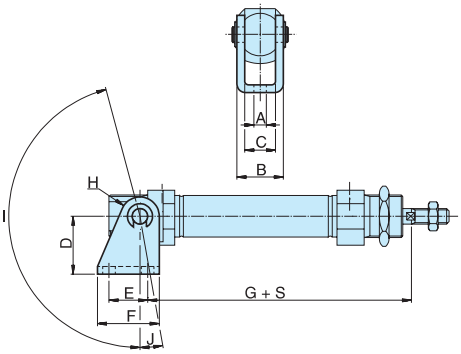
Cylinder Ø mm	A mm	B h14 mm	C mm	D mm	E mm	F e9 mm	G mm	H mm	Order code
10	12,5	26	38	20	8	4	6	10	**P1A-4CMJ**
12-16	16,5	38	58	25	10	6	8	14	**P1A-4DMJ**
20	22,5	46	66	30	10	6	8	16	**P1A-4HMJ**
25	22,5	46	66	30	10	6	8	20	**P1A-4HMJ**



Stainless Mounting nut

Cylinder Ø mm	A mm	B mm	C	Order code
10	19	6	M12x1,25	**9126725405**
12-16	24	8	M16x1,50	**9126725406**
20-25	32	11	M22x1,50	**9126725407**

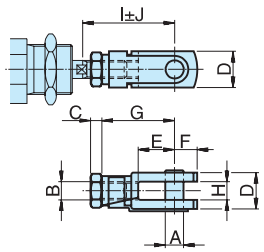
Cylinder Mountings



Clevis bracket

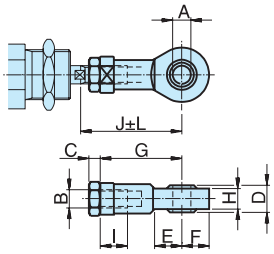
Cylinder Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I °	J °	Order code
10	4,5	13	8	24	12,5	20	65,3	5	160	17	**P1A-4CMT**
12	5,5	18	12	27	15,0	25	73,0	7	170	15	**P1A-4DMT**
16	5,5	18	12	27	15,0	25	80,0	7	170	15	**P1A-4DMT**
20	6,5	24	16	30	20,0	32	91,0	10	165	10	**P1A-4HMT**
25	6,5	24	16	30	20,0	32	100,0	10	165	10	**P1A-4HMT**

S=stroke



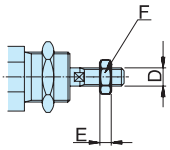
Clevis

Cylinder Ø mm	A mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	Order code
10	4	M4	2,2	8	8	5	16	4	22,0	2,0	**P1A-4CRC**
12-16	6	M6	3,2	12	12	7	24	6	31,0	3,0	**P1A-4DRC**
20	8	M8	4,0	16	16	10	32	8	40,5	3,5	**P1A-4HRC**
25	10	M10x1,25	5,0	20	20	12	40	10	49,0	3,0	**P1A-4JRC**



Swivel rod eye

Cylinder Ø mm	A mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm	Order code
10	5	M4	2,2	8	10	9	27	6,0	8	33,0	9	2,0	**P1A-4CRS**
12-16	6	M6	3,2	9	10	10	30	6,8	9	38,5	11	1,5	**P1A-4DRS**
20	8	M8	4,0	12	12	12	36	9,0	12	46,0	14	2,0	**P1A-4HRS**
25	10	M10x1,25	5,0	14	14	14	43	10,5	15	52,5	17	2,5	**P1A-4JRS**



Stainless Rod nut

Cylinder Ø mm	D	F mm	E mm	Order code
10	M4	7	2,2	**9127385121**
12-16	M6	10	3,2	**9127385122**
20	M8	13	4,0	**9127385123**
25	M10x1,25	17	5,0	**9126725404**

This range of stainless steel cylinders has been specially designed for use in difficult environments. Hygienic design, external seals of flourianted rubber and prelubrication with our food-industry-approved grease according to USDA-H1 make the cylinders particularly suitable for food industry use.
All cylinders have magnetic pistons for proximity position sensing. Fixing dimensions to ISO 6432 simplify installation and make the cylinders physically interchangeable throughout the world.

- Mini - cylinders according to ISO 6432
- All stainless in 10 to 25 mm bores
- Magnetic piston as standard
- Double and single acting
- End stroke buffers for long service life
- Available with adjustable cushioning

Operating information

Working pressure: Max 10 bar
Temperature range: -20°C to +80°C Ø10-25mm

Prelubricated, further lubrication is not normally necessary.
If additional lubrication is introduced it must be continued.

For technical information see CD

Double acting fixed cushioning

Ø10mm - (M5)

Stroke mm	Order code
10	**P1S-S010DS-0010**
15	**P1S-S010DS-0015**
25	**P1S-S010DS-0025**
40	**P1S-S010DS-0040**
50	**P1S-S010DS-0050**
80	**P1S-S010DS-0080**
100	**P1S-S010DS-0100**
125	**P1S-S010DS-0125**

Ø12mm - (M5)

Stroke mm	Order code
10	**P1S-S012DS-0010**
15	**P1S-S012DS-0015**
25	**P1S-S012DS-0025**
40	**P1S-S012DS-0040**
50	**P1S-S012DS-0050**
80	**P1S-S012DS-0080**
100	**P1S-S012DS-0100**
125	**P1S-S012DS-0125**
160	**P1S-S012DS-0160**
200	**P1S-S012DS-0200**

Ø16mm - (M5)

Stroke mm	Order code
10	**P1S-S016DS-0010**
15	**P1S-S016DS-0015**
25	**P1S-S016DS-0025**
40	**P1S-S016DS-0040**
50	**P1S-S016DS-0050**
80	**P1S-S016DS-0080**
100	**P1S-S016DS-0100**
125	**P1S-S016DS-0125**
160	**P1S-S016DS-0160**
200	**P1S-S016DS-0200**

Ø20mm - (G1/8)

Stroke mm	Order code
10	**P1S-S020DS-0010**
15	**P1S-S020DS-0015**
25	**P1S-S020DS-0025**
40	**P1S-S020DS-0040**
50	**P1S-S020DS-0050**
80	**P1S-S020DS-0080**
100	**P1S-S020DS-0100**
125	**P1S-S020DS-0125**
160	**P1S-S020DS-0160**
200	**P1S-S020DS-0200**
250	**P1S-S020DS-0250**
320	**P1S-S020DS-0320**

Ø25mm - (G1/8)

Stroke mm	Order code
10	**P1S-S025DS-0010**
15	**P1S-S025DS-0015**
25	**P1S-S025DS-0025**
40	**P1S-S025DS-0040**
50	**P1S-S025DS-0050**
80	**P1S-S025DS-0080**
100	**P1S-S025DS-0100**
125	**P1S-S025DS-0125**
160	**P1S-S025DS-0160**
200	**P1S-S025DS-0200**
250	**P1S-S025DS-0250**
320	**P1S-S025DS-0320**

Double acting adjustable cushioning

Ø20mm - (G1/8)

Stroke mm	Order code
15	**P1S-S020MS-0015**
25	**P1S-S020MS-0025**
40	**P1S-S020MS-0040**
50	**P1S-S020MS-0050**
80	**P1S-S020MS-0080**
100	**P1S-S020MS-0100**
125	**P1S-S020MS-0125**
160	**P1S-S020MS-0160**
200	**P1S-S020MS-0200**
250	**P1S-S020MS-0250**
320	**P1S-S020MS-0320**

Ø25mm - (G1/8)

Stroke mm	Order code
15	**P1S-S025MS-0015**
25	**P1S-S025MS-0025**
40	**P1S-S025MS-0040**
50	**P1S-S025MS-0050**
80	**P1S-S025MS-0080**
100	**P1S-S025MS-0100**
125	**P1S-S025MS-0125**
160	**P1S-S025MS-0160**
200	**P1S-S025MS-0200**
250	**P1S-S025MS-0250**
320	**P1S-S025MS-0320**

Sensors

For sensors see page 96.

Design Variants

Working temperatures

High temperature

Ø10 and Ø16mm	-10°C to +120°C Non-magnetic piston
Ø20 and Ø25mm	-10°C to +150°C Non-magnetic piston

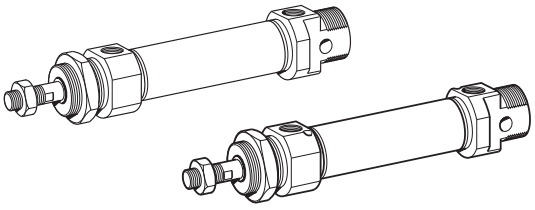
Low temperature

Ø10, 12 and 16mm	-40°C to +60°C Non-magnetic piston

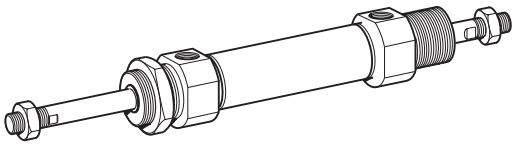
Double acting options

Effective end-cushioning
A version of ISO 6432 Ø10-Ø25 incorporates fixed end-cushioning, while the cylinders Ø20-Ø125 have pneumatic end-cushioning with adjusting screws for exact setting, permitting heavier loads and higher speeds for short cycle times.

Double-acting adjustable cushioning	Ø20 - Ø25 (not for seal material type F and L)
Double-acting non-adjustable cushioning	Ø10 - Ø25

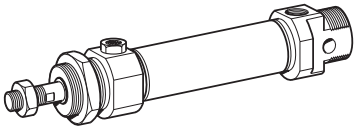


Double-acting, adjustable cushioning through rod	Ø20 - Ø25 (not for seal material type F and L)
Double-acting, non-adjustable cushioning through rod	Ø10 - Ø25
Double-acting, adjustable cushioning through rod, hollow	Ø20 - Ø25 (not for seal material type F and L)
Double-acting, non-adjustable cushioning through rod, hollow	Ø20 - Ø25 max stroke 125mm

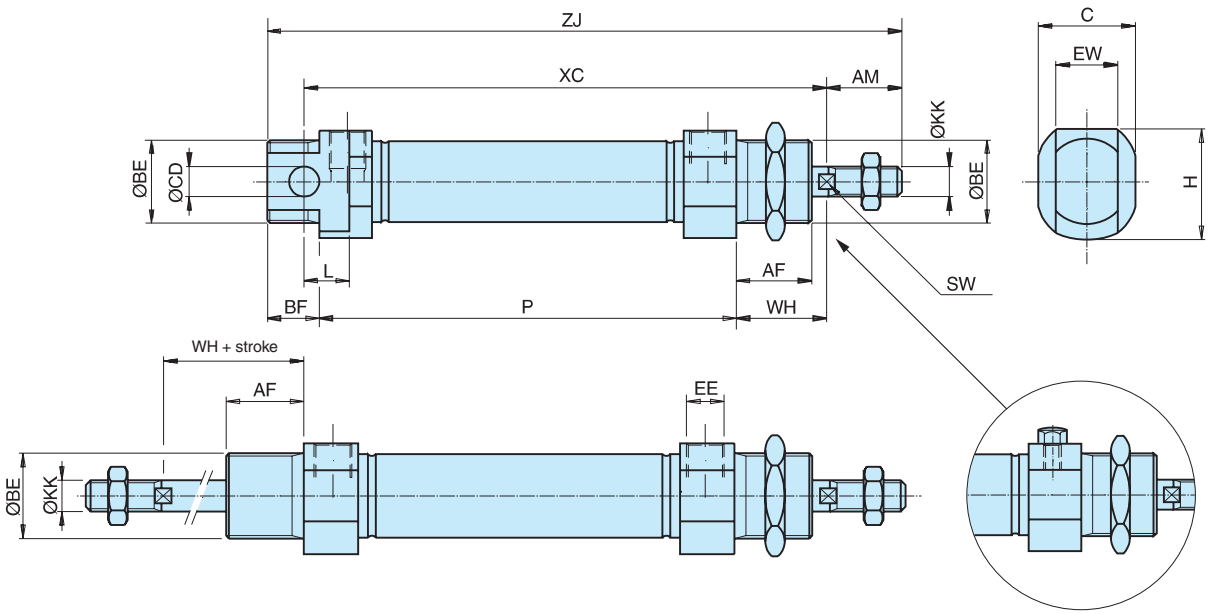


Single acting options

Single-acting, non-adjustable cushioning, spring return for retract stroke	Ø10 - Ø25
Single-acting, push type	Ø20 - Ø25



Home



Dimensions

Cyl. bore mm	AM 0/-2 mm	BE	AF mm	BF mm	C mm	CDH9 mm	EE	EW mm	H mm	KK	L mm	SW mm	WH±1,2 mm
10	12	M12x1,25	12	10	14	4	M5	8	19	M4	6	–	16
12	16	M16x1,5	18	13	18	6	M5	12	19	M6	9	5	22
16	16	M16x1,5	18	13	18	6	M5	12	19	M6	9	5	22
20	20	M22x1,5	20	14	24	8	G1/8	16	29	M8	12	7	24
25	22	M22x1,5	22	14	28	8	G1/8	16	32	M10x1,25	12	9	28

Double acting cylinders

Cyl. bore mm	XC mm	ZJ mm	P mm
10	64 + stroke	84 + stroke	46 + stroke
12	75 + stroke	99 + stroke	48 + stroke
16	82 + stroke	104 + stroke	53 + stroke
20	95 + stroke	125 + stroke	67 + stroke
25	104 + stroke	132 + stroke	68 + stroke

Single acting with spring return, type SS

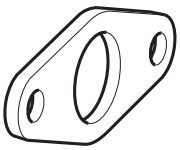
Stroke/ Cyl. bore mm	10 XC mm	15 XC mm	25 XC mm	40 XC mm	50 XC mm	80 XC mm	10 ZJ mm	15 ZJ mm	25 ZJ mm	40 ZJ mm	50 ZJ mm	80 ZJ mm	10 P mm	15 P mm	25 P mm	40 P mm	50 P mm	80 P mm
10	74	79	89	126	136	174	94	99	109	146	156	194	56	61	71	108	118	156
12	85	90	100	132	142	185	109	114	124	156	166	209	58	63	73	105	115	158
16	92	97	107	122	132	184	114	119	129	144	154	206	63	68	78	93	103	155
20	105	110	120	135	145	191	135	140	150	165	175	221	77	82	92	107	117	163
25	114	119	129	144	154	201	142	147	157	172	182	229	78	83	93	108	118	165

Length tolerances ±1 mm
Stroke length tolerances +1,5/0 mm

Cylinders are supplied complete with mounting and adjusting nuts.
Cylinders with through piston rod are supplied complete with two adjusting nuts and one mounting nut.

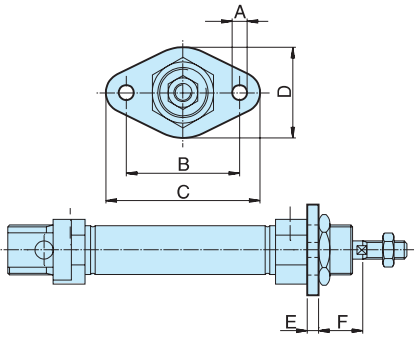
Cylinder mountings

Flange-MF8



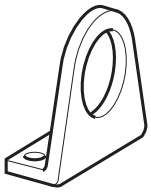
Intended for fixed attachment of the cylinder. The flange is designed for mounting on the front or rear end-covers.

Material:
Stainless steel, DIN X 10 CrNiS 18 9



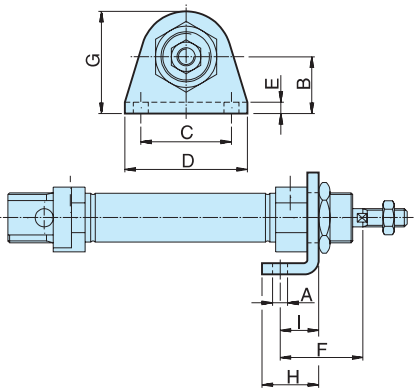
Cylinder Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	Weight Kg	Order code
10	4,5	30	40	22	3	13	0,012	**P1S-4CMB**
12-16	5,5	40	52	30	4	18	0,025	**P1S-4DMB**
20	6,6	50	66	40	5	19	0,045	**P1S-4HMB**
25	6,6	50	66	40	5	23	0,045	**P1S-4HMB**

Foot-MS3



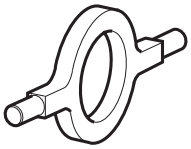
Intended for fixed attachement of the cylinder. The bracket is designed for mounting on the front or rear end-covers.

Material:
Stainless steel, DIN X 10 CrNiS 18 9



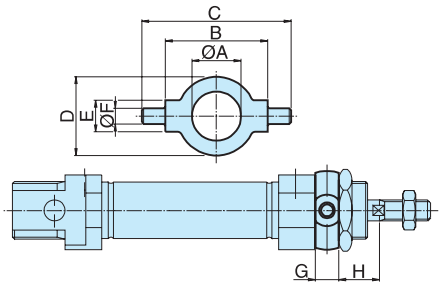
Cylinder Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Weight Kg	Order code
10	4,5	16	25	35	3	24	26	16	11	0,020	**P1S-4CMF**
12-16	5,5	20	32	42	4	32	32,5	20	14	0,040	**P1S-4DMF**
20	6,5	25	40	54	5	36	45	25	17	0,080	**P1S-4HMF**
25	6,5	25	40	54	5	40	45	25	17	0,080	**P1S-4HMF**

Cover trunnion



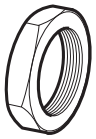
Intended for articulated mounting of the cylinder. The flange is designed for mounting on the front or rear end-covers.

Material:
Stainless steel, DIN X 10 CrNiS 18 9



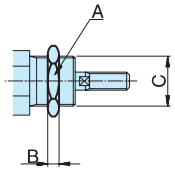
Cylinder Ø	A mm	B h14 mm	C mm	D mm	E e9 mm	F mm	G mm	H Kg	Weight	Order code
10	12,5	26	38	20	8	4	6	10	0,014	**P1A-4CMJ**
12-16	16,5	38	58	25	10	6	8	14	0,033	**P1A-4DMJ**
20	22,5	46	66	30	10	6	8	16	0,037	**P1A-4HMJ**
25	22,5	46	66	30	10	6	8	20	0,037	**P1A-4HMJ**

Mounting nut



Intended for fixed mounting of the cylinder.
Cylinders are supplied complete with one mounting nut.

Material:
Stainless steel, DIN X 5 CrNi 18 10



Cylinder Ø mm	A mm	B mm	C	Weight Kg	Order code
10	16	3	M12x1,25	0,009	**9126725405**
12-16	20	4	M16x1,50	0,018	**9126725406**
20-25	27	5	M22x1,50	0,042	**9126725407**

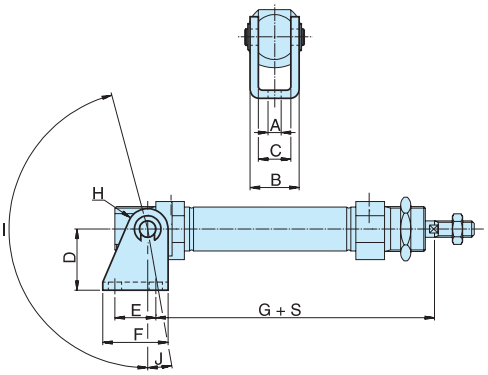
Home

Cylinder mountings

Clevis bracket

Intended for articulated mounting of the cylinder. Supplied with shaft for mounting on the rear end cover.

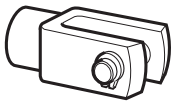
Material:
Bracket: stainless steel, DIN X 5 CrNi 18 10
Pin: tempered stainless steel, DIN X 20 Cr 13
Locking rings: stainless steel, DIN X 5 CrNi 18 10



Cylinder Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I °	J °	Weight Kg	Order code
10	4,5	13	8	24	12,5	20	65,3	5	160	17	0,020	**P1S-4CMT**
12	5,5	18	12	27	15	25	73	7	170	15	0,040	**P1S-4DMT**
16	5,5	18	12	27	15	25	80	7	170	15	0,040	**P1S-4DMT**
20	6,5	24	16	30	20	32	91	10	165	10	0,080	**P1S-4HMT**
25	6,5	24	16	30	20	32	100	10	165	10	0,080	**P1S-4HMT**

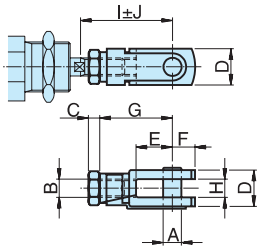
S=stroke

Clevis



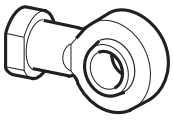
According to ISO 8140
Intended for articulated mounting of the cylinder. This mounting is adjustable in the axial direction. Supplied complete with pin.

Material:
Stainless steel, DIN X 5 CrNi 18 10



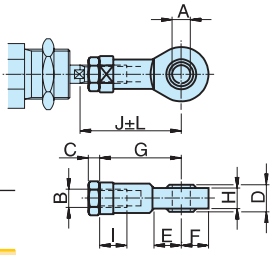
Cylinder Ø mm	A mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	Weight	Order code
10	4	M4	2,2	8	8	5	16	4	22	2	0,007	**P1S-4CRD**
12-16	6	M6	3,2	12	12	7	24	6	31	3	0,022	**P1S-4DRD**
20	8	M8	4	16	16	10	32	8	40,5	3,5	0,045	**P1S-4HRD**
25	10	M10x1,25	5	20	20	12	40	10	49	3	0,095	**P1S-4JRD**

Swivel rod eye



According to ISO 8139
Intended for articulated mounting of the cylinder. This mounting is adjustable in the axial direction.

Material:
Swivel rod eye: stainless steel, DIN X 5 CrNi 18 10
Ball: hardened stainless steel, DIN X 5 CrNi 18 10

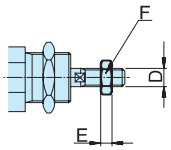


Cylinder Ø mm	A mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm	Weight	Order code
10	5	M4	2,2	8	10	9	27	6	8	33	9	2	0,017	**P1S-4CRT**
12-16	6	M6	3,2	9	10	10	30	6,8	9	38,5	11	1,5	0,025	**P1S-4DRT**
20	8	M8	4	12	12	12	36	9	12	46	14	2	0,045	**P1S-4HRT**
25	10	M10x1,25	5	14	14	14	43	10,5	15	52,5	17	2,5	0,085	**P1S-4JRT**

Rod nut

Intended for fixed mounting on the piston rod. Cylinders are supplied complete with one rod nut. (cylinders with through piston rod are supplied with two rod nuts.)

Material:
Stainless steel, DIN X 5 CrNi 18 10



Cylinder Ø mm	D	F mm	E mm	Weight	Order code
10	M4	7	2,2	0,001	**9127385121**
12-16	M6	10	3,2	0,002	**9127385122**
20	M8	13	4	0,005	**9127385123**
25	M10x1,25	17	5	0,007	**9126725404**

Stainless steel cylinders, ISO 6431, Bore 32 - 125mm P1S

This range of stainless steel cylinders has been specially designed for use in difficult environments. Hygienic design, external seals of flourianted rubber and prelubrication with our food-industry-approved grease according to USDA-H1 make the cylinders particularly suitable for food industry use.
All cylinders have magnetic pistons for proximity position sensing. Fixing dimensions to ISO 6431 simplify installation and make the cylinders physically interchangeable throughout the world.

- Round cylinder to ISO 6431
- All stainless steel
- Clean, smooth washdown design
- Magnetic piston as standard
- Adjustable cushioning for long service life
- Complete range of mountings and sensors

Operating information

Working pressure: Max 10 bar
Temperature range: -20°C to +70°C

Prelubricated, further lubrication is not normally necessary.
If additional lubrication is introduced it must be continued.

For technical information see CD

Standard stroke lengths

Ø32mm - (G1/8)

Stroke mm	Order code
25	P1S-D032MS-0025
50	P1S-D032MS-0050
80	P1S-D032MS-0080
100	P1S-D032MS-0100
125	P1S-D032MS-0125
160	P1S-D032MS-0160
200	P1S-D032MS-0200
250	P1S-D032MS-0250
320	P1S-D032MS-0320
400	P1S-D032MS-0400
500	P1S-D032MS-0500

Ø40mm - (G1/4)

Stroke mm	Order code
25	P1S-D040MS-0025
50	P1S-D040MS-0050
80	P1S-D040MS-0080
100	P1S-D040MS-0100
125	P1S-D040MS-0125
160	P1S-D040MS-0160
200	P1S-D040MS-0200
250	P1S-D040MS-0250
320	P1S-D040MS-0320
400	P1S-D040MS-0400
500	P1S-D040MS-0500

Ø50mm - (G1/4)

Stroke mm	Order code
25	P1S-D050MS-0025
50	P1S-D050MS-0050
80	P1S-D050MS-0080
100	P1S-D050MS-0100
125	P1S-D050MS-0125
160	P1S-D050MS-0160
200	P1S-D050MS-0200
250	P1S-D050MS-0250
320	P1S-D050MS-0320
400	P1S-D050MS-0400
500	P1S-D050MS-0500

Ø63mm - (G3/8)

Stroke mm	Order code
25	P1S-D063MS-0025
50	P1S-D063MS-0050
80	P1S-D063MS-0080
100	P1S-D063MS-0100
125	P1S-D063MS-0125
160	P1S-D063MS-0160
200	P1S-D063MS-0200
250	P1S-D063MS-0250
320	P1S-D063MS-0320
400	P1S-D063MS-0400
500	P1S-D063MS-0500

Ø80mm - (G3/8)

Stroke mm	Order code
25	P1S-L080MS-0025
50	P1S-L080MS-0050
80	P1S-L080MS-0080
100	P1S-L080MS-0100
125	P1S-L080MS-0125
160	P1S-L080MS-0160
200	P1S-L080MS-0200
250	P1S-L080MS-0250
320	P1S-L080MS-0320
400	P1S-L080MS-0400
500	P1S-L080MS-0500

Ø100mm - (G1/2)

Stroke mm	Order code
25	P1S-L100MS-0025
50	P1S-L100MS-0050
80	P1S-L100MS-0080
100	P1S-L100MS-0100
125	P1S-L100MS-0125
160	P1S-L100MS-0160
200	P1S-L100MS-0200
250	P1S-L100MS-0250
320	P1S-L100MS-0320
400	P1S-L100MS-0400
500	P1S-L100MS-0500

Ø125mm - (G1/2)

Stroke mm	Order code
25	P1S-L125MS-0025
50	P1S-L125MS-0050
80	P1S-L125MS-0080
100	P1S-L125MS-0100
125	P1S-L125MS-0125
160	P1S-L125MS-0160
200	P1S-L125MS-0200
250	P1S-L125MS-0250
320	P1S-L125MS-0320
400	P1S-L125MS-0400
500	P1S-L125MS-0500

Sensors

For sensors see pages 96.

Home

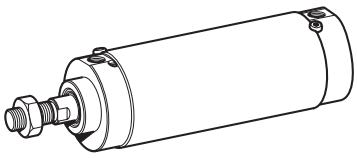
Design Variants

Working temperatures

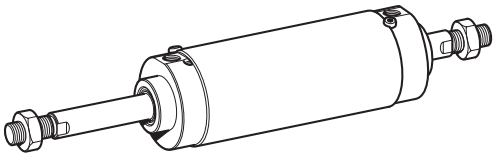
High temperature	-10°C to +150°C Non-magnetic piston
Low temperature	
Ø10 and Ø125mm	-40°C to +40°C Non-magnetic piston
Stainless steel scraper for piston rod	
	-20°C to +80°C Magnetic piston

Double acting options

Double-acting adjustable cushioning — Ø80 - Ø125

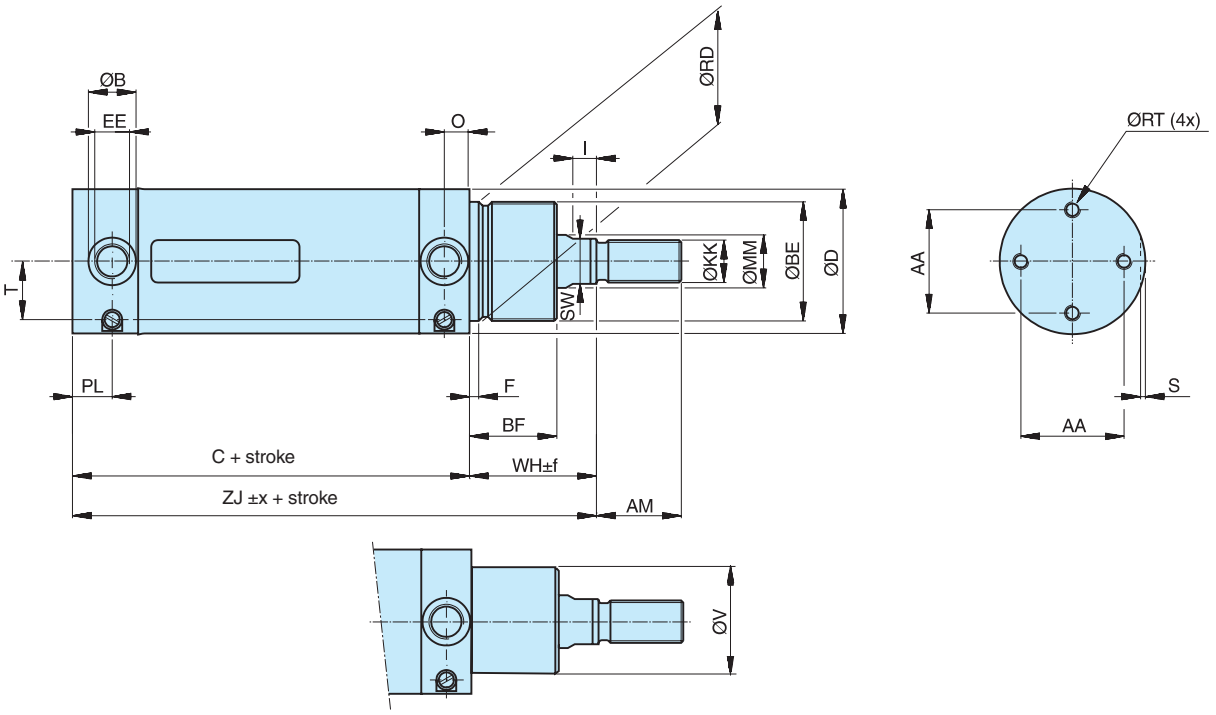


Double-acting adjustable cushioning through rod only — Ø80 - Ø125



Mounting options

ISO 6431 Stainless Steel Cylinders are available with a variety of integral threaded mounting holes or trunnion pegs. See Technical Catalogue CD for details.



Not threaded front end

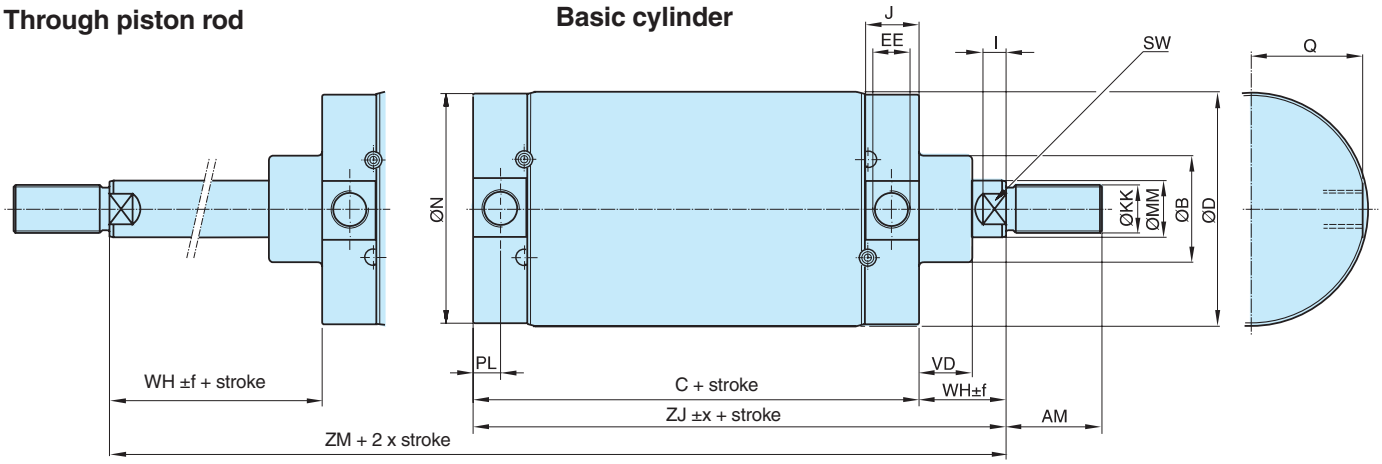
Dimensions Ø32-Ø63

Cylinder designation	AA mm	AM mm	B mm	BF mm	BE	C mm	D mm	EE	F mm	I mm	KK	MM mm	O mm	PL mm	RD mm	RT mm
P1S-D032M	24,5	22	15	25	M30x1,5	88	36	G1/8	4,2	6	M10x1,25	12	8	13	30	M5
P1S-D040M	30	24	18	30	M38x1,5	97	44	G1/4	4,5	9	M12x1,25	16	9,5	15	38	M6
P1S-D050M	39	32	18	33	M45x1,5	101	55	G1/4	4,5	9	M16x1,5	20	9,5	15	45	M6
P1S-D063M	49	32	25	33	M45x1,5	117	68	G3/8	4,5	9	M16x1,5	20	13,3	20,5	45	M8

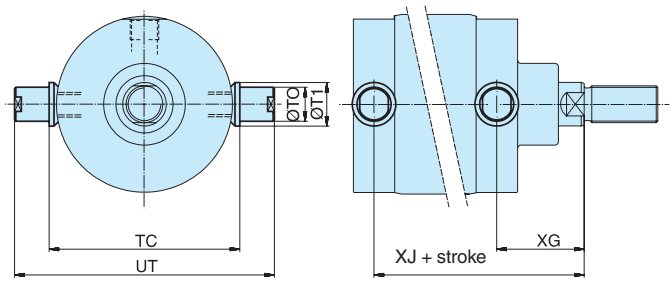
Cylinder designation	S mm	SW mm	T mm	V mm	WH mm	ZJ mm	Mounting tolerances x mm	Mounting tolerances f mm	Stroke length 0-500 mm mm
P1S-D032M	1,5	10	12,2	26	35,5	123,5	1,2	2,5	+2,0
P1S-D040M	1,5	14	16,5	35	44	141	1,0	2,2	+2,0
P1S-D050M	1,5	17	22	41	47	148	0,9	2,3	+2,0
P1S-D063M	1,5	17	26	41	47	164	1,4	2,3	+2,5

Through piston rod

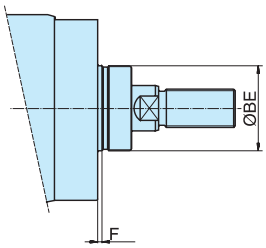
Basic cylinder



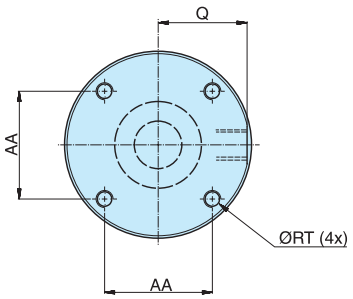
Trunnion pegs on front or rear end cover



Threaded front end



Mounting holes in the end covers



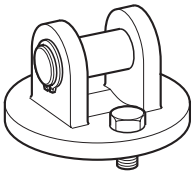
Dimensions Ø80-Ø125

Cylinder designation	AA mm	AM mm	B mm	BE	C mm	D mm	EE	F mm	KK	I mm	J mm	MM mm	N mm	PL mm	Q mm
P1S-•080M	46	40	50	M50x1,5	141	86	G3/8	4	M20x1,5	10	24,5	25	84	12,5	40
P1S-•100M	60	40	50	M50x1,5	158	106	G1/2	4	M20x1,5	8	30	25	104	15,5	49,5
P1S-•125M	76	54	60	M60x2	183	132	G1/2	4	M27x2	13	30	32	129	15,5	62,5

Cylinder designation	RT	SW mm	TC mm	TO mm	T1 mm	UT mm	VD mm	WH mm	XG mm	X3 mm	ZJ mm	ZM mm	Mounting tol. x mm	Mounting tol. f mm	Stroke length 0-500 mm
P1S-•080M	M8	21	98	20	25	125	19	37	49,5	165,5	178	215	1,5	2,5	+2,5
P1S-•100M	M10	21	109	25	32	152	19	35	50,5	177,5	193	228	1,5	2,5	+2,5
P1S-•125M	M12	27	134	25	32	177	24	47	63	214	230	277	2,0	2,5	+4,0

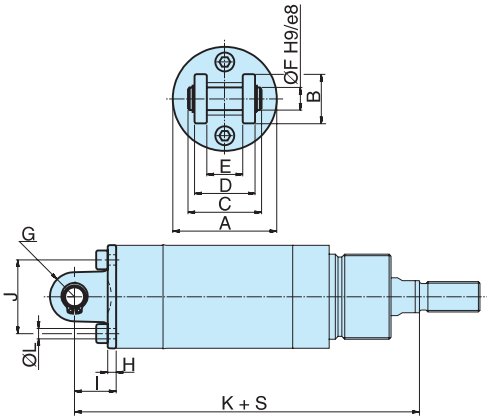
Cylinder mountings Ø32 - Ø63

Clevis bracket MP4



Intended for articulated mounting of the cylinder versions D, F or K. The bracket is mounted at the rear end cover and is supplied complete with shaft, mounting screw and O-ring for a clean joint between end cover and bracket.

Material:
Stainless steel, DIN X 5 CrNi 18 10



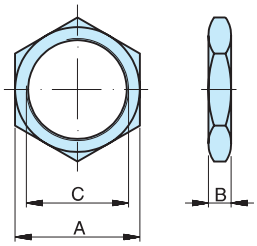
Cylinder Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm	Weight Kg	Order code
32	35,5	20	33	26	15	10	10	4,5	18,5	25	142	5,5	0,09	**P1S-4KME**
40	43,5	24	35	28	17	12	12	4	19	30	160	6,5	0,12	**P1S-4LME**
50	54,5	26	39	32	17	12	13	4,5	22	39	170	6,5	0,19	**P1S-4MME**
63	67,5	34	47	40	22	16	17	6	26	49	190	8,6	0,34	**P1S-4NME**

S = Stroke

Mounting nut

Intended for fixed mounting of the cylinder via the neck.

Material: stainless steel, DIN X 5 CrNi 18 10



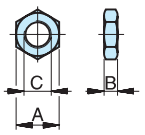
Cylinder Ø mm	A mm	B mm	C	Weight Kg	Order code
32	36	8	M30x1,5	0,03	**9127294401**
40	46	10	M38x1,5	0,06	**9127294402**
50	55	10	M45x1,5	0,08	**9127294403**
63	55	10	M45x1,5	0,08	**9127294403**

Cylinder mountings Ø32-Ø125

Rod nut

Intended for fixed mounting on the piston rod. Cylinders are supplied complete with one rod nut. (cylinders with through piston rods are supplied with two rod nuts.)

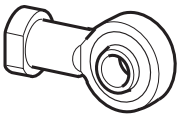
Material:
Stainless steel, DIN X 5 CrNi 18 10



Cylinder Ø	A mm	B mm	C mm	Weight Kg	Order code
32	17	5	M10x1,25	0,01	**9126725404**
40	19	6	M12x1,25	0,01	**9126725405**
50	24	8	M16x1,5	0,02	**9126725406**
63	24	8	M16x1,5	0,02	**9126725406**
80	30	10	M20x1,5	0,04	**0261109921**
100	30	10	M20x1,5	0,04	**0261109921**
125	41	13,5	M27x2	0,10	**0261109922**

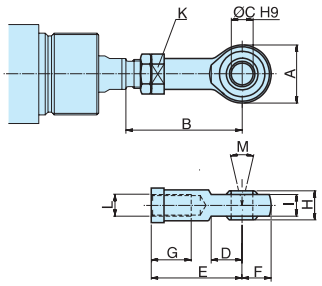
Cylinder mountings Ø32 - Ø125

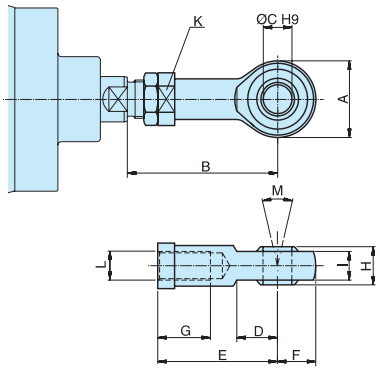
Swivel rod eye



According to ISO 8139
Intended for articulated mounting of the cylinder. This mounting is adjustable in the axial direction.

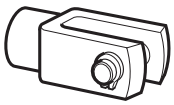
Materal:
Swivel rod eye: stainless steel, DIN X 5 CrNi 18 10
Ball: hardened stainless steel, DIN X 5 CrNi 18 10





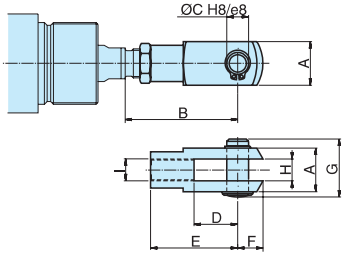
Cyl. Ø mm	A mm	B_{min} mm	B_{max} mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	K mm	L	M	Weight Kg	Order code
32	28	50	55	10	15	43	14	15	14	10,5	17	M10x1,25	24°	0,08	**P1S-4JRT**
40	32	56	62	12	17	50	16	22	16	12	19	M12x1,25	24°	0,12	**P1S-4LRT**
50	42	72	80	16	22	64	21	28	21	15	22	M16x1,5	30°	0,25	**P1S-4MRT**
63	42	72	80	16	22	64	21	28	21	15	22	M16x1,5	30°	0,25	**P1S-4MRT**
80	50	87	97	20	26	77	25	33	25	18	32	M20x1,5	30°	0,46	**P1S-4PRT**
100	50	87	97	20	26	77	25	33	25	18	32	M20x1,5	30°	0,46	**P1S-4PRT**
125	70	123,5	137	30	36	110	35	51	37	25	41	M27x2	30°	1,28	**P1S-4RRT**

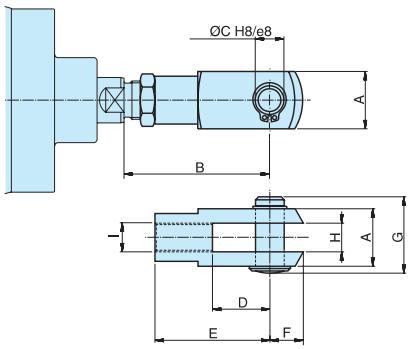
Clevis



According to ISO 8140
Intended for articulated mounting of the cylinder. This mounting is adjustable in the axial direction. Supplied complete with pin.

Material:
Clevis: stainless steel, DIN X 10 CrNiS 18 9
Pin: stainless steel, DIN X 5 CrNi 18 10
Locking rings according to DIN 471

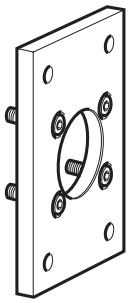




Cylinder Ø mm	A mm	B_{min} mm	B_{max} mm	C mm	D mm	E mm	F mm	G mm	H mm	I	Weight Kg	Order code
32	20	46	52	10	20	40	12	28	10	M10x1,25	0,09	**P1S-4JRD**
40	24	54	60	12	24	48	19	32	12	M12x1,25	0,15	**P1S-4LRD**
50	32	72	80	16	32	64	25	42	16	M16x1,5	0,35	**P1S-4MRD**
63	32	72	80	16	32	64	25	42	16	M16x1,5	0,35	**P1S-4MRD**
80	40	90	100	20	40	80	32	50	20	M20x1,5	0,75	**P1S-4PRD**
100	40	90	100	20	40	80	32	50	20	M20x1,5	0,75	**P1S-4PRD**
125	55	123,5	137	30	54	110	45	72	30	M27x2	2,10	**P1S-4RRD**

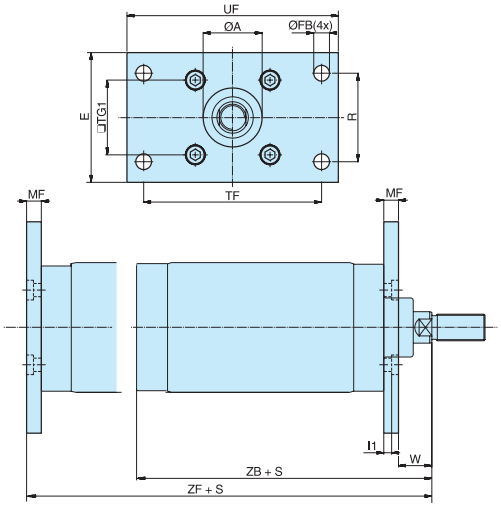
Cylinder mountings

Flange MF1/MF2



Intended for fixed attachment of cylinder version D, E, F, L, M or Q. The flange is designed for mounting on the front or rear end covers.

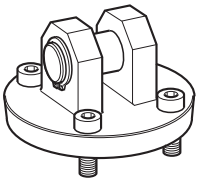
Material:
Stainless steel, DIN X 5 CrNiMo 17 13 3



Cylinder Ø mm	A mm	FB mm	E mm	R mm	TF mm	TG1 mm	UF mm	MF mm	I1 mm	W mm	ZB mm	ZF mm	Weight Kg	Order code
80	50,2	12	86	63	126	46	150	12	6	25	178	190	0,97	**P1S-4PMB**
100	51	14	106	75	150	60	170	12	6	23	193	205	1,42	**P1S-4QMB**
125	61	16	132	90	180	76	205	15	8	32	230	245	1,55	**P1S-4RMB**

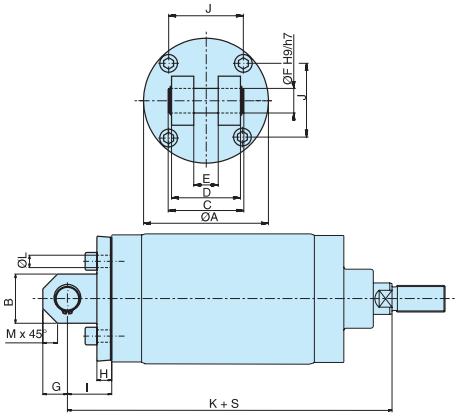
S = Stroke

Clevis bracket MP4



Intended for articulated mounting of cylinder versions D, F, L or Q. The bracket is mounted on the rear end cover and is supplied complete with shaft, mounting screw and O-ring for a clean joint between end cover and bracket.

Material:
Bracket: stainless steel, DIN X 5 CrNi 18 10
Pin: stainless steel, DIN X 5 CrNiMo 17 13 3



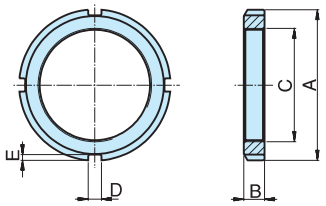
Cylinder Ø mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm	M mm	Weight Kg	Order code
80	80	30	57	50	16	16	15	12	32	46	210	8,6	9	0,78	**P1S-4PME**
100	103	42	67	60	20	20	21	12	37	60	230	10,6	12	1,42	**P1S-4QME**
125	127	50	77	70	25	25	25	15	45	76	275	12,6	15	2,06	**P1S-4RME**

S = Stroke

Mounting nut

Intended for fixed mounting on the front end cover of cylinders according to cylinder version C or D.

Material:
Stainless steel, DIN X 5 CrNi 18 10

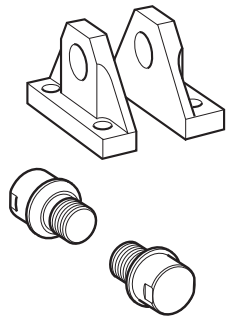


Cylinder Ø mm	A mm	B mm	C	D mm	E mm	Weight Kg	Order code
80	70	11	M50x1,5	6	2,5	0,16	**9126461304**
100	70	11	M50x1,5	6	2,5	0,16	**9126461304**
125	80	11	M60x2	7	3	0,19	**9126461305**

Home

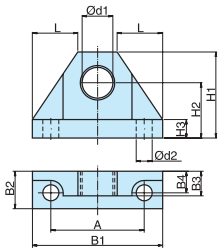
Cylinder mountings

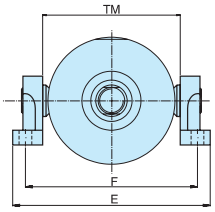
Bearing bracket for trunnion pegs



Intended for articulated mounting of the cylinder. The trunnion pegs are factory mounted on the front or rear end cover and are combined with bearing brackets. Supplied in pairs.

Material:
Bearing brackets: stainless steel, DIN X 5 CrNi 18 10
Journal bearing: stainless steel,
DIN X 5 CrNiMo 17 13 3/PTFE

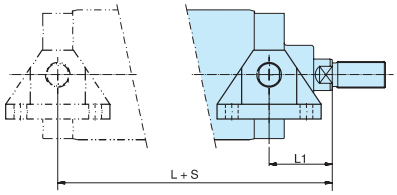




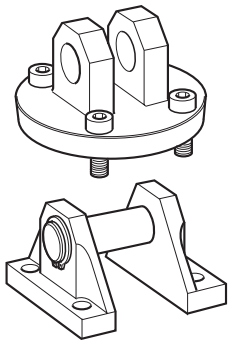
Cylinder Ø mm	A mm	B1 mm	B2 mm	B3 mm	B4 mm	d1 mm	d2 mm	H1 mm	H2 mm	H3 mm	L mm	Weight Kg	Order code
80-100	60	90	28	15	15,5	20	11	58	37	12	34,5	0,16	**9126461304**
125	76	106	30	20	17,5	25	13	70	45	15	40	0,19	**9126461305**

Cylinder Ø mm	E mm	F mm	L1 mm	L2 mm	TM mm	Weight Kg	Order code
80	154	129	49,5	165,5	98	0,16	**9126461304**
100	169	144	50,5	177,5	109	0,16	**9126461304**
125	194	169	63	214	134	0,19	**9126461305**

S = Stroke

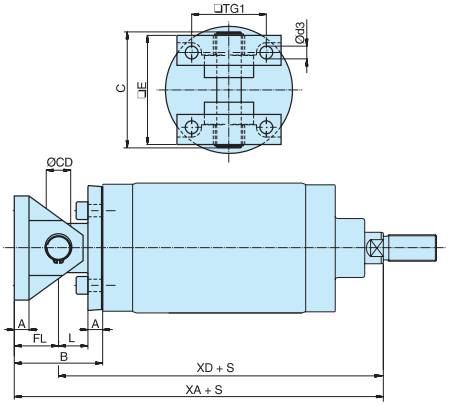


Combinated mounting MP2/MP4



Intended for articulated mounting of cylinder versions D, F, L or Q. The unit is mounted on the rear end cover and is combined with bearing brackets MP2 and is supplied complete with shaft, mounting screw and O-ring for a clean joint between end cover and bracket.

Material:
Bearing brackets: stainless steel, DIN X 5 CrNi 18 10
Journal bearing: stainless steel,
Journal bearing: DIN X 5 CrNiMo 17 13 3/PTFE
Bracket: stainless steel, DIN X 5 CrNi 18 10
Pin: stainless steel, DIN X 5 CrNiMo 17 13 3



Cylinder Ø mm	A mm	B mm	C mm	CD mm	d3 mm	E mm	FL mm	L mm	TG1 mm	XA mm	XD mm	Weight Kg	Order code
80	12	64	82	16	9	74	32	20	46	242	210	1,29	**P1S-4PML**
100	12	74	98	20	11	90	37	25	60	267	230	2,33	**P1S-4QML**
125	15	90	118	25	13	110	45	30	76	320	275	3,30	**P1S-4RML**

S = Stroke

The innovative P1D is a future-proof generation of ISO/VDMA cylinders. The cylinders are double-acting, with a new design of air cushioning.
The P1D complies with the current ISO 6431, ISO 15552, VDMA 24562 and AFNOR installation dimension standards.

- Available in 32 to 125 mm bores
- PUR seals for long service life
- Drop-in sensors
- Corrosion resistant design
- Magnetic piston as standard
- Lubricated with food grade grease

Operating information

Working pressure:	Max 10 bar
Seals / Temperature options	
Standard:	-20°C to +80°C
High temperature:	-10°C to +150°C
Low temperature:	-40°C to +40°C
Cylinders for low pressure hydraulic operation:	Ø32-125mm
ATEX approval:	CE Ex IIGD c T4 120°C

For ATEX specific products contact Sales Office

For technical information see CD

P1D Standard - Double acting

Ø32mm - (G1/8)

Stroke mm	Order code
25	P1D-S032MS-0025
40	P1D-S032MS-0040
50	P1D-S032MS-0050
80	P1D-S032MS-0080
100	P1D-S032MS-0100
125	P1D-S032MS-0125
160	P1D-S032MS-0160
200	P1D-S032MS-0200
250	P1D-S032MS-0250
320	P1D-S032MS-0320
400	P1D-S032MS-0400
500	P1D-S032MS-0500

Ø40mm - (G1/4)

Stroke mm	Order code
25	P1D-S040MS-0025
40	P1D-S040MS-0040
50	P1D-S040MS-0050
80	P1D-S040MS-0080
100	P1D-S040MS-0100
125	P1D-S040MS-0125
160	P1D-S040MS-0160
200	P1D-S040MS-0200
250	P1D-S040MS-0250
320	P1D-S040MS-0320
400	P1D-S040MS-0400
500	P1D-S040MS-0500

Ø50mm - (G1/4)

Stroke mm	Order code
25	P1D-S050MS-0025
40	P1D-S050MS-0040
50	P1D-S050MS-0050
80	P1D-S050MS-0080
100	P1D-S050MS-0100
125	P1D-S050MS-0125
160	P1D-S050MS-0160
200	P1D-S050MS-0200
250	P1D-S050MS-0250
320	P1D-S050MS-0320
400	P1D-S050MS-0400
500	P1D-S050MS-0500

Ø63mm - (G3/8)

Stroke mm	Order code
25	P1D-S063MS-0025
40	P1D-S063MS-0040
50	P1D-S063MS-0050
80	P1D-S063MS-0080
100	P1D-S063MS-0100
125	P1D-S063MS-0125
160	P1D-S063MS-0160
200	P1D-S063MS-0200
250	P1D-S063MS-0250
320	P1D-S063MS-0320
400	P1D-S063MS-0400
500	P1D-S063MS-0500

Ø80mm - (G3/8)

Stroke mm	Order code
25	P1D-S080MS-0025
40	P1D-S080MS-0040
50	P1D-S080MS-0050
80	P1D-S080MS-0080
100	P1D-S080MS-0100
125	P1D-S080MS-0125
160	P1D-S080MS-0160
200	P1D-S080MS-0200
250	P1D-S080MS-0250
320	P1D-S080MS-0320
400	P1D-S080MS-0400
500	P1D-S080MS-0500

Ø100mm - (G1/2)

Stroke mm	Order code
25	P1D-S100MS-0025
40	P1D-S100MS-0040
50	P1D-S100MS-0050
80	P1D-S100MS-0080
100	P1D-S100MS-0100
125	P1D-S100MS-0125
160	P1D-S100MS-0160
200	P1D-S100MS-0200
250	P1D-S100MS-0250
320	P1D-S100MS-0320
400	P1D-S100MS-0400
500	P1D-S100MS-0500

Ø125mm - (G1/2)

Stroke mm	Order code
25	P1D-S125MS-0025
40	P1D-S125MS-0040
50	P1D-S125MS-0050
80	P1D-S125MS-0080
100	P1D-S125MS-0100
125	P1D-S125MS-0125
160	P1D-S125MS-0160
200	P1D-S125MS-0200
250	P1D-S125MS-0250
320	P1D-S125MS-0320
400	P1D-S125MS-0400
500	P1D-S125MS-0500

The cylinders are supplied complete with a zinc plated steel piston rod nut.

Sensors

For sensors see page 96.

Indicates stocked product.

Design Variants

P1D Tie-Rod

The P1D is available in a tie-rod version, based on the same high level technology. This future-proof cylinder is the perfect choice wherever a tie-rod cylinder is needed.
The P1D Tie-Rod uses "drop-in" P1D sensors. An ingenious multi-jointed adapter fixes the sensors in any chosen position along the stroke.

P1D Clean

P1D Clean is a new version in our ISO cylinder system, completely designed for the foodstuffs industry. Many years' experience of the stringent requirements for hygiene, choice of material and corrosion resistance, from a wide spectrum of foodstuffs applications have guided the development of this cylinder version. Great emphasis has been put on the external design of the cylinder, choice of materials and corrosion protection.

P1D Clean without sensor function

Special order code for P1D Clean without sensor function.
This version is a permanently sealed. The cylinder has a very clean design and is intended for applications where no sensors are used.

Alternative piston rod materials

All P1D cylinders in all bores, Ø32-125 mm, can be ordered with the following piston rod materials:

- Steel, hard chromed
- Stainless steel, roller polished (standard)
- Acid-proof steel, roller polished
- Stainless steel, hard chromed

Through piston rod

All P1D cylinders in all bores, Ø32-125 mm, are available with a through rod. Cylinders with a through rod can take higher side forces thanks to the double support for the piston rod. In addition, this design makes it easier to install external position sensors.

3 and 4 position cylinders

By installing two cylinders with the same or different stroke, it is possible to build a working unit with three or four positions. This type of unit is available as factory-fitted P1D tie-rod cylinders (P1D-T) in all bores, Ø32-125 mm. Other P1D cylinders can be flange mounted back-to-back with a special mounting

Tandem version

The P1D is also available as a tandem cylinder, i.e. two cylinders connected in series. This cylinder unit has almost twice the force, which is a great advantage in restricted spaces. Tandem cylinders are available as tie-rod cylinders, P1D-T, in all bores Ø32-125 mm.

Design Variants

Low and high ambient temperature

For all bores, Ø32-125 mm, the P1D can be supplied in special high ambient temperature and low ambient temperature versions. The cylinders have seal systems, materials and grease for their particular temperature ranges. The high temperature version does not have magnetic piston (no function at high temperatures). The low temperature cylinders do have magnetic piston, but remember that most sensors are specified to – 25 °C (no function below this temperature). Ambient temperature ranges:
– Low temperature: -40 °C to +40 °C
– High temperature: -10 °C to +150 °C, peaks up to +200 °C

Low pressure hydraulics

The P1D in bores Ø32 - 125 mm can be supplied with special seals for operation with low pressure hydraulics up to 10 bar.
Temperature range -20 °C to +80°C.

P1D complete working unit

P1D Standard can be ordered with a factory-fitted valve and hpiping. The valve series is the robust and compact Viking
series, with product code P2L-A (for cylinder bores 32-63), P2L-B (for cylinder bores 80-100) and P2L-D (for cylinder bore 125).

P1D cylinder with piston rod locking

The P1D cylinder is available in a version with piston rod locking, allowing the piston rod to be locked in any position. The lock unit, of the air/spring actuated type, is integrated in the front end piece of the cylinder.

P1D Standard with piston rod locking

P1D Clean with piston rod locking

Cylinders complete with mountings, sensors, speed regulation, fittings etc.

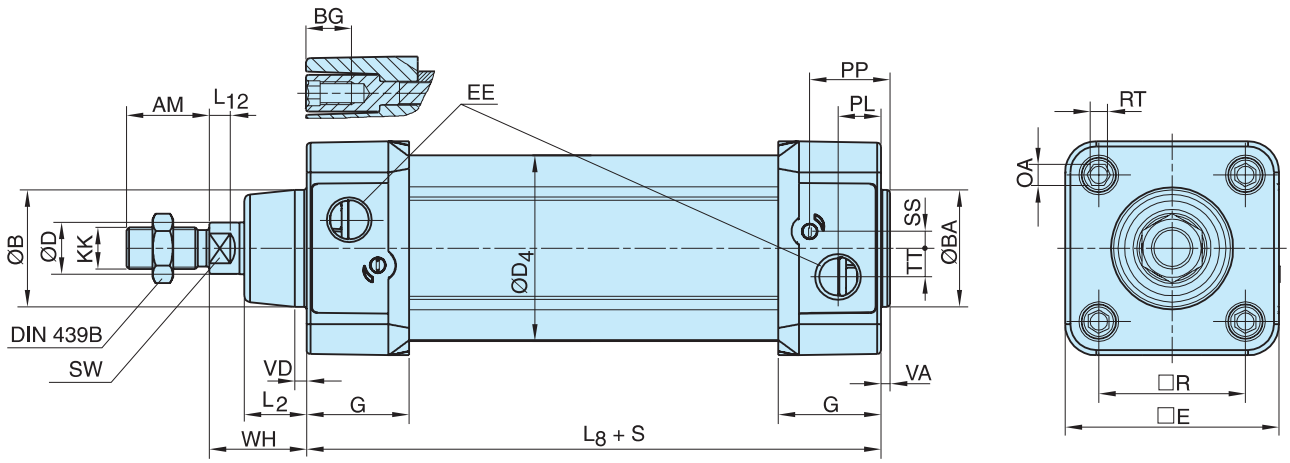
Order a complete working unit on a single oredr code instead of a lot of separate numbers. Save time in all phases, such as purchasing, goods reception and installation. A factory installed complete cylinder makes your work more efficient!

For complete ordering information see Technical Catalogue CD.

Operation with dry piston rod

In many applications, primarily in the foodstuffs industry, the cylinders are cleaned frequently. This means that the film of grease on the piston rod is washed off, which puts special demands on the materials and the design of the piston rod seal system (scraper ring and piston rod seal). A piston rod seal system specially designed for dry rod operation is available as options for this type of application, for all bores of P1D cylinders. The system has a specially designed L-shaped seal and the material is self-lubricating, high molecular weight plastics (HDPE) – the same system as in our previous P1C cylinders, with proven function.

P1D Standard



Dimensions

Cylinder bore mm	AM mm	B mm	BA mm	BG mm	D mm	D4 mm	E mm	EE mm	G mm	KK	L2 mm	L8 mm	L12 mm
32	22	30	30	16	12	45,0	50,0	G1/8	28,5	M10x1,25	16,0	94	6,0
40	24	35	35	16	16	52,0	57,4	G1/4	33,0	M12x1,25	19,0	105	6,5
50	32	40	40	16	20	60,7	69,4	G1/4	33,5	M16x1,5	24,0	106	8,0
63	32	45	45	16	20	71,5	82,4	G3/8	39,5	M16x1,5	24,0	121	8,0
80	40	45	45	17	25	86,7	99,4	G3/8	39,5	M20x1,5	30,0	128	10,0
100	40	55	55	17	25	106,7	116,0	G1/2	44,5	M20x1,5	32,4	138	14,0
125	54	60	60	20	32	134,0	139,0	G1/2	51,0	M27x2	45,0	160	18,0

Cylinder bore mm	OA mm	PL mm	PP mm	R mm	RT	SS mm	SW mm	TT mm	VA mm	VD mm	WH mm
32	6,0	13,0	21,8	32,5	M6	4,0	10	4,5	3,5	4,5	26
40	6,0	14,0	21,9	38,0	M6	8,0	13	5,5	3,5	4,5	30
50	8,0	14,0	23,0	46,5	M8	4,0	17	7,5	3,5	5,0	37
63	8,0	16,4	27,4	56,5	M8	6,5	17	11,0	3,5	5,0	37
80	6,0	16,0	30,5	72,0	M10	0	22	15,0	3,5	4,0	46
100	6,0	18,0	35,8	89,0	M10	0	22	20,0	3,5	4,0	51
125	8,0	28,0	40,5	110,0	M12	0	27	17,5	5,5	6,0	65

S=Stroke

Tolerances

Cylinder bore mm	B	BA	L_8 mm	L_9 mm	R mm	Stroke tolerance up to stroke 500 mm	Stroke tolerance for stroke over 500 mm
32	d11	d11	±0,4	±2	±0,5	+0,3/+2,0	+0,3/+3,0
40	d11	d11	±0,7	±2	±0,5	+0,3/+2,0	+0,3/+3,0
50	d11	d11	±0,7	±2	±0,6	+0,3/+2,0	+0,3/+3,0
63	d11	d11	±0,8	±2	±0,7	+0,3/+2,0	+0,3/+3,0
80	d11	d11	±0,8	±3	±0,7	+0,3/+2,0	+0,3/+3,0
100	d11	d11	±1,0	±3	±0,7	+0,3/+2,0	+0,3/+3,0
125	d11	d11	±1,0	±3	±1,1	+0,3/+2,0	+0,3/+3,0

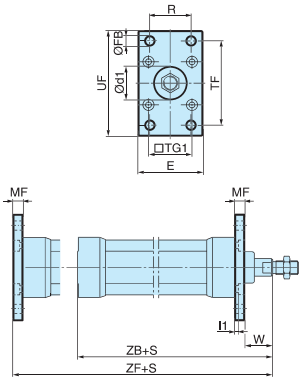
Cylinder mountings

Flange MF1/MF2

Intended for fixed mounting of cylinder. Flange can be fitted to front or rear end cover of cylinder.

Materials
Flange: Surface-treated steel, black
Mounting screws acc. to DIN 6912: Zinc-plated steel 8.8

Supplied complete with mounting screws for attachment to cylinder.



According to ISO MF1/MF2, VDMA 24 562, AFNOR

Cyl. bore mm	d1 H11 mm	FB H13 mm	TG1 mm	E mm	R JS14 mm	MF JS14 mm	TF JS14 mm	UF mm	l1 -0,5 mm	W* mm	ZF* mm	ZB* mm	Weight Kg	Order code
32	30	7	32,5	45	32	10	64	80	5,0	16	130	123,5	0,23	**P1C-4KMB**
40	35	9	38,0	52	36	10	72	90	5,0	20	145	138,5	0,28	**P1C-4LMB**
50	40	9	46,5	65	45	12	90	110	6,5	25	155	146,5	0,53	**P1C-4MMB**
63	45	9	56,5	75	50	12	100	120	6,5	25	170	161,5	0,71	**P1C-4NMB**
80	45	12	72,0	95	63	16	126	150	8,0	30	190	177,5	1,59	**P1C-4PMB**
100	55	14	89,0	115	75	16	150	170	8,0	35	205	192,5	2,19	**P1C-4QMB**
125	60	16	110,0	140	90	20	180	205	10,5	45	245	230,5	3,78	**P1C-4RMB**

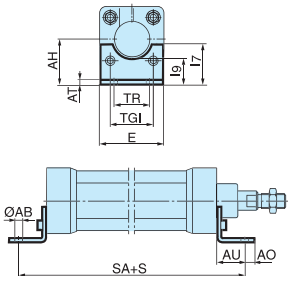
S = Stroke length

Foot bracket MS1

Intended for fixed mounting of cylinder. Foot bracket can be fitted to front and rear end covers of cylinder.

Materials
Foot bracket: Surface-treated steel, black
Mounting screws acc. to DIN 912: Zinc-plated steel 8.8

Supplied in pairs with mounting screws for attachment to cylinder.



According to ISO MS1, VDMA 24 562, AFNOR

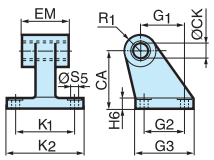
Cyl. bore mm	AB H14 mm	TG1 mm	E mm	TR JS14 mm	AO mm	AU mm	AH JS15 mm	I7 mm	AT mm	I9 JS14 mm	SA* mm	Weight Kg	Order code
32	7	32,5	45	32	10	24	32	30	4,5	17,0	142	0,06	**P1C-4KMF**
40	9	38,0	52	36	8	28	36	30	4,5	18,5	161	0,08	**P1C-4LMF**
50	9	46,5	65	45	13	32	45	36	5,5	25,0	170	0,16	**P1C-4MMF**
63	9	56,5	75	50	13	32	50	35	5,5	27,5	185	0,25	**P1C-4NMF**
80	12	72,0	95	63	14	41	63	49	6,5	40,5	210	0,50	**P1C-4PMF**
100	14	89,0	115	75	15	41	71	54	6,5	43,5	220	0,85	**P1C-4QMF**
125	16	110,0	140	90	22	45	90	71	8,0	60,0	250	1,48	**P1C-4RMF**

S = Stroke length

Pivot bracket with rigid bearing

Intended for flexible mounting of cylinder. The pivot bracket can be combined with clevis bracket MP2.

Materials
Pivot bracket: Surface-treated aluminium, black
Bearing: Sintered oil-bronze bushing



According to CETOP RP 107 P, VDMA 24 562, AFNOR

Cyl. bore mm	CK H9 mm	S5 H13 mm	K1 JS14 mm	K2 mm	G1 JS14 mm	G2 JS14 mm	EM mm	G3 mm	CA JS15 mm	H6 mm	R1 mm	Weight Kg	Order code
32	10	6,6	38	51	21	18	25,5	31	32	8	10,0	0,06	**P1C-4KMD**
40	12	6,6	41	54	24	22	27,0	35	36	10	11,0	0,08	**P1C-4LMD**
50	12	9,0	50	65	33	30	31,0	45	45	12	13,0	0,15	**P1C-4MMD**
63	16	9,0	52	67	37	35	39,0	50	50	12	15,0	0,20	**P1C-4NMD**
80	16	11,0	66	86	47	40	49,0	60	63	14	15,0	0,33	**P1C-4PMD**
100	20	11,0	76	96	55	50	59,0	70	71	15	19,0	0,49	**P1C-4QMD**
125	25	14,0	94	124	70	60	69,0	90	90	20	22,5	1,02	**P1C-4RMD**

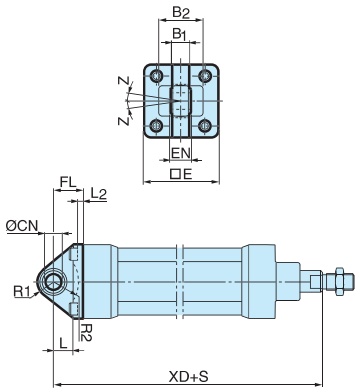
Cylinder mountings

Swivel eye bracket

Intended for use together with clevis bracket GA

Material
Bracket: Surface-treated aluminium, black
Swivel bearing acc. to DIN 648K: Hardened steel

Supplied complete with mounting screws for attachment to cylinder.



According to VDMA 24 562, AFNOR

Cyl. bore	E	B1	B2	EN	R1	R2	FL	l2	L	CN H7	XD*	Z	Weight Kg	Order code
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm			
32	45	10,5	-	14	16	-	22	5,5	12	10	142	4°	0,08	**P1C-4KMSA**
40	52	12,0	-	16	18	-	25	5,5	15	12	160	4°	0,11	**P1C-4LMSA**
50	65	15,0	51	21	21	19	27	6,5	15	16	170	4°	0,20	**P1C-4MMSA**
63	75	15,0	-	21	23	-	32	6,5	20	16	190	4°	0,27	**P1C-4NMSA**
80	95	18,0	-	25	29	-	36	10,0	20	20	210	4°	0,52	**P1C-4PMSA**
100	115	18,0	-	25	31	-	41	10,0	25	20	230	4°	0,72	**P1C-4QMSA**
125	140	25,0	-	37	40	-	50	10,0	30	30	275	4°	1,53	**P1C-4RMSA**

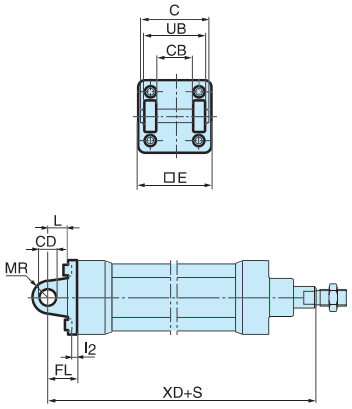
S = Stroke length * Does not apply to cylinders with lock unit.

Clevis bracket MP2

Intended for flexible mounting of cylinder. Clevis bracket MP2 can be combined with clevis bracket MP4.

Materials
Clevis bracket: Surface-treated aluminium, black
Pin: Surface hardened steel
Circlips according to DIN 471: Spring steel
Mounting screws acc. to DIN 912: Zinc-plated steel 8.8

Supplied complete with mounting screws for attachment to cylinder.



According to ISO MP2, VDMA 24 562, AFNOR

Cyl. bore	C	E	UB h14	CB H14	FL ±0,2	L	l2	CD H9	MR	XD*	Weight Kg	Order code
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
32	53	45	45	26	22	13	5,5	10	10	142	0,08	**P1C-4KMT**
40	60	52	52	28	25	16	5,5	12	12	160	0,11	**P1C-4LMT**
50	68	65	60	32	27	16	6,5	12	12	170	0,14	**P1C-4MMT**
63	78	75	70	40	32	21	6,5	16	16	190	0,29	**P1C-4NMT**
80	98	95	90	50	36	22	10,0	16	16	210	0,36	**P1C-4PMT**
100	118	115	110	60	41	27	10,0	20	20	230	0,64	**P1C-4QMT**
125	139	140	130	70	50	30	10,0	25	25	275	1,17	**P1C-4RMT**

S = Stroke length * Does not apply to cylinders with lock unit

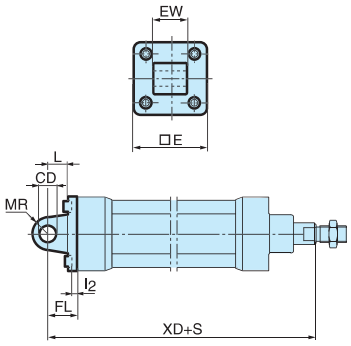
Cylinder mountings

Clevis bracket MP4

Intended for flexible mounting of cylinder. Clevis bracket MP4 can be combined with clevis bracket MP2.

Materials
Clevis bracket: Surface-treated aluminium, black
Mounting screws acc. to DIN 912: Zinc-plated steel 8.8

Supplied complete with mounting screws for attachment to cylinder.



According to ISO MP4, VDMA 24 562, AFNOR

Cyl. bore mm	E mm	EW mm	FL mm	L ±0,2 mm	l2 mm	CD mm	MR H9 mm	XD* mm	Weight Kg	Order code
32	45	26	22	13	5,5	10	10	142	0,09	**P1C-4KME**
40	52	28	25	16	5,5	12	12	160	0,13	**P1C-4LME**
50	65	32	27	16	6,5	12	12	170	0,17	**P1C-4MME**
63	75	40	32	21	6,5	16	16	190	0,36	**P1C-4NME**
80	95	50	36	22	10,0	16	16	210	0,46	**P1C-4PME**
100	115	60	41	27	10,0	20	20	230	0,83	**P1C-4QME**
125	140	70	50	30	10,0	25	25	275	1,53	**P1C-4RME**

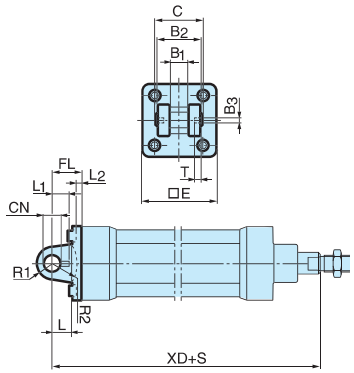
S = Stroke length * Does not apply to cylinders with lock unit.

Clevis bracket GA

Intended for flexible mounting of cylinder. Clevis bracket GA can be combined with pivot bracket with swivel bearing, swivel eye bracket and swivel rod eye.

Materials
Clevis bracket: Surface-treated aluminium
Pin: Surface hardened steel
Locking pin: Spring steel
Circlips according to DIN 471: Spring steel
Mounting screws acc. to DIN 912: Zinc-plated steel 8.8

Supplied complete with mounting screws for attachment to cylinder.



According to VDMA 24 562, AFNOR

Cyl. bore mm	C mm	E mm	B2 d12 mm	B1 H14 mm	T mm	B3 mm	R2 mm	L1 mm	FL ±0,2 mm	l2 mm	L mm	CN F7 mm	R1 mm	XD* mm	Weight Kg	Order code
32	41	45	34	14	3	3,3	17	11,5	22	5,5	12	10	11	142	0,09	**P1C-4KMCA**
40	48	52	40	16	4	4,3	20	12,0	25	5,5	15	12	13	160	0,13	**P1C-4LMCA**
50	54	65	45	21	4	4,3	22	14,0	27	6,5	17	16	18	170	0,17	**P1C-4MMCA**
63	60	75	51	21	4	4,3	25	14,0	32	6,5	20	16	18	190	0,36	**P1C-4NMCA**
80	75	95	65	25	4	4,3	30	16,0	36	10,0	20	20	22	210	0,58	**P1C-4PMCA**
100	85	115	75	25	4	4,3	32	16,0	41	10,0	25	20	22	230	0,89	P1C-4QMCA
125	110	140	97	37	6	6,3	42	24,0	50	10,0	30	30	30	275	1,75	**P1C-4RMCA**

S = Stroke length * Does not apply to cylinders with lock unit.

Stainless steel Pin Set GA

Cyl. bore mm	Weight Kg	Order code
32	0,05	**P1C-4KMCA**
40	0,06	**P1C-4LMCA**
50	0,07	**P1C-4MMCA**
63	0,07	**P1C-4NMCA**
80	0,17	**P1C-4PMCA**
100	0,31	**P1C-4QMCA**
125	0,54	**P1C-4RMCA**

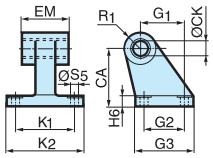
Materials
Pin: Stainless steel
Locking pin: Stainless steel
Circlips according to DIN 471: Stainless steel

Cylinder mountings

Pivot bracket with swivel bearing

Intended for use together with clevis bracket GA.

Material
Pivot bracket: Surface-treated steel, black
Swivel bearing acc. to DIN 648K: Hardened steel



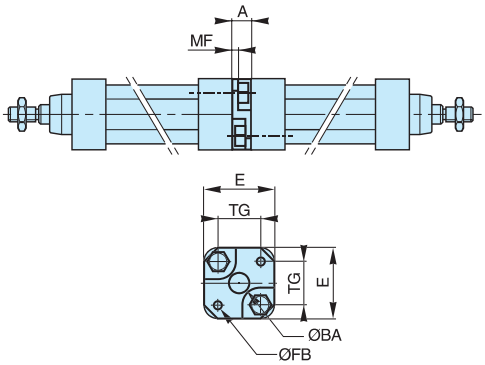
According to VDMA 24 562, AFNOR

Cyl. bore mm	CN H7 mm	S5 H13 mm	K1 JS14 mm	K2 mm	EU mm	G1 JS14 mm	G2 JS14 mm	EN mm	G3 mm	CH JS15 mm	H6 mm	ER mm	Z	Weight Kg	Order code
32	10	6,6	38	51	10,5	21	18	14	31	32	10	16	4°	0,18	**P1C-4KMA**
40	12	6,6	41	54	12,0	24	22	16	35	36	10	18	4°	0,25	**P1C-4LMA**
50	16	9,0	50	65	15,0	33	30	21	45	45	12	21	4°	0,47	**P1C-4MMA**
63	16	9,0	52	67	15,0	37	35	21	50	50	12	23	4°	0,57	**P1C-4NMA**
80	20	11,0	66	86	18,0	47	40	25	60	63	14	28	4°	1,05	**P1C-4PMA**
100	20	11,0	76	96	18,0	55	50	25	70	71	15	30	4°	1,42	**P1C-4QMA**
125	30	14,0	94	124	25,0	70	60	37	90	90	20	40	4°	3,10	**P1C-4RMA**

Mounting kit

Mounting kit for back to back mounted cylinders, 3 and 4 position cylinders.

Material:
Mounting: Aluminium
Mounting screws: Zinc-plated steel 8.8



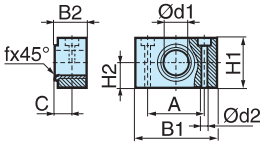
Cyl. bore mm	E mm	TG mm	ØFB mm	MF mm	A mm	ØBA mm	Weight Kg	Order code
32	50	32,5	6,5	5	16	30	0,060	**P1E-6KB0**
40	60	38,0	6,5	5	16	35	0,078	**P1E-6LB0**
50	66	46,5	8,5	6	20	40	0,162	**P1E-6MB0**
63	80	56,5	8,5	6	20	45	0,194	**P1E-6NB0**
80	100	72,0	10,5	8	25	45	0,450	**P1E-6PB0**
100	118	89,0	10,5	8	25	55	0,672	**P1E-6QB0**

Pivot bracket for MT4

Intended for use together with central trunnion MT4.

Material
Pivot bracket: Surface-treated aluminium
Bearing acc. to DIN 1850 C: Sintered oil-bronze bushing

Supplied in pairs.



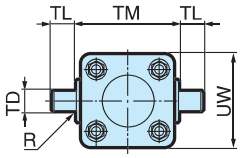
According to ISO, VDMA 24 562, AFNOR

Cyl. bore mm	B1 mm	B2 mm	A mm	C mm	d1 mm	d2 H13 mm	H1 mm	H2 mm	fx45° min mm	Weight Kg	Order code
32	46	18,0	32	10,5	12	6,6	30	15	1,0	0,04*	**9301054261**
40	55	21,0	36	12,0	16	9,0	36	18	1,6	0,07*	**9301054262**
50	55	21,0	36	12,0	16	9,0	36	18	1,6	0,07*	**9301054262**
63	65	23,0	42	13,0	20	11,0	40	20	1,6	0,12*	**9301054264**
80	65	23,0	42	13,0	20	11,0	40	20	1,6	0,12*	**9301054264**
100	75	28,5	50	16,0	25	14,0	50	25	2,0	0,21*	**9301054266**
125	75	28,5	50	16,0	25	14,0	50	25	2,0	0,21*	**9301054266**

Cylinder mountings

Centre trunnion MT4 for P1D-S

Intended for articulated mounting of cylinder. This mounting is available for the P1D Standard and for the tie-rod design of P1D. The trunnion is factory-fitted in the centre of the cylinder or at an optional location specified by the XV-measure – Combined with pivot bracket for MT4.
Material:
Trunnion: zinc plated steel

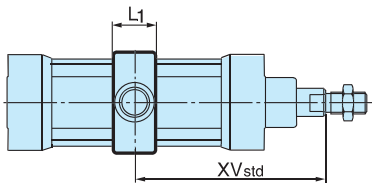


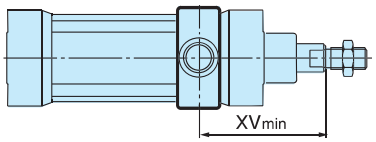
Centre trunnion MT4 for P1D-T

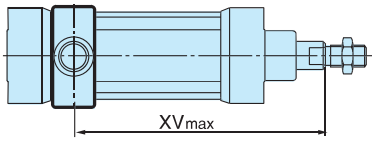
Trunnion centred
The central trunnion for the P1D-S and P1D-T is ordered with letter D in position 17 (no dimension specified in positions 18-20).

Trunnion with optional location
The central trunnion for the P1D-S and P1D-T is ordered with letter G in position 17 and desired XV-measure (3-digit measure in mm) in positions 18-20.

Trunnion loose
P1D-S can also be ordered with the central trunnion loosely fitted to the cylinder (not fixed in position). This allows the position to be established at the time of installation.
Ordered with letter G in position 17 and 000 in positions 18-20.







According to ISO MT4, VDMA 24 562, AFNOR

Cyl. bore mm	TM h14 mm	TL h14 mm	TD e9 mm	R mm	UW P1D-S mm	UW P1D-T mm	L1 P1D-S mm	L1 P1D-T mm	X1* mm	XV*$_{min}$ P1D-S mm	XV*$_{min.}$ P1D-T mm	X2* P1D-S mm	X2* P1D-T mm
32	50	12	12	1,0	52	46	18	15	73,0	89	62	57	84
40	63	16	16	1,6	59	59	20	20	82,5	95	73	70	92
50	75	16	16	1,6	71	69	20	20	90,0	113	81	67	99
63	90	20	20	1,6	84	84	26	25	97,5	118	90	78	106
80	110	20	20	1,6	105	102	26	25	110,0	132	98	88	122
100	132	25	25	2,0	129	125	32	30	120,0	140	111	100	129
125	160	25	25	2,0	159	155	33	32	145,0	168	132	122	158

XVstd = X1 + Stroke length/2, XVmax = X2 + Stroke length

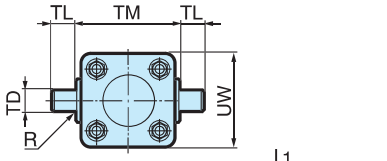
* Does not apply to cylinders with lock unit.

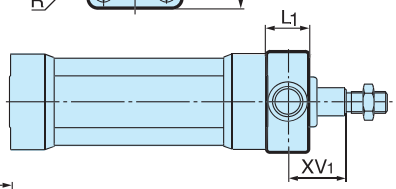
Flange mounted trunnion

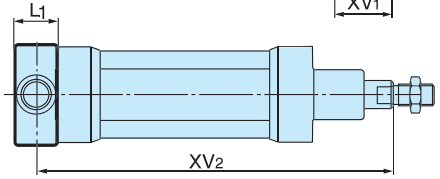
Intended for articulated mounting of cylinder. This trunnion can be flange mounted on the front or rear end cover of all P1D cylinders. At your choice, you can order a complete cylinder with factory-fitted flange mounted trunnion Individual trunnions have order code as shown to the right.

Material:
Trunnion: zinc plated steel
Screws: zinc plated steel, 8.8

Delivered complete with mounting screws for attachment to the cylinder







According to ISO MT4, VDMA 24 562, AFNOR

Cyl. bore mm	TM h14 mm	TL h14 mm	TD e9 mm	R mm	UW mm	L1 mm	XV$_1$* mm	X* mm	Y mm	Weight Kg	Order code
32	50	12	12	1,0	46	14	19,5	126,5	11	0,17	**P1D-4KMYF**
40	63	16	16	1,6	59	19	21,0	144,0	14	0,43	**P1D-4LMYF**
50	75	16	16	1,6	69	19	28,0	152,0	20	0,55	**P1D-4MMYF**
63	90	20	20	1,6	84	24	25,5	169,5	20	1,10	**P1D-4NMYF**
80	110	20	20	1,6	102	24	34,5	185,5	26	1,66	**P1D-4PMYF**
100	132	25	25	2,0	125	29	37,0	203,0	31	3,00	**P1D-4QMYF**

XV_2 = X +Stroke length * Does not apply to cylinders with lock unit.

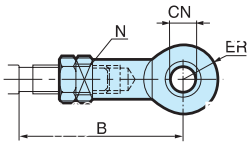
To fit a flange mounted trunnion at the front end cover of a P1D cylinder with lock unit, the piston rod must be extended. This is in order to provide the same WH dimensions as for the P1D base cylinder with dimension Y.

Piston rod mountings

Swivel rod eye

Intended for articulated mounting of the cylinder.
Maintenance-free PTFE.

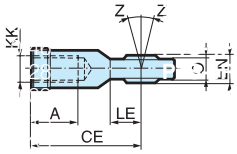
Material:
Swivel rod eye, nut: galvanized steel.
Swivel bearing according to DIN 648K: Hardened steel.



Stainless steel swivel rod eye

Stainless-steel swivel rod eye for articulated mounting of cylinder.
Maintenance-free.

Materials
Swivel rod eye: Stainless steel
Swivel bearing according to DIN 648K: Stainless steel
Use stainless steel nut with stainless steel swivel rod eye.



ISO 8139

Cyl.-dia. mm	A mm	B min mm	B max mm	CE mm	CN H9 mm	EN h12 mm	ER mm	KK	LE	N* min mm	O mm	Z mm	Weight kg	Order code Galvanised Steel	Order code Stainless Steel
32	20	48,0	55	43	10	14	14	M10x1,25	15	17	10,5	12°	0,08	**P1C-4KRS**	**P1S-4JRT**
40	22	56,0	62	50	12	16	16	M12x1,25	17	19	12,0	12°	0,12	**P1C-4LRS**	**P1S-4LRT**
50	28	72,0	80	64	16	21	21	M16x1,5	22	22	15,0	15°	0,25	**P1C-4MRS**	**P1S-4MRT**
63	28	72,0	80	64	16	21	21	M16x1,5	22	22	15,0	15°	0,25	**P1C-4MRS**	**P1S-4MRT**
80	33	87,0	97	77	20	25	25	M20x1,5	26	32	18,0	15°	0,46	**P1C-4PRS**	**P1S-4PRT**
100	33	87,0	97	77	20	25	25	M20x1,5	26	32	18,0	15°	0,46	**P1C-4PRS**	**P1S-4PRT**
125	51	123,5	137	110	30	37	35	M27x2	36	41	25,0	15°	1,28	**P1C-4RRS**	**P1S-4RRT**

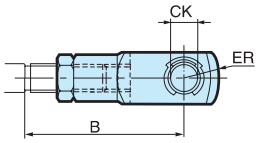
*key grip

Clevis

Intended for articulated mounting of the cylinder.

Material:
Clevis and clip galvanized steel.
Pin: Hardened steel

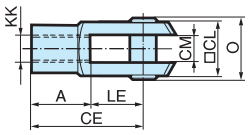
Supplied complete with axle.



Stainless steel clevis

Stainless-steel clevis for articulated mounting of cylinder.

Material
Clevis: Stainless steel
Pin: Stainless steel
Circlips according to DIN 471: Stainless steel
Use stainless steel nut with stainless steel swivel rod eye.



ISO 8140

Cyl.-dia. mm	A mm	B min mm	B max mm	CE mm	CK h11/E9 mm	CL mm	CM mm	ER mm	KK	LE mm	O mm	Weight kg	Order code Galvanised Steel	Order code Stainless Steel
32	20	45,0	52	40	10	20	10	16	M10x1,25	20	28,0	0,09	**P1C-4KRC**	**P1S-4JRD**
40	24	54,0	60	48	12	24	12	19	M12x1,25	24	32,0	0,15	**P1C-4LRC**	**P1S-4LRD**
50	32	72,0	80	64	16	32	16	25	M16x1,5	32	41,5	0,35	**P1C-4MRC**	**P1S-4MRD**
63	32	72,0	80	64	16	32	16	25	M16x1,5	32	41,5	0,35	**P1C-4MRC**	**P1S-4MRD**
80	40	90,0	100	80	20	40	20	32	M20x1,5	40	50,0	0,75	**P1C-4PRC**	**P1S-4PRD**
100	40	90,0	100	80	20	40	20	32	M20x1,5	40	50,0	0,75	**P1C-4PRC**	**P1S-4PRD**
125	56	123,5	137	110	30	55	30	45	M27x254	72,0		2,10	**P1C-4RRC**	**P1S-4RRD**

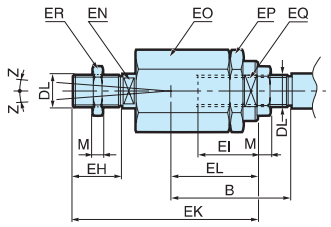
Piston rod mountings

Flexo coupling

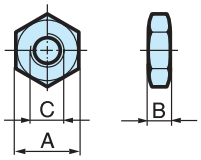
Flexo coupling for articulated mounting of piston rod.
Flexo fitting is intended to take up axial angle errors within a range of ±4°.

Material
Flexo coupling, nut: Zinc-plated steel
Socket: Hardened steel

Supplied complete with galvanized adjustment nut.



Cyl. bore mm	B min mm	B max mm	DL	EH mm	EI mm	EK mm	EL mm	EN mm	EO mm	EP mm	EQ mm	ER mm	M mm	Z	Weight mm	Order code
32	36,0	43	M10x1,25	20	23	70	31	12	30	30	19	30	5,0	4°	0,09	**P1C-4KRC**
40	37,0	43	M12x1,25	23	23	67	31	12	30	30	19	30	6,0	4°	0,15	**P1C-4LRC**
50	53,0	61	M16x1,5	40	32	112	45	19	41	41	30	41	8,0	4°	0,35	**P1C-4MRC**
63	53,0	61	M16x1,5	40	32	112	45	19	41	41	30	41	8,0	4°	0,35	**P1C-4MRC**
80	57,0	67	M20x1,5	39	42	122	56	19	41	41	30	41	10,0	4°	0,75	**P1C-4PRC**
100	57,0	67	M20x1,5	39	42	122	56	19	41	41	30	41	10,0	4°	0,75	**P1C-4PRC**
125	75,5	89	M27x2	48	48	145	60	24	55	55	32	55	13,5	4°	2,10	**P1C-4RRC**



According to DIN 439 B

Nut

Intended for fixed mounting of accessories to the piston rod.
Material: Zinc-plated steel

All P1D cylinders are delivred with a zinc-plated steel piston rod nut, except P1D Clean, which is delivered with a stainless steel piston rod nut instead.

Stainless steel nut

Intended for fixed mounting of accessories to the piston rod.

Material: Stainless steel A2

All P1D cylinders are delivred with a zinc-plated steel piston rod nut, except P1D Clean, which is delivered with a stainless steel piston rod nut instead.

Acid-proof nut

Intended for fixed mounting of accessories to the piston rod.

Material: Acid-proof steel A4

Cylinders with acid-proof piston rod are supplied with nut of acid-proof steel

Cyl. bore mm	A mm	B mm	C	Weight Kg	Order code
32	17	5,0	M10x1,25	0,007	**9128985601**
40	19	6,0	M12x1,25	0,010	**0261109910**
50	24	8,0	M16x1,5	0,021	**9128985603**
63	24	8,0	M16x1,5	0,021	**9128985603**
80	30	10,0	M20x1,5	0,040	**0261109911**
100	30	10,0	M20x1,5	0,040	**0261109911**
125	30	10,0	M20x1,5	0,100	**0261109912**
32	17	5,0	M10x1,25	0,007	**9126725404**
40	19	6,0	M12x1,25	0,010	**9126725405**
50	24	8,0	M16x1,5	0,021	**9126725406**
63	24	8,0	M16x1,5	0,021	**9126725406**
80	30	10,0	M20x1,5	0,040	**0261109921**
100	30	10,0	M20x1,5	0,040	**0261109921**
125	30	10,0	M20x1,5	0,100	**0261109922**
32	17	5,0	M10x1,25	0,007	**0261109919**
40	19	6,0	M12x1,25	0,010	**0261109920**
50	24	8,0	M16x1,5	0,021	**0261109917**
63	24	8,0	M16x1,5	0,021	**0261109917**
80	30	10,0	M20x1,5	0,040	**0261109916**
100	30	10,0	M20x1,5	0,040	**0261109916**
125	30	10,0	M20x1,5	0,100	**0261109918**

Sealing plugs

Four plastic sealing plugs are supplied with every P1D Clean cylinder. These are installed in the end cover screws which are not used for the cylinder installation. To ensure the sealing function, the plugs can be used only once i.e. they cannot be re-used. When installed in the end cover screws, they should be tapped lightly with a hammer to securely fix.

Cyl.	Order code
32	**9121742201**
40	**9121742201**
50	**9121742202**
63	**9121742202**
80	**9121742203**
100	**9121742203**
125	**9121742204**

Three versions of the Piston Rod Guidance modules are available. For standard applications, units with plain PTFE coated bearings are available but for more demanding applications with greater loadings, versions featuring 4 linear ball bearings provide excellent stability and rigidity.

Anti-rotation is achieved by twin guide bars. The piston rod is attached to the end plate by a self aligning coupling.

The units provide high resistance to torque loading and greatly increased linear load bearing capacity.

- Highly accurate guidance
- High torque loading capacity
- Lightweight and long life
- Twin recirculating bearings or plain bearings versions
- Flange compatible with 3D® products

Operating information

Cylinder version:	ISO 6431 / VDMA cylinder
Working temperature standard:	-10°C to +80°C

For technical information see CD

Range

3 versions of the Piston Rod Guidance Units are available.

"H" style, with plain PTFE coated bearings for ISO Ø32 to Ø100mm cylinders, low-cost version for light loadings.

"H" style, with 4 linear ball bearings, for ISO Ø12 to Ø100mm, for more demanding applications with greater loadings.

"U" style, with plain PTFE coated bearings, for ISO Ø12 to Ø100mm for heavy loadings.

P 1 E - 4 K R H - 0 1 0 0

	Cylinder version
E	ISO 6431/ VDMA cylinders

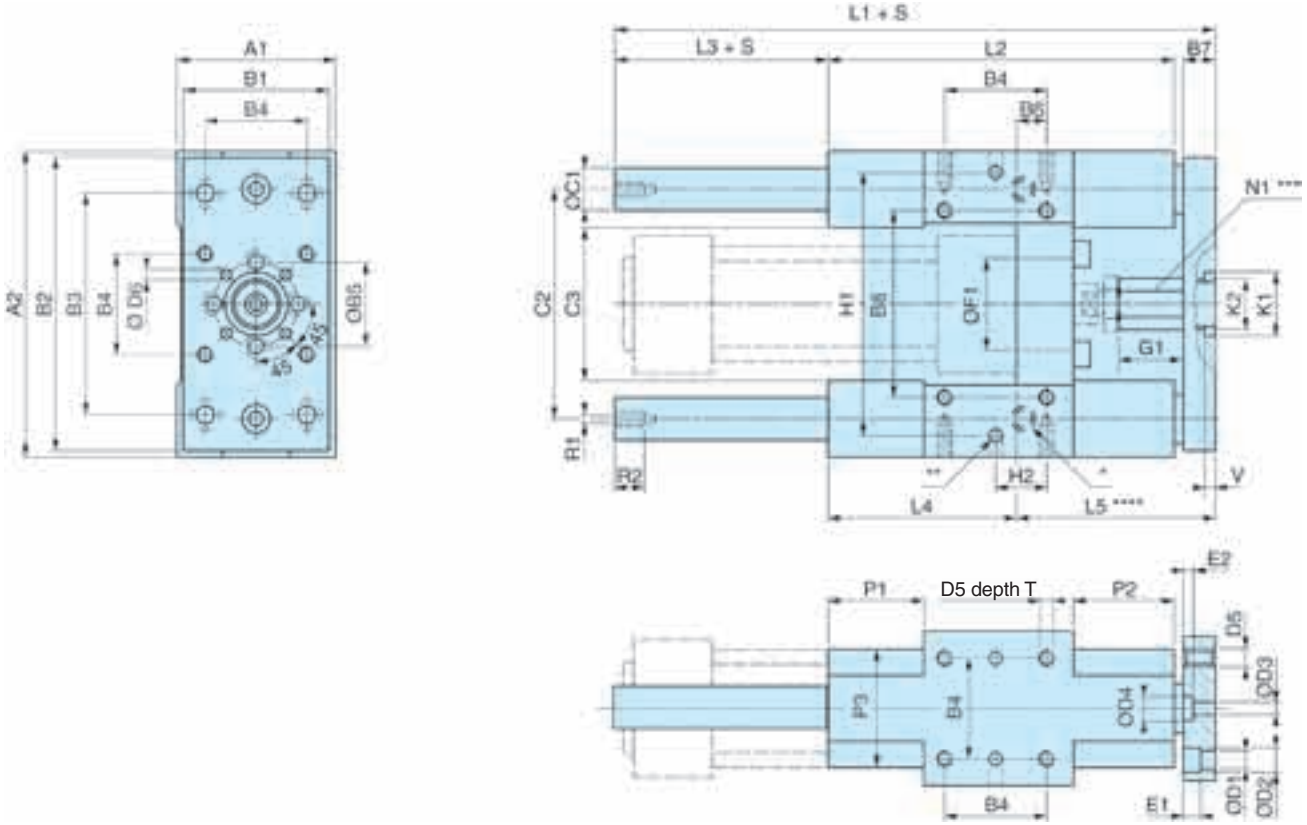
	Bore size mm
K	32
L	40
M	50
N	63
P	80
Q	100

	Guide module type
H	H style, ball bearings
J	H style, plain bearings
K	U style, plain bearings

Stroke length (mm)

Same as for the cylinder e.g. **0100** = 100 mm.

Rod Guidance Modules



Dimensions, H style guidance modules

Cyl. bore mm	A_1 mm	A_2 mm	B_1 mm	B_2 mm	B_3 mm	B_4 mm	$ØB_5$ mm	B_6 mm	B_7 mm	B_8 mm	$ØC_1$ mm	C_2 mm	C_3 mm	$ØD_1$ mm	$ØD_2$ mm	$ØD_3$ mm
32	50	97	45	90	78	32,5	31,5	4,0	12	61	12	73,5	50	6,6	11	5,2
40	58	115	54	110	84	38,0	31,5	11,0	12	69	16	86,5	58	6,6	11	5,2
50	70	137	63	130	100	46,5	50,0	19,0	15	85	20	103,5	70	9,0	14	6,4
63	85	152	80	145	105	56,5	50,0	15,0	15	100	20	118,5	85	9,0	14	6,4
80	105	189	100	180	130	72,0	76,0	21,0	20	130	25	147,0	105	11,0	17	8,4
100	130	213	120	200	150	89,0	76,0	24,5	20	150	25	171,5	130	11,0	17	8,4

Cyl. bore mm	$ØD_4$ mm	D_5 mm	$ØD_6$ mm	E_1 mm	E_2 mm	Ø $F_1^{+0,1/0}$ mm	G_1 mm	L_1 mm	L_2 mm	L_3 mm	L_4 mm	L_5 mm	N_1 mm	$P_1^{\pm1}$ mm	$P_2^{\pm1}$ mm
32	9	M6	4	7	4	30	17	150	120	15	71	64	17	36	31
40	9	M6	4	7	4	35	24	170	130	25	71	74	17	36	36
50	11	M8	4	9	9	40	27	192	150	24	79	89	24	42	44
63	11	M8	4	9	9	45	27	222	180	24	109	89	24	58	44
80	14	M10	6	11	5	45	32	247	200	24	113	110	30	50	52
100	14	M10	6	11	5	55	32	267	220	24	128	115	30	49	51

Cyl. bore mm	P_3 mm	R_1 mm	R_2 mm	W mm	$H_1^{\pm0,05}$ mm	H_2 mm	K_1^{H8} mm	K_2 mm	T mm	$V^{+0,3/0}$ mm
32	40	M6	11	5	81	16	24	19	12	4
40	44	M6	11	6	99	19	24	19	12	4
50	50	M8	16	8	119	23	38	26	16	4
63	60	M8	16	8	132	28	38	26	16	4
80	70	M10	16	10	166	36	46	32	20	4
100	70	M10	16	10	190	45	46	32	20	4

S = Stroke length

* Lubricators

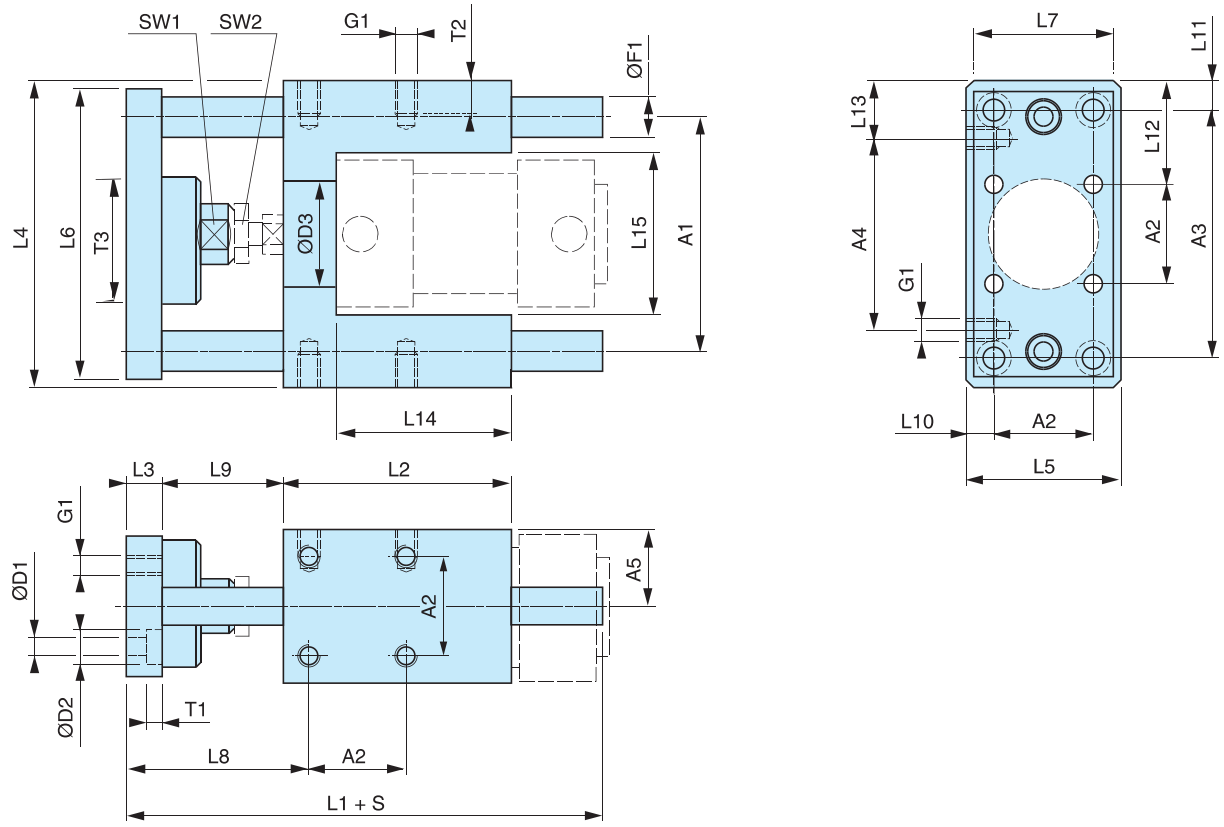
** 6 hole Ø6 ^{H7}, depth $10^{+1/0}$

*** Hexagon profile

**** Min adjustment=0, max.=W

Home

Rod Guidance Modules



Dimensions, U style guidance modules

Cyl. bore mm	A_1 mm	A_2 mm	A_3 mm	A_4 mm	A_5 mm	D_1 mm	D_2 mm	D_3 mm	F_1 mm	G_1 mm	L_1 mm	L_2 mm	L_3 mm	L_4 mm	L_5 mm
32	74	32,5	78	61	25,0	6,6	11	30	12	M6	133	72	12	97	50
40	87	38,0	84	69	29,0	6,6	11	35	16	M6	149	84	12	115	58
50	104	46,5	100	85	35,0	9,0	15	40	20	M8	175	100	15	137	70
63	119	56,5	105	100	42,5	9,0	15	45	20	M8	190	115	15	152	85
80	148	72,0	130	130	52,0	11,0	18	45	25	M10	238	150	20	189	105
100	172	89,0	150	150	65,0	11,0	18	55	25	M10	249	165	20	213	130

Cyl. bore mm	L_6 mm	L_7 mm	L_8 mm	L_9 mm	L_{10} mm	L_{11} mm	L_{12} mm	L_{13} mm	L_{14} mm	L_{15} mm	SW_1 mm	SW_2 mm	T_1 mm	T_2 mm	T_3 mm
32	90	45	$60,5^{+2/0}$	$35^{+2/0}$	8,75	9,5	32,25	18,0	44	50,2	13	17	6,5	10	30 *
40	110	54	$63,5^{+2/0}$	$41^{+2/0}$	10,00	15,5	38,50	23,0	51	58,2	15	19	6,5	10	Ø45
50	130	63	$76,0^{+5/0}$	$48^{+4/0}$	11,75	18,5	45,25	26,0	60	70,2	22	24	9,0	13	Ø54
63	145	80	$76,0^{+5/0}$	$48^{+4/0}$	14,25	23,5	47,75	26,0	75	85,2	22	24	9,0	13	Ø54
80	180	100	$93,0^{+6/0}$	$56^{+6/0}$	16,50	29,5	58,50	29,5	116	105,4	27	30	11,0	16	Ø60
100	200	120	$95,5^{+6/0}$	$56^{+6/0}$	20,50	31,5	62,00	31,5	126	130,4	27	30	11,0	16	Ø60

* For Allen key
S = Stroke length

P1E Cylinders are equipped as standard with magnetic pistons for proximity position sensing. A full range of sensors enables the cylinders to be integrated into the most advanced automation systems. The sensors can be fitted at any position along the cylinder stroke.
In development of P1E cylinders, great emphasis was placed on the importance of long service life and operation with unlubricated air characteristics essential for applications in demanding environments.

- Cylinder for heavy duty operation to VDMA 24562
- Bore sizes Ø160 - Ø200mm
- Tie rod design
- Hard anodised cylinder tube as standard
- Stainless steel piston rod
- Non-lube operation

Operating information

Working pressure: Max 10 bar
Seal / Temperature options:
Standard: -20°C to +70°C
High temperature: -10°C to +180°C

Prelubricated, further lubrication is not normally necessary.
If additional lubrication is introduced it must be continued.

Piston rod type
Male threaded
Stainless steel as standard
Chrome plated steel
Rod gaiter versions

For technical information see CD

Tie rod cylinders - Double acting, magnetic piston, male piston rod thread

Ø160mm - (G3/4)

Stroke mm	Order code
25	**P1E-T160MS-0025**
50	**P1E-T160MS-0050**
80	**P1E-T160MS-0080**
100	**P1E-T160MS-0100**
125	**P1E-T160MS-0125**
160	**P1E-T160MS-0160**
200	**P1E-T160MS-0200**
250	**P1E-T160MS-0250**
320	**P1E-T160MS-0320**

Ø200mm - (G3/4)

Stroke mm	Order code
25	**P1E-T200MS-0025**
50	**P1E-T200MS-0050**
80	**P1E-T200MS-0080**
100	**P1E-T200MS-0100**
125	**P1E-T200MS-0125**
160	**P1E-T200MS-0160**
200	**P1E-T200MS-0200**
250	**P1E-T200MS-0250**
320	**P1E-T200MS-0320**

Cylinder mountings

Swivel rod eye Zinc plated steel - **ISO 8139**

Cyl.Ø	Order code
160	**P1C--4SRS**
200	**P1C--4SRS**

Clevis Galvanised steel - **ISO 8140**

Cyl.Ø	Order code
160	**P1C-4SRC**
200	**P1C-4SRC**

Clevis bracket MP2 Aluminium/Cast iron

Cyl.Ø	Order code
160	**P1C-4SMT**
200	**P1C-4TMT**

Clevis bracket MP4 Aluminium/Cast iron

Cyl.Ø	Order code
160	**P1C-4SME**
200	**P1C-4TME**

Flange MF1 and MF2 Surface treated steel

Cyl.Ø	Order code
160	**P1C-4SMB**
200	**P1C-4TMB**

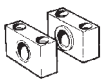
Foot bracket Surface treated steel

Cyl.Ø	Order code
160	**P1C-4SMF**
200	**P1C-4TMF**

Piston rod nut Zinc plated steel - **DIN 439 B**

Cyl.Ø	Order code
160	**9128985606**
200	**9128985606**

Pivot bracket for MPT4



Cyl.Ø	Order code
160	**9301054268**
200	**9301054268**

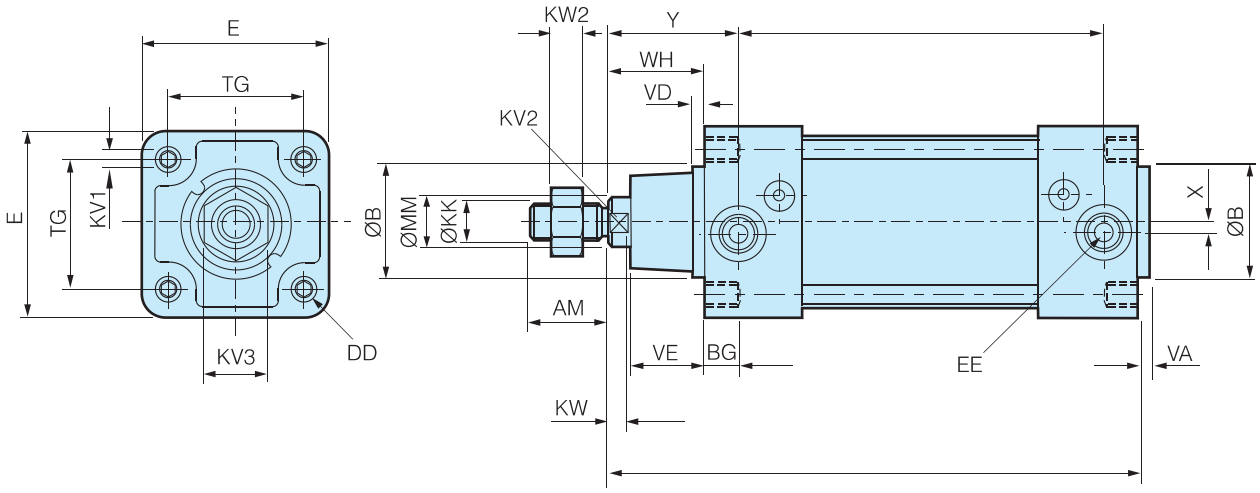
Sensors

For sensors see page 96.

Indicates stocked product.

Home

Basic Tie Rod and Profile cylinders



Dimensions (mm)

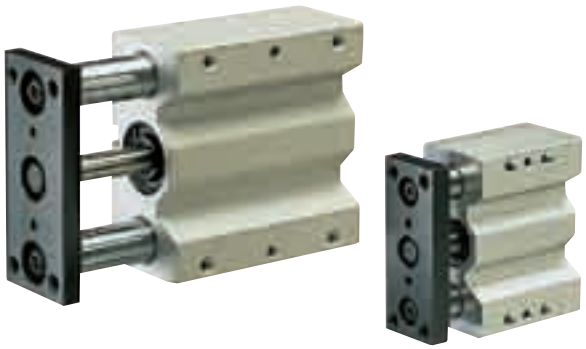
Bore Size	MM Ø	KK*	AM* +0/-2	ØB e11	WH	VD	VE	ZJ	VA	PJ	X	Y	KV3 A/F	KW2
160	40	M36x2	72	65	80	7	52	260	5	132	0	104	55	14
200	40	M36x2	72	75	95	7	60	275	5	132	0	119	55	14

Bore Size	EE	DD	KV1 A/F	BG min	KV2 A/F	KW	E	TG
160	G3/4	M16	30	24	36	16	179	140
200	G3/4	M16	30	24	36	16	216	175

Bore Size	Weight (kg)	
	0mm stroke	5mm stroke
160	11,71	0,114
200	15,45	0,126

* To ISO 6431

P5T cylinders are a modern and versatile range of cylinders with integral guides. The cylinders are double-acting, with end stop cushioning for quiet and vibration free operation. The strong guide shafts make it possible to adsorb considerable thrust forces and torque.



- Complete cylinder function with integral guidance
- Stainless steel guide rods
- Wide range of standard strokes, diameter 16-100 mm
- Flexible porting as standard
- Magnetic piston as standard with drop-in sensor technology
- End stop cushions as standard

Operating information

Working pressure	Max 10 bar
Working temperature	-20 °C to +80 °C

Prelubricated, further lubrication is not normally necessary. If additional lubrication is introduced it must be continued.

For technical information see CD

Double acting - Plain bearing and top & rear connections

Ø16mm - (M5)

Stroke.mm	Order code
10	**P5T-C016DGSN010**
25	**P5T-C016DGSN025**
40	**P5T-C016DGSN040**
50	**P5T-C016DGSN050**
75	**P5T-C016DGSN075**
100	**P5T-C016DGSN100**

Ø20mm - (G1/8)

Stroke.mm	Order code
25	**P5T-C020DGSN025**
40	**P5T-C020DGSN040**
50	**P5T-C020DGSN050**
75	**P5T-C020DGSN075**
100	**P5T-C020DGSN100**
125	**P5T-C020DGSN125**
150	**P5T-C020DGSN150**

Ø25mm - (G1/8)

Stroke.mm	Order code
25	**P5T-C025DGSN025**
50	**P5T-C025DGSN050**
75	**P5T-C025DGSN075**
100	**P5T-C025DGSN100**
125	**P5T-C025DGSN125**
150	**P5T-C025DGSN150**

Sensors

For sensors see page 96.

Ø32mm - (G1/8)

Stroke.mm	Order code
25	**P5T-C032DGSN025**
50	**P5T-C032DGSN050**
75	**P5T-C032DGSN075**
100	**P5T-C032DGSN100**
125	**P5T-C032DGSN125**
150	**P5T-C032DGSN150**
175	**P5T-C032DGSN175**
200	**P5T-C032DGSN200**

Ø40mm - (G1/8)

Stroke.mm	Order code
25	**P5T-C040DGSN025**
50	**P5T-C040DGSN050**
75	**P5T-C040DGSN075**
100	**P5T-C040DGSN100**
125	**P5T-C040DGSN125**
150	**P5T-C040DGSN150**
175	**P5T-C040DGSN175**
200	**P5T-C040DGSN200**

Ø50mm - (G1/4)

Stroke.mm	Order code
25	**P5T-C050DGSN025**
50	**P5T-C050DGSN050**
75	**P5T-C050DGSN075**
100	**P5T-C050DGSN100**
125	**P5T-C050DGSN125**
150	**P5T-C050DGSN150**
175	**P5T-C050DGSN175**
200	**P5T-C050DGSN200**

Ø63mm - (G1/4)

Stroke.mm	Order code
25	**P5T-C063DGSN025**
50	**P5T-C063DGSN050**
75	**P5T-C063DGSN075**
100	**P5T-C063DGSN100**
125	**P5T-C063DGSN125**
150	**P5T-C063DGSN150**
175	**P5T-C063DGSN175**
200	**P5T-C063DGSN200**

Ø80mm - (G3/8)

Stroke.mm	Order code
25	**P5T-C080DGSN025**
50	**P5T-C080DGSN050**
75	**P5T-C080DGSN075**
100	**P5T-C080DGSN100**
125	**P5T-C080DGSN125**
150	**P5T-C080DGSN150**
175	**P5T-C080DGSN175**
200	**P5T-C080DGSN200**

Ø100mm - (G3/8)

Stroke.mm	Order code
25	**P5T-C100DGSN025**
50	**P5T-C100DGSN050**
75	**P5T-C100DGSN075**
100	**P5T-C100DGSN100**
125	**P5T-C100DGSN125**
150	**P5T-C100DGSN150**
175	**P5T-C100DGSN175**
200	**P5T-C100DGSN200**

Indicates stocked product.

Design Variants

In addition to the standard designs, a number of variants of the P5T range are available to special order, to provide effective solutions in a large number of applications.

Cylinders with special strokes
Cylinders with two fixing plates
Cylinders with adjustable stops, with cushioning
High-temperature cylinders for the temperature range of -10°C to +150°C (not magnetic piston).

Special design for food industry applications

There is a special version of the P5T for food industry applications and other installation cases where high corrosion resistance and hygiene are required. This version has steel parts and other components in either stainless steel or special treated aluminium. Please contact Customer Service for more information.

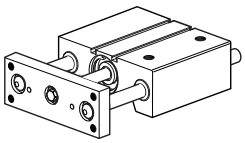
Plain bearing or recirculating ball bearings

The P5T is supplied with plain bearings as standard. This type of bearing has guide rods of greater diameter, providing excellent support for heavy loads, especially static loads. Plain bearings are highly tolerant of vibration and dirt, and are suitable for regular cleaning.
Recirculating ball bearings are used for applications which require high precision and low friction.

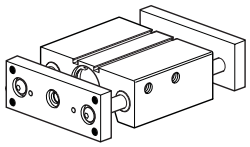
The choice should be based on the following factors:

Application requirements	Plain bearing	Recirculating ball bearings
Precision	Good	Excellent
Friction	Higher	Low
Coefficient of friction	Variable	Constant
Precision during service life	Variable	Constant
Static load capacity	Excellent	Good
Dynamic load capacity	Good, but with friction losses	Good
Vibration tolerance	Excellent	Average
Dirt tolerance	Excellent	Poor
Washing tolerance	Excellent	Poor

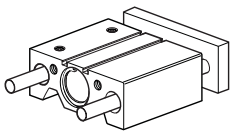
Double acting, connections on top.



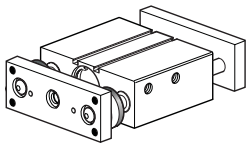
Double acting with two fixing plates, side connections are recommended.



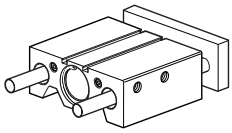
Double acting, connections at rear.



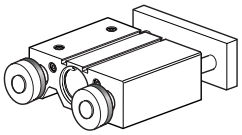
Double acting with two fixing plates and adjustable end stops with cushioning, side connections are recommended.



Double acting, connections on side.

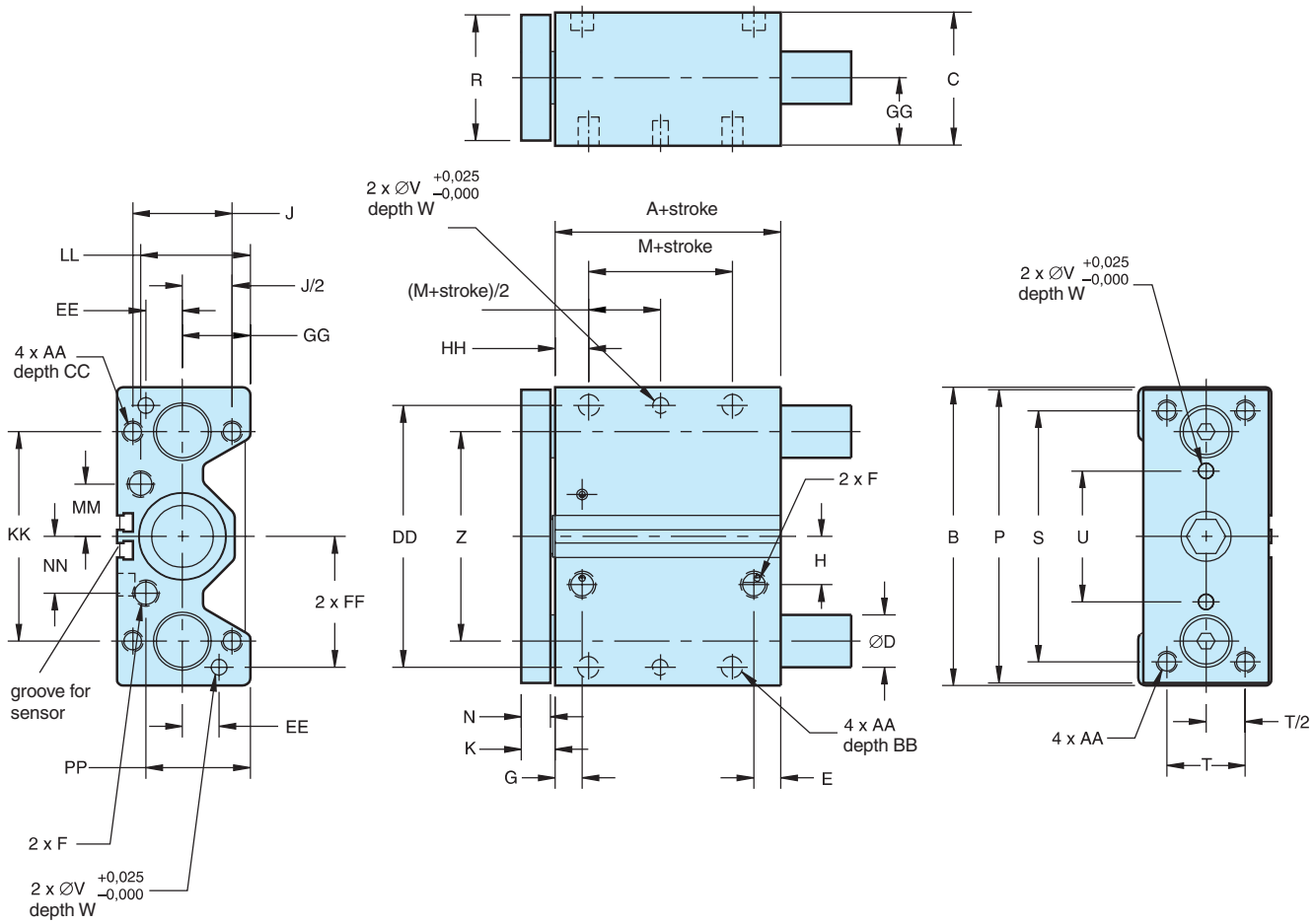


Double acting with one fixing plate adjustable end stops with cushioning, connections on side, on top or at rear.



Dimensions, P5T basic cylinder

Connection option **D**
(connection from above or rear)



Cylinder diam. mm	A mm	B mm	C mm	D1*) mm	D2*) mm	E mm	F	G mm	H mm	J mm	K mm	M mm	N mm	P mm	R mm	S mm	T mm	U mm	V mm
16	37,8	64	31	8	10	10,1	M5	10,1	7	22	9,9	7	7,9	62	25,4	52	16	20	3
20	35	74	36	10	12	19	G1/8	10	15,8	26	9,9	10	7,9	72	31,8	60	18	30	4
25	38	88	42	12	16	21	G1/8	11,4	15,5	32	9,9	10	7,9	86	38	70	26	34	4
32	36	114	51	16	20	10,3	G1/8	10,4	18,4	38	13,1	5	11,1	112	44,5	96	30	50	6
40	44	124	51	16	20	12,1	G1/8	14,9	22,5	38	13,1	10	11,1	122	44	106	30	60	6
50	44,9	140	62	20	25	14,5	G1/4	16,1	27	44	14,7	10	12,7	138	57	120	40	60	8
63	50,1	150	75	20	25	16,4	G1/4	14,5	33	44	14,7	10	12,7	148	70	130	50	72	8
80	59,5	188	95	25	30	17,5	G3/8	19	37	56	18	15	16	185	88,9	160	60	92	10
100	66**)	224	115	30	35	21,9**)	G3/8	23	40	62	18	15	16	221	108	190	80	114	10

Cylinder diam. mm	W mm	Z mm	AA	BB mm	CC mm	DD mm	EE mm	FF mm	GG mm	HH mm	KK mm	LL mm	MM mm	NN mm	PP mm	Piston rod Ø mm
16	6	42	M5x0,8	7,5	10	54	8	27	15	13,1	42	22,5	11,3	9,7	23	8
20	6	52	M5x0,8	7,5	10	64	10	32	17	13,1	52	26	15,4	15,4	26	10
25	6	62	M6x1,0	10	12	76	11	38	21	14,1	62	33,4	17	17	33,4	10
32	6	80	M8x1,25	11	16	100	14	50	26	12,9	80	42	20	21,7	38	16
40	6	90	M8x1,25	11	16	110	14	55	26	13,9	90	41	24	26,4	37,9	16
50	8	100	M10x1,5	12	20	124	16	62	30	14,3	100	51	29	33	44	20
63	8	110	M10x1,5	15	20	132	18	66	36,5	16,3	110	62	36	37,8	57,8	20
80	10	140	M12x1,75	18	24	166	22	83	46,5	21	140	78	45	48	75,5	25
100	10	170	M14x2,0	21	28	200	24	100	56,5	25	170	91,5	53	51	95.5	25

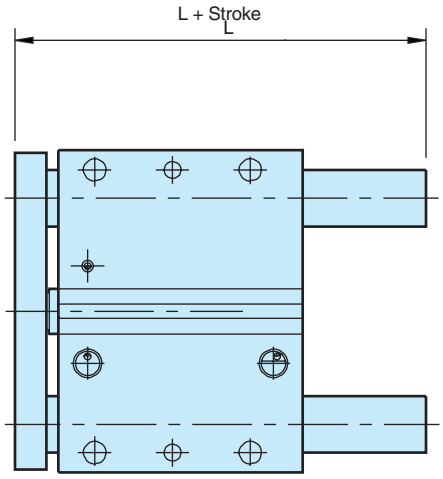
Length tolerance ± 1 mm
Stoke tolerance + 1.5/0 mm
**) Stroke 25 mm, A=75 mm, E=28 mm

*) D1 = bearing rod diameter for recirculating ball bearing
*) D2 = bearing rod diameter for plain bearing

Dimensions, P5T basic cylinder

Standard lengths

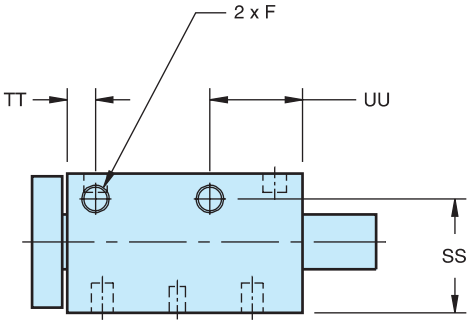
Cylinder diam mm	Stroke mm	L mm
16	10	36,2
	25, 40, 50, 75	60,2
	100	75,2
20	25, 40, 50, 75	66,9
	100, 125	91,9
25	25, 50, 75, 100	69,9
	125, 150	91,9
32	25, 50, 75, 100	77,9
	125, 150, 175, 200	116,0
40	25, 50, 75, 100	77,9
	125, 150, 175, 200	116,0
50	25, 50, 75, 100	84,0
	125, 150, 175, 200	124,1
63	25, 50, 75, 100	84,0
	125, 150, 175, 200	124,1
80	25, 50, 75, 100	101,8
	125, 150, 175, 200	140,0
100	25	122,8
	50, 75, 100	120,3
	125, 150, 175, 200	158,4



Dimensions, P5T basic cylinder

Connection option **S** (side connections)

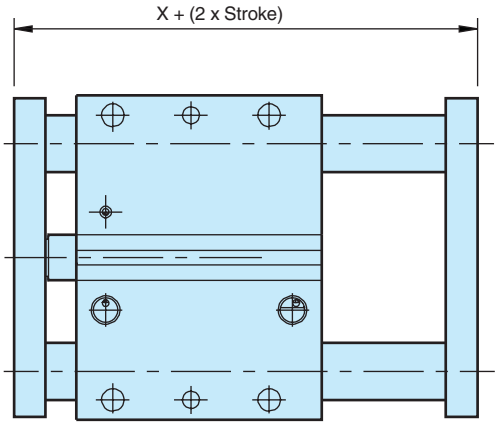
Cylinder diam. mm	SS mm	TT mm	UU mm	F
16	24,1	10	20	M5
20	29,2	10	20	M5
25	35,2	11,4	25	M5
32	41,7	10,4	34	G1/8
40	41,7	14,9	34	G1/8
50	51,3	16,1	38	G1/4
63	60,7	15,6	41,8	G1/4
80	75,5	19	47	G3/8
100	83,7	23	53,3	G3/8



Home

Dimensions, P5T basic cylinder

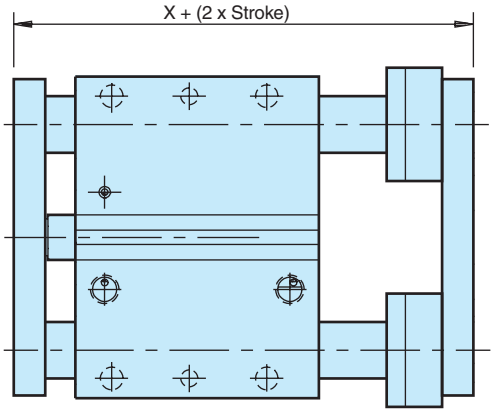
Option **D**



Please note that load capacity increases with two fixing plates, due to greater bearing distance.

Dimensions, P5T with two fixing plates and adjustable end stop with cushioning

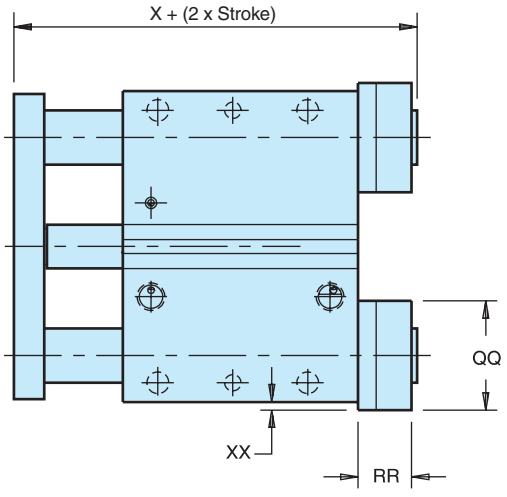
Option **A**



Cylinder diam. mm	Guide rod dia, mm	X for option D mm	X for option A mm	X for option E mm	QQ mm	RR mm	XX mm
16	8	57,6	70,6	62,7	18,0	13,0	0
	10	57,6	70,6	62,7	24,0	13,0	1
20	10	54,9	67,9	59,9	24,0	13,0	1
	12	54,9	72,6	64,6	28,0	17,7	3
25	12	57,8	75,5	67,6	28,0	17,7	1
	16	57,8	77,5	69,6	34,0	19,7	4
32	16	62,2	81,9	70,8	34,0	19,7	0
	20	62,2	83,9	72,8	41,4	21,7	3,7
40	16	70,2	89,9	78,8	34,0	19,7	0
	20	70,2	91,9	80,8	41,4	21,7	3,7
50	20	74,3	96,0	83,3	41,4	21,7	0,7
	25	74,3	96,0	83,3	50,8	21,7	5,4
63	20	79,5	101,2	88,5	41,4	21,7	0,7
	25	79,5	101,2	88,5	50,8	21,7	5,4
80	25	95,5	117,2	101,2	50,8	21,7	1,4
	30	95,5	117,2	101,2	60,5	21,7	6,3
100	30	102,0	123,7	107,7	60,5	21,7	3,3
	35	102,0	123,7	107,7	65,0	21,7	5,5

Dimensions, P5T with adjustable end stop with cushioning

Option **E**



- Exceptional rigidity
- Reduced dimensions
- Excellent repeatability
- Easy mounting
- MPS option
- Numerous options

The Precision Slide Table is a pneumatic actuator, operated by 2 cylinders mounted in parallel for moving loads fitted on its mobile carriage or on its front plate quickly and accurately.

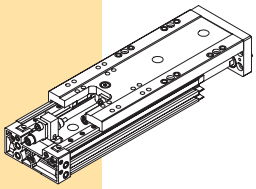
Operating information

Working pressure	2-8 bar
Working temperature	0°C to +65°C
Operation	Dry air, with or without lubrification

For technical information see CD

Design Variants

Standard Precision Slide Table fitted with internal plastic buffers or hydraulic shock absorbers



Available in 4 sizes with strokes from 10 to 250 mm.

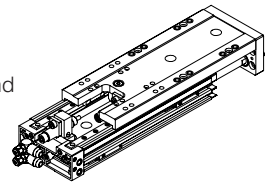
Internal auto-compensating hydraulic shock absorbers are strongly recommended for heavy duty.

Plastic buffers can be used for low speeds or with very short strokes.

A load or another Precision Slide Table can be attached onto the mobile carriage or onto the front plate.

Multiple mounting configurations are available.

Precision Slide Table with Sensors

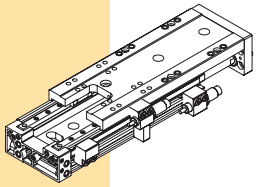


Magnetic switches (reed) or inductive sensors for position sensing at each end of stroke.

They can be mounted right or left side of the Precision Slide Table.

A third sensor may be used for additional position sensing at any point of the stroke.

Precision Slide Table fitted with external plastic buffers or hydraulic shock absorbers

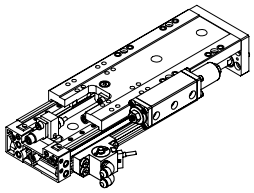


Whenever internal adjustments are not accessible, plastic buffers or hydraulic shock absorbers may be fitted on the Precision Slide

They can be mounted to the right or left side of the Precision Slide Table.

This mounting makes accessibility easier for stroke adjustments in specific mounting configurations.

Precision Slide Table with Mid Position Stop (MPS)



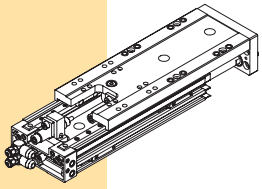
The Mid Position Stop provides an additional stop of the carriage along the stroke.

It can be fitted on the right, left or on each side of the Precision Slide Tables.

It operates in both directions with a same stop position when extending or retracting.

It is fitted with a hydraulic shock absorber which performs efficiently in both directions.

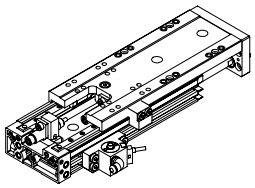
Precision Slide Table with Flow Controllers



Flow controllers may be fitted on 3 sides of the Precision Slide Table rear end plate.

They provide accurate speed control when extending or retracting.

Precision Slide Table with End of stroke locking



This option is for locking the movement in the event of the compressed air supply being cut off mainly when the Precision Slide Table is in vertical position.

It can be supplied mounted on either side of the Precision slide Table.

Drop-in sensors

The completely new "drop-in" P1D sensors can easily be installed from the side in the sensor groove, at any position along the piston stroke. The sensors are completely recessed and thus mechanically protected. Choose between electronic or reed sensors and several cable lengths and 8 mm and M12 connectors.
The same standard sensors are used for all P1D versions, i.e. even for P1D Clean with the patent applied system of integrated sensors.
Please note that the sensors with 8 mm and M12 connector should have cable lengths 1 m for P1D Clean to allow flexible positioning of the sensors, including longer stroke lengths.
There is a double jointed adapter for the tie-rod version, which offers simple and flexible use of standard sensors.

Electronic sensors

The new electronic sensors are "Solid State", i.e. they have no moving parts at all. They are provided with short-circuit protection and transient protection as standard. The built-in electronics make the sensors suitable for applications with high on and off switching frequency, and where very long service life is required.

Reed sensors

The sensors are based on proven reed switches, which offer reliable function in many applications. Simple installation, a protected position on the cylinder and clear LED indication are important advantages of this range of sensors.

Ordering data

Output/function	Cable/connector	Weight kg	Order code
Electronic sensors , 10-30 V AC/DC			
PNP type, normally open	0,27 m PUR-cable and 8 mm snap-in male connector [1]	0,007	**P8S-GPSHX**
PNP type, normally open	1,0 m PUR-cable and 8 mm snap-in male connector	0,013	**P8S-GPSCX**
PNP type, normally open	1,0 m PUR-cable and M8 screw male connector	0,013	**P8S-GPCCX**
PNP type, normally open	0,27 m PUR-cable and M12 screw male connector [1]	0,015	**P8S-GPMHX**
PNP type, normally open	3 m PVC-cable without connector	0,030	**P8S-GPFLX**
PNP type, normally open	10 m PVC-cable without connector	0,110	**P8S-GPFTX**
Electronic sensors , 18-30 V DC			
ATEX Certified	CE Ex II3G EEx nA II T4X CE Ex II3D 135°C IP67		
PNP type, normally open	3 m PVC-cable without connector	0,030	**P8S-GPFLX/EX**
Reed sensors , 10-30 V AC/DC			
Normally open	0,27 m PUR-cable and 8 mm snap-in male connector [1]	0,007	**P8S-GSSHX**
Normally open	1,0 m PUR-cable and 8 mm snap-in male connector	0,013	**P8S-GSSCX**
Normally open	1,0 m PUR-cable and M8 male connector	0,013	**P8S-GSCCX**
Normally open	0,27 m PUR-cable and M12 screw male connector[1]	0,015	**P8S-GSMHX**
Normally open	1,0 m PUR-cable and M12 screw male connector	0,023	**P8S-GSMCX**
Normally open	3 m PVC-cable without connector	0,030	**P8S-GSFLX**
Normally open	10 m PVC-cable without connector	0,110	**P8S-GSFTX**
Normally closed	5m PVC-cable without connector [2]	0,050	**P8S-GCFPX**
Reed sensors, 10-120 V AC/DC			
Normally open	3 m PVC-cable without connector	0,030	**P8S-GRFLX**
Reed sensors, 24-230 V AC/DC			
Normally open	3 m PVC-cable without connector [2]	0,030	**P8S-GRFLX2**

1) Not in combination with P1D Clean (too short cable)
2) Without LED

Adapter for Tie-Rod cylinders

Description	Weight kg	Order code
Double jointed adapter for cylinder P1D-T cylinder bore Ø32 to Ø125 mm and P1E-T diameter 160 – 200 mm	0,07	**P8S-TMA0X**

Sensor mounting

Description	Weight kg	Order code
Suitable for P1A and P1S diameter 10 - 25 mm	0,07	**P8S-TMC01**
Suitable for P1S diameter 32 - 63 mm	0,07	**P8S-TMC02**
Suitable for P1S diameter 80 - 125 mm	0,07	**P8S-TMC03**

Indicates stocked product.

Connecting cables with one connector

The cables have an integral snap-in female connector.

Type of cable	Cable length/connector	Weight kg	Order code
Cables for sensors, complete with female connector			
Cable, Flex PVC	3 m, 8 mm round connector	0,07	**9126344341**
Cable, Flex PVC	10 m, 8 mm round connector	0,21	**9126344342**
Cable, Super Flex PVC	3 m, 8 mm round connector	0,07	**9126344343**
Cable, Super Flex PVC	10 m, 8 mm round connector	0,21	**9126344344**
Cable, Polyuretan	3 m, 8 mm round connector	0,01	**9126344345**
Cable, Polyuretan	10 m, 8 mm round connector	0,20	**9126344346**
Cable, Polyuretan	3 m, M12 connector	0,07	**9126344348**
Cable, Polyuretan	10 m, M12 connector	0,20	**9126344349**

Cable connectors

Connector	Weight kg	Order code
M8 connector	0,017	**P8CS0803J**
M12 connector	0,022	**P8CS1204J**

Ready to use connecting cables with connectors at each end

As accessories the system comprises a large number of different cables in order to meet all requirements that may arise and to make the installation simple, fast and reliable.

Cables with moulded 8 mm snap-in round contacts in both ends. The cables are available in two types, one with a straight male and female connectors respectively, and one with a straight 3-pole male connector in one end and an angled 3-pole female connector in the other end.

Technical data

Contacts

Moulded 8 mm snap-in male/female contacts.

Enclosure IP67

Cable

Conductor 3x0,25 mm^2 (32x0,10 mm^2)

Sheath PVC/PUR

Colour Black

Cables with straight 3-pole male and female connectors respectively. Cables with a straight 3-pole male connector in one end and an angled 3-pole female connector in the other end.

Designation	Weight kg	Order code
Cable with straight contacts, 0,2 m	0,02	**9121717014**
Cable with straight contacts, 0,3 m	0,02	**9121717015**
Cable with straight contacts, 0,5 m	0,03	**9121717016**
Cable with straight contacts, 1,0 m	0,03	**9121717017**
Cable with straight contacts, 2,0 m	0,05	**9121717018**
Cable with straight contacts, 3,0 m	0,07	**9121717019**
Cable with straight contacts, 5,0 m	0,12	**9121717020**
Cable with straight contacts, 10 m	0,23	**9121717021**

Designation	Weight kg	Order code
Cable + straight and angled connectors, 0,2 m	0,02	**9121717022**
Cable + straight and angled connectors, 0,3 m	0,02	**9121717023**
Cable + straight and angled connectors, 0,5 m	0,03	**9121717024**
Cable + straight and angled connectors, 1,0 m	0,03	**9121717025**
Cable + straight and angled connectors, 2,0 m	0,05	**9121717026**
Cable + straight and angled connectors, 3,0 m	0,07	**9121717027**
Cable + straight and angled connectors, 5,0 m	0,12	**9121717028**
Cable + straight and angled connectors, 10 m	0,23	**9121717029**

Indicates stocked product.

Home

- Easy mounting
- Long life cycle
- No external leakage
- Position control
- Combination with other 3D® range products

The magnetic rodless cylinder is basically a pneumatic rodless cylinder featuring a mobile piston fitted with annular magnets.
The mobile carriage is also equipped with magnets to provide magnetic coupling (carriage/piston).
The carriage slides freely along the main tube.

Operating information

Working pressure	2-7 bar
Working temperature	0°C to +60°C
Operation	Dry air, with or without lubrification

For technical information see CD

Design Variants

Magnetic rodless cylinder, basic version

They are available in 3 bores with possible stroke lengths from0 up to 2000 mm.

Non adjustable Rubber bumpers on Ø 16 mm.

Adjustable Pneumatic cushioning on Ø 20 and 32 mm.

The load is fixed onto the mobile carriage by 4 tapped holes.

The cylinder is attached by ends with nuts, flanges or brackets.

Magnetic rodless cylinder, guided version

Available in 3 diameters with strokes from 0 to 1500 mm.

Air supply on one side only.

4 tapped holes permit to attach load onto the mobile carriage.

Mounting at the ends provided by 4 tapped and chamferred holes.

External hydraulic shock adsorbers

Self-compensating hydraulic shock absorbers can be used instead of rubber bumpers for a greater cushioning at the end of stroke.

They are recommended for arduous applications.

External adjustable rubber bumpers

They can be fitted on cylinder endplates and provide cushioning and adjustment at the end of stroke.

Used when light loads and short strokes.

Magneto-inductive sensors

A guiding rail fitted on one side only of the cylinder provides mounting and position adjustment of sensors.

Mounting on same side as the end of stroke stops.

Home

- Comprehensive range
- Compact design
- Long strokes
- Built-in guidance
- Excellent life cycle
- Built-in magnets for sensors
- Single and diouble carriages

Operating information

Working pressure: 2 - 8 bar
Working temperature: -10°C to +70°C

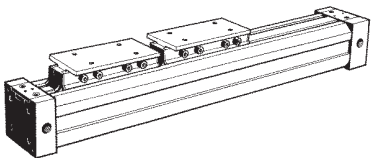
Prelubricated, further lubrication is not normally necessary. If additional lubrication is introduced it must be continued.

For technical information see CD

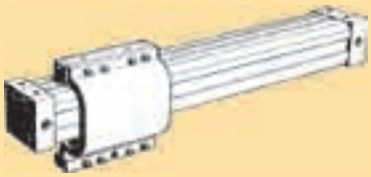
Design Variants

Single T-Carriage

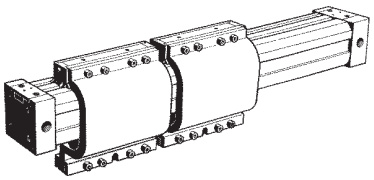
Double T-Carriage



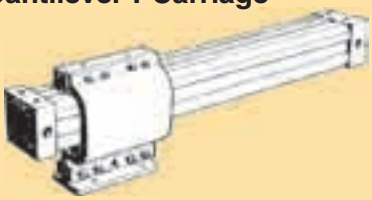
Single Cantilever Carriage



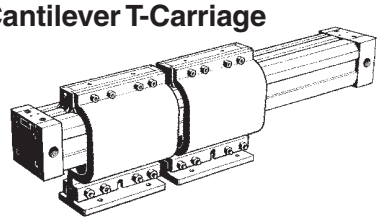
Double Cantilever Carriage



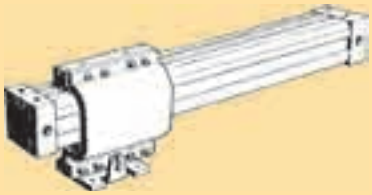
Single Cantilever T-Carriage



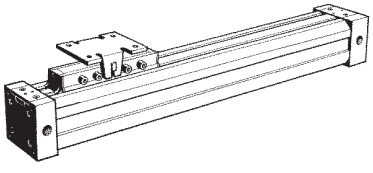
Double Cantilever T-Carriage



Single Articulated Cantilever Carriage



Single Articulated Carriage



The RA is a double-acting rotary actuator of very compact design. It has a high torque and small installation dimensions. The actuator has double pistons, which transmit the turning moment to the output shaft.
The toothed piston rods act on the output shaft in a rack-and-pinion type arrangement. Each piston and toothed rod is of integral construction.
The rack-and-pinion type arrangement gives an even turning moment throughout the rotation movement.

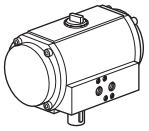
- 90° or 180° rotation
- Shaft with key
- Uniform high torque in both directions

Operating information

Working pressure	Max 10 bar
Working temperature	-20 °C to +80 °C
Operation	Dry air, with or without lubrication

For technical information see CD

Rack & pinion type, RA series



Angle	Torque Nm at 6 bar	Port size	Order code
90°	22,8	G1/8	**RA2-90**
180°	22,8	G1/8	**RA2-180**
90°	45,0	G1/8	**RA4-90**
180°	45,0	G1/8	**RA4-180**
90°	81,70	G1/8	**RA8-90**
180°	81,70	G1/8	**RA8-180**
90°	134,0	G1/4	**RA12-90**
180°	134,0	G1/4	**RA12-180**
90°	224,0	G1/4	**RA20-90**
180°	224,0	G1/4	**RA20-180**

Design Variants

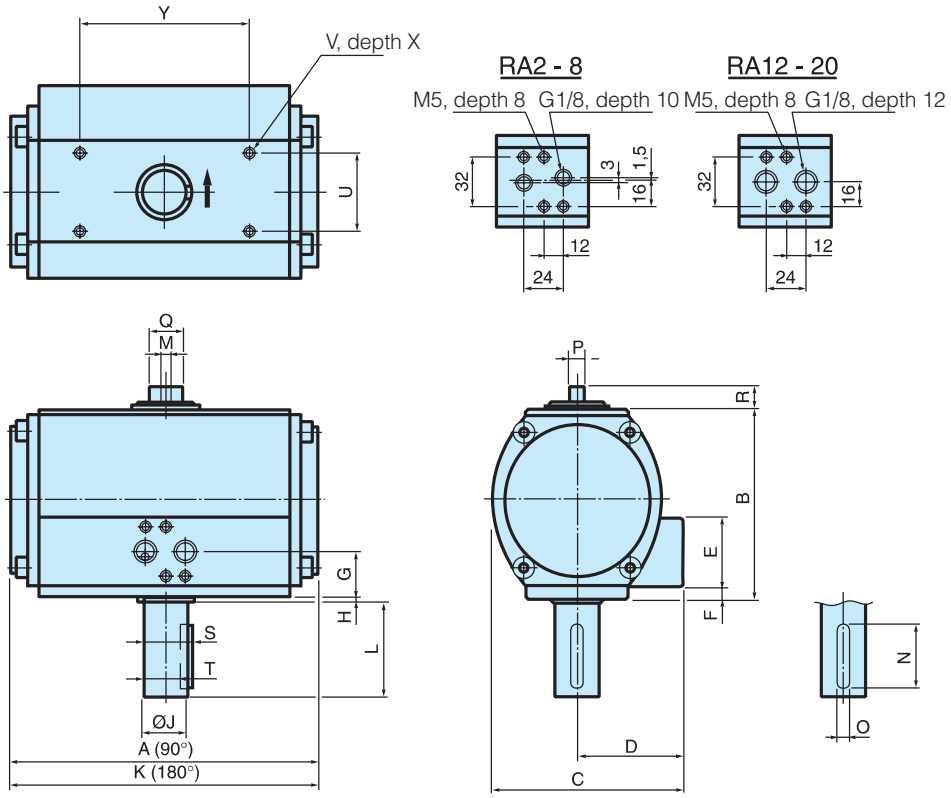
Single acting (90°)

Non-standard turning angle

Other surface treatment

Indicates stocked product.

Dimensions (mm)



Connection arrangements:
EURO standard
according to ISO and
Namur- VDI/VDE 3845

The turning limits
should be determined
by external stop lugs.

Type	A	B	C	D	E	F	G	H	ØJh8	K	L	M	N	O	P
RA2	114,5	73,0	75,5	43,5	41	-	20,5	4	14	169	30	M6	19	5	7,5
RA4	133,0	90,5	87,5	47,5	41	-	20,5	4	19	215	40	M6	31	6	7,5
RA8	162,0	109,0	105,0	57,0	42	7,5	28,5	4	19	245	40	M8	31	6	11,5
RA12	194,0	118,5	121,0	67,0	43	8,0	29,5	5	28	295	60	M8	48	8	11,5
RA20	218,0	140,5	136,5	72,0	43	8,0	29,5	5	28	337	60	M8	48	8	11,5

Type	Q	R	S	T	U	V	X	Y
RA2	13	10,0	16,0	11,0	32	M5	8	50
RA4	15	11,0	21,5	15,5	32	M5	8	73
RA8	17	13,5	21,5	15,5	40	M6	10	90
RA12	20	15,0	31,0	24,0	49	M6	10	107
RA20	25	15,0	31,0	24,0	60	M6	10	120

Rotary actuators are an efficient and easy way to generate torque from compressed air, in a very compact size. They are ideal for the compact applications in a wide range of industries such as, packaging, process, electronics etc.

- Compact design
- Durable construction
- Long maintenance-free life
- High output torque/weight ratio
- Wide choice of torques available (up to 247 Nm)
- Range of mounting option, hydro-cushioning and position sensors

Operating information

Working pressure: Max 10 bar
Permissible fluid: Filtered (<5µ) with or without lubrication
Standard working temperature:
PRN/PRO 3 to 20 -5°C to +80°C
Other models -5°C to +60°C

Prelubricated, further lubrication is not normally necessary. If additional lubrication is introduced it must be continued.

For technical information see CD

PRN miniature (fixed oscillating angle)

Single vane	Torque at 6 bar (N.m)	Oscillating reference point 45°	90°	Oscillating angle 90°	180°	270°
PRNA1S	0,16		X	**PRNA1S-90-90**	**PRNA1S-180-90**	
PRNA3S	0,38		X	**PRNA3S-90-90**	**PRNA3S-180-90**	
PRNA10S	1,20		X	**PRNA10S-90-90**	**PRNA10S-180-90**	
PRNA20S	2,10		X	**PRNA20S-90-90**	**PRNA20S-180-90**	
PRN30SE	4,10	X		**PRN30SE-90-45**	**PRN30SE-180-45**	**PRN30SE-270-45**
Double vane						
PRNA3D	0,65			**PRNA3D-90-45**		
PRNA10D	2,54			**PRNA10D-90-45**		
PRNA20D	4,70			**PRNA20D-90-45**		
PRN30DE	9,50			**PRN30DE-90-45**		

PRO (adjustable oscillating angle)

Single vane	Torque at 6bar (N.m)	Oscillating angle	Order code	Double vane	Torque at 6bar (N.m)	Oscillating angle	Order code
	0,38	30 to 180°	**PROA3S-0-90**		0,65	30 to 90°	**PROA3D-0-45**
	1,20	30 to 180°	**PROA10S-0-90**		2,54	30 to 90°	**PROA10D-0-45**
	2,10	30 to 180°	**PROA20S-0-90**		4,70	30 to 90°	**PROA20D-0-45**
	4,10	30 to 270°	**PRO30SE-0-45**		9,50	30 to 90°	**PRO30DE-0-45**

PRN high torque range (fixed oscillating angle)

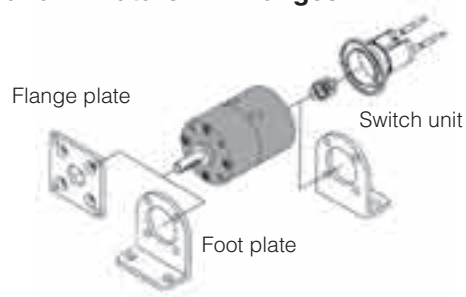
Single vane	Torque at 6 bar (N.m)	Oscillating angle 90°	180°	270°
PRN50SE	5,9	**PRN50SE-90-45**	**PRN50SE-180-45**	**PRN50SE-270-45**
PRN150SE	18,0	**PRN150SE-90-45**	**PRN150SE-180-45**	**PRN150SE-270-45**
PRN300SE	34,5	**PRN300SE-90-45**	**PRN300SE-180-45**	**PRN300SE-270-45**
PRN800SE	123,0	**PRN800SE-90-45**	**PRN800SE-180-45**	**PRN800SE-270-45**
Double vane (oscillating angle 45°)				
PRN50DE	12,8	**PRN50DE-90-45**		
PRN150DE	41,5	**PRN150DE-90-45**		
PRN300DE	83,0	**PRN300DE-90-45**		
PRN800DE	247,0	**PRN800DE-90-45**		

Indicates stocked product.

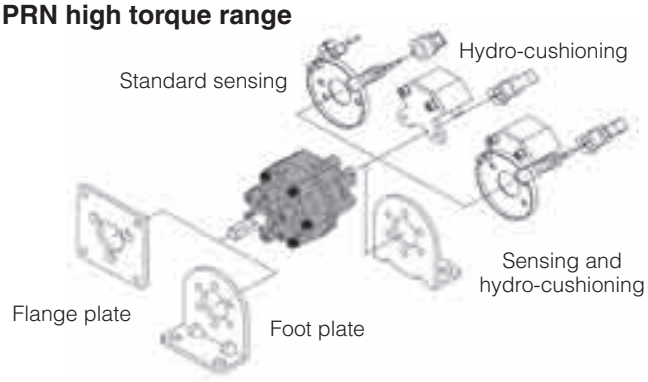
Home

Design Variants

PRO and miniature PRN ranges



PRN high torque range



Hydro-cushion for PRN050 to PRN800 rotary actuators

Rotary actuator	Hydro-cushion	Claw for hydro-cushion - Oscillating angle		
		90°	180°	270°
PRN50S	**CRN50**	**CRN50-90-45-T**	**CRN50-180-45-T**	**CRN50-270-45-T**
PRN150S	**CRN150**	**CRN150-90-45-T**	**CRN150-180-45-T**	**CRN150-270-45-T**
PRN300S	**CRN300**	**CRN300-90-45-T**	**CRN300-180-45-T**	**CRN300-270-45-T**
PRN50D	**CRN50**	**CRN50-90-45-T**		
PRN150D	**CRN150**	**CRN150-90-45-T**		
PRN300D	**CRN300**	**CRN300-90-45-T**		

P1V-S is a range of air motors with all external components made of stainless steel, which means that they can be used in food grade applications, and in all other applications where there is a risk of corrosion.

- Power from 0,02 kW to 1,2 kW
- ATEX CE Ex approved from 0,12 kW to 1,2 kW
- Designed for arduous applications
- No-lube intermittent operation as standard
- 0,2 kW and 0,3 kW Brakemotors for higher safety

Operating information

Working presure: Max 7 bar (max 6 bar in Ex area)
Working temperature: -30° to +100° C (-20° to +40°C in Ex area)
Fluid: Compressed air with ISO 8573-1 Quaility class 3.4.3 (no-lube operation) and 3.-.5 (lube operation)
ATEX approval: CE Ex II 2 GD c IIC T6 (80ºC)X
CE Ex II 2 GD c IIC T5 (95ºC)X

For ATEX specific products contact Sales Office

Note: All technical data is based on a working pressure of 6 bar in the inlet port

Reversible air motors

Keyed shaft, P1V-S002A series, 20 watt - (M5)

Max output	Free speed	Speed at max output	Torque at max output	Min start torque	Air consumption at max output	Conn.	Min pipe ID	Order code
kW	rpm	r/min	Nm	Nm	l/s			
0,02	1300	650	0,29	0,44	1.7	M5	3	**P1V-S002A0130**
0,02	950	475	0,40	0,60	1.7	M5	3	**P1V-S002A0095**

Keyed shaft, P1V-S008A series, 80 watt - (M8 x 0,75, 3 push in nippels for plastic pipes Ø6/4 mm supplied)

0,08	24000	12000	0,06	0,09	3.5	M8 x 0,75*	4	**P1V-S008A0Q00**
0,08	7000	3500	0,22	0,33	3.5	M8 x 0,75*	4	**P1V-S008A0700**
0,08	1900	950	0,80	1,20	3.5	M8 x 0,75*	4	**P1V-S008A0190**
0,08	1300	650	1,20	1,80	3.5	M8 x 0,75*	4	**P1V-S008A0130**

Keyed shaft, P1V-S012A series, 120 watt - (G1/8)

CE Ex II2GD cIIC T6 (80°C) X

0,12	22000	11000	0,10	0,15	5.0	G1/8	6	**P1V-S012A0N00**
0,12	5500	2750	0,42	0,63	5.0	G1/8	6	**P1V-S012A0550**
0,12	3600	1800	0,64	0,95	5.0	G1/8	6	**P1V-S012A0360**
0,12	1400	700	1,64	2,40	5.0	G1/8	6	**P1V-S012A0140**
0,12	900	450	2,54	3,80	5.0	G1/8	6	**P1V-S012A0090**
0,12	600	300	3,82	5,00*	5.0	G1/8	6	**P1V-S012A0060**
0,12	100	50	5,00*	5,00*	5.0	G1/8	6	**P1V-S012A0010**

Threaded shaft, P1V-S012D series, 120 watt - (G1/8)

CE Ex II2GD cIIC T6 (80°C) X

0,12	22000	11000	0,10	0,15	5.0	G1/8	6	**P1V-S012D0N00**
0,12	5500	2750	0,42	0,63	5.0	G1/8	6	**P1V-S012D0550**
0,12	3600	1800	0,64	0,95	5.0	G1/8	6	**P1V-S012D0360**
0,12	1400	700	1,64	2,40	5.0	G1/8	6	**P1V-S012D0140**
0,12	900	450	2,54	3,80	5.0	G1/8	6	**P1V-S012D0090**
0,12	600	300	3,82	5,00*	5.0	G1/8	6	**P1V-S012D0060**
0,12	100	50	5,00*	5,00*	5.0	G1/8	6	**P1V-S012D0010**

Keyed shaft, P1V-S020A series, 200 watt - (G1/8)

CE Ex II2GD cIIC T6 (80°C) X

0,20	14500	7250	0,26	0,40	6.3	G1/8	10	**P1V-S020A0E50**
0,20	4600	2300	0,80	1,20	6.3	G1/8	10	**P1V-S020A0460**
0,20	2400	1200	1,60	2,40	6.3	G1/8	10	**P1V-S020A0240**
0,20	1400	700	2,70	4,10	6.3	G1/8	10	**P1V-S020A0140**
0,20	700	350	5,40	8,20	6.3	G1/8	10	**P1V-S020A0070**
0,20	350	160	12,00	18,00	6.3	G1/8	10	**P1V-S020A0035**
0,10	180	90	10,50	15,00	6.3	G1/8	10	**P1V-S020A0018**
0,20	110	55	33,00	49,50	6.3	G1/8	10	**P1V-S020A0011**
0,20	60	30	72,00	108,00*	6.3	G1/8	10	**P1V-S020A0006**
0,18	50	25	20,00*	20,00*	6.3	G1/8	10	**P1V-S020A0005**
0,18	20	-	20,00*	20,00*	6.3	G1/8	10	**P1V-S020A0002**
0,18	10	-	20,00*	20,00*	6.3	G1/8	10	**P1V-S020A0001**
0,20	5	-	20,00*	20,00*	6.3	G1/8	10	**P1V-S020A00005**

Indicates stocked product.

* Max allowed torque

Home

Reversible air motors

Threaded shaft, P1V-S020D series, 200 watt - (G1/8)

CE Ex II2GD cIIC T6 (80°C) X

Max output kW	Free speed rpm	Speed at max output r/min	Torque at max output Nm	Min start torque Nm	Air consumption at max output l/s	Conn.	Min pipe ID	Order code
0,20	14500	7250	0,26	0,40	6.3	G1/8	10	**P1V-S020D0E50**
0,20	4600	2300	0,80	1,20	6.3	G1/8	10	**P1V-S020D0460**
0,20	2400	1200	1,60	2,40	6.3	G1/8	10	**P1V-S020D0240**
0,20	1400	700	2,70	4,10	6.3	G1/8	10	**P1V-S020D0140**
0,20	700	350	5,40	8,20	6.3	G1/8	10	**P1V-S020D0070**
0,20	350	160	12,00	18,00	6.3	G1/8	10	**P1V-S020D0035**
0,10	180	90	10,50	15,00	4.5	G1/8	10	**P1V-S020D0018**
0,20	50	25	20,00*	20,00*	6.3	G1/8	10	**P1V-S020D0005**

Keyed shaft, P1V-S030A series, 300 watt - (G1/4)

CE Ex II2GD cIIC T6 (80°C) X

0,30	14500	7250	0,40	0,60	8.0	G1/4	10	**P1V-S030A0E50**
0,30	4600	2300	1,20	1,90	8.0	G1/4	10	**P1V-S030A0460**
0,30	2400	1200	2,40	3,60	8.0	G1/4	10	**P1V-S030A0240**
0,30	1400	700	4,10	6,10	8.0	G1/4	10	**P1V-S030A0140**
0,30	600	300	9,60	14,30	8.0	G1/4	10	**P1V-S030A0060**
0,30	280	140	20,50	26,00	8.0	G1/4	10	**P1V-S030A0028**
0,30	230	115	24,00	36,00	8.0	G1/4	10	**P1V-S030A0023**
0,13	180	90	13,80	21,00	4.7	G1/8	10	**P1V-S030A0018**
0,30	100	50	57,00	85,50	8.0	G1/4	10	**P1V-S030A0010**
0,30	50	25	36,00*	36,00*	8.0	G1/4	10	**P1V-S030A0005**

Threaded shaft, P1V-S030D series, 300 watt - (G1/4)

CE Ex II2GD cIIC T6 (80°C) X

0,30	14500	7250	0,40	0,60	8.0	G1/4	10	**P1V-S030D0E50**
0,30	4600	2300	1,20	1,90	8.0	G1/4	10	**P1V-S030D0460**
0,30	2400	1200	2,40	3,60	8.0	G1/4	10	**P1V-S030D0240**
0,30	1400	700	4,10	6,10	8.0	G1/4	10	**P1V-S030D0140**
0,30	600	300	9,60	14,30	8.0	G1/4	10	**P1V-S030D0060**
0,30	280	140	20,50	26,00	8.0	G1/4	10	**P1V-S030D0028**
0,13	180	90	13,80	21,00	4.7	G1/8	10	**P1V-S030D0018**
0,30	50	25	36,00*	36,00*	8.0	G1/4	10	**P1V-S030D0005**

Keyed shaft, P1V-S060A series, 600 watt - (G3/8)

CE Ex II2GD cIIC T6 (80°C) X

0,60	14000	7000	0,82	1,23	14.5	G3/8	12	**P1V-S060A0E00**
0,60	4000	2000	2,90	4,30	14.5	G3/8	12	**P1V-S060A0400**
0,60	2700	1350	4,20	6,40	14.5	G3/8	12	**P1V-S060A0270**
0,60	1700	850	6,70	10,10	14.5	G3/8	12	**P1V-S060A0170**
0,60	720	360	15,90	24,00	14.5	G3/8	12	**P1V-S060A0072**
0,60	480	240	23,90	36,00	14.5	G3/8	12	**P1V-S060A0048**
0,60	300	150	38,20	57,00	14.5	G3/8	12	**P1V-S060A0030**
0,30	100	50	60,00*	60,00*	14.5	G3/8	12	**P1V-S060A0010**

Keyed shaft, P1V-S120A series, 1200 watt - (G3/4)

CE Ex II2GD cIIC T5 (95°C) X

1,20	8000	4000	2,90	4,30	27,0	G3/4	19	**P1V-S120A0800**
1,20	2700	1350	8,50	12,70	27,0	G3/4	19	**P1V-S120A0270**
1,20	1100	550	21,00	31,00	27,0	G3/4	19	**P1V-S120A0110**
1,20	780	390	29,40	44,00	27,0	G3/4	19	**P1V-S120A0078**
1,20	320	160	71,60	107,00	27,0	G3/4	19	**P1V-S120A0032**
1,20	200	100	66,90	110,00*	19,0	G3/4	19	**P1V-S120A0012**

* Max allowed torque

Indicates stocked product.

Home

Brake motors

The integrated brake is a spring-loaded disk brake, which is released at a minimum air pressure of 5 bar. The brake is applied in the absence of pressure.

The technology and the size of air motors with integrated running and stationary brake make them ideal for applications requiring repeated precise positioning.

The motor can also be kept stationary in a specific position, and the stopping time for a rotating weight can be shortened significantly. Another typical application for brake motors is when the output shaft needs to be held in one position when the motor stops delivering torque.

The brake can handle more than 1500 braking operations per hour at maximum braking torque.

Note!
Brake motors must only ever be supplied with unlubricated air, otherwise there is a risk of oil from the supply air getting into the brake unit, resulting in poor brake performance or no braking effect.

Please check the allowed maximum torque applied on the motor from the load in the technical catalogue

Brake motors with keyed shaft, P1V-S020AD series, 200 watt - (G1/8)

Max output kW	Free speed rpm	Speed at max output r/min	Torque at max output Nm	Min start torque Nm	Air consumption at max output l/s	Conn.	Min pipe ID	Order code
0,20	14500	7250	0,26	0,40	6.3	G1/8	10	**P1V-S020ADE50**
0,20	4600	2300	0,80	1,20	6.3	G1/8	10	**P1V-S020AD460**
0,20	2400	1200	1,60	2,40	6.3	G1/8	10	**P1V-S020AD240**
0,20	1400	700	2,70	4,10	6.3	G1/8	10	**P1V-S020AD140**
0,20	700	350	5,40	8,20	6.3	G1/8	10	**P1V-S020AD070**
0,20	350	160	12,00	18,00	6.3	G1/8	10	**P1V-S020AD035**
0,10	180	90	10,50	15,00	4.5	G1/8	10	**P1V-S020AD018**
0,20	110	55	33,00	49,50	6.3	G1/8	10	**P1V-S020AD011**
0,20	60	30	72,00	108,00*	6.3	G1/8	10	**P1V-S020AD006**
0,18	50	25	20,00*	20,00*	6.3	G1/8	10	**P1V-S020AD005**
0,18	20	-	20,00*	20,00*	6.3	G1/8	10	**P1V-S020AD002**
0,18	10	-	20,00*	20,00*	6.3	G1/8	10	**P1V-S020AD005**
0,18	5	-	20,00*	20,00*	6.3	G1/8	10	**P1V-S020AD0005**

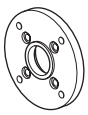
Brake motors with keyed shaft, P1V-S030AD series, 300 watt - (G1/4)

0,30	14500	7250	0,40	0,60	8.0	G1/4	10	**P1V-S030ADE50**
0,30	4600	2300	1,20	1,90	8.0	G1/4	10	**P1V-S030AD460**
0,30	2400	1200	2,40	3,60	8.0	G1/4	10	**P1V-S030AD240**
0,30	1400	700	4,10	6,10	8.0	G1/4	10	**P1V-S030AD140**
0,30	600	300	9,60	14,30	8.0	G1/4	10	**P1V-S030AD060**
0,30	280	140	20,50	26,00	8.0	G1/4	10	**P1V-S030AD028**
0,30	230	115	24,00	36,00	8.0	G1/4	10	**P1V-S030AD023**
0,30	100	50	57,00	85,50	8.0	G1/4	10	**P1V-S030AD010**
0,30	50	25	36,00*	36,00*	8.0	G1/4	10	**P1V-S030AD005**

* Max allowed torque

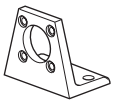
P1V-S Accessories

Flange



For air motor	For drilling motor	Order code
P1V-S002		**P1V-S4002B**
P1V-S008	P1V-S008	**P1V-S4008B**
P1V-S012		**P1V-S4012B**
P1V-S020	P1V-S025	**P1V-S4020B**
P1V-S030	P1V-S040	**P1V-S4030B**
P1V-S060		**P1V-S4060B**
P1V-S120		**P1V-S4120B**

Foot



For air motor	For drilling motor	Order code
P1V-S008	P1V-S008	**P1V-S4008F**
P1V-S012		**P1V-S4012F**
P1V-S020	P1V-S025	**P1V-S4020F**
P1V-S030	P1V-S040	**P1V-S4030F**
P1V-S020A0011		**P1V-S4020C**
P1V-S020A0006		**P1V-S4020C**
P1V-S020A0023		**P1V-S4020C**
P1V-S020A0010		**P1V-S4020C**
P1V-S060		**P1V-S4060F**
P1V-S120		**P1V-S4120F**

Design Variants

A large number of drilling motors, milling motors and grinding motors have been developed using the P1V-S as the base motor in order to make it easier to install air motors in machining applications.

NB: These motors must be supplied with lubricated air

Operating information

Working pressure:	Max 7 bar
Working temperature:	-30°C to +100°C
Medium: (unlubricated for grinding motor P1V-S009)	40 µm filtered oil mist

For technical information see CD

P1V-A is a range of reversable air motors intended for heavy and demanding applications. The motor housings are made from painted cast iron, and the components sealed to permit operation in damp and dirty environments.

The simple construction of the motors makes them very reliable, with long service life and they are easy to service.

- Designed for arduous applications.
- Wide range of optional gears
- Wide speed and torque range 1.6kW, 2.6kW, 3.6kW

Operating information

Working Pressure:	Max 7 bar
Working Temperature:	-30 °C to +100 °C
Medium	40 µm with or without oil mist

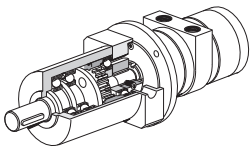
Note: All technical detail based on 6 bar inlet

Basic motor with keyed shaft

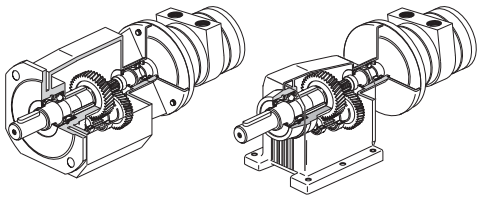
Max power kW	Free speed* r/min	Speed at max power r/min	Torque at at max power Nm	Min start torque Nm	Air consum-tion at max power l/s	Conct.	Min pipe ID Inlet/ Outlet mm	Order code
Series P1V-A160								
1,6	9000	4500	3,3	5	32	G1/2	19/19	**P1V-A160A0900**
Series P1V-A260								
2,6	7000	3500	7,1	11	60	G3/4	19/25	**P1V-A260A0700**
Series P1V-A360								
3,6	6000	3000	11,5	17	80	G1	22/32	**P1V-A360A0600**

* Idling speed

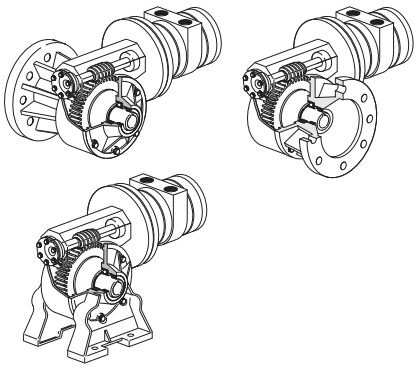
Planetary gear



Helical gear



Worm gear



Planetery gear: torque 15 - 160 Nm, speed 900 - 90 r/min at max output
Helical gear: torque 23 - 1800 Nm, speed 625 - 18 r/min at max output
Worm gear: torque 38 - 670 Nm, speed 350 - 37 r/min at max output

Clamp cylinders are single acting pneumatic cylinders with built-in oleo-pneumatic intensifiers They can be used to solve most clamping, tightening etc problems.

- Single acting cylinders with built-in hydro-pneumatic intensifier
- Compact size with large clamping forces up to 2700 daN (depending on air pressure)
- Operated using a compressed air supply, no special installation required
- Easy adjustment through a fully threaded body
- Simple and rapid installation

Operating information

Working pressure:	Max 9bar
except VBH603 and VBH606 :	Max 7bar
Permissible fluid:	Filtered (40µ) with or without lubrication
Standard working temperature:	+5°C to +50°C

Hydraulic clamps

Order code	Max.stroke (mm)	Ø external (mm)	Force at 6bar (daN)
VB363C	3	36	240
VB366C	6	36	240
VB369C	9	36	240
VB483C	3	48	530
VB486C	6	48	530
VB489C	9	48	530
VB4812C	12	48	530
VBH483C	3	48	1060
VB606C	6	60	1140
VB609C	9	60	1140
VB6012C	12	60	1140
VBH603C	3	60	1800
VBH606C	6	60	1800

Maintenance

Seal kit for	VB Ø36	VB Ø48	VBH Ø48	VB Ø60	VBH Ø60
Order code	**JJVB36**	**JJVB48**	**JJVBH48**	**JJVB60**	**JJVBH60**

Oil container for all types of hydraulic clamp cylinders (250ml capacity) : Order code BH680VB

Hydraulic clamp mountings

Mounting for VB	Mounting block	Rounded end	V groove end
Ø36	**FVA36-1**	**BVA36-16**	**BVA36-17**
Ø48	**FVA48-1**	**BVA48-16**	**BVA48-17**
Ø60	**FVA60-1**	**BVA60-16**	**BVA60-17**

Mounting block

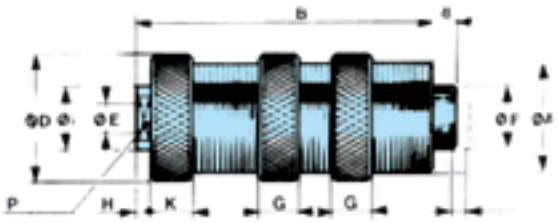
Rounded clamp piston end

V groove clamp piston end

Indicates stocked product.

Home

Dimensions (mm)



Model No	ØA	B	ØD	ØE	ØF	G	H	K	ØL	P
VB363C	M36 x 1,5	98,0	42	G1/8	22	12	4	13	22	17
VB366C	M36 x 1,5	127,5	42	G1/8	22	12	4	13	22	17
VB369C	M36 x 1,5	185,0	42	G1/8	22	12	4	13	22	17
VB483C	M48 x 1,5	111,0	56	G1/8	32	12	4	13	22	17
VBH483C	M48 x 1,5	148,0	56	G1/8	32	12	4	13	22	17
VB486C	M48 x 1,5	148,0	56	G1/8	32	12	4	13	22	17
VB489C	M48 x 1,5	188,0	56	G1/8	32	12	4	13	22	17
VB4812C	M48 x 1,5	234,0	56	G1/8	32	12	4	13	22	17
VBH603C	M60 x 2	175,0	70	G1/4	40	14	5	17	25	22
VB606C	M60 x 2	175,0	70	G1/4	40	14	5	17	25	22
VBH606C	M60 x 2	290,0	70	G1/4	40	14	5	17	25	22
VB609C	M60 x 2	249,0	70	G1/4	40	14	5	17	25	22
VB6012C	M60 x 2	314,0	70	G1/4	40	14	5	17	25	22

Air bellows are the ideal choice for applications requiring short stroke, high thrust single acting actuators.

Manufactured from fabric reinforced synthetic rubber in one, two or three convolutions according to stroke and model. They incorporate no reciprocating meatl parts and so provide virtually frictionless thrust compared with conventional pneumatic cylinders.

- 10 sizes, diameters 70-660 mm
- Strokes from 45 to 375 mm
- Single, double or triple convolutions
- High thrust and frictionless movement
- Maintenance free

Operating information

Working pressure: Max 8 bar
Working temperature: -30°C to +70°C
High temperature version
Working temperature: -30°C to +115°C
Operation: Dry air

It is recommended that external mechanical stops are used to limit the stroke. The units should not achieve maximum stroke or be allowed to 'bottom out'.
Air Bellows may not be stacked, use singly only.

Air bellows are suitable for vibration applications i.e. device feeders at high frequency.

For technical information see CD

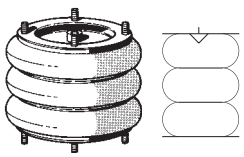
Single convolution

Symbol	Ø mm (inches)	Port size	Max force (N) at 1 bar (0 stroke)	Max stroke mm	Order code
	110 (4½ x 1)	G3/8	1150	45	**9109400**
	150 (6 x 1)	G1/2	1900	55	**9109004A**
	200 (8 x 1)	G1/2	3200	75	**9109014**
	250 (10 x 1)	G1/2	5000	100	**9109024**
	300 (12 x 1)	G1/2	6500	100	**9109044**
	370 (14½ x 1)	G1/2	9600	115	**9109064**

Double convolution

Symbol	Ø mm (inches)	Port size	Max force (N) at 1 bar (0 stroke)	Max stroke mm	Order code
	70 (2¾ x 2)	G1/4	400	50	**9109009**
	110 (4½ x 2)	G3/8	900	80	**9109401**
	150 (6 x 2)	G1/2	1800	112	**9109001A**
	200 (8 x 2)	G1/2	3000	180	**9109011**
	250 (10 x 2)	G1/2	4800	200	**9109021**
	300 (12 x 2)	G1/2	6800	195	**9109041**
	370 (14½ x 2)	G1/2	10000	225	**9109061**
	410 (16 x 2)	G1/2	11400	250	**9109171**
	550 (21½ x 2)	G3/4	24000	300	**9109150**
	660 (26 x 2)	G3/4	30800	310	**9109156**

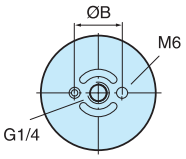
Triple convolution

Symbol	Ø mm (inches)	Port size	Max force (N) at 1 bar (0 stroke)	Max stroke mm	Order code
	70 (2¾ x 3)	G1/4	370	65	**9109010**
	110 (4½ x 3)	G3/8	900	100	**9109402**
	150 (6 x 3)	G1/2	1800	173	**9109007A**
	200 (8 x 3)	G1/2	3000	225	**9109017**
	250 (10 x 3)	G1/2	4800	300	**9109031**
	300 (12 x 3)	G1/2	6800	330	**9109051**
	370 (14½ x 3)	G1/2	10200	350	**9109069**
	410 (16 x 3)	G1/2	10500	375	**9109177**

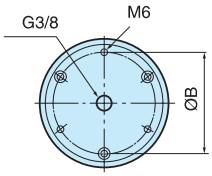
Indicates stocked product.

Dimensions (mm)

Ø70 mm *(2¾")*
Aluminium end plate version

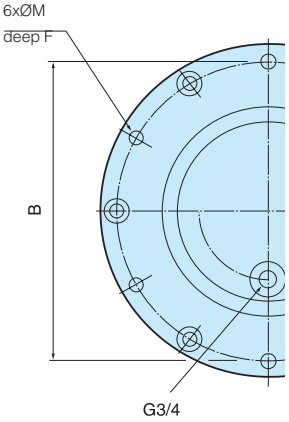


Ø110 mm *(4½")*
Aluminium end plate version

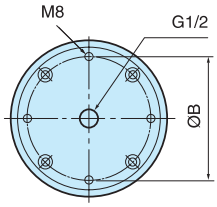


Ø550 mm *(21½")*
Steel end plate version

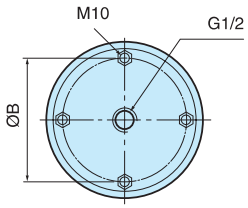
Ø660 mm *(26")*
Steel end plate version



Ø150 mm *(6")*
Aluminium end plate version

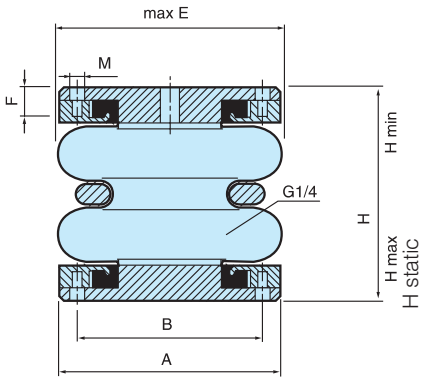


Ø200-410 mm *(8-16")*
Aluminium end plate version

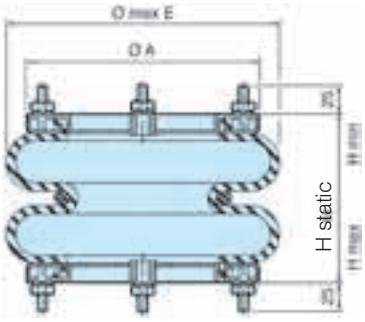


Ø	Number of convolutions	H min	H static	H max	Stroke max	ØE max	ØA	ØB	ØM	F
70	2	65	90	115	50	80	78	36	M6	9
70	3	80	110	145	65	80	78	36	M6	9
110	1	45	65	90	45	125	110	93	M6	13
110	2	65	100	145	80	125	110	93	M6	13
110	3	100	145	200	100	125	110	93	M6	13
150	1	50	80	105	55	175	155	127	M8	16
150	2	78	130	190	172	175	155	127	M8	16
150	3	102	190	275	173	175	155	127	M8	16
200	1	50	90	125	75	230	184	155,5	M10	
200	2	70	160	250	180	230	184	155,5	M10	
200	3	100	205	325	225	230	184	155,5	M10	
250	1	50	100	150	100	280	210	181	M10	
250	2	70	170	270	250	280	210	181	M10	
250	3	100	250	400	300	280	210	181	M10	
300	1	50	100	150	100	330	260	232	M10	
300	2	75	170	270	195	330	260	232	M10	
300	3	100	250	430	330	330	260	232	M10	
370	1	50	110	165	115	395	310	282,5	M10	
370	2	70	180	295	225	395	310	282,5	M10	
370	3	100	280	450	350	395	310	282,5	M10	
410	2	75	200	325	250	440	310	282,5	M10	
410	3	125	300	500	375	440	310	282,5	M10	
550	2	90	200	390	300	580	498,5	470	M10	19
660	2	90	200	400	310	700	498,5	470	M10	19

Ø70-150 mm *(2¾-6")*

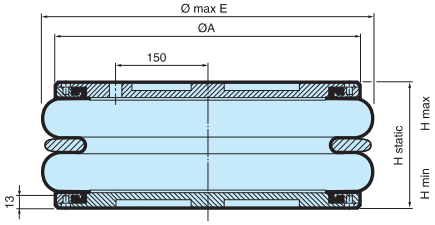


Ø200-410 mm *(8-16")*
Steel end plate version

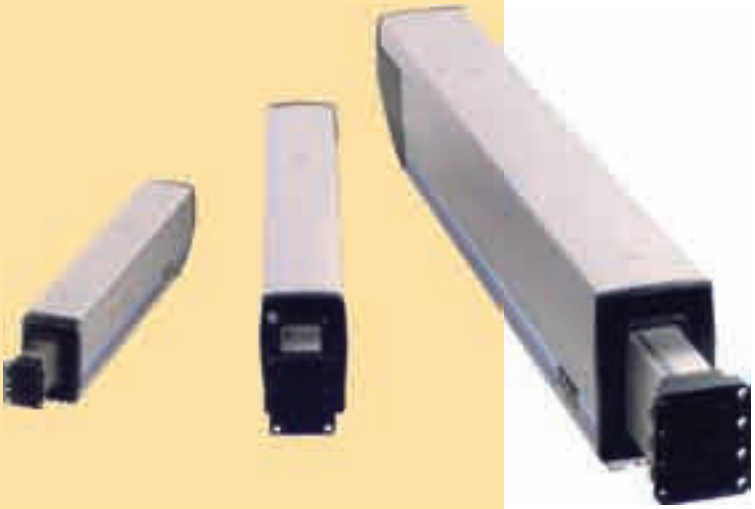


Ø550 mm *(21½")*
Aluminium end plate version

Ø660 mm *(26")*
Steel end plate version

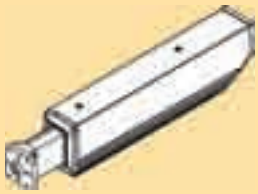


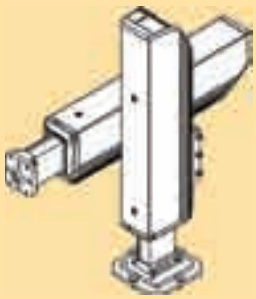
Factory Automation Actuators

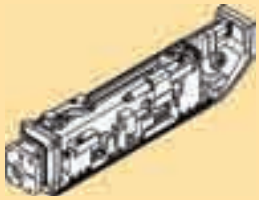


- Exceptional rigidity
- High cycle rates
- Excellent repeatability
- Modular
- Compact design
- Built-in functions

The complete integrated modular linear actuator 3D® Linear Units provide the ultimate in rigidity and accuracy. Pneumatic and electrical connections are located at the rear end for ease of installation. The body form incorporates a dovetail for use with the comprehensive range of 3D® mounting kits.







Operating information

Working pressure	2-8 bar
Working temperature	0°C to +65°C
Operation	Dry air, with or without lubrication

For technical information, see CD

Design Variants

"Pneumatic 3D®" Linear Unit

The range consists of 3 sizes with strokes of 25 to 800mm available.
The unit is mounted by a dovetail.
The slide flange is for connecting other units in the 3D® range quickly and accurately using appropriate mounting kits.

"Pneumatic 3D®" Linear Lift Unit

The "pneumatic 3D®" Linear Units can be changed into a lift unit thanks to a single plate fitted to the end of the slide. Connected to another linear unit the dimensions and mass at the end of the arms can be minimised in this way for more accurate positioning and inserting it into small areas.

"Pneumatic 3D®" Linear Units with MPS option

The one way Mid-Position Stop allows the slide to be stopped at different places. It's small size makes it easy to install inside the unit. Up to 4 MPS can be built in standard linear units.

"Pneumatic 3D®" Linear Units with protection bellows

The bellows protects the slide and guide rods from external projections (shavings etc.) and improves the service life of linear units in hostile environments.

- Excellent rigidity
- Pneumatic cushioning
- Reed switches or solid state sensors
- Long strokes
- Modular
- Optional connection facility

Carrier units are modular, fully integrated rodless cylinders, providing excellent rigidity over long stroke lengths. Avaialble in 25, 32 and 40mm bore sizes and in "simple" versions for light duty applications or "standard" carriers with 4 double ball bearing guidance for more arduous use.

Operating information

Working pressure	2-8 bar
Working temperature	0°C to +65°C
Operation	Dry air, with or without lubrication

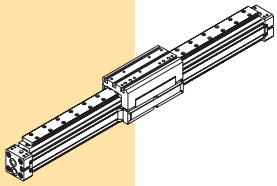
For technical information see CD

Design Variants

Simple Carrier Units

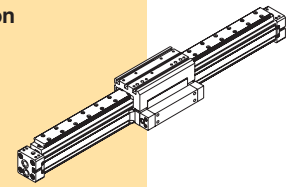
Simple Carrier Unit

The range consists of 3 sizes with strokes of 100 to 5000mm available. The moving carriage enables other units in the 3D® range to be quickly and accurately connected using mounting kits.



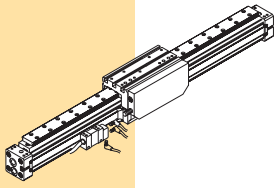
Simple Carrier Unit with brake option

This option is for locking the movement in the event of the compressed air supply being cut off, mainly when the carrier unit is used in the vertical position.



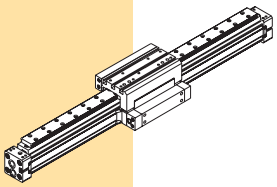
Simple Carrier Unit with MPS option

The two way variable Mid-Position Stop allows the carriage to be accurately stopped at different places. One or more MPS can be built in the Simple Carrier Unit.



Simple Carrier Unit with MPS and brake option

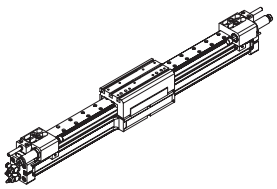
The two options can be combined on the same Simple Carrier Unit.



Standard Carrier Units

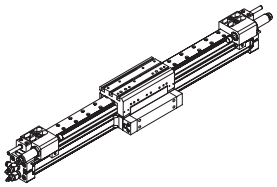
"Pneumatic 3D®" Carrier Unit

The range consists of 3 sizes with strokes of 100 to 5010mm available. The moving carriage enables other units in the 3D® range to be quickly and accurately connected using mounting kits.



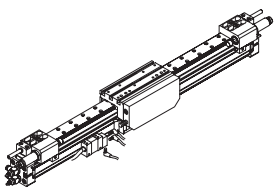
"Pneumatic 3D®" Carrier Unit with brake option

This option is for locking the movement in the event of the compressed air supply being cut off, mainly when the carrier unit is used in the vertical position.



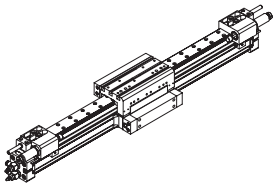
"Pneumatic 3D®" Carrier Unit with MPS option

The two way variable Mid-Position Stop allows the carriage to be accurately stopped at different places.
One or more MPS can be built in the "Pneumatic 3D®" Carrier Unit.



"Pneumatic 3D®" Carrier Unit with MPS and brake option

The two options can be combined on the same "Pneumatic 3D®" Carrier Unit.



- Compact design
- Double acting, square jaws
- Automatic grip retention by mechanical system
- Total jaw opening (180°)
- High reliability

These modern lightweight grippers offer high performance with a choice of options to suit most applications.

Operating information

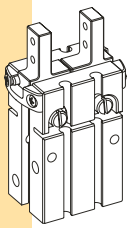
Working pressure	3-8 bar
Working temperature (with or without sensors)	-20°C to 70°C
Operation	Dry air, with or without lubrication

For technical information see CD

Design Variants

Parallel double acting, square jaw carriers

Gripper is opened and closed by pneumatic pressure.
No grip retention at closing.
4 sizes available.

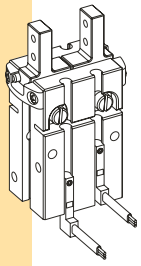


Sensors

Check on closing and opening of gripper by means of magneto-inductive sensors.

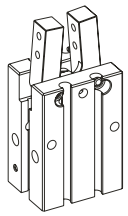
Spring function

Self-locking in closed or opened position by internal spring.
In case of air failure, the retention force is equal to the clamping force divided by 4.



Angular double acting, square jaw carriers

Gripper is opened and closed by pneumatic pressure.
No self-locking in closed position.
4 sizes available.

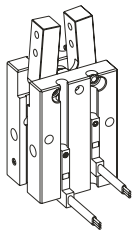


Sensors

Check on closing and opening of gripper by means of magneto-inductive sensors.

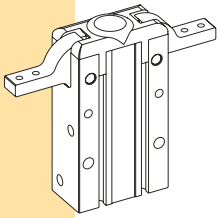
Spring function

Self-locking in closed or opened position by internal spring.
In case of air failure, the retention force is equal to the clamping force divided by 4.



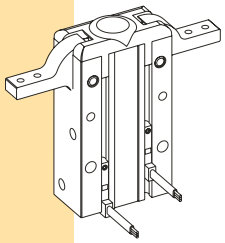
Radial double acting, square jaw carriers

Gripper is opened and closed by pneumatic pressure.
Automatic grip retention by mechanical system.
4 sizes available.



Detection

Check on opening and closing of gripper by means of magneto-inductive sensors.



Shock adsorbers are hydraulic units which allow to bring a moving load to rest, quickly and safely, without rebound nor backward movement.

They provide a constant linear deceleration with the lowest possible reaction force in the shortest possible stopping time.

- Compact and heavy duty versions
- High energy absorption
- Low return force
- Long service life
- Increases productivity
- Reduces maintenance

Operation information

Type	Self-compensating
Working temperature	
MC9 to MC 600	0 to 65°
SC925	-12 to 90°
MC33 to MC64	-12 to 70°

Sizing software available on separate CD : PDE2524TCUK-CD

For technical information, see CD

MC 9 to MC 600 series

Stroke (mm)	Ø	Order code
5	M6 x 0,5	**MC9M-1-B**
5	M6 x 0,5	**MC9M-2-B**
5	M8 x 1	**MC10ML-B**
5	M8 x 1	**MC10MH-B**
6,6	M10 x 1	**MC25ML**
6,6	M10 x 1	**MC25M**
6,6	M10 x 1	**MC25MH**
10	M12 x 1	**MC75M-1**
10	M12 x 1	**MC75M-2**
10	M12 x 1	**MC75M-3**
12,5	M14 x 1,5	**MC150M**
12,5	M14 x 1,5	**MC150MH**
12,5	M14 x 1,5	**MC150MH2**
12,5	M20 x 1,5	**MC225M**
12,5	M20 x 1,5	**MC225MH**
12,5	M20 x 1,5	**MC225MH2**
25,4	M25 x 1,5	**MC600M**
25,4	M25 x 1,5	**MC600MH**
25,4	M25 x 1,5	**MC600MH2**

SC 925 series

Stroke (mm)	Ø	Order code
40	M25 x 1,5	**SC925M-1**
40	M25 x 1,5	**SC925M-2**
40	M25 x 1,5	**SC925M-3**

Accessories

Stop collar

Series	Order code
MC 9 M	**AH6**
MC 10 M	**AH8**
MC 25 M	**AH10**
MC 75 M	**AH12**
MC 150 M	**AH14**
MC 225 M	**AH20**
MC 600M	**AH25**
SC 925 M	

Clamp

Series	Order code
MC 9 M	**MB6**
MC 10 M	**MB8**
MC 25 M	**MB10**
MC 75 M	**MB12**
MC 150 M	**MB14**
MC 225 M	**MB20**
MC 600M SC 925 M	**MB25**

Side load adaptor

Series	Order code
MC 9 M	**BV6**
MC 10 M	**BV8**
MC 25 M	**BV10**
MC 75 M	**BV12**
MC 150 M	**BV14**
MC 225 M	**BV20**
MC 600M SC 925 M	**BV25**

Indicates stocked product.

Accessories

Rectangular flange

Series	Order code
MC 9 M	**RF6**
MC 10 M	**RF8**
MC 25 M	**RF10**
MC 75 M	**RF12**
MC 150 M	**RF14**
MC 225 M	**RF20**
MC 600M SC 925 M	**RF25**

Lock nut

Series	Order code
MC 9 M	**KM6**
MC 10 M	**KM8**
MC 25 M	**KM10**
MC 75 M	**KM12**
MC 150 M	**KM14**
MC 225 M	**KM20**
MC 600M	**KM25** SC 925 M

MC 33 to MC 64

Stroke (mm)	Ø	Order code
25	M33 x 1,5	**MC 3325 M-1**
50	M33 x 1,5	**MC 3350 M-1**
25	M45 x 1,5	**MC 4525 M-1**
50	M45 x 1,5	**MC 4550 M-1**
75	M45 x 1,5	**MC 4575 M-1**
50	M64 x 2	**MC 6450 M-1**
100	M64 x 2	**MC 64100 M-1**
150	M64 x 2	**MC 64150 M-1**

Accessories

Locking ring

Series	Order code
MC 33	**NM33**
MC 45	**NM45**
MC 64	**NM64**

Nylon button

Series	Order code
MC 33	**PP33**
MC 45	**PP45**
MC 64	**PP64**

Square flange

Series	Order code
MC 33	**QF33**
MC 45	**QF45**
MC 64	**QF64**

Side foot mounting kit

Series	Order code
MC3325M & MC3350M	**S33**
MC4525M, MC4550M & MC4575M	**S45**
MC6450M, MC64100M & MC64150M	**S64**

Clevis mounting kit

Series	Order code
MC 33	**C33**
MC 45	**C45**
MC 64	**C64**

Female fitting

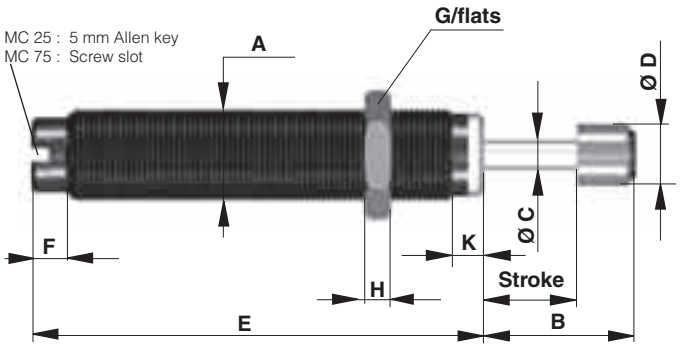
Series	Order code
MC 33	**P1C-4KMC**
MC 45	**P1C-4MMC**
MC 64	**P1C-4PMC**

Indicates stocked product.

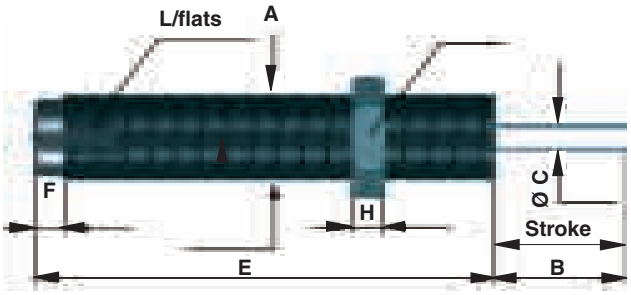
Home

Dimensions (mm)

Serie MC 9 M to MC 75 M

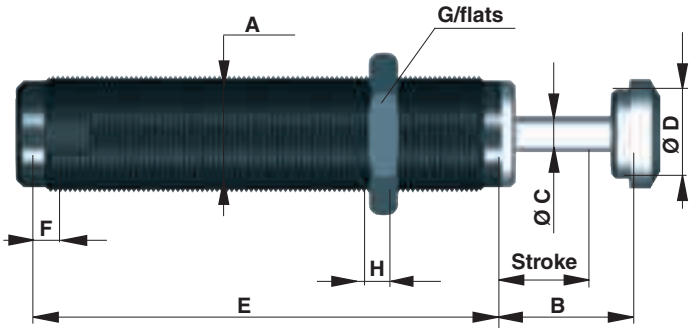


Serie MC 150 M to MC 600 M



Part No	Stroke (mm)	A	B	C	D	E	F	G	H	K	L
MC 9 M-1-B	5	M6 x 0,5	10	2	4,8	26	2,5	8	2,5	1	-
MC 9 M-2-B	5	M6 x 0,5	10	2	4,8	26	2,5	8	2,5	1	-
MC 10 ML-B	5	M8 x 1	10	2	6,4	28,5	5	11	3	2	-
MC 10 MH-B	5	M8 x 1	10	2	6,4	28,5	5	11	3	2	-
MC 25 ML	6,6	M10 x 1	14,6	3,2	7,6	43,4	5	13	3	5	-
MC 25 M	6,6	M10 x 1	14,6	3,2	7,6	43,4	5	13	3	5	-
MC 25 MH	6,6	M10 x 1	14,6	3,2	7,6	43,4	5	13	3	5	-
MC 75 M-1	10	M12 x 1	18	3,2	7,6	52	5	14	4	3	-
MC 75 M-2	10	M12 x 1	18	3,2	7,6	52	5	14	4	3	-
MC 75 M-3	10	M12 x 1	18	3,2	7,6	52	5	14	4	3	-
MC 150 M	12,5	M14 x 1,5	17,5	4,8	-	70	8,5	17	5	-	12
MC 150 MH	12,5	M14 x 1,5	17,5	4,8	-	70	8,5	17	5	-	12
MC 150 MH2	12,5	M14 x 1,5	17,5	4,8	-	70	8,5	17	5	-	12
MC 225 M	12,5	M20 x 1,5	17,5	6,3	-	80	8,5	24	6	-	18
MC 225 MH	12,5	M20 x 1,5	17,5	6,3	-	80	8,5	24	6	-	18
MC 225 MH2	12,5	M20 x 1,5	17,5	6,3	-	80	8,5	24	6	-	18
MC 600 M	25,4	M25 x 1,5	32	8	-	111	9	30	8	-	23
MC 600 MH	25,4	M25 x 1,5	32	8	-	111	9	30	8	-	23
MC 600 MH2	25,4	M25 x 1,5	32	8	-	111	9	30	8	-	23

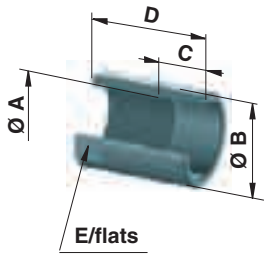
Serie SC 925



Part No	Stroke (mm)	A	B	C	D	E	F	G	H
SC 925 M-1	40	M25 x 1,5	51	6,3	23	138	7	30	8
SC 925 M-2	40	M25 x 1,5	51	6,3	23	138	7	30	8
SC 925 M-3	40	M25 x 1,5	51	6,3	23	138	7	30	8

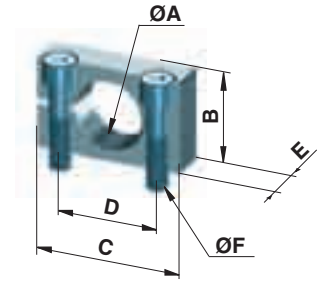
Dimensions (mm)

Stop collar



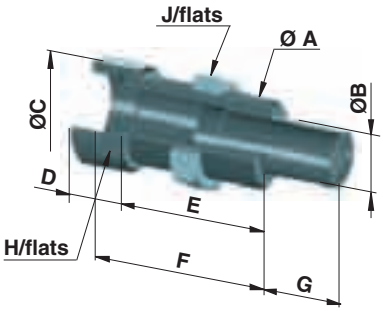
Part No	Used with serie	ØA	ØB	C	D	E
AH6	MC 9 M	M 6 x 0,5	8	6	12	-
AH8	MC 10 M	M 8 x 1	11	6	12	-
AH10	MC 25 M	M 10 x 1	14	10	20	-
AH12	MC 75 M	M 12 x 1	16	10	20	-
AH14	MC 150 M	M 14 x 1,5	18	12	20	15
AH20	MC 225 M	M 20 x 1,5	25	12	25	22
AH25	MC 600 M	M 25 x 1,5	32	16	32	27
	SC 925 M	M 25 x 1,5	32	16	32	27

Clamp



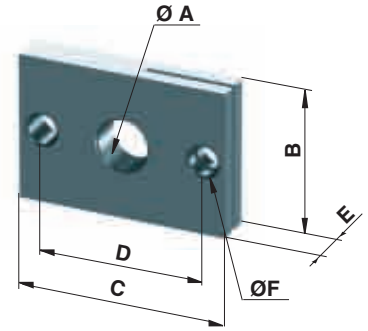
Part No	Used with serie	ØA	B	C	D	E	ØF
MB6	MC 9 M	M 6 x 0,5	10	20	12	8	M3
MB8	MC 10 M	M 8 x 1	12	25	16	10	M4
MB10	MC 25 M	M 10 x 1	14	25	16	10	M4
MB12	MC 75 M	M 12 x 1	16	32	20	12	M5
MB14	MC 150 M	M 14 x 1,5	20	32	20	12	M5
MB20	MC 225 M	M 20 x 1,5	25	40	28	20	M6
MB25	MC 600 M	M 25 x 1,5	32	46	34	25	M6
	SC 925 M	M 25 x 1,5	32	46	34	25	M6

Side load adaptor



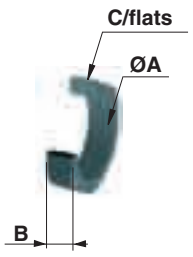
Part No	Used with serie	ØA	ØB	ØC	D	E	ØF	G	H	J
BV8	MC 10 M	M 8 x 1	4	11	10	10	12	5	9	11
BV10	MC 25 M	M 10 x 1	6	13	11	12	15	6,5	11	13
BV12	MC 75 M	M 12 x 1	7	15	12	18	22	10	14	14
BV14	MC 150 M	M 14 x 1,5	9	18	12	20	24	12,5	16	17
BV20	MC 225 M	M 20 x 1,5	12	24	14	20	24	12,5	22	24
BV25	MC 600 M	M 25 x 1,5	16	30	16	38	44	25	27	30
	SC 925 M	M 25 x 1,5	16	30	16	38	44	25	27	30

Rectangular flange



Part No	Used with serie	ØA	B	C	D	E	ØF
RF6	MC 9 M	M 6 x 0,5	10	20	14	5	3,4
RF8	MC 10 M	M 8 x 1	14	25	18	6	4,5
RF10	MC 25 M	M 10 x 1	14	28	20	6	4,5
RF12	MC 75 M	M 12 x 1	20	32	24	6	5,5
RF14	MC 150 M	M 14 x 1,5	20	34	26	6	5,5
RF20	MC 225 M	M 20 x 1,5	32	46	36	8	6,5
RF25	MC 600 M	M 25 x 1,5	32	52	42	8	6,5
	SC 925 M	M 25 x 1,5	32	52	42	8	6,5

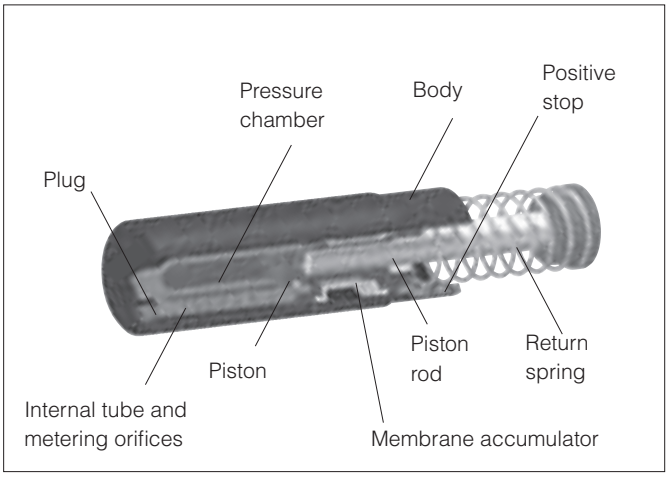
Lock nut



Part No	Used with serie	A	B	C
KM6	MC 9 M	M6 x 0,5	2,5	8
KM8	MC 10 M	M 8 x 1	3	11
KM10	MC 25 M	M 10 x 1	3	13
KM12	MC 75 M	M 12 x 1	4	14
KM14	MC 150 M	M 14 x 1,5	5	17
KM20	MC 225 M	M 20 x 1,5	6	24
KM25	MC 600 M	M 25 x 1,5	8	30
	SC 925 M	M 25 x 1,5	8	30

Dimensions (mm)

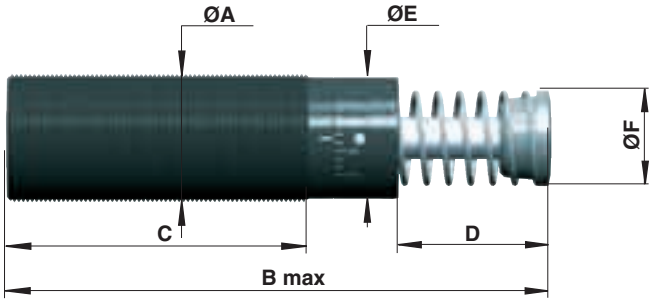
Serie MC 33 to MC 64



Serie	MC 3325 M	MC 3350 M	MC 4525 M	MC 4550 M	MC 4575 M	MC 6450 M	MC 64100 M	MC 64150 M
Thread (mm)	M33 x 1,5	M33 x 1,5	M45 x 1,5	M45 x 1,5	M45 x 1,5	M64 x 2	M64 x 2	M64 x 2
Type	Self-compensating							
Mechanical stop	Built-in end of stroke							
Impact velocity (m/s)	0,15 to 5							
Stroke (mm)	25	50	25	20	75	50	100	150
Max. capacity per cycle (Nm)	155	310	340	680	1020	1700	3400	5100
Temperature (°C)	- 12 to 70							

Dimensions (mm)

Serie MC 33 to MC 64

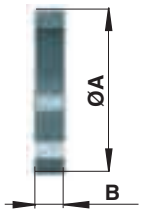


For the 3 ranges of effective weight

Part No	Stroke	A (mm)	B	C	D	E	F
MC 3325 M	25	M33 x 1,5	138	83	23	30	25
MC 3350 M	50	M33 x 1,5	189	108	48,5	30	25
MC 4525 M	25	M45 x 1,5	145	95	23	42	35
MC 4550 M	50	M45 x 1,5	195	120	48,5	42	35
MC 4575 M	75	M45 x 1,5	246	145	74	42	35
MC 6450 M	50	M64 x 2	225	140	48,5	60	48
MC 64100 M	100	M64 x 2	326	191	99,5	60	48
MC 64150 M	150	M64 x 2	450	241	150	60	48

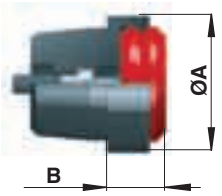
Dimensions (mm)

Locking Ring



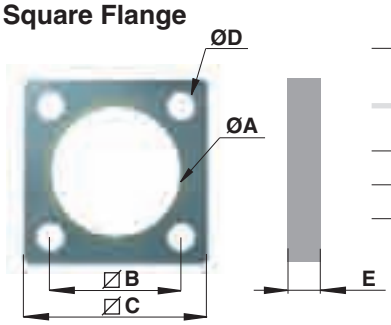
Part No	Used with serie	ØA	B
NM33	MC 3325 M & MC 3350 M	40	6
NM45	MC 4525 M & MC 4550 M & MC 4575 M	57	10
NM64	MC 6450 M & MC 64100 M & MC 64150 M	76	10

Nylon Button



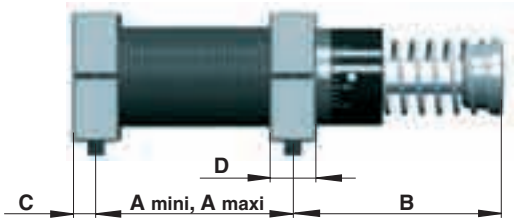
Part No	Used with serie	ØA	B
PP33	MC 3325 M & MC 3350 M	29	12
PP45	MC 4525 M & MC 4550 M & MC 4575 M	42	18
PP64	MC 6450 M & MC 64100 M & MC 64150 M	60	18

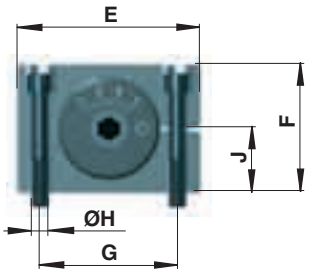
Square Flange



Part No	Used with serie	ØA	ØD	⍁B	⍁C	E
QF33	MC 3325 M & MC 3350 M	M33 x 1,5	6,6	32	44	12
QF45	MC 4525 M & MC 4550 M & MC 4575 M	M45 x 1,5	9	42	56	15
QF64	MC 6450 M & MC 64100 M & MC 64150 M	M64 x 2	11	58	80	20

Side foot Mounting Kit





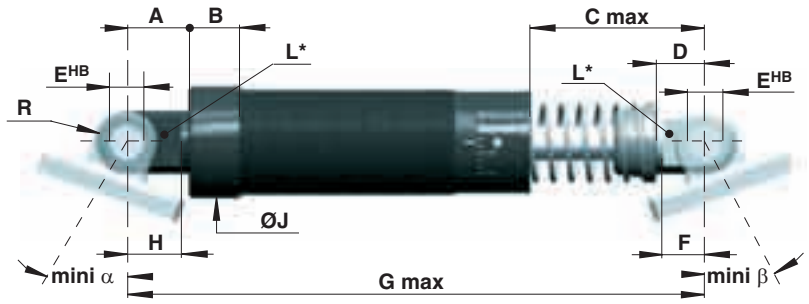
S33 = 2 flanges + 4 screws M6 x40
S45 = 2 flanges + 4 screws M8 x50
S64 = 2 flanges + 4 screws M10 x80

Tightening torque
S33 =11 Nm **S45** = 27 Nm **S64** = 50 Nm

Removing torque
S33 > 90 Nm **S45** > 350 Nm **S64** >350Nm

Part No	Used with serie	A mini	A maxi	B	C	D	E	F	G	ØH	J
S33	MC 3325 M	25	60	68	10	20	56	40	42	6,6	20
S33	MC 3350 M	32	86	93	10	20	56	40	42	6,6	20
S45	MC 4525 M	32	66	66	12,5	25	80	56	60	9	28
S45	MC 4550 M	40	92	91	12,5	25	80	56	60	9	28
S45	MC 4575 M	50	118	116	12,5	25	80	56	60	9	28
S64	MC 6450 M	50	112	100	12,5[2]	25	100	80	78	11	40
S64	MC 64100 M	64	162	152	12,5	25	100	80	78	11	40
S64	MC 64150 M	80	212	226	12,5	25	100	80	78	11	40

Dimensions (mm)

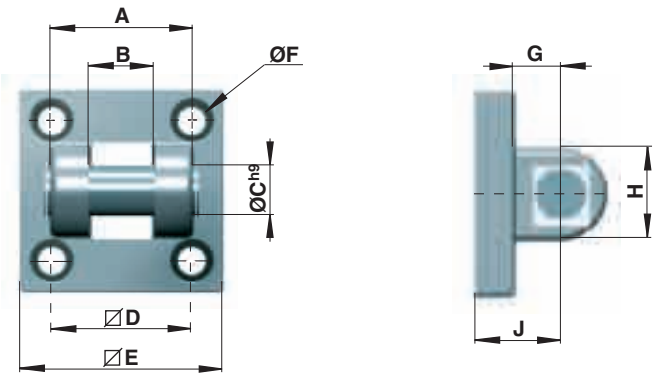


S33 =
S45 =
S64 = 2 clevis shipped fitted onto shock absorber

Part No	Used with serie	A	B	Cmax	D	E^{HB}	F	G max	H	ØJ	L*	R	mini α	mini β
C33	MC 3325 M	14	14	39	14	10	13	168	13	38	13	10	20°	0°
C33	MC 3350 M	14	14	64	14	10	13	218	13	38	13	10	20°	0°
C45	MC 4525 M	28	20	43	18	16	17	200	20	53	20	14	15°	15°
C45	MC 4550 M	28	20	68	18	13	17	250	20	53	20	14	15°	15°
C45	MC 4575 M	28	20	93	18	13	17	300	20	53	20	14	15°	15°
C64	MC 6450 M	35	25	85	35	20	30	310	30	74	24	20	20°	10°
C64	MC 64100 M	35	25	136	35	20	30	410	30	74	24	20	20°	10°
C64	MC 64150 M	35	25	187	35	20	30	530	30	74	24	20	20°	10°

L* indicates the width of front and rear clevis

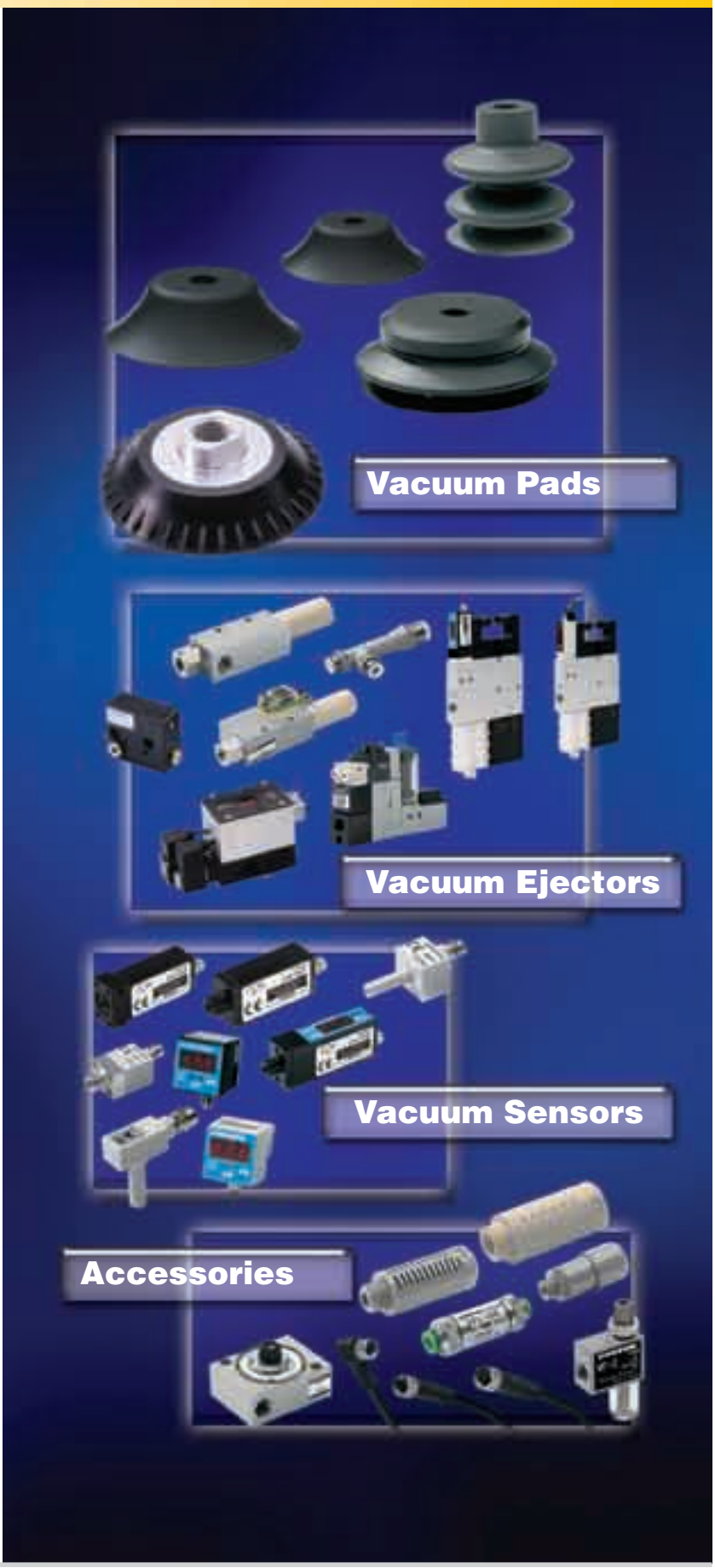
Female Fitting



Supplied with 4 mounting screws

Part No	Used with serie	A	B	$ØC^{h9}$	⍁D	⍁E	Ø F	G	H	J
P1C-4KMC	MC 3325 M , MC 3350 M	34	14	10	32	48	7	13	23	22
P1C-4MMC	MC 4525 M, MC 4550 M, MC 4575 M	45	21	16	46	65	9	15	29	27
P1C-4PMC	MC 6450 M, MC 64100 M, MC 64150 M	65	25	20	72	95	11	22	45	36

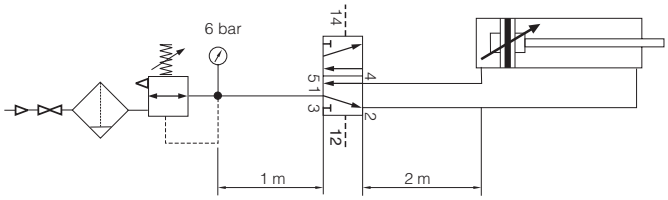
Vacuum Products



Valves and Logic Processing

Choice of components for air supply to cylinders

In the chart below can you find the suitable valves, tubes etc. for each cylinder size. If you have a tube length over 2 m, choose one tube size larger than in the chart. The table is based on a maximum cylinder speed of 0,5m/s.



Following data is valid:
Supply pressure: min 7,0 bar
Regulator pressure setting: 6,0 bar
Pipe length between air treatment unit and valve: max 1 m
Pipe length between valve and cylinder : max 2 m
The table is made for a cylinder speed max 0,5 m/s

Cylinder														
Cylinder diameter mm	Ø10	Ø12	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100	Ø125	Ø160	Ø200
Cylinder ISO connection	M5	M5	M5	G1/8	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2	G1/2	G3/4	G3/4
Tube														
Tube diameter mm Ext / Int	4 / 2.7	4 / 2.7	4 / 2.7	6 / 4	6 / 4	6 / 4	8 / 6	8 / 6 10 / 8	10 / 8	12 / 9 14 / 11	12 / 9	16 / 13	18 / 15	22 / 16
FRL units														
Moduflex P3H														
Moduflex P3K														
Moduflex P3M														
Valves														
4mm inst. fitting valve														
M5 valve														
6mm inst. fitting valve														
1/8 valve														
1/4 valve														
3/8 valve														
1/2 valve														

Possible Recommended Cylinder speed < 0,5 m/s Not recommended

General lightweight applications & Individual/multiple field bus connections

P2M Moduflex valves

See page: 138

- High flow, compact size.
- Mixable valve sizes.
- Stand alone valves, modular islands with individual, multiconnector or bus connections.
- Integrated selectable internal or external pilot supply and exhaust.
- Optional peripheral modules.
- Push-in connection.
- DIN rail or block mounting.

Poppet valve for enclosures

PS1 Interface

See page: 158

- High speed poppet valve
- Push-in connection
- Built-in terminal block
- Pneumatic output indicator
- DIN rail mounting

Stackable inline lightweight valve

PVL Compact valves

See page: 161

- High flow, compact size
- Push-in or threaded connection
- DIN rail or block mounting
- Light weight construction

Home

ISO 15407 / ISO 5599 - Plug-in / Non plug-in

General applications

Isomax valves

See page: 176

- Size 1, 2, 3, 01, 02 (26 and 18 mm)
- Ceramic technology for long life operation
- From vacuum up to 10 bar applications (15407-1)
- From vacuum up to 12 bar applications (5599-1)
- Internal or external pilot supply with same valves
- Common M12 (5599-1)
- M12 on each coil (5599-1)

Heavy duty applications, Multiple connection and Plug-in

Isys ISO valves

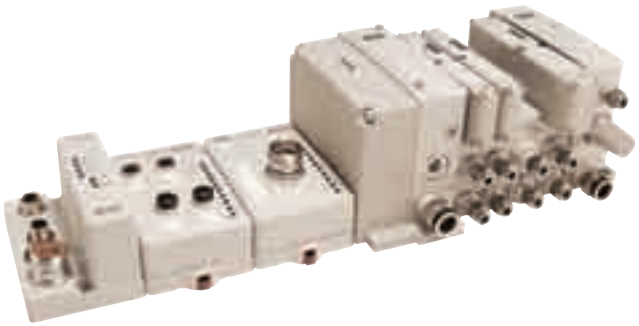
See page: 181

- Complete ISO valve range
- Heavy duty and corrosion resistant body
- Internal led & rectifier
- Vacuum up to 10 bar
- Internal or external pilot supply with same valve.
- Multiple connection, Sub-D25, M23, terminal blocks

Field Bus

Isysnet

See page: 198



- Compatible with Profibus DP, DeviceNet, ControlNet and Ethernet IP
- Accept signals from sensors, photo eyes, limit switches and other input devices
- Broad choice of I/O types with connector choice of 8mm, 12mm, 23mm
- Choice of digital, analog, or high watt I/O modules

Home

Stand alone or on a manifold, Ideal for 1 to 4 valves for OEM

Heavy duty applications / Mobile

Viking Xtreme metal spool valves

See page: 215

- 4 sizes: G1/8, G1/4, G3/8 and G1/2.
- Wide operating temperature range
- Compact design with good corrosion resistance.
- Wide range of 5/2 and 5/3 versions.
- High and low temperature versions available for transport applications.

Industrial applications

B Series high performance industrial valves

See page: 227

- 2 sizes: 1/8" and 1/4"
- Compact size
- Inlet-exhaust-mounting facility
- Fast response, high flow
- Integrated mounting holes
- Wear compensating seal system
- DIN rail mountable manifolds

Miniature valves

ADEX directional control valves

See page: 243

- 2 sizes: M5 and 1/8"
- Compact body with large flow
- Quick response time, faster than 10ms
- Expected life time more than 50,000,000 cycles
- Low power consumption only 0.6W
- Optional multipin connector manifold
- Manual override

Home

Mechanical Valves

Metal valves

Midget and Intermediate valves

See page: 249

- 43 series G1/8 body ported
- 53 series G1/4 body ported
- Stainless steel spool
- 3/2, 5/2 and 5/3 versions
- Viton body seals as standard
- Integral mounting holes

Push Buttons

General applications

PXB Control and process duty Ø 22mm

See page: 263

- Facia mounted operation
- 3/2 NO or NC
- Modular construction
- Wide range of actuators
- Dual pneumatic an electrical output signal

Heavy duty applications

VA - Brass bodied spool valves

See page: 266

- Rugged valves for heavy duty applications
- Large and robust actuators for easy operation
- Excellent corrosion resistance
- Integral mounting holes
- Panel mounting versions

Home

General Automation and Assembly Cells

PXC Limit Switches

See page: 270

- High durability
- Very good repeat accuracy
- Design for process duty cycle
- Push-in connection
- Versatile and easily maintained
- Miniature size

Logic Processing

See page: 272

- Complete range
- Stand alone, stackable or combinable modules
- Very fast response time
- Flexible and highly maintainable system
- DIN rail mounting
- Ø 4mm connection

Airline Isolator

See page: 277

- In line installation
- High flow
- Internal supply for signal air
- Suitable as main shut-off or as power valve for cylinder and air motor
- Optional low-pressure hydraulic version

Two Hand Control Units

See page: 279

- Ergonomic design
- Robust polymer or metal enclosure
- Meets requirements for protection against accidental operation and tampering
- Metal enclosure features a wrist-rest bar which helps prevent illness due to repetitive actions
- Conforms to EN574 and EN954-1 requirements

Moduflex Valve System®

The Moduflex Valve® System redefines flexibility for pneumatic users. Whether configured from basic components or ordered as a pre-assembled and tested valve island, Moduflex flexibility is unmatched in the marketplace.

V Series

T Series

S Series

P Series

Innovative

The 6 patents awarded to the Moduflex valve system reflect that innovation is core to the Parker design process. Maintaining a clear understanding of our customer's expectations has defined the individuality of the Moduflex, and clearly differentiated it as a leading automation solution.

Adaptive

No other system can be adapted so simply once specified. Unique, captive fitting release system, quick release electrical connectors and single mechanical screw connection between manifolds offer the ultimate capability for late system design changes.

Multi-Functional

From stand-alone valves to fieldbus ready valve islands, from cylinder flow controls to vacuum generators with integrated blow-off, the Moduflex Valve System® meets the requirements of the whole automation spectrum.

Light-weight

An Asi compatible valve manifold with 8 electrical inputs and 8 pneumatic outputs weighs a mere 800grams, making the Moduflex Valve System® the perfect choice for end of arm tooling application.

Moduflex Valve Technology

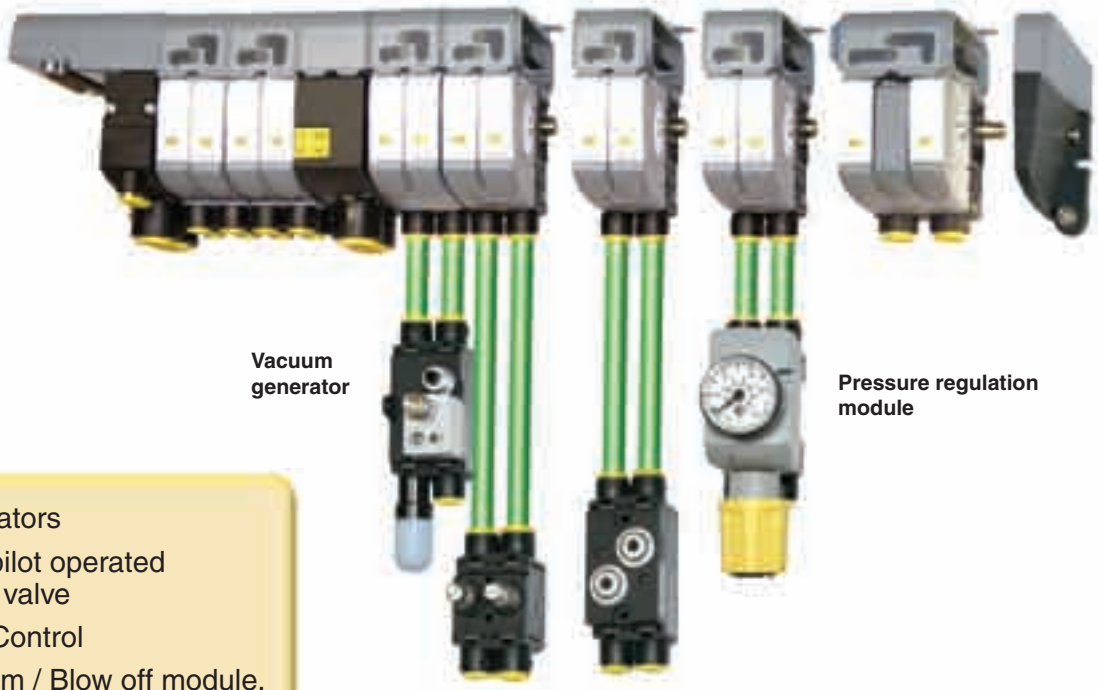
Two technology platforms enable the compact design and high performance of the Moduflex Valve System.
The compact dual 4/2 and 3/2 valves utilize well proven Parker seal technology. The standard 4/2 valves adopt the long life super durable ceramic switching technology.

Dual 4/2 valve

4/2 Valve

Moduflex Complete Control

With the introduction of the dual 4/2 size 1 valves, Moduflex now offers unrivaled ability of matching valves to exact flow requirements, ensuring cost and space are minimized.
In addition, Moduflex Valve System® offers all the necessary control peripherals to provide a complete automation solution. Moduflex is the complete control package.



- Regulators
- Dual pilot operated check valve
- Flow Control
- Vacuum / Blow off module.

Operating information

Working pressure:	-0.9 to 8 bar
Pilot pressure :	3 to 8 bar*
Working temperature	-15 °C to +60 °C
Protection Individual connectors	IP67 NEMA4
Protection Integrated connectors	IP65
Voltage: 24V DC	

* 2 x 3/2 and 3/2 3.5 to 8 bar

		Dual 4/2	Dual 3/2	3/2	4/2
Size 1	Qmax	333 l/min	415 l/min	415 l/min	510 l/min
	Qn	130 l/min	235 l/min	235 l/min	310 l/min
Size 2	Qmax	-	805 l/min	805 l/min	1340 l/min
	Qn	-	450 l/min	440 l/min	800 l/min

Ordering Options

Depending on the application requirements and production methods, Moduflex may be ordered as follows :

Basic Modules
These modules are supplied without connectors, the choice of plug-in connectors enables total flexibility in the field ;
(Preferred ordering method for best price and delivery.)

Complete Modules
Supplied complete with connectors, for use with valve islands or as stand-alone valves or peripheral modules ;
Consult your local distributor or Parker location for assembly information, price and delivery.

Pre-assembled Valve Islands
Supplied fully assembled to specifications and complete with pneumatic and electrical connectors. Islands can be easily configured with the Moduflex Configurator Software.
See technical catalogue CD.

Moduflex Island Configurator Software

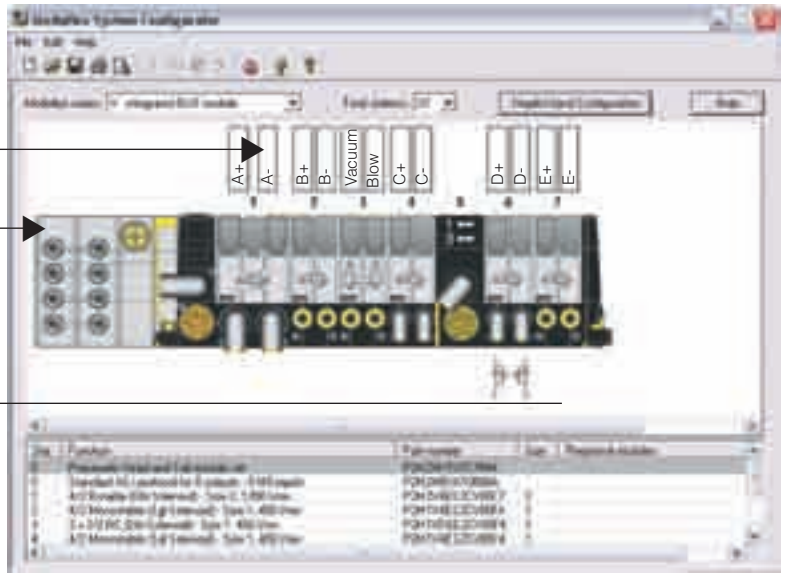
*Available on CD within this catalog

valve island modules identification

valve island graphic description with valve module symbols, output connectors, pneumatic and electrical head module, etc.....

addition of peripheral modules

valve island composition with each module description and order code



V series – Fieldbus and multi-connector valve islands

Pages 98 - 101

T series – Simple valve islands

Page 102 - 103

S series – Stand alone valves

Page 104 - 105

P series – Peripheral control modules

Page 106

Home

Valve island modules with integrated connections

When a high number of valves are necessary, valves maybe configured with integrated electrical connectivity. These islands are then connected to the control PLC with a multi-connector cable or with a fieldbus connection.

Basic modules (without connectors) and corresponding clip-on pneumatic connectors

Size 1 Valve Modules

Description	Symbol	Weight (g)	Order code
4/2 Solenoid spring		94	P2M1V4ES2CV
4/2 Double solenoid		103	P2M1V4EE2CV
2 x 3/2 NC + NC with exhaust check valves		106	P2M1VDEE2CV
2 x 3/2 NO + NO with exhaust check valves		106	P2M1VCEE2CV
2 x 3/2 NC + NO with exhaust check valves		106	P2M1VEEE2CV
2 x 4/2 Solenoid spring with exhaust check valves		114	P2M1VJEE2CV
3/2 NC Solenoid spring with exhaust check valves		102	P2M1V3ES2CV
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		106	P2M1VGEE2CV

P2M1V4ES2CV

CMD06-1

P2M1VJEE2CV

FMD04-1

P2M1VDEE2CV

FMD04-1

Size 1 connectors Tube OD *

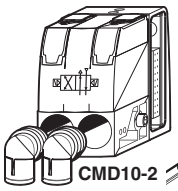
Description		W. (g)	Order code
Straight	4mm	2	FMD04-1
	6mm	3	FMD06-1
Elbow	4mm	5	CMD04-1
	6mm	3	CMD06-1
Plug		3	PMDXX1
Muffler		5	MMDVA1
Clip-on double male union		3	HMDXX1

* Pack quantity : 10

Size 2 Valve Modules

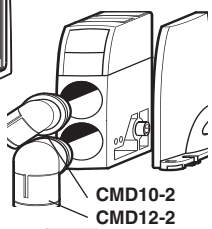
Description	Symbol	Weight (g)	Order code
4/2 Solenoid spring		100	P2M2V4ES2CV
4/2 Double solenoid		110	P2M2V4EE2CV
2 x 3/2 NC + NC with exhaust check valves		115	P2M2VDEE2CV
2 x 3/2 NO + NO with exhaust check valves		115	P2M2VCEE2CV
2 x 3/2 NC + NO with exhaust check valves		115	P2M2VEEE2CV
3/2 NC Solenoid spring with exhaust check valves		110	P2M2V3ES2CV
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		115	P2M2VGEE2CV

P2M2V4EE2CV



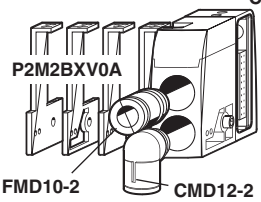
CMD10-2

P2M2HXT01



CMD10-2
CMD12-2

P2M2BXV0A



FMD10-2

CMD12-2

Size 2 connectors Tube OD *

Description		W. (g)	Order code
Straight	6mm	3	FMD06-2
	8mm	4	FMD08-2
	10mm	5	FMD10-2
	12mm	6	FMD12-2
Elbow	6mm	5	CMD06-2
	8mm	6	CMD08-2
	10mm	7	CMD10-2
	12mm	8	CMD12-2
Plug		5	PMDXX2
Muffler		3	MMDVA2
Clip-on double male union		8	HMDXX2

* Pack quantity : 10

Head & Tail sets and Intermediate supply exhaust modules

Valve Island Pneumatic head and tail module set	P2M2HXT01
Valve Island Intermediate supply module with a set of 4 configurations plates	P2M2BXV0A

Size 2 connectors should be specified with head and tail sets.

Indicates stocked product.

Order codes V Series - Complete modules (on order)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
P	2	M	1	V	4	E	E	2	C	V	0	0	F	6

Size option	
1	Size 1
2	Size 2

Series	
V	Valvetronic

Valve Function - Solenoid Versions	
4 E S	4/2 - Single solenoid
4 E E	4/2 - Double solenoid
J E E	2 x 4/2 - 2 x 1 solenoid
D E E	2 x 3/2 - Normally closed
C E E	2 x 3/2 - Normally open (4/3 PC)
B E E	2 x 3/2 - Normally closed + PO check (4/3 APB)
E E E	2 x 3/2 - 1 x Open, 1 x Closed
G E E	4/3 CE - 2 x 3/2 - Normally closed
3 E S	3/2 Single solenoid

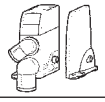
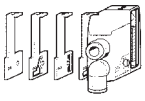
PC = Pressure Centre
APB = All Ports Blocked
CE = Centre Exhausted

For basic modules, leave digits 12 - 15, blank.

Pneumatic connectors Ports 2 & 4		
Size 1 modules		
F4	straight	4mm OD
C4	elbow	4mm OD
F6	straight	6mm OD
C6	elbow	6mm OD
Size 2 modules		
F6	straight	6mm OD
C6	elbow	6mm OD
F8	straight	8mm OD
C8	elbow	8mm OD
F0	straight	10mm OD
C0	elbow	10mm OD

Head/Tail & Intermediate Module Ordering Guide (on order)

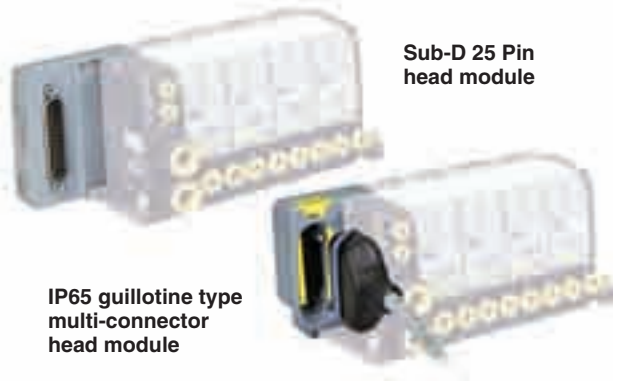
P	2	M	2	H	X	T	0	1	F	0	C	2

Island head or intermediate module function		
HXT01	Pneumatic head and tail set	
BXV0A	V series intermediate supply module with a set of 4 configuration plates	

Pressure port connector	
F6	straight 6mm OD
C6	elbow 6mm OD
F8	straight 8mm OD
C8	elbow 8mm OD
F0	straight 10mm OD
C0	elbow 10mm OD
F2	straight 12mm OD
C2	elbow 12mm OD
PP	plug
MM	muffler

Exhaust port connector	
F6	straight 6mm OD
C6	elbow 6mm OD
F8	straight 8mm OD
C8	elbow 8mm OD
F0	straight 10mm OD
C0	elbow 10mm OD
F2	straight 12mm OD
C2	elbow 12mm OD
PP	plug
MM	muffler

Electrical multi-connection head modules



Sub-D 25 Pin head module

IP65 guillotine type multi-connector head module

Sub D25 standard multi-connector head module		**P2M2HEV0D**
Sub D25 connector with flying leads - 3m cable		**P8LMH25M3A**
IP65 guillotine type multi-connector head module		**P2M2HEV0A**
Complementary connector with flying leads multi-cable	2 m. cable	**P8LMH20M2A**
	5 m. cable	**P8LMH20M5A**
	9 m. cable	**P8LMH20M9A**

Field bus connection head modules : to be chosen from next page.

AS-i protocol head modules

Standard AS-i protocol (up to 31 nodes) electrical head modules

Electrical module for **8 outputs** max.

- V series islands may have up to 8 solenoid pilots
- 2 nodes per module, 4 I / 4 O per node

Input connections	Order code
no input	**P2M2HBVA10800**
8 M8 inputs	**P2M2HBVA10808A**
4 inputs on 4 M12	**P2M2HBVA10808B**

Electrical module for **4 outputs** max.

- V series islands may have up to 8 solenoid pilots
- 1 node per module, 4 I / 4 O per node

No inputs	**P2M2HBVA10400**
4 inputs on 4 M12	**P2M2HBVA10404B**

AS-i version 2-1 protocol (up to 62 nodes) electrical head modules

Electrical module for **6 outputs** max.

- V series islands may have up to 6 solenoid pilots
- 2 nodes per module, 4 I / 3 O per node

none	**P2M2HBVA20600**
8 M8 Inputs	**P2M2HBVA20608A**
8 inputs on 4 M12	**P2M2HBVA20608B**

AS-i bus accessories

AS-i bus accessories	Length	Order code
M12 cable with jack for addressing	1 m	**P8LS12JACK**

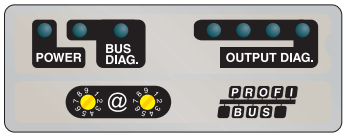
Indicates stocked product.

Home

Device bus electrical head modules

electrical module for 16 outputs max.
(V series islands may have up to 16 solenoid pilots)

PROFI BUS



Bus protocol	Order code
Profibus DP	**P2M2HBVP11600**

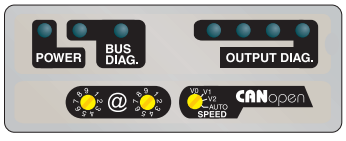
DeviceNet™

Bus protocol	Order code
DeviceNet	**P2M2HBVD11600**

INTERBUS-S

Bus protocol	Order code
Interbus S	**P2M2HBVS11600**

CANopen



Bus protocol	Order code
CANopen	**P2M2HBVC11600**

Indicates stocked product.

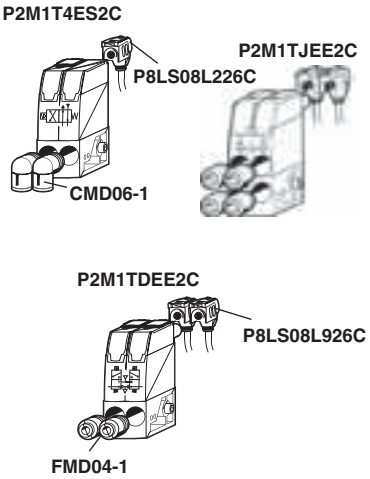
Valve island modules with individual connectors : T series

For simple systems, valve islands may be configured using individual valve wiring or air pilot connections.

Basic modules (without connectors) and corresponding clip-on electrical and pneumatic connectors

Size 1 Valve Modules

Description	Symbol	Weight (g)	Order code
4/2 Solenoid spring		68	P2M1T4ES2C
4/2 Double solenoid		77	P2M1T4EE2C
2 x 3/2 NC + NC with exhaust check valves		80	P2M1TDEE2C
2 x 3/2 NO + NO with exhaust check valves		80	P2M1TCEE2C
2 x 3/2 NC + NO with exhaust check valves		80	P2M1TEEE2C
2 x 4/2 Solenoid spring with exhaust check valves		88	P2M1TJEE2C
3/2 NC Solenoid spring with exhaust check valves		76	P2M1T3ES2C
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		80	P2M1TGEE2C



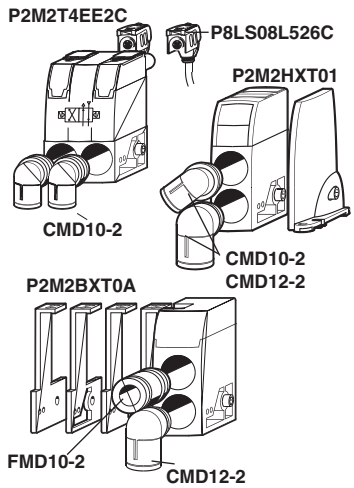
Size 1 connectors Tube OD *

Description		W. (g)	Order code
Straight	4mm	2	FMD04-1
	6mm	3	FMD06-1
Elbow	4mm	5	CMD04-1
	6mm	3	CMD06-1
Plug		3	PMDXX1
Muffler		5	MMDVA1
Clip-on double male union		3	HMDXX1

* Pack quantity : 10

Size 2 Valve Modules

Description	Symbol	Weight (g)	Order code
4/2 Solenoid spring		74	P2M2T4ES2C
4/2 Double solenoid		83	P2M2T4EE2C
2 x 3/2 NC + NC with exhaust check valves		94	P2M2TDEE2C
2 x 3/2 NO + NO with exhaust check valves		94	P2M2TCEE2C
2 x 3/2 NC + NO with exhaust check valves		94	P2M2TEEE2C
3/2 NC Solenoid spring with exhaust check valves		90	P2M2T3ES2C
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		94	P2M2TGEE2C



Size 2 connectors Tube OD *

Description		Order code
Straight	6mm	FMD06-2
	8mm	FMD08-2
	10mm	FMD10-2
	12mm	FMD12-2
Elbow	6mm	CMD06-2
	8mm	CMD08-2
	10mm	CMD10-2
	12mm	CMD12-2
Plug		PMDXX2
Muffler		MMDVA2
Clip-on double male union		HMDXX2

* Pack quantity : 10

Head & Tail sets and Intermediate supply exhaust modules for T series

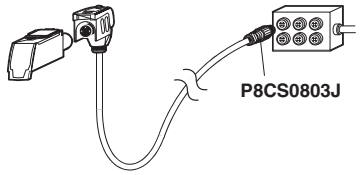
Valve Island Pneumatic head and tail module set	P2M2HXT01
Valve Island Intermediate supply module with a set of 4 configurations plates	P2M2BXT0A

Size 2 connectors should be specified with head and tail sets.

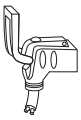
Indicates stocked product.

Electrical connectors

P8LS08L226C

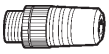


Clip-on individual electrical connector, for each solenoid pilot, with LED, voltage surge protection and flying lead cable IP67 protected



2 m. cable	**P8LS08L226C**
5 m. cable	**P8LS08L526C**
9 m. cable	**P8LS08L926C**

Straight cable or thread connector, IP67 protected.



M8 cable quick connect	**P8CS0803J**
M12 cable quick connect	**P8CS1204J**

Complete modules T Series - Ordering guide

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
P	2	M	1	T	4	E	E	2	C	V	2	0	F	6

Size option

1	Size 1
2	Size 2

Series

T	Individual connectors

Valve Function - Solenoid Versions

4 E S	4/2 - Single solenoid
4 E E	4/2 - Double solenoid
J E E	2 x 4/2 - 2 x 1 solenoid
D E E	2 x 3/2 - Normally closed
C E E	2 x 3/2 - Normally open (4/3 PC)
B E E	2 x 3/2 - Normally closed + PO check (4/3 APB)
E E E	2 x 3/2 - 1 x Open, 1 x Closed
G E E	4/3 CE - 2 x 3/2 - Normally closed
3 E S	3/2 Single solenoid
	Valve Function - Air Pilot Versions *
4 P S	4/2 Single air pilot
4 P P	4/2 Double air pilot
J P P	2 x 4/2 - 2 x 1 air pilot
D P P	2 x 3/2 - Normally closed
C P P	2 x 3/2 - Normally open (4/3 PC)
B P P	2 x 3/2 - Normally closed + PO check (4/3 APB)
E P P	2 x 3/2 - 1 x Open, 1 x Closed
G P P	4/3 CE - 2 x 3/2 - Normally closed
3 P S	3/2 Single solenoid

Electrical connector

0	No cable
2	2m cable
5	5m cable
9	9m cable

* For air pilot versions leave digits 9 - 15 blank. (Basic modules only)

Pneumatic connectors Ports 2 & 4

Size 1 modules	
F4	straight 4mm OD
C4	elbow 4mm OD
F6	straight 6mm OD
C6	elbow 6mm OD
Size 2 modules	
F6	straight 6mm OD
C6	elbow 6mm OD
F8	straight 8mm OD
C8	elbow 8mm OD
F0	straight 10mm OD
C0	elbow 10mm OD

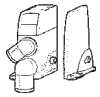
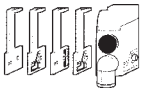
PC = Pressure Centre
APB = All Ports Blocked
CE = Centre Exhausted

For basic modules, leave digits 11 - 15, blank.

Head/Tail & Intermediate Module Ordering Guide

P	2	M	2	H	X	T	0	1	F	0	C	2

Island head or intermediate module function

HXT01	Pneumatic head and tail set	
BXT0A	T series intermediate supply module with a set of 4 configuration plates	

Pressure port connector

F6	straight 6mm OD
C6	elbow 6mm OD
F8	straight 8mm OD
C8	elbow 8mm OD
F0	straight 10mm OD
C0	elbow 10mm OD
F2	straight 12mm OD
C2	elbow 12mm OD
PP	plug
MM	muffler

Exhaust port connector

F6	straight 6mm OD
C6	elbow 6mm OD
F8	straight 8mm OD
C8	elbow 8mm OD
F0	straight 10mm OD
C0	elbow 10mm OD
F2	straight 12mm OD
C2	elbow 12mm OD
PP	plug
MM	muffler

Indicates stocked product.

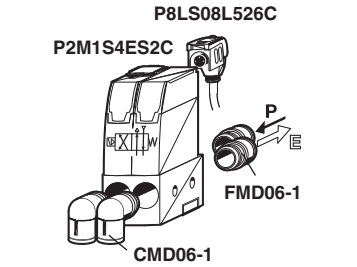
Stand-Alone Valve Modules : S series

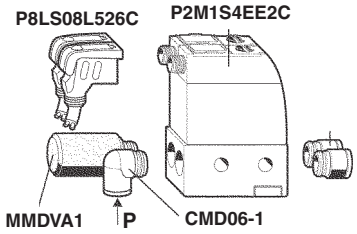
For control of isolated cylinders, a stand-alone valve module is ideal. Pull-out mounting feet are integrated into the base for simple installation.

Basic modules (without connectors) and corresponding clip-on electrical and pneumatic connectors

Size 1 Valve Modules

Description	Symbol	W (g)	Order code
4/2 Solenoid spring		72	P2M1S4ES2C
4/2 Double solenoid		87	P2M1S4EE2C
2 x 3/2 NC + NC with exhaust check valves		85	P2M1SDEE2C
2 x 3/2 NO + NO with exhaust check valves		85	P2M1SCEE2C
2 x 3/2 NC + NO with exhaust check valves		85	P2M1SEEE2C
3/2 NC Solenoid spring with exhaust check valves		85	P2M1S3ES2C
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		85	P2M1SGEE2C





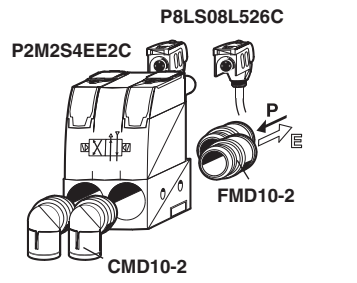
Size 1 connectors Tube OD *

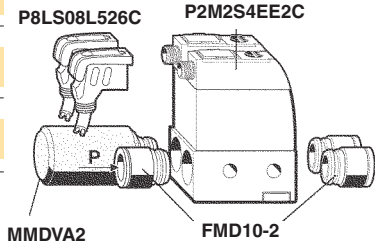
Description		W. (g)	Order code
Straight	4mm	2	FMD04-1
	6mm	3	FMD06-1
Elbow	4mm	5	CMD04-1
	6mm	3	CMD06-1
Plug		3	PMDXX1
Muffler		5	MMDVA1
Clip-on double male union		3	HMDXX1

* Pack quantity : 10

Size 2 valve Modules

Description	Symbol	W (g)	Order code
4/2 Solenoid spring		72	P2M2S4ES2C
4/2 Double solenoid		87	P2M2S4EE2C
2 x 3/2 NC + NC with exhaust check valves		85	P2M2SDEE2C
2 x 3/2 NO + NO with exhaust check valves		85	P2M2SCEE2C
2 x 3/2 NC + NO with exhaust check valves		85	P2M2SEEE2C
3/2 NC Solenoid spring with exhaust check valves		85	P2M2S3ES2C
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		85	P2M2SGEE2C





Size 2 connectors Tube OD *

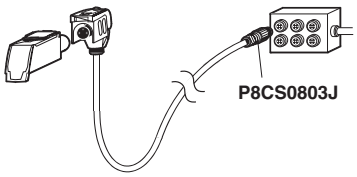
Description		W. (g)	Order code
Straight	6mm	3	FMD06-2
	8mm	4	FMD08-2
	10mm	5	FMD10-2
	12mm	6	FMD12-2
Elbow	6mm	5	CMD06-2
	8mm	6	CMD08-2
	10mm	7	CMD10-2
	12mm	8	CMD12-2
Plug		5	PMDXX2
Muffler		3	MMDVA2
Clip-on double male union		8	HMDXX2

* Pack quantity : 10

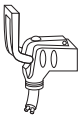
Indicates stocked product.

Electrical connectors

P8LS08L226C

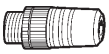


Clip-on individual electrical connector, for each solenoid pilot, with LED, voltage surge protection and flying lead cable IP67 protected



2 m. cable	**P8LS08L226C**
5 m. cable	**P8LS08L526C**
9 m. cable	**P8LS08L926C**

Straight cable or thread connector, IP67 protected.



M8 cable quick connect	**P8CS0803J**
M12 cable quick connect	**P8CS1204J**

Order codes S Series - Complete modules (on order)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
P	2	M	1	S	4	E	E	2	C	V	5	A	F	6

Size option

1	Size 1
2	Size 2

Series

S	Stand alone modules

Electrical connector

0	No cable
2	2m cable
5	5m cable
9	9m cable

Valve Function - Solenoid Versions	
4 E S	4/2 - Single solenoid
4 E E	4/2 - Double solenoid
D E E	2 x 3/2 - Normally closed
C E E	2 x 3/2 - Normally open (4/3 PC)
B E E	2 x 3/2 - Normally closed + PO check (4/3 APB)
E E E	2 x 3/2 - 1 x Open, 1 x Closed
G E E	4/3 CE - 2 x 3/2 - Normally closed
3 E S	3/2 Single solenoid
Valve Function - Air Pilot Versions *	
4 P S	4/2 Single air pilot
4 P P	4/2 Double air pilot
D P P	2 x 3/2 - Normally closed
C P P	2 x 3/2 - Normally open (4/3 PC)
B P P	2 x 3/2 - Normally closed + PO check (4/3 APB)
E P P	2 x 3/2 - 1 x Open, 1 x Closed
G P P	4/3 CE - 2 x 3/2 - Normally closed
3 P S	3/2 Single solenoid

Pneumatic connectors

Ports 1 & 3		Ports 2 & 4		Tube OD	
A	Straight & straight	**F**	Straight & straight	Size 1 modules	
B	Elbow & elbow	**C**	Elbow & elbow	**4**	4mm OD
C	Straight & muffler	**0**	No connector for plug-in P module	**6**	6mm OD
D	Elbow & muffler			Size 2 modules	
				6	6mm OD
				8	8mm OD
				0	10mm OD

* For air pilot versions leave digits 9 - 15 blank. (Basic modules only)

For basic modules, leave digits 11 - 15, blank.

PC = Pressure Centre
APB = All Ports Blocked
CE = Centre Exhausted

Indicates stocked product.

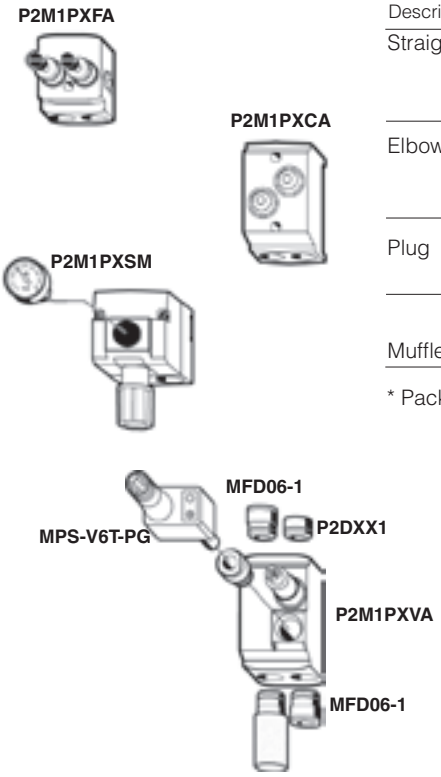
Basic peripheral modules (without connectors) and corresponding clip-on pneumatic connectors

Size 1 Peripheral Modules

Description		W. (g)	Order code
Dual flow control		50	P2M1PXFA
Dual P.O. check valve		50	P2M1PXCA
Pressure regulator	0-2 bar	135	P2M1PXSR
	0-4 bar	135	P2M1PXSM
	0-8 bar	135	P2M1PXSG
	With pressure gauge		
Vacuum generator	90% Vac	30	P2M1PXVA

Vacuum accessories

Sensor		10	MPS-V6T-PC
		70	MPS-V6T-PG
Silencer		5	P6M-PAB1



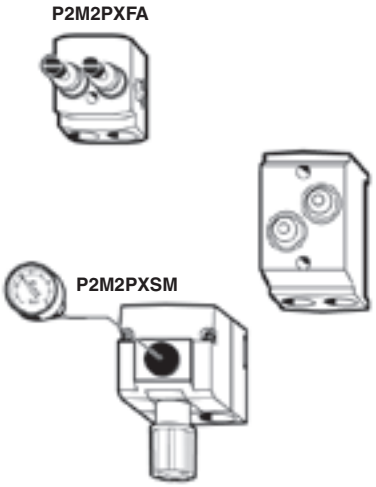
Size 1 connectors Tube OD *

Description		W. (g)	Order code
Straight	4mm	2	FMD04-1
	6mm	3	FMD06-1
Elbow	4mm	5	CMD04-1
	6mm	3	CMD06-1
Plug		3	PMDXX1
Muffler		5	MMDVA1

* Pack quantity : 10

Size 2 Peripheral Modules

Description		W. (g)	Order code
Dual flow control		75	P2M2PXFA
Dual P.O. check valve		70	P2M2PXCA
Pressure regulator	0-2 bar	165	P2M2PXSR
	0-4 bar	165	P2M2PXSM
	0-8 bar	165	P2M2PXSG
	With pressure gauge		



Size 2 connectors Tube OD *

Description		W. (g)	Order code
Straight	6mm	3	FMD06-2
	8mm	4	FMD08-2
	10mm	5	FMD10-2
	12mm	6	FMD12-2
Elbow	6mm	5	CMD06-2
	8mm	6	CMD08-2
	10mm	7	CMD10-2
	12mm	8	CMD12-2
Plug		5	PMDXX2

* Pack quantity : 10

Clip-on pressure gauges

Clip-on pressure gauge for pressure regulator modules, size 1 or size 2.
Pressure gauge is equipped with a damper to protect it from pressure oscillations.

	W. (g)	Order code
0 to 2 bar	30	P2M1K0GT
0 to 4 bar	30	P2M1K0GL
0 to 8 bar	30	P2M1K0GN

Indicates stocked product.

1 - Multi-connector or sub-D 25 valve island

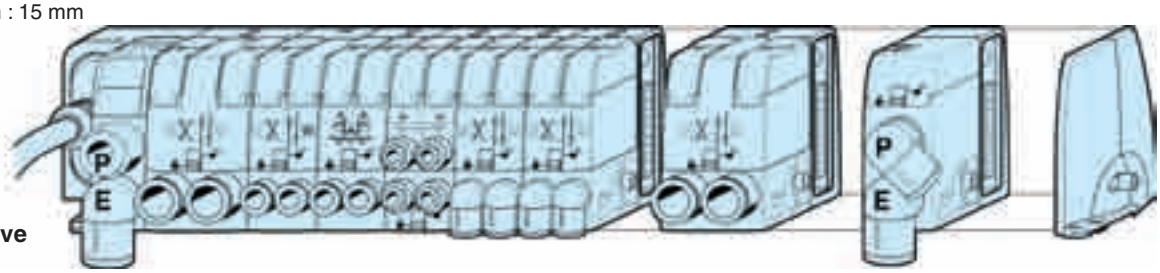
Multi-connector or sub-D 25 electrical head module width : 15 mm

Head and tail pneumatic module set width : 48 mm

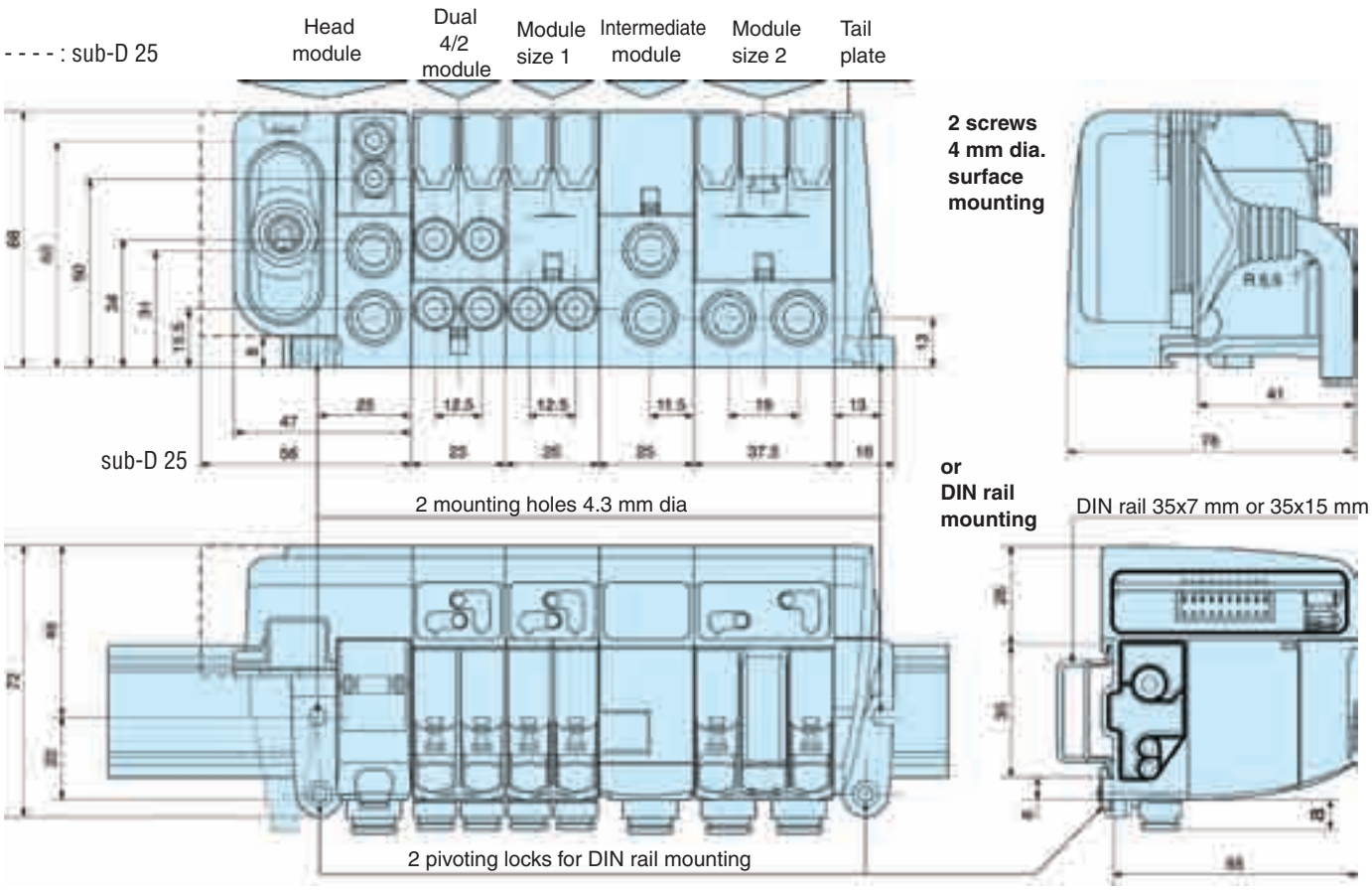
Modules size 1 width : 25 mm

Modules size 2 width : 37.5 mm

Intermediate module width : 25 mm



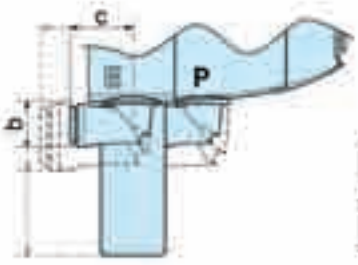
Island total width depending on valve composition



Special case : 4/3 closed centre function within island version : Add the dimensions of the dual P.O. check valve module plugged into the island.

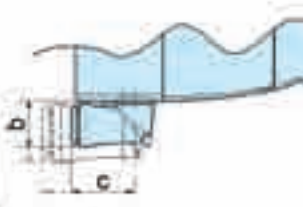
Island head and intermediate modules

	a	b	c
6 mm tube OD	8	13	16
8 mm tube OD	9	16	19
10 mm tube OD	13	18	22
12 mm tube OD	13	19	25
muffler		40	



Island valves modules

	OD tube	a	b	c
Size 1 modules	4 mm	8	10	12
	6 mm	8	13	16
Size 2 modules	8 mm	9	16	19
	10 mm	13	18	22



Home

2 - Field bus connected islands

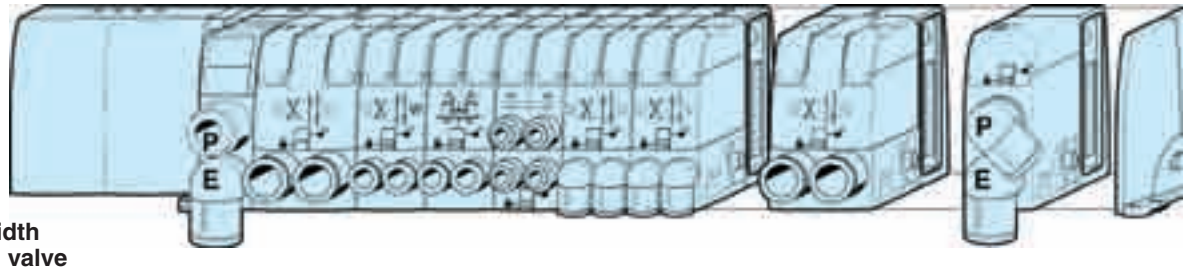
Electrical field bus head module width : 62 mm

Head and tail pneumatic module set width : 48 mm

Modules size 1 width : 25 mm

Modules size 2 width : 37.5 mm

Intermediate module width :25 mm



Island total width depending on valve composition

Electrical field bus head module

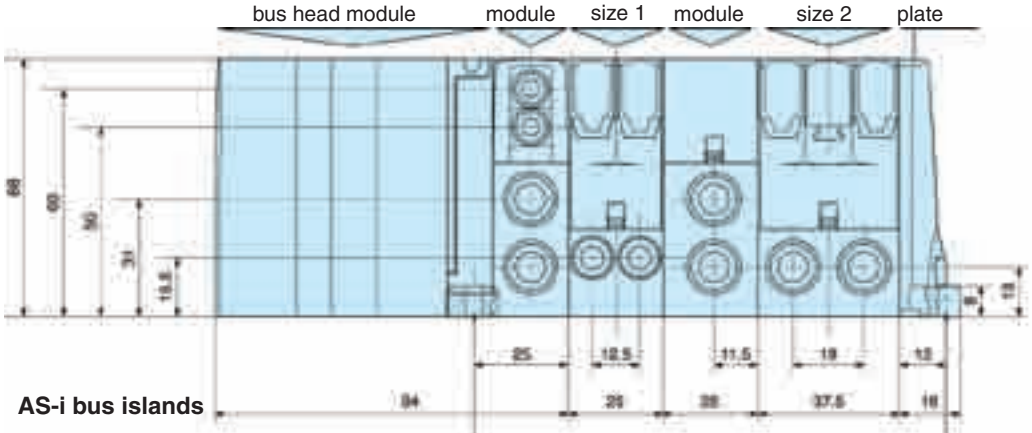
Pneumatic head module

Module size 1

Intermediate module

Module size 2

Tail plate



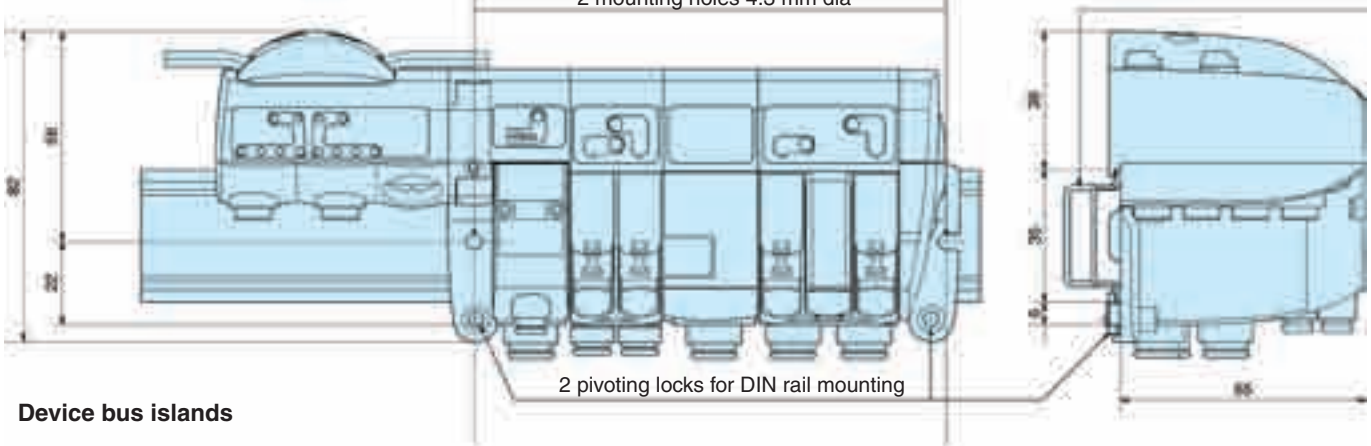
2 screws 4 mm dia. surface mounting

or DIN rail mounting

DIN rail 35x7 mm or 35x15 mm

AS-i bus islands

2 mounting holes 4.3 mm dia

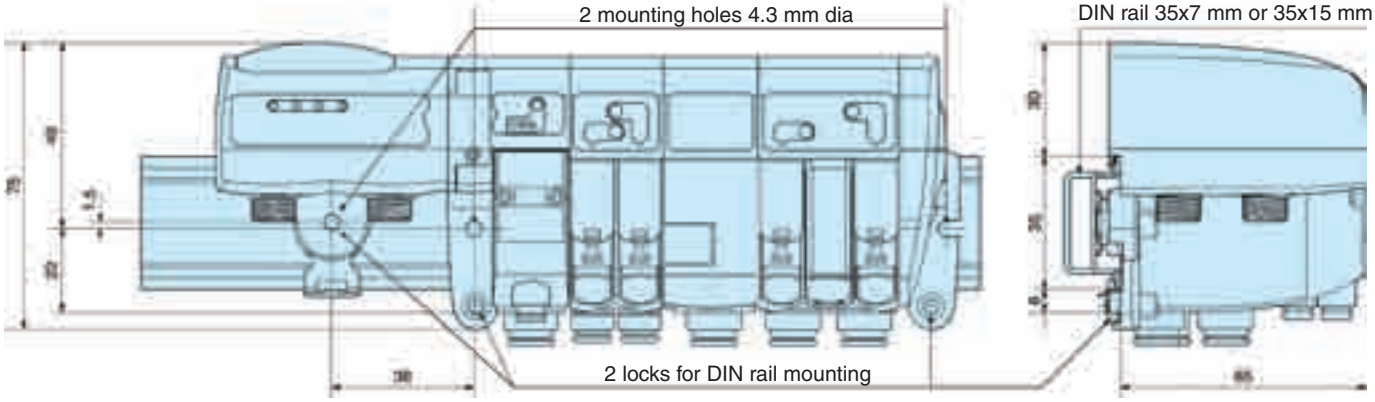


2 pivoting locks for DIN rail mounting

Device bus islands

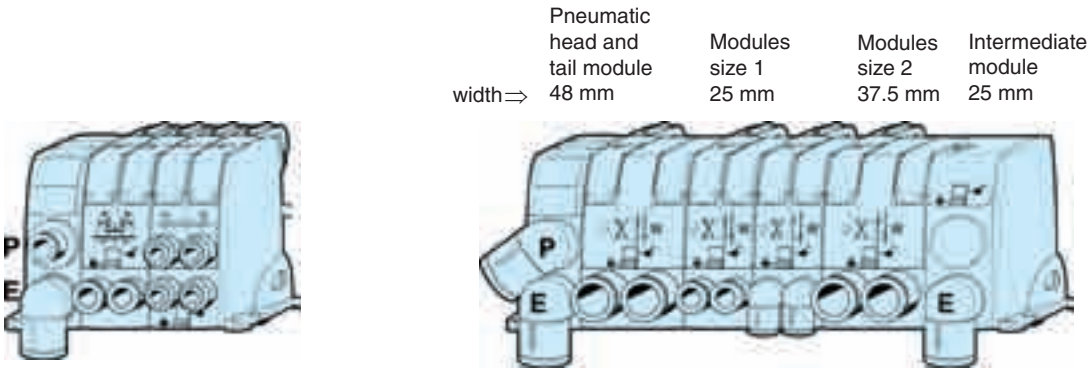
2 mounting holes 4.3 mm dia

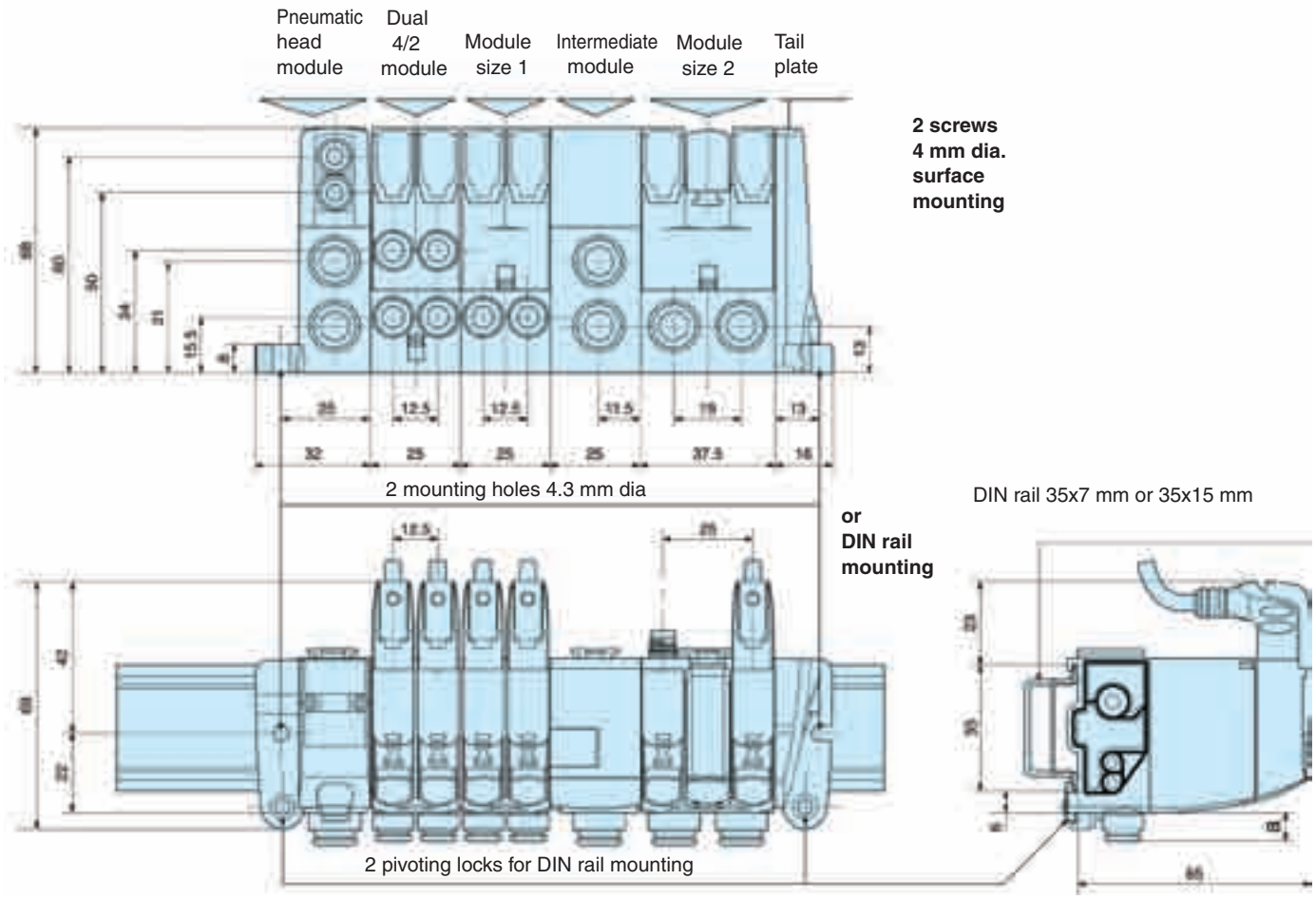
DIN rail 35x7 mm or 35x15 mm



2 locks for DIN rail mounting

Island total width depending on valve composition

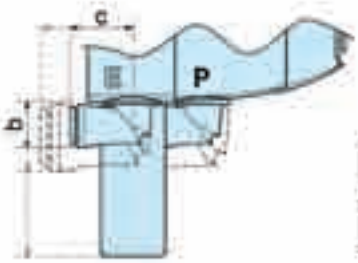




Special case : 4/3 closed centre function within island version :
Add the dimensions of the dual P.O. check valve module plugged into the island.

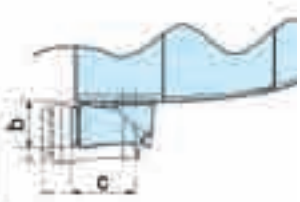
Island head and intermediate modules

	a	b	c
6 mm tube OD	8	13	16
8 mm tube OD	9	16	19
10 mm tube OD	13	18	22
12 mm tube OD	13	19	25
muffler		40	



Island valves modules

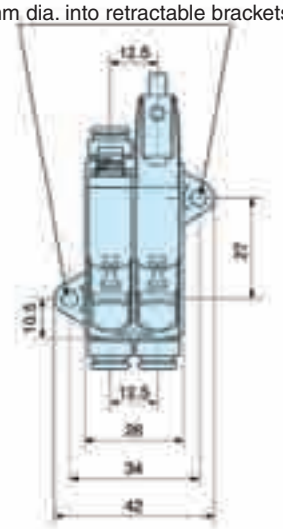
	OD tube	a	b	c
Size 1 modules	4 mm	8	10	12
	6 mm	8	13	16
Size 2 modules	8 mm	9	16	19
	10 mm	13	18	22



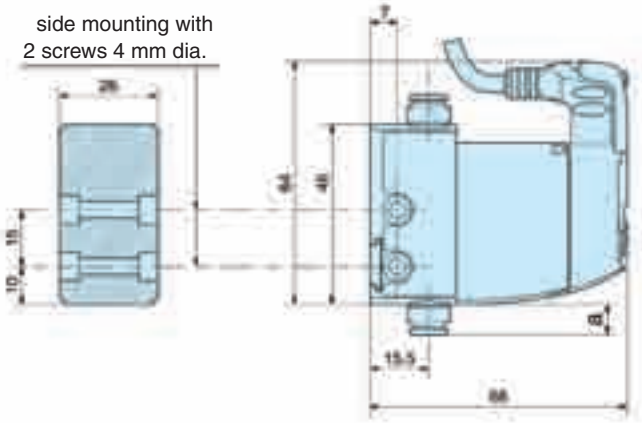
Home

Stand-alone valve size 1

surface mounting with screws
4 mm dia. into retractable brackets 3 mm thick

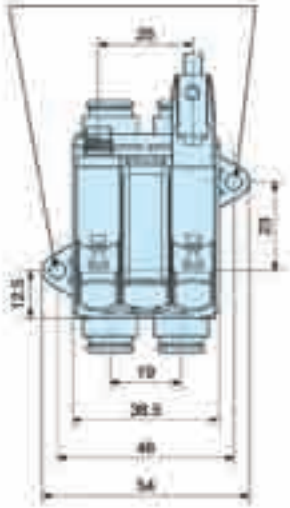


or side mounting with
2 screws 4 mm dia.

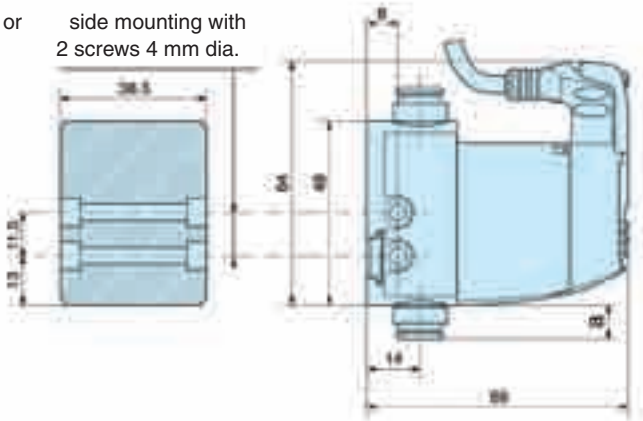


Stand-alone valve size 2

surface mounting with screws
4 mm dia. into retractable brackets 3 mm thick

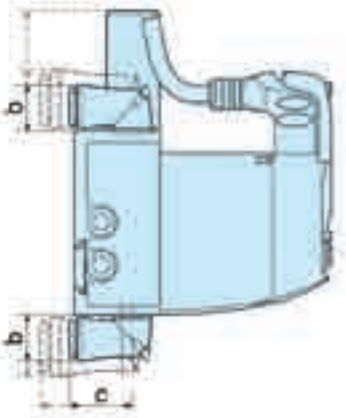


or side mounting with
2 screws 4 mm dia.



Dimensions and mountings of the stand-alone valves 4/2, double and single 3/2, 4/3 vented centre and 4/3 pressure centre.

Special case : 4/3 closed centre. Add the dual P.O. check valve module that has been plugged in the basic valve.



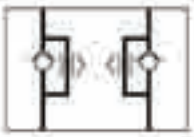
		a	b	c
Size 1 modules	4 mm tube OD	8	10	12
	6 mm tube OD	8	13	16
	muffler		31	
Size 2 modules	8 mm tube OD	9	16	19
	10 mm tube OD	13	18	22
	muffler		40	

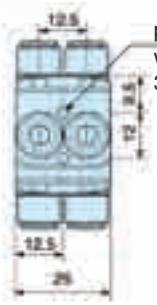
Reminder : peripheral modules may either be plugged in the valve output ports or mounted in line separate from the valve

peripheral module
plugged in a valve
or an island

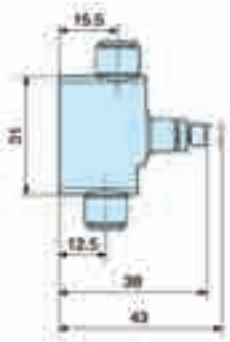
in-line peripheral modules :
mounting is required

Dual flow control module size 1





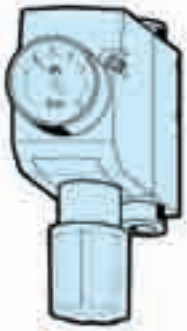
possible mounting
with 2 screws
3 mm dia.

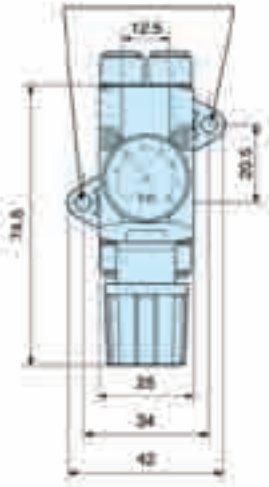


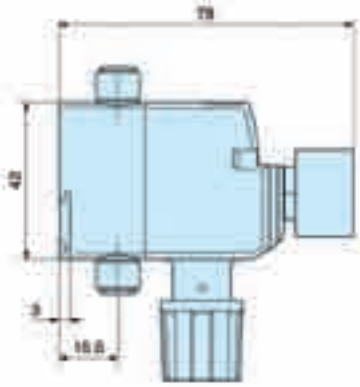
Pressure regulation module size 1

mounting with 2 screws 4 mm dia.
on retractable brackets

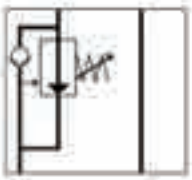
- with gauge

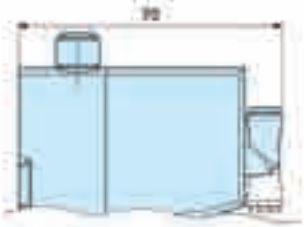






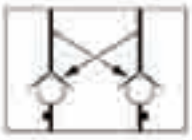
- without gauge

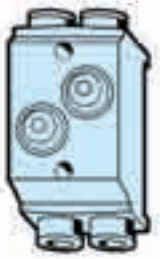




swivel elbow push-in
connector 4 mm OD tube

Dual P.O. check valve module size 1

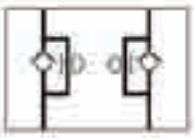


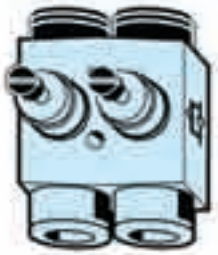


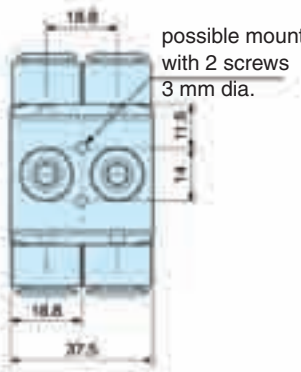
possible mounting
with 2 screws
3 mm dia.

Home

Dual flow control module size 2

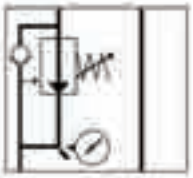


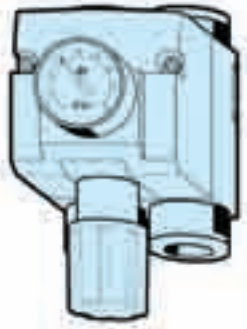




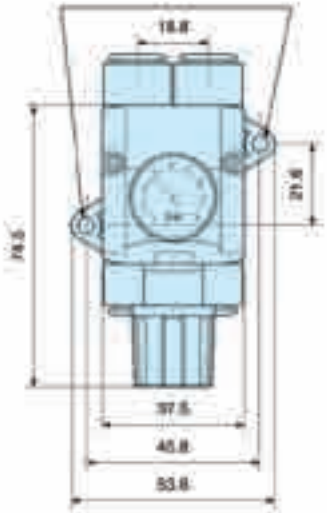
Pressure regulation module size 2

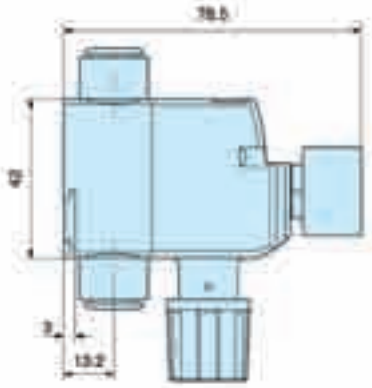
- with gauge



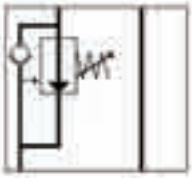


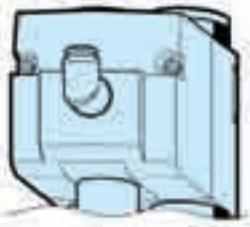
mounting with 2 screws 4 mm dia.
on retractable brackets

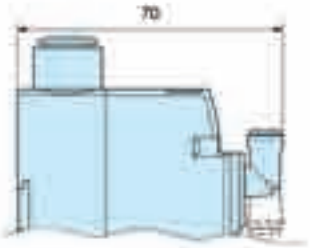




- without gauge

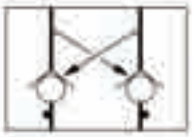


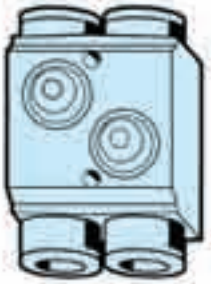


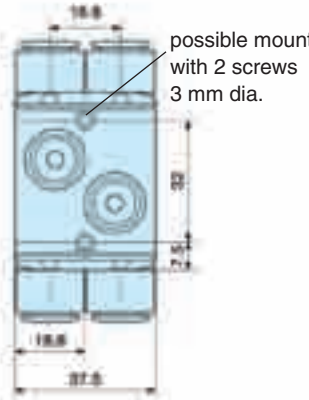


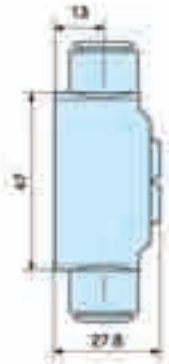
swivel elbow push-in
connector 4 mm OD tube

Dual P.O. check valve module size 2





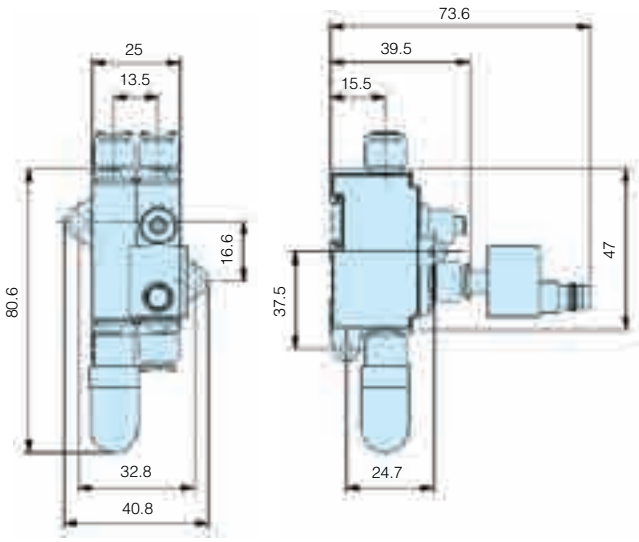




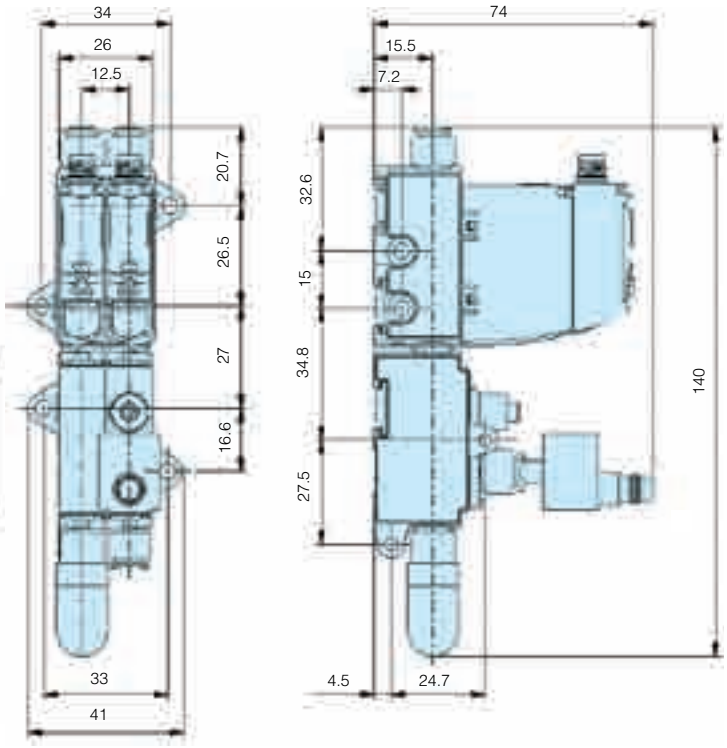
Home

Vacuum generator module

In-line



With Moduflex valve



High speed poppet type solenoid valves with individual electrical connections. Light weight plastic bodies with DIN rail manifold. Ideal for cabinet installations.

- High speed poppet valve
- Push-in connection
- Built-in terminal block
- Pneumatic output indicator
- DIN rail mounting

Poppet valve, not suitable for use with Soft or Slow start Valves. When pressure is applied, the double solenoid interface takes a pre-determined position (non activated). In the absence of electrical signal, output 2 (yellow indicator) is activated, output 4 (red indicator) is non activated. Double solenoid version is delivered as standard with Non locking flush override.

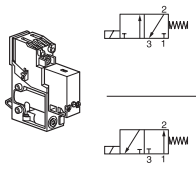
Operating information

Working pressure;	
3/2 and 4/2:	3-8 bar
Low pressure interface 3/2:	1-8 bar
Flow (Qmax):	200 l/min
Working temperature	-15 °C to +60 °C

For technical information see CD

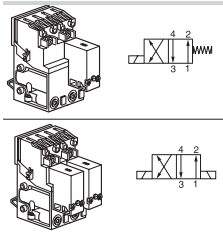
Electro-Pneumatic modules 3/2

With solenoid valve, output with Ø4 mm Push-in connection
Visual indication of pneumatic output (NC) red : (NO) yellow
Spring return manual override. 24V DC

Symbol	Order code
	**PS1-E21102B**
	PS1-E22102B

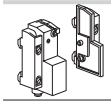
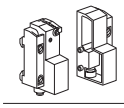
Electro-Pneumatic modules 4/2

With solenoid valve, two outputs with Ø 4 mm Push-in connections
Visual indication of pneumatic output (NC) red and (NO) yellow
Spring return manual override. 24V DC

Symbol	Order code
	**PS1-E28102B**
	PS1-E29102B

Head and tail sets - intermediate supply modules

For 3/2 and 4/2 interface modules

	Description	Pneumatic connection	Characteristics	Order code
	Set for single air supply connection	Push-in Ø 6 mm	1 electrical common terminal 1 main air supply port 1 exhaust port	**PS1-E101**
		G1/8		**PS1-E1018**
	Set for double air supply connection	Push-in Ø 6 mm	1 electrical common terminal 2 main air supply ports 2 exhaust ports	**PS1-E102**
		G1/8		**PS1-E1028**
	Intermediate air supply module	Threaded G1/8 *(see description below)* *	1 air supply port 1 exhaust port	**PS1-E1038**

Incorporating an intermediate supply module into a group of electro-pneumatic modules gives the following options:

Air supply connection

- Additional G1/8 port to supplement the air supply to the manifold
- Blank the common air supply, enabling different pressures to be supplied to groups of modules within the manifold

Exhaust connection

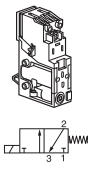
- Additional exhaust flow through the G1/8 port
- Blank the common exhaust, enabling seperation of exhaust from module groups

* The intermediate supply module is supplied with 4 interchangeable connectors to enable the above supply options to be achieved

Indicates stocked product.

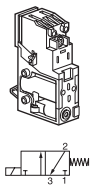
Electro-Pneumatic modules 3/2

Modules without solenoid valve*
3 to 8 bar version

Symbol	Connection	Actuator	Return	Order code
	Push-in Ø4 mm Visual indication of pneumatic output (NC) red	Solenoid	Spring	**PS1-E111**
	Push-in Ø6 mm Visual indication of pneumatic output (NC) red	Solenoid	Spring	**PS1-E116**
	Push-in Ø4 mm Visual indication of pneumatic output (NO) yellow	Solenoid	Spring	**PS1-E121**
	Push-in Ø6 mm Visual indication of pneumatic output (NO) yellow	Solenoid	Spring	**PS1-E126**

Electro-Pneumatic modules 3/2

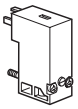
Modules without solenoid valve* - 1 to 8 bar version

Symbol	Connection	Actuator	Return	Order code
	Push-in Ø4 mm Visual indication of pneumatic output (NC) red	Solenoid	Spring	**PS1-E311**
	Push-in Ø6 mm Visual indication of pneumatic output (NC) red	Solenoid	Spring	**PS1-E316**

* To obtain a complete Electro-Pneumatic interface module, order: 1 module without solenoid valve (e.g.: PS1-E121) + 1 solenoid valve (e.g.: PS1-E2302B)

Solenoids 15 mm 1,2 W / 1,6 VA

(8mm pin spacing)



Spring return manual override

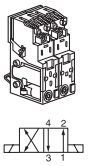
Voltage	Order code
24 VDC	**P2E-KS32C1**
48 VDC	**P2E-KS32D1**
24 V 50/60Hz	**P2E-KS31C1**
48 V 50/60Hz	**P2E-KS34D1**
115 V 50Hz, 120 V 60Hz	**P2E-KS31F1**
230 V 50Hz, 240 V 60Hz	**P2E-KS31J1**

Indexing manual override

Voltage	Order code
24 VDC	**P2E-KS32C2**
48 VDC	**P2E-KS32D2**
24 V 50/60Hz	**P2E-KS31C2**
48 V 50/60Hz	**P2E-KS34D2**
115 V 50Hz, 120 V 60Hz	**P2E-KS31F2**
230 V 50Hz, 240 V 60Hz	**P2E-KS31J2**

Electro-Pneumatic modules 4/2

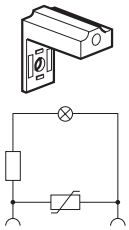
Modules without solenoid valve*
Visual indication of pneumatic output (NC) red and (NO) yellow

Symbol	Connection	Actuator	Return	Order code
	Push-in Ø4 mm	Solenoid	Solenoid	**PS1-E191**
	Push-in Ø6 mm	Solenoid	Solenoid	**PS1-E196**
	Push-in Ø4 mm	Solenoid	Spring	**PS1-E181**
	Push-in Ø6 mm	Solenoid	Spring	**PS1-E186**

* To obtain a complete Electro-Pneumatic interface module, order: 1 module without solenoid valve (e.g.: **PS1-E191**) + 2 solenoids valves (e.g.: **PS1-E2302B**)

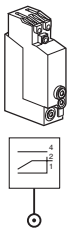
Suppressor and LED indicators

For mounting between the solenoid valve and the cable plug.

Symbol	Description	Voltage	Order code
	LED Indicator	24 V AC/DC	**P8V-CR26C**
		48 V AC/DC	**P8V-CR26D**
		115 V 50 Hz 120 V 60 Hz	**P8V-CR24F**
		230 V~50 Hz 240 V~60 Hz	**P8V-CR24J**

Note: The Interface modules have been re-designed to accept the 9,4mm spacing and the 8mm spacing versions of the suppressor and LED indicators listed above. If you are purchasing a suppressor for maintenance on an Interface module purchased before June 2004, then refer to Interface Technical leaflet supplied with this catalogue.

Pressure switches

			Order code
	1 changeover contact 5 A/250 V Pneu. Ø 4 mm	Fixed operating threshold < 1,3 bar	**PS1-P1081**
	1 changeover contact 5 A/250 V Pneu. Ø 4 mm	Adjustable operating threshold 2 to 5 bar	**PS1-P1091**

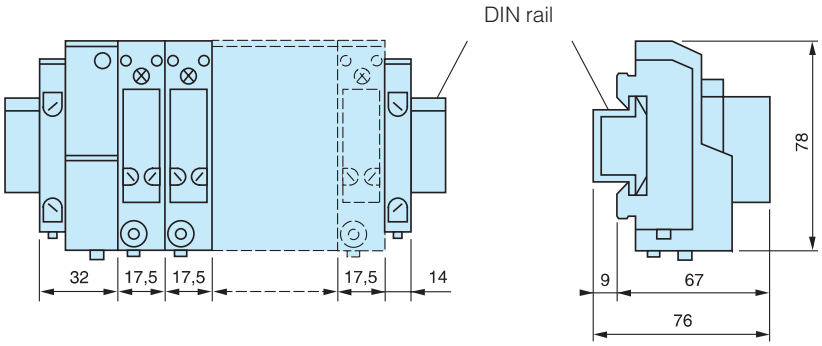
Note: The Interface modules have been re-designed to accept the previous 9,4mm spacing solenoids and the new 8mm spacing solenoids listed above. If you are purchasing a solenoid for maintenance on an Interface module purchased before June 2004, then refer to Interface Technical leaflet supplied with this catalogue.

Indicates stocked product.

Dimensions, PS1 valve Series

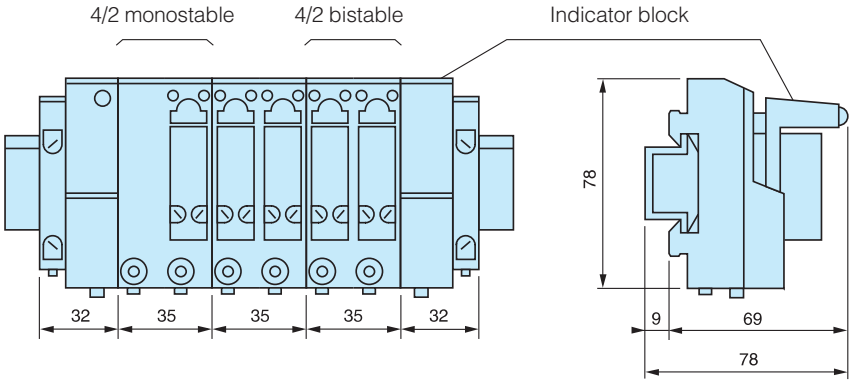
Electropneumatic interface modules 3/2

P1S-E21102• with P1S-E101 head and tail units



Electropneumatic interface modules 4/2

P1S-E28• and P1S-E29 with PS1-E102 head and tail units



Stacking high flow valves with air pilot or solenoid actuation. Lightweight plastic bodies feature push-in or threaded connections. Stacking valves feature modular inlet and exhaust facility.

- High flow, compact size
- Push-in or threaded connection
- DIN rail or block mounting
- Light weight construction

Operating information

Working pressure;			
Pneumatically operated:	2-10 bar		
Electrically operated, bistable:	2-10 bar		
Electrically operated, monostable:	3-10 bar		
Working temperature	-15 °C to +60 °C		
	PVL-A	**PVL-B**	**PVL-C**
Flow (Qmax):	270l/min	900 l/min	1800 l/min
Flow Qn:	170 l/min	540 l/min	1100 l/min
Flow measured with valve stacked in island.			

Pneumatically actuated 5/2 valves - Size M5

Symbol	Connect	Order code
	Ø4 mm	**PVL-A122104**
	M5	**PVL-A122115**
	Ø4 mm	**PVL-A121104**
	M5	**PVL-A121115**

Electrically/Pneumatically actuated 5/2 valves size G1/8*

Symbol	Connect	Order code
	Ø6 mm	**PVL-B122606**
	G1/8	**PVL-B122618**
	Ø6 mm	**PVL-B121606**
	G1/8	**PVL-B121618**

Electrically/Pneumatically actuated 5/2 valves size G1/4*

Symbol	Connect	Order code
	Ø8 mm	**PVL-C122608**
	G1/4	**PVL-C122619**
	Ø8 mm	**PVL-C121608**
	G1/4	**PVL-C121619**

* For solenoids and pilot connectors, see opposite page

Electrically/Pneumatically actuated 2 x 3/2 valves

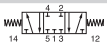
Symbol	Connect	Order code
	Ø6 mm	**PVL-B125606**

Electrically actuated 5/2 valves - Size M5

Complete with 24V DC miniature solenoid and connector with 2m cable.

Symbol	Connect	Order code
	Ø4 mm	**PVL-A122304B40**
	M5	**PVL-A122315B40**
	Ø4 mm	**PVL-A121304B50**
	M5	**PVL-A121315B50**

Electrically/Pneumatically actuated 5/3 valves size G1/8*

Symbol	Connect	Order code
	Ø6 mm	**PVL-B127606**
	G1/8	**PVL-B127618**
	Ø6 mm	**PVL-B128606**
	G1/8	**PVL-B128618**

Electrically/Pneumatically actuated 5/3 valves size G1/4*

Symbol	Connect	Order code
	Ø8 mm	**PVL-C127608**
	G1/4	**PVL-C127619**
	Ø8 mm	**PVL-C128608**
	G1/4	**PVL-C128619**

* For solenoids and pilot connectors, see opposite page

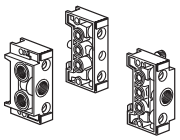
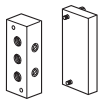
Wiring and connecting accessories for PVL-A

	Order code
Connector only (sold in pack of 10 pcs)	**PES-D10**
Connector with 5 m cable	**PES-D101**

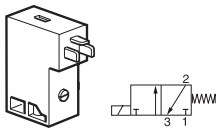
Indicates stocked product.

Head and tail sets

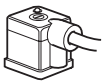
For stacking power valves 5/2, sizes M5, G1/8 and G1/4

	Type of mounting	Description	Valve size	Port size	Order code
	DIN rail mounting	Single air supply head and tail set	M5 1/8" 1/4"	G1/8 G1/4 G3/8	**PVL-A1718** **PVL-B1719** **PVL-C1713**
		Dual air supply head and tail set	M5 1/8" 1/4"	G1/4 G1/4 G3/8	**PVL-A1728** **PVL-B1729** **PVL-C1723**
	Surface mounting	Single air supply head and tail set	1/8" 1/4"	G1/8 G1/4	**PVL-B1818** **PVL-C1819**
		Double air supply head and tail set	1/8" 1/4"	G1/8 G1/4	**PVL-B1828** **PVL-C1829**

Solenoids 15mm NC Standard flow DIN 1.2W/1.6VA

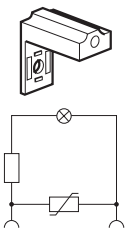
	Voltage	Order code Override flush non locking	Order code Override flush locking
	24 VDC	**P2E-KV32C1**	**P2E-KV32C2**
	48 VDC	**P2E-KV32D1**	
	24 VAC 50Hz	**P2E-KV31C1**	**P2E-KV31C2**
	48 VAC 50/60Hz	**P2E-KV34D1**	**P2E-KV34D2**
	115 VAC 50Hz/ 120 VAC 60Hz	**P2E-KV31F1**	**P2E-KV31F2**
	230 VAC 50Hz/ 240 VAC 60Hz	**P2E-KV31J1**	**P2E-KV31J2**

Cable plugs 15 mm (8 mm pin spacing) IP 65

	Description	Order code
	Large headed screw for inaccessible or recess position	
	Standard to be wired universal	**P8C-C**
	To be wired LED+protection 24 VDC	**P8C-C26C**
	With standard screw	
	Standard to be wired universal	**P8C-D**
	To be wired LED+protection 24 VDC	**P8C-D26C**
	With cable and standard screw	
	Standard with 2 m cable	**P8L-C2**
	Standard with 5 m cable	**P8L-C5**
	LED+protection 24 VAC/DC, 2 m	**P8L-C226C**
	LED+protection 24 VAC/DC, 5 m	**P8L-C526C**

Suppressor and LED indicators

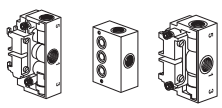
For mounting between the solenoid valve and the cable plug.

Symbol	Description	Voltage	Order code
	LED Indicator	24 V AC/DC	**P8V-CR26C**
		48 V AC/DC	**P8V-CR26D**
		115 V 50 Hz 120 V 60 Hz	**P8V-CR24F**
		230 V~50 Hz 240 V~60 Hz	**P8V-CR24J**

Air Pilot Connectors for PVL - B and C

	Mounting	Type of connection	Order code
	Mounts on the same interface as the 1 W / 1,2 VA solenoid actuator	Push-in Ø4 mm	**PVA-P111**
		Threaded M5	**PVA-P115**

Components for stacking two sizes of valve

	Type of mounting	Description	Valve size	Order code
Components for stacking 2 sizes: "transfer/take-off" module and corresponding head and tail set 	DIN rail	Kit for stacking power valves : - one "transfer/take-off" module - Head and tail set with one in each size.	1/8" and 1/4"	**PVU-LCB119**
Components for inlet/exhaust common gallery sealing		Kit for sealing the commons: - 3 common blanking plugs - 2 drilled and threaded rods - 2 screws for extended tie rods	M5 1/8" 1/4"	**PVL-A1901** **PVL-B1901** **PVL-C1901**

Indicates stocked product.

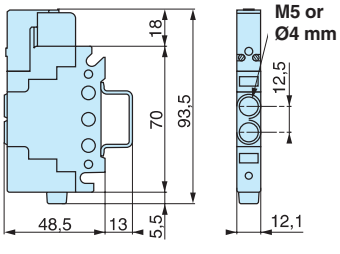
Home

Dimensions, PVL valve Series

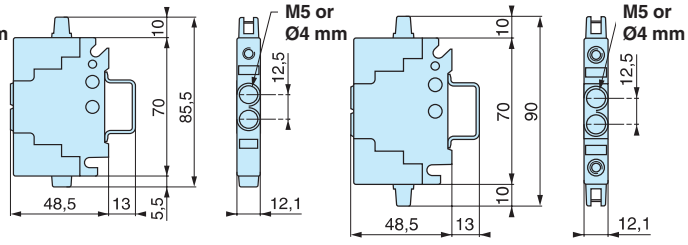
All dimensions in mm unless otherwise stated

M5 stacking power valves with pneumatic or electrical piloting

Electrical piloting with 0,9 W solenoid actuator
Monostable PVL-A1213•• Bistable PVL-A1223•

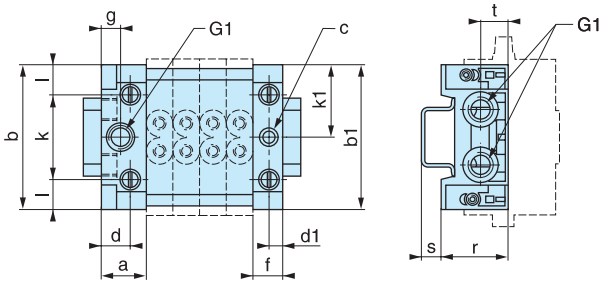


Pneumatic piloting
Monostable PVL-A1211•• Bistable PVL-A1221••

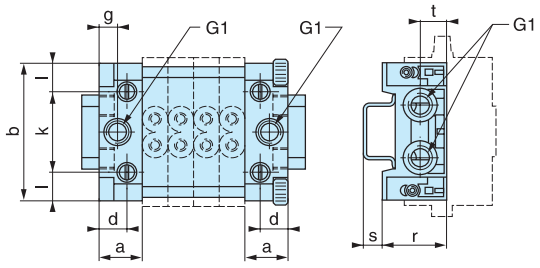


Head and tail sets

- Mounting on DIN rail
Single air supply PVL-A1718



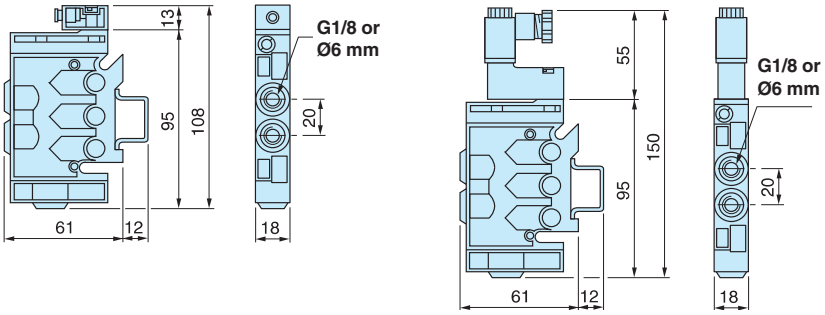
Dual air supply PVL-A1728



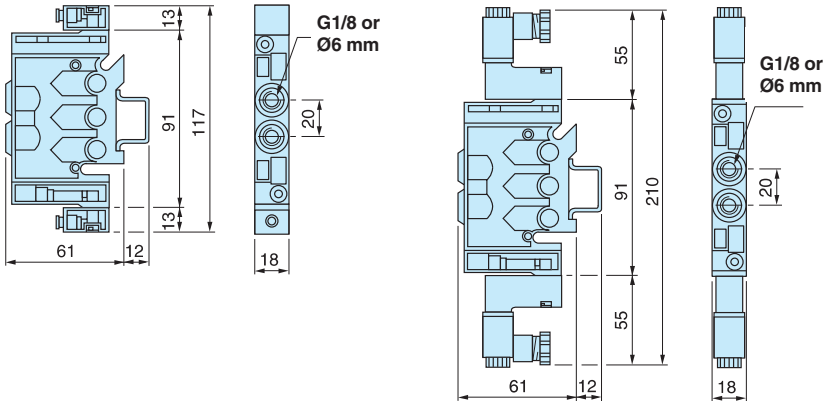
Thread size	a	b	b1	c	d	d1	f	g	G1	k	k1	l	r	s	t
M5	20	65	65	4,2	12,9	5,9	13	8,5	1/8"	38	38	13,5	30	8,8	12,5

Stacking power valves 1/8" with pneumatic or electrical piloting

Monostable PVL-B1216••, PVL-B1236••

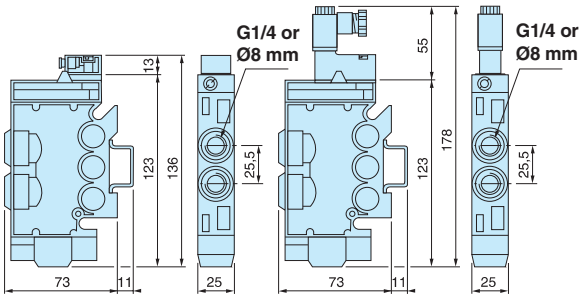


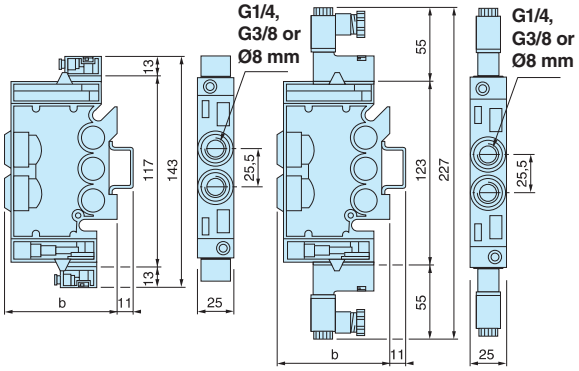
Bistable PVL-B1226••



Stacking power valves 1/4" with pneumatic or electrical control

With 1 W solenoid actuator and suitable pneumatic connector
Monostable PVL-C1216••, PVL-C1236••

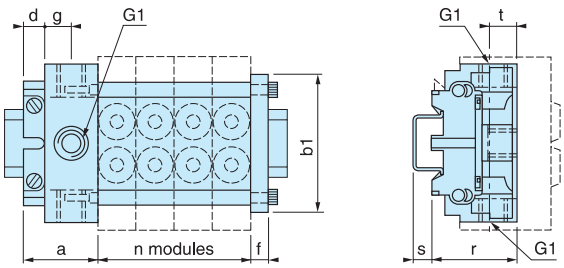




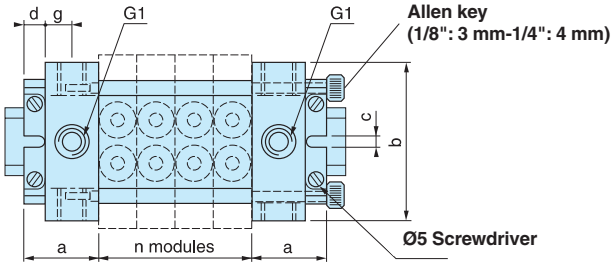
	G1/4	G3/8
b	73	77

Head and tail sets

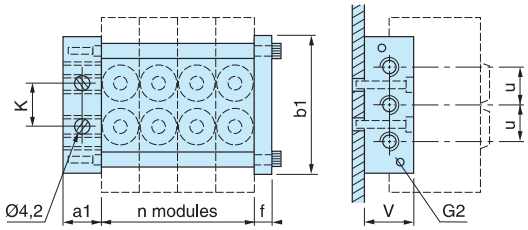
Single air supply
PVL-B1719, PVL-C1713, mounting on DIN rail



Dual air supply
PVL-B1729, PVL-C1723, mounting on DIN rail



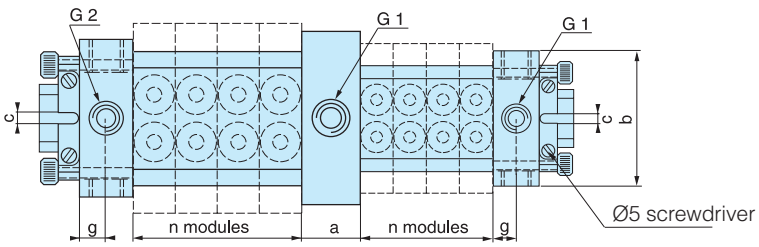
Single air supply
PVL-B1818, PVL-C1819, "stack mounting"



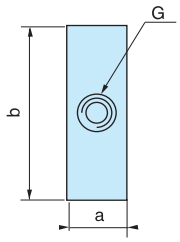
	a	a1	b	b1	c	d	f	g	G1	G2	k	r	s	t	u	v
1/8"	38	16	83	70	4,2	10	8	12	1/4"	1/8"	17,3	44	9	11	16	25
1/4"	38	20	108	100	4,2	10	8	12	3/8"	1/4"	63,5	55	9	13	20	30

"Transfer / take-off" module, intermediate supply module

For combination of sizes 1/4" - 1/8" - PVU-LCB119



PVUL-BB118 - PVU-LCC119



	a	b	G
1/8"	18	75	1/8
1/4"	25	100	1/4

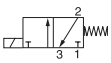
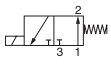
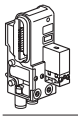
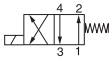
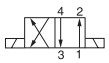
Miniature solenoid valves with modular pneumatic and electrical inputs. Lightweight plastic bodies with DIN rail manifold mounting facility. Ideal for cabinet installations.

- 3/2 and 4/2 module poppet valve
- Push-in connection
- Electrical connection by Cable gland, Sub D25 or industrial connector
- Visual indication by LED with built in surge suppression
- Modular system

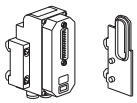
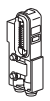
Operating information

Working Pressure	3 to 8 bar
Working temperature	-15 °C to +60 °C
	(Bus modules: 0 °C to 40 °C)
Flow, Qmax = 200 l/min	Qn = 100 l/min
Standard voltage	24 VDC
Protection level	IP65
For technical information see CD	

Valve slices including solenoids

Type		Actuator	Return	Push-in fittings mm	LED indicator and noise suppressor	Voltage	Order code
		Solenoid 3/2 NC	Spring	Ø4	Yes	24 VDC	**P2S-EW344ES2CR**
				Ø6	Yes	24 VDC	**P2S-EW346ES2CR**
		Solenoid 3/2 NO	Spring	Ø4	Yes	24 VDC	**P2S-EW144ES2CR**
		Solenoid 4/2	Spring	Ø4	Yes	24 VDC	**P2S-EW444ES2CR**
				Ø6	Yes	24 VDC	**P2S-EW446ES2CR**
		Solenoid 4/2	Solenoid	Ø4	Yes	24 VDC	**P2S-EW444EE2CQ**
				Ø6	Yes	24 VDC	**P2S-EW446EE2CQ**

Head and tail sets, intermediate accessories

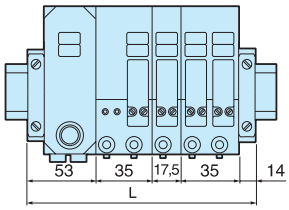
	Electrical connection	Push-in fitting, mm	Order code
	Sub D25 on the top	Ø8	**P2S-EA148D25AT**
	Intermediate air supply module	Ø6	**P2S-EA246**

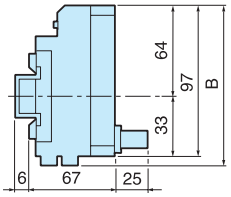
For connecting leads refer to page 168.

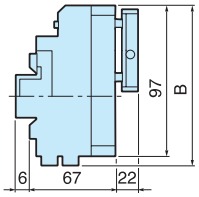
Indicates stocked product.

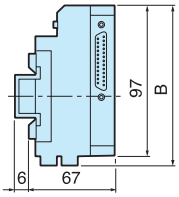
Dimensions, Valvetronic Interface 2000

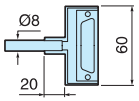
With Cable gland or SubD25 Connection Island









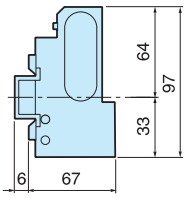


L = 67+(m x 17,5)+(n x 35)
m = number of 3/2 valves
n = number of 4/2 valves

Fitting Ø6
Fitting Ø8

B=105 mm
B=109 mm

Intermediary air supply



Stacking high flow valves with air pilot or solenoid actuation. Lightweight plastic bodies feature push-in or threaded connections. Modular pneumatic inlet, exhaust and modular electrical connections.

- High flow, compact, light weight
- Push-in or threaded pneumatic connections
- 2 x 3/2 - 5/2 - 5/3 functions
- Electrical head connection by Sub D 25 or Industrial Cylindrical Connector.
- Bus protocols: Interbus S, Profibus DP, DeviceNet and ASI
- Modular system

Flow characteristics (Qmax)

	Type 2 x 3/2 G1/8 threaded	Push in Ø6 mm
Flow Qmax	750 l/min	600 l/min
Flow Qn	400 l/min	300 l/min
	Type 5/2 **G1/8 threaded**	**Push in Ø6 mm**
Flow Qmax	900 l/min	775 l/min
Flow Qn	540 l/min	420 l/min
	Type 5/3 closed centre **G1/8 threaded**	**Push in Ø6 mm**
Flow Qmax	650 l/min	500 l/min
Flow Qn	370 l/min	280 l/min
	Type 5/3 vented centre **G1/8 threaded**	**Push in Ø6 mm**
Flow Qmax	900 l/min	775 l/min
Flow Qn	540 l/min	420 l/min

Operating information

Working Pressure	2 to 10 bar (3 to 10 bar for Monostable)
Working temperature	-15 °C to +60 °C (Bus modules: 0°C to 50°C)
Protection level	IP65

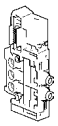
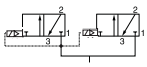
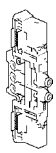
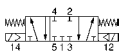
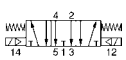
Input modules

Protection level	IP65
Voltage and type of output	PNP 24V DC
Normal current	100 mA
Maxi. available current island	1 A for all the inputs

Output modules

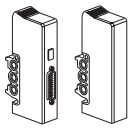
Protection level	IP65
Type and output voltage	PNP 24V DC
Normal current	100 mA
Maxi. available current island	1 A for all the outputs

Valve slices including solenoids

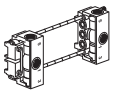
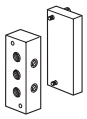
	Symbol	Actuator	Return	Pneumatic connection	Voltage	Order code
		Solenoid double 3/2 NC	Internal air pilot	Ø6 mm G1/8	24 V DC 24 V DC	**PVL-B10560652B** **PVL-B10561852B**
		Solenoid 5/2	Solenoid	Ø6 mm G1/8	24 V DC 24 V DC	**PVL-B10260602B** **PVL-B10261802B**
		Solenoid 5/2	Spring	Ø6 mm G1/8	24 V DC 24 V DC	**PVL-B10160652B** **PVL-B10161852B**
		Solenoid 5/3 closed centre	Solenoid self centring	Ø6 mm G1/8	24 V DC 24 V DC	**PVL-B10760602B** **PVL-B10761802**
		Solenoid 5/3 vented centre	Solenoid self centring	Ø6 mm	24 V DC	**PVL-B10860602B**

Indicates stocked product.

Electrical head and tail sets

	Valves configuration	Type of connector	Order code
	Single solenoid	Sub-D25	**PVL-B191125**
	Double solenoid	Sub-D25	**PVL-B192125**
	Double solenoid	Cylindrical 35-pins	**PVL-B192235**
	Double solenoid then Single solenoid	Sub-D25	**PVL-B194125**
	Single solenoid then Double solenoid	Sub-D25	**PVL-B193125**
Transfer module	Double solenoid then Single solenoid		**PVL-B1940**
	Single solenoid then Double solenoid		**PVL-B1930**
35 pin round cable 5meters			**P8L-MC35A5**

Pneumatic head and tail sets

Type of	Description mounting		Port size	Order code
	DIN rail mounting	Single supply head and tail set	G1/4	**PVL-B1719**
		Dual air supply head and tail set	G1/4	**PVL-B1729**
	Surface mounting	Single air supply head and tail set	G1/8	**PVL-B1818**
		Dual air supply head and tail set	G1/8	**PVL-B1828**
		Pressure isolating disc. (Sold in lots of 10)		**PVL-B1902**

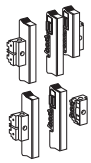
Input Module

Type	Connection	Order code
PVL-B Single solenoid	2 Inputs	**PVL-B1E1302**
PVL-B Double solenoid	4 Inputs	**PVL-B1E2304**

Output Module

Type	Connection	Order code
PVL-B Single solenoid	2 Outputs	**PVL-B1S1302**
PVL-B Double solenoid	4 Outputs	**PVL-B1S2304**

Head and tail sets

	Description	Type	Connection	Order code
	Pneumatic head and tail set with closing plates (and transfer module)	Double solenoid then Single solenoid	G1/4	**PVL-B194729**
		Double solenoid	G1/4	**PVL-B192729**
	Connector	M23 female 6 pins power	Supply	**P8C-MC06B**
		M23 female 12 pins	Profibus	**P8C-MC12BP**
	Plug	M23, IP 65	Bus Out	**P8C-PB1**
	Installation Diskett	Profibus and DeviceNet		**P8C-PDISK**

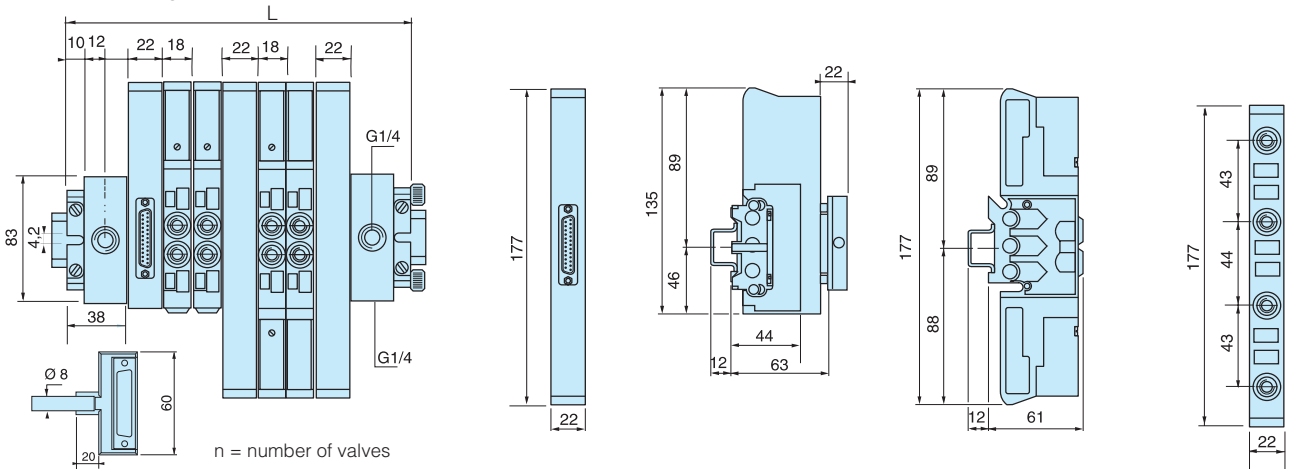
Connecting leads for Head module with Sub D 25

Type	Connection to valve island	Connection to PLC	Length m	Order code
	Leads for head module with Sub D 25 female	20 coloured wires AWG 24	5,0	**P8L-MD25A5B**
			9,9	**P8L-MD25A9B**
			15,0	**P8L-MD25ACB**

Indicates stocked product.

Dimensions, Valvetronic PVL-B10

Uniform configuration L = 120 + (n x 18)*
Mixed configuration L = 142 + (n x 18)*

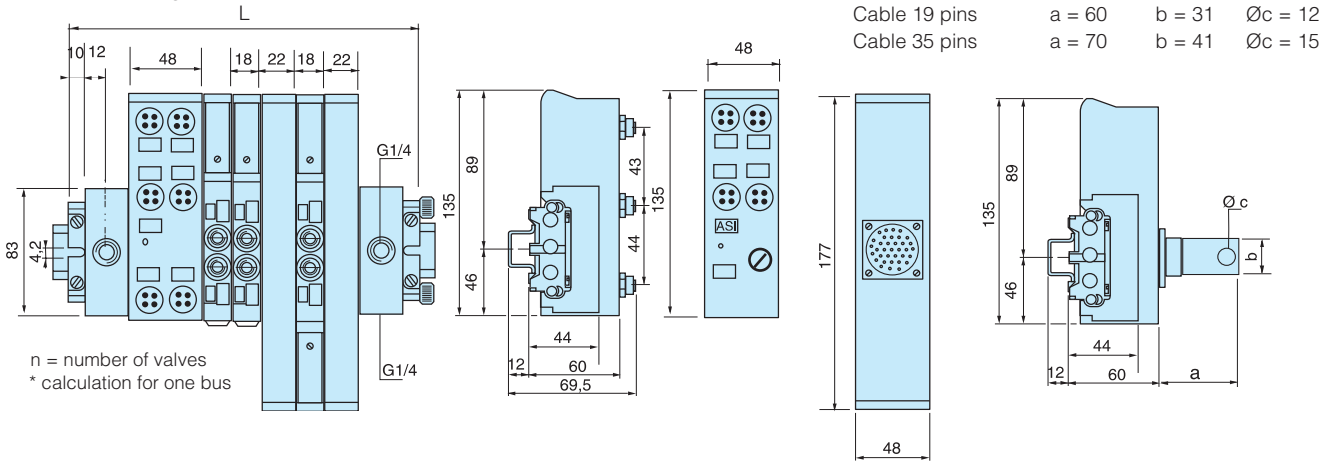


n = number of valves
* calculation for one bus

ASI Bus

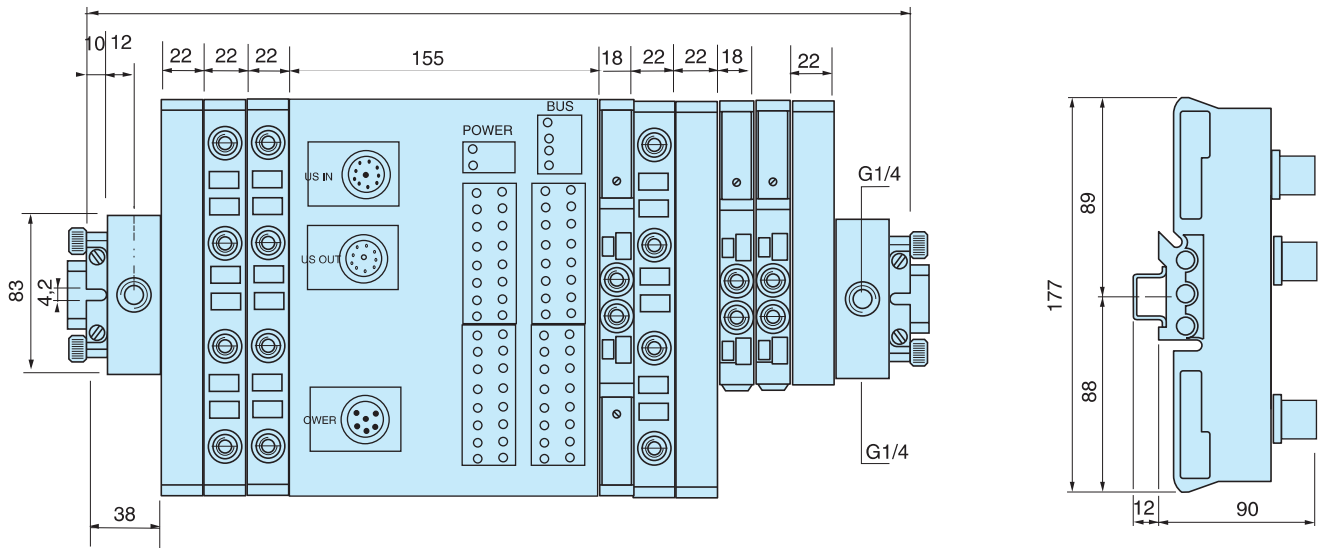
Uniform configuration L = 146 + (n x 18) *
Mixed configuration L = 168 + (n x 18) *

Connector 19 pins	a = 90	b = 31	
Connector 35 pins		a = 115	b = 41
Cable 19 pins	a = 60	b = 31	Øc = 12
Cable 35 pins	a = 70	b = 41	Øc = 15



n = number of valves
* calculation for one bus

DeviceNet, Profibus DP, Interbus S, FIPIO



Stacking high flow valves with air pilot or solenoid actuation. Lightweight plastic bodies feature push-in or threaded connections. Modular pneumatic inlet, exhaust and modular electrical connections.

- High flow, compact, light weight
- Push-in or threaded pneumatic outlets
- Bus protocols: Interbus S, Profibus DP, DeviceNet and ASI
- Electrical head connection by Cable gland, Sub D 25 or cylindrical connection
- Modular system

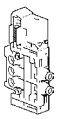
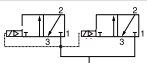
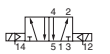
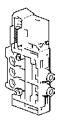
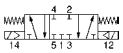
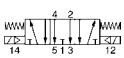
Flow characteristics (Qmax)

	Type 2 x 3/2 G1/4 threaded	Push in Ø8 mm
Flow Qmax	950 l/min	900 l/min
Flow Qn	830 l/min	470 l/min
	Type 5/2 G1/4 threaded	**Push in Ø8 mm**
Flow Qmax	1850 l/min	1400 l/min
Flow Qn	1100 l/min	820 l/min
	Type 5/3 closed centre G1/4 threaded	**Push in Ø8 mm**
Flow Qmax	1300 l/min	1170 l/min
Flow Qn	790 l/min	640 l/min
	Type 5/3 vented centre G1/4 threaded	**Push in Ø8 mm**
Flow Qmax	1850 l/min	1400 l/min
Flow Qn	1100 l/min	830 l/min

Operating information

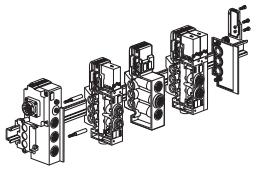
Working Pressure	2 to 10 bar (3 to 10 bar for Monostable)
Working temperature	-15 °C to +60 °C (Bus modules: 0°C to 50°C)
Protection level	IP65

Valve slices including solenoids

	Symbol	Actuator	Return	Pneumatic connection	Voltage	Order code
		Solenoid double 3/2 NC	Internal air pilot	G1/4	24 V DC	**PVL-C10561952B**
		Solenoid 5/2	Solenoid	G1/4	24 V DC	**PVL-C10261902B**
		Solenoid 5/2	Spring	G1/4	24 V DC	**PVL-C10161952B**
		Solenoid 5/3 closed centre	Solenoid self centring	G1/4	24 V DC	**PVL-C10761902B**
		Solenoid 5/3 vented centre	Solenoid self centring	G1/4	24 V DC	**PVL-C10861902B**

Indicates stocked product.

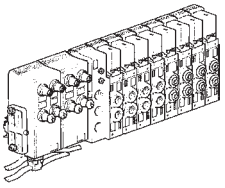
Head and tail Electrical pneumatic modules



Description	Auxiliary Pressure px	Electrical Connection	Pneumatic Connection	Order code
Head modules + tail closing plate	Without px	Cable gland	G3/8	**PVL-C1713H20A**
		Sub D 25	G3/8	**PVL-C1713D25A**
	With px	Cable gland	G3/8	**PVL-C2713H20A**
Tail air supply module			G3/8	**PVU-LC213**
Intermediate air supply module			G3/8	**PVU-LC213E**
Pressure isolating discs			Sold in lots of 10	**PVL-C1902**

For connecting leads see page 168.

ASI Bus Modules - Inputs and Outputs version



Description	Connection	Order code
Head master module with tail closing plate	M12 ASI/24V	**PVL-BA1BA44**
	Vampire ASI/24V	**PVL-BA1BA44V**
Intermediate module	M12 ASI/24V	**PVL-BA5BA44**
Spare vampire cover clip		**P8B-AVMP2** Sold in lots of 5
Connection LEAD to address terminal		**P8B-AJACK**

Combination Kits PVL-B10/PVL-C10 or PVL-C10/ASI bus modules

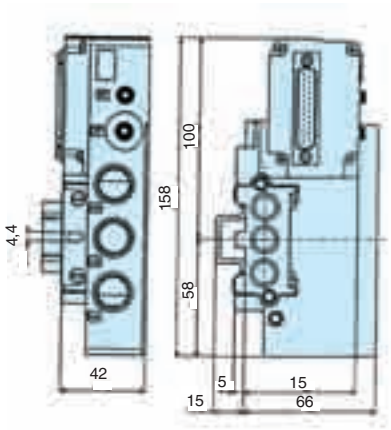
Type of combination module		Connection	Order code
Combination PVL-B10/PVL-C10	Without px version*	G1/4 and G3/8	**PVL-C1713B19**
	With px version (Ø4mm)*	G1/4 and G3/8	**PVL-C2713B19**
Combination bus ASI/PVL-C10	Without px version*	G3/8	**PVL-C1713B**
	With px version (Ø4mm)*	G3/8	**PVL-C2713B**

*px = auxilliary air supply for solenoids, separately from the main valves air supply.

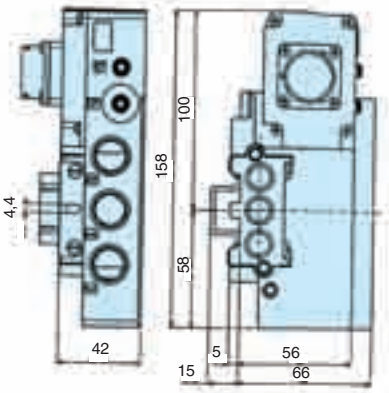
Indicates stocked product.

Dimensions, Valvetronic PVL-C10

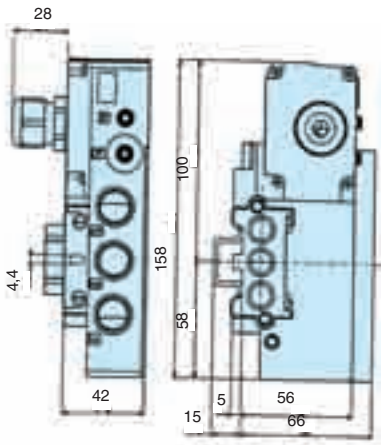
Head modules : SubD25 connector



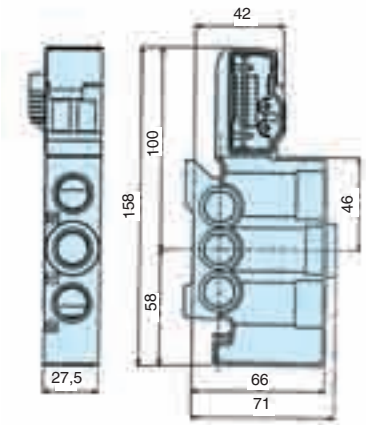
Cylindrical connector



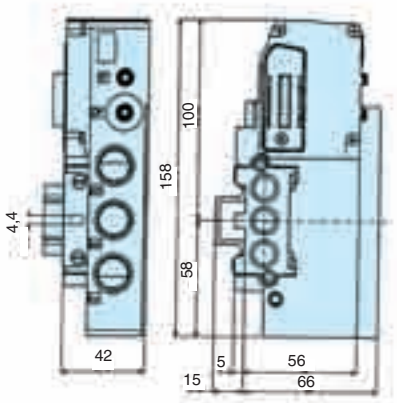
Cable gland



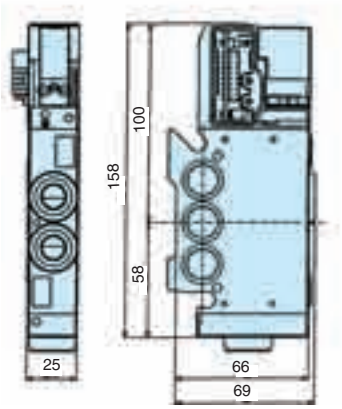
Intermediary air supply module



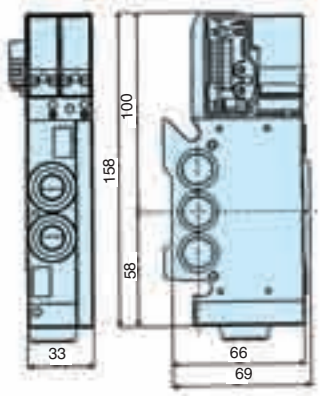
Transfer Module from PVL-B10/PVL-C10 and Head ASI bus / Air feed module PVL-C10



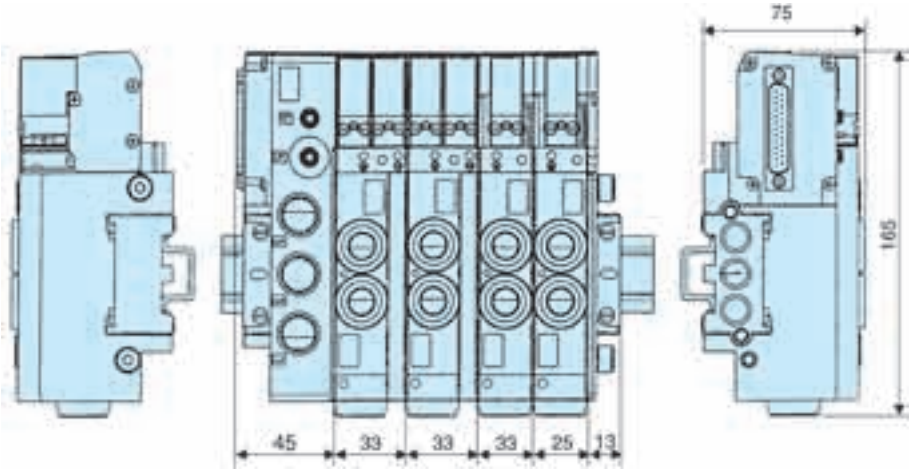
Valve 5/2 monostable



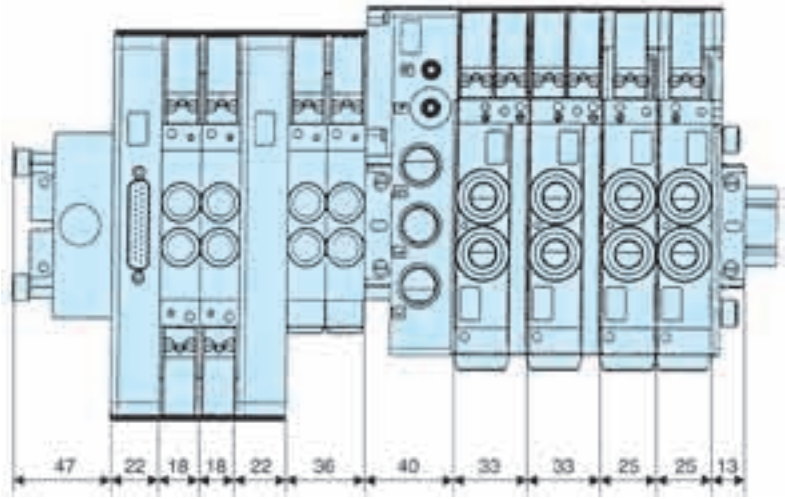
Valve 5/2 bistable - 2x3/2 - 5/3



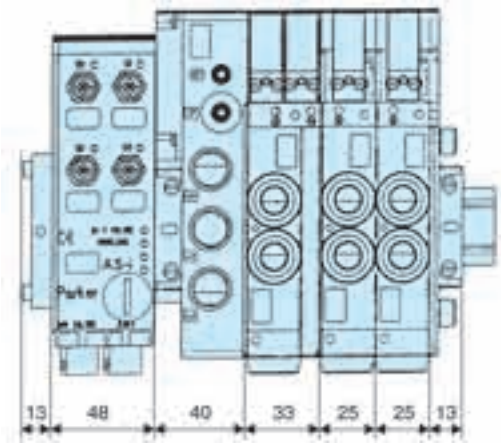
Dimensions, Valvetronic PVL-C10



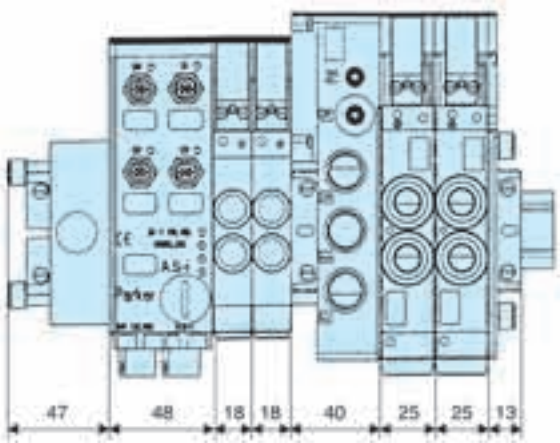
Association PVL-B10 G1/8 and PVL-C10 G1/4



Association ASI and PVL-C10



Association ASI and PVL-B10 and PVL-C10



ISO 15407

Size 02 / 01

Cylinders from Ø 10 to 100

ISO 15407-1

Individual Connection

DIN C	Isomax	
M12	ISYS ISO	
Remote pilot	Isomax	ISYS ISO
Subbase, Manifolds		
Flow Control, Regulator		

ISO 15407-2

Plug-in

Plug-in	ISYS ISO
Subbase, Manifolds	

ISO 5599

Size 1 / 2 / 3

Cylinders from Ø 63 to 200

ISO 5599-1 — Individual Connection

DIN A, Industrial	**Isomax**	**ISYS ISO**
M12, M23	**Isomax**	**ISYS ISO**
Remote pilot	**Isomax**	**ISYS ISO**
Subbase, Manifolds		
Flow Control, Regulator		

ISO 5599-2 — Plug-in

Plug-in	**ISYS ISO**
Subbase, Manifolds	

Home

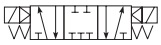
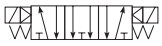
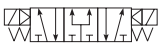
Ceramic slide valves for maximum operational life. Solenoid or air pilot actuation. Vacuum to 10 bar general applications.

- Size 01 and 02 (26 and 18 mm)
- Ceramic technology for long life operation
- From vacuum up to 10 bar applications
- Internal or external pilot supply with same valves
- Capture solenoid exhaust

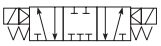
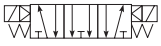
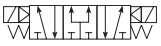
Operation information

Working pressure :	-0,9 to 10 bar	
Working temperature :	-10 to +60°C	
	DX02	**DX01**
Flow (Qmax.) :	630 l/min	1000 l/min
Flow (Qn) :	385 l/min	585 l/min

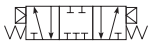
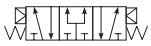
Solenoid operated ISO valve fitted with 15 mm solenoid 24 VDC

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Spring Spring	4,0/2,0 4,3/2,3	15/25 25/35	0.13 0.17	**DX02-621-951M** **DX01-621-951M**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Differential Differential	3,9/1,6 3,8/1,7	15/30 20/40	0.13 0.17	**DX02-651-951M** **DX01-651-951M**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Electrical signal Electrical signal	1,3/1,3 1,0/1,0	12/12 15/15	0.17 0.21	**DX02-606-951M** **DX01-606-951M**
5/3 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Closed center	Electrical signal Self centering	3,3 2,9	20/60 20/60	0.17 0.21	**DX02-616-951M** **DX01-616-951M**
	02 - 18mm 01 - 26mm	Electrical signal Vented center	Electrical signal Self centering	3,3 3	20/60 20/60	0.17 0.21	**DX02-611-951M** **DX01-611-951M**
	02 - 18mm 01 - 26mm	Electrical signal Press. center	Electrical signal Self centering	3,3 3	20/60 20/60	0.17 0.21	**DX02-613-951M** **DX01-613-951M**

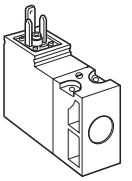
Solenoid operated ISO valve fitted with adaptor to accept 15 mm solenoid

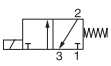
Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Spring Spring	4,0/2,0 4,3/2,3	15/25 25/35	0.9 0.13	**DX02-621-60** **DX01-621-60**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Differential Differential	3,9/1,6 3,8/1,7	15/30 20/40	0.9 0.13	**DX02-651-60** **DX01-651-60**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Electrical signal Electrical signal	1,3/1,3 1,0/1,0	12/12 15/15	0.9 0.13	**DX02-606-60** **DX01-606-60**
5/3 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Closed center	Electrical signal Self centering	3,3 2,9	20/60 20/60	0.9 0.13	**DX02-616-60** **DX01-616-60**
	02 - 18mm 01 - 26mm	Electrical signal Vented center	Electrical signal Self centering	3,3 3	20/60 20/60	0.9 0.13	**DX02-611-60** **DX01-611-60**
	02 - 18mm 01 - 26mm	Electrical signal Press. center	Electrical signal Self centering	3,3 3	20/60 20/60	0.9 0.13	**DX02-613-60** **DX01-613-60**

Pneumatic operated ISO valve

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm 01 - 26mm	Air signal Air signal	Spring Spring	4,0/2,0 4,3/2,3	15/25 25/35	0.9 0.13	**DX02-421-60** **DX01-421-60**
	02 - 18mm 01 - 26mm	Air signal Air signal	Differential Differential	3,9/1,6 3,8/1,7	15/30 20/40	0.9 0.13	**DX02-451-60** **DX01-451-60**
	02 - 18mm 01 - 26mm	Air signal Air signal	Air signal Air signal	1,3/1,3 1,0/1,0	12/12 14/14	0.9 0.13	**DX02-406-60** **DX01-406-60**
5/3 Valves							
	02 - 18mm 01 - 26mm	Air signal Closed center	Air signal Self centering	3,3 2,9	20/50 20/50	0.9 0.13	**DX02-416-60** **DX01-416-60**
	02 - 18mm 01 - 26mm	Air signal Vented center	Air signal Self centering	3,3 3	20/50 20/50	0.9 0.13	**DX02-411-60** **DX01-411-60**
	02 - 18mm 01 - 26mm	Air signal Press. center	Air signal Self centering	3,3 3	20/50 20/50	0.9 0.13	**DX02-413-60** **DX01-413-60**

Solenoids 15 mm NC standard flow DIN 1,2 W/1,6 VA





Voltage	Order code Override flush non locking	Order code Override flush locking
24 V DC	**P2E-KV32C1**	**P2E-KV32C2**
48 V DC	**P2E-KV32D1**	
24 V AC 50 Hz	**P2E-KV31C1**	**P2E-KV31C2**
48 V AC 50/60 Hz	**P2E-KV34D1**	**P2E-KV34D2**
AC 60 Hz	**P2E-KV31F1**	**P2E-KV31F2**
40 V AC 60 Hz	**P2E-KV31J1**	**P2E-KV31J2**

Connectors see page 196.

Indicates stocked product.

ISO 5599-1 - ISOMAX

Ceramic slide valves for maximum operational life. Solenoid or air pilot operated with a wide choice of bases and manifolds. Vacuum to 12 bar general applications.

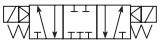
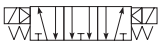
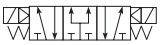
- Size1, 2 and 3
- Ceramic technology for long life operation
- From vacuum up to 12 bar applications
- Internal or external pilot supply with same valves
- M12 on each coil
- Common M12

Operation information

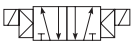
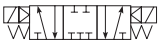
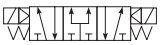
Working pressure :	-0,9 to 12 bar		
Working temperature :	-10 to +60°C		
	DX1	**DX2**	**DX3**
Flow (Qmax.) :	1680 l/min	3640 l/min	6420 l/min
Flow (Qn.) :	1150 l/min	2330 l/min	4050 l/min
ATEX approval:	CE Ex II 2 GD c 85°C		

For ATEX specific products contact Sales Office

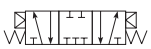
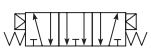
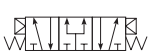
Solenoid operated ISO valve fitted with CNOMO solenoid(s) 24 VDC

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring	3,9/2,5	40/55	0.5	**DX1-621-BL49**
	2 - 56mm	Electrical signal	Spring	3,6/2,4	60/105	0.75	**DX2-621-BL49**
	3 - 71mm	Electrical signal	Spring	3,6/2,3	85/160	1.25	**DX3-621-BL49**
	1 - 43mm	Electrical signal	Differential	3,3/1,9	30/70	0.5	**DX1-651-BL49**
	2 - 56mm	Electrical signal	Differential	3,3/2,0	55/110	0.75	**DX2-651-BL49**
	3 - 71mm	Electrical signal	Differential	3,3/1,9	80/180	1.25	**DX3-651-BL49**
	1 - 43mm	Electrical signal	Electrical signal	1,0/1,0	25/25	0.65	**DX1-606-BL49**
	2 - 56mm	Electrical signal	Electrical signal	1,0/1,0	30/30	0.9	**DX2-606-BL49**
	3 - 71mm	Electrical signal	Electrical signal	1,0/1,0	40/40	1.4	**DX3-606-BL49**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,6	30/95	0.65	**DX1-616-BL49**
	2 - 56mm	Closed center	Self centering	2,1	40/190	0.9	**DX2-616-BL49**
	3 - 71mm			2,1	55/330	1.4	**DX3-616-BL49**
	1 - 43mm	Electrical signal	Electrical signal	2,8	25/70	0.65	**DX1-611-BL49**
	2 - 56mm	Vented center	Self centering	2,2	40/140	0.9	**DX2-611-BL49**
	3 - 71mm			2,1	60/270	1.4	**DX3-611-BL49**
	1 - 43mm	Electrical signal	Electrical signal	2,4	25/65	0.65	**DX1-613-BL49**
	2 - 56mm	Press. center	Self centering	2,1	40/150	0.9	**DX2-613-BL49**

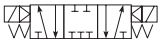
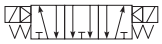
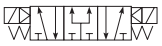
Solenoid operated ISO valve fitted with CNOMO operator without coil

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring	3,9/2,5	40/55	0.4	**DX1-621-BN**
	2 - 56mm	Electrical signal	Spring	3,6/2,4	60/105	0.65	**DX2-621-BN**
	3 - 71mm	Electrical signal	Spring	3,6/2,3	85/160	1.15	**DX3-621-BN**
	1 - 43mm	Electrical signal	Differential	3,3/1,9	30/70	0.4	**DX1-651-BN**
	2 - 56mm	Electrical signal	Differential	3,3/2,0	55/110	0.65	**DX2-651-BN**
	3 - 71mm	Electrical signal	Differential	3,3/1,9	80/180	1.15	**DX3-651-BN**
	1 - 43mm	Electrical signal	Electrical signal	1,0/1,0	25/25	0.55	**DX1-606-BN**
	2 - 56mm	Electrical signal	Electrical signal	1,0/1,0	30/30	0.8	**DX2-606-BN**
	3 - 71mm	Electrical signal	Electrical signal	1,0/1,0	40/40	1.3	**DX3-606-BN**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,6	30/95	0.55	**DX1-616-BN**
	2 - 56mm	Closed center	Self centering	2,1	40/190	0.8	**DX2-616-BN**
	3 - 71mm			2,1	55/330	1.3	**DX3-616-BN**
	1 - 43mm	Electrical signal	Electrical signal	2,8	25/70	0.55	**DX1-611-BN**
	2 - 56mm	Vented center	Self centering	2,2	40/140	0.8	**DX2-611-BN**
	3 - 71mm			2,1	60/270	1.3	**DX3-611-BN**
	1 - 43mm	Electrical signal	Electrical signal	2,4	25/65	0.55	**DX1-613-BN**
	2 - 56mm	Press. center	Self centering	2,1	40/150	0.8	**DX2-613-BN**

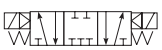
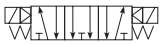
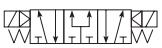
Pneumatic operated ISO valve without valve spool override

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Air signal	Spring	3,9/2,5	30/45	0.35	**DX1-421-60**
	2 - 56mm	Air signal	Spring	3,6/2,4	50/95	0.6	**DX2-421-60**
	3 - 71mm	Air signal	Spring	3,6/2,3	80/160	1.1	**DX3-421-60**
	1 - 43mm	Air signal	Differential	3,3/1,9	25/60	0.35	**DX1-451-60**
	2 - 56mm	Air signal	Differential	3,3/2,0	45/100	0.6	**DX2-451-60**
	3 - 71mm	Air signal	Differential	3,3/1,9	70/170	1.1	**DX3-451-60**
	1 - 43mm	Air signal	Air signal	1,0/1,0	20/20	0.35	**DX1-406-60**
	2 - 56mm	Air signal	Air signal	1,0/1,0	25/25	0.6	**DX2-406-60**
	3 - 71mm	Air signal	Air signal	1,0/1,0	35/35	1.1	**DX3-406-60**
5/3 Valves							
	1 - 43mm	Air signal	Air signal	2,6	20/80	0.35	**DX1-416-60**
	2 - 56mm	Closed center	Self centering	2,1	30/170	0.6	**DX2-416-60**
	3 - 71mm			2,1	45/330	1.1	**DX3-416-60**
	1 - 43mm	Air signal	Air signal	2,8	20/65	0.35	**DX1-411-60**
	2 - 56mm	Vented center	Self centering	2,2	30/140	0.6	**DX2-411-60**
	3 - 71mm			2,1	50/270	1.1	**DX3-411-60**
	1 - 43mm	Air signal	Air signal	2,4	20/60	0.35	**DX1-413-60**
	2 - 56mm	Press. center	Self centering	2,1	25/140	0.6	**DX2-413-60**

Solenoid operated ISO valve, CNOMO, 24 VDC with M12 coil

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring	3,9/2,5	40/55	0.5	**DX1-621-B619**
	2 - 56mm	Electrical signal	Spring	3,6/2,4	60/105	0.75	**DX2-621-B619**
	3 - 71mm	Electrical signal	Spring	3,6/2,3	85/160	1.25	**DX3-621-B619**
	1 - 43mm	Electrical signal	Differential	3,3/1,9	30/70	0.5	**DX1-651-B619**
	2 - 56mm	Electrical signal	Differential	3,3/2,0	55/110	0.75	**DX2-651-B619**
	3 - 71mm	Electrical signal	Differential	3,3/1,9	80/180	1.25	**DX3-651-B619**
	1 - 43mm	Electrical signal	Electrical signal	1,0/1,0	25/25	0.65	**DX1-606-B619**
	2 - 56mm	Electrical signal	Electrical signal	1,0/1,0	30/30	0.9	**DX2-606-B619**
	3 - 71mm	Electrical signal	Electrical signal	1,0/1,0	40/40	1.4	**DX3-606-B619**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,6	30/95	0.65	**DX1-616-B619**
	2 - 56mm	Closed center	Self centering	2,1	40/190	0.9	**DX2-616-B619**
	3 - 71mm			2,1	55/330	1.4	**DX3-616-B619**
	1 - 43mm	Electrical signal	Electrical signal	2,8	25/70	0.65	**DX1-611-B619**
	2 - 56mm	Vented center	Self centering	2,2	40/140	0.9	**DX2-611-B619**
	3 - 71mm			2,1	60/270	1.4	**DX3-611-B619**
	1 - 43mm	Electrical signal	Electrical signal	2,4	25/65	0.65	**DX1-613-B619**
	2 - 56mm	Press. center	Self centering	2,1	40/150	0.9	**DX2-613-B619**

Solenoid operated ISO valve, CNOMO, 24 VDC with Din A coil and M12 connector

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring	3,9/2,5	40/55	0.65	**DX1-621-B219**
	2 - 56mm	Electrical signal	Spring	3,6/2,4	60/105	0.9	**DX2-621-B219**
	3 - 71mm	Electrical signal	Spring	3,6/2,3	85/160	1.4	**DX3-621-B219**
	1 - 43mm	Electrical signal	Differential	3,3/1,9	30/70	0.65	**DX1-651-B219**
	2 - 56mm	Electrical signal	Differential	3,3/2,0	55/110	0.9	**DX2-651-B219**
	3 - 71mm	Electrical signal	Differential	3,3/1,9	80/180	1.4	**DX3-651-B219**
	1 - 43mm	Electrical signal	Electrical signal	1,0/1,0	25/25	0.8	**DX1-606-B219**
	2 - 56mm	Electrical signal	Electrical signal	1,0/1,0	30/30	1.05	**DX2-606-B219**
	3 - 71mm	Electrical signal	Electrical signal	1,0/1,0	40/40	1.55	**DX3-606-B219**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,6	30/95	0.8	**DX1-616-B219**
	2 - 56mm	Closed center	Self centering	2,1	40/190	1.05	**DX2-616-B219**
	3 - 71mm			2,1	55/330	1.55	**DX3-616-B219**
	1 - 43mm	Electrical signal	Electrical signal	2,8	25/70	0.8	**DX1-611-B219**
	2 - 56mm	Vented center	Self centering	2,2	40/140	1.05	**DX2-611-B219**
	3 - 71mm			2,1	60/270	1.55	**DX3-611-B219**
	1 - 43mm	Electrical signal	Electrical signal	2,4	25/65	0.8	**DX1-613-B219**
	2 - 56mm	Press. center	Self centering	2,1	40/150	1.05	**DX2-613-B219**

ISO 15407-1 - ISYS ISO

Solenoid or air pilot actuation. Vacuum to 10 bar heavy duty applications.

- Size HA and HB (26mm and 18mm)
- Heavy duty and corrosion resistant body
- Internal led & rectifier
- Internal or external pilot supply with same valve
- M12 common wiring

Operation information

Working pressure :	2,0 to 10 bar	
Working temperature :	-15 to +50°C	
	Size 02	**Size 01**
Flow (Qmax.) :	10,8 l/s	25,3 l/s
Flow (Qn) :	6,5 l/s	15,3 l/s

Solenoid operated ISO valve, 24VDC, central M12 connection

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm	Electrical signal	Spring & Diff.	3,1	20/40	0.15	**HBEWXBG2G9000FA**
	01 - 26mm	Electrical signal	Spring & Diff.	3,1	20/45	0.25	**HAEWXBG2G9000FA**
	02 - 18mm	Electrical signal	Differential	2,7	15/40	0.15	**HB1WXBG2G9000FA**
	01 - 26mm	Electrical signal	Differential	2,7	15/50	0.25	**HA1WXBG2G9000FA**
	02 - 18mm	Electrical signal	Electrical signal	1,7	10	0.165	**HB2WXBG2G9000FA**
	01 - 26mm	Electrical signal	Electrical signal	1,7	10	0.265	**HA2WXBG2G9000FA**
5/3 Valves							
	2 - 18mm	Electrical signal	Electrical signal	2,4	15/60	0.165	**HB5WXBG2G9000FA**
	01 - 26mm	Closed center	Self centering	2,4	15/50	0.265	**HA5WXBG2G9000FA**
	02 - 18mm	Electrical signal	Electrical signal	2,4	15/60	0.165	**HB6WXBG2G9000FA**
	01 - 26mm	Vented center	Self centering	2,4	15/50	0.265	**HA6WXBG2G9000FA**
	02 - 18mm	Electrical signal	Electrical signal	2,4	15/60	0.165	**HB7WXBG2G9000FA**
	01 - 26mm	Press. center	Self centering	2,4	15/50	0.265	**HA7WXBG2G9000FA**

Pneumatic operated ISO valve

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm	Air signal	Spring & Diff.	3,1	15/30	0.115	**HBFWX000XXA**
	01 - 26mm	Air signal	Spring & Diff.	3,1	15/40	0.215	**HAFWX000XXA**
	02 - 18mm	Air signal	Differential	2,7	10/30	0.115	**HB3WX000XXA**
	01 - 26mm	Air signal	Differential	2,7	15/35	0.215	**HA3WX000XXA**
	02 - 18mm	Air signal	Air signal	1,7	8	0.115	**HB4WX000XXA**
	01 - 26mm	Air signal	Air signal	1,7	10	0.215	**HA4WX000XXA**
5/3 Valves							
	2 - 18mm	Air signal	Air signal	2,4	15/35	0.115	**HB8WX000XXA**
	01 - 26mm	Closed center	Self centering	2,4	15/40	0.215	**HA8WX000XXA**
	02 - 18mm	Air signal	Air signal	2,4	15/35	0.115	**HB9WX000XXA**
	01 - 26mm	Vented center	Self centering	2,4	15/40	0.215	**HA9WX000XXA**
	02 - 18mm	Air signal	Air signal	2,4	15/35	0.115	**HB0WX000XXA**
	01 - 26mm	Press. center	Self centering	2,4	15/40	0.215	**HA0WX000XXA**

ISO 15407-2 - ISYS ISO

Solenoid actuated Iso valve for multiple and centralised field bus (Plug-in)

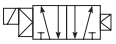
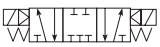
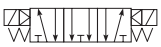
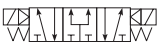
- Size HA and HB (26mm and 18mm)
- Heavy duty and corrosion resistant body
- Internal led & rectifier
- Internal or external pilot supply with same valve
- Multiple connection, Sub D25, M23, Terminal block
- Communication with ISYS NET

Operation information

Working pressure :	2,0 to 10 bar	
Working temperature :	-15 to +50°C	
	Size 02	**Size 01**
Flow (Qmax.) :	10,8 l/s	25,3 l/s
Flow (Qn) :	6,5 l/s	15,3 l/s

Solenoid operated ISO plug-in valve, 24VDC

Manual override non locking, Led & surge suppressor

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Spring & Diff. Spring & Diff.	3,1 3,1	20/40 20/45	0.13 0.23	**HBEVXBG0G9A** **HAEVXBG0G9A**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Differential Differential	2,7 2,7	15/40 15/50	0.13 0.23	**HB1VXBG0G9A** **HA1VXBG0G9A**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Electrical signal Electrical signal	1,7 1,7	10 10	0.145 0.245	**HB2VXBG0G9A** **HA2VXBG0G9A**
5/3 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Closed center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.145 0.245	**HB5VXBG0G9A** **HA5VXBG0G9A**
	02 - 18mm 01 - 26mm	Electrical signal Vented center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.145 0.245	**HB6VXBG0G9A** **HA6VXBG0G9A**
	02 - 18mm 01 - 26mm	Electrical signal Press. center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.145 0.245	**HB7VXBG0G9A** **HA7VXBG0G9A**

ISO 5599-1 - ISYS ISO

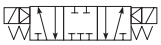
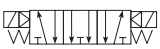
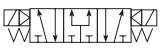
Heavy duty valve. Solenoid or air pilot. Vacuum to 10 bar. Wide choice of electrical connections.

- Size 1, 2, 3
- Heavy duty and corrosion resistant body
- Vacuum to 10 bar
- Internal or external pilot supply with same valve
- Din A, M12, M23 connections

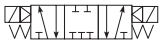
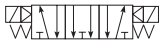
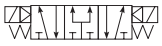
Operation information

Working pressure :	2,0 to 10 bar		
Working temperature :	-15 to +50°C		
	Size 1	**Size 2**	**Size 3**
Flow (Qmax.) :	34,5 l/s	69,0 l/s	130,8 l/s
Flow (Qn) :	20,8 l/s	42,0 l/s	83,7 l/s

Solenoid operated ISO valve fitted with CNOMO solenoid(s) 24 VDC

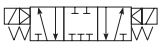
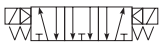
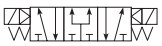
Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring & Diff.	3,1/2,5	25/35	0.77	**H1EWXBBL49C**
	2 - 56mm	Electrical signal	Spring & Diff.	3,1/2,1	40/70	1.19	**H2EWXBBL49C**
	3 - 71mm	Electrical signal	Spring & Diff.	3,8/3,3	70/80	1.47	**H3EWXBBL49C**
	1 - 43mm	Electrical signal	Differential	1,7/1,9	25/45	0.77	**H11WXBBL49C**
	2 - 56mm	Electrical signal	Differential	2,4/1,7	35/80	1.19	**H21WXBBL49C**
	3 - 71mm	Electrical signal	Differential	3,5/2,4	55/85	1.47	**H31WXBBL49C**
	1 - 43mm	Electrical signal	Electrical signal	1,7	15	0.94	**H12WXBBL49C**
	2 - 56mm	Electrical signal	Electrical signal	1,7	20	1.36	**H22WXBBL49C**
	3 - 71mm	Electrical signal	Electrical signal	2,4	25	1.64	**H32WXBBL49C**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.94	**H15WXBBL49C**
	2 - 56mm	Closed center	Self centering	3,5	30/75	1.36	**H25WXBBL49C**
	3 - 71mm			3,5	23/80	1.64	**H35WXBBL49C**
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.94	**H16WXBBL49C**
	2 - 56mm	Vented center	Self centering	3,5	30/75	1.36	**H26WXBBL49C**
	3 - 71mm			3,5	23/80	1.64	**H36WXBBL49C**
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.94	**H17WXBBL49C**
	2 - 56mm	Press. center	Self centering	3,5	30/75	1.36	**H27WXBBL49C**
	3 - 71mm			3,5	23/80	1.64	**H37WXBBL49C**

Solenoid operated ISO valve fitted with CNOMO operator without coil

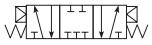
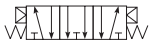
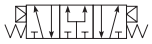
Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring & Diff.	3,1/2,5	25/35	0.65	**H1EWXBBNXXC**
	2 - 56mm	Electrical signal	Spring & Diff.	3,1/2,1	40/70	1.07	**H2EWXBBNXXC**
	3 - 71mm	Electrical signal	Spring & Diff.	3,8/3,3	70/80	1.35	**H3EWXBBNXXC**
	1 - 43mm	Electrical signal	Differential	1,7/1,9	25/45	0.65	**H11WXBBNXXC**
	2 - 56mm	Electrical signal	Differential	2,4/1,7	35/80	1.07	**H21WXBBNXXC**
	3 - 71mm	Electrical signal	Differential	3,5/2,4	55/85	1.35	**H31WXBBNXXC**
	1 - 43mm	Electrical signal	Electrical signal	1,7	15	0.7	**H12WXBBNXXC**
	2 - 56mm	Electrical signal	Electrical signal	1,7	20	1.12	**H22WXBBNXXC**
	3 - 71mm	Electrical signal	Electrical signal	2,4	25	1.4	**H32WXBBNXXC**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.7	**H15WXBBNXXC**
	2 - 56mm	Closed center	Self centering	3,5	30/75	1.12	**H25WXBBNXXC**
	3 - 71mm			3,5	23/80	1.4	**H35WXBBNXXC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.7	**H16WXBBNXXC**
	2 - 56mm	Vented center	Self centering	3,5	30/75	1.12	**H26WXBBNXXC**
	3 - 71mm			3,5	23/80	1.4	**H36WXBBNXXC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.7	**H17WXBBNXXC**
	2 - 56mm	Press. center	Self centering	3,5	30/75	1.12	**H27WXBBNXXC**
	3 - 71mm			3,5	23/80	1.4	**H37WXBBNXXC**

Solenoid operated ISO valve, 24VDC, central M12 connection

Oriented side 14, Led & surge suppressor

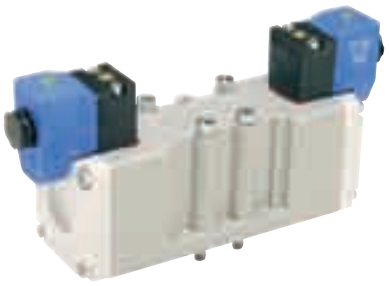
Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring & Diff.	3,1/2,5	30/40	0.77	**H1EWXBG2B9000FC**
	2 - 56mm	Electrical signal	Spring & Diff.	3,1/2,1	45/70	1.29	**H2EWXBG2B9000FC**
	3 - 71mm	Electrical signal	Spring & Diff.	3,8/3,3	75/80	1.57	**H3EWXBG2B9000FC**
	1 - 43mm	Electrical signal	Differential	1,7/1,9	30/50	0.77	**H11WXBG2B9000FC**
	2 - 56mm	Electrical signal	Differential	2,4/1,7	40/80	1.29	**H21WXBG2B9000FC**
	3 - 71mm	Electrical signal	Differential	3,5/2,4	60/85	1.57	**H31WXBG2B9000FC**
	1 - 43mm	Electrical signal	Electrical signal	1,7	20	1.04	**H12WXBG2B9000FC**
	2 - 56mm	Electrical signal	Electrical signal	1,7	25	1.46	**H22WXBG2B9000FC**
	3 - 71mm	Electrical signal	Electrical signal	2,4	30	1.74	**H32WXBG2B9000FC**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	1.04	**H15WXBG2B9000FC**
	2 - 56mm	Closed center	Self centering	3,5	35/80	1.46	**H25WXBG2B9000FC**
	3 - 71mm			3,5	40/85	1.74	**H35WXBG2B9000FC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	1.04	**H16WXBG2B9000FC**
	2 - 56mm	Vented center	Self centering	3,5	35/80	1.46	**H26WXBG2B9000FC**
	3 - 71mm			3,5	40/85	1.74	**H36WXBG2B9000FC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	1.04	**H17WXBG2B9000FC**
	2 - 56mm	Press. center	Self centering	3,5	35/80	1.46	**H27WXBG2B9000FC**
	3 - 71mm			3,5	40/85	1.74	**H37WXBG2B9000FC**

Pneumatic operated ISO valve without manual override

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Air signal Air signal	Spring & Diff. Spring & Diff. Spring & Diff.	3,1/2,5 3,1/2,1 3,8/3,3	20/30 35/70 65/75	0.6 1.02 1.3	**H1FWX000XXC** **H2FWX000XXC** **H3FWX000XXC**
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Air signal Air signal	Differential Differential Differential	1,7/1,9 2,4/1,7 3,5/2,4	20/40 30/80 50/85	0.6 1.02 1.3	**H13WX000XXC** **H23WX000XXC** **H33WX000XXC**
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Air signal Air signal	Air signal Air signal Air signal	1,7 1,7 2,4	12 16 20	0.6 1.02 1.3	**H14WX000XXC** **H24WX000XXC** **H34WX000XXC**
5/3 Valves							
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Closed center	Air signal Self centering	2,4 3,5 3,5	15/55 20/70 30/80	0.6 1.12 1.3	**H18WX000XXC** **H28WX000XXC** **H38WX000XXC**
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Vented center	Air signal Self centering	2,4 3,5 3,5	15/55 20/70 30/80	0.6 1.02 1.3	**H19WX000XXC** **H29WX000XXC** **H39WX000XXC**
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Press. center	Air signal Self centering	2,4 3,5 3,5	15/55 20/70 30/80	0.6 1.02 1.3	**H10WX000XXC** **H20WX000XXC** **H30WX000XXC**

ISO 5599-2 - ISYS ISO

Solenoid actuator Iso valve for multiple and centralised field bus



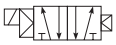
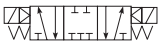
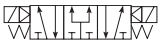
- Size 1, 2, 3
- Heavy duty and corrosion resistant body
- Internal led rectifier
- Internal or external pilot supply with same valve
- Multiple connection, SubD25, M23, Terminal block
- Communication with ISYS NET

Operation information

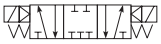
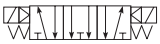
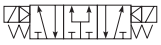
Working pressure :	2,0 to 10 bar		
Working temperature :	-15 to +50°C		
	Size 1	**Size 2**	**Size 3**
Flow (Qmax.) :	34,5 l/s	69,0 l/s	130,8 l/s
Flow (Qn) :	20,8 l/s	42,0 l/s	83,7 l/s

Solenoid operated ISO valve, 24VDC, Plug-in

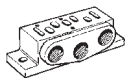
Led & surge suppressor

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring & Diff.	3,1/2,5	30/40	0.77	**H1EVXBG0B9C**
	2 - 56mm	Electrical signal	Spring & Diff.	3,1/2,1	45/70	1.19	**H2EVXBG0B9C**
	3 - 71mm	Electrical signal	Spring & Diff.	3,8/3,3	75/80	1.47	**H3EVXBG0B9C**
	1 - 43mm	Electrical signal	Differential	1,7/1,9	30/50	0.77	**H11VXBG0B9C**
	2 - 56mm	Electrical signal	Differential	2,4/1,7	40/80	1.19	**H21VXBG0B9C**
	3 - 71mm	Electrical signal	Differential	3,5/2,4	60/85	1.47	**H31VXBG0B9C**
	1 - 43mm	Electrical signal	Electrical signal	1,7	20	0.94	**H12VXBG0B9C**
	2 - 56mm	Electrical signal	Electrical signal	1,7	25	1.36	**H22VXBG0B9C**
	3 - 71mm	Electrical signal	Electrical signal	2,4	30	1.64	**H32VXBG0B9C**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.94	**H15VXBG0B9C**
	2 - 56mm	Closed center	Self centering	3,5	35/80	1.36	**H25VXBG0B9C**
	3 - 71mm			3,5	40/85	1.64	**H35VXBG0B9C**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.94	**H16VXBG0B9C**
	2 - 56mm	Vented center	Self centering	3,5	35/80	1.36	**H26VXBG0B9C**
	3 - 71mm			3,5	40/85	1.64	**H36VXBG0B9C**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.94	**H17VXBG0B9C**
	2 - 56mm	Press. center	Self centering	3,5	35/80	1.36	**H27VXBG0B9C**
	3 - 71mm			3,5	40/85	1.64	**H37VXBG0B9C**

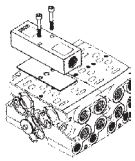
Solenoid operated ISO valve, with plug in operator, without coil

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring & Diff.	3,1/2,5	30/40	0.65	**H1EVXBGNXXC**
	2 - 56mm	Electrical signal	Spring & Diff.	3,1/2,1	45/70	1.07	**H2EVXBGNXXC**
	3 - 71mm	Electrical signal	Spring & Diff.	3,8/3,3	75/80	1.35	**H3EVXBGNXXC**
	1 - 43mm	Electrical signal	Differential	1,7/1,9	30/50	0.65	**H11VXBGNXXC**
	2 - 56mm	Electrical signal	Differential	2,4/1,7	40/80	1.07	**H21VXBGNXXC**
	3 - 71mm	Electrical signal	Differential	3,5/2,4	60/85	1.35	**H31VXBGNXXC**
	1 - 43mm	Electrical signal	Electrical signal	1,7	20	0.7	**H12VXBGNXXC**
	2 - 56mm	Electrical signal	Electrical signal	1,7	25	1.12	**H22VXBGNXXC**
	3 - 71mm	Electrical signal	Electrical signal	2,4	30	1.4	**H32VXBGNXXC**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.7	**H15VXBGNXXC**
	2 - 56mm	Closed center	Self centering	3,5	35/80	1.12	**H25VXBGNXXC**
	3 - 71mm			3,5	40/85	1.4	**H35VXBGNXXC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.7	**H16VXBGNXXC**
	2 - 56mm	Vented center	Self centering	3,5	35/80	1.12	**H26VXBGNXXC**
	3 - 71mm			3,5	40/85	1.4	**H36VXBGNXXC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.7	**H17VXBGNXXC**
	2 - 56mm	Press. center	Self centering	3,5	35/80	1.12	**H27VXBGNXXC**
	3 - 71mm			3,5	40/85	1.4	**H37VXBGNXXC**

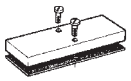
Side ported subbase

	Description	Port size	Weight	Order code BSPP "G"	Order code NPT
	**Individual subbase kit**				
	Subbase with side port				
	Size 02	G1/8	0.07	**PL02-01-70**	**PL02-01-80**
	Size 01	G1/4	0.12	**PL01-02-70**	**PL01-02-80**

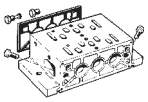
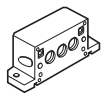
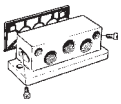
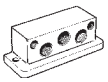
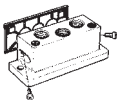
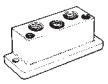
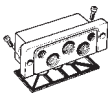
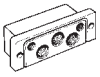
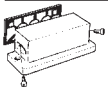
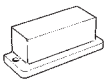
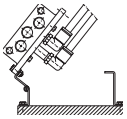
Side ported manifold

	Description	Port size	Weight	Order code BSPP "G"	Order code NPT
	**Two station manifold base with side ports**				
	To suit valves with internal supply solenoid				
	Size 02	G1/8	0.14	**PJLP02-201-70**	**PJLP02-201-80**
	Size 01	G1/4	0.7	**PJLP01-202-70**	**PJLP01-202-80**
	Two station manifold base				
	To suit pneumatic actuated valves				
	Size 01	G1/4	0.73	**PJL01-202-70**	**PJL01-202-80**
	End plate kit - for side ported two station manifold base				
	Size 02	G1/4	0.15	**PEJ02-02-70**	**PEJ02-02-80***
	Size 01	G3/8	0.52	**PEJ01-03-70**	**PEJ01-03-80****
	* Use with PJLP02				
	** Use with PJLP01 or PJL01				
	Gaskets and assembly hardware included.				

Accessories

	Description	Weight	Order code
	**Blanking plate**		
	Size 02	0.04	**DX02BLK**
	Size 01	0.05	**DX01BLK**
	Blanking plug (for subbase PJL)		
	Size 02	0.01	**D02BD0**
	Size 01	0.02	**D01BD0**
	Bolt, washer and nut		
	Size 02		**DX02M2MB**
	Size 01		**DX01M2MB**

ISO 15407-1 - Bottom ported manifold

Accessories	Designation	Weight (kg)	Order code **(P2V-A**, 18 mm)	Weight (kg)	Order code **(P2V-B**, 26 mm)
	**Multiple manifold** Including seal, fitting screws and plugs. Ports 2, 4, and 14 are bottom-connected. Fit plugs as required to provide common supply of operating air and common exhausts for solenoid valves.	0,20	**P2V-AM511NB**	0,40	**P2V-BM512NB**
	Multiple manifold Multiple manifold as above, but with the plugs fitted to suit use with valves with internal supply to solenoid.	0,20	**P2V-AM511PB**	0,40	**P2V-BM512PB**
	**Intermediate manifold, 18 to 26 mm** Including seals and fitting screws. For connecting P2V-AM511NB/PB multiple manifolds to P2V-BM511NB/PB multiple manifolds.	0,33	**P2V-AM500BE**	0,33	**P2V-AM500BE**
	**Connection block** G-side, including seal and fitting screws. For side connection.	0,18	**P2V-AM512GS**	0,21	**P2V-BM513GS**
	**Connection block** H-side. For side connection.	0,18	**P2V-AM512HS**	0,21	**P2V-BM513HS**
	**Connection block** G-side, including seal and fitting screws. For top connection.	0,18	**P2V-AM512GT**	0,21	**P2V-BM513GT**
	**Connection block** H-side. For top connection.	0,18	**P2V-AM512HT**	0,21	**P2V-BM513HT**
	**Connection block** G-side, including seal and fitting screws. For bottom connection.	0,18	**P2V-AM512GB**	0,22	**P2V-BM513GB**
	**Connection block** H-side. For bottom connection.	0,18	**P2V-AM512HB**	0,22	**P2V-BM513HB**
	**End cover** G-side, including seal and fitting screws.	0,19	**P2V-AM500G0**	0,24	**P2V-BM500G0**
	**End cover** H-side	0,19	**P2V-AM500H0**	0,24	**P2V-BM500H0**
	Plug For sealing supply and exhaust air ducts between multiple manifolds with different primary supply pressures.	0,004	**P2V-AK0P**	0,01	**P2V-BK0P**
	**Angle mounting set** For raising multiple manifolds so that angle connections can be fitted to the underside. The parts are designed so that the entire manifold can be angled to simplify connection of the pipes. The set consists of four mounts, complete with all necessary screws and nuts.	0,14	**P2V-AK0M**	0,14	**P2V-AK0M**
	O-ring strip seal For sealing between bases and multiple manifolds. 3.53 mm diameter, Supplied in 5 m lengths.	0,07	**9304331543**	0,07	**9304331543**

Side ported manifold

Description	Port size	Order code
Manifold with two valve positions with terminal Strip (Non collective wiring)		
Size 01 - 26mm	G1/4	**PS551154CP**
Manifold with two single solenoid valve positions with single address board		
Size 02 - 18mm	G1/8	**PS561152JP**
Size 01 - 26mm	G1/4	**PS551154JP**
Manifold with two valve positions with double address board		
Size 02 - 18mm	G1/8	**PS561152MP**
Size 01 - 26mm	G1/4	**PS551154MP**
Extension Manifold with two valve positions with single address board *		
Size 02 - 18mm	G1/8	**PS561152NP**
Size 01 - 26mm	G1/4	**PS551154NP**
Extension Manifold with two valve positions with double address board *		
Size 02	G1/8	**PS561152PP**
Size 01	G1/4	**PS551154PP**

* Use only one per manifold assembly to address more 24 solenoid

Side & bottom ported manifold

Description	Port size	Order code
Manifold with two valve positions with terminal Strip		
Size 01 - 26mm	G1/4	**PS551164CP**
Manifold with two valve positions with single address board		
Size 02 - 18mm	G1/8	**PS561162JP**
Size 01 - 26mm	G1/4	**PS551164JP**
Manifold with two valve positions with double address board		
Size 02 - 18mm	G1/8	**PS561162MP**
Size 01 - 26mm	G1/4	**PS551164MP**
Extension Manifold with two valve positions with single address board		
Size 02 - 18mm	G1/8	**PS561162NP**
Size 01 - 26mm	G1/4	**PS551164NP**
Extension Manifold with two valve positions with double address board		
Size 02	G1/8	**PS561162PP**
Size 01	G1/4	**PS551164PP**

Accessories

Description	Order code
Blanking plate	
Size 02 - 18mm	**PS5634P**
Size 01 - 26mm	**PS5534P**
Manifold to Manifold gasket kit	
HA & HB Gasket Standard	**PS561AP**
HA & HB Gasket 1 Blocked	**PS561BP**
HA & HB Gasket 1 2 3 Blocked	**PS561CP**

Indicates stocked product.

Collective wiring end plate kits

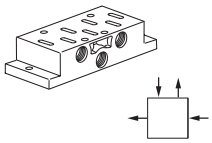
	Description	Port size	Order code
	Left & right ends modules with pressure & exhaust port, auxiliary port , and non collective wiring (only for PS551154CP) Size 02 / 01	G3/8	**PS5631011P**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and SubD25 connection Size 02 / 01	G3/8	**PS5620L21P**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and 19pin Brad Harrison connection Size 02 / 01	G3/8	**PS5620L31P**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and 12pin M23 connection Size 02 / 01	G3/8	**PS5620L41P**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and 16 point terminal strip Size 02 / 01	G3/8	**PS5620L51P**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and ISYSNET (32 output driver is included) Size 02 / 01	G3/8	**PS5620L61P**

Accessories

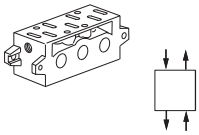
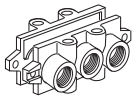
	Description		Order code
	32 output driver module for spare part		**PSSV32A**
	HA & HB 24 Out Cable Size 02 / 01	G3/8	**PS5624P**
	HA & HB 32 Out cable Size 02 / 01	G3/8	**PS5632P**
	25 pin female 25 pin SubD25 cable 3m		**P8LMH25M3A**

Indicates stocked product.

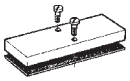
VDMA Side Ported Subbases

	Description	Size	Port size	Weight	Order code
	**Subbases VDMA**				
	Side port according to VDMA	1 - 43mm	G1/4	0.16	**P2N-VS512SD**
	Side port according to VDMA	2 - 56mm	G3/8	0.28	**P2N-WS513SD**
	Side port according to VDMA	3 - 71mm	G1/2	0.35	**P2N-YS514SD**

VDMA Bottom Ported Manifold

	Description	Size	Port size	Weight	Order code
	**VDMA Form C**				
	Bottom port according to VDMA	1 - 43mm	G1/4	0.24	**P2N-VM512MB**
	Bottom port according to VDMA	2 - 56mm	G3/8	0.36	**P2N-WM513MB**
	Bottom port according to VDMA	3 - 71mm	G1/2	0.70	**P2N-YM514MB**
	VDMA Transition plate				
	Size 1 to Size 3	1 to 3	G1/4		**P2N-VM500AK**
	Kit includes: Transition plate only				
	VDMA Form D - End plate				
	According to VDMA	1 - 43mm	G3/8	0.21	**P2N-VM513ES**
	According to VDMA	2 - 56mm	G1/2	0.36	**P2N-WM514ES**
	According to VDMA	3 - 71mm	G1	0.68	**P2N-YM518ES**
	VDMA Isolation - Main galley				
	According to VDMA	1 - 43mm	G3/8	0.21	**P2N-VK0P**
	According to VDMA	2 - 56mm	G1/2	0.36	**P2N-WK0P**
	According to VDMA	3 - 71mm	G1	0.68	**P2N-YK0P**
	Kit includes: (1) Isolator plug.				

Accessories

	Description	Size	Port size	Weight	Order code
	**Blanking plate**				
		1 - 43mm	G1/4	0.10	**P2N-AA5B**
	Kit includes: (1) Blanking plate, (1) Gasket	2 - 56mm	G3/8	0.15	**P2N-BA5B**
	and (4) Mounting bolts	3 - 71mm	G1/2	0.20	**P2N-CA5B**

Indicates stocked product.

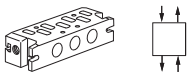
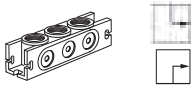
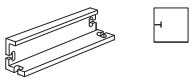
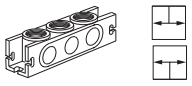
Side ported subbases

	Description	Size	Port size	Weight	Order code BSP	Order code NPT
	Single subbase with side ports 1 3 5 2 4 ports & 12 14	1 - 43mm 1 - 43mm	G1/4 G3/8	0.16 0.16	**PL1-1/4-70** **PL1-3/8-70**	**PL1-1/4-80**
		2 - 56mm 2 - 56mm	G3/8 G1/2	0.28	**PL2-3/8-70** **P2N-HS514SS**	**PL2-3/8-80**
		3 - 71mm 3 - 71mm	G1/2 G3/4		**PL3-1/2-70** **P2N-JS516SD**	**PL3-1/2-80**

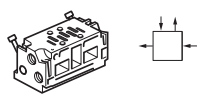
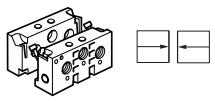
Bottom ported subbases

	Description	Size	Port size	Weight	Order code BSP	Order code NPT
	Single subbase with side ports 1 3 5 2 4 ports & 12 14	1 - 43mm 2 - 56mm 3 - 71mm	G1/4 G3/8 G1/2	0.37 0.59 0.59	**PD1-1/4-70** **PD2-3/8-70** **PD3-1/2-70**	**PD1-1/4-80** **PD2-3/8-80**

Size 1 bottom ported manifold

	Description	Size	Port size	Weight	Order code
	**Manifold** with bottom ports low profile	1 - 43mm	G1/4	0.2	**P2N-AM512MB**
	**Connecting block** Top or bottom ported connecting block for above manifold "low profile"	1 - 43mm	G3/8	0.15	**P2N-AM513GT**
	**End** End piece for above manifold "low profile"	1 - 43mm	no	0.06	**P2N-AM500J**
	**Intermediate supply** Top or bottom ported intermediate supply for above manifold "low profile"	1 - 43mm	G3/8	0.14	**P2N-AM513BT**
	Isolation plugs isolating seal for above manifold "low profile"	1 - 43mm		0.07	**P2N-AK0P**

Sizes 1 & 2 side ported manifold

	Description	Size	Port size	Weight	Order code
	**Manifold** Manifold with side port	1 - 43mm 2 - 56mm	G1/4 G3/8	0.24 0.21	**P2N-EM512MD** **P2N-FM513MD**
	**End** Side ported connecting kit for above manifold with side ports	1 - 43mm 2 - 56mm	G3/8 G1/2	0.36 0.29	**P2N-EM513ES** **P2N-FM514ES**

Indicates stocked product.

Side ported manifold

Description	Size	Port size	Order code
Manifold with terminal Strip (non collective wiring)	1 - 43mm 2 - 56mm 3 - 71mm	G3/8 G1/2 G3/4	**PS401156CCP** **PS411158CCP** **PS421150CCP**
Manifold with single address board (single solenoid)	1 - 43mm	G3/8	**PS401156JCP**
Manifold with double address board	1 - 43mm	G3/8	**PS401156MCP**

Accessories

Description	Size	Port size	Order code
Blanking plate	1 - 43mm 2 - 56mm 3 - 71mm	G3/8 G1/2 G3/4	**PS4034CP** **PS4134CP** **PS4234CP**
Insulation plug	1 - 43mm 2 - 56mm 3 - 71mm	G3/8 G1/2 G3/4	**PS4032CP** **PS4132CP** **PS4232CP**
Manifold to Manifold gasket kit	1 - 43mm	G3/8	**PS4013P**

Coils for plug in valve

Description		Order code
12 V DC	5599-2 coil	**PS404145P**
24 V DC	5599-2 coil	**PS4041B9P**
24 V AC	5599-2 coil	**PS404142P**
120 V AC	5599-2 coil	**PS404123P**
240 V AC	5599-2 coil	**PS404157P**

Indicates stocked product.

Collective wiring end plate kits

	Description	Port size	Order code
	Left & right ends modules with pressure & exhaust port, auxiliary port , and non collective wiring		
	Size 1	G1/2	**PS4031011CP**
	Size 2	G3/4	**PS4131011CP**
	Size 3	G3/4	**PS4231011CP**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and SubD25 connection		
	Size 1	G1/2	**PS4020L21CP**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and 19pin Brad Harrison connection		
	Size 1	G1/2	**PS4020L31CP**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and 12pin M23 connection		
	Size 1	G1/2	**PS4020L41CP**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and ISYSNET		
	Size 1	G3/8	**PS4020L61CP**

Accessories

	Description	Order code
	32 output driver module for spare part	**PSSV32A**
	HA & HB 24 Out Cable	**PS4024P**
	25 pin female 25 pin SubD25 cable 3m	**P8LMH25M3A**
	H1 H2 H3 Pilot Gasket	**PS4007P**
	Valve to base gasket	**PS4005CP**

Indicates stocked product.

Accessories - Sandwich Regulator

Features

- Remote air pilot operated for hard-to-reach pressure control.
- Unregulated pilot pressure to valve for consistent valve shifting regardless of pressure adjustment.

Gauge adaptor kit

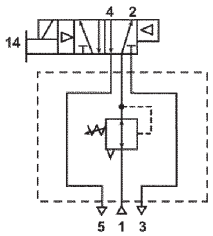
Included with all HB Regulators. Both kits are required on all HA & HB Regulators when the Regulator is on the last station on the right (14) end.

Description	Order code
Gauge kit	PS5651160P

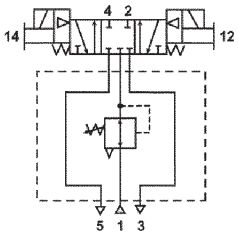
HB & HA Common Port Regulation

Provides adjustable regulated air pressure to the valves #1 port which gives the same pressure to both the #2 and #4 port of the manifold or subbase. The regulator is always on the 14 end of the valve.

Common port regulator with 4-way, 2-position single solenoid valve



Common port regulator with 4-way, 3-position APB valve



HA - 26mm
(Common Port Regulator shown)

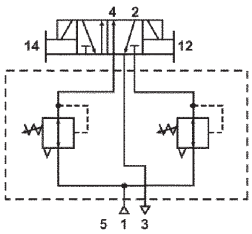
8 bar	Order code	
	Plug-in	Non Plug-in
Size 18mm	PS5638133P	PS5637133P
Size 26mm	PS5538133P	PS5537133P

HB & HA Independent Port Regulation

Dual Port Regulator

Provides regulated pressure to both ports. Pressure regulation can occur out of the #2 or #4 port of the valve. In this case #2 and #4 have to be cross wired.
3 position CP have to be used as a COE
3 position COE have to be used as a CP

Independent dual port regulator with 4-way, 2-position double solenoid valve



Order chart - Sandwich Regulator (please contact Parker Sales Office)

PS5637	1	6	6	P

Series	
HB	
15407-1 18mm	**PS5637**
15407-2 18mm	**PS5638**
HA	
15407-1 26mm	**PS5537**
15407-2 26mm	**PS5538**

Regulator function	
1	Common pressure regulator
2	Independent pressure regulator

#4 Port regulator / Gauge*	
2	2-60 PSIG w/o Gauge
3	5-125 PSIG w/o Gauge
5	2-60 PSIG w/Gauge
6	5-125 PSIG w/Gauge

* For common pressure regulator option. Regulator gauge callout must be the same number for both Port #4 and port #2. (Example: 166)

#2 Port regulator / Gauge*	
2	2-60 PSIG w/o Gauge
3	5-125 PSIG w/o Gauge
5	2-60 PSIG w/Gauge
6	5-125 PSIG w/Gauge

* For common pressure regulator option. Regulator gauge callout must be the same number for both Port #4 and port #2. (Example: 166)

How to Configure Sandwich Regulator / Valve Combinations

Ordering Components

- Manifold or Subbase Kit required.
- Sandwich Regulator Kit configured for Internal Pilot as standard.
- Order valve as External Pilot.

Internal Pilot Configuration -

Pressure in Base Port 1 feeds regulator configured for Internal Pilot which feeds valve configured for External Pilot.

Flow control - ISO 15407 - Sandwich flow controls features

- Both adjustment screws are located on the 12 end of the unit.
- Sandwich Flow Control mounts with its own studs, which means the valve uses standard bolts for mounting.
- Sandwich Flow Control is not to be used as a shut off device and is not bubble tight when needles are fully turned down.

Plug-In
15407-2
18mm Shown

Size	Order code	
	Plug-in	Non Plug-in
	15407-2	**15407-1**
Size 18mm	**PS5635P**	**PS5642P**
Size 26mm	**PS5535P**	**PS5542P**

Accessories - Sandwich Regulator

Features

- Remote air pilot operated for hard-to-reach pressure control.
- Unregulated pilot pressure to valve for consistent valve shifting regardless of pressure adjustment.

Gauge adaptor kit

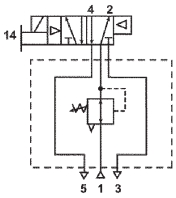
Included with all HB Regulators. Both kits are required on all HA & HB Regulators when the Regulator is on the last station on the right (14) end.

Description	Order code
Gauge kit	PS5651160P

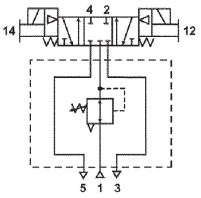
ISYS ISO 1 / 2 / 3 Common Port Regulation

Provides adjustable regulated air pressure to the valves #1 port which gives the same regulated pressure to both the #2 and #4 port of the manifold or subbase. The regulator is always on the 14 end of the valve.

Common port regulator with 4-way, 2-position single solenoid valve



Common port regulator with 4-way, 3-position APB valve



		Order code	
		Plug-in	Non Plug-in
Size 1	8 bar	PS4038133CP	PS5037133CP

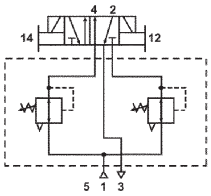
ISYS ISO 1 / 2 / 3 Independent Port Regulation

Dual Port Regulator or Single Port Regulator

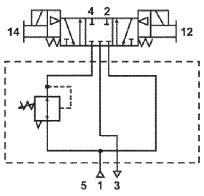
Provides regulated pressure to both ports. Pressure regulation can occur out of the #2 or #4 port of the valve. Full line pressure would be provided with a pass plate.

When using an independent Pressure Sandwich Regulator, the cylinder outlet ports are reversed. The 12 end energizes the #2 port. The 3-Position CE and PC functions are also reversed. (See schematics on right).

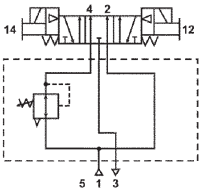
Independent dual port regulator with 4-way, 2-position double solenoid valve



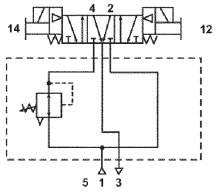
Independent port regulator with 4-way, 3-position all ports blocked valve



Independent port regulator with 4-way, 3-position inlet to cylinder function



Independent port regulator with 4-way, 3-position cylinder to exhaust function



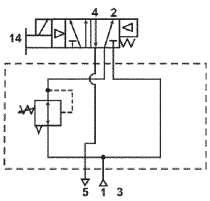
⚠ **CAUTION: Requires 4-way, 3-position, cylinder to exhaust valve**

⚠ **CAUTION: Requires 4-way, 3-position, cylinder to exhaust valve**

ISYS ISO 1 / 2 / 3 Selector Regulation

Supplies two different pressures to the valves #1 and #3 flow paths. Shifting the valve "selects" one or the other of these two pressures to flow out port #2. A Selector Regulator can: 1) Provide regulated pressure to one flow path and full line pressure to the other by use of the Line Pressure By-Pass Plate.

Selector regulator with 4-way, 2-position single solenoid valve



Order chart - Sandwich Regulator (please contact Parker Sales Office)

PS4037 | **1** | **6** | **6** | **C** | **P**

Series	
ISYS ISO Size 1	
5599-1	**PS4037**
5599-2	**PS4038**
ISYS ISO Size 2	
5599-1	**PS4137**
5599-2	**PS4138**
ISYS ISO Size 3	
5599-1	**PS4237**
5599-2	**PS4238**

Regulator function	
1	Common pressure regulator
2	Independent pressure regulator
3	Selector Regulator

#4 Port regulator / Gauge*	
0	Line By-Pass Plate**
1	1-30 PSIG w/o Gauge
2	2-60 PSIG w/o Gauge
3	5-125 PSIG w/o Gauge
4	1-30 PSIG w/Gauge
5	2-60 PSIG w/Gauge
6	5-125 PSIG w/Gauge
C	Air Pilot w/60 PSIG Gauge
D	Air Pilot w/60 PSIG Gauge

* For common pressure regulator option. Regulator gauge callout must be the same number for both Port #4 and port #2. (Example: 166)

** Pressure Line By-Pass Option can only be used with independent and Selector Regulators (Option 2 & 3 in Sandwich Block Function).

#2 Port regulator / Gauge*	
0	Line By-Pass Plate**
1	1-30 PSIG w/o Gauge
2	2-60 PSIG w/o Gauge
3	5-125 PSIG w/o Gauge
4	1-30 PSIG w/Gauge
5	2-60 PSIG w/Gauge
6	5-125 PSIG w/Gauge
C	Air Pilot w/60 PSIG Gauge
D	Air Pilot w/60 PSIG Gauge

* For common pressure regulator option. Regulator gauge callout must be the same number for both Port #4 and port #2. (Example: 166)

** Pressure Line By-Pass Option can only be used with independent and Selector Regulators (Option 2 & 3 in Sandwich Block Function).

How to Configure Sandwich Regulator / Valve Combinations

Ordering Components

- Manifold or Subbase Kit required.
- Sandwich Regulator Kit configured for Internal Pilot as standard.
- Order valve as External Pilot.

Internal Pilot Configuration -

Pressure in Base Port 1 feeds regulator configured for Internal Pilot which feeds valve configured for External Pilot.

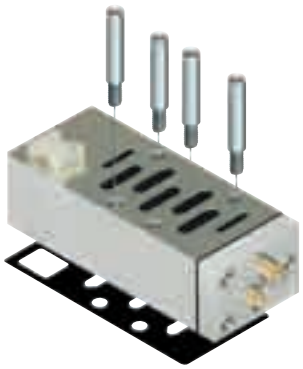
External Pilot Configuration - H1, H2, H3

An External Pilot pressure in Port 12 or 14 of the base feeds thru the Sandwich Regulator 12 or 14 galley directly to the 12/14 pilot of the valve.
This configuration takes an External Pilot from the 12 port of the base and passes it thru the regulator to feed the 12 galley of the valve.

Flow Control - Size 1 / 2 / 3 - ISO 5599 - Sandwich flow controls features

- Both adjustment screws are located on the 12 end of the unit.
- Sandwich Flow Control mounts with its own studs, which means the valve uses standard bolts for mounting.

Size	Order code	
	Plug-in	Non Plug-in
	5599-2	**5599-1**
Size 1	**PS4035CP**	**PS4042CP**
Size 2	**PS4135CP**	**PS4142CP**
Size 3	**PS4235CP**	**PS4242CP**



Plug-In
5599-2
Size 2 Shown

Solenoid coils with Din A or Industrial connection

Voltage	Order code Din A Standard 30 x 30	Weight (Kg)	Order code Din A Mobile 30 x 30	Weight (Kg)	Order code Industrial standard 22 x 30	Weight (Kg)
Direct current						
12V DC	**P2FCA445**	0.105	**P2FCA447**	0.105	**P2FCB445**	0.093
24V DC	**P2FCA449**	0.105	**P2FCA448**	0.105	**P2FCB449**	0.093
48V DC	**P2FCA453***	0.105	**P2FCA474**	0.105	**P2FCB451**	0.093
72V DC			**P2FCA470**	0.105		
96V DC			**P2FCA471**	0.105		
110V DC			**P2FCA472**	0.105		
Alternative current						
12V 50/60Hz	**P2FCA440**	0.105			**P2FCB440**	0.093
24V 50/60Hz	**P2FCA442**	0.105			**P2FCB442**	0.093
48V 50/60Hz	**P2FCA469#**	0.105				
110V 50Hz, 120V 60Hz	**P2FCA453**	0.105			**P2FCB453**	0.093
230V 50Hz, 230V 60Hz	**P2FCA457**	0.105			**P2FCB457**	0.093

* P2FCA453 is compatible with 110 V AC and 48 V DC

\# P2FCA469 is 24 V DC 6.8W or 48 V 50Hz 9.9 VA

Solenoid coils with M12 connection

Voltage	Order code 30 x 30	Weight (Kg)	Order code 22 x 30	Weight (Kg)
Direct current				
24V DC	**P2FC6419**	0.065	**P2FC7419**	0.065

Spare Solenoid Nuts

Valves requiring captured exhaust should be fitted with plastic knurled nut

Order code
P2FNP

Valves with vented exhaust are fitted with diffuser plastic nut

Order Code
P2FND

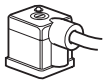
Spare Solenoid Operators

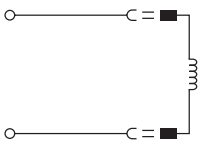
Solenoid pilot operator CNOMO NC

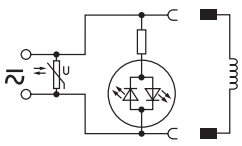
Description	Order code No manual override	Weight (Kg)	Order code Non-lock manual override	Weight (Kg)	Order code Locking manual override	Weight (Kg)
Standard duty	**P2FP23N4A**	0.065	**P2FP23N4B**	0.065	**P2FP23N4C**	0.065
Mobile metal	**P2FP43M4A**	0.1				

Note.
Solenoid pilot operators are fitted to the Viking valve range. Order the above part numbers for spares. The operators are supplied with mounting screws and interface 'O' rings.
Coils and connectors must be ordered separately.

Solenoid Connectors / Cable Plugs EN175301-803

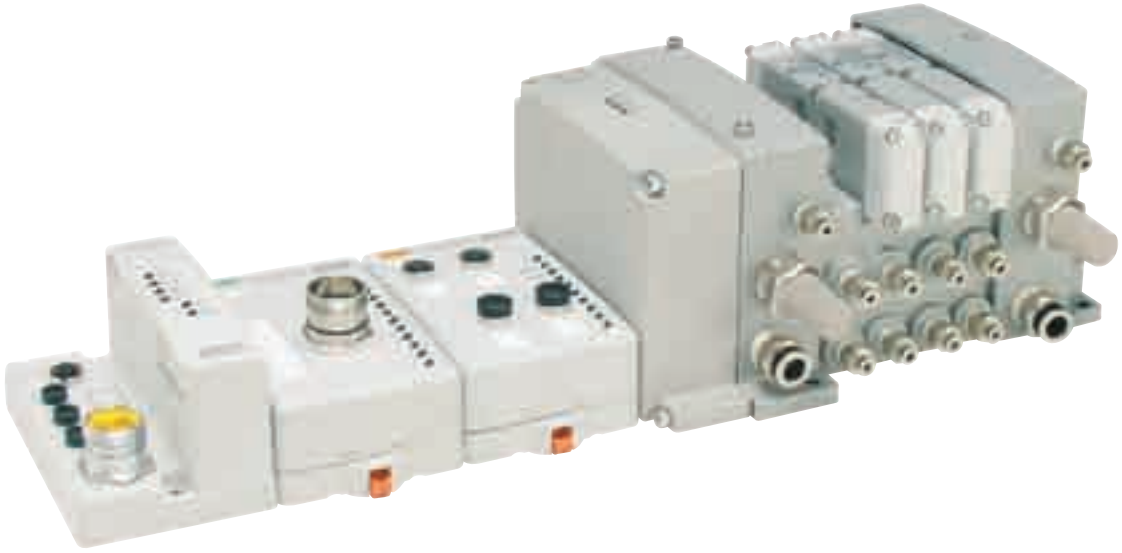
	Description	Order code 15mm Form C/ISO15217	Order code 22mm Industrial Form B	Order code 30mm Form A/ISO4400
With large headed screw suitable for mounting in inaccessible or recess position	Standard IP65	**P8C-C**		
	24V DC LED and protection IP65	**P8C-C26C**		
	110V AC LED and protection IP65	**P8C-C21E**		
With standard screw	Standard IP65 without flying lead	**P8C-D**	**3EV10V10**	**3EV290V10**
	With LED and protection 24V AC/DC	**P8C-D26C**	**3EV10V20-24**	**3EV290V20-24**
	With LED and protection 110V AC	**P8C-D21E**	**3EV10V20-110**	**3EV290V20-110**
	With LED and protection 230V AC		**3EV10V20-230**	**3EV290V20-230**
With cable 	Standard with 2m cable IP65	**P8L-C2**		
	Standard with 5m cable IP65	**P8L-C5**		
	24V AC/DC, 2m cable LED and protection IP65	**P8L-C226C**		
	24V AC/DC, 5m cable LED and protection IP65	**P8L-C526C**	**3EV10V20-24L5**	**3EV290V20-24L5**
	24V AC/DC, 10m cable LED and protection IP65	**P8L-CA26C**		
	110V AC/DC, 2m cable LED and protection IP65	**P8L-C221E**		
	110V AC/DC, 5m cable LED and protection IP65	**P8L-C521E**	**3EV10V20-110L5**	**3EV290V20-110L5**
	230V AC, 5m cable LED and protection IP65		**3EV10V20-230L5**	**3EV290V20-230L5**





P8C-C	**P8C-D26C**	**P8L-C226C**
P8C-D	**P8C-D21E**	**P8L-C526C**
P8L-C2	**P8C-C26C**	**P8L-CA26C**
P8L-C5	**P8C-C21E**	**P8L-C221E**
3EV10V10		**P8L-C521E**
	3EV10V20-24	**3EV10V20-24L5**
	3EV10V20-110	**3EV10V20-110L5**
	3EV10V20-230	**3EV10V20-230L5**

Field Bus System



Integrated Solution

- A complete field bus communication offering for all ISO valves.
- Extremely fast I/O backplane uses change-of-state (COS) connections to maximize performance.
- UL, C-UL and CE certifications (as marked).

I/O Modules

- Accepts signals from sensors, photo eyes, limits and other field input devices.
- Provides signals to remotely operating solenoid valves and other field operating output devices.
- Choice of digital, analog, high watt I/O Modules.
- Choose from a broad range of color coded I/O types with connector choices of 8mm, 12mm or M23.
- Built-in miswiring, short circuit, open circuit detection with electronic feedback.

Modularity

- Ease of module replacement with unique latching mechanisms eliminating the need for screws.
- Auto Device Replacement allows OEMs to add I/O modules without making changes to the control software.
- Built-in panel grounding.
- Electronic and mechanical keying prevents users from placing I/O modules in the wrong sequence.

Communication Modules

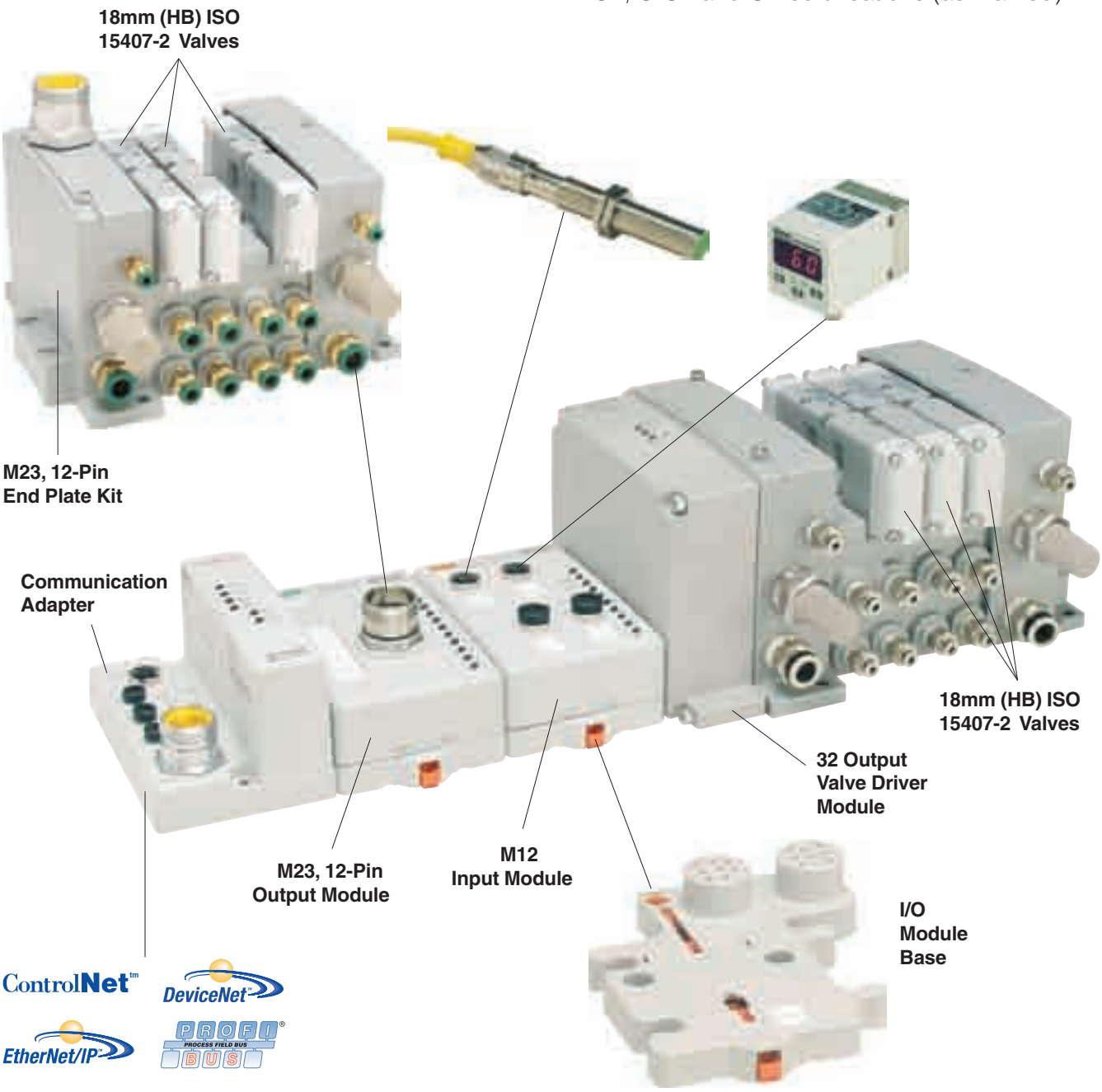
- A Communication Module supports up to a maximum of 63 I/O modules and up to 264 Inputs and 264 Outputs.

ControlNet™ DeviceNet™ EtherNet/IP™ PROFIBUS PROCESS FIELD BUS

ISYSNET Field Bus System

Centralised Solution

- A complete field bus communication offering for all ISO valves.
- UL, C-UL and CE certifications (as marked).



I/O Configuration

- Centralized isysnet system.
- Pneumatics and I/O are in close proximity to one another
- I/O density per module = 8.

Communication Modules

PSSCENA

PSSCCNA

†§	DeviceNet™ (M18 or M12)	**PSSCDM18PA** (M18) or **PSSCDM12A** (M12)	10 to 28.8VDC
†§	ControlNet™	**PSSCCNA**	10 to 28.8VDC
†§	EtherNet I/P™	**PSSCENA**	10 to 28.8VDC
†§	Profibus-DP®	**PSSCPBA**	10 to 28.8VDC

* IP67 Certified

† Reference the following documents for installation instructions.
DeviceNet - E101P, PSS-UM001A; ControlNet - E103P
Ethernet I/P - E104P; Profibus-DP - E102P

§ Requires a PSST8M23A or PSSV32A in all manifold assemblies. PSSV32A is included in factory assembled manifolds and ISYSNET end plate kits.

EDS and GSD files located at www.parker.com/pneu/isysnet

I/O Modules

PSST8M12A

PSST8M23A

PSSNACM12A

PSSTACM12A

PSSN8M8A

†	8 Digital Inputs M12 on 4 M12 connectors for PNP Sensors	**PSSN8M12A**	10 to 28.8VDC
†	8 Digital Inputs M12 on 4 M12 connectors for NPN Sensors	**PSSP8M12A**	10 to 28.8VDC
†	8 Digital Inputs M8 for PNP Sensors	**PSSN8M8A**	10 to 28.8VDC
†	8 Digital Inputs M8 for NPN Sensors	**PSSP8M8A**	10 to 28.8VDC
+	8 Digital Outputs M12 (PNP Sourcing)	**PSST8M12A**	10 to 28.8VDC
+	8 Digital Outputs M8 (PNP Sourcing)	**PSST8M8A**	10 to 28.8VDC
§	4 Digital Output, High Watt Relay M12 (PNP Sourcing) (2 Amp)	**PSSTR4M12A**	24VDC
+#	8 Digital Outputs M23 (PNP Sourcing)	**PSST8M23A**	10 to 28.8VDC
‡	2 Analog Inputs Voltage (M12)	**PSSNAVM12A**	0 to 10V ± 10V
‡	2 Analog Inputs Current (M12)	**PSSNACM12A**	4 to 20mA or 0 to 20mA
**	2 Analog Outputs Voltage (M12)	**PSSTAVM12A**	0 to 10V ± 10V
**	2 Analog Outputs Current (M12)	**PSSTACM12A**	4 to 20mA or 0 to 20mA

* IP67 Certified

Reference the following Documents for Installation Instructions.
† E106P § E109P ** E111P
+ E107P ** E111P
#Can be used with PSSTERM.
See www.parker.com/pneu/isysnet

Home

Valve Driver Modules

32 Point Module – HB, HA, H1, H2, H3	**PSSV32A*†**
24 Output Cable – HB, HA	**PS5624P†**
25 - 32 Output Cable – HB, HA	**PS5632P†**
24 Output Cable – H1, H2, H3	**PS4024P†**

* Reference Document E100P for Installation Instructions. See www.parker.com/pneu/isysnet

† Isysnet Add-A-Folds assemblies and end plate kits include a valve driver module (PSSV32A) and cable.

HB / HA 24 output manifolds require a PS5624P.

HB / HA 32 output manifolds require a PS5624P + PS5632P.

H1, H2, H3 manifolds require a PS4024P, allowing 21 outputs.

Included in kits:- **PS5620L61P**
PS4020L61CP

PSSV32A

Terminating Module	**PSSTERM**

Used as the last Terminating Module for a Stand Alone isysnet Assembly.

A PSST8M23A must be located in the isysnet assembly.

PSSTERM

Power Extender Module

24VDC Field Power Module	**PSSSE24A**	24VDC

A Power Extender Module must be used on every 12th Module in an isysnet assembly. See www.parker.com/pneu/isysnet

Reference Document E105P and PSS-SG001 for configuration instructions. See www.parker.com/pneu/isysnet

PSSSE24A

Bus Extender Cable

1 Meter Cable*	**PSSEXT1**	24VDC
3 Meter Cable*	**PSSEXT3**	24VDC

* Requires a PSSSE24 Power Extender Module.

IP67 Certified

Reference the following Documents for Installation Instructions. E117P

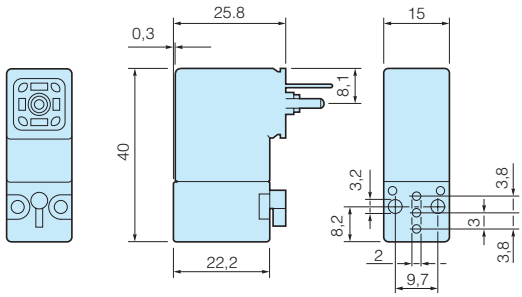
See www.parker.com/pneu/isysnet

PSSEXT1

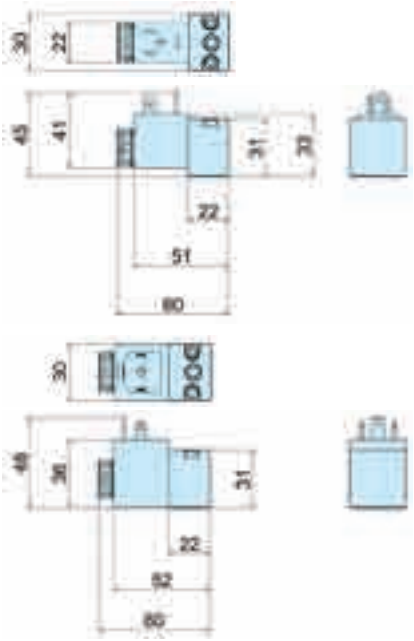
Solenoid dimensions

Cable Plug Dimensions (mm)

Solenoid operators P2E - 15mm

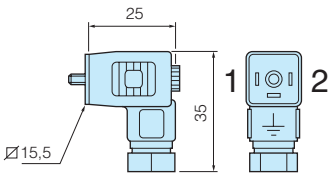


Solenoid operators P2F - CNOMO - 22 x 30mm



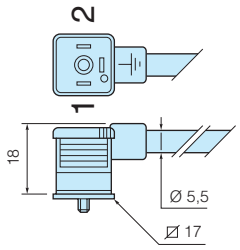
Cable plugs

P8L-C2
P8LC5
P8L-C226C
P8L-C526C
P8L-CA26C
P8L-C221E
P8L-C521E



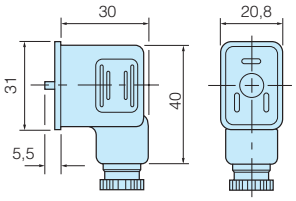
Cable plugs

P8C-C
P8C-C26C
P8C-C21E
P8C-D
P8C-D26C
P8C-D21E



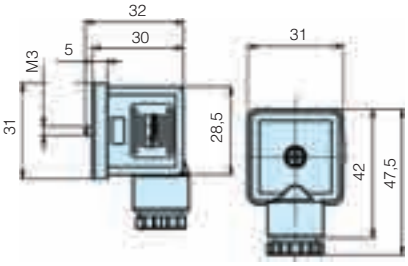
Cable plugs

3EV10V10



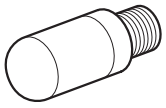
Cable plugs

3EV290V10



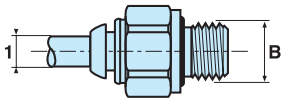
Accessories

Silencers



Port	Ordercode	Pack Qty
G1/8	P6M-PAB1	10
G1/4	P6M-PAB2	10
G3/8	P6M-PAB3	10
G1/2	P6M-PAB4	10

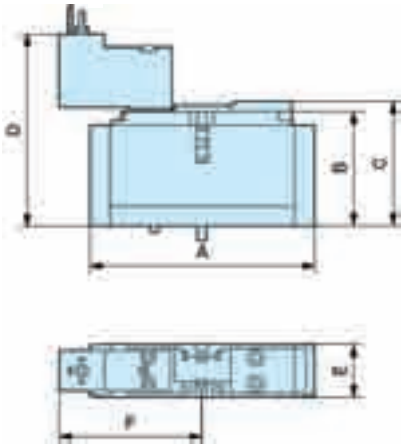
Fittings



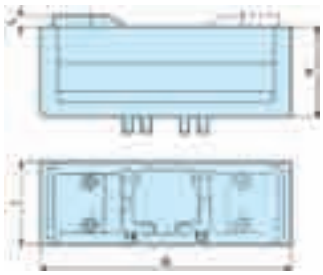
Male connector - BSPP

Tube dia 1	Thread B	Ordercode	Box Qty
4	1/8	F4PMB4-1/8	20
4	1/8	F4PMB4-1/8	20
6	1/8	F4PMB6-1/8	30
8	1/8	F4PB8-1/8	40
6	1/4	F4PMB6-1/4	30
8	1/4	F4PB8-1/4	30
10	1/4	F4PB10-1/4	20
12	1/4	F4PB12-1/4	10
8	3/8	F4PB8-3/8	20
10	3/8	F4PB10-3/8	20
12	3/8	F4PB12-3/8	10
14	3/8	F4PB14-3/8	10
10	1/2	F4PB10-1/2	10
12	1/2	F4PB12-1/2	10
14	1/2	F4PB14-1/2	10

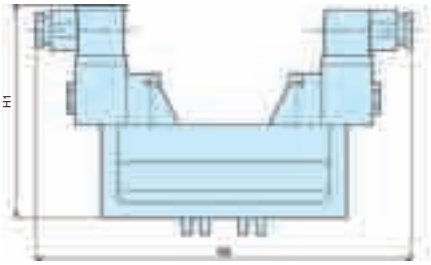
Isomax - Dimensions (mm)



Pneumatically actuated



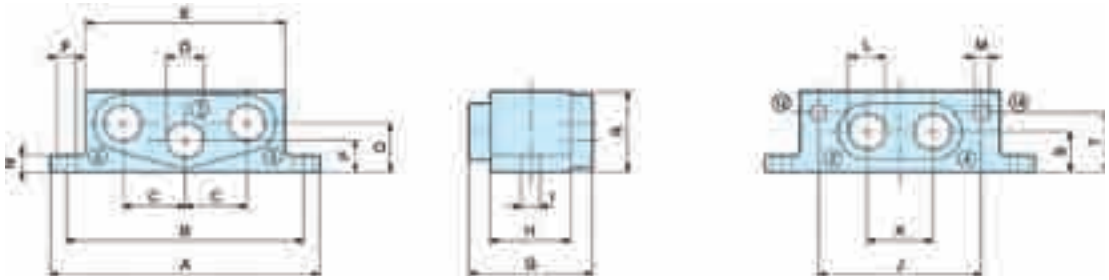
With P2F solenoids



	A	B	C	D	E	F
Isomax 02	80	41	44,5	67,8	18	51,2
Isomax 01	100	42	45,5	68,8	26	51,2

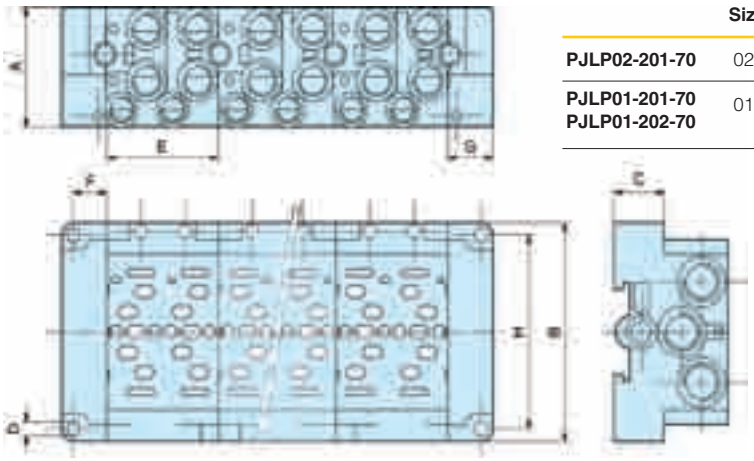
	G	G1	G2	G3	H	H1	I	L
Size 1	120	164	202,5	160	47	119	42	5
Size 2	140	179,5	218	175,5	58,5	130	54	5
Size 3	170	198	235,5	194	71	142,5	68	5

Single subbases side ported



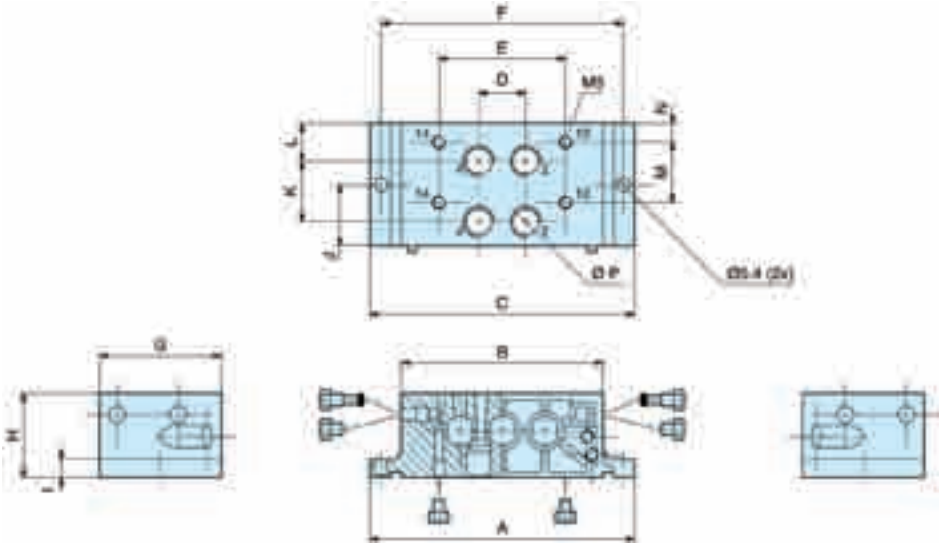
	Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T
PL02-01-70	02	80	70	16	G1/8	52	8	27	19	5,5	40	17	G1/8	M5	8	8	8	22	13	6
P2V-BS512SS	01	92	80	21,2	G1/8	68	6,5	42	27	5,5	55	22	G1/8	M5	6	11	17	28	14	21

Side ported manifolds for 2 valve positions



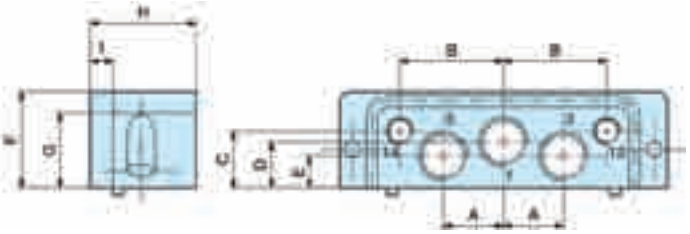
	Size	A	B	C	D	E	F	G	H
PJLP02-201-70	02	38,5	80	12	Ø 4,2	38	14	18	72
PJLP01-201-70 **PJLP01-202-70**	01	55	100	24	Ø 5,5	54	17	22	90

Bottom ported manifolds for 2 valve positions



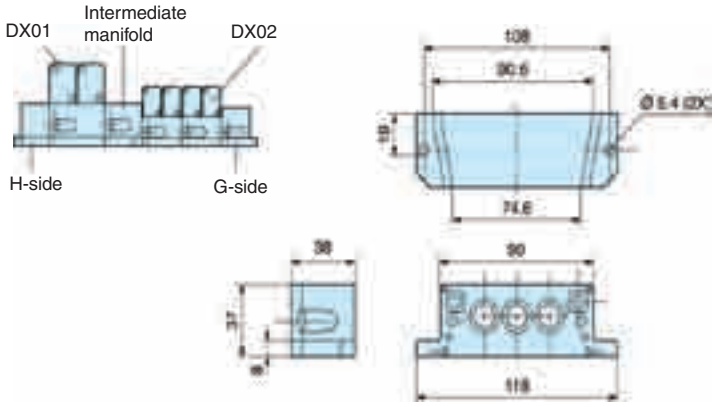
	Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
P2V-AM511PB	**02**	102	74	74,6	16	43	92	38	26	7	19	19	11	19	5	G1/8
P2V-BM512PB	**01**	118	90	90,6	21	56,5	108	54	37	8	27	27	16,5	27	8	G1/4

G and H side end plate bottom ported for above bottom ported manifold



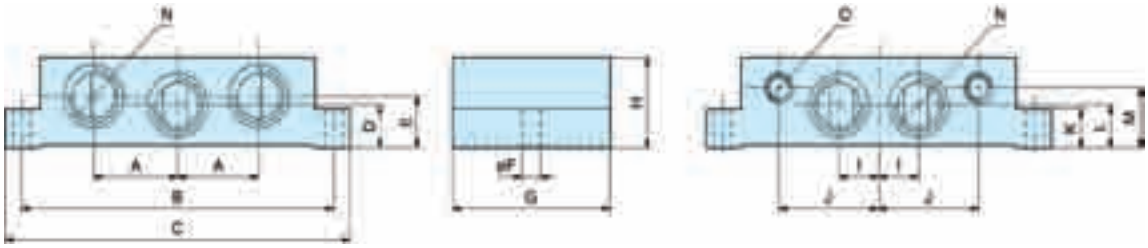
	Size	Port size 1,2,3	Port size 12, 14	A	B	C	D	E	F	G	H	I
P2V-AM512GB and P2V-AM512HB	**02**	G1/4	G1/8	17	29	21	18,5	9,5	35,5	28	33	7
P2V-BM513GB and P2V-BM513HB	**01**	G3/8	G1/8	21,5	37	20	16	11	34,5	28	38	8

Transfer plate size 01 to size 02 for above bottom ported manifold



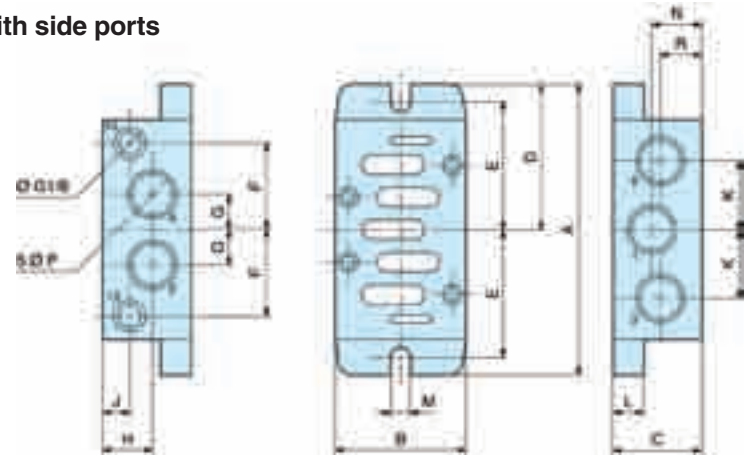
Dimensions

Single subbase with side ports according to VDMA



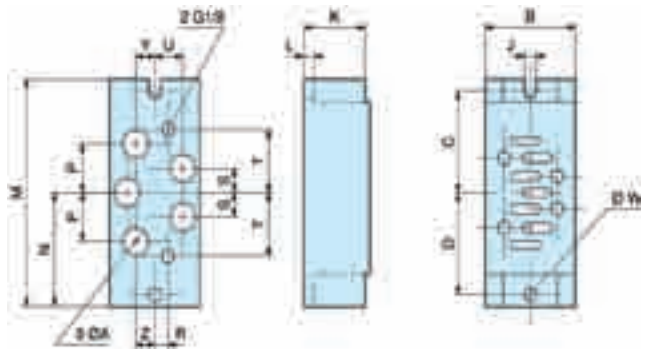
Order code	ISO Size	Port Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P2N-VS512SD	1	G1/4	21,5	98	110	11	20	5,5	48	32	12	29	10	11	23	G1/4	G1/8
P2N-WS513S	2	G3/8	28	112	124	14	26	6,6	56	40	15	37	13	14	30	G3/8	G1/8
P2N-YS514SD	3	G1/2	34	136	149	17	17	6,6	71	32	16	45	18	17	22	G1/2	G1/8

Single subbase with side ports



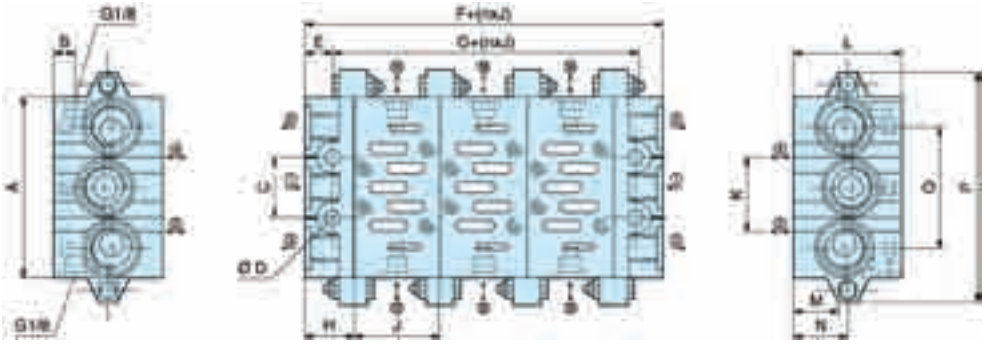
Order code	ISO Size	ØP	A	B	C	D	E	F	G	H	J	K	L	M	N	R
PL1-1/4-70	1	G1/4	110	46	29	55	49	30	11	17,75	17,75	22	6	5,5	17,75	17,75
PL2-3/8-70	2	G3/8	124	56	37	62	55	37	14,5	22,5	14	28	6	5,5	22,5	14,5
P2N-JS516SD	3	G3/4	149	71	60	74,5	68	45	21	33	10	40	18	6,6	37,5	22,5

Single subbase with bottom ports



Order code	A	B	C	D	J	K	L	M	N	P	R	S	T	U	W	Y	Z
PD1-1/4-70	G1/4	46	49	49	5,5	29	6	110	55	22	10	11	30	10	5,5	10	10
PD2-3/8-70	G3/8	56	55	55	5,5	37	6	124	62	29	10	14,5	37	12,5	5,5	12,5	12,5
PD3-1/2-70	G1/2	77	68	68	6,6	32	18	149	74,5	34	10	17	45	17	6,5	17	17

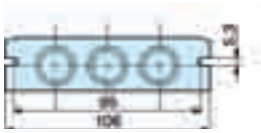
Manifold and end plates according to VDMA (P2N-VM / WM / YM)



ISO Size	Port 1, 3, 5	Port 2, 4	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
1	G3/8	G1/4	85	8,5	28	7	11	44	22	22	43	26	46	21	24	56	110
2	G1/2	G3/8	100	9	35	9	13	52	26	26	56	30	47	22	24	68	135
3	G1	G1/2	140	10	52	12	15	60	30	30	71	38	56	31	34	104	190

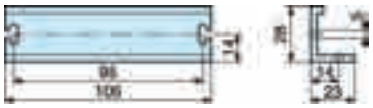
Manifold and end plates with bottom ports "low profile" (P2N-AM..)

Manifold P2N-AM512MB



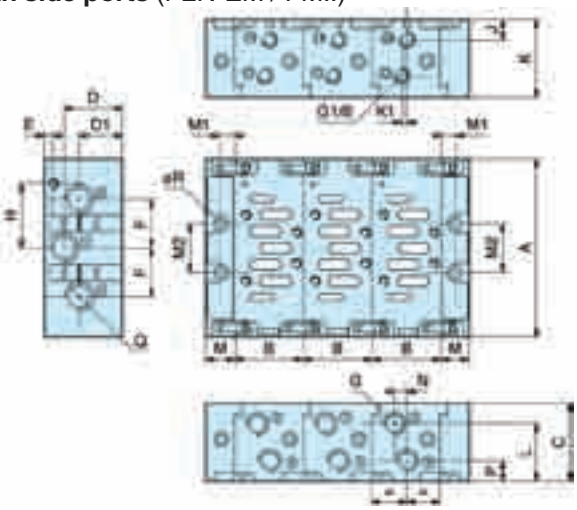
Connecting block P2N-AM513GT

End piece P2N-AM500J



Intermediate supply P2N-AM513BT

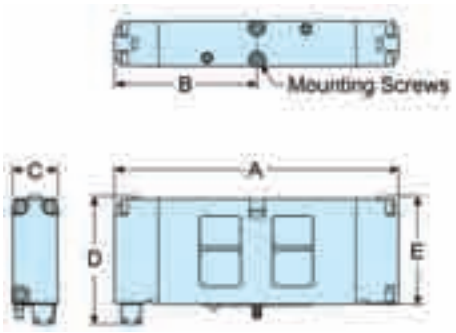
Manifold and end plates with side ports (P2N-EM / FM..)



Order code	A	B	C	D	D1	E	F	G	H	J	K	K1	L	M	M1	M2	N	P	Q	R
P2N-EM . . .	110	43	48	35,5	26,5	5,5	28	G1/4	36	15,5	35	3	32	20	11	28	12	12,5	G3/8	6
P2N-FM . . .	129	56	60	44,5	35,5	6	34,5	G3/8	45	16	41,5	3	41	24	13	35	12,5	16	G1/2	8

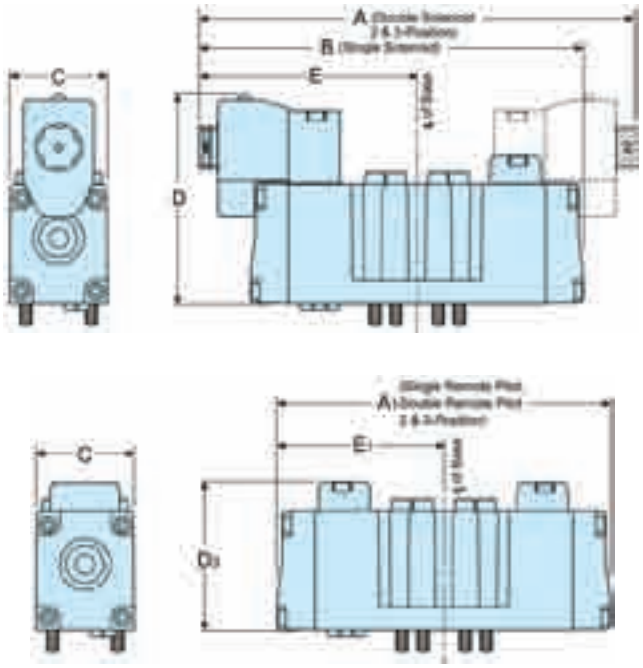
Isysnet Field Bus System - Dimensions

15407-2 Series Valves



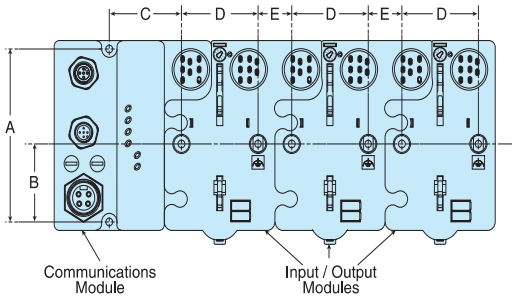
	A	B	C	D	E
HB	113	56	18	50	43
HA	130	65	26	50	42

H1 / H2 / H3 Series Valves 5599-2



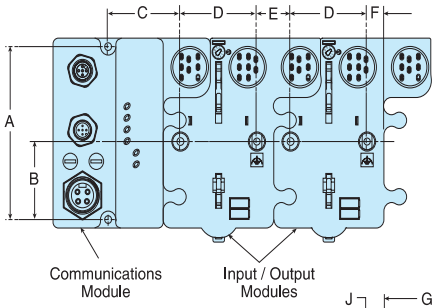
	A	A1	B	C	D	D1	D2	D3	D4	E	E1
H1	186	142	164	42	90	109	109	63.5	63	93	71
H2	212	168	190	55	103	122	116	76		106	84
H3	241	177	209	55	103	122	116	76		121	89

Isysnet Field Bus System - Dimensions



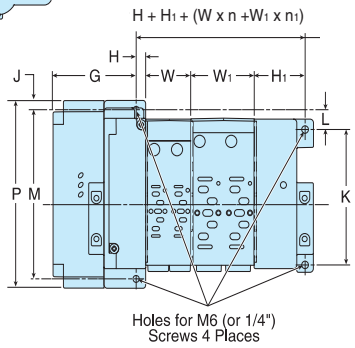
HB-HA

A	B	C	D	E	F
102	46	48	51	22	11

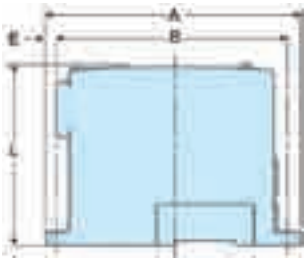


HB-HA

A	B	E	L	G	H
152	137	7,5	106	68	8,4
H_1	**J**	**K**	**L**	**M**	**P**
45,8	4	110	16	137	152
W	**W_1**				
40,8	56,8				

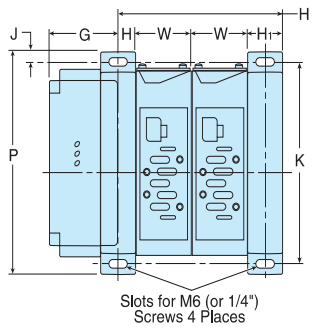


n = Number of 18mm HB Bases
n1 = Number of 26mm HA Bases
W= Width of 18mm HB Bases
W1 = Width of 26mm HA Bases



H1

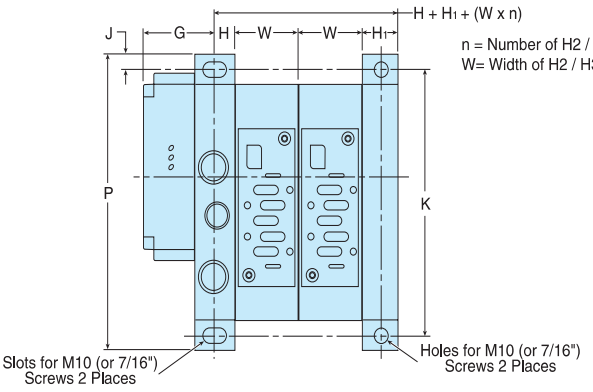
G	H	H_1	J	K
56	15,9	15,9	8,5	165
P	**W**			
182	49			



n = Number of H1 Bases
W= Width of H1 Bases

H2

G	H	H_1	J	K
58	8,4	15	12	215
P	**W**			
239	56			

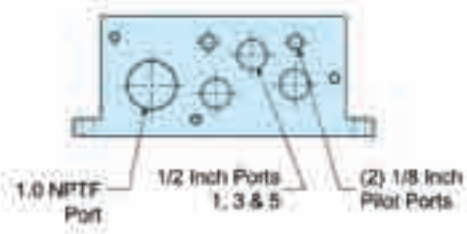


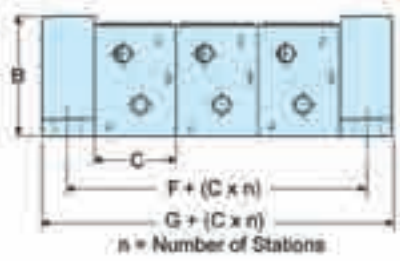
n = Number of H2 / H3 Bases
W= Width of H2 / H3 Bases

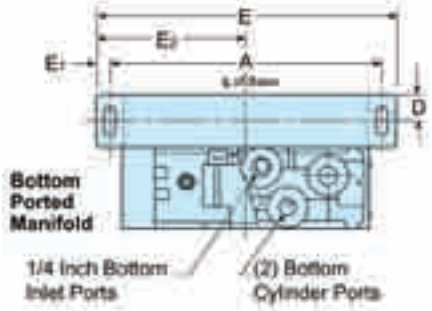
H3

G	H	H_1	J	K
64	24	16,5	15	265
P	**W**			
295	71			

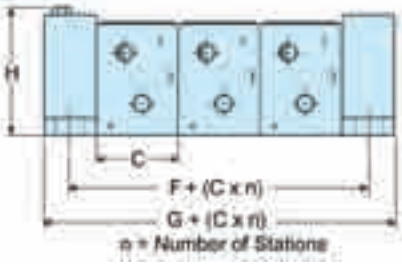
H1 5599-2 / 5599-1 Manifold





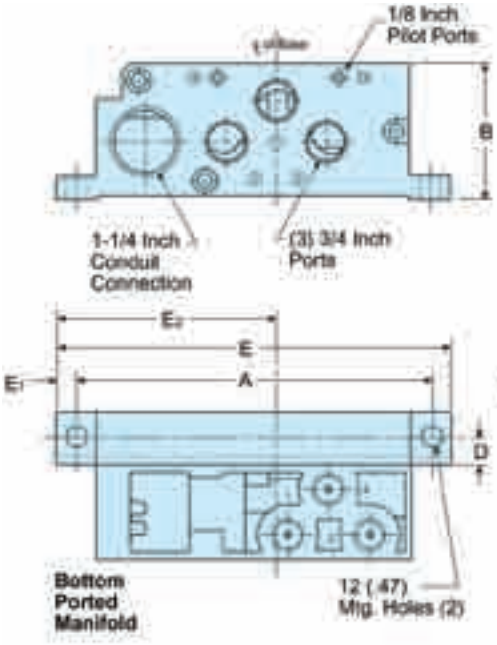


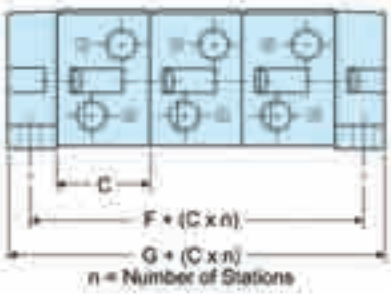
Manifold with Optional Collective Wiring System



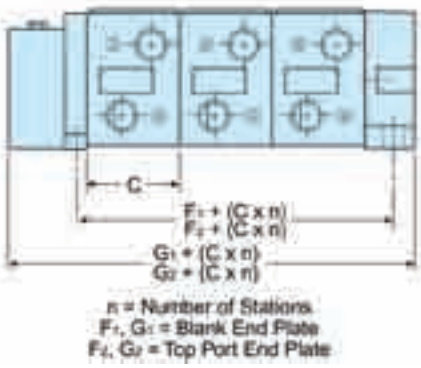
	A	B	C	D	E	E1	E2	F	G	H
H1	165	73	49	15.9	182	.84	91	31.8	63.5	76

H2 / H3 5599-2 / 5599-1 Manifold





Manifold with Optional Collective Wiring System



	A	B	C	D	E	E1	E2	F	F1	F2	G	G1*	G2*
H2	215	85	56	15	239	12	134	30	27	33	60	87	99

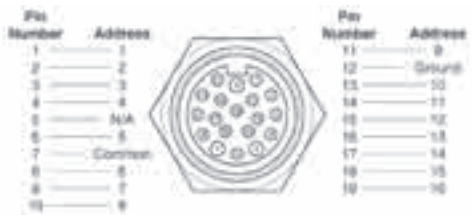
	A	B	C	D	E	E1	E2	F	F1	F2	G	G1*	G2*
H3	265	105	71	17	295	15	159	33	29	41	63	90	114

Maximum Solenoids Energized Simultaneously

HA HB	Voltage code	25-pin D-Sub	19-pin round	Single 12-pin M23	Isysnet	
24 V DC	B9 / G9	24	16	8	32	
120 V AC*	23	24	16	8	32	
H1 H2 H3	Voltage code	25-pin D-Sub	19-pin round	Single 12-pin M23	Isysnet	SAM 3.0
12 V DC	45	13	13	8	N/A	N/A
24 V AC*	42	24	16	8	N/A	N/A
24 V DC	B9	20	16	8	21	4
120 V AC*	23	24	16	8	N/A	N/A

* Not CSA certified for 25-pin, D-Sub option.

19-Pin Round Brad Harrison



Face View - Male 19-Pin Connector

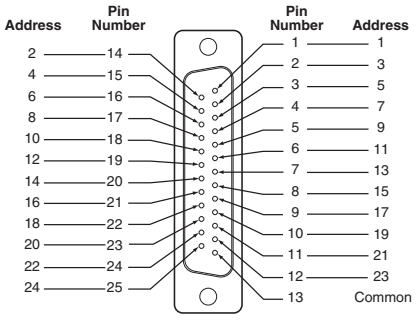
19-Pin Round Cable Specifications

Common Pin "7" is rated for 8 amps. Cable common wire must be greater than total amperage of solenoids on Add-A-Fold assembly.

Example:- 8 station manifold, 16 solenoids,
120VAC - 16 x .039 amps = .63 total amp rating.
NEMA 4 rated with properly assembled NEMA 4 rated cable.

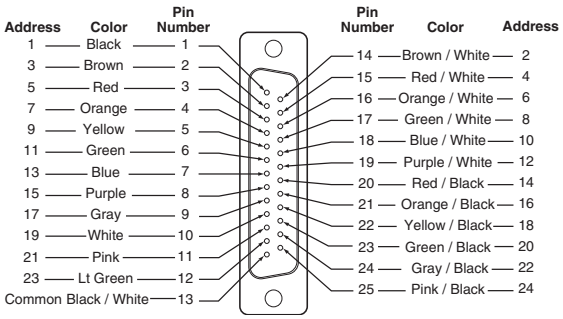
Brad Harrison #333030P80M050	16.40 ft. (Female to Male Cable)
Brad Harrison #333030P80M0100	32.80 ft. (Female to Male Cable)

25-Pin, D-Sub Connector (Male)



Face View - Male D-Sub, 25-Pin Connector

25-Pin, D-Sub Cable (Female)



25-Pin, D-Sub Cable Specifications

Common Pin “13” is rated for 3 amps. Common wire rating must be greater than total amperage of all solenoids on a Add-A-Fold assembly.

IP65 rated with properly assembled IP65 rated cable.

M23, 12-Pin Round Connector (Male)

Face View - Male M23, 12-Pin Connector

M23, 12-Pin Round Connector (Female)

Face View - Female M23, 12-Pin Connector

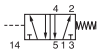
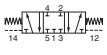
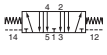
The Viking Xtreme valve range is robust, versatile and combines high performance with compact installation dimensions. Large flow capacity, short change-over times and low change-over pressure are important characteristics of this valve range.

- 4 sizes: G1/8, G1/4, G3/8 and G1/2.
- Wide operating temperature range
- Compact design with good corrosion resistance.
- Wide range of 5/2 and 5/3 versions.
- High and low temperature versions available for transport applications.

Operating information

	P2L-AX	P2L-BX	P2L-CX	P2L-DX
Working pressure:	16 bar	16 bar	12 bar	12 bar
Working temperature, standard				
Air pilot solenoid		-40 °C to +60 °C		
Standard and food version		-10 °C to +50 °C		
Mobile version		-40 °C to +60 °C		
Flow (Qmax);	**P2L-AX**	**P2L-BX**	**P2L-CX**	**P2L-DX**
	19,0 l/s	38,0 l/s	72,0 l/s	78,0 l/s

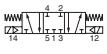
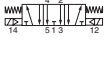
Pneumatically actuated 5/2 and 5/3 valves

Symbol	Size	Actuator	Return	Order code
	G1/8 G1/4 G3/8 G1/2	Air pilot	Air pilot	**P2LAX511PP** **P2LBX512PP** **P2LCX513PP** **P2LDX514PP**
	G1/8 G1/4 G3/8 G1/2	Air pilot	Spring	**P2LAX511PS** **P2LBX512PS** **P2LCX513PS** **P2LDX514PS**
	G1/8 G1/4 G3/8 G1/2	Air pilot Closed centre	Air pilot Self centring	**P2LAX611PP** **P2LBX612PP** **P2LCX613PP** **P2LDX614PP**
	G1/8 G1/4 G3/8 G1/2	Air pilot Vented centre	Air pilot Self centring	**P2LAX811PP** **P2LBX812PP** **P2LCX813PP** **P2LDX814PP**
	G1/8 G1/4 G3/8 G1/2	Air pilot Pressure centre	Air pilot Self centring	**P2LAX711PP** **P2LBX712PP** **P2LCX713PP** **P2LDX714PP**

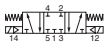
Lever actuated 5/2 and 5/3 valves

Symbol	Size	Actuator	Return	Order code
	G1/8	Lever	Lever	**P2LAX511VV**
	G1/8	Lever	Spring	**P2LAX511VS**
	G1/8	Lever	Lever	**P2LAX61122**
	G1/8	Lever	Lever	**P2LAX81122**
	G1/8	Lever	Lever	**P2LAX61111**
	G1/8	Lever	Lever	**P2LAX81111**

Electrically actuated 5/2 and 5/3 valves - 15mm solenoid

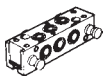
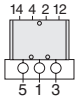
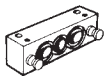
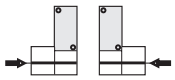
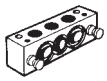
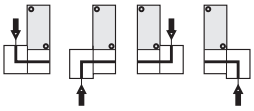
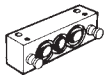
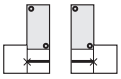
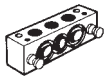
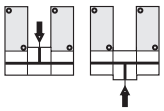
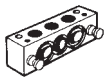
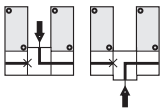
Symbol	Size	Actuator	Return	Order code 15mm solenoid with 24 VDC sol	Order code Internal supply to solenoid without 15mm solenoid
	G1/8 G1/4 G3/8 G1/2	Solenoid	Solenoid	**P2LAX511EENXB549** **P2LBX512EENXB549** **P2LCX513EENXB549** **P2LDX514EENXB549**	**P2LAX511EENXXX** **P2LBX512EENXXX** **P2LCX513EENXXX** **P2LDX514EENXXX**
	G1/8 G1/4 G3/8 G1/2	Solenoid	Spring	**P2LAX511ESNXB549** **P2LBX512ESNXB549** **P2LCX513ESNXB549** **P2LDX514ESNXB549**	**P2LAX511ESNXXX** **P2LBX512ESNXXX** **P2LCX513ESNXXX** **P2LDX514ESNXXX**
	G1/8 G1/4 G3/8 G1/2	Solenoid Closed centre	Solenoid Self centring	**P2LAX611EENXB549** **P2LBX612EENXB549** **P2LCX613EENXB549** **P2LDX614EENXB549**	**P2LAX611EENXXX** **P2LBX612EENXXX** **P2LCX613EENXXX** **P2LDX614EENXXX**
	G1/8 G1/4 G3/8 G1/2	Solenoid Vented centre	Solenoid Self centring	**P2LAX811EENXB549** **P2LBX812EENXB549** **P2LCX813EENXB549** **P2LDX814EENXB549**	**P2LAX811EENXXX** **P2LBX812EENXXX** **P2LCX813EENXXX** **P2LDX814EENXXX**
	G1/8 G1/4 G3/8 G1/2	Solenoid Pressure centre	Solenoid Self centring	**P2LAX711EENXB549** **P2LBX712EENXB549** **P2LCX713EENXB549** **P2LDX714EENXB549**	**P2LAX711EENXXX** **P2LBX712EENXXX** **P2LCX713EENXXX** **P2LDX714EENXXX**

Electrically actuated 5/2 and 5/3 valves - 22mm solenoid

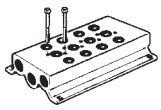
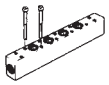
Symbol	Size	Actuator	Return	Order code 22mm solenoid 24 VDC	Order code Internal supply to solenoid without coil
	G1/8 G1/4 G3/8 G1/2	Solenoid	Solenoid	**P2LAX511EENDDB49** **P2LBX512EENDDB49** **P2LCX513EENDDB49** **P2LDX514EENDDB49**	**P2LAX511EENDDN** **P2LBX512EENDDN** **P2LCX513EENDDN** **P2LDX514EENDDN**
	G1/8 G1/4 G3/8 G1/2	Solenoid	Spring	**P2LAX511ESNDDB49** **P2LBX512ESNDDB49** **P2LCX513ESNDDB49** **P2LDX514ESNDDB49**	**P2LAX511ESNDDN** **P2LBX512ESNDDN** **P2LCX513ESNDDN** **P2LDX514ESNDDN**
	G1/8 G1/4 G3/8 G1/2	Solenoid Closed centre	Solenoid Self centring	**P2LAX611EENDDB49** **P2LBX612EENDDB49** **P2LCX613EENDDB49** **P2LDX614EENDDB49**	**P2LAX611EENDDN** **P2LBX612EENDDN** **P2LCX613EENDDN** **P2LDX614EENDDN**
	G1/8 G1/4 G3/8 G1/2	Solenoid Vented centre	Solenoid Self centring	**P2LAX811EENDDB49** **P2LBX812EENDDB49** **P2LCX813EENDDB49** **P2LDX814EENDDB49**	**P2LAX811EENDDN** **P2LBX812EENDDN** **P2LCX813EENDDN** **P2LDX814EENDDN**
	G1/8 G1/4 G3/8 G1/2	Solenoid Pressure centre	Solenoid Self centring	**P2LAX711EENDDB49** **P2LBX712EENDDB49** **P2LCX713EENDDB49** **P2LDX714EENDDB49**	**P2LAX711EENDDN** **P2LBX712EENDDN** **P2LCX713EENDDN** **P2LDX714EENDDN**

Electrically actuated 5/2 - Xtreme duty 16 bar - 40°C to +60°C

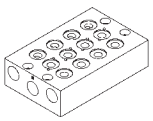
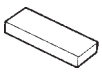
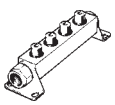
Symbol	Size	Actuator	Return	Order code 22mm solenoid 24 VDC	Order code Internal supply to solenoid without coil
	G1/8 G1/4 G3/8 G1/2	Solenoid	Solenoid Low temp.	**P2LAX511EEHDDB49** **P2LBX512EEHDDB49** **P2LCX513EEHDDB49** **P2LDX514EEHDDB49**	**P2LAX511EEHDDN** **P2LBX512EEHDDN** **P2LCX513EEHDDN** **P2LDX514EEHDDN**
	G1/8 G1/4 G3/8 G1/2	Solenoid	Spring Low temp.	**P2LAX511ESHDDB49** **P2LBX512ESHDDB49** **P2LCX513ESHDDB49** **P2LDX514ESHDDB49**	**P2LAX511ESHDDN** **P2LBX512ESHDDN** **P2LCX513ESHDDN** **P2LDX514ESHDDN**

Accessories P2LAX	Connection alternatives	Type	Weight kg	Order code
		**Multiple manifold** including seals, mounting screws, and guiding pins.	0,11	**9121658060**
		**Connection block S** including seals, mounting screws, and guiding pins. G1/4	0,15	**9121658064**
		**Connection block L** including seals, mounting screws, and guiding pins. G1/4	0,15	**9121658061**
		**End cover** including seals, mounting screws, and guiding pins.	0,16	**9121658066**
		**Intermediate block T** including seals, mounting screws, and guiding pins. G1/4	0,17	**9121658062**
		**Intermediate block L** including seals, mounting screws, and guiding pins. G1/4	0,17	**9121658065**
		Blanking plate including seals, mounting screws.	0,05	**9121658063**

Accessories P2LAX

	Type	Weight kg	Order code
	**Manifold bar, P2LA** including seals, mounting screws. G3/8		
	For 4 valves	0,48	**9121658075**
	For 6 valves	0,63	**9121658076**
	For 8 valves	0,80	**9121658077**
	For 10 valves	0,98	**9121658078**
	For 12 valves	1,10	**9121658079**
	For 14 valves	1,23	**9121658099**
	Blanking plate, P2LA for Manifold bar	0,05	**9121658063**
	**Pressure bar, P2LA** for common air supply incl. O-rings and mounting screws. G1/4		
	For 2 valves	0,13	**9121658070**
	For 4 valves	0,20	**9121658071**
	For 6 valves	0,26	**9121658072**
	For 8 valves	0,33	**9121658073**
	Blanking plate, P2LA for Pressure bar	0,05	**9121658074**
	Assembly screws, P2LA in stainless steel for valve	0,02	**9121658043**
	Assembly screws, P2LA in stainless steel for blanking plate	0,01	**9121658044**
	O-ring kit, P2LA O-rings between valve and manifold bar/ Pressure bar	0,01	**9121658046**

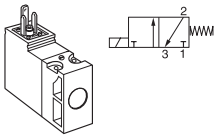
Accessories P2LBX

	Type	Weight kg	Order code
	**Manifold bar, P2LB, (not for P2LB with external air supply to solenoid valves)** incl. fasteners and O-ring. G3/8		
	For 2 valves	0,69	**9121594805X**
	For 4 valves	1,13	**9121594806X**
	For 6 valves	1,56	**9121594807X**
	For 8 valves	2,00	**9121594808X**
	For 10 valves	2,45	**9121594812X**
	**Blanking plate, P2LB** for Manifold bar	0,10	**9121594809X**
	**Pressure bar, P2LB** for common air supply incl. O-rings and banjo-bolts. G3/8		
	For 2 valves	0,38	**9127113301X**
	For 4 valves	0,53	**9127113302X**
	For 6 valves	0,68	**9127113303X**
	For 8 valves	0,83	**9127113304X**
	For 10 valves	0,99	**9127113305X**
	Blanking plug, P2LB for Pressure bar. G1/4	0,02	**9127113350**

Solenoid Operators - Electrical connection EN175301-803 C/ISO15217 (Ex DIN 43650C)

Solenoids 15 mm NC, standard

(Note! Mounting screws included in basic valve)



Voltage	Weight Kg	Order code Without manual override	Weight Kg	Order code Override, blue, non locking flush	Weight Kg	Order code Override, yellow, locking flush
12 VDC	0,038	**P2E-KV32B0**	0,038	**P2E-KV32B1**	0,038	**P2E-KV32B2**
24 VDC	0,038	**P2E-KV32C0**	0,038	**P2E-KV32C1**	0,038	**P2E-KV32C2**
48 VDC	0,038	**P2E-KV32D0**	0,038	**P2E-KV32D1**	0,038	**P2E-KV32D2**
24 VAC 50Hz	0,038	**P2E-KV31C0**	0,038	**P2E-KV31C1**	0,038	**P2E-KV31C2**
48 VAC 50/60Hz	0,038	**P2E-KV34D0**	0,038	**P2E-KV34D1**	0,038	**P2E-KV34D2**
115 VAC 50Hz/ 120 VAC 60Hz	0,038	**P2E-KV31F0**	0,038	**P2E-KV31F1**	0,038	**P2E-KV31F2**
230 VAC 50Hz/ 240 VAC 60Hz	0,038	**P2E-KV31J0**	0,038	**P2E-KV31J1**	0,038	**P2E-KV31J2**

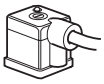
In accordance with the EU Machine Directive, EN 983, solenoid valves with manual override should have spring-return operating arms for safety.

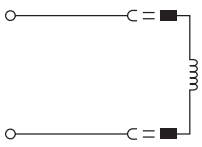
Solenoid coils for 22mm solenoid operators

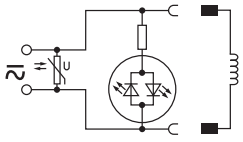
Voltage	Order code Form B	Weight (Kg)
12V 60Hz	**P2FCB440**	0.093
24V 50/60Hz	**P2FCB442**	0.093
12V DC	**P2FCB445**	0.093
12V DC Mobile	**P2FCB447**	0.093
24v DC Mobile	**P2FCB448**	0.093
24V DC	**P2FCB449**	0.093
48V DC	**P2FCB451**	0.093
110V/50Hz, 120V/60Hz	**P2FCB453**	0.093
230V/50Hz, 230V/60Hz	**P2FCB457**	0.093

Note: Mobile solenoids are only suitable for Viking Xtreme valves with 'H' specification having 0,8/1,0 operator type P2FP13H4D

Solenoid Connectors / Cable Plugs EN175301-803

	Description	Order code 15mm Form C/ISO15217	Order code 22mm Industrial Form B
With large headed screw suitable for mounting in inaccessible or recess position	Standard IP65	**P8C-C**	
	24V DC LED and protection IP65	**P8C-C26C**	
	110V AC LED and protection IP65	**P8C-C21E**	
With standard screw	Standard IP65 without flying lead	**P8C-D**	**3EV10V10**
	With LED and protection 24V AC/DC	**P8C-D26C**	**3EV10V20-24**
	With LED and protection 110V AC	**P8C-D21E**	**3EV10V20-110**
	With LED and protection 230V AC		**3EV10V20-230**
With cable 	Standard with 2m cable IP65	**P8L-C2**	
	Standard with 5m cable IP65	**P8L-C5**	
	24V AC/DC, 2m cable LED and protection IP65	**P8L-C226C**	
	24V AC/DC, 5m cable LED and protection IP65	**P8L-C526C**	**3EV10V20-24L5**
	24V AC/DC, 10m cable LED and protection IP65	**P8L-CA26C**	
	110V AC/DC, 2m cable LED and protection IP65	**P8L-C221E**	
	110V AC/DC, 5m cable LED and protection IP65	**P8L-C521E**	**3EV10V20-110L5**
	230V AC, 5m cable LED and protection IP65		**3EV10V20-230L5**



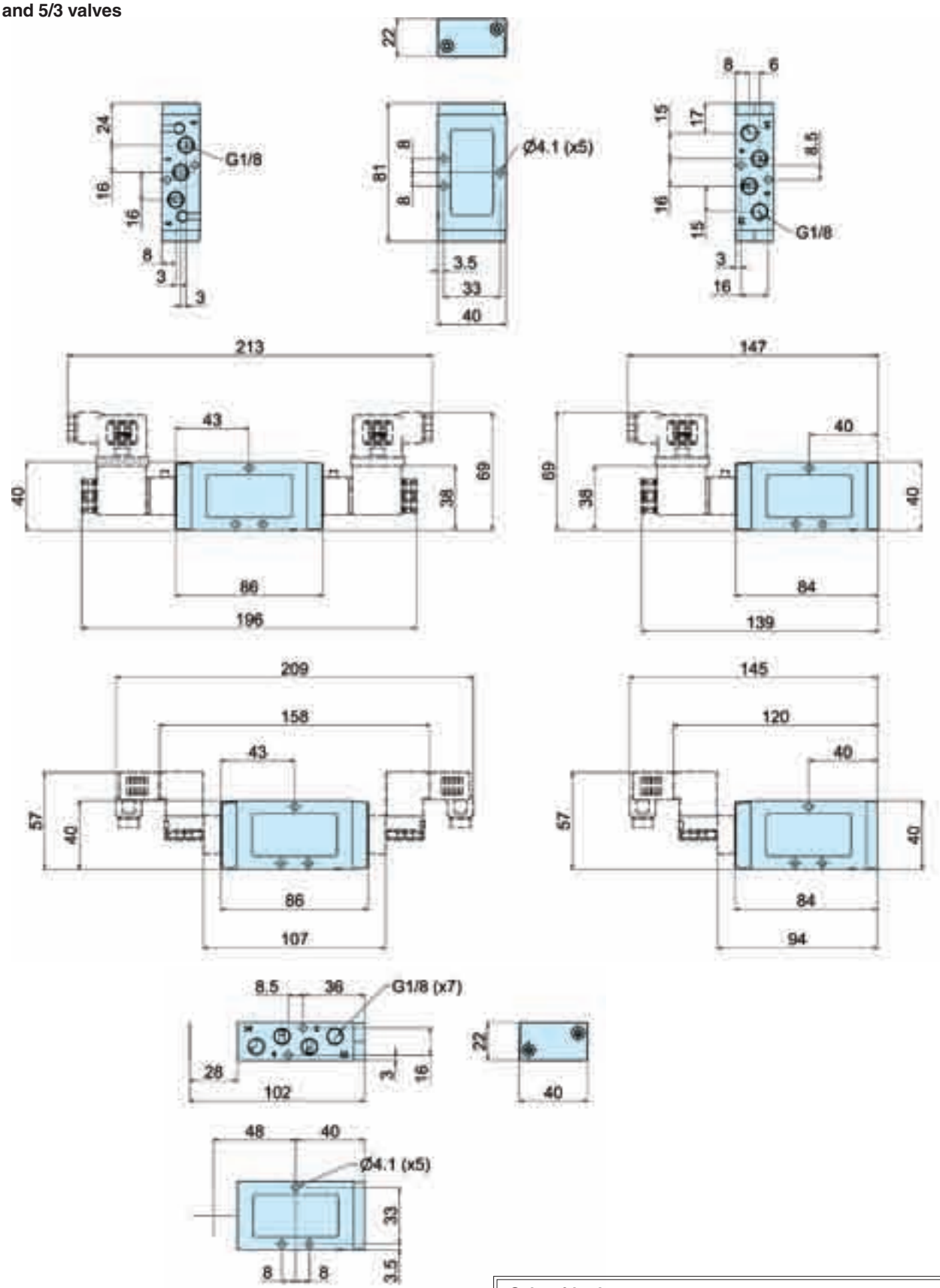


P8C-C
P8C-D
P8L-C2
P8L-C5
3EV10V10

P8C-D26C	**P8L-C226C**
P8C-D21E	**P8L-C526C**
P8C-C26C	**P8L-CA26C**
P8C-C21E	**P8L-C221E**
	P8L-C521E
3EV10V20-24	**3EV10V20-24L5**
3EV10V20-110	**3EV10V20-110L5**
3EV10V20-230	**3EV10V20-230L5**

Dimensions

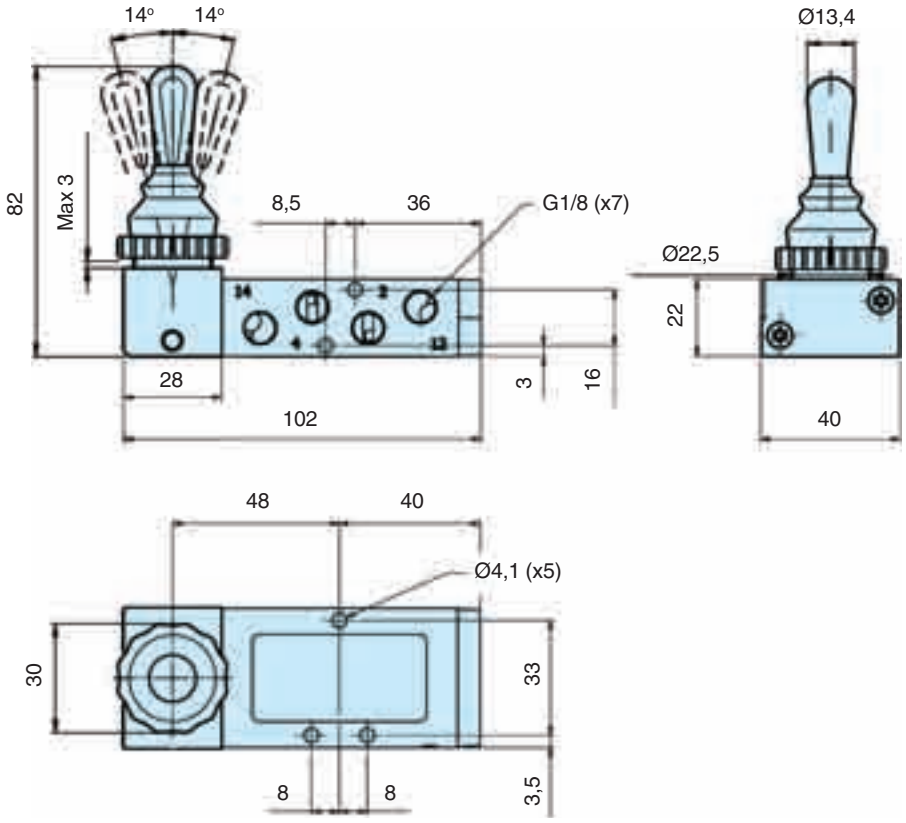
P2LAX... all
5/2 and 5/3 valves



Solenoid valves
Solenoid valves and cable plugs must be ordered separately.
One pilot valve is required for each E in the valve order code.

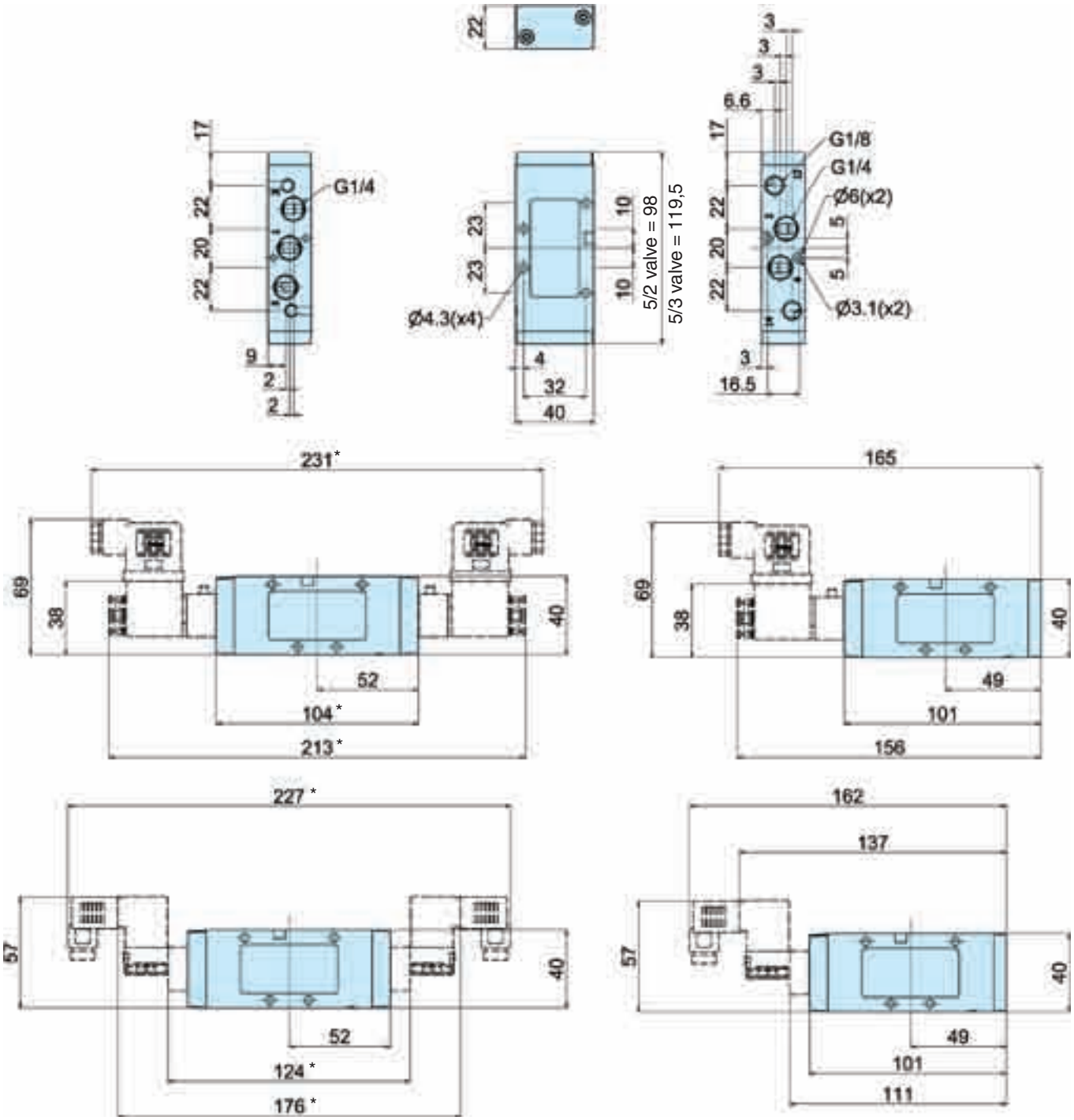
Dimensions

P2LAX - Lever operated directional control valves



Dimensions

P2LBX... all
5/2 and 5/3 valves

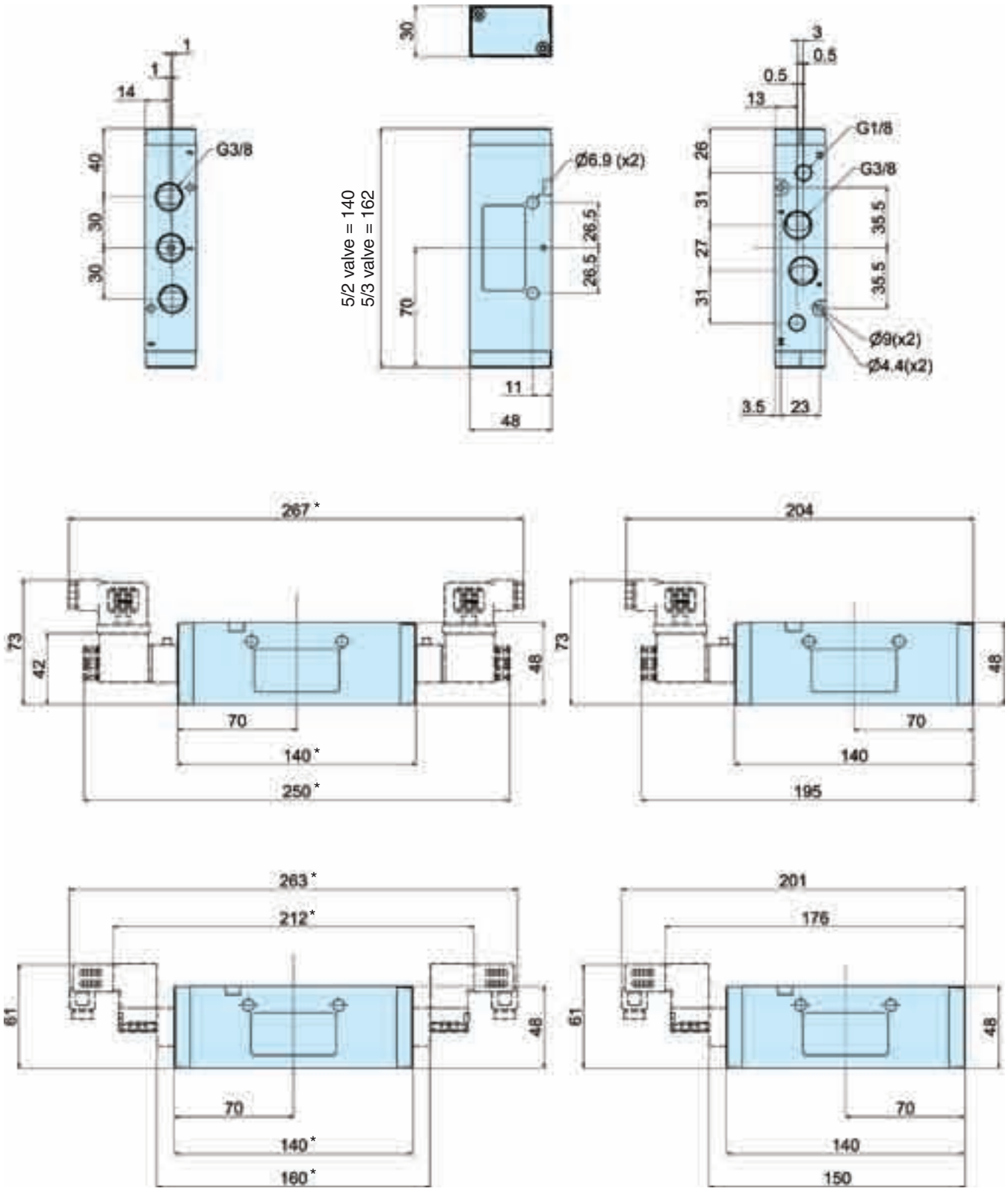


*** Note:** 5/3 valves - add 21.5mm

Solenoid valves
Solenoid valves and cable plugs must be ordered separately.
One pilot valve is required for each E in the valve order code.

Dimensions

P2LCX... all
5/2 and 5/3 valves

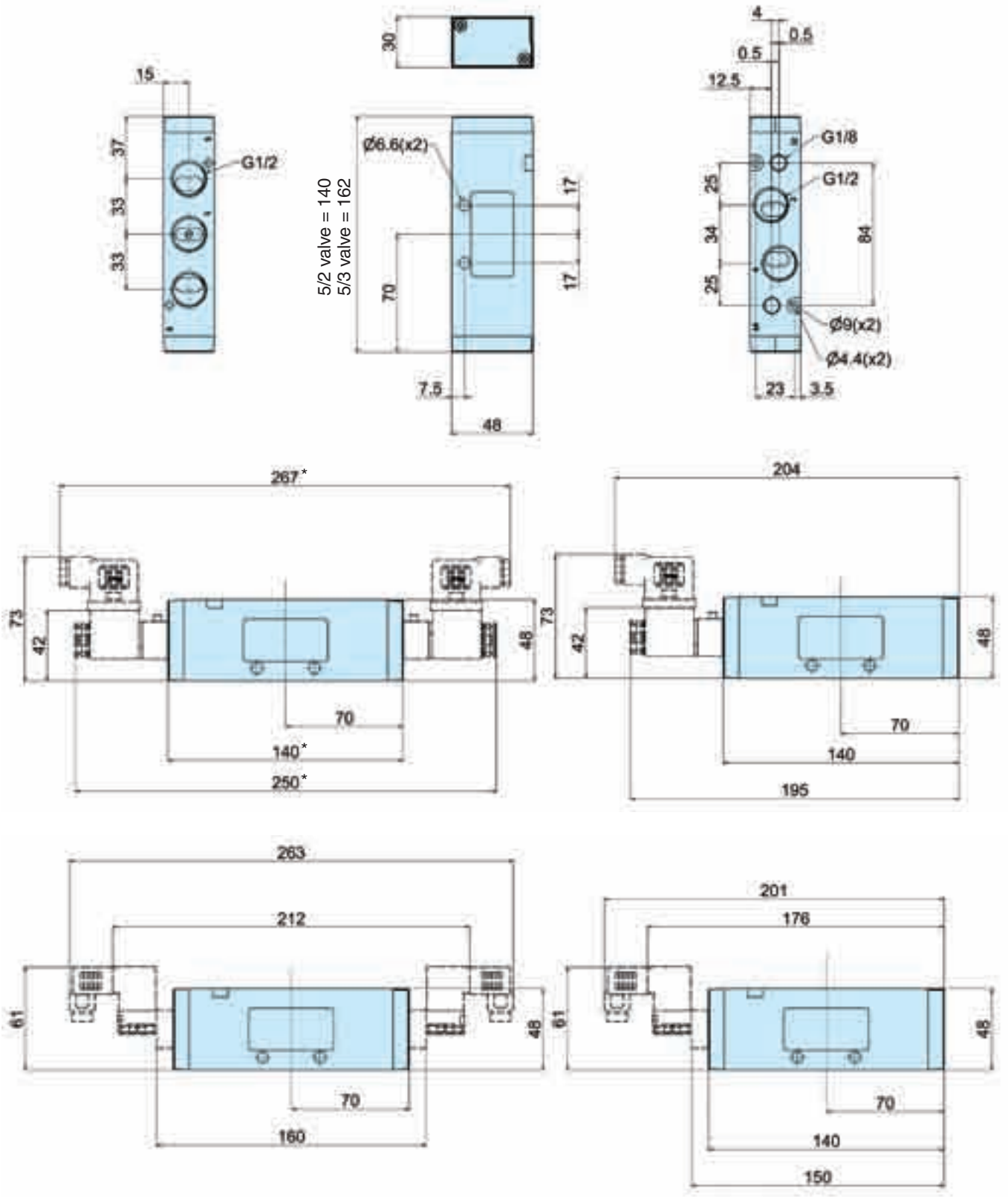


*** Note:** 5/3 valves - add 22.0mm

Solenoid valves
Solenoid valves and cable plugs must be ordered separately.
One pilot valve is required for each E in the valve order code.

Dimensions

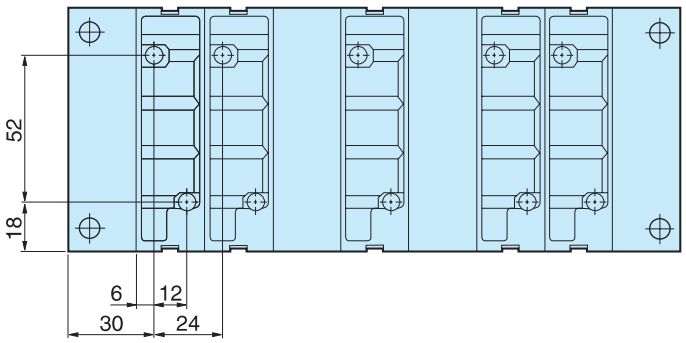
P2LDX... all
5/2 and 5/3 valves



*** Note:** 5/3 valves - add 22.0mm

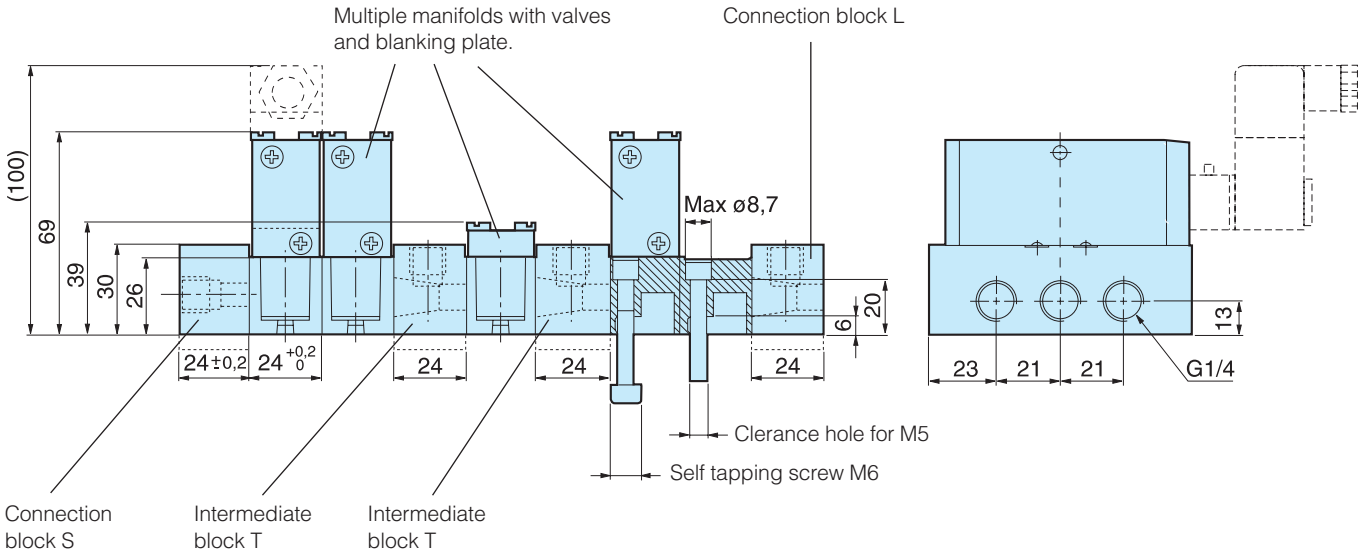
Solenoid valves
Solenoid valves and cable plugs must be ordered separately.
One pilot valve is required for each E in the valve order code.

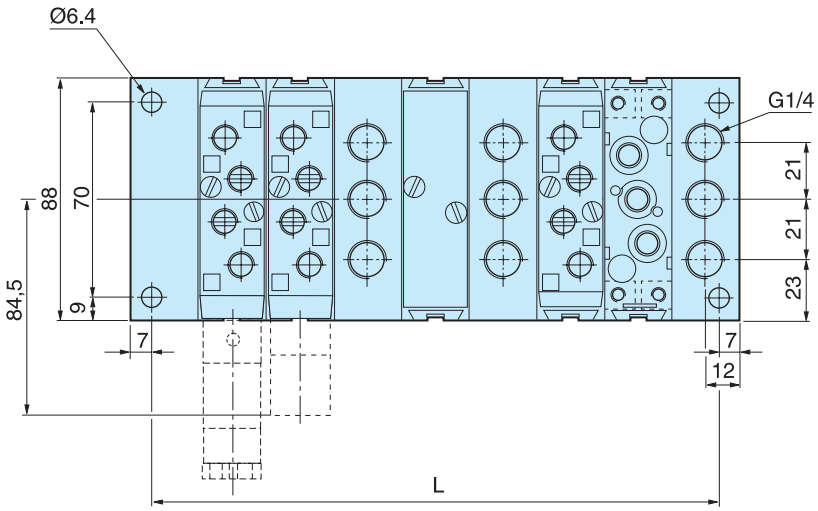
Dimensions



Connection block L and intermediate blocks L and T can be turned so that connection can be made from above or below.

Multiple manifolds must be fitted with the top indication line (a 10 mm long line) facing the same side on all manifolds.

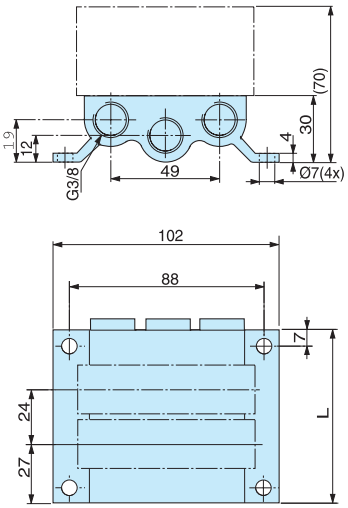




L = 34 + (Number of manifolds and Intermediate blocks x 24)

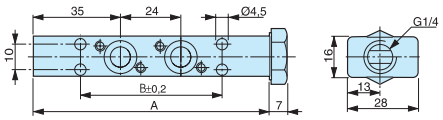
Dimensions

Manifold bar, P2LA



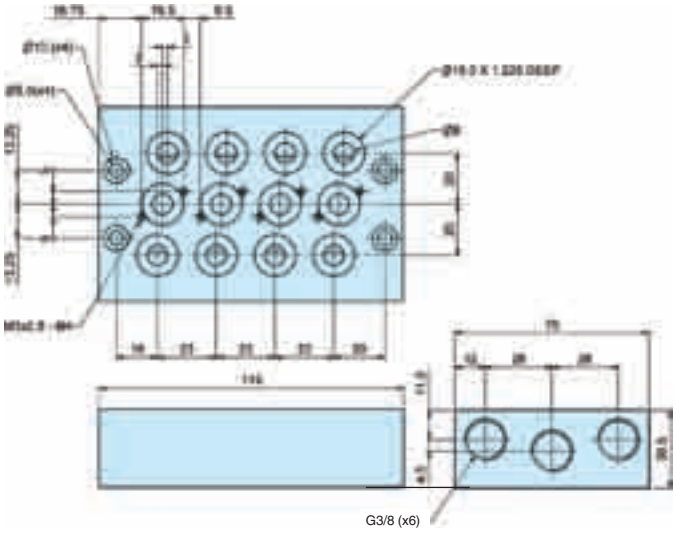
No. of valves	L mm
4	126
6	174
8	222
10	270
12	318
14	366

Pressure bar, P2LA



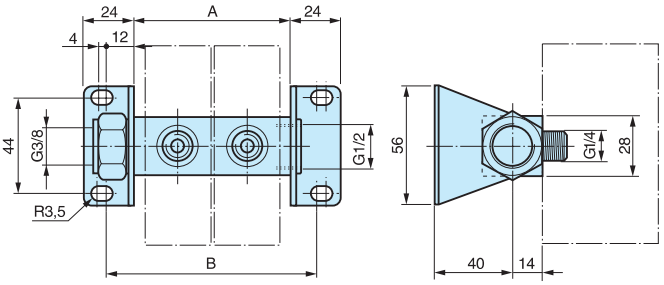
No. of valves	A mm	B mm
2	94	56
4	164	142
6	190	152
8	238	200

Manifold bar, P2LB

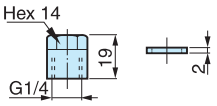


No. of valves	L mm
2	94
4	158
6	222
8	286
10	350

Pressure bar, P2LB



Blanking plug, P2LB



No. of valves	A mm	B mm
2	54	78
4	100	124
6	146	188
8	192	216
10	238	262

High performance metal bodied industrial valves with air pilot or solenoid actuation. Featuring the 'Wear Compensating Seal System' these valves have integral mounting holes and an inlet exhaust manifold option.

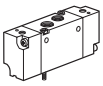
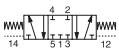
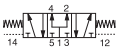
- 2 sizes: 1/8" and 1/4"
- Compact size
- Inlet-exhaust-mounting facility
- Fast response, high flow
- Integrated mounting holes
- Wear compensating seal system
- DIN rail mountable manifolds

Operating information

Working pressure		1,5 to 10 bar
Working temperature		-10 °C to +50 °C
Port size		B3 : G1/8, B4 : G1/4
Flow (Qn):	B3	960 l/min
	B4	1170 l/min

For technical information see CD

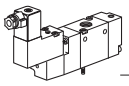
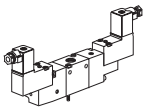
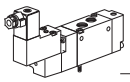
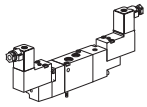
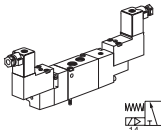
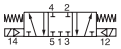
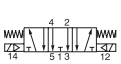
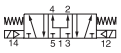
Main data for Directional control valves, B3 Series

	Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changeover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
Pneumatically actuated 3/2 valves									
		Air	Differential air	1,4/-	16/17	0,07		**B3K5000XXH**	1
		Air	Spring return	3,0/-	20/18	0,07		**B3U5000XXH**	1
		Air	Air	1,4/-	2/2	0,08		**B3M5000XXH**	1
Pneumatically actuated 5/2 and 5/3 valves									
		Air	Differential air	1,4/-	16/17	0,09		**B335000XXH**	1
		Air	Spring return	3,0/-	20/18	0,09		**B3P5000XXH**	1
		Air	Air	1,4/1,4	2/2	0,10		**B345000XXH**	1
		Air Closed centre position	Air Self centring	3,0/3,0	12/12	0,10		**B385000XXH**	1
		Air Vented centre position	Air Self centring	3,0/3,0	12/12	0,10		**B395000XXH**	1
		Air Pressurised centre position	Air Self centring	3,0/3,0	12/12	0,10		**B305000XXH**	1

* Solenoid and cable plug (must be ordered separately see opposite page)
** 2 Solenoids and cable plugs (must be ordered separately see opposite page)

Indicates stocked product.

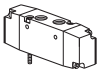
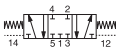
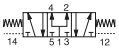
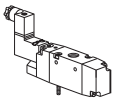
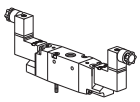
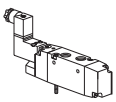
Main data for Directional control valves, B3 Series

	Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changeover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
Electrically actuated 3/2 valves									
		Electric	Differential air	1,4/-	12/14	0,12 0,08	24 VDC Less solenoid	**B3G5BB549H** **B3G5BXXXXH**	1 1
		Electric	Spring return	3,0/-	22/28	0,12 0,08	24 VDC Less solenoid	**B3R5BB549H** **B3R5BXXXXH**	1 1
		Electric	Air	1,4/1/4	9/3	0,13 0,09	24 VDC Less solenoid	**B3S5BB549H** **B3S5BXXXXH**	1 1
		Electric	Electric	1,4/1/4	8/8	0,13 0,09	24 VDC Less solenoid	**B3J5BB549H** **B3J5BXXXXH**	1 1
Electrically actuated 5/2 valves									
		Electric Air	Differential Air	1,4/-	12/14	0,12 0,09	24 VDC Less solenoid	**B315BB549H** **B315BXXXXH**	1 1
		Electric	Spring return	3,0/-	22/28	0,12 0,09	24 VDC Less solenoid	**B3T5BB549H** **B3T5BXXXXH**	1 1
		Electric	Air	1,4/1/4	9/3	0,14 0,10	24 VDC Less solenoid	**B3A5BB549H** **B3A5BXXXXH**	1 1
		Electric	Electric	1,4/1/4	8/8	0,19 0,10	24 VDC Less solenoid	**B325BB549H** **B325BXXXXH**	1 1
Electrically actuated 5/3 valves									
		Electric Closed centre position	Electric Self centring	3,0/3,0	12/12	0,18 0,09	24 VDC Less solenoid	**B355BB549H** **B355BXXXXH**	1 1
		Electric Vented centre position	Electric Self centring	3,0/3,0	12/12	0,18 0,09	24 VDC Less solenoid	**B365BB549H** **B365BXXXXH**	1 1
		Electric Pressurised centre position	Electric Self centring	3,0/3,0	12/12	0,10 0,09	24 VDC Less solenoid	**B375BB549H** **B375BXXXXH**	1 1

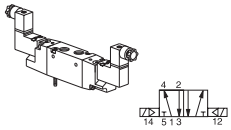
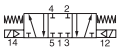
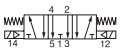
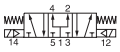
Internal air supply to differential pilots and solenoids via port 1

Valves supplied with solenoid operators include standard P8C-D connector

Main data for Directional control valves, B4 Series

	Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changeover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
Pneumatically actuated 3/2 valves									
		Air	Differential air	1,5/-	34/45	0,163		**B4K6000XXF**	1
		Air	Spring return	3,0/-	32/48	0,16		**B4U6000XXF**	1
		Air	Air	1,5/1,5	15/17	0,177		**B4M6000XXF**	1
Pneumatically actuated 5/2 and 5/3 valves									
		Air	Differential air	1,5/-	34/45	0,184		**B436000XXF**	1
		Air	Spring return	3,0/-	32/48	0,19		**B4P6000XXF**	1
		Air	Air	1,5/1,5	15/17	0,198		**B446000XXF**	1
		Air Closed centre position	Air Self centring	3,0/3,0	16/19	0,204		**B486000XXF**	1
		Air Vented centre position	Air Self centring	3,0/3,0	16/19	0,204		**B496000XXF**	1
		Air Pressurised centre position	Air Self centring	3,0/3,0	16/19	0,204		**B406000XXF**	1
Electrically actuated 3/2 valves									
		Electric	Differential air	1,5/-	34/45	0,206 0,157	24 VDC Less solenoid	**B4G6AB549F** **B4G6AXXXXF**	1 1
		Electric	Spring return	3,0/-	36/40	0,210 0,161	24 VDC Less solenoid	**B4R6AB549F** **B4R6AXXXXF**	1 1
		Electric	Air	1,5/1,5	15/17	0,220 0,170	24 VDC Less solenoid	**B4S6AB549F** **B4S6AXXXXF**	1 1
		Electric	Electric	1,5/1/5	15/17	0,262 0,164	24 VDC Less solenoid	**B4J6AB549F** **B4J6AXXXXF**	1 1
Electrically actuated 5/2 valves									
		Electric Air	Differential Air	1,5/-	34/45	0,227 0,178	24 VDC Less solenoid	**B416AB549F** **B416AXXXXF**	1 1
		Electric Air	Spring return	3,0/-	36/40	0,227 0,178	24 VDC Less solenoid	**B4T6AB549F** **B4T6AXXXXF**	1 1
		Electric	Air	1,5/1/5	15/17	0,241 0,192	24 VDC Less solenoid	**B4A6AB549F** **B4A6AXXXXF**	1 1

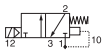
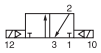
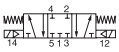
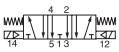
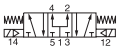
Main data for Directional control valves, B4 Series

Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changeover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
Electrically actuated 52 and 5/3 valves								
	Electric	Electric	1,5/1,5	15/15	0,283 0,185	24 VDC Less solenoid	**B426AB549F** **B426AXXXXF**	1 1
	Electric Closed centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B456AB549F** **B456AXXXXF**	1 1
	Electric Vented centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B466AB549F** **B466AXXXXF**	1 1
	Electric Pressurised centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B476AB549F** **B476AXXXXF**	1 1

Internal air supply to differential pilots and solenoids via port 1

Valves supplied with solenoid operators include standard P8C-D connector

Main data for Directional control valves, B5 Series (G1/4 threaded ports)

Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changeover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
Electrically actuated 3/2 valves								
	Electric	Air/Spring Assisted	2,4/2,4	24/26		24 VDC Less solenoid coil	**B5V6BCB49C** **B5V6BCNXXC**	1 1
	Electric	Electric	1,5/1/5	15/17		24 VDC Less solenoid coil	**B5J6BCB49C** **B5J6BCNXXC**	1 1
Electrically actuated 5/2 valves								
	Electric	Air/Spring Assisted	2,4/2,4	24/26		24 VDC Less solenoid coil	**B5E6BCB49C** **B5E6BCNXXC**	1 1
Electrically actuated 5/2 valves								
	Electric	Electric	1,5/1,5	15/15	0,283 0,185	24 VDC Less solenoid	**B526BCB49C** **B526BCNXXC**	1 1
	Electric Closed centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B556BCB49C** **B556BCNXXC**	1 1
	Electric Vented centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B566BCB49C** **B566BCNXXC**	1 1
	Electric Pressurised centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B576BCB49C** **B576BCNXXC**	1 1

Internal air supply to differential pilots and solenoids via port 1

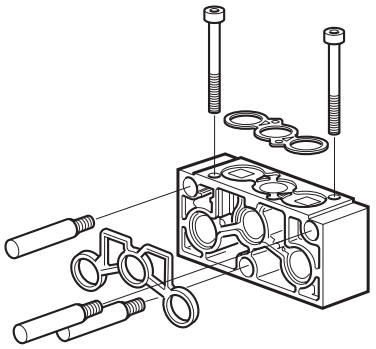
Inlet Exhaust Manifolds for B3 series valves

Standard Base without Flow Controls
Each kit contains:
1 pcs Manifold Base
2 pcs Mounting screws and nuts
3 pcs Tie Rods
1 pcs Body-to-base Gasket and
1 pcs Base-to-Base Gasket

		Order code	Qty
Manifold Base Kit	3/2 =	PS2948F	1
	5/2 =	PS2917F	1

Base with Flow Controls
Each kit contains:
1 pcs Manifold Base with Flow Controls
2 pcs Mounting screws and nuts
3 pcs Tie Rods
1 pcs Body-to-base Gasket
1 pcs Base-to-Base Gasket

		Order code	Qty
Manifold Base Kit	3/2 =	PS2949F	1
	5/2 =	PS2918F	1



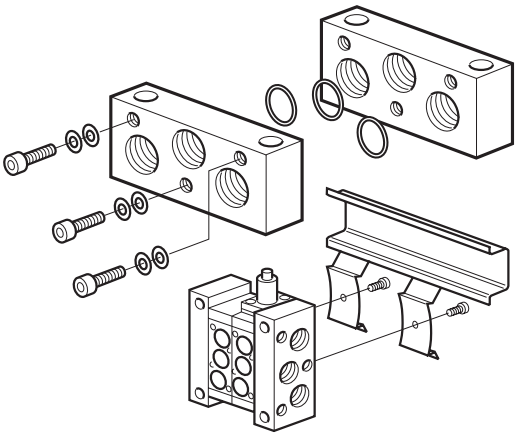
End plates

Standard End Plates may be used with either of above Manifold Bases

Each kit contains:
1 right and 1 left End Plate
3 pcs O-Rings
3 pcs Blanking Plugs
3 pcs Socket Head Cap Screws
3 pcs Flat Washers
3 pcs Lockwashers

		Order code	Qty
Manifold End plate kit	3/2 =	PS2951F	1
	5/2 =	PS2916F	1

	Order code	Qty
DIN rail mounting kit for IEM manifold	PS2970F	1

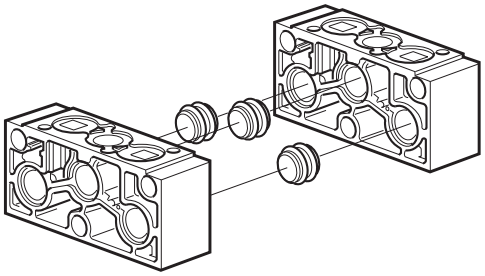


Isolator Plug Kit

Used to isolate the 1, 3 or 5 gallery between two Manifold Bases

Each kit contains:
3 pcs Isolator Plugs complete with O-rings.

	Order code	Qty
Isolator Plug Kit	PS2919F	1

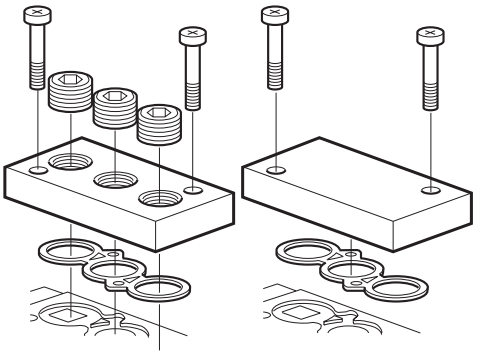


Manifold Ported Plate
Each kit contains:
1 pcs Inlet Plate
2 pcs Mounting Screws
3 pcs G1/8 Plugs
1 pcs Gasket

		Order code	Qty
Manifold Ported Plate	3/2 =	PS2967F	1
	5/2 =	PS2921F	1

Manifold Blanking Plate
Each kit contains:
1 pcs Cover Plate
2 pcs Mounting Screws
1 pcs Gasket
Used to blank off unused stations.

		Order code	Qty
Manifold Blanking Plate	3/2 =	PS2968F	1
	5/2 =	PS2969F	1



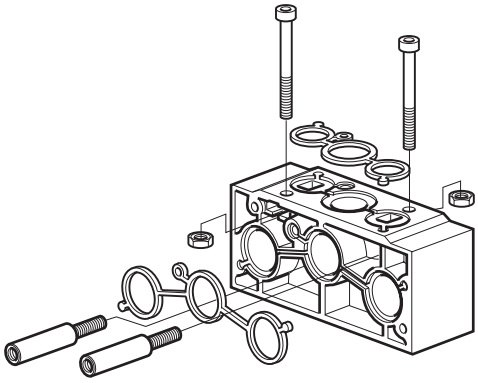
Inlet Exhaust Manifolds for B4 series valves

Standard Base without Flow Controls
Each kit contains:
1 pcs Manifold Base
2 pcs Mounting screws and nuts
2 pcs Tie Rods
1 pcs Body-to-base Gasket and
1 pcs Base-to-Base Gasket

		Order code	Qty
Manifold Base Kit	3/2 =	PS4548F	1
	5/2 =	PS4517F	1

Base with Flow Controls
Each kit contains:
1 pcs Manifold Base with Flow Controls
2 pcs Mounting screws and nuts
2 pcs Tie Rods
1 pcs Body-to-base Gasket
1 pcs Base-to-Base Gasket

		Order code	Qty
Manifold Base Kit	3/2 =	PS4549F	1
	5/2 =	PS4518F	1



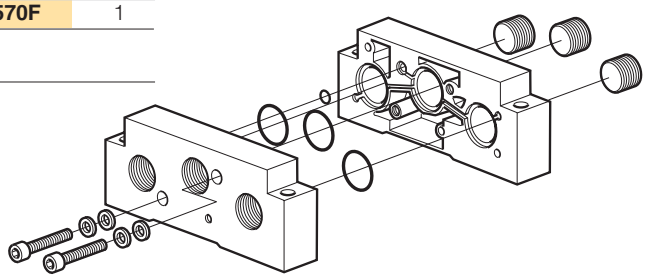
End plates

Standard End Plates may be used with either of above Manifold Bases

Each kit contains:
1 right and 1 left End Plate
3 pcs O-Rings
3 pcs Blanking Plugs
2 pcs Socket Head Cap Screws
2 pcs Flat Washers
2 pcs Lockwashers

	Port Size		Order code	Qty
Manifold End plate kit	3/8 BSP	3/2 =	PS4551F	1
	3/8 BSP	5/2 =	PS4516F	1

	Order code	Qty
DIN rail mounting kit for IEM manifold	PS4570F	1

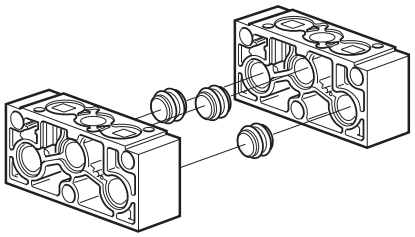


Isolator Plug Kit

Used to isolate the 1, 3 or 5 gallery between two Manifold Bases

Each kit contains:
3 pcs Isolator Plugs complete with O-rings

	Order code	Qty
Isolator Plug kit	PS4519F	1

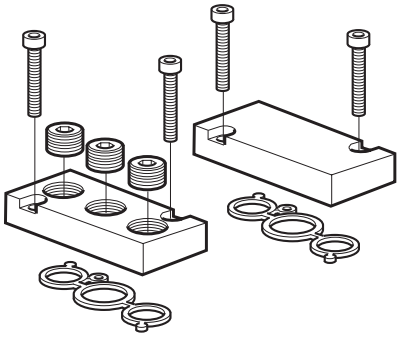


Manifold Ported Plate
Each kit contains:
1 pcs Inlet Plate
2 pcs Mounting screws
3 pcs G1/4 Plugs
1 pcs Gasket

		Order code	Qty
Manifold Ported plate	3/2 =	PS4567F	1
	5/2 =	PS4521F	1

Manifold Blanking plate
Each kit contains:
1 pcs Cover Plate
2 pcs Mounting Screws
1 pcs Gasket
Used to blank off unused stations.

		Order code	Qty
Manifold Blanking plate	3/2 =	PS4568F	1
	5/2 =	PS4569F	1



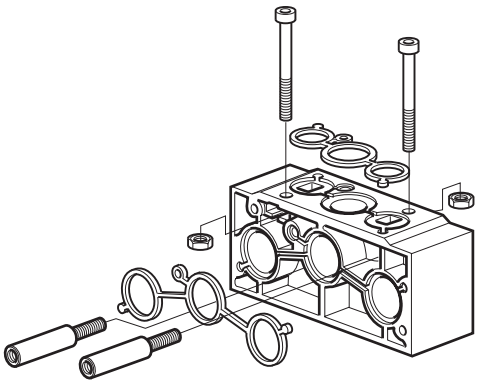
Inlet Exhaust Manifolds for B5 series valves

Standard Base without Flow Controls
Each kit contains:
1 pcs Manifold Base
2 pcs Mounting screws and nuts
2 pcs Tie Rods
1 pcs Body-to-base Gasket and
1 pcs Base-to-Base Gasket

	Order code	Qty
Manifold Base Kit	**PS2817P**	1

Base with Flow Controls
Each kit contains:
1 pcs Manifold Base with Flow Controls
2 pcs Mounting screws and nuts
2 pcs Tie Rods
1 pcs Body-to-base Gasket
1 pcs Base-to-Base Gasket

	Order code	Qty
Manifold Base Kit	**PS2818P**	1

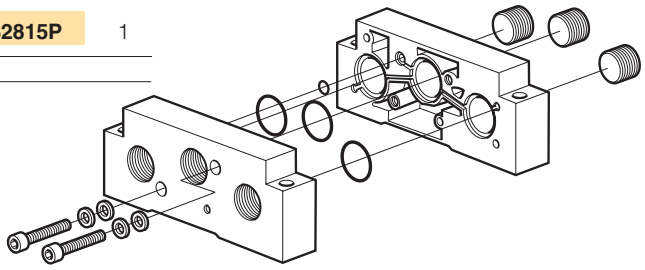


End plates

Standard End Plates may be used with either of above Manifold Bases

Each kit contains:
1 right and 1 left End Plate
3 pcs O-Rings
3 pcs Blanking Plugs
2 pcs Socket Head Cap Screws
2 pcs Flat Washers
2 pcs Lockwashers

	Port Size	Order code	Qty
Manifold End plate kit	G3/8	**PS2815P**	1

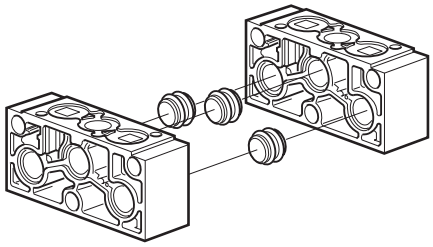


Isolator Plug Kit

Used to isolate the 1, 3 or 5 gallery between two Manifold Bases

Each kit contains:
3 pcs Isolator Plugs complete with O-rings

	Order code	Qty
Isolator Plug kit	**PS2819P**	1

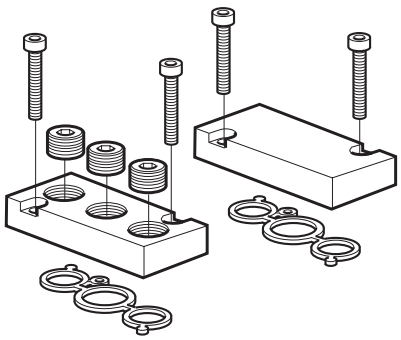


Manifold Ported Plate
Each kit contains:
1 pcs Inlet Plate
2 pcs Mounting screws
3 pcs G3/8 Plugs
1 pcs Gasket

	Order code	Qty
Manifold Ported plate	**PS2821P**	1

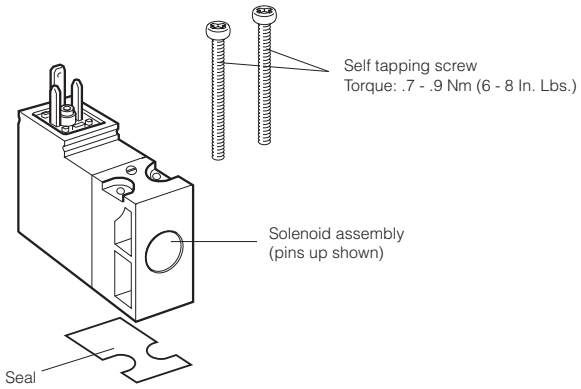
Manifold Blanking plate
Each kit contains:
1 pcs Cover Plate
2 pcs Mounting Screws
1 pcs Gasket
Used to blank off unused stations.

	Order code	Qty
Manifold Blanking plate	**PS2869P**	1



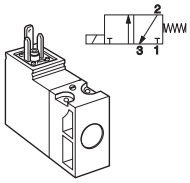
15mm Solenoid Operators for B3 and B4 Valves

Electrical connection EN 175302-803 C/ISO15217 (Ex DIN 43650C)



Solenoids 15mm NC, standard

(**Note!** Mounting screws included with basic valve)



Voltage	Weight Kg	Order code Without manual override		Weight Kg	Order code Override, blue, non locking flush		Weight Kg	Order code Override, yellow, locking flush	
12 VDC	0,038	**P2E-KV32B0**	Ⓛ	0,038	**P2E-KV32B1**	Ⓛ	0,038	**P2E-KV32B2**	Ⓛ
24 VDC	0,038	**P2E-KV32C0**	Ⓛ	0,038	**P2E-KV32C1**	Ⓛ	0,038	**P2E-KV32C2**	Ⓛ
48 VDC	0,038	**P2E-KV32D0**	Ⓛ	0,038	**P2E-KV32D1**	Ⓛ	0,038	**P2E-KV32D2**	Ⓛ
24 VAC 50Hz	0,038	**P2E-KV31C0**	Ⓛ	0,038	**P2E-KV31C1**	Ⓛ	0,038	**P2E-KV31C2**	Ⓛ
48 VAC 50/60Hz	0,038	**P2E-KV34D0**	Ⓛ	0,038	**P2E-KV34D1**	Ⓛ	0,038	**P2E-KV34D2**	Ⓛ
115 VAC 50Hz 120 VAC 60Hz	0,038	**P2E-KV31F0**	Ⓛ	0,038	**P2E-KV31F1**	Ⓛ	0,038	**P2E-KV31F2**	Ⓛ
230 VAC 50Hz 240 VAC 60Hz	0,038	**P2E-KV31J0**	Ⓛ	0,038	**P2E-KV31J1**	Ⓛ	0,038	**P2E-KV31J2**	Ⓛ

Solenoid coils for B5 valves

Solenoid coils to suit 'N' enclosure type 22mm 3-Pin EN 175301-803 Industrial Form B

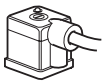
Coil Voltage	Order code	Weight (kg)
24 VAC	**PS2828B42P**	0.093
12 VDC	**PS2828B45P**	0.093
24 VDC	**PS2828B49P**	0.093
110 VAC	**PS2828B53P**	0.093
230 VAC	**PS2828B57P**	0.093

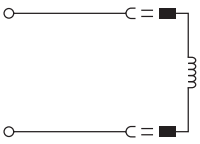
Solenoid Operator Kit

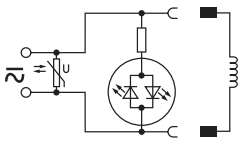
Each kit contains:
1 large 'O' ring for operator base
1 small 'O' ring for operator base
2 mounting screws
1 solenoid/stem nut

	Order code	Qty
Non locking m/o	**PS2844BP**	1
Locking m/o	**PS2844CP**	1

Solenoid Connectors / Cable Plugs EN175301-803

	Description	Order code 15mm Form C/ISO15217 Suitable for B3 & B4 valves	Order code 22mm Industrial Form B Suitable for B5 valves
With large headed screw suitable for mounting in inaccessible or recess position	Standard IP65	**P8C-C**	
	24V DC LED and protection IP65	**P8C-C26C**	
	110V AC LED and protection IP65	**P8C-C21E**	
With standard screw	Standard IP65 without flying lead	**P8C-D**	**3EV10V10**
	With LED and protection 24V AC/DC	**P8C-D26C**	**3EV10V20-24**
	With LED and protection 110V AC	**P8C-D21E**	**3EV10V20-110**
	With LED and protection 230V AC		**3EV10V20-230**
With cable 	Standard with 2m cable IP65	**P8L-C2**	
	Standard with 5m cable IP65	**P8L-C5**	
	24V AC/DC, 2m cable LED and protection IP65	**P8L-C226C**	
	24V AC/DC, 5m cable LED and protection IP65	**P8L-C526C**	**3EV10V20-24L5**
	24V AC/DC, 10m cable LED and protection IP65	**P8L-CA26C**	
	110V AC/DC, 2m cable LED and protection IP65	**P8L-C221E**	
	110V AC/DC, 5m cable LED and protection IP65	**P8L-C521E**	**3EV10V20-110L5**
	230V AC, 5m cable LED and protection IP65		**3EV10V20-230L5**





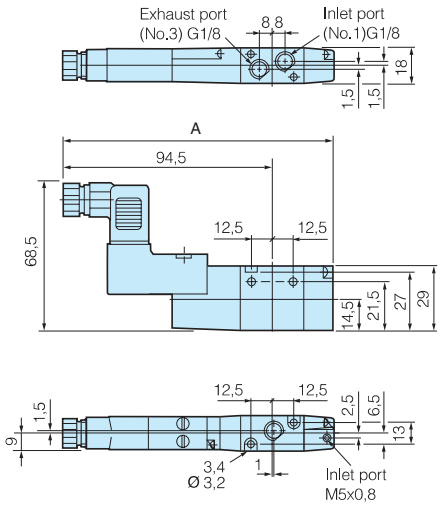
P8C-C
P8C-D
P8L-C2
P8L-C5
3EV10V10

P8C-D26C	**P8L-C226C**
P8C-D21E	**P8L-C526C**
P8C-C26C	**P8L-CA26C**
P8C-C21E	**P8L-C221E**
	P8L-C521E
3EV10V20-24	**3EV10V20-24L5**
3EV10V20-110	**3EV10V20-110L5**
3EV10V20-230	**3EV10V20-230L5**

Dimensions, B3 Valve Series

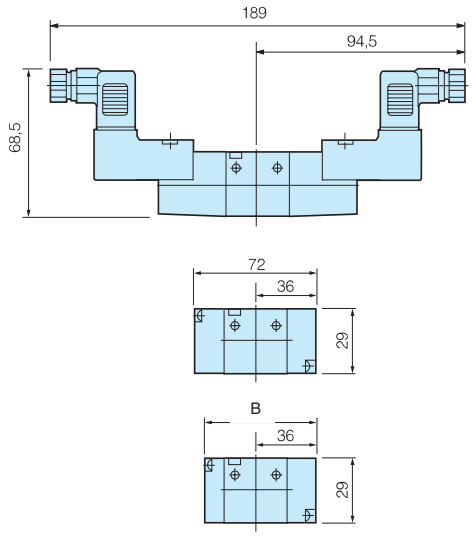
3/2 Body ported

Single solenoid operated air spring return / spring return



	Air differential return	Spring return
A	130,5	136,7

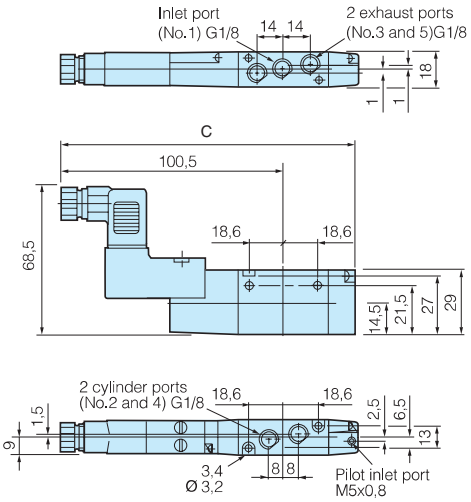
Double solenoid operated



	Air differential return	Spring return
B	67,0	73,2

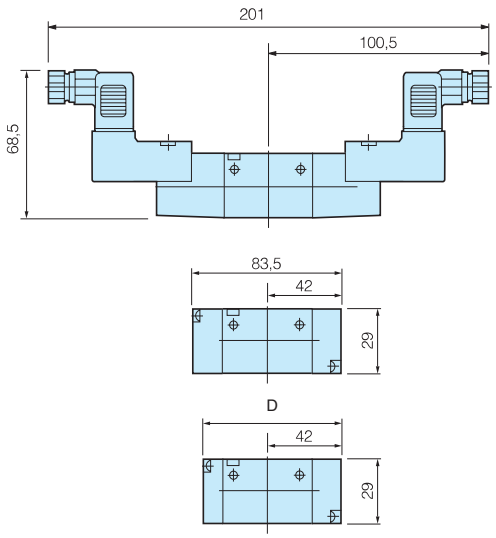
5/2 Body ported

Single solenoid operated air spring return / spring return



	Air differential return	Spring return
C	137,5	143,7

Double solenoid operated

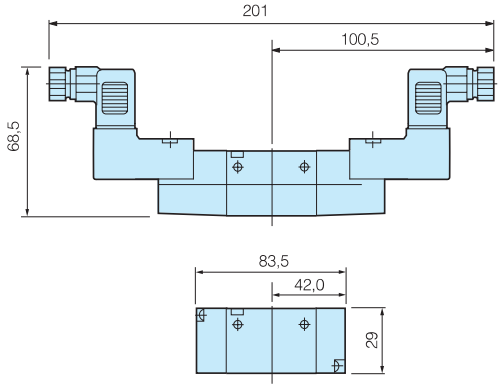


	Air differential return	Spring return
D	79,0	85,2

All dimensions in mm unless otherwise stated

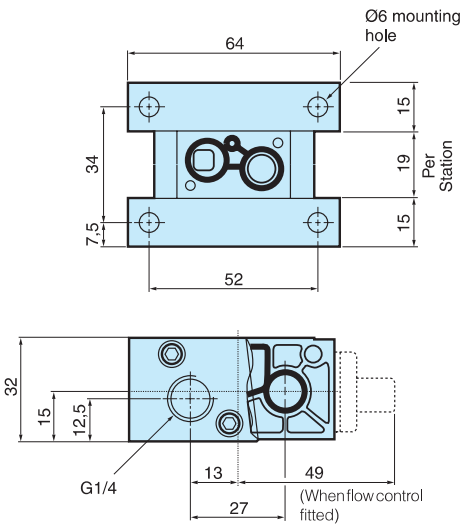
Dimensions, B3 Valve Series

5/3 Body ported

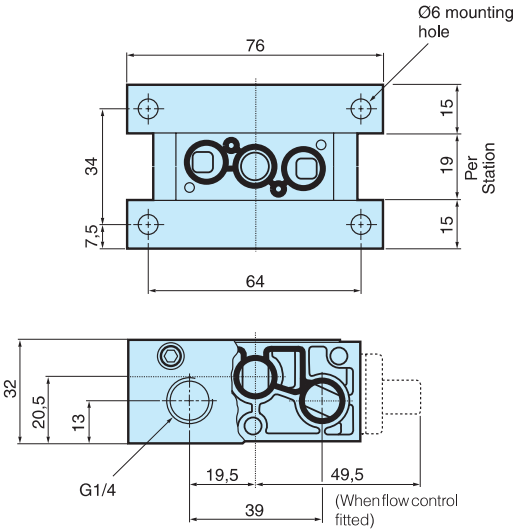


Manifolds - IEM Inlet Exhaust Manifold System

3/2 Inlet Exhaust Manifold
For B3 Body Ported Valves



5/2 Inlet Exhaust Manifold
For B3 Body Ported Valves

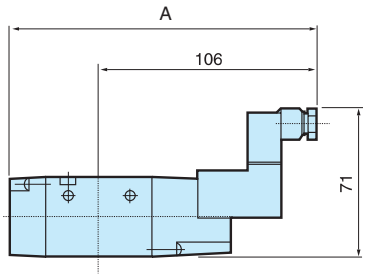


All dimensions in mm unless otherwise stated

Dimensions, B4 Valve Series

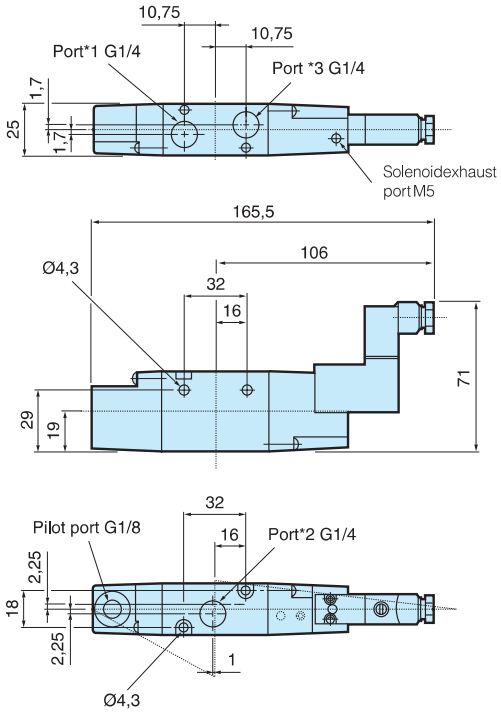
3/2 Body ported

Single solenoid operated air spring return / spring return

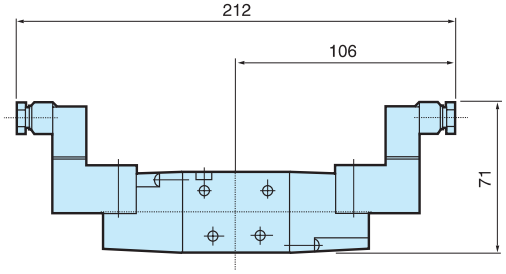


	Air differential return	Spring return
A	154,0	156,0

Single solenoid operated air pilot return

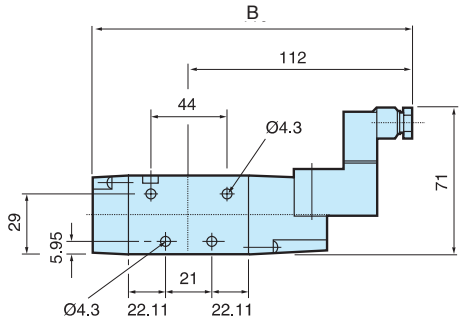


Double solenoid operated



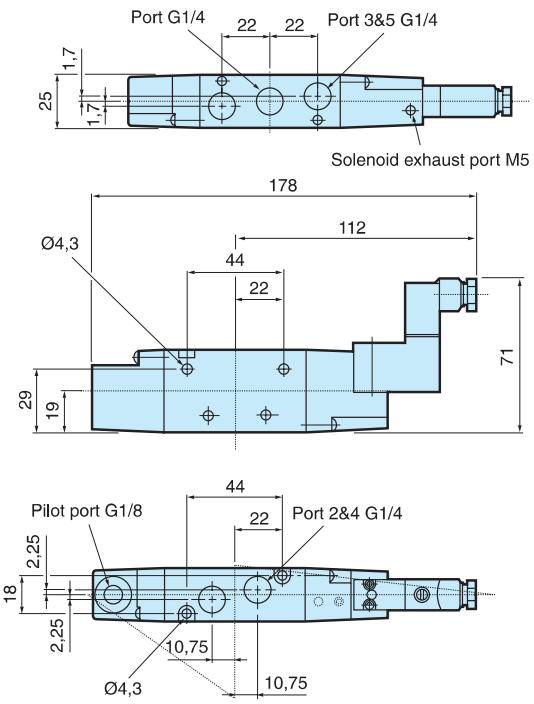
5/2 Body ported

Single solenoid operated air spring return / spring return

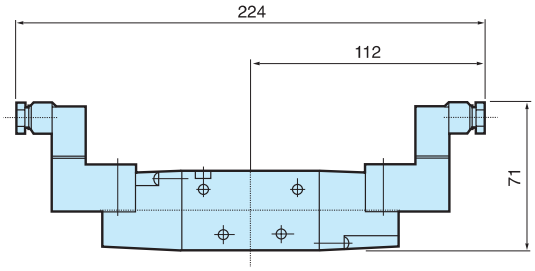


	Air differential return	Spring return
B	166,0	168,0

Single solenoid operated air pilot return



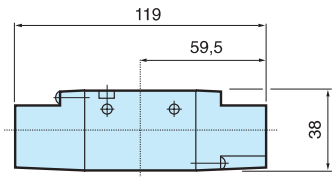
Double solenoid operated



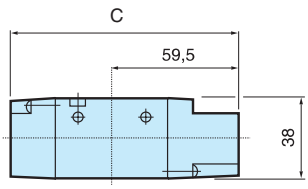
All dimensions in mm unless otherwise stated

Dimensions, B4 Valve Series

3/2 Body ported
Double air pilot operated

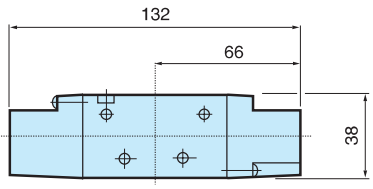


Air pilot operated air spring return / spring return

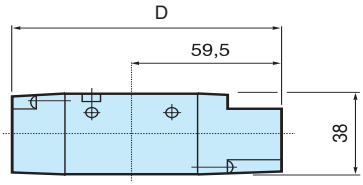


	Air differential return	Spring return
C	107,5	109,5

5/2 Body ported
Double air pilot operated

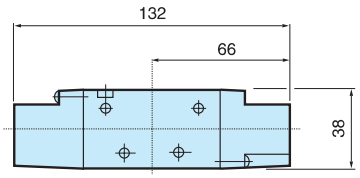


Air pilot operated air spring return / spring return

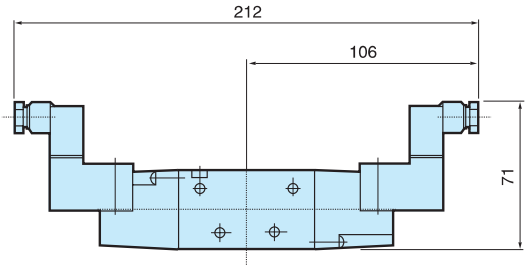


	Air differential return	Spring return
D	120,0	122,0

5/3 Body ported
Double air pilot return

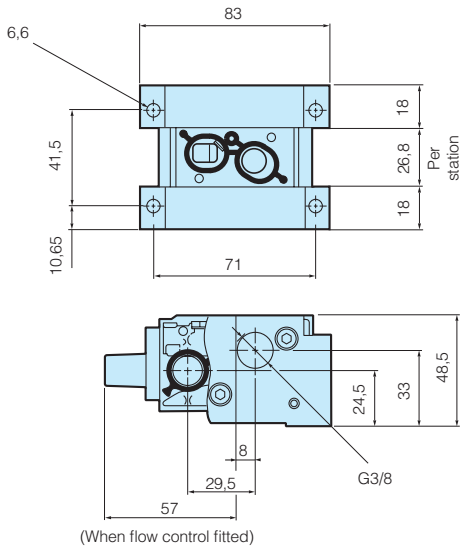


5/3 Body ported
Double solenoid operated

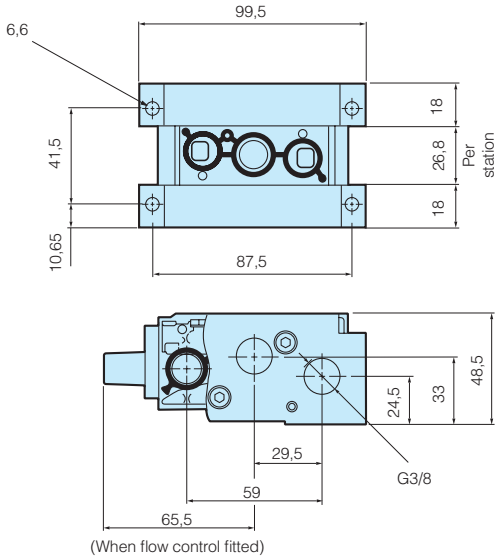


Manifolds - IEM Inlet Exhaust Manifold System

3/2 Inlet Exhaust Manifold
For B4 Body Ported Valves



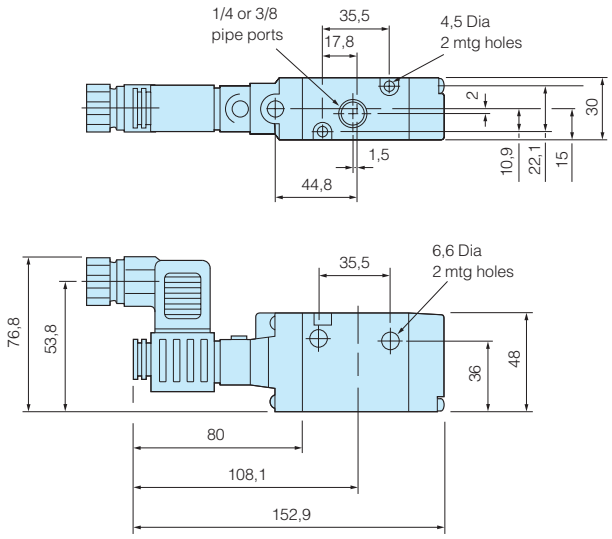
5/2 Inlet Exhaust Manifold
For B4 Body Ported Valves



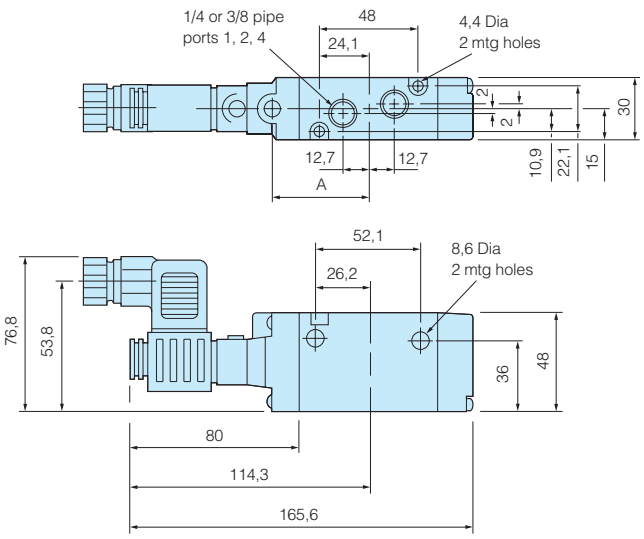
All dimensions in mm unless otherwise stated

Dimensions, B5 Valve Series

3/2 Body ported
Single solenoid operated air spring return / spring return

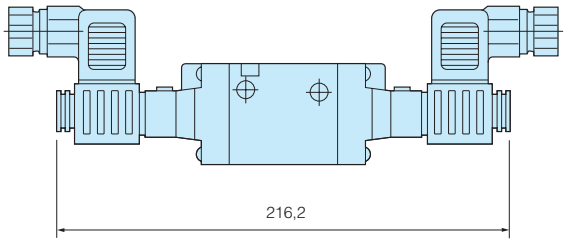


5/2 and 5/3 Body ported
Single solenoid operated air spring return / spring return

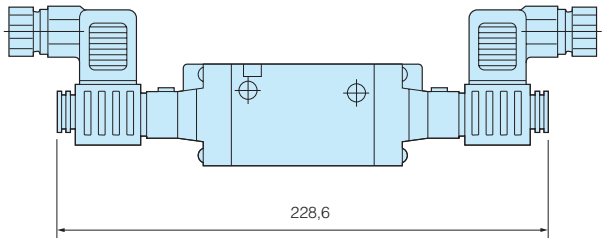


	2 Position	3 Position
A	51,1	62,7

Double solenoid operated



Double solenoid operated

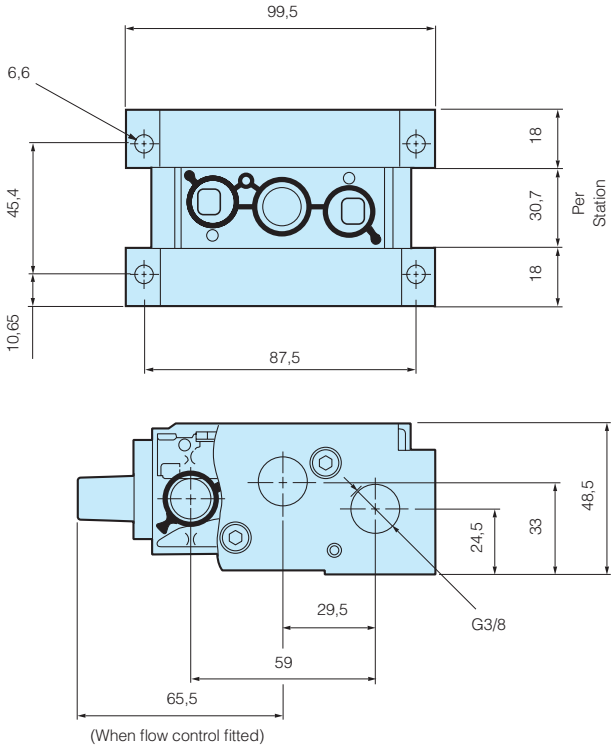


All dimensions in mm unless otherwise stated

Home

Manifolds - IEM Inlet Exhaust Manifold System

5/2 Inlet Exhaust Manifold
For B5 Body Ported Valves



Miniature low voltage solenoid valves, ideal for powering small cylinders in the packaging and process industries. Metal bodies with stand alone or manifold mounted versions.

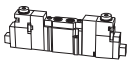
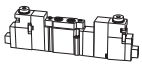
- 2 sizes: M5 and 1/8"
- Compact body with large flow
- Quick response time, faster than 10ms
- Expected life time more than 50,000,000 cycles
- Low power consumption only 0.6W
- Optional multipin connector manifold
- Manual override

Operating information

Working pressure : 1.5 to 7 bar
Working temperature : -5°C to +50°C
Flow (Qmax) A05 : 260 l/min
A12 : 850 l/min
Flow Qn A05 : 160 l/min
A12 : 510 L/min

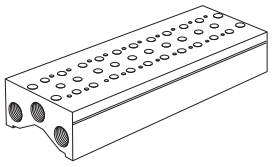
For technical information see CD

Directional control valves A05R and A12R series, inline / IEM manifold

	Symbol	Description (Electrically Actuated)	Voltage	Order code A05R - M5 ports	Order code A12R - G1/8 ports
		5/2 single solenoid	24V DC	**A05RS251PM5MF**	**A12RS251PG1MF**
		5/2 double solenoid	24V DC	**A05RD251PM5MF**	**A12RD251PG1MF**
		5/3 closed centre	24V DC	**A05RD351PM5MF**	**A12RD351PG1MF**

A05R/A12R Series Manifolds

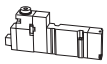
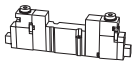
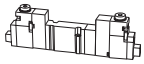
Manifold for individual wiring threaded type



No. of stations	Port size	Size	Order Code Manifold
4	M5	A05	**MMFU4A05G**
	G1/8	A12	**MMFU4A12G**
6	M5	A05	**MMFU6A05G**
	G1/8	A12	**MMFU6A12G**
8	M5	A05	**MMFU8A05G**
	G1/8	A12	**MMFU8A12G**

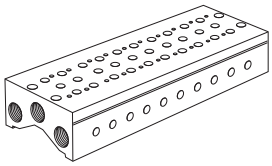
Indicates stocked product.

Directional control valves A05P/A12P series, sub-base version

Symbol	Description	Voltage	Order code A05P	Order code A12P
	Electrically actuated 5/2 single solenoid	24V DC	**A05PS251P**	**A12PS251P**
	Electrically actuated 5/2 double solenoid	24V DC	**A05PD251P**	**A12PD251P**
	Electrically actuated 5/3 closed centre	24V DC	**A05PD351P**	**A12PD351P**

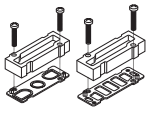
A05P/A12P Series manifold sub-bases

Manifolds individual wiring threaded type



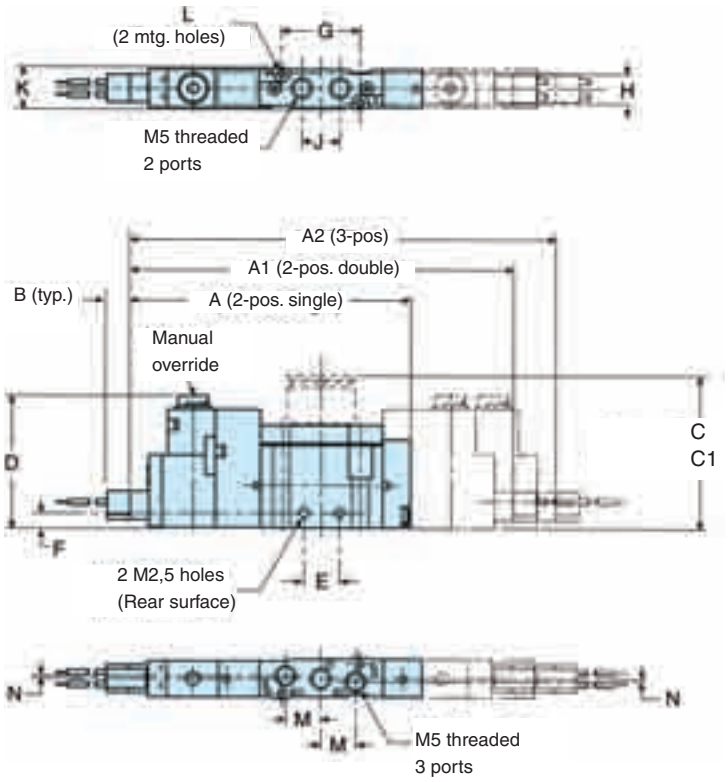
No. of stations	Port size	Size	Order Code Manifold
4	M5	A05	**MMFS4A05GM5**
	G1/8	A12	**MMFS4A12GG1**
6	M5	A05	**MMFS6A05GM5**
	G1/8	A12	**MMFS6A12GG1**
8	M5	A05	**MMFS8A05GM5**
	G1/8	A12	**MMFS8A12GG1**

Mounting and Wiring Accessories

	Description	Order code
	Connector with lead wire black (-) red (+) 500mm	**A05PDCCL5**
	IEM blank plate kit (pack of 5)	**A05RGBP** **A12RGBP**
	Subbase blank plate kit (pack of 5)	**A05PGBP** **A12PGBP**

Indicates stocked product.

A05R - Single and double operators - Body ported

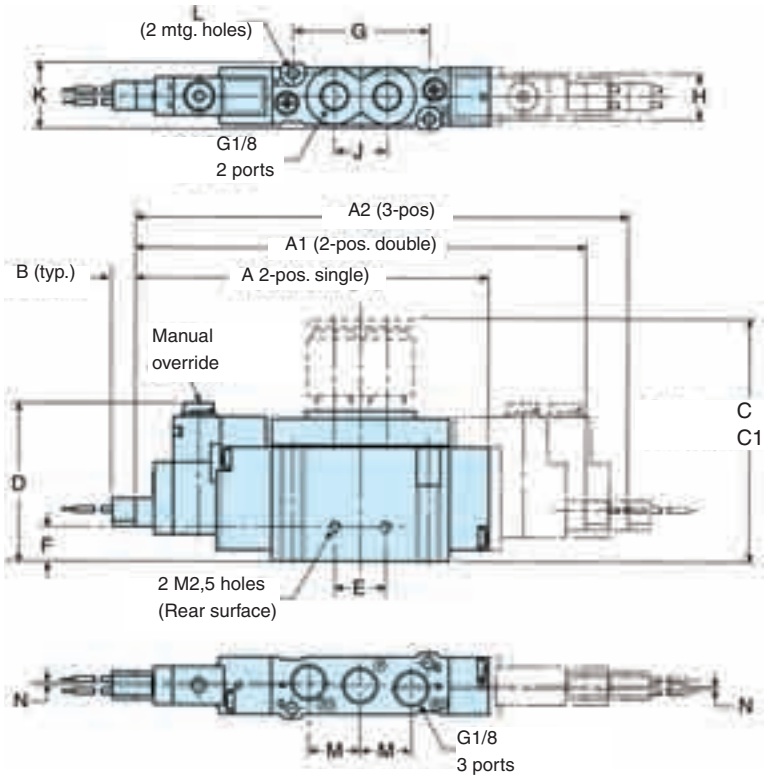


A05R - Body ported

A	A1	A2	B	C
74	100	108	6	-
C1	**D**	**E**	**F**	**G**
-	34,6	9,6	4	21
H	**J**	**K**	**L**	**M**
8,5	10,2	11,4	Ø2,1	9,5
N				
1				

Dimensions in mm

A12R - Single and double operators - Body ported

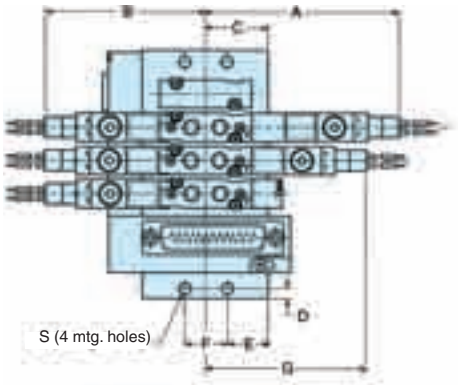


A12R - Body ported

A	A1	A2	B	C
93,5	119	130	6	-
C1	**D**	**E**	**F**	**G**
-	41,6	13,4	9	36
H	**J**	**K**	**L**	**M**
12	14	17,2	Ø3,1	13,6
N				
0,8				

Dimensions in mm

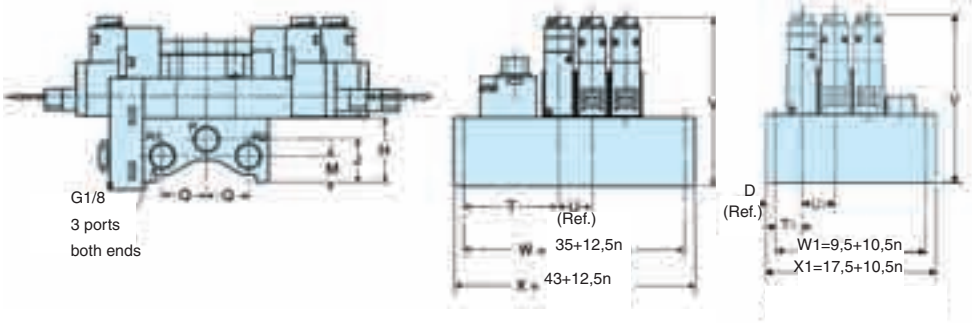
A05R - Manifold - Valve body ports



A05R - Manifold - valve body port

A 64	**B** 56	**C** 23,5	**D** 4	**E** 15,5
F 16	**G** 56	**H** 24	**J** 15,5	**M** 9,5
Q 16	**S** Ø4,5	**T** 34	**T1** 10	**U** 12,5
U1 10,5	**V** 63			

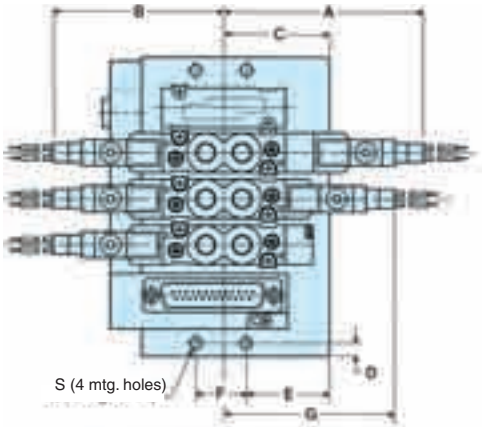
Dimensions in mm



n = number of stations

MMCU... **MMFU...**

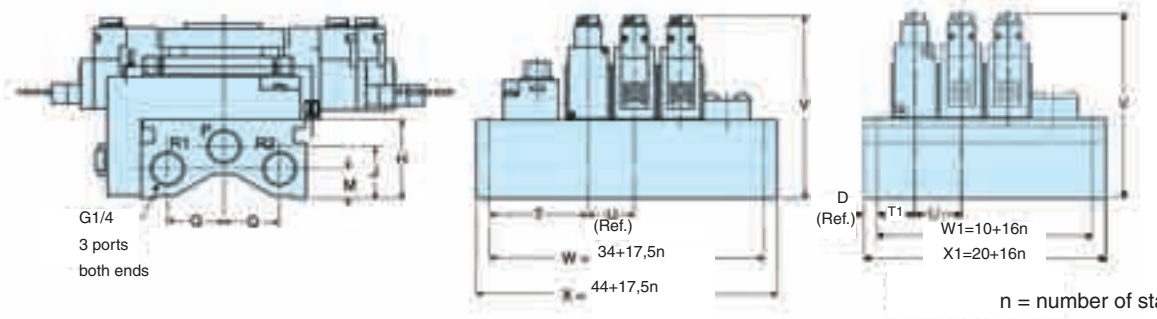
A12R - Manifold - Valve body ports



A12R - Manifold - Valve body port

A 77	**B** 66	**C** 29	**D** 5	**E** 19,2
F 19,6	**G** 66	**H** 27,5	**J** 18	**M** 10,5
Q 19,5	**S** Ø4,5	**T** 37,5	**T1** 12,2	**U** 17,5
U1 16	**V** 70			

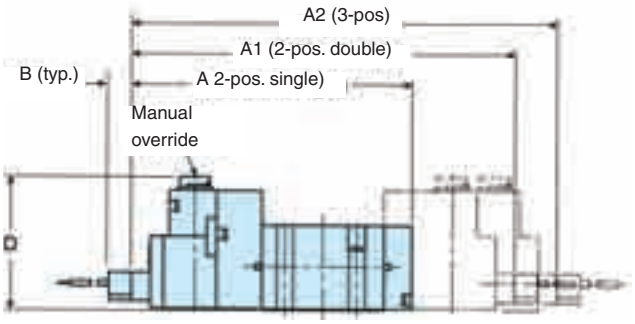
Dimensions in mm



n = number of stations

MMCU... **MMFU...**

A05P - Single and double operators - Subbase

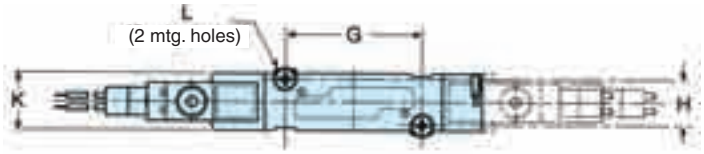


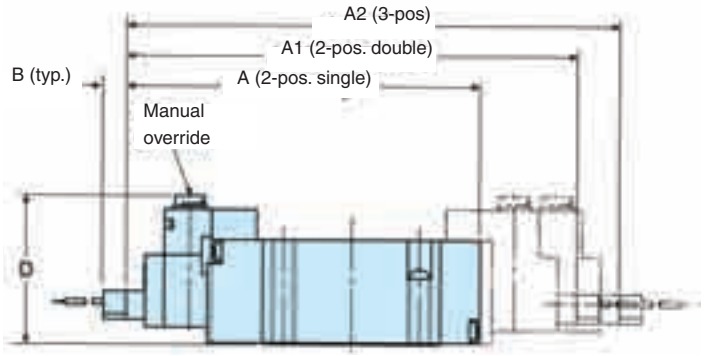
A05P - Subbase

A	A1	A2	B	D
74	100	108	6	35,1
G	**H**	**K**	**L**	
19	8,5	10	Ø2,1	

Dimensions in mm

A12P - Single and double operators - Subbase



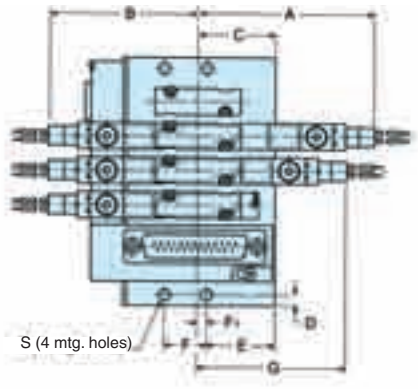


A12P - Subbase

A	A1	A2	B	D
93,5	119	130	6	39,1
G	**H**	**K**	**L**	
34	12	15	Ø3,1	

Dimensions in mm

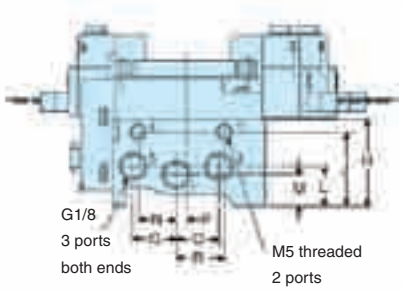
A05P - Manifold - Side ports

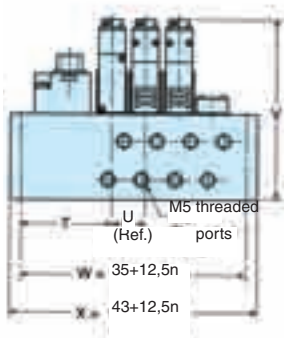


A05P - Manifold - Side ports

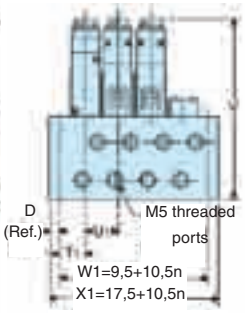
A 64	**B** 56	**C** 30,2	**D** 4	**E** 25,5
F 16	**F1** 4,7	**G** 56	**H** 32	**J** 28
L 14,5	**M** 11,5	**N** 14	**P** 3	**Q** 16
R 18	**S** Ø4,5	**T** 33,8	**T1** 10	**U** 12,5
	U1 10,5	**V** 67		

Dimensions in mm





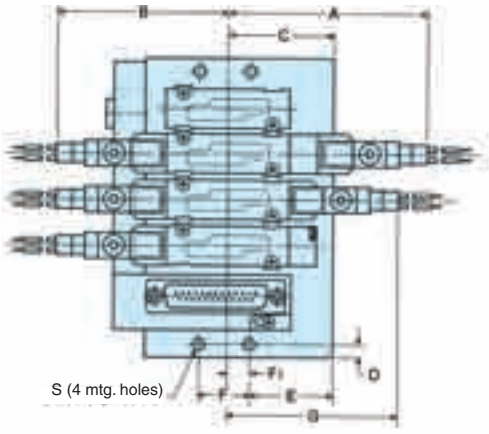
MMCS...



MMFS...

n = number of stations

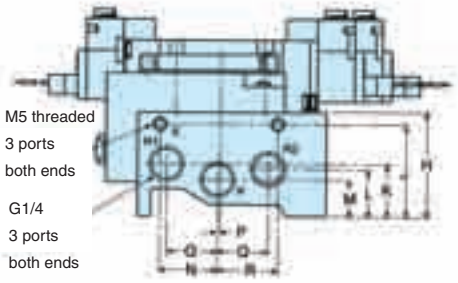
A12P - Manifolds - Side ports

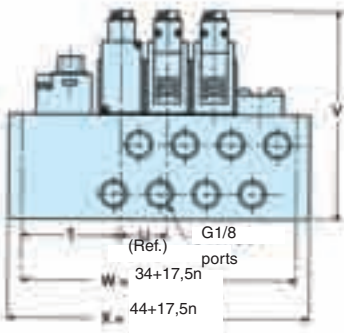


A12P - Manifold - Side ports

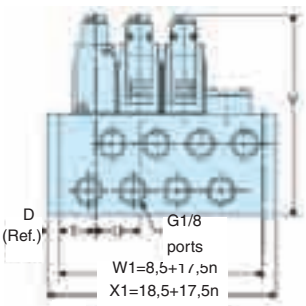
A 77	**B** 66	**C** 40,4	**D** 5	**E** 31,7
F 19,6	**F1** 11	**G** 66	**H** 39,5	**J** 35
K 20,5	**L** 18	**M** 14	**N** 22	**P** 1
Q 19,5	**R** 23	**S** Ø4,5	**T** 37,2	**T1** 12,7
U 17,5	**V** 79			

Dimensions in mm





MMCS...



MMFS...

n = number of stations

G1/8 and G1/4 Body ported spool valves with excellent reliability. Viton seals as standard provide long service life even in arduous conditions.

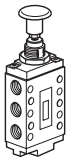
- 43 series G1/8 body ported
- 53 series G1/4 body ported
- Stainless steel spool
- 3/2, 5/2 and 5/3 versions
- Viton body seals as standard
- Integral mounting holes

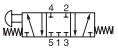
Operating information

Working pressure		Vacuum-10 bar
Working temperature		-10 °C to +80 °C
Port size	G1/8	43 series
	G1/4	53 series
Flow (Qmax);	43 series	510 l/min
	53 series	1740 l/min

For technical information see CD

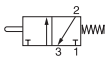
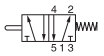
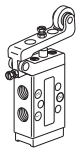
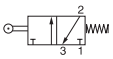
Push button operated valves, B43 / B53 Series



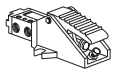
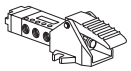
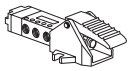
Symbol	Type	Actuator	Return	Size	Order code
	3/2	Button, black	Spring	G1/8 G1/4	**B43003BXS** **B53003HXS**
	3/2	Button black	Air Pilot	G1/4	**B53003HXP**
	3/2	Button black	Spring	G1/8	**B43603BX**
	3/2	Button red	Spring	G1/4	**B53003HY**
	3/2	Button, black	Button	G1/8 G1/4	**B43003HXS** **B53003HX**
	5/2	Button, black	Spring	G1/8 G1/4	**B43004BXS** **B53004HXS**
	5/2	Button, black	Button	G1/8 G1/4	**B43004HXS** **B53004HX**
	5/2	Button black	Air Pilot	G1/8 G1/4	**B43004HXP** **B53004HXP**
	5/3	Button closed centre	Button self centring	G1/4	**B53004HXX**

Indicates stocked product.

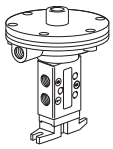
Mechanically operated valves, B43 / B53 Series

	Symbol	Type	Actuator	Return	Size	Order code
		3/2	Plunger Plunger Plunger	Spring Spring Spring	G1/8 G1/8 G1/4	**B43003CS** **B43603C** **B53003CS**
		5/2	Plunger Plunger	Spring Spring	G1/8 G1/4	**B43004CS** **B53004CS**
		3/2	Roller lever Roller lever Roller	Spring Spring Spring	G1/8 G1/8 G1/4	**B43003RS** **B43603R** **B53003RS**
		3/2	One way roller trip	Spring	G1/8	**B43003RTS**
		5/2	Roller lever Roller	Spring Spring	G1/8 G1/4	**B43004RS** **B53004RS**
		5/2	Roller	Air Pilot	G1/8	**B43004RP**

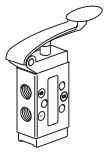
Manually operated valves, B43/53 series

	Symbol	Type	Actuator	Return	Size	Mid-position	Order code
Single-pedal operated							
		3/2	Foot pedal	Spring	G1/8 G1/4		**B43003FS** **B53003FS**
			Foot pedal	Foot Pedal	G1/4		**B53003G**
		5/2	Foot pedal	Spring	G1/8 G1/4		**B43004FS** **B53004FS**
			Foot pedal	Foot Pedal	G1/4		**B53004G**
		5/3	Foot pedal	Foot Pedal	G1/4	Closed centre	**B53004GX**
			Foot pedal	Foot Pedal	G1/4	Vented centre	**B53004GY**

Diaphragm operated valves

	Symbol	Type	Actuator	Return	Size	Mid-position	Order code
		3/2	Diaphragm	Spring	G1/8		**B43003DF**
		5/2	Diaphragm	Spring	G1/8		**B43004DF**

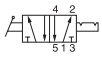
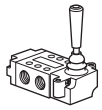
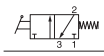
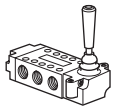
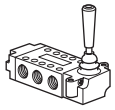
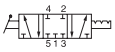
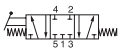
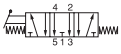
Palm lever operated valves

	Symbol	Type	Actuator	Return	Size	Mid-position	Order code
		3/2	Palm lever	Spring	G1/8		**B43003ES**

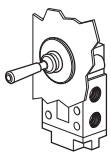
Indicates stocked product.

Manually operated valves, B43/53 series

Lever operated

		3/2	Lock down lever	Spring	G1/8	**B43003LS**
		3/2	Lock down lever	Spring	G1/8	**B43603L**
		5/2	Lock down lever	Spring	G1/8	**B43004LS**
		3/2	Lever	Spring	G1/4	**B53003LS**
		3/2	Lever	Air Pilot	G1/4	**B53003LP**
		3/2	Lever	Lever	G1/4	**B53003LT**
		5/2	Lever	Spring	G1/4	**B53004LS**
		5/2	Lever	Air Pilot	G1/4	**B53004LP**
		5/2	Lever	Lever	G1/4	**B53004LT**
		5/3	Lever Closed centre	Lever Held in three positions	G1/4	**B53004L**
		5/3	Lever Vented centre	Lever Held in three positions	G1/4	**B53004LW**
		3/3	Lever	Spring	G1/4	**B53003LX**
		5/3	Lever Closed centre	Lever Self centring	G1/4	**B53004LX**
		5/3	Lever Vented centre	Lever Self centring	G1/4	**B53004LY**

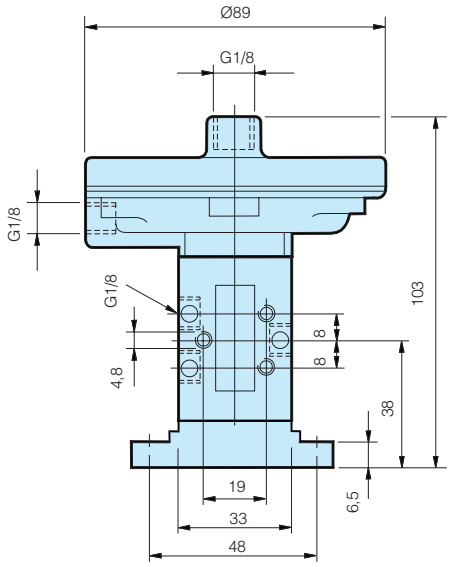
Panel mounting kit - B53 series

	**M53004L-10A**

Indicates stocked product.

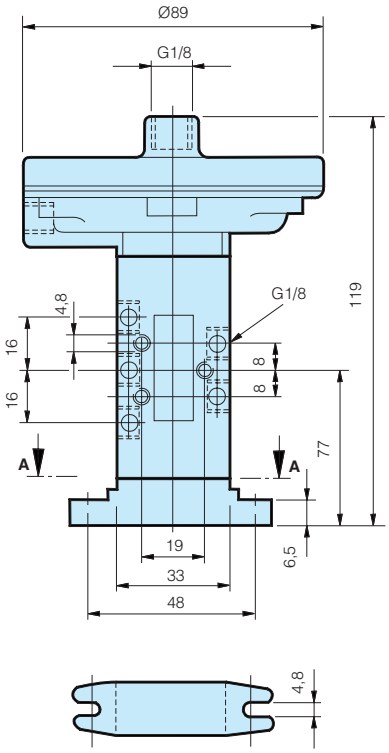
3/2 valve dimensions (mm)

Diaphragm operated spring return

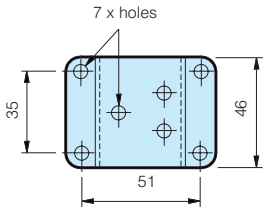


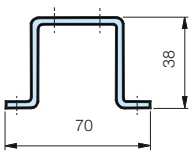
5/2 valve dimensions (mm)

Diaphragm operated spring return



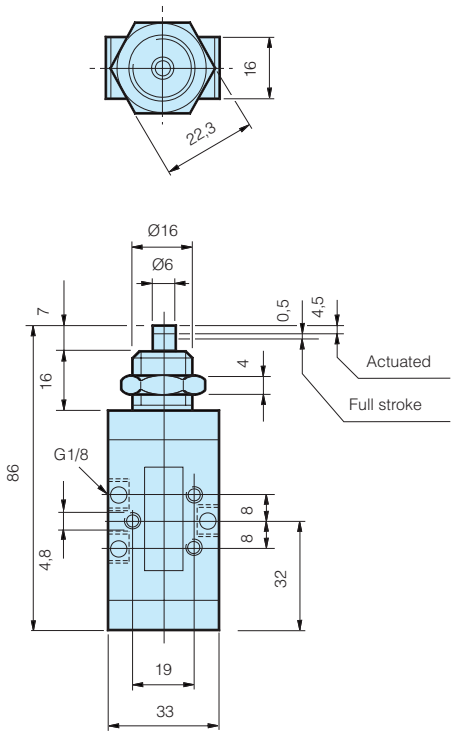
Mounting brackets





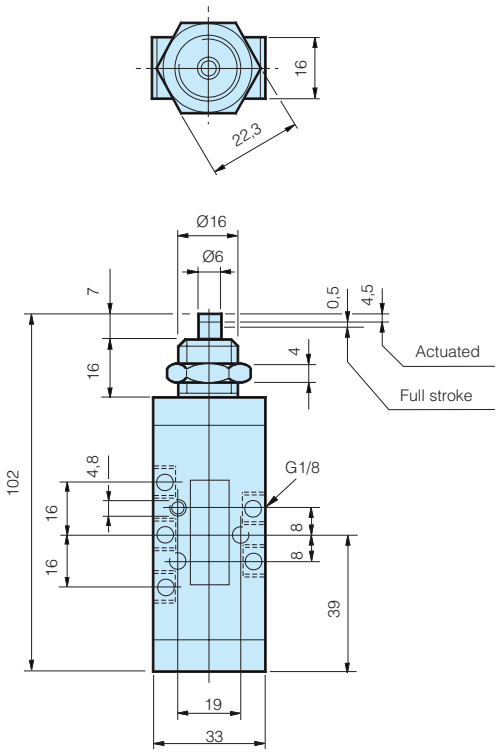
3/2 valve dimensions (mm)

Plunger operated spring return



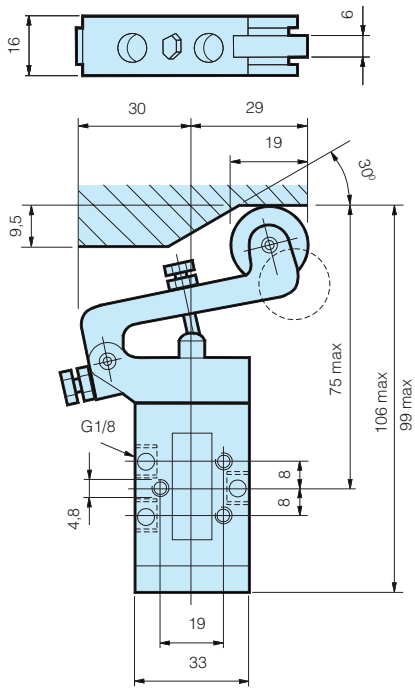
5/2 valve dimensions (mm)

Plunger operated spring return

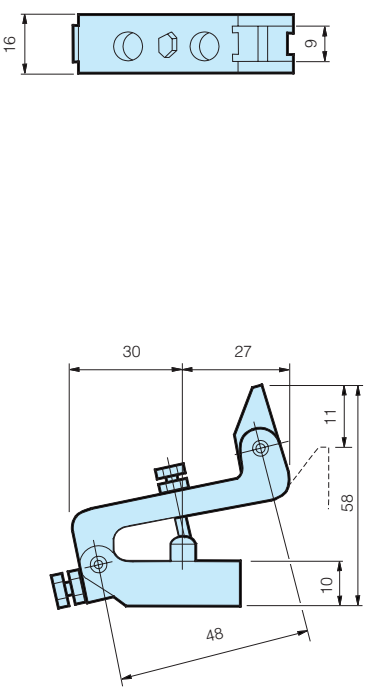


3/2 valve dimensions (mm)

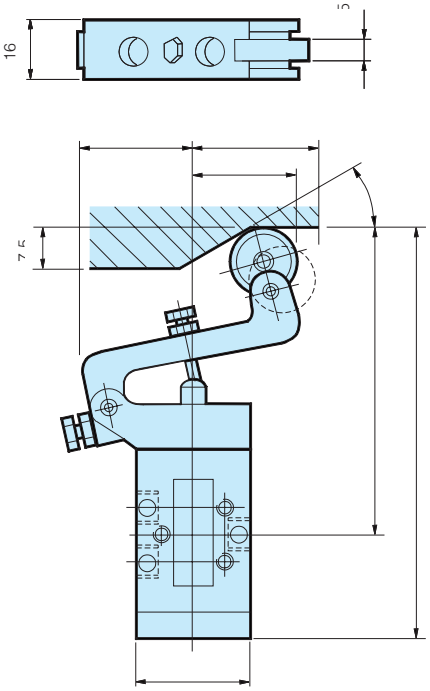
Roller operated spring return



One way trip

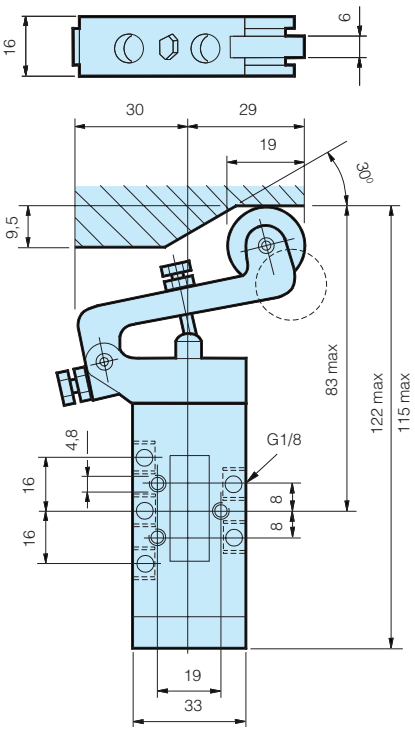


One way roller trip operated spring return

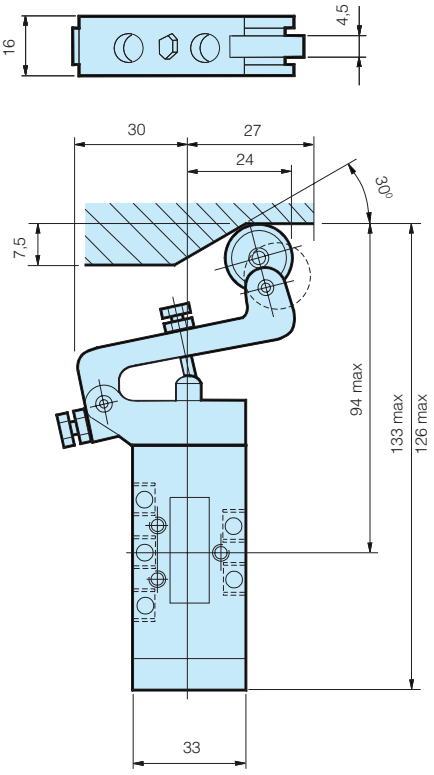


5/2 valve dimensions (mm)

Roller operated spring return

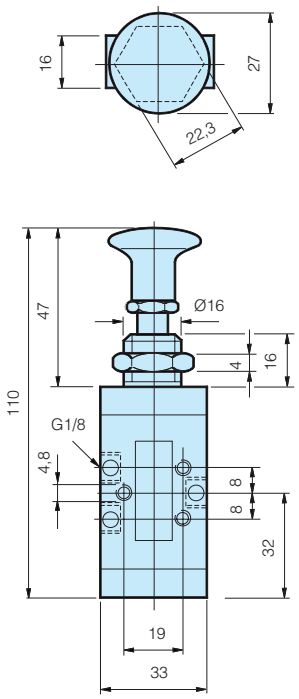


One way roller trip operated spring return

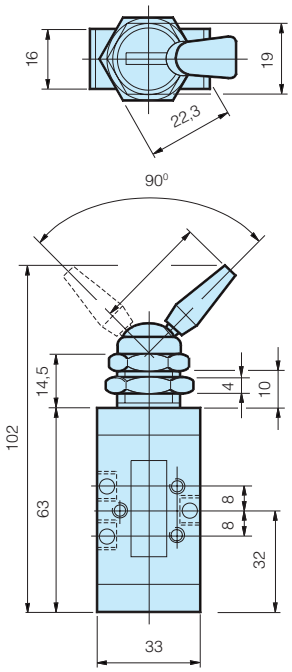


3/2 valve dimensions (mm)

Button operated
spring or button return

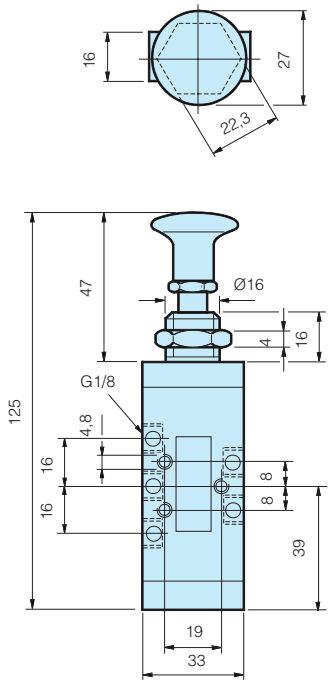


Lock down lever operated
spring return

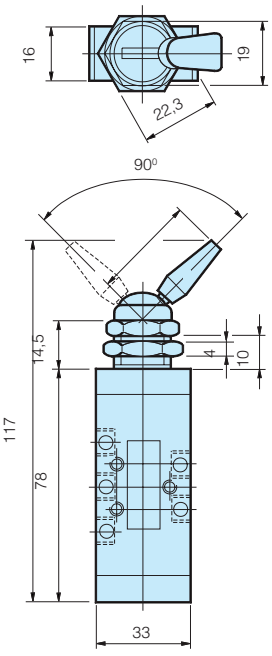


5/2 valve dimensions (mm)

Button operated
spring or button return

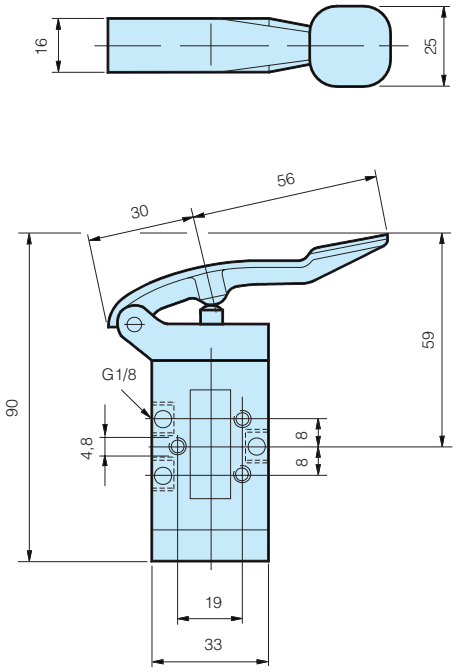


Lock down lever operated
spring return

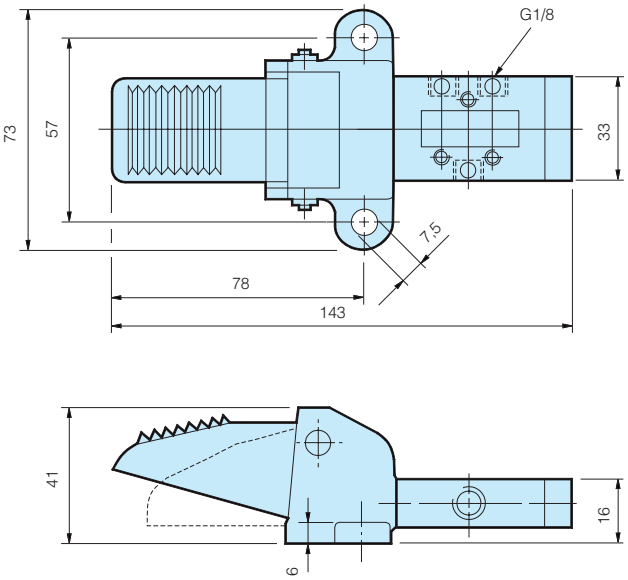


3/2 valve dimensions (mm)

Palm lever operated spring return

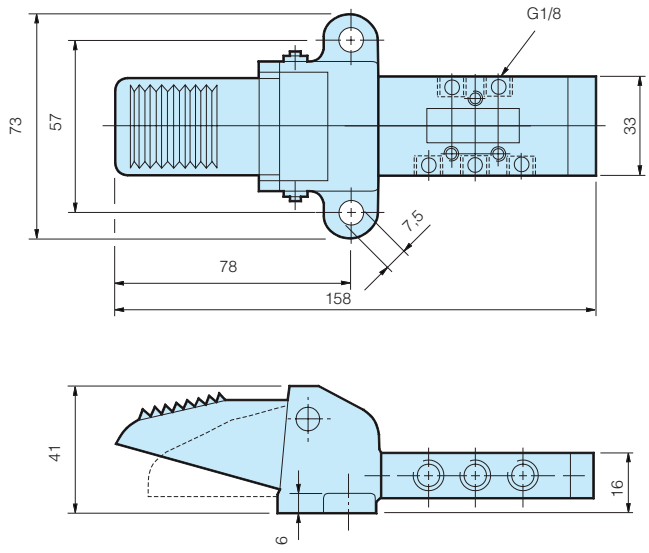


Foot pedal operated spring return



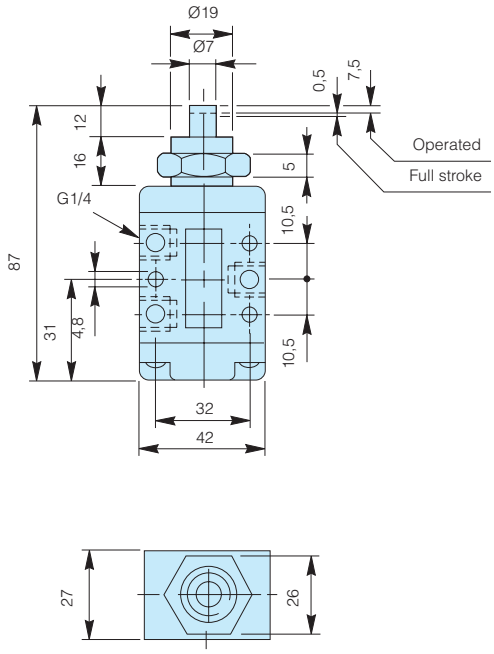
5/2 valve dimensions (mm)

Foot pedal operated spring return

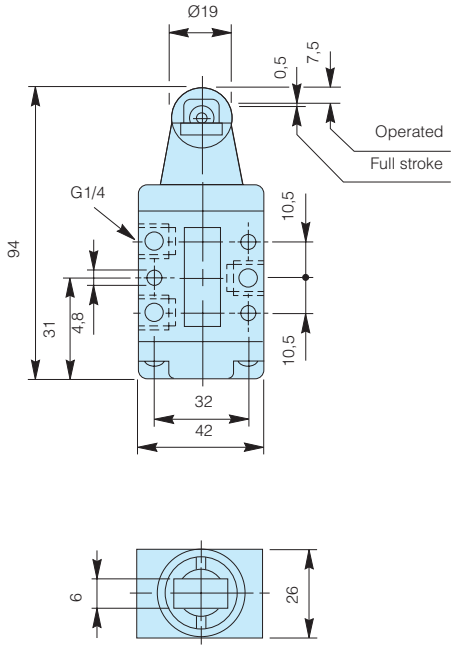


3/2 valve dimensions (mm)

Plunger operated spring return

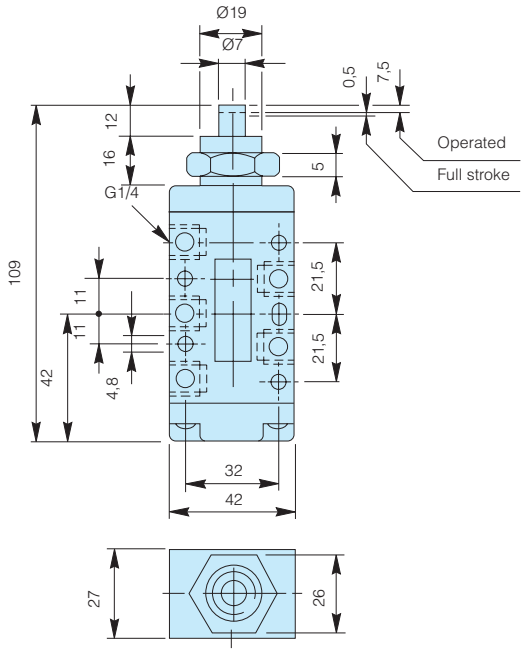


Roller operated

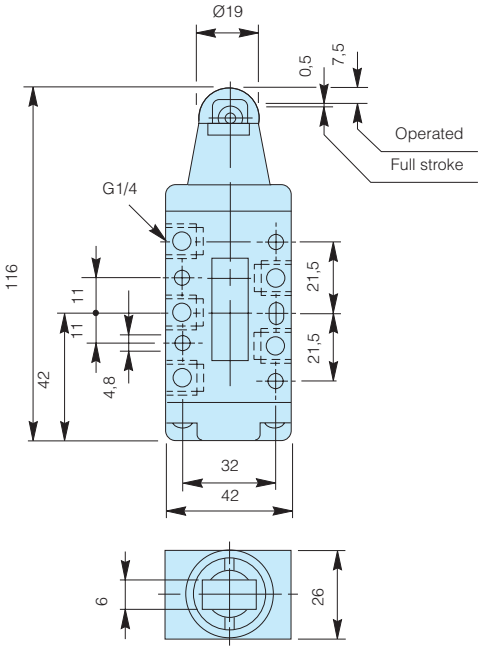


5/2 valve dimensions (mm)

Plunger operated spring return

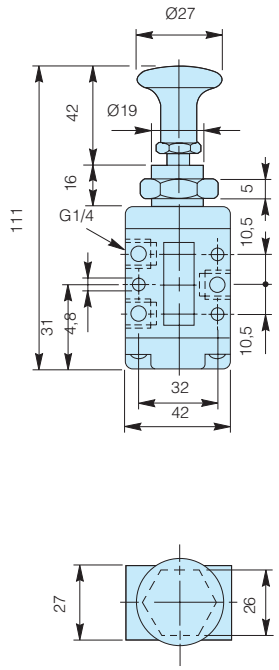


Roller operated

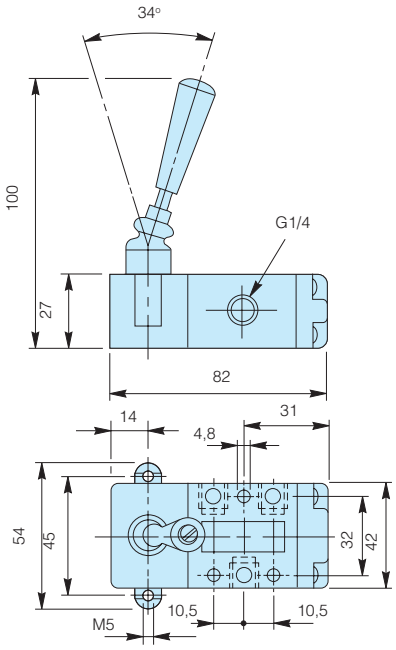


3/2 valve dimensions (mm)

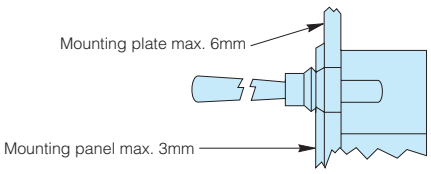
Button operated spring return



Lever operated spring return

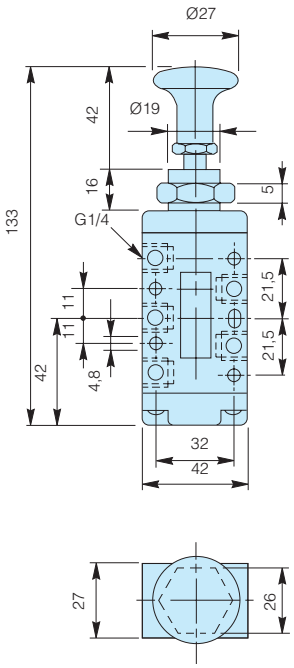


Panel mounting

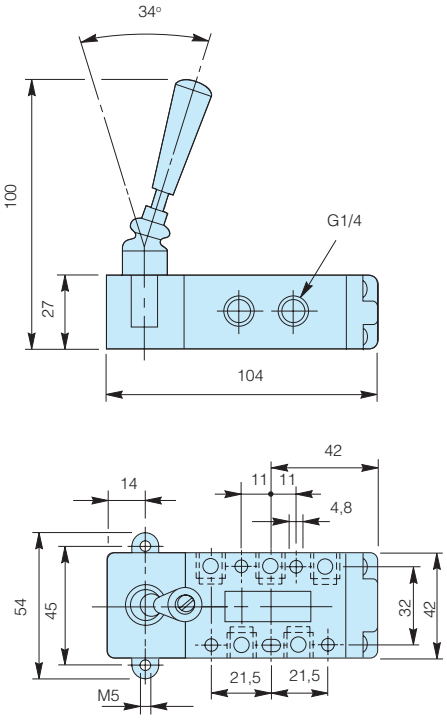


5/2 valve dimensions (mm)

Button operated spring return

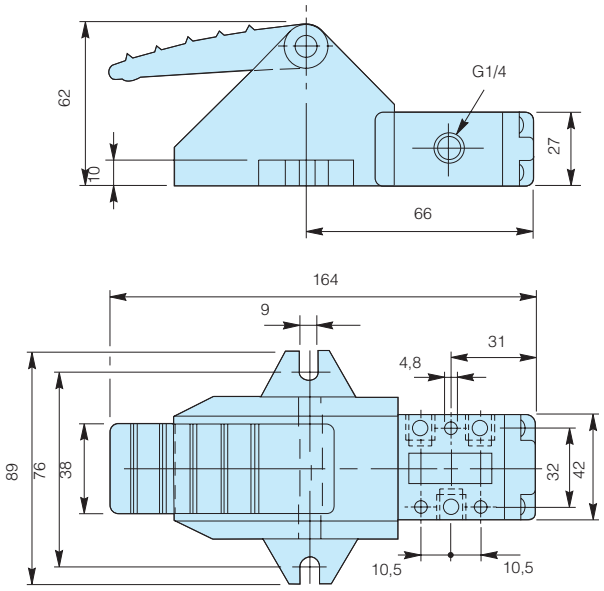


Lever operated spring return

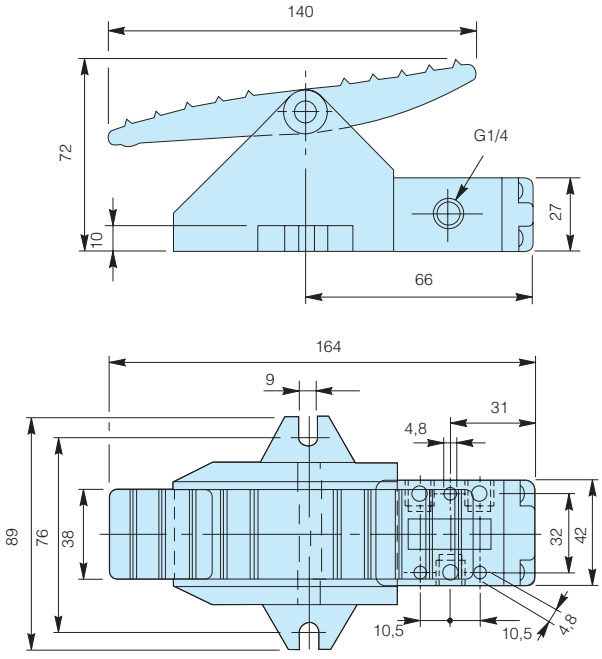


3/2 valve dimensions (mm)

Foot pedal operated spring return

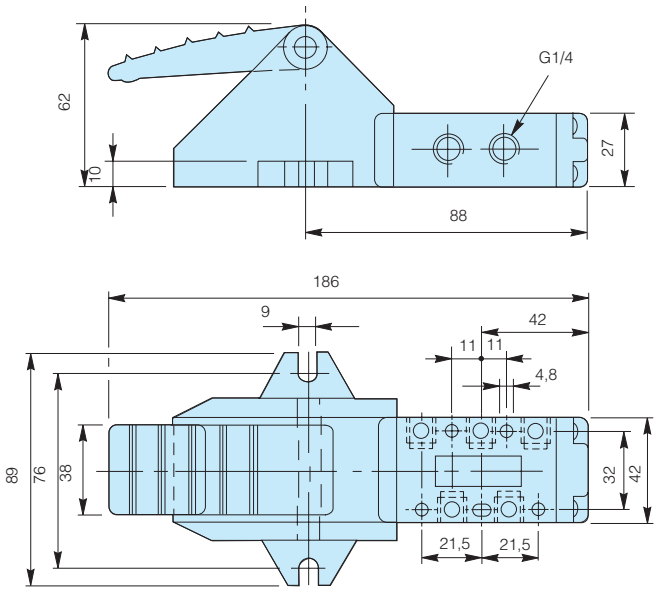


Foot pedal operated

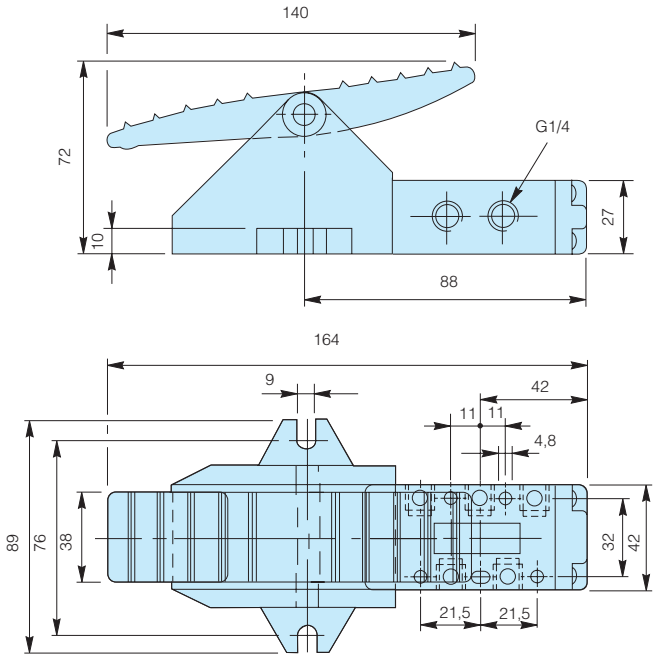


5/2 valve dimensions (mm)

Foot pedal operated spring return

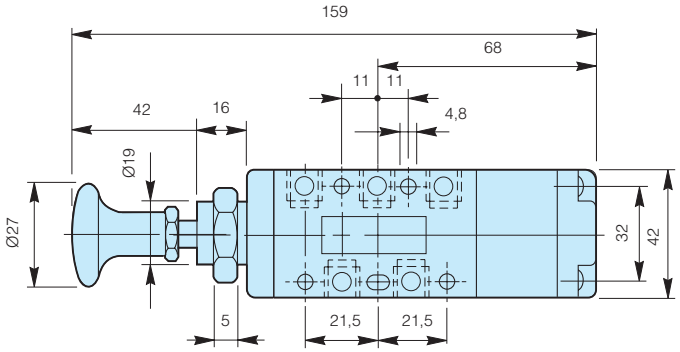


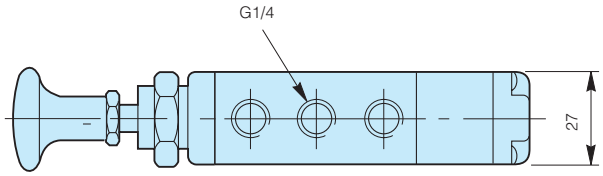
Foot pedal operated



5/3 valve dimensions (mm)

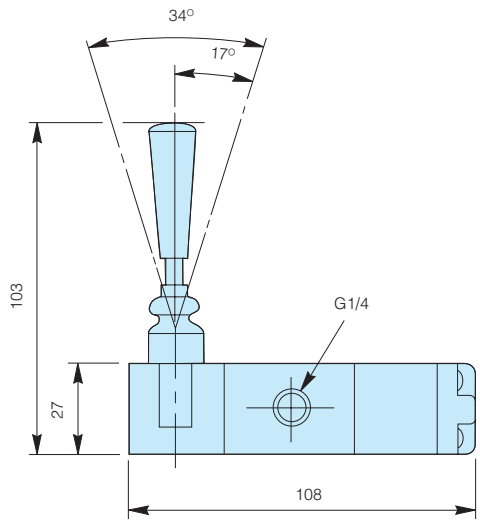
Button operated

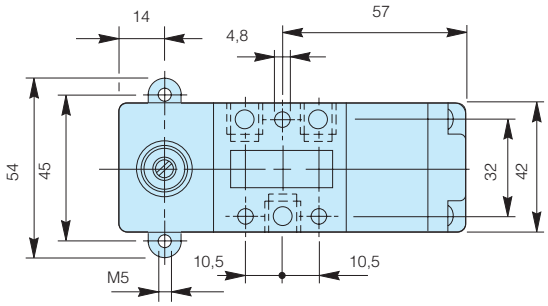




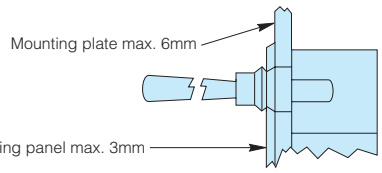
3/3 valve dimensions (mm)

Lever operated



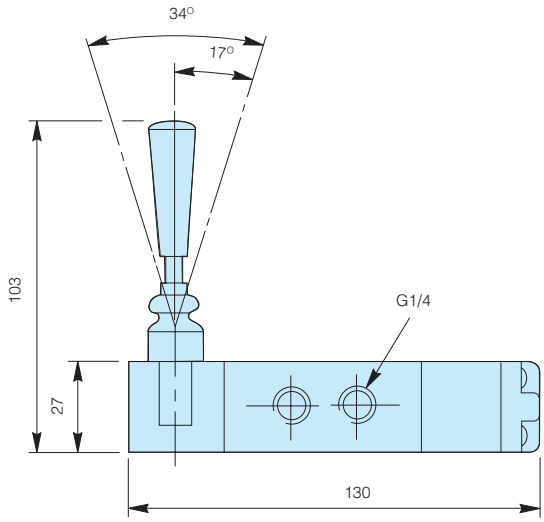


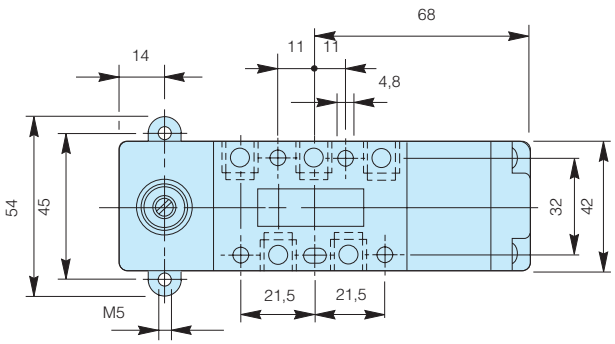
Panel mounting



5/3 valve dimensions (mm)

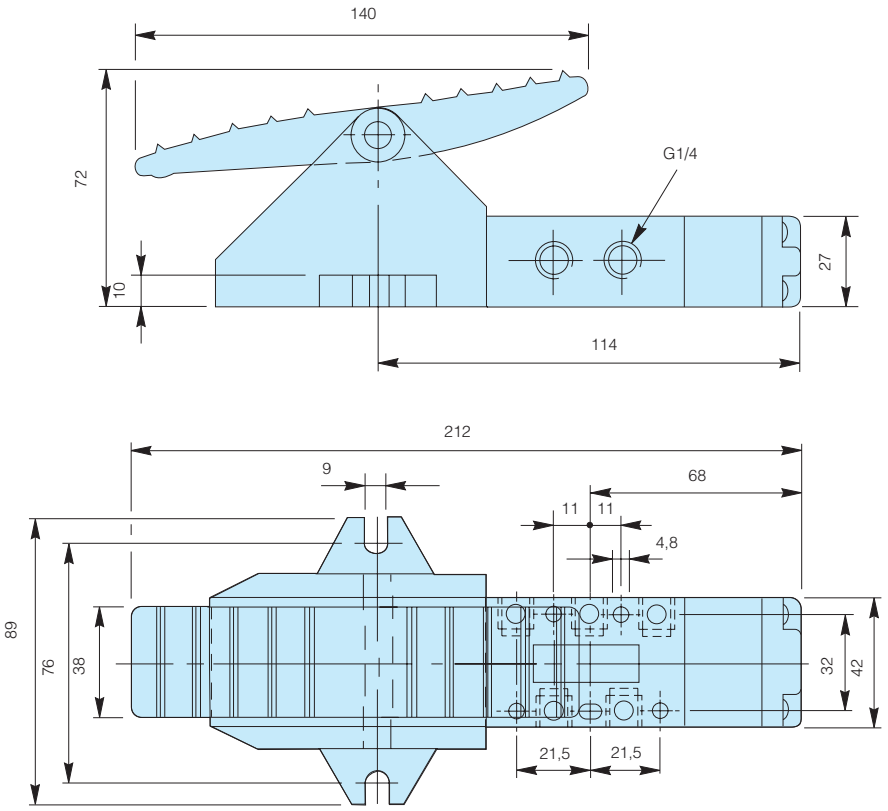
Lever operated





5/3 valve dimensions (mm)

Foot pedal operated spring return



Designed to fit the standard electrical Ø22mm knock out, they can provide dual pneumatic and electrical output signals. A variety of button and switch actuators are available.

- Facia mounted operation
- 3/2 NO or NC
- Modular construction
- Wide range of actuators
- Dual pneumatic an electrical output signal

Flow characteristics

PXB-B3••	Qmax = 60 l/min Qn = 30 l/min
PXB-B4••	Qmax = 240 l/min Qn = 120 l/min
Connections	Ø 4 mm push-in

Operating information

Push button valves - Visual indicators

Working pressure	
PXB-B3••	1 to 9 bar
PXB-B4••	1 to 10 bar
PXV-••	1 to 8 bar
Working temperature	-15°C to +60°C
ATEX approval:	CE Ex II 3 GD

For ATEX specific products contact Sales Office

Spring return push buttons

Symbol	Flow	Order code
	60 l/min	**PXB-B3111BA2**
	240 l/min	**PXB-B4131BA2**

Black - With 1 NC valve

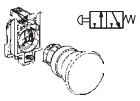
Symbol	Flow	Order code
	60 l/min	**PXB-B3111BA3**
	240 l/min	**PXB-B4131BA3**

Green - With 1 NC valve

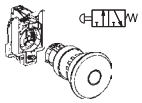
Symbol	Flow	Order code
	60 l/min	**PXB-B3111BA4**
	240 l/min	**PXB-B4131BA4**

Red - With 1 NC valve

Mushroom head push buttons

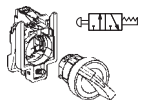
Symbol	Flow	Order code
	60 l/min	**PXB-B3111BC2**
	240 l/min	**PXB-B4131BC2**

Black - Spring return - With 1 NC valve

Symbol	Flow	Order code
	60 l/min	**PXB-B3111BT4**
	240 l/min	**PXB-B4131BT4**

Red - Latching - With 1 NC valve

Selector switches

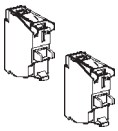
Symbol	Flow	Order code
	60 l/min	**PXB-B3111BD2**
	240 l/min	**PXB-B4131BD2**

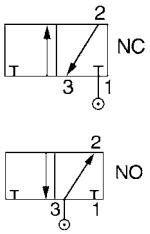
Black - 2 positions - With 1 NC valve

Indicates stocked product.

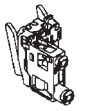
Additional switch valves, electrical contact block and mounting brackets

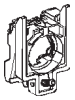
Symbol	Flow	Order code
	60 l/min NC	**PXB-B3911**
	240 l/min NC	**PXB-B4931**
	60 l/min NO	**PXB-B3921**
	240 l/min NO	**PXB-B4931**
	60 l/min NC	**PXB-B3912**
	60 l/min NO	**PXB-B3922**

Contact	Order code
 Normally open NO	**ZBE-101**
Normally closed NC	**ZBE-102**



All PXB-B4 valves can be connected either as normally closed 3/2 valve (NC) or normally open 3/2 valve (NO) as required, by connecting the primary air supply to port 1 or port 3.

Symbol	Flow	Order code
	60 l/min NC	**PXB-B3111B**
	60 l/min NO	**PXB-B3121B**

	Description	Order code
	Mounting block	**ZB4-BZ009**

Spring return push buttons

Spring return

	Colour	Order code
Flush	Black	**ZB4-BA2**
	Green	**ZB4-BA3**
	Red	**ZB4-BA4**

Mushroom head

	Colour	Order code
Ø40 mm spring return	Black	**ZB4-BC2**
	Green	**ZB4-BC3**
	Red	**ZB4-BC4**

Selector switches

Black handle

	Function	Order code
Standard	2 positions fixed	**ZB4-BD2**
	3 positions fixed	**ZB4-BD3**

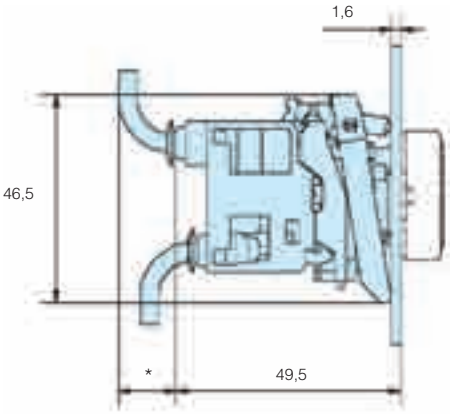
Visual indicators

	Colour actuated	Colour unactuated	Order code
	Green	Black	**PXV-F131**
	Red	Black	**PXV-F141**
	Yellow	Black	**PXV-F151**
	Blue	Black	**PXV-F161**
	White	Black	**PXV-F111**
	Green	Red	**PXV-F1314**

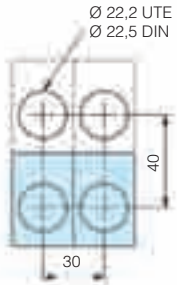
Indicates stocked product.

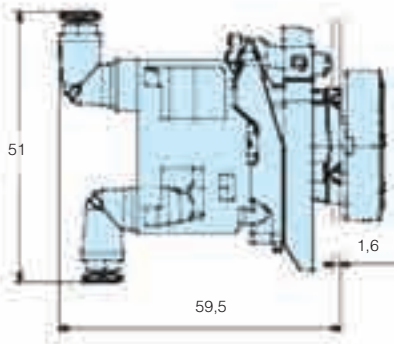
Home

PXB-B3

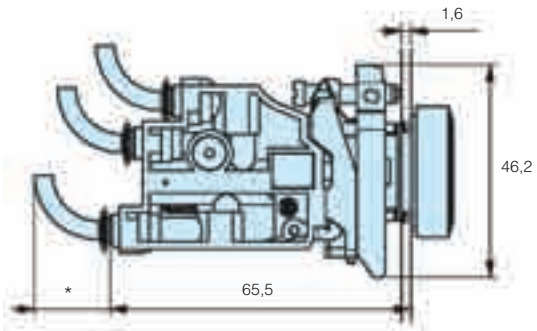


Body width 30mm
* With 2 x 4mm tube = 10
With 2,7 x 4mm tube = 15

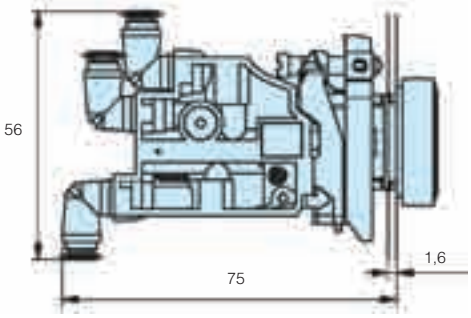




PXB-B4



Body width 30mm
* With 2 x 4mm tube = 10
With 2,7 x 4mm tube = 15



Rugged brass bodies with excellent corrosion resistance make these valves the ideal choice for arduous applications. Large and robust manual actuators are available together with air pilot actuators.

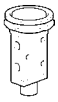
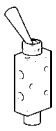
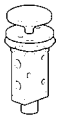
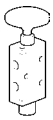
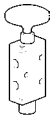
- Rugged valves for heavy duty applications
- Large and robust actuators for easy operation
- Excellent corrosion resistance
- Integral mounting holes
- Panel mounting versions

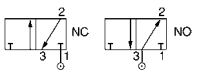
Operating information

Working temperature	-20 °C to +70 °C
Working pressure	Max 10 bar
Flow (Qmax):	380 l/min

For technical information see CD

Push button valves, VA13 Series - G1/8

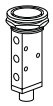
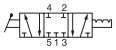
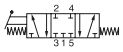
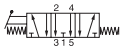
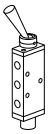
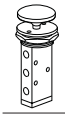
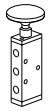
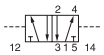
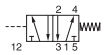
	Symbol	Actuator	Return	Operating force at 6 bar, N	Mounting	Order code
Hand actuated						
		Flush-Push button, red	Spring	32,5	Panel	**VA13-HIS4**
		Flush-Push button, black	Spring	32,5	Panel	**VA13-HIS4A06**
		Hand lever Held in two positions	Hand lever	8	Panel	**VA13-HB24**
		Hand lever Held in two positions	Hand lever	8	Side	**VA13-HB2**
		Button, red Two positions	Button	3	Panel	**VA13-KL24**
		Button, red	Spring	31,5	Panel	**VA13-KS4**
		Button, red Two positions	Button	3	Side	**VA13-KL2**
		Button, red	Spring	31,5	Side	**VA13-KS**
		Button, red Two positions	Knob/ Air signal	6	Side	**VA13-KL2A**



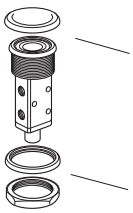
All 3/2 type VA13 valves can be connected either as normally closed 3/2 valve (NC) or normally open 3/2 valve (NO) as required, by connecting the primary air supply to port 1 or port 3

Indicates stocked product.

Push button valves, VA15 Series - G1/8 connection

	Symbol	Actuator	Return	Operating force at 6 bar, N	Mounting	Order code
Hand actuated						
		Flush-Push button, red	Spring	34,5	Panel	**VA15-HIS4**
		Hand lever Held in two positions	Hand lever	9	Panel	**VA15-HB24**
		Hand lever Held in three positions Closed centre position	Hand lever	9	Panel	**VA15-HB34**
		Hand lever Held in three positions Vented centre position	Hand lever	9	Panel	**VA15-XHB34**
		Hand lever Three positions Closed centre position	Hand lever	9	Panel	**VA15-HC4**
		Hand lever Three positions Vented centre position	Hand lever Self centring	9	Panel	**VA15-XHC4**
		Hand lever Held in two positions	Hand lever	9	Side	**VA15-HB2**
		Button, red Two positions	Button	5	Panel	**VA15-KL24**
		Button, red Two positions	Button	5	Side	**VA15-KL2**
		Air signal	Air signal	3/3	Side	**VA15-AA**
		Air signal	Spring	4/-	Side	**VA15-AS**

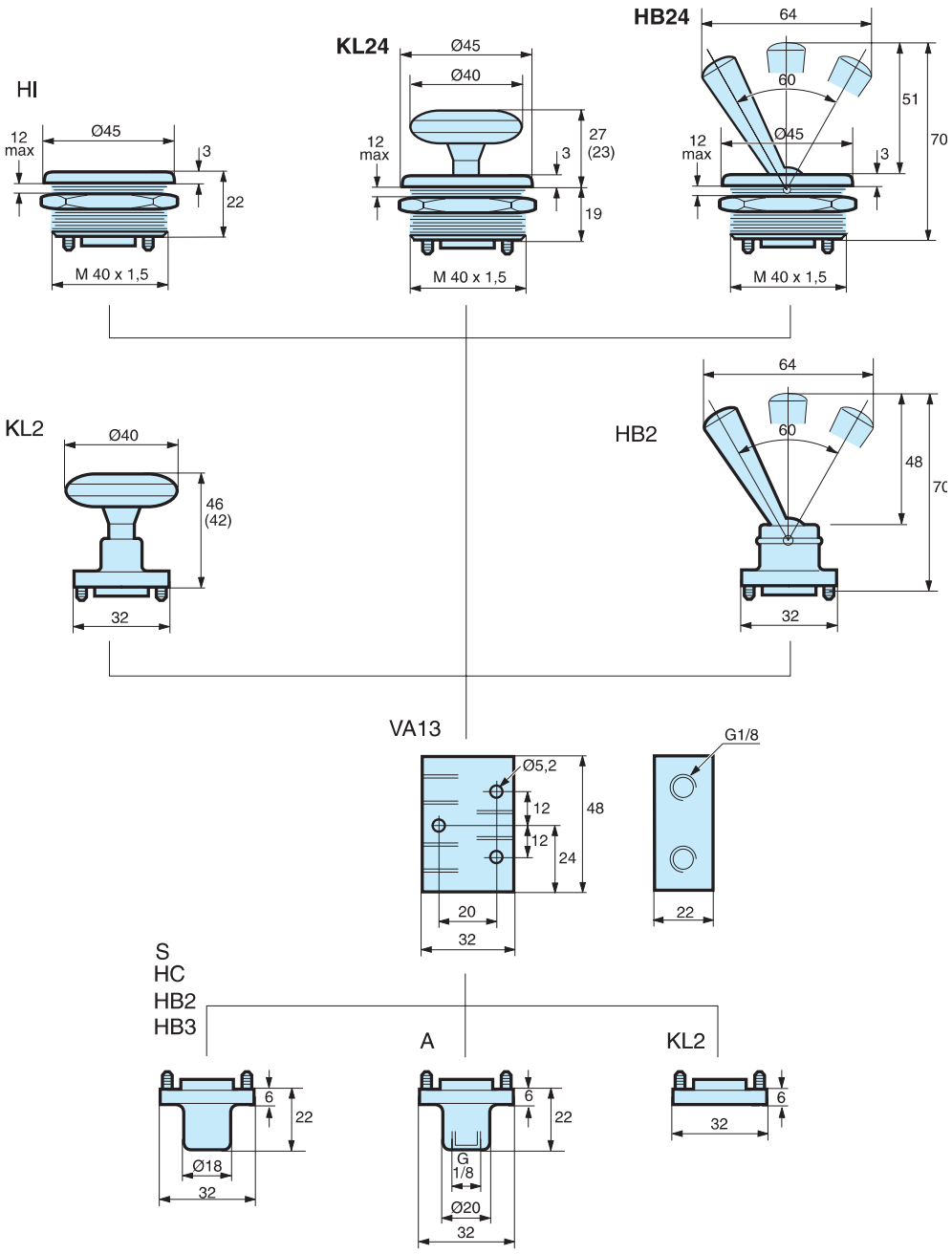
Accessories for VA13/15HI... Series valves



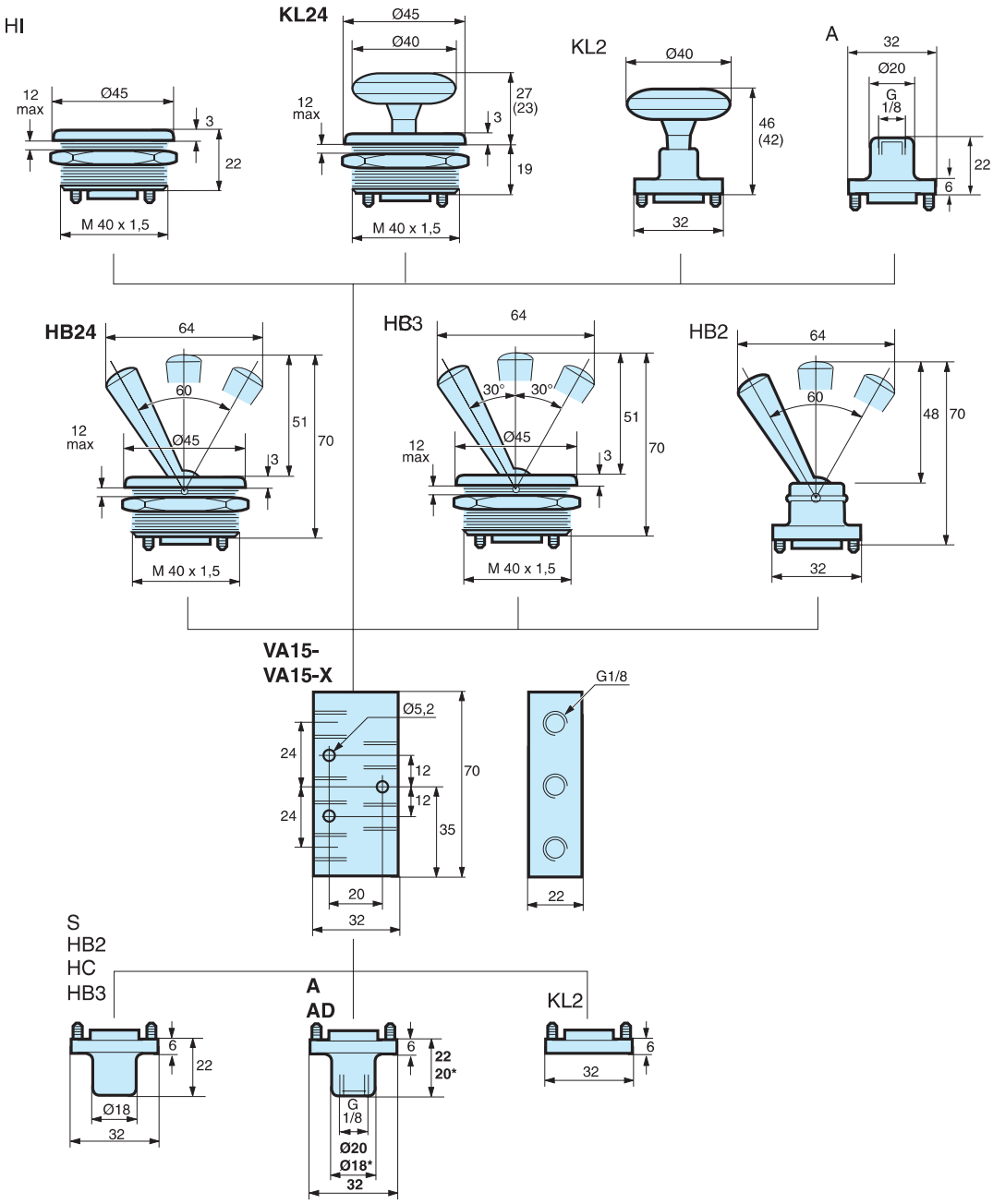
Description	Order code
Diaphragm, black	**9127359331**
Diaphragm, yellow	**9127359332**
Mounting ring	**9127359334**

Indicates stocked product.

Dimensions


HI
12 max
Ø45
3
22
M 40 x 1,5
KL24
Ø45
Ø40
12 max
27 (23)
3
19
M 40 x 1,5
HB24
64
60
51
70
12 max
Ø45
3
M 40 x 1,5
KL2
Ø40
46 (42)
32
HB2
64
60
48
70
32
VA13
Ø5,2
12
12
48
24
20
32
G1/8
22
S
HC
HB2
HB3
6
22
Ø18
32
A
6
22
G 1/8
Ø20
32
KL2
6
32

Dimensions


HI
12 max
Ø45
3
22
M 40 x 1,5
KL24
Ø45
Ø40
12 max
27 (23)
3
19
M 40 x 1,5
KL2
Ø40
46 (42)
32
A
32
Ø20
G 1/8
22
6
HB24
64
60
12 max
Ø45
3
51
70
M 40 x 1,5
HB3
64
30°
30°
51
12 max
Ø45
3
70
M 40 x 1,5
HB2
64
60
48
70
32
VA15-
VA15-X
Ø5,2
24
12
12
24
70
35
20
32
G1/8
22
S
HB2
HC
HB3
6
22
Ø18
32
A
AD
6
22
20*
G 1/8
Ø20
Ø18*
32
KL2
6
32

Compact 3/2 normally closed metal bodied valves with push-in air connections. Designed for the process duty cycle with high durability. Ideal for the process or packaging industry.

- High durability
- Very good repeat accuracy
- Design for process duty cycle
- Push-in connection
- Versatile and easily maintained
- Miniature size

Operating information

Working pressure; PXC-M	3 to 8 bar			
Working temperature	-15 °C to +60 °C			
	PXC-M111	**PXC-M121**	**PXC-M521**	**PXC-M601**
Flow (Qmax):	60 l/min	85 l/min	250 l/min	250 l/min

Bore Ø1,5 mm, flow 60 Nl/min

	Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Steel plunger	Spring	11	**PXC-M111**

Bore Ø1,5 mm, flow 85 Nl/min

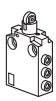
	Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Plastic roller	Spring	4,5	**PXC-M121**
		Steel roller	Spring	4,5	**PXC-M131**

Bore Ø2,5 mm, flow 250 Nl/min

	Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Plastic roller	Spring	7	**PXC-M521**

3/2 compact limit switches - With Ø4mm Push-in connections with pipeable exhaust port

Bore Ø2,5mm, flow 250 Nl/min - With plunger head

	Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Steel plunger	Spring	24	**PXC-M601A110**
		Steel roller plunger	Spring	24	**PXC-M601A102**
		90° Steel roller plunger	Spring	24	**PXC-M601A103**

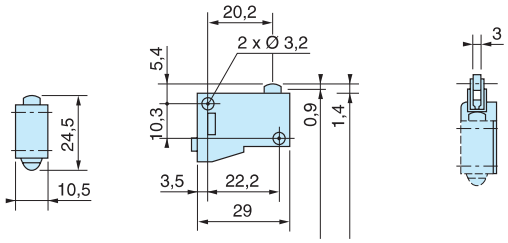
Indicates stocked product.

Dimensions, Limit switches, Series PXC

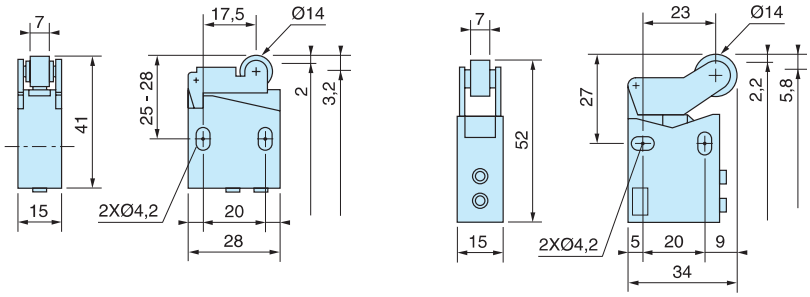
All dimensions in mm unless otherwise stated

3/2 miniature limit switches

PXC-M111 **PXC-Z12** **PXC-Z11**

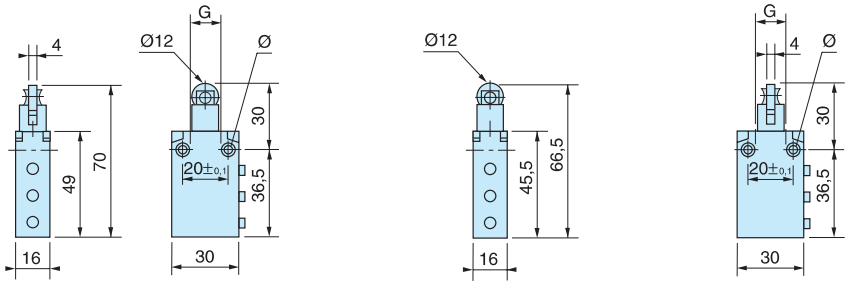


PXC-M121 - PXC-M131 **PXC-M521**

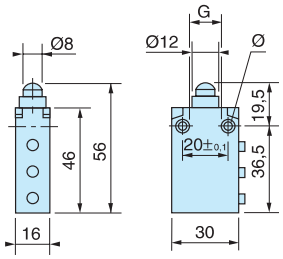


3/2 compact limit switches

PXC-M601A102 **PXC-M601A103**



PXC-M601A110



Logic processing

Miniature high-speed valves in stand alone, stackable or combined modules, incorporating standard logic functions. The range also includes timers and impulse modules.

- Complete range
- Stand alone, stackable or combinable modules
- Very fast response time
- Flexible and highly maintainable system
- DIN rail mounting
- Ø 4mm connection

Operating information

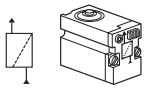
Working pressure	3 to 8 bar
Working temperature	-15 °C to 60 °C
Flow (Qmax)	180 l/min (PRD = 60 l/min)
ATEX approval:	CE Ex II 2 GD c 85°C

For ATEX specific products contact Sales Office

For technical information see CD

Logic sequencer

Step modules

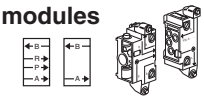


	Order code
Without sub base Pneumatic output	**PSM-A10**
Visual indication of pneumatic output and manual override	**PSM-A12**
With sub base Wihtout manual overide	**PSM-B12**

Step module subbase

	Order code
Subbase	**PSB-A12**
Additional interlock	**PSV-A12**

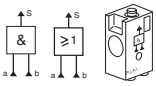
Set of head and tail modules and deviation modules



	Order code
Head & tail set	**PSE-A12**
Deviation standard	**PSD-A12**
Deviation for remote	**PSD-B12**

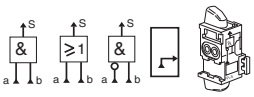
Logic elements

Line mounted elements



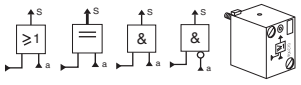
Logic Function	Order code
AND	**PLL-A11**
OR	**PLK-A11**
Clip on Din-rail	**PZM-L199**

Combinable elements



Logic Function	Order code
AND	**PLL-B12**
OR	**PLK-B12**
NOT	**PLN-B12**
INPUT	**PLE-B12**

Subbase mounted elements



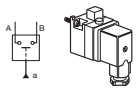
Logic Function	Order code
AND	**PLL-C10**
NOT inhibit standard	**PLN-C10**
NOT inhibit threshold	**PLN-D10**
OR	**PLK-C10**
YES regenerated	**PLJ-C10**

3 port subbase to be ordered separately.

Logic relays

Pressure switch

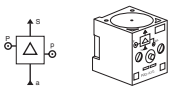
To be used with 3 port subbase



	Order code
With subbase	**PRE-A12**
Without subbase	**PRE-A10**

Amplifier relays

To be used with 4 port subbase



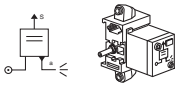
	Order code
With subbase	**PRD-A12**
Without subbase	**PRD-A10**

Memory relays

To be used with 4 port subbase

	Order code
With subbase	**PLM-A12**
Without subbase	**PLM-A10**

Sensor relays



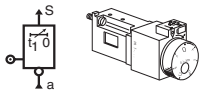
	Order code
With subbase	**PRF-A12**
Without subbase	**PRF-A10**

Indicates stocked product.

Home

Time delay relays

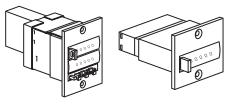
To be mounted on 3 port subbase



Function	Timing	Order code
Output after timed period	0,1 to 3s	**PRT-E10**
	0,1 to 30s	**PRT-A10**
	10 to 180s	**PRT-B10**
With subbase	0,1 to 30s	**PRT-A12**
Output during timed period	0,1 to 3s	**PRT-F10**
	0,1 to 30s	**PRT-C10**
	10 to 180s	**PRT-D10**

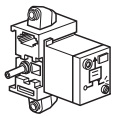
Impulse counters

Flush mounting
Pneumatic or manual reset



	Order code
*Surface mounting	**PCT-A11**
*Flush mounting	**PCT-B11**
Surface mounting	**PCP-A11**

* Totalising counters

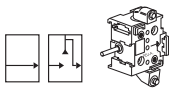


Not elements

Description	Order code
PLNC10 on PZUA12 subbase	**PLN-C12**
PLND10 on PZUA12 subbase	**PLN-D12**

Subbase for logic elements and relays

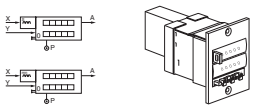
3 port and 4 port subbases



	Order code
Input module	**PZU-E12**
3 port "common input"	**PZU-A12**
3 port "cascade"	**PZU-C12**
port subbases	**PZU-B12**

* For combination with memory relay and amplified relay.

Timers with calibrated dial



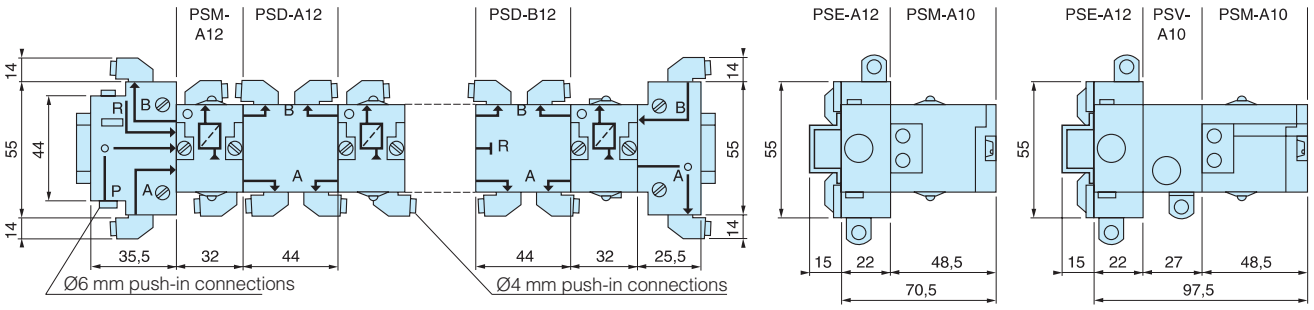
Time base	Time range	Order code
1 second	1 second to 27 hours	**PCM-A11**
1 minute	1 minute to 69 days	**PCM-B11**
2 minutes	3 to 100 seconds	**PCM-C11**
2 minutes	3 to 10 minutes	**PCM-D11**
2 minutes	3 to 100 minutes	**PCM-E11**

Indicates stocked product.

Home

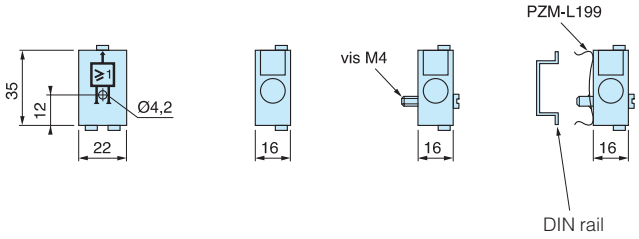
Dimensions, Logic processing

Modular sequencer



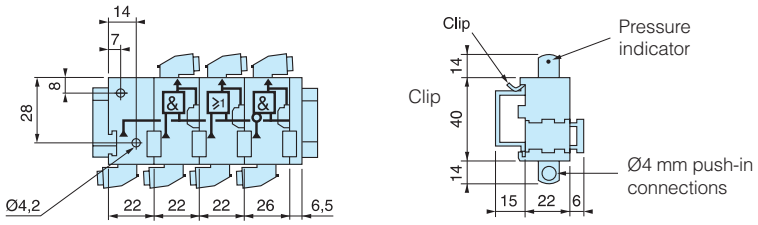
Line mounted logic elements

PLL-A11 and PLK-A11



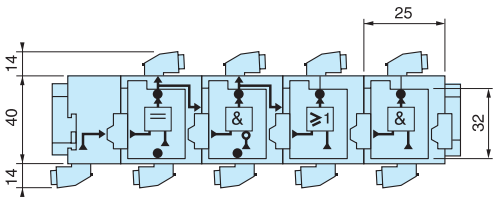
Combinable logic elements

PLE-B12 — PLL-B12 — PLK-B12 and PLN-B12

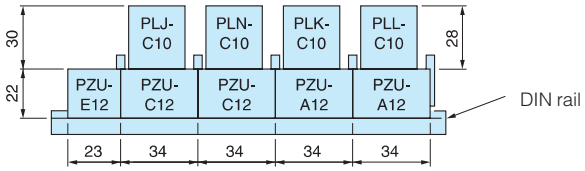


Logic elements mounted on 3-port modular subbases

PZU-E12

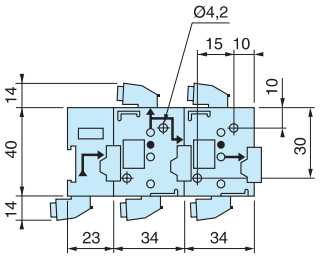


PLJ-C10 — PLN-C10 — PLK-C10 and PLL-C10 mounted on PZU-C12 and PZU-A12

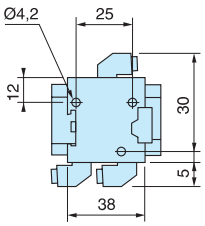


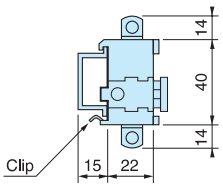
3 and 4-port modular subbases

PZU-E12 — PZU-C12 — PZU-A12



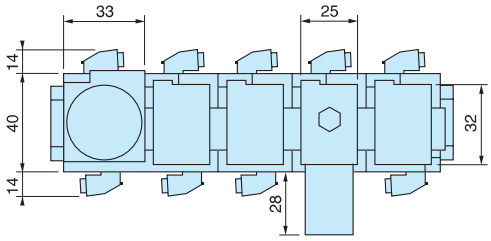
PZU-B12

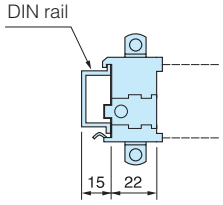


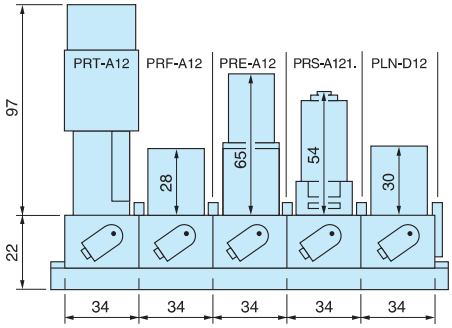


Relays mounted on 3-port modular subbases

PRT-A12 — PRF-A12 — PRE-A12 — PRS-A121 and PLN-D12

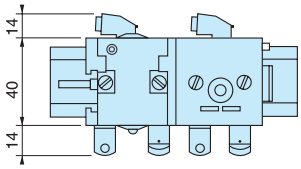


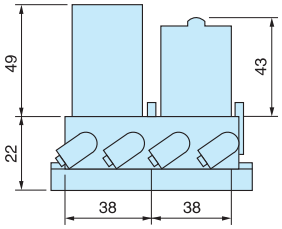




Relays mounted on 4-port modular subbases

PLM-A12 and PRD-A12

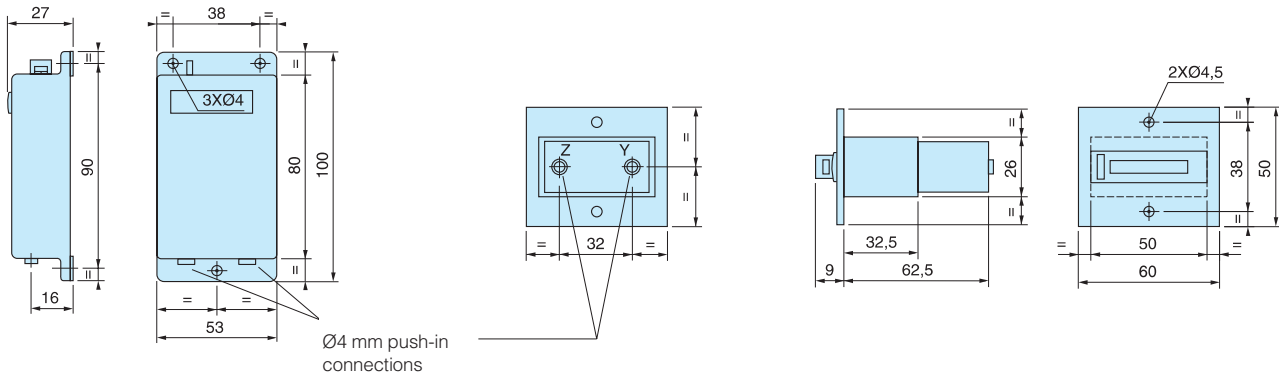




Logic processing

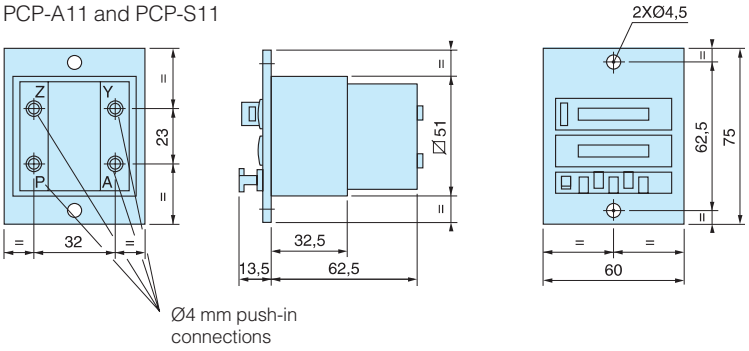
Totalising counters

PCT-A11 PCT-B11



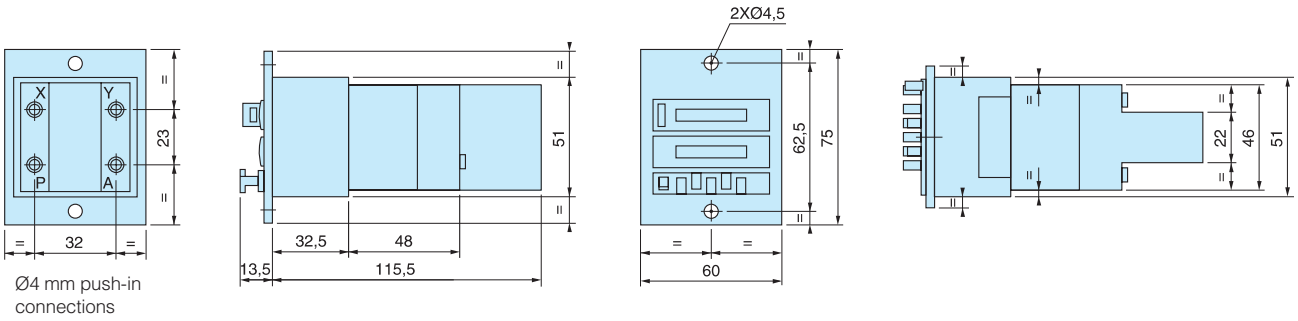
Preselection counters

PCP-A11 and PCP-S11



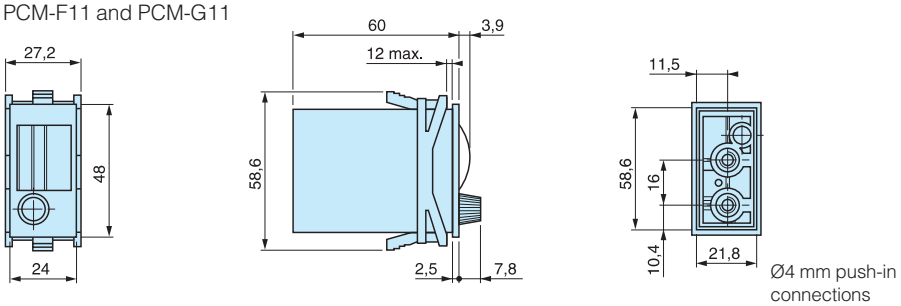
Digital display timers

PCM-A11 and PCM-B11



Timers with calibrated dial

PCM-F11 and PCM-G11



High flow shut off valves for isolating downstream equipment. Air pilot or solenoid actuated versions available.

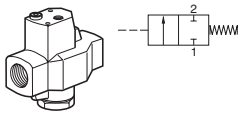
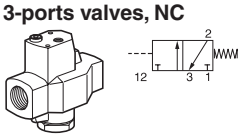
- In line installation
- High flow
- Internal supply for signal air
- Suitable as main shut-off or as power valve for cylinder and air motor
- Optional low-pressure hydraulic version

Operating information

	VE22/23	VE42/43	VE82/83
Working pressure	Max 10 bar	Max 10 bar	Max 10 bar
Working temperature	-10 °C to +70 °C		
Flow, C=	5,4 l/s, bar	20,3 l/s, bar	52 l/s, bar
(acc. to ISO 6358)	(b=0,4)	(b=0,4)	(b=0,35)
Qn=	24,5 l/s	92 l/s	228 l/s
Qmax=	37,8 l/s	142,1 l/s	364 l/s
Signal pressure at 6 bar	Min 3,5 bar	Min 3,5 bar	Min 3 bar

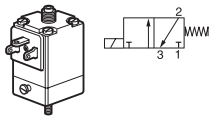
Port 3 must not be plugged or pressurised
Prelubricated, further lubrication is not normally necessary
If additional lubrication is introduced it must be continued

Airline Isolator Valves, VE22-83 series

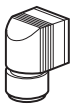
Type	Symbol	Actuator	Return	Operating pressure, at 6 bar	Port size	Order code
2-port valves, NC		Air pilot	Spring	3,5	G1/4	**VE22-A-S-5***
						VE22-A-S-5-BOO
		Air pilot	Spring	3,5	G1/2	**VE42-A-S-5***
						VE42-A-S-5-BOO
		Air pilot	Spring	3,5	G1	**VE82-A-S-5***
						VE82-A-S-5-BOO
3-ports valves, NC		Air pilot	Spring	3,5	G1/4	**VE23-A-S-5***
		Air pilot	Spring	3,5	G1/2	**VE43-A-S-5***
		Air pilot	Spring	3,5	G1	**VE83-A-S-5***

* For electrically actuated, please order 1 pcs adaptor set, 1 pcs solenoid VE13 and 1 pcs cable connector

Solenoid 32mm form A without cable plug

NC	Voltage	Order code
VE13, Standard power, With manual override		
	24 VDC	**VE13-ESC042C2**
	24 VAC 50Hz	**VE13-ESC044C2**
	110 VAC 50Hz	**VE13-ESC044E2**
	220 VAC 50Hz	**VE13-ESC044H2**
	240 VAC 50Hz	**VE13-ESC044K2**

Cable plug, suitable for VE13

	Description	Order code
	24V, LED+Diode	**9125998004**
	24V AC/DC, LED+VDR	**9125998006**
	110V AC/DC, LED+VDR	**9125998008**
	240V AC/DC, LED+VDR	**9125998010**
	Black	**9125998011**

Adaptor set for VE13-ES

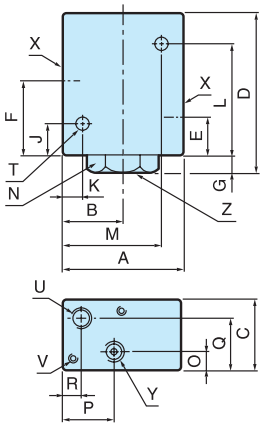
	Order code
	4145064590

Indicates stocked product.

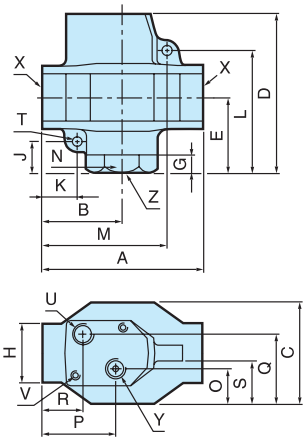
Home

Dimensions, Airline Isolator Valves

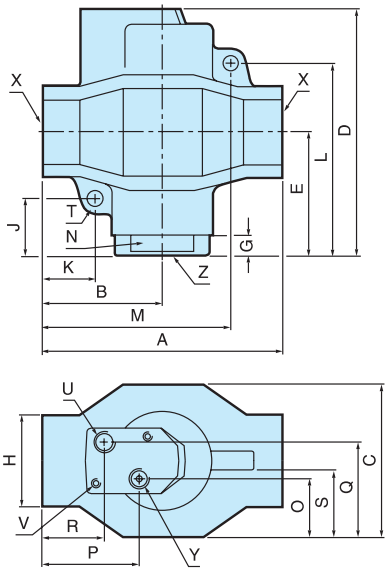
VE22/VE23



VE42/VE43



VE82/VE83



Type	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S
VE22/VE23	60	30	35	82,5	21	36	6	-	14	10	54	50	30	9,0	26,0	26,0	9,0	-
VE42/43	82	41	50	88,8	40	-	8	30	17	18	63	64	30	16,5	38,5	33,5	21,5	21,0
VE82/VE83	120	60	75	133,3	60	-	10	45	26	26	94	94	45	29,0	46,5	46,0	29,5	32,5

Type	T	U	V	X	Y	Z
VE22/VE23	6,5	G1/8	M4	G1/4	G1/8	G1/4
VE42/43	6,5	G1/8	M4	G1/2	G1/8	G1/2
VE82/VE83	8,5	G1/8	M4	G1	G1/8	G1

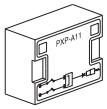
Ergonomically designed units to provide protection against accidental operation of machines. Completely sealed units prevent tampering and comply with latest European safety standards.

- Ergonomic design
- Robust polymer or metal enclosure
- Meets requirements for protection against accidental operation and tampering
- Metal enclosure features a wrist-rest bar which helps prevent illness due to repetitive actions
- Conforms to EN574 and EN954-1 requirements

Operating information

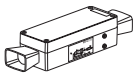
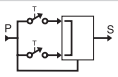
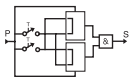
Working pressure	3 to 8 bar
Working temperature	-5 °C to +60 °C
For technical information see CD	

Control module only

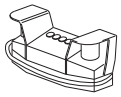
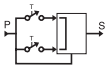
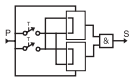
	Symbol	Connections	Order code
		Ø4 mm Push-in	**PXP-A11**

Complete units

Polymer enclosure, with two Ø40 mm push button with protective guards and control module

	Symbol	Connections	Number of control modules	Order code
		Ø4 mm Push-in	1	**PXP-C111**
		Ø4 mm Push-in	2	**PXP-D121**

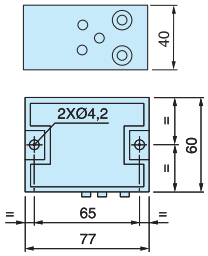
Metal enclosure, with two Ø60 push buttons, wrist restbar, built in protective guard and control module

	Symbol	Connections	Number of control modules	Order code
		Push-in Ø6 mm for supply Ø4 mm for output	1	**PXP-S111**
		Push-in Ø6 mm for supply Ø4 mm for output	2	**PXP-S121**

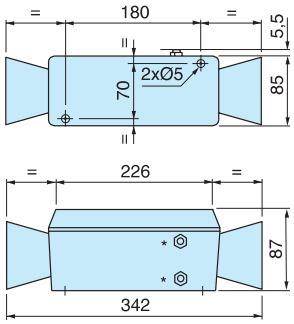
Indicates stocked product.

Dimensions

PXP-A11

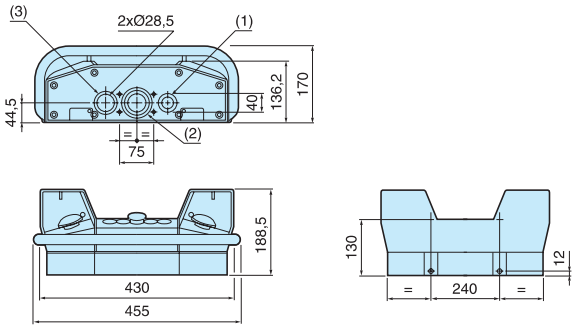


PXP-C111 and PXP-D121



* Ø4 mm push-in connections
** Ø6 mm push-in connections

PXP-S111 and PXP-S121



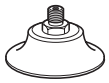
Vacuum pads

- Flat & Bellow Pads
- Male & Female Connections
- Different Materials
- Range of Diameters

Flat Pads - PFG

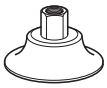
Ø (mm)	Order code
1	**PFG-1-NBR**
1,5	**PFG-1.5-NBR**
2	**PFG-2A-NBR**
3,5	**PFG-3.5A-NBR**
5	**PFG-5A-NBR**
6	**PFG-6A-NBR**
8	**PFG-8A-NBR**
10	**PFG-10A-NBR**
15	**PFG-15A-NBR**
20	**PFG-20B-NBR**
25	**PFG-25-NBR**
30	**PFG-30-NBR**
35	**PFG-35-NBR**
40	**PFG-40-NBR**
50	**PFG-50-NBR**
60	**PFG-60-NBR**
80	**PFG-80-NBR**
95	**PFG-95-NBR**
120	**PFG-120-NBR**
150	**PFG-150-NBR**
200	**PFG-200-NBR**

Flat Pads - Male Connection - PFTM



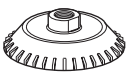
Ø (mm)	Thread	Order code
2	M5	**PFTM-2A-NBR-M5**
3,5	M5	**PFTM-3.5A-NBR-M5**
5	M5	**PFTM-5A-NBR-M5**
5	G1/8	**PFTM-5A-NBR-G1**
6	M5	**PFTM-6A-NBR-M5**
6	G1/8	**PFTM-6A-NBR-G1**
8	M5	**PFTM-8A-NBR-M5**
8	G1/8	**PFTM-8A-NBR-G1**
10	M5	**PFTM-10A-NBR-M5**
10	G1/8	**PFTM-10A-NBR-G1**
15	M5	**PFTM-15A-NBR-M5**
15	G1/8	**PFTM-15A-NBR-G1**
20	G1/8	**PFTM-20B-NBR-G1**
20	G1/4	**PFTM-20B-NBR-G2**
25	G1/8	**PFTM-25-NBR-G1**
25	G1/4	**PFTM-25-NBR-G2**
30	G1/8	**PFTM-30-NBR-G1**
30	G1/4	**PFTM-30-NBR-G2**
35	G1/8	**PFTM-35-NBR-G1**
35	G1/4	**PFTM-35-NBR-G2**
40	G1/8	**PFTM-40-NBR-G1**
40	G1/4	**PFTM-40-NBR-G2**
50	G1/8	**PFTM-50-NBR-G1**
50	G1/4	**PFTM-50-NBR-G2**
60	G1/4	**PFTM-60-NBR-G2**
80	G1/4	**PFTM-80-NBR-G2**
95	G1/4	**PFTM-95-NBR-G2**

Flat Pads - Female Connection - PFTF



Ø (mm)	Thread	Order code
5	G1/8	**PFTF-5A-NBR-G1**
6	G1/8	**PFTF-6A-NBR-G1**
8	G1/8	**PFTF-8A-NBR-G1**
10	G1/8	**PFTF-10A-NBR-G1**
15	G1/8	**PFTF-15A-NBR-G1**
20	G1/8	**PFTF-20B-NBR-G1**
20	G1/4	**PFTF-20B-NBR-G2**
25	G1/8	**PFTF-25-NBR-G1**
25	G1/4	**PFTF-25-NBR-G2**
30	G1/8	**PFTF-30-NBR-G1**
30	G1/4	**PFTF-30-NBR-G2**
35	G1/8	**PFTF-35-NBR-G1**
35	G1/4	**PFTF-35-NBR-G2**
40	G1/8	**PFTF-40-NBR-G1**
40	G1/4	**PFTF-40-NBR-G2**
50	G1/8	**PFTF-50-NBR-G1**
50	G1/4	**PFTF-50-NBR-G2**
60	G1/4	**PFTF-60-NBR-G2**
80	G1/4	**PFTF-80-NBR-G2**
95	G1/4	**PFTF-95-NBR-G2**
120	G1/2	**PFTF-120-NBR-G4**
150	G1/2	**PFTF-150-NBR-G4**
200	G1/2	**PFTF-200-NBR-G4**

Flat Pads - Reinforced Female Connection - CFS

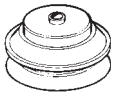


Ø (mm)	Thread	Order code
20	M5	**P5V-CFS02035N**
30	M5	**P5V-CFS03035N**
50	G1/8	**P5V-CFS05011N**
75	G1/4	**P5V-CFS07512N**
100	G3/8	**P5V-CFS10013N**
150	G1/2	**P5V-CFS15014N**
300	G1	**P5V-CFS30018N**

Indicates stocked product.

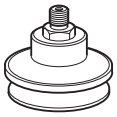
Home

1.1/2 Bellow Pads - PBG



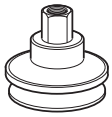
Ø (mm)	Order code
10	**PBG-10A-NBR**
15	**PBG-15A-NBR**
20	**PBG-20B-NBR**
30	**PBG-30-NBR**
40	**PBG-40-NBR**
50	**PBG-50-NBR**
75	**PBG-75-NBR**
110	**PBG-110-NBR**
150	**PBG-150-NBR**

1.1/2 Bellow Pads - Male Connection - PBTM



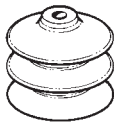
Ø (mm)	Thread	Order code
10	M5	**PBTM-10A-NBR-M5**
10	G1/8	**PBTM-10A-NBR-G1**
15	M5	**PBTM-15A-NBR-M5**
15	G1/8	**PBTM-15A-NBR-G1**
20	G1/8	**PBTM-20B-NBR-G1**
20	G1/4	**PBTM-20B-NBR-G2**
30	G1/8	**PBTM-30-NBR-G1**
30	G1/4	**PBTM-30-NBR-G2**
40	G1/8	**PBTM-40-NBR-G1**
40	G1/4	**PBTM-40-NBR-G2**
50	G1/8	**PBTM-50-NBR-G1**
50	G1/4	**PBTM-50-NBR-G2**
75	G1/4	**PBTM-75-NBR-G2**

1.1/2 Bellow Pads - Female Connection - PBTF



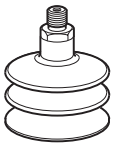
Ø (mm)	Thread	Order code
10	G1/8	**PBTF-10A-NBR-G1**
15	G1/8	**PBTF-15A-NBR-G1**
20	G1/8	**PBTF-20B-NBR-G1**
20	G1/4	**PBTF-20B-NBR-G2**
30	G1/8	**PBTF-30-NBR-G1**
30	G1/4	**PBTF-30-NBR-G2**
40	G1/8	**PBTF-40-NBR-G1**
40	G1/4	**PBTF-40-NBR-G2**
50	G1/8	**PBTF-50-NBR-G1**
50	G1/4	**PBTF-50-NBR-G2**
75	G1/4	**PBTF-75-NBR-G2**
110	G1/2	**PBTF-110-NBR-G4**
150	G1/2	**PBTF-150-NBR-G4**

2.1/2 Bellow Pads - PCG



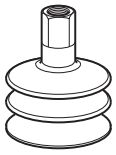
Ø (mm)	Order code
5	**PCG-5-NBR**
7	**PCG-7-NBR**
9	**PCG-10-NBR**
14	**PCG-15-NBR**
18	**PCG-18-NBR**
20	**PCG-20-NBR**
32	**PCG-30-NBR**
42	**PCG-40-NBR**
62	**PCG-60-NBR**
88	**PCG-90-NBR**

2.1/2 Bellow Pads - Male Connection - PCTM



Ø (mm)	Thread	Order code
5	M5	**PCTM-5-NBR-M5**
5	G1/8	**PCTM-5-NBR-G1**
7	M5	**PCTM-7-NBR-M5**
7	G1/8	**PCTM-7-NBR-G1**
9	M5	**PCTM-10-NBR-M5**
9	G1/8	**PCTM-10-NBR-G1**
14	M5	**PCTM-15-NBR-M5**
14	G1/8	**PCTM-15-NBR-G1**
18	M5	**PCTM-18-NBR-M5**
18	G1/8	**PCTM-18-NBR-G1**
20	M5	**PCTM-20-NBR-M5**
20	G1/8	**PCTM-20-NBR-G1**
32	G1/8	**PCTM-30-NBR-G1**
32	G1/4	**PCTM-30-NBR-G2**
42	G1/8	**PCTM-40-NBR-G1**
42	G1/4	**PCTM-40-NBR-G2**
62	G1/8	**PCTM-60-NBR-G1**
62	G1/4	**PCTM-60-NBR-G2**
88	G1/4	**PCTM-90-NBR-G2**

2.1/2 Bellow Pads - Female Connection - PCTF



Ø (mm)	Thread	Order code
5	G1/8	**PCTF-5-NBR-G1**
7	G1/8	**PCTF-7-NBR-G1**
9	G1/8	**PCTF-10-NBR-G1**
14	G1/8	**PCTF-15-NBR-G1**
18	G1/8	**PCTF-18-NBR-G1**
20	G1/8	**PCTF-20-NBR-G1**
32	G1/8	**PCTF-30-NBR-G1**
32	G1/4	**PCTF-30-NBR-G2**
42	G1/8	**PCTF-40-NBR-G1**
42	G1/8	**PCTF-40-NBR-G2**
62	G1/8	**PCTF-60-NBR-G1**
62	G1/4	**PCTF-60-NBR-G2**
88	G1/4	**PCTF-90-NBR-G2**

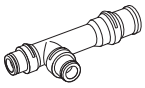
Other materials than NBR (nitrile) available
SI (silicone)
U (urethane)

Indicates stocked product.

Vacuum ejectors

- Basic Ejectors
- Basic Ejectors with electro-mechanical Switch
- In-line Ejectors
- Integrated Ejectors small & large

In-line Ejectors - MCA

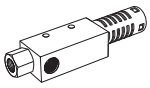


Vac %	Vac flow Nl/min.	Order code
86	5	**MCA05HST6T6G1**
86	5	**MCA05HST6T6T6**
60	9	**MCA05LST6T6G1**
60	9	**MCA05LST6T6T6**
86	11,5	**MCA07HST6T6G1**
86	11,5	**MCA07HST6T6T6**
50	19,5	**MCA07LST6T6G1**
50	19,5	**MCA07LST6T6T6**
90	25	**MCA10HST6T6G2**
90	25	**MCA10HST6T6T8**
60	37	**MCA10LST6T6G2**
60	37	**MCA10LST6T6T8**
92	35	**MCA13HST6T6G2**
92	35	**MCA13HST6T6T8**

Ejector incl. blow-off - CV-VR

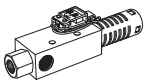
Vac %	Vac flow Nl/min.	Order code
92	63	**CV15HSVRG**

Basic Ejectors - CV



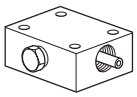
Vac %	Vac flow Nl/min.	Order code
86	6	**CV05HSG**
57	9	**CV05LSG**
91	27	**CV10HSG**
57	36	**CV10LSG**
91	63	**CV15HSG**
57	95	**CV15LSG**
91	110	**CV20HSG**
57	165	**CV20LSG**
91	160	**CV25HSG**
57	250	**CV25LSG**
91	225	**CV30AHSG**
57	350	**CV30ALSG**

Ejectors with electro-mech. switch - CV-CK



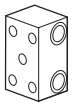
Vac %	Vac flow Nl/min.	Order code
86	6	**CV05HSCKG**
57	9	**CV05LSCKG**
91	27	**CV10HSCKG**
57	36	**CV10LSCKG**
91	63	**CV15HSCKG**
57	95	**CV15LSCKG**
91	110	**CV20HSCKG**
57	165	**CV20LSCKG**

Basic Ejectors - GAR



Vac %	Vac flow Nl/min.	Order code
85	36	**P5V-GAR0312**
85	53	**P5V-GAR0614**
85	120	**P5V-GAR1214**
85	290	**P5V-GAR2414**
85	480	**P5V-GAR4216**
85	600	**P5V-GAR7214**

Ejectors incl. AirSaver - GWV

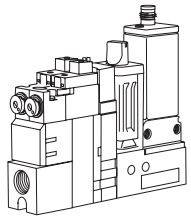


Vac %	Vac flow Nl/min.	Order code
90	14	**P5V-GWV0214**
90	32	**P5V-GWV0314**
90	50	**P5V-GWV0414**
90	88	**P5V-GWV0614**

Indicates stocked product.

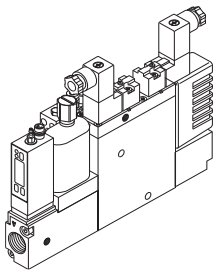
Home

Integrated Ejectors - (Small) - MC2



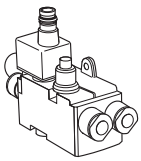
Vac %	Vac flow Nl/min.	Order code	Order code Sensor
86	5,5	MC2S05HSZL24B5G	
86	5,5	MC2S05HS12L24B5G	MPS-V1E-PC
86	5,5	MC2S05HS02L24B5G	MVS-201-PCP
53	10,5	MC2S05LSZL24B5G	
53	10,5	MC2S05LS12L24B5G	MPS-V1E-PC
53	10,5	MC2S05LS02L24B5G	MVS-201-PCP
86	11	MC2S07HSZL24B5G	
86	11	MC2S07HS12L24B5G	MPS-V1E-PC
86	11	MC2S07HS02L24B5G	MVS-201-PCP
53	20,5	MC2S07LSZL24B5G	
53	20,5	MC2S07LS12L24B5G	MPS-V1E-PC
53	20,5	MC2S07LS02L24B5G	MVS-201-PCP
86	20	MC2S10HSZL24B5G	
86	20	MC2S10HS12L24B5G	MPS-V1E-PC
86	20	MC2S10HS02L24B5G	MVS-201-PCP

Integrated Ejectors - (Large) - CVK



Vac %	Vac flow Nl/min.	Order code	Order code Sensor
90	60	CVK15HSZC24BDG	
90	60	CVK15HS22C24BDG	MPS-V2G-PC
90	60	CVK15HS02C24BDG	MVS-201-PCP
90	60	CVK15HS62C24BDG	MPS-V6C-PC
55	90	CVK15LSZC24BDG	
55	90	CVK15LS22C24BDG	MPS-V2G-PC
55	90	CVK15LS02C24BDG	MVS-201-PCP
55	90	CVK15LS62C24BDG	MPS-V6C-PC
90	100	CVK20HSZC24BDG	
90	100	CVK20HS22C24BDG	MPS-V2G-PC
90	100	CVK20HS02C24BDG	MVS-201-PCP
90	100	CVK20HS62C24BDG	MPS-V6C-PC
55	155	CVK20LSZC24BDG	
55	155	CVK20LS22C24BDG	MPS-V2G-PC
55	155	CVK20LS02C24BDG	MVS-201-PCP
55	155	CVK20LS62C24BDG	MPS-V6C-PC
90	150	CVK27HSZC24BDG	
90	150	CVK27HS22C24BDG	MPS-V2G-PC
90	150	CVK27HS02C24BDG	MVS-201-PCP
90	150	CVK27HS62C24BDG	MPS-V6C-PC

Moduflex Vacuum Generators - P2M



Order code for Size 1 vacuum generator (90% vac. - 25 Nl/min)	
Basic module	P2M1PXVA
I: 2 unions - V: 2 x 6mm straight - E: Silencer	P2M1PXVAJJAF6AMA
I: 2 unions - V: 6mm straight + plug - E: Silencer	P2M1PXVAJJAF6BMA
I: 2 x 6mm straight - V: 2 x 6mm straight - E: Silencer	P2M1PXVAF6AF6AMA
I: 2 x 6mm straight - V: 6mm straight + plug - E: Silencer	P2M1PXVAF6AF6BMA
I: 6mm straight + plug - V: 2 x 6mm straight - E: Silencer	P2M1PXVAF6BF6AMA
I: 6mm straight + plug - V: 6mm straight + plug - E: Silencer	P2M1PXVAF6BF6BMA

I = Input V = Vacuum E = Exhaust

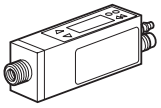
Indicates stocked product.

Home

Vacuum sensors

- -1 to +10 bar
- Analog and/or Digital Outputs
- With display

Sensors



Pressure range	Output	Connection electrical	Connection pneumatic	Order code
-1 to 0 bar	1 analog / 7 amp.	conn.	G1/8	**P5V-SVVA16K**
-1 to 0 bar	1 analog & 1 digit	M8	G1/8	**MPS-V1G-PC**
0 to +10 bar	1 analog & 1 digit	M8	G1/8	**MPS-P1G-PC**
-1 to 0 bar	1 analog & 1 digit	M8	Flange	**MPS-V1E-PC**
0 to +10 bar	1 analog & 1 digit	M8	Flange	**MPS-P1E-PC**
-1 to 0 bar	1 digit	M8	Flange	**MPS-V1E-PC3**
-1 to 0 bar	2 digit	M8	G1/8	**MPS-V2G-PC**
0 to +10 bar	2 digit	M8	G1/8	**MPS-P2G-PC**
-1 to 0 bar	2 digit	M8	G1/8	**MPS-V3G-PC**
0 to +10 bar	2 digit	M8	G1/8	**MPS-P3G-PC**
-1 to 0 bar	2 digit	M8	Tube	**MPS-V6T-PC**
-1 to 0 bar	2 digit	Cable	Tube	**MPS-V6T-PG**
-1 to 0 bar	2 digit	M8	G1/8	**MPS-V6G-PC**
-1 to 0 bar	2 digit	Cable	G1/8	**MPS-V6G-PG**
-1 to 0 bar	1 analog	Cable	Tube	**MPS-V6T-AGE**
0 to +10 bar	1 analog	Cable	Tube	**MPS-P6T-AGE**
		Cable		**MPS-71E-PG**
		Cable		**MPS-74E-PG**

Vacuum accessories

- High performance silencers and vacuum filters
- Electronic cables with M8 connector 4 pin

Electronic cables

Order code
CB-M8-4P-2M
CB-M8-4P-5M
CB-M8-4P-5M-90

Silencers

Thread	Order code
G 3/4	**MS6-01**
G 1/2	**MSL02**
G 1/4	**MSM-01**
G 1/8	**MSS-01**

Vacuum filters

Order code
VF-11
VF-2
VF-3
VF-5
VF-6
VFL-44
VFL-66

Vacuum cut-off valve

Thread	Order code
M5	**P5V-BKS35**
G1/8	**P5V-BKS11**
G1/4	**P5V-BKS12**

Thread	Order code
G3/8	**P5V-BKS13**
G1/2	**P5V-BKS14**

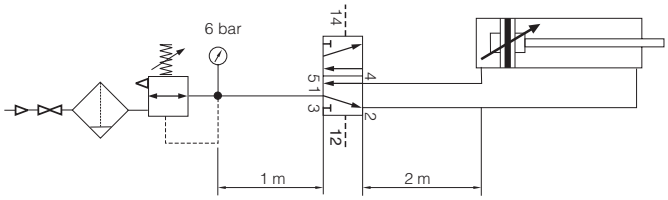
Indicates stocked product.

Home

Valves and Logic Processing

Choice of components for air supply to cylinders

In the chart below can you find the suitable valves, tubes etc. for each cylinder size. If you have a tube length over 2 m, choose one tube size larger than in the chart. The table is based on a maximum cylinder speed of 0,5m/s.



Following data is valid:
Supply pressure: min 7,0 bar
Regulator pressure setting: 6,0 bar
Pipe length between air treatment unit and valve: max 1 m
Pipe length between valve and cylinder : max 2 m
The table is made for a cylinder speed max 0,5 m/s

Cylinder														
Cylinder diameter mm	Ø10	Ø12	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100	Ø125	Ø160	Ø200
Cylinder ISO connection	M5	M5	M5	G1/8	G1/8	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2	G1/2	G3/4	G3/4
Tube														
Tube diameter mm Ext / Int	4 / 2.7	4 / 2.7	4 / 2.7	6 / 4	6 / 4	6 / 4	8 / 6	8 / 6 10 / 8	10 / 8	12 / 9 14 / 11	12 / 9	16 / 13	18 / 15	22 / 16
FRL units														
Moduflex P3H														
Moduflex P3K														
Moduflex P3M														
Valves														
4mm inst. fitting valve														
M5 valve														
6mm inst. fitting valve														
1/8 valve														
1/4 valve														
3/8 valve														
1/2 valve														

Possible Recommended Cylinder speed < 0,5 m/s Not recommended

General lightweight applications & Individual/multiple field bus connections

P2M Moduflex valves

See page: 138

- High flow, compact size.
- Mixable valve sizes.
- Stand alone valves, modular islands with individual, multiconnector or bus connections.
- Integrated selectable internal or external pilot supply and exhaust.
- Optional peripheral modules.
- Push-in connection.
- DIN rail or block mounting.

Poppet valve for enclosures

PS1 Interface

See page: 158

- High speed poppet valve
- Push-in connection
- Built-in terminal block
- Pneumatic output indicator
- DIN rail mounting

Stackable inline lightweight valve

PVL Compact valves

See page: 161

- High flow, compact size
- Push-in or threaded connection
- DIN rail or block mounting
- Light weight construction

Home

ISO 15407 / ISO 5599 - Plug-in / Non plug-in

General applications

Isomax valves

See page: 176

- Size 1, 2, 3, 01, 02 (26 and 18 mm)
- Ceramic technology for long life operation
- From vacuum up to 10 bar applications (15407-1)
- From vacuum up to 12 bar applications (5599-1)
- Internal or external pilot supply with same valves
- Common M12 (5599-1)
- M12 on each coil (5599-1)

Heavy duty applications, Multiple connection and Plug-in

Isys ISO valves

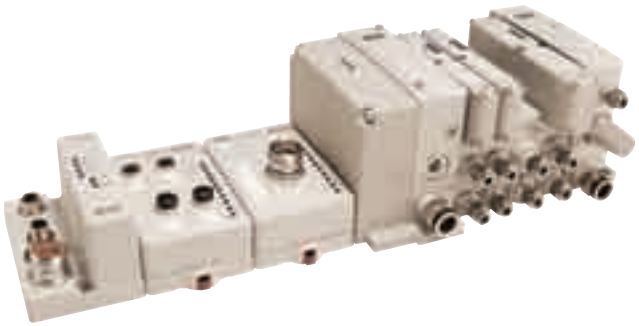
See page: 181

- Complete ISO valve range
- Heavy duty and corrosion resistant body
- Internal led & rectifier
- Vacuum up to 10 bar
- Internal or external pilot supply with same valve.
- Multiple connection, Sub-D25, M23, terminal blocks

Field Bus

Isysnet

See page: 198



- Compatible with Profibus DP, DeviceNet, ControlNet and Ethernet IP
- Accept signals from sensors, photo eyes, limit switches and other input devices
- Broad choice of I/O types with connector choice of 8mm, 12mm, 23mm
- Choice of digital, analog, or high watt I/O modules

Home

Stand alone or on a manifold, Ideal for 1 to 4 valves for OEM

Heavy duty applications / Mobile

Viking Xtreme metal spool valves

See page: 215

- 4 sizes: G1/8, G1/4, G3/8 and G1/2.
- Wide operating temperature range
- Compact design with good corrosion resistance.
- Wide range of 5/2 and 5/3 versions.
- High and low temperature versions available for transport applications.

Industrial applications

B Series high performance industrial valves

See page: 227

- 2 sizes: 1/8" and 1/4"
- Compact size
- Inlet-exhaust-mounting facility
- Fast response, high flow
- Integrated mounting holes
- Wear compensating seal system
- DIN rail mountable manifolds

Miniature valves

ADEX directional control valves

See page: 243

- 2 sizes: M5 and 1/8"
- Compact body with large flow
- Quick response time, faster than 10ms
- Expected life time more than 50,000,000 cycles
- Low power consumption only 0.6W
- Optional multipin connector manifold
- Manual override

Home

Mechanical Valves

Metal valves

Midget and Intermediate valves

See page: 249

- 43 series G1/8 body ported
- 53 series G1/4 body ported
- Stainless steel spool
- 3/2, 5/2 and 5/3 versions
- Viton body seals as standard
- Integral mounting holes

Push Buttons

General applications

PXB Control and process duty Ø 22mm

See page: 263

- Facia mounted operation
- 3/2 NO or NC
- Modular construction
- Wide range of actuators
- Dual pneumatic an electrical output signal

Heavy duty applications

VA - Brass bodied spool valves

See page: 266

- Rugged valves for heavy duty applications
- Large and robust actuators for easy operation
- Excellent corrosion resistance
- Integral mounting holes
- Panel mounting versions

Home

General Automation and Assembly Cells

PXC Limit Switches

See page: 270

- High durability
- Very good repeat accuracy
- Design for process duty cycle
- Push-in connection
- Versatile and easily maintained
- Miniature size

Logic Processing

See page: 272

- Complete range
- Stand alone, stackable or combinable modules
- Very fast response time
- Flexible and highly maintainable system
- DIN rail mounting
- Ø 4mm connection

Airline Isolator

See page: 277

- In line installation
- High flow
- Internal supply for signal air
- Suitable as main shut-off or as power valve for cylinder and air motor
- Optional low-pressure hydraulic version

Two Hand Control Units

See page: 279

- Ergonomic design
- Robust polymer or metal enclosure
- Meets requirements for protection against accidental operation and tampering
- Metal enclosure features a wrist-rest bar which helps prevent illness due to repetitive actions
- Conforms to EN574 and EN954-1 requirements

Moduflex Valve System®

The Moduflex Valve® System redefines flexibility for pneumatic users. Whether configured from basic components or ordered as a pre-assembled and tested valve island, Moduflex flexibility is unmatched in the marketplace.

V Series

T Series

S Series

P Series

Innovative

The 6 patents awarded to the Moduflex valve system reflect that innovation is core to the Parker design process. Maintaining a clear understanding of our customer's expectations has defined the individuality of the Moduflex, and clearly differentiated it as a leading automation solution.

Adaptive

No other system can be adapted so simply once specified. Unique, captive fitting release system, quick release electrical connectors and single mechanical screw connection between manifolds offer the ultimate capability for late system design changes.

Multi-Functional

From stand-alone valves to fieldbus ready valve islands, from cylinder flow controls to vacuum generators with integrated blow-off, the Moduflex Valve System® meets the requirements of the whole automation spectrum.

Light-weight

An Asi compatible valve manifold with 8 electrical inputs and 8 pneumatic outputs weighs a mere 800grams, making the Moduflex Valve System® the perfect choice for end of arm tooling application.

Moduflex Valve Technology

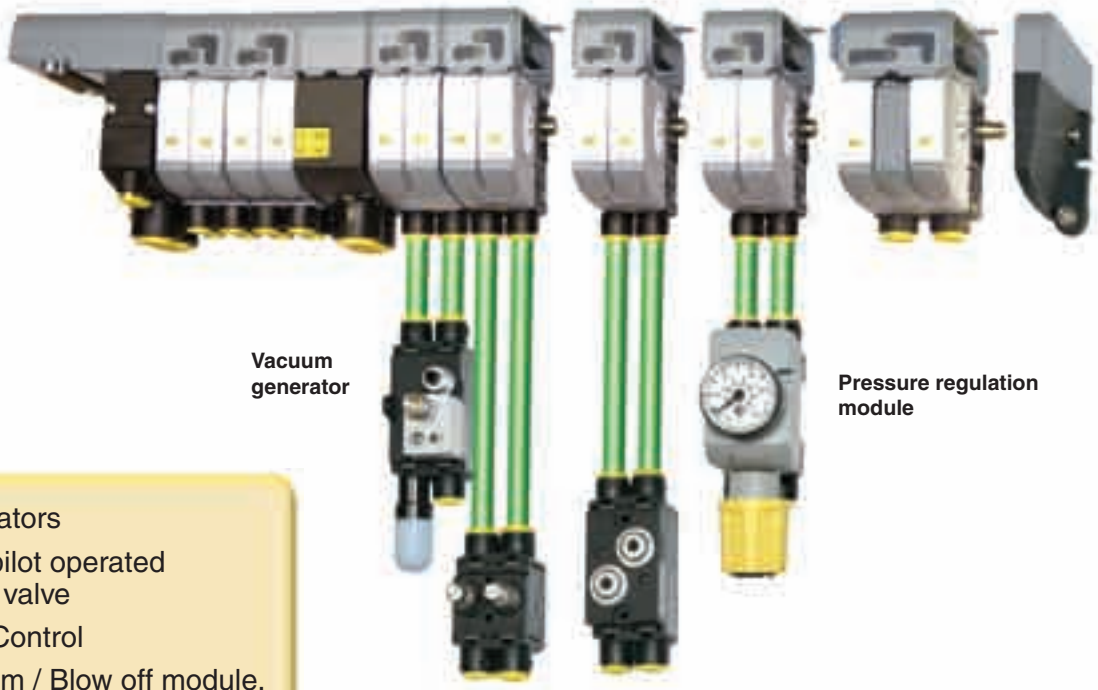
Two technology platforms enable the compact design and high performance of the Moduflex Valve System.
The compact dual 4/2 and 3/2 valves utilize well proven Parker seal technology. The standard 4/2 valves adopt the long life super durable ceramic switching technology.

Dual 4/2 valve

4/2 Valve

Moduflex Complete Control

With the introduction of the dual 4/2 size 1 valves, Moduflex now offers unrivaled ability of matching valves to exact flow requirements, ensuring cost and space are minimized.
In addition, Moduflex Valve System® offers all the necessary control peripherals to provide a complete automation solution. Moduflex is the complete control package.



- Regulators
- Dual pilot operated check valve
- Flow Control
- Vacuum / Blow off module.

Operating information

Working pressure:	-0.9 to 8 bar
Pilot pressure :	3 to 8 bar*
Working temperature	-15 °C to +60 °C
Protection Individual connectors	IP67 NEMA4
Protection Integrated connectors	IP65
Voltage: 24V DC	

* 2 x 3/2 and 3/2 3.5 to 8 bar

		Dual 4/2	Dual 3/2	3/2	4/2
Size 1	Qmax	333 l/min	415 l/min	415 l/min	510 l/min
	Qn	130 l/min	235 l/min	235 l/min	310 l/min
Size 2	Qmax	-	805 l/min	805 l/min	1340 l/min
	Qn	-	450 l/min	440 l/min	800 l/min

Ordering Options

Depending on the application requirements and production methods, Moduflex may be ordered as follows :

Basic Modules
These modules are supplied without connectors, the choice of plug-in connectors enables total flexibility in the field ;
(Preferred ordering method for best price and delivery.)

Complete Modules
Supplied complete with connectors, for use with valve islands or as stand-alone valves or peripheral modules ;
Consult your local distributor or Parker location for assembly information, price and delivery.

Pre-assembled Valve Islands
Supplied fully assembled to specifications and complete with pneumatic and electrical connectors. Islands can be easily configured with the Moduflex Configurator Software.
See technical catalogue CD.

Moduflex Island Configurator Software

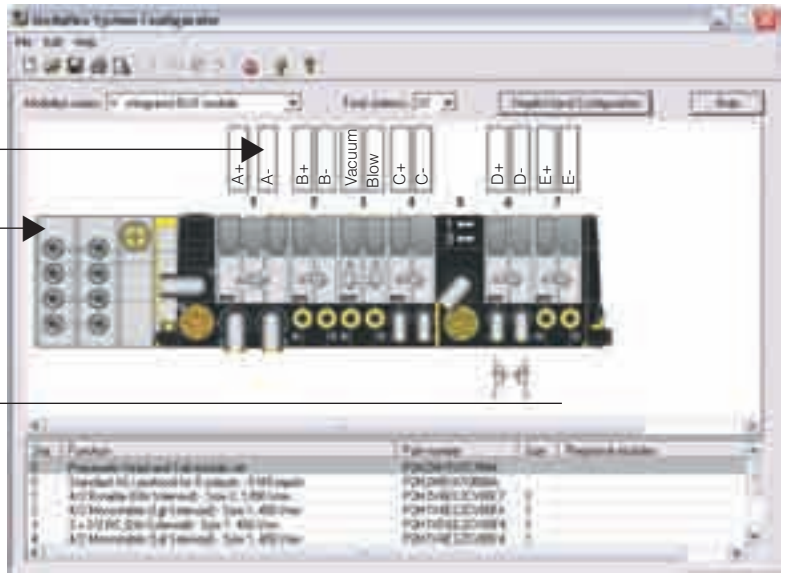
*Available on CD within this catalog

valve island modules identification

valve island graphic description with valve module symbols, output connectors, pneumatic and electrical head module, etc.....

addition of peripheral modules

valve island composition with each module description and order code



V series – Fieldbus and multi-connector valve islands

Pages 98 - 101

T series – Simple valve islands

Page 102 - 103

S series – Stand alone valves

Page 104 - 105

P series – Peripheral control modules

Page 106

Home

Valve island modules with integrated connections

When a high number of valves are necessary, valves maybe configured with integrated electrical connectivity. These islands are then connected to the control PLC with a multi-connector cable or with a fieldbus connection.

Basic modules (without connectors) and corresponding clip-on pneumatic connectors

Size 1 Valve Modules

Description	Symbol	Weight (g)	Order code
4/2 Solenoid spring		94	P2M1V4ES2CV
4/2 Double solenoid		103	P2M1V4EE2CV
2 x 3/2 NC + NC with exhaust check valves		106	P2M1VDEE2CV
2 x 3/2 NO + NO with exhaust check valves		106	P2M1VCEE2CV
2 x 3/2 NC + NO with exhaust check valves		106	P2M1VEEE2CV
2 x 4/2 Solenoid spring with exhaust check valves		114	P2M1VJEE2CV
3/2 NC Solenoid spring with exhaust check valves		102	P2M1V3ES2CV
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		106	P2M1VGEE2CV

P2M1V4ES2CV

CMD06-1

P2M1VJEE2CV

FMD04-1

P2M1VDEE2CV

FMD04-1

Size 1 connectors Tube OD *

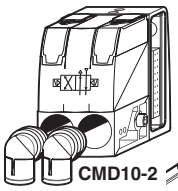
Description		W. (g)	Order code
Straight	4mm	2	FMD04-1
	6mm	3	FMD06-1
Elbow	4mm	5	CMD04-1
	6mm	3	CMD06-1
Plug		3	PMDXX1
Muffler		5	MMDVA1
Clip-on double male union		3	HMDXX1

* Pack quantity : 10

Size 2 Valve Modules

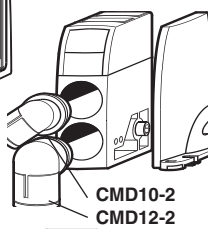
Description	Symbol	Weight (g)	Order code
4/2 Solenoid spring		100	P2M2V4ES2CV
4/2 Double solenoid		110	P2M2V4EE2CV
2 x 3/2 NC + NC with exhaust check valves		115	P2M2VDEE2CV
2 x 3/2 NO + NO with exhaust check valves		115	P2M2VCEE2CV
2 x 3/2 NC + NO with exhaust check valves		115	P2M2VEEE2CV
3/2 NC Solenoid spring with exhaust check valves		110	P2M2V3ES2CV
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		115	P2M2VGEE2CV

P2M2V4EE2CV



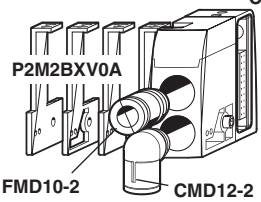
CMD10-2

P2M2HXT01



CMD10-2
CMD12-2

P2M2BXV0A



FMD10-2

CMD12-2

Size 2 connectors Tube OD *

Description		W. (g)	Order code
Straight	6mm	3	FMD06-2
	8mm	4	FMD08-2
	10mm	5	FMD10-2
	12mm	6	FMD12-2
Elbow	6mm	5	CMD06-2
	8mm	6	CMD08-2
	10mm	7	CMD10-2
	12mm	8	CMD12-2
Plug		5	PMDXX2
Muffler		3	MMDVA2
Clip-on double male union		8	HMDXX2

* Pack quantity : 10

Head & Tail sets and Intermediate supply exhaust modules

Valve Island Pneumatic head and tail module set	P2M2HXT01
Valve Island Intermediate supply module with a set of 4 configurations plates	P2M2BXV0A

Size 2 connectors should be specified with head and tail sets.

Indicates stocked product.

Order codes V Series - Complete modules (on order)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
P	2	M	1	V	4	E	E	2	C	V	0	0	F	6

Size option	
1	Size 1
2	Size 2

Series	
V	Valvetronic

Valve Function - Solenoid Versions	
4 E S	4/2 - Single solenoid
4 E E	4/2 - Double solenoid
J E E	2 x 4/2 - 2 x 1 solenoid
D E E	2 x 3/2 - Normally closed
C E E	2 x 3/2 - Normally open (4/3 PC)
B E E	2 x 3/2 - Normally closed + PO check (4/3 APB)
E E E	2 x 3/2 - 1 x Open, 1 x Closed
G E E	4/3 CE - 2 x 3/2 - Normally closed
3 E S	3/2 Single solenoid

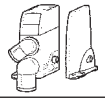
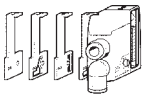
PC = Pressure Centre
APB = All Ports Blocked
CE = Centre Exhausted

For basic modules, leave digits 12 - 15, blank.

Pneumatic connectors Ports 2 & 4		
Size 1 modules		
F4	straight	4mm OD
C4	elbow	4mm OD
F6	straight	6mm OD
C6	elbow	6mm OD
Size 2 modules		
F6	straight	6mm OD
C6	elbow	6mm OD
F8	straight	8mm OD
C8	elbow	8mm OD
F0	straight	10mm OD
C0	elbow	10mm OD

Head/Tail & Intermediate Module Ordering Guide (on order)

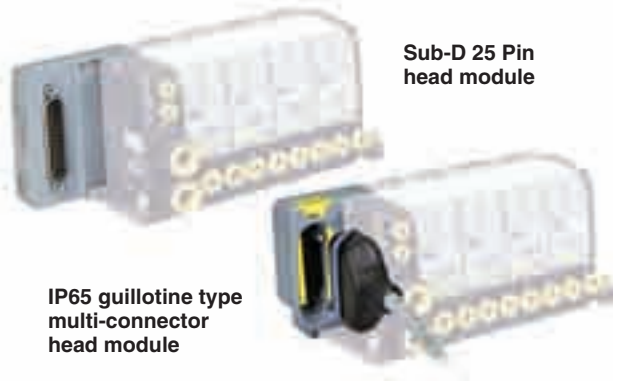
P	2	M	2	H	X	T	0	1	F	0	C	2

Island head or intermediate module function		
HXT01	Pneumatic head and tail set	
BXV0A	V series intermediate supply module with a set of 4 configuration plates	

Pressure port connector	
F6	straight 6mm OD
C6	elbow 6mm OD
F8	straight 8mm OD
C8	elbow 8mm OD
F0	straight 10mm OD
C0	elbow 10mm OD
F2	straight 12mm OD
C2	elbow 12mm OD
PP	plug
MM	muffler

Exhaust port connector	
F6	straight 6mm OD
C6	elbow 6mm OD
F8	straight 8mm OD
C8	elbow 8mm OD
F0	straight 10mm OD
C0	elbow 10mm OD
F2	straight 12mm OD
C2	elbow 12mm OD
PP	plug
MM	muffler

Electrical multi-connection head modules



Sub-D 25 Pin head module

IP65 guillotine type multi-connector head module

Sub D25 standard multi-connector head module		**P2M2HEV0D**
Sub D25 connector with flying leads - 3m cable		**P8LMH25M3A**
IP65 guillotine type multi-connector head module		**P2M2HEV0A**
Complementary connector with flying leads multi-cable	2 m. cable	**P8LMH20M2A**
	5 m. cable	**P8LMH20M5A**
	9 m. cable	**P8LMH20M9A**

Field bus connection head modules : to be chosen from next page.

AS-i protocol head modules

Standard AS-i protocol (up to 31 nodes) electrical head modules

Electrical module for **8 outputs** max.

- V series islands may have up to 8 solenoid pilots
- 2 nodes per module, 4 I / 4 O per node

Input connections	Order code
no input	**P2M2HBVA10800**
8 M8 inputs	**P2M2HBVA10808A**
4 inputs on 4 M12	**P2M2HBVA10808B**

Electrical module for **4 outputs** max.

- V series islands may have up to 8 solenoid pilots
- 1 node per module, 4 I / 4 O per node

No inputs	**P2M2HBVA10400**
4 inputs on 4 M12	**P2M2HBVA10404B**

AS-i version 2-1 protocol (up to 62 nodes) electrical head modules

Electrical module for **6 outputs** max.

- V series islands may have up to 6 solenoid pilots
- 2 nodes per module, 4 I / 3 O per node

none	**P2M2HBVA20600**
8 M8 Inputs	**P2M2HBVA20608A**
8 inputs on 4 M12	**P2M2HBVA20608B**

AS-i bus accessories

AS-i bus accessories	Length	Order code
M12 cable with jack for addressing	1 m	**P8LS12JACK**

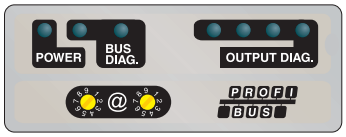
Indicates stocked product.

Home

Device bus electrical head modules

electrical module for 16 outputs max.
(V series islands may have up to 16 solenoid pilots)

PROFI BUS



Bus protocol	Order code
Profibus DP	**P2M2HBVP11600**

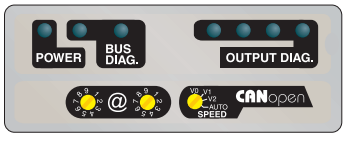
DeviceNet™

Bus protocol	Order code
DeviceNet	**P2M2HBVD11600**

INTERBUS-S

Bus protocol	Order code
Interbus S	**P2M2HBVS11600**

CANopen



Bus protocol	Order code
CANopen	**P2M2HBVC11600**

Indicates stocked product.

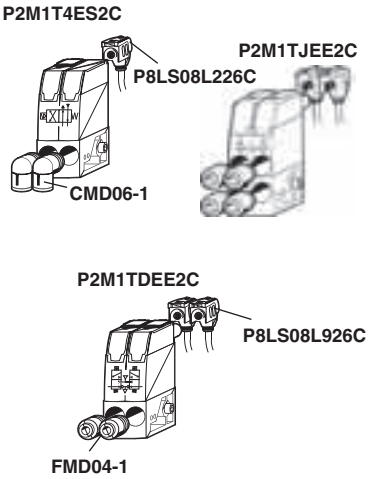
Valve island modules with individual connectors : T series

For simple systems, valve islands may be configured using individual valve wiring or air pilot connections.

Basic modules (without connectors) and corresponding clip-on electrical and pneumatic connectors

Size 1 Valve Modules

Description	Symbol	Weight (g)	Order code
4/2 Solenoid spring		68	P2M1T4ES2C
4/2 Double solenoid		77	P2M1T4EE2C
2 x 3/2 NC + NC with exhaust check valves		80	P2M1TDEE2C
2 x 3/2 NO + NO with exhaust check valves		80	P2M1TCEE2C
2 x 3/2 NC + NO with exhaust check valves		80	P2M1TEEE2C
2 x 4/2 Solenoid spring with exhaust check valves		88	P2M1TJEE2C
3/2 NC Solenoid spring with exhaust check valves		76	P2M1T3ES2C
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		80	P2M1TGEE2C



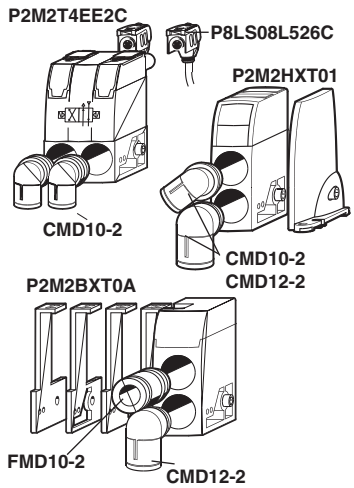
Size 1 connectors Tube OD *

Description		W. (g)	Order code
Straight	4mm	2	FMD04-1
	6mm	3	FMD06-1
Elbow	4mm	5	CMD04-1
	6mm	3	CMD06-1
Plug		3	PMDXX1
Muffler		5	MMDVA1
Clip-on double male union		3	HMDXX1

* Pack quantity : 10

Size 2 Valve Modules

Description	Symbol	Weight (g)	Order code
4/2 Solenoid spring		74	P2M2T4ES2C
4/2 Double solenoid		83	P2M2T4EE2C
2 x 3/2 NC + NC with exhaust check valves		94	P2M2TDEE2C
2 x 3/2 NO + NO with exhaust check valves		94	P2M2TCEE2C
2 x 3/2 NC + NO with exhaust check valves		94	P2M2TEEE2C
3/2 NC Solenoid spring with exhaust check valves		90	P2M2T3ES2C
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		94	P2M2TGEE2C



Size 2 connectors Tube OD *

Description		Order code
Straight	6mm	FMD06-2
	8mm	FMD08-2
	10mm	FMD10-2
	12mm	FMD12-2
Elbow	6mm	CMD06-2
	8mm	CMD08-2
	10mm	CMD10-2
	12mm	CMD12-2
Plug		PMDXX2
Muffler		MMDVA2
Clip-on double male union		HMDXX2

* Pack quantity : 10

Head & Tail sets and Intermediate supply exhaust modules for T series

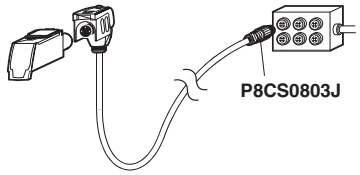
Valve Island Pneumatic head and tail module set	P2M2HXT01
Valve Island Intermediate supply module with a set of 4 configurations plates	P2M2BXT0A

Size 2 connectors should be specified with head and tail sets.

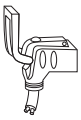
Indicates stocked product.

Electrical connectors

P8LS08L226C

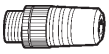


Clip-on individual electrical connector, for each solenoid pilot, with LED, voltage surge protection and flying lead cable IP67 protected



2 m. cable	**P8LS08L226C**
5 m. cable	**P8LS08L526C**
9 m. cable	**P8LS08L926C**

Straight cable or thread connector, IP67 protected.



M8 cable quick connect	**P8CS0803J**
M12 cable quick connect	**P8CS1204J**

Complete modules T Series - Ordering guide

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
P	2	M	1	T	4	E	E	2	C	V	2	0	F	6

Size option

1	Size 1
2	Size 2

Series

T	Individual connectors

Valve Function - Solenoid Versions

4 E S	4/2 - Single solenoid
4 E E	4/2 - Double solenoid
J E E	2 x 4/2 - 2 x 1 solenoid
D E E	2 x 3/2 - Normally closed
C E E	2 x 3/2 - Normally open (4/3 PC)
B E E	2 x 3/2 - Normally closed + PO check (4/3 APB)
E E E	2 x 3/2 - 1 x Open, 1 x Closed
G E E	4/3 CE - 2 x 3/2 - Normally closed
3 E S	3/2 Single solenoid
	Valve Function - Air Pilot Versions *
4 P S	4/2 Single air pilot
4 P P	4/2 Double air pilot
J P P	2 x 4/2 - 2 x 1 air pilot
D P P	2 x 3/2 - Normally closed
C P P	2 x 3/2 - Normally open (4/3 PC)
B P P	2 x 3/2 - Normally closed + PO check (4/3 APB)
E P P	2 x 3/2 - 1 x Open, 1 x Closed
G P P	4/3 CE - 2 x 3/2 - Normally closed
3 P S	3/2 Single solenoid

Electrical connector

0	No cable
2	2m cable
5	5m cable
9	9m cable

* For air pilot versions leave digits 9 - 15 blank. (Basic modules only)

Pneumatic connectors Ports 2 & 4

Size 1 modules	
F4	straight 4mm OD
C4	elbow 4mm OD
F6	straight 6mm OD
C6	elbow 6mm OD
Size 2 modules	
F6	straight 6mm OD
C6	elbow 6mm OD
F8	straight 8mm OD
C8	elbow 8mm OD
F0	straight 10mm OD
C0	elbow 10mm OD

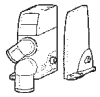
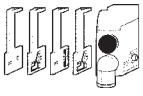
PC = Pressure Centre
APB = All Ports Blocked
CE = Centre Exhausted

For basic modules, leave digits 11 - 15, blank.

Head/Tail & Intermediate Module Ordering Guide

P	2	M	2	H	X	T	0	1	F	0	C	2

Island head or intermediate module function

HXT01	Pneumatic head and tail set	
BXT0A	T series intermediate supply module with a set of 4 configuration plates	

Pressure port connector

F6	straight 6mm OD
C6	elbow 6mm OD
F8	straight 8mm OD
C8	elbow 8mm OD
F0	straight 10mm OD
C0	elbow 10mm OD
F2	straight 12mm OD
C2	elbow 12mm OD
PP	plug
MM	muffler

Exhaust port connector

F6	straight 6mm OD
C6	elbow 6mm OD
F8	straight 8mm OD
C8	elbow 8mm OD
F0	straight 10mm OD
C0	elbow 10mm OD
F2	straight 12mm OD
C2	elbow 12mm OD
PP	plug
MM	muffler

Indicates stocked product.

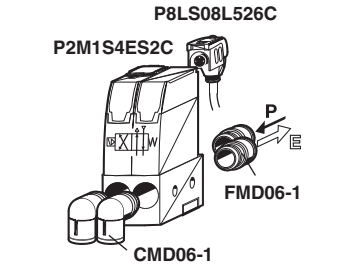
Stand-Alone Valve Modules : S series

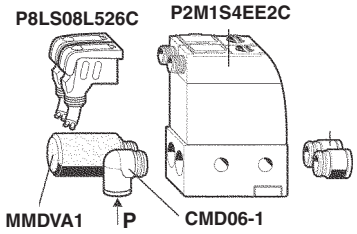
For control of isolated cylinders, a stand-alone valve module is ideal. Pull-out mounting feet are integrated into the base for simple installation.

Basic modules (without connectors) and corresponding clip-on electrical and pneumatic connectors

Size 1 Valve Modules

Description	Symbol	W (g)	Order code
4/2 Solenoid spring		72	P2M1S4ES2C
4/2 Double solenoid		87	P2M1S4EE2C
2 x 3/2 NC + NC with exhaust check valves		85	P2M1SDEE2C
2 x 3/2 NO + NO with exhaust check valves		85	P2M1SCEE2C
2 x 3/2 NC + NO with exhaust check valves		85	P2M1SEEE2C
3/2 NC Solenoid spring with exhaust check valves		85	P2M1S3ES2C
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		85	P2M1SGEE2C





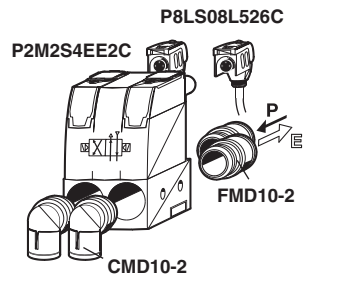
Size 1 connectors Tube OD *

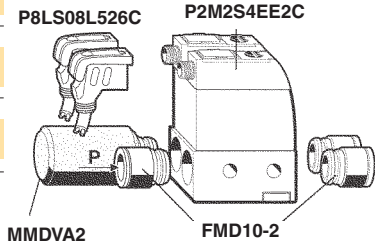
Description		W. (g)	Order code
Straight	4mm	2	FMD04-1
	6mm	3	FMD06-1
Elbow	4mm	5	CMD04-1
	6mm	3	CMD06-1
Plug		3	PMDXX1
Muffler		5	MMDVA1
Clip-on double male union		3	HMDXX1

* Pack quantity : 10

Size 2 valve Modules

Description	Symbol	W (g)	Order code
4/2 Solenoid spring		72	P2M2S4ES2C
4/2 Double solenoid		87	P2M2S4EE2C
2 x 3/2 NC + NC with exhaust check valves		85	P2M2SDEE2C
2 x 3/2 NO + NO with exhaust check valves		85	P2M2SCEE2C
2 x 3/2 NC + NO with exhaust check valves		85	P2M2SEEE2C
3/2 NC Solenoid spring with exhaust check valves		85	P2M2S3ES2C
4/3 Centre exhaust = 2 x 3/2 NC + NC without exhaust check valve		85	P2M2SGEE2C





Size 2 connectors Tube OD *

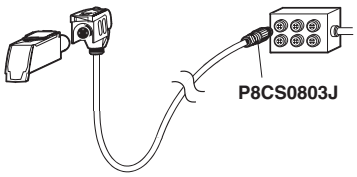
Description		W. (g)	Order code
Straight	6mm	3	FMD06-2
	8mm	4	FMD08-2
	10mm	5	FMD10-2
	12mm	6	FMD12-2
Elbow	6mm	5	CMD06-2
	8mm	6	CMD08-2
	10mm	7	CMD10-2
	12mm	8	CMD12-2
Plug		5	PMDXX2
Muffler		3	MMDVA2
Clip-on double male union		8	HMDXX2

* Pack quantity : 10

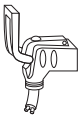
Indicates stocked product.

Electrical connectors

P8LS08L226C

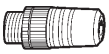


Clip-on individual electrical connector, for each solenoid pilot, with LED, voltage surge protection and flying lead cable IP67 protected



2 m. cable	**P8LS08L226C**
5 m. cable	**P8LS08L526C**
9 m. cable	**P8LS08L926C**

Straight cable or thread connector, IP67 protected.



M8 cable quick connect	**P8CS0803J**
M12 cable quick connect	**P8CS1204J**

Order codes S Series - Complete modules (on order)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
P	2	M	1	S	4	E	E	2	C	V	5	A	F	6

Size option

1	Size 1
2	Size 2

Series

S	Stand alone modules

Electrical connector

0	No cable
2	2m cable
5	5m cable
9	9m cable

Valve Function - Solenoid Versions	
4 E S	4/2 - Single solenoid
4 E E	4/2 - Double solenoid
D E E	2 x 3/2 - Normally closed
C E E	2 x 3/2 - Normally open (4/3 PC)
B E E	2 x 3/2 - Normally closed + PO check (4/3 APB)
E E E	2 x 3/2 - 1 x Open, 1 x Closed
G E E	4/3 CE - 2 x 3/2 - Normally closed
3 E S	3/2 Single solenoid
Valve Function - Air Pilot Versions *	
4 P S	4/2 Single air pilot
4 P P	4/2 Double air pilot
D P P	2 x 3/2 - Normally closed
C P P	2 x 3/2 - Normally open (4/3 PC)
B P P	2 x 3/2 - Normally closed + PO check (4/3 APB)
E P P	2 x 3/2 - 1 x Open, 1 x Closed
G P P	4/3 CE - 2 x 3/2 - Normally closed
3 P S	3/2 Single solenoid

Pneumatic connectors

Ports 1 & 3		Ports 2 & 4		Tube OD	
A	Straight & straight	**F**	Straight & straight	Size 1 modules	
B	Elbow & elbow	**C**	Elbow & elbow	**4**	4mm OD
C	Straight & muffler	**0**	No connector for plug-in P module	**6**	6mm OD
D	Elbow & muffler			Size 2 modules	
				6	6mm OD
				8	8mm OD
				0	10mm OD

* For air pilot versions leave digits 9 - 15 blank. (Basic modules only)

For basic modules, leave digits 11 - 15, blank.

PC = Pressure Centre
APB = All Ports Blocked
CE = Centre Exhausted

Indicates stocked product.

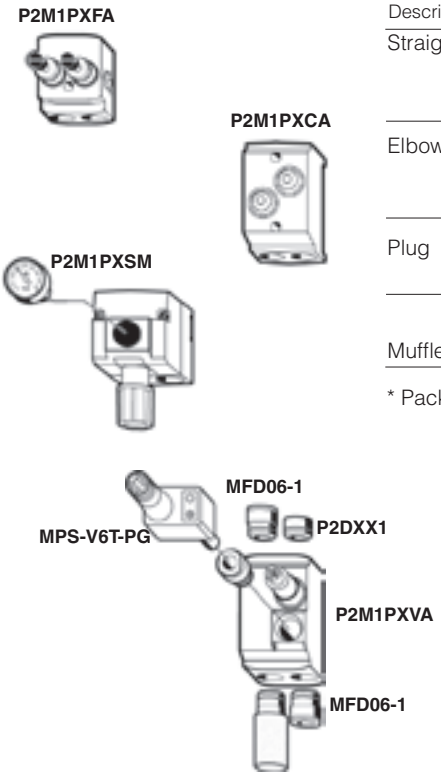
Basic peripheral modules (without connectors) and corresponding clip-on pneumatic connectors

Size 1 Peripheral Modules

Description		W. (g)	Order code
Dual flow control		50	P2M1PXFA
Dual P.O. check valve		50	P2M1PXCA
Pressure regulator	0-2 bar	135	P2M1PXSR
	0-4 bar	135	P2M1PXSM
	0-8 bar	135	P2M1PXSG
	With pressure gauge		
Vacuum generator	90% Vac	30	P2M1PXVA

Vacuum accessories

Sensor		10	MPS-V6T-PC
		70	MPS-V6T-PG
Silencer		5	P6M-PAB1



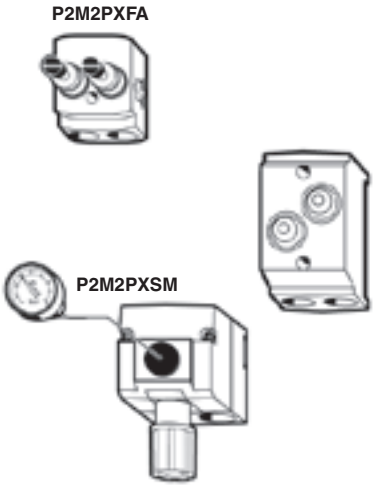
Size 1 connectors Tube OD *

Description		W. (g)	Order code
Straight	4mm	2	FMD04-1
	6mm	3	FMD06-1
Elbow	4mm	5	CMD04-1
	6mm	3	CMD06-1
Plug		3	PMDXX1
Muffler		5	MMDVA1

* Pack quantity : 10

Size 2 Peripheral Modules

Description		W. (g)	Order code
Dual flow control		75	P2M2PXFA
Dual P.O. check valve		70	P2M2PXCA
Pressure regulator	0-2 bar	165	P2M2PXSR
	0-4 bar	165	P2M2PXSM
	0-8 bar	165	P2M2PXSG
	With pressure gauge		



Size 2 connectors Tube OD *

Description		W. (g)	Order code
Straight	6mm	3	FMD06-2
	8mm	4	FMD08-2
	10mm	5	FMD10-2
	12mm	6	FMD12-2
Elbow	6mm	5	CMD06-2
	8mm	6	CMD08-2
	10mm	7	CMD10-2
	12mm	8	CMD12-2
Plug		5	PMDXX2

* Pack quantity : 10

Clip-on pressure gauges

Clip-on pressure gauge for pressure regulator modules, size 1 or size 2.
Pressure gauge is equipped with a damper to protect it from pressure oscillations.

	W. (g)	Order code
0 to 2 bar	30	P2M1K0GT
0 to 4 bar	30	P2M1K0GL
0 to 8 bar	30	P2M1K0GN

Indicates stocked product.

1 - Multi-connector or sub-D 25 valve island

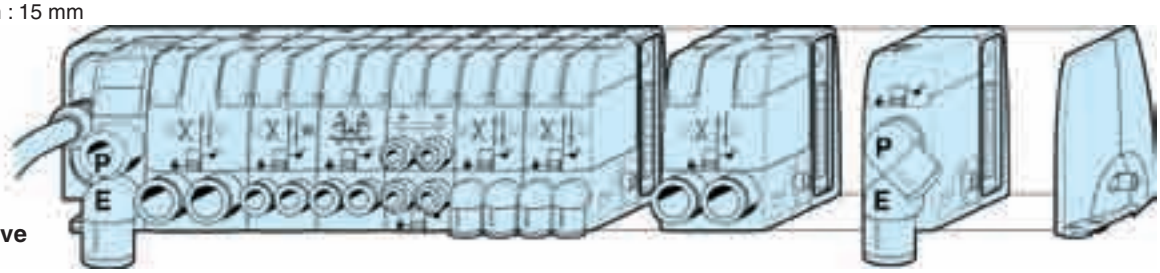
Multi-connector or sub-D 25 electrical head module width : 15 mm

Head and tail pneumatic module set width : 48 mm

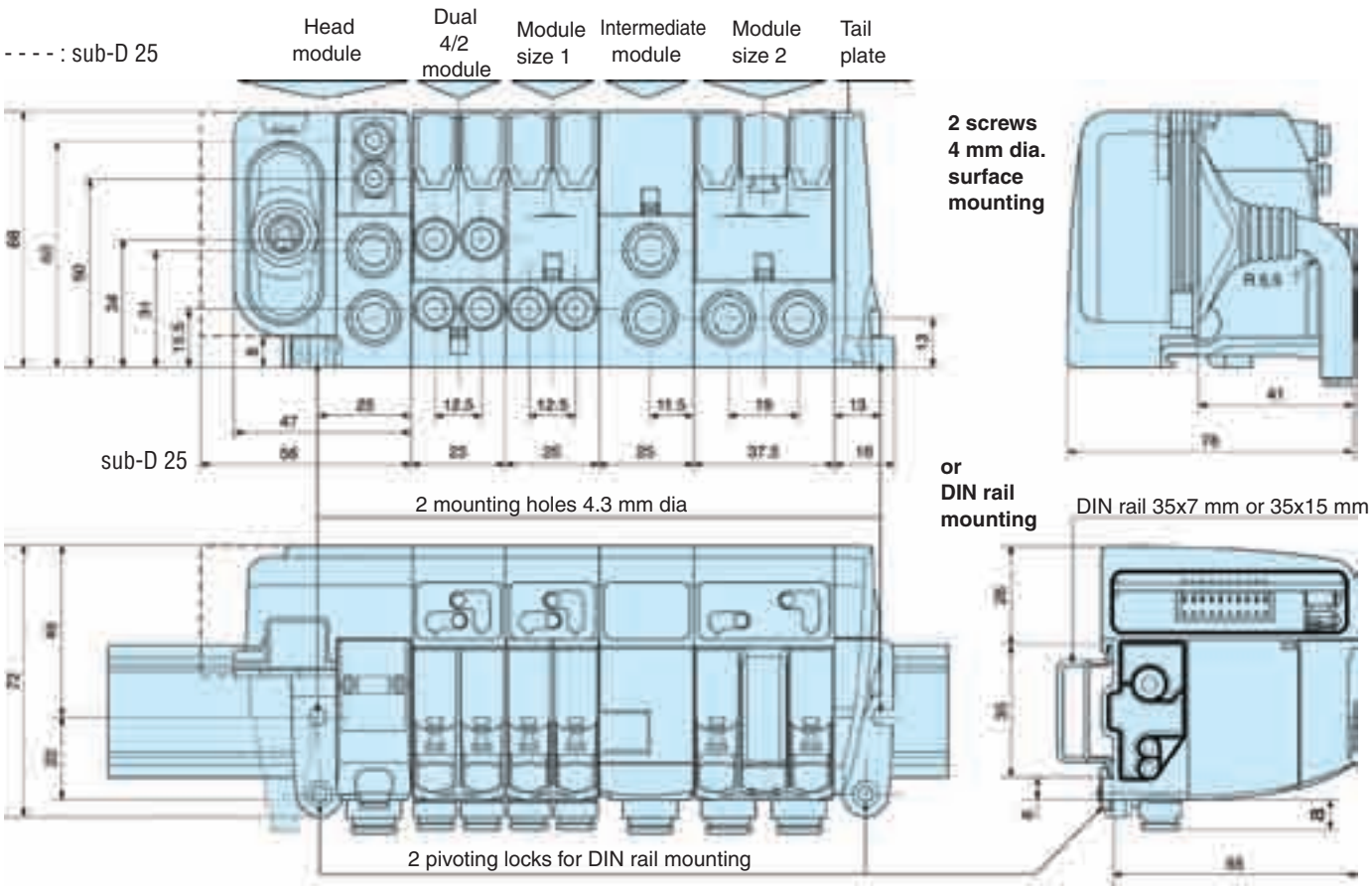
Modules size 1 width : 25 mm

Modules size 2 width : 37.5 mm

Intermediate module width : 25 mm



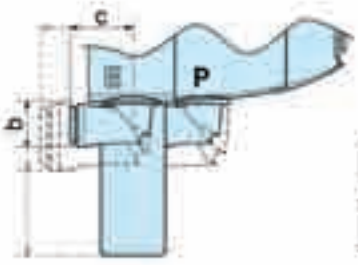
Island total width depending on valve composition



Special case : 4/3 closed centre function within island version : Add the dimensions of the dual P.O. check valve module plugged into the island.

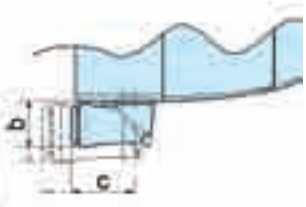
Island head and intermediate modules

	a	b	c
6 mm tube OD	8	13	16
8 mm tube OD	9	16	19
10 mm tube OD	13	18	22
12 mm tube OD	13	19	25
muffler		40	



Island valves modules

	OD tube	a	b	c
Size 1 modules	4 mm	8	10	12
	6 mm	8	13	16
Size 2 modules	8 mm	9	16	19
	10 mm	13	18	22



Home

2 - Field bus connected islands

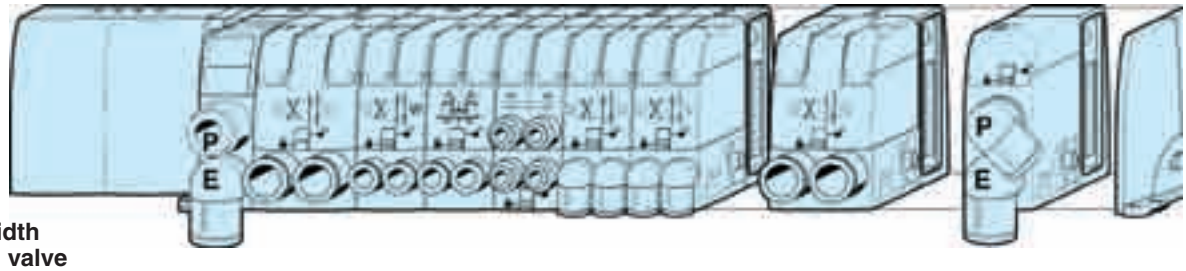
Electrical field bus head module width : 62 mm

Head and tail pneumatic module set width : 48 mm

Modules size 1 width : 25 mm

Modules size 2 width : 37.5 mm

Intermediate module width :25 mm



Island total width depending on valve composition

Electrical field bus head module

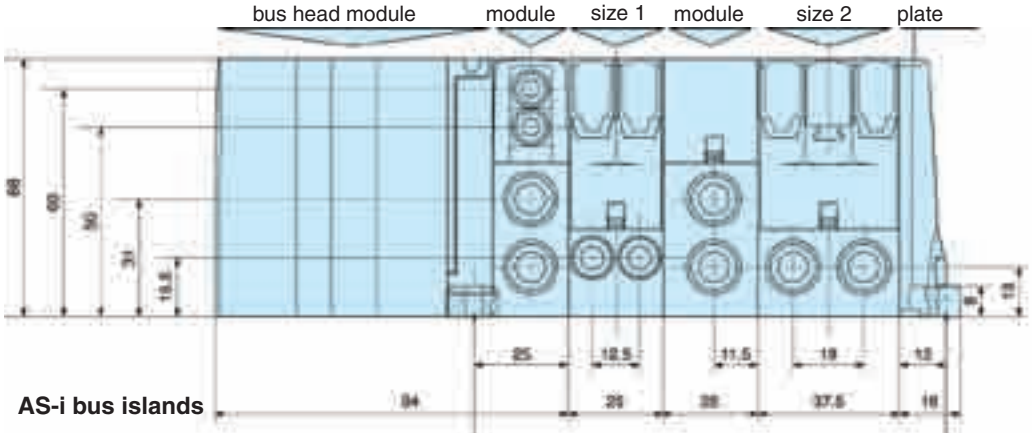
Pneumatic head module

Module size 1

Intermediate module

Module size 2

Tail plate



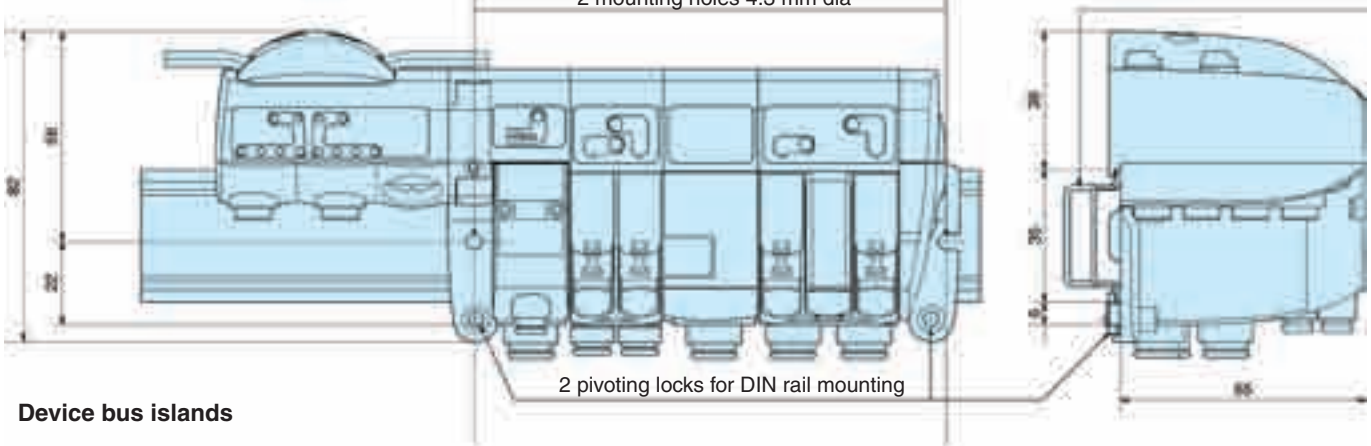
2 screws 4 mm dia. surface mounting

or DIN rail mounting

DIN rail 35x7 mm or 35x15 mm

AS-i bus islands

2 mounting holes 4.3 mm dia

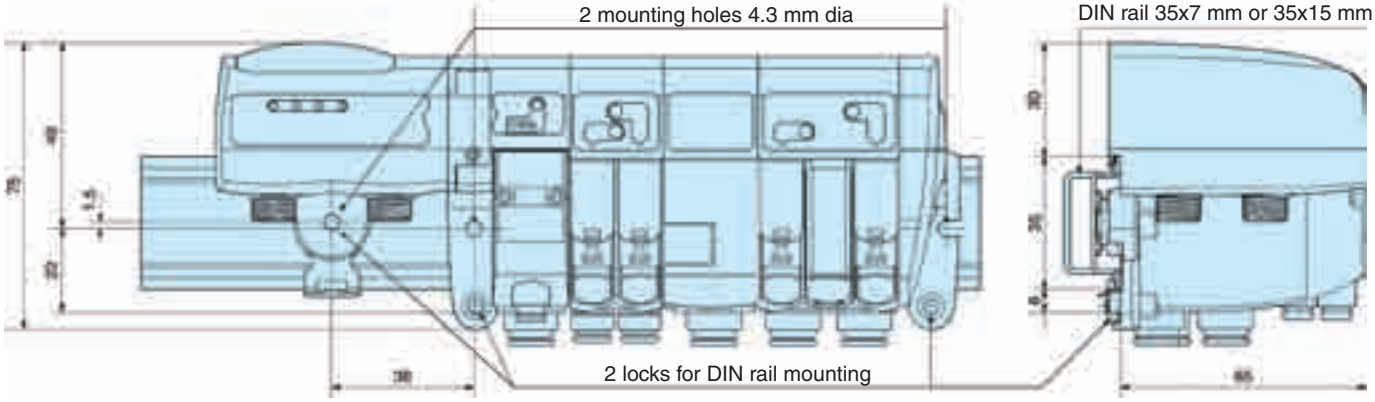


2 pivoting locks for DIN rail mounting

Device bus islands

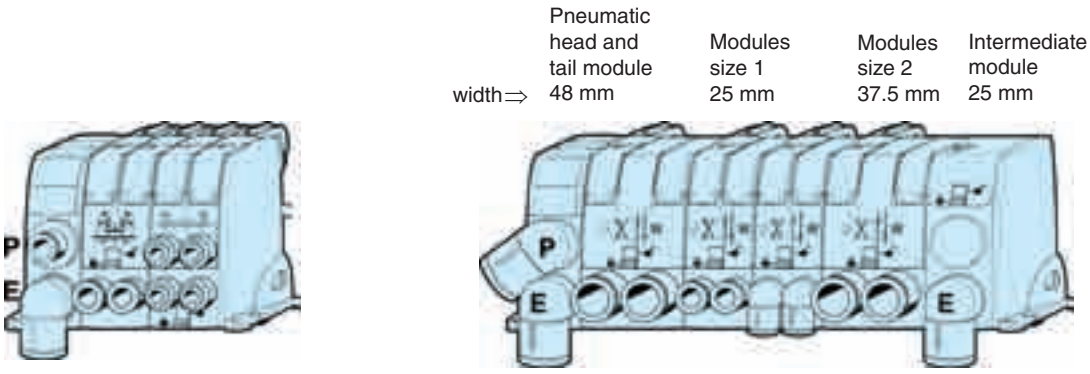
2 mounting holes 4.3 mm dia

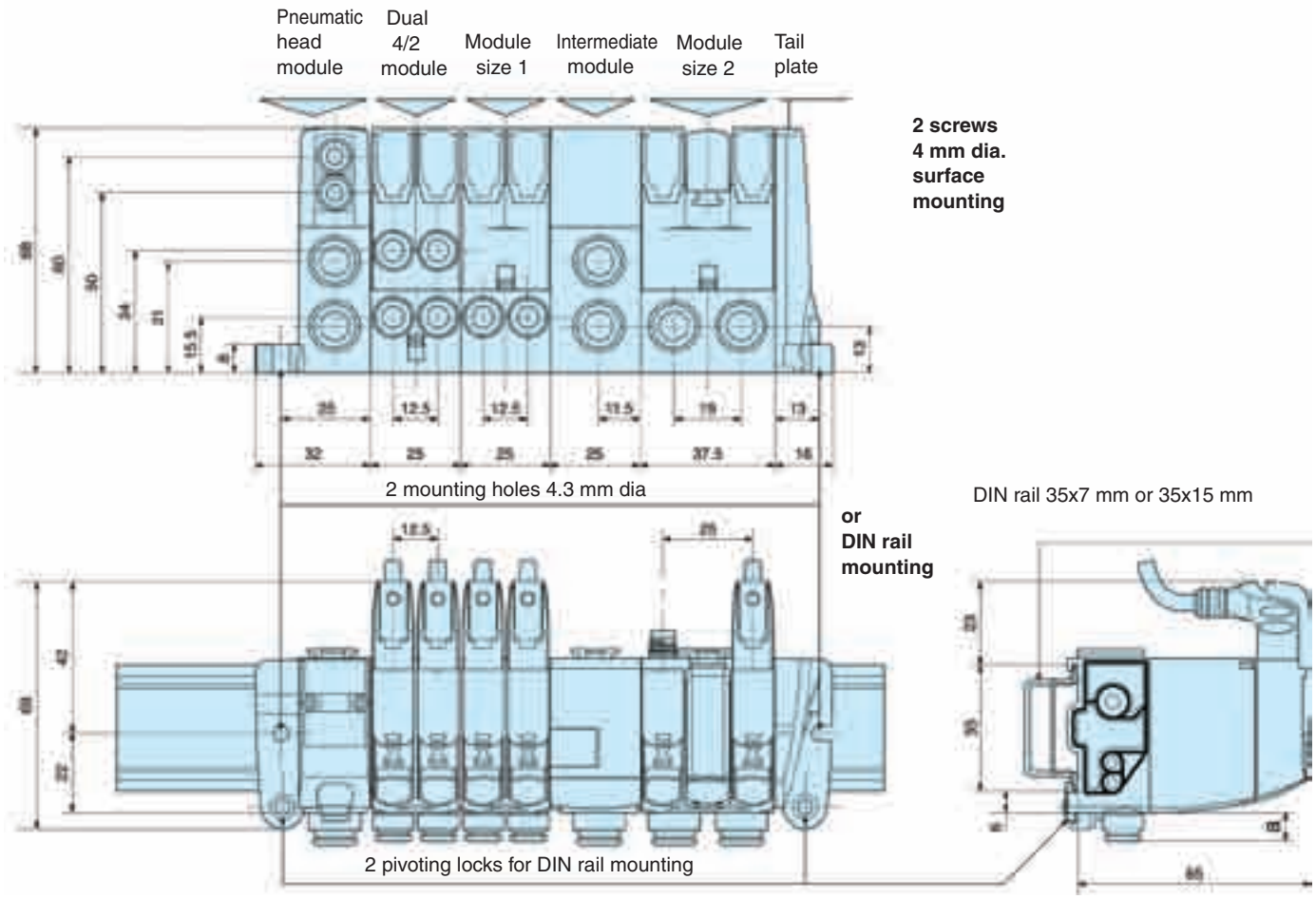
DIN rail 35x7 mm or 35x15 mm



2 locks for DIN rail mounting

Island total width depending on valve composition

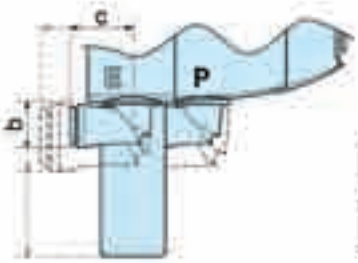




Special case : 4/3 closed centre function within island version :
Add the dimensions of the dual P.O. check valve module plugged into the island.

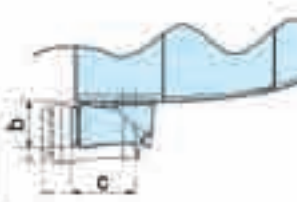
Island head and intermediate modules

	a	b	c
6 mm tube OD	8	13	16
8 mm tube OD	9	16	19
10 mm tube OD	13	18	22
12 mm tube OD	13	19	25
muffler		40	



Island valves modules

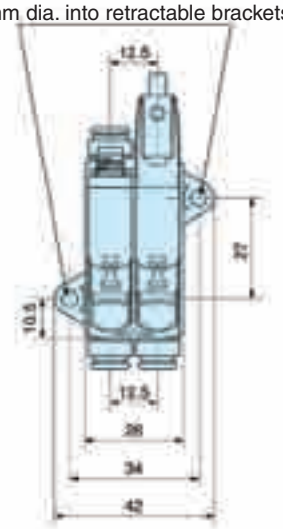
	OD tube	a	b	c
Size 1 modules	4 mm	8	10	12
	6 mm	8	13	16
Size 2 modules	8 mm	9	16	19
	10 mm	13	18	22



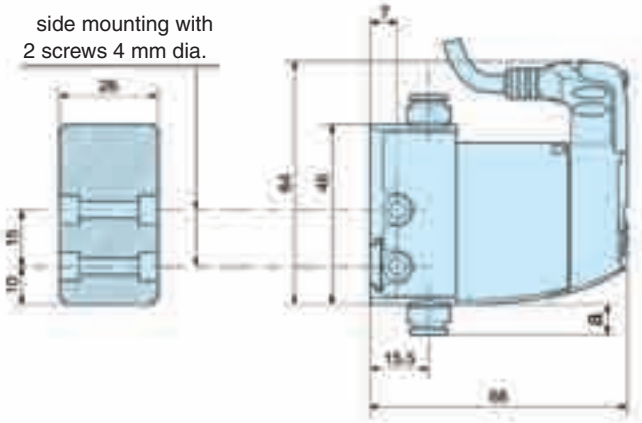
Home

Stand-alone valve size 1

surface mounting with screws
4 mm dia. into retractable brackets 3 mm thick

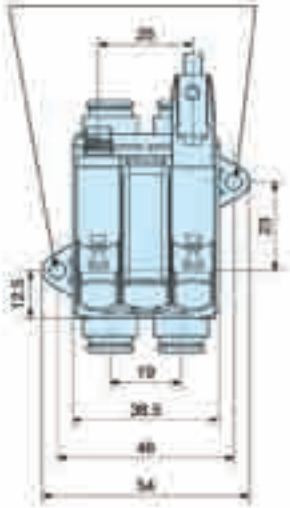


or side mounting with
2 screws 4 mm dia.

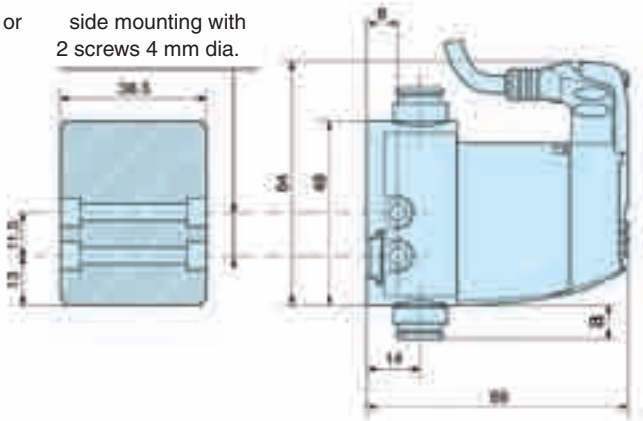


Stand-alone valve size 2

surface mounting with screws
4 mm dia. into retractable brackets 3 mm thick

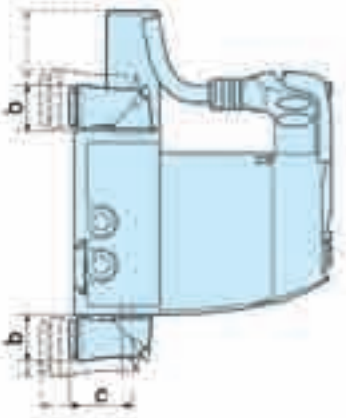


or side mounting with
2 screws 4 mm dia.



Dimensions and mountings of the stand-alone valves 4/2, double and single 3/2, 4/3 vented centre and 4/3 pressure centre.

Special case : 4/3 closed centre. Add the dual P.O. check valve module that has been plugged in the basic valve.



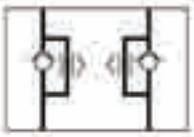
		a	b	c
Size 1 modules	4 mm tube OD	8	10	12
	6 mm tube OD	8	13	16
	muffler		31	
Size 2 modules	8 mm tube OD	9	16	19
	10 mm tube OD	13	18	22
	muffler		40	

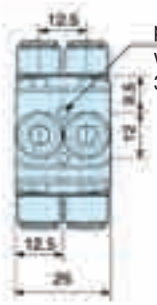
Reminder : peripheral modules may either be plugged in the valve output ports or mounted in line separate from the valve

peripheral module
plugged in a valve
or an island

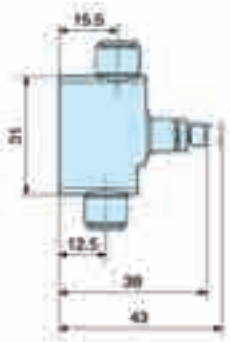
in-line peripheral modules :
mounting is required

Dual flow control module size 1





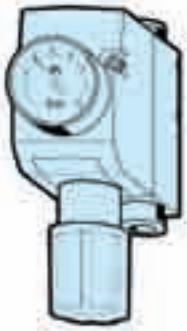
possible mounting
with 2 screws
3 mm dia.

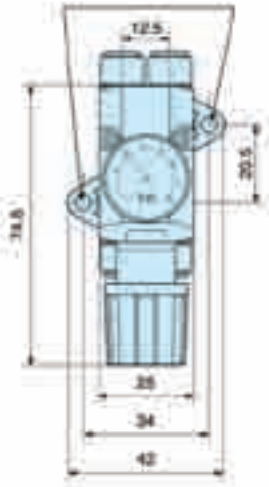


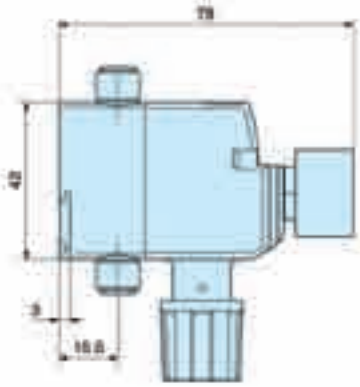
Pressure regulation module size 1

mounting with 2 screws 4 mm dia.
on retractable brackets

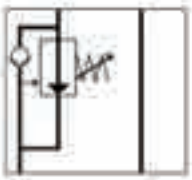
- with gauge

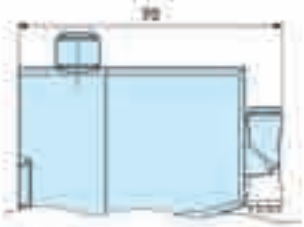






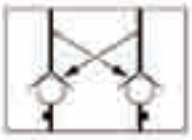
- without gauge

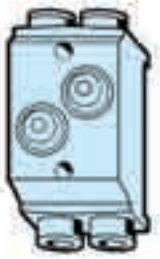




swivel elbow push-in
connector 4 mm OD tube

Dual P.O. check valve module size 1

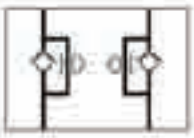


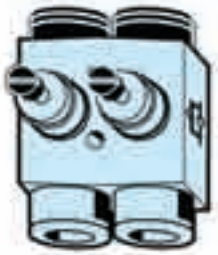


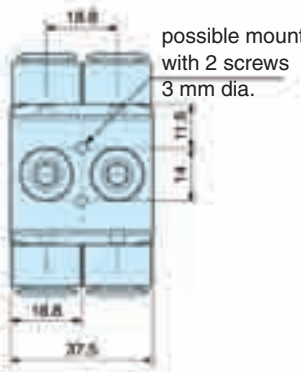
possible mounting
with 2 screws
3 mm dia.

Home

Dual flow control module size 2

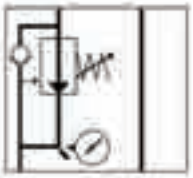


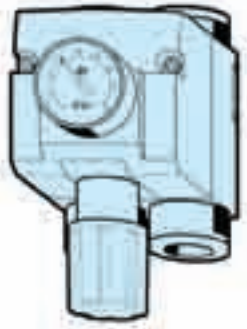




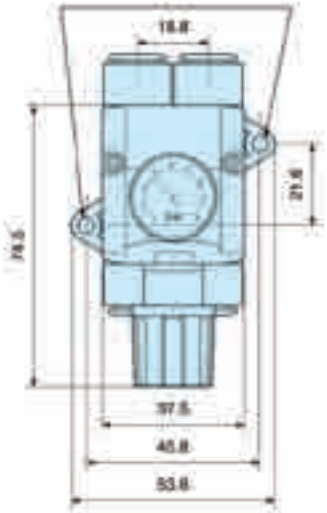
Pressure regulation module size 2

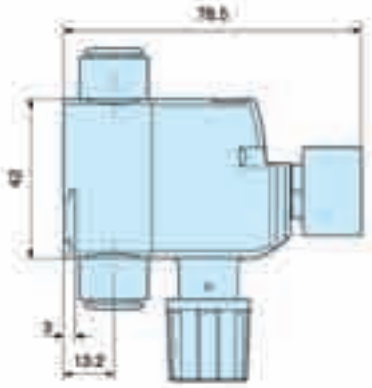
- with gauge



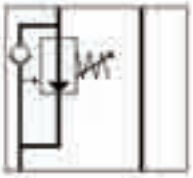


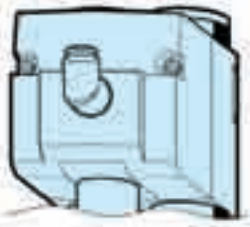
mounting with 2 screws 4 mm dia.
on retractable brackets

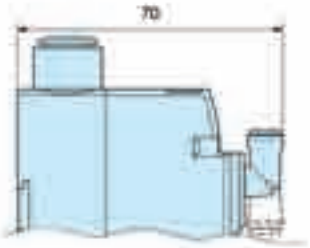




- without gauge

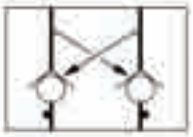


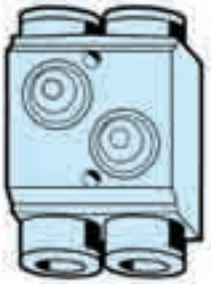


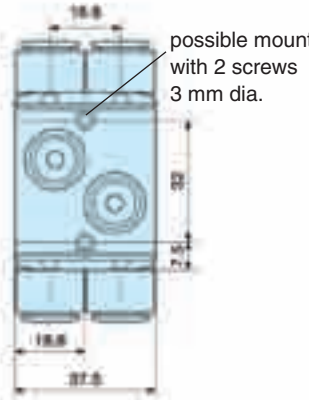


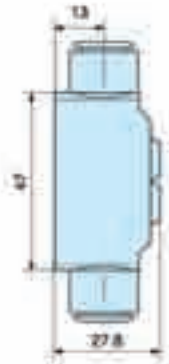
swivel elbow push-in
connector 4 mm OD tube

Dual P.O. check valve module size 2





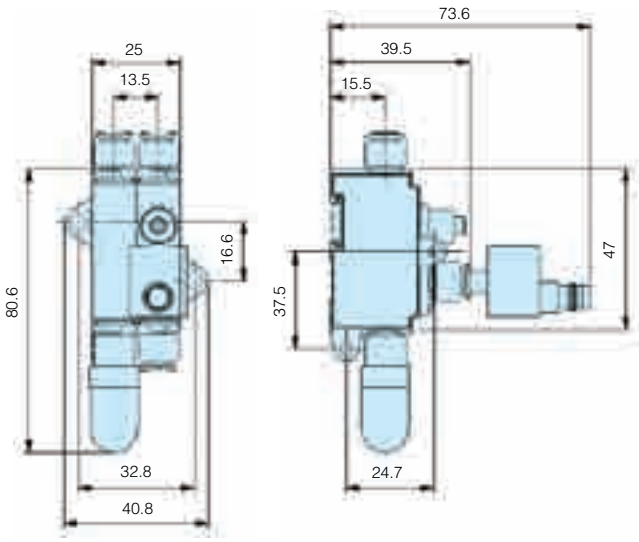




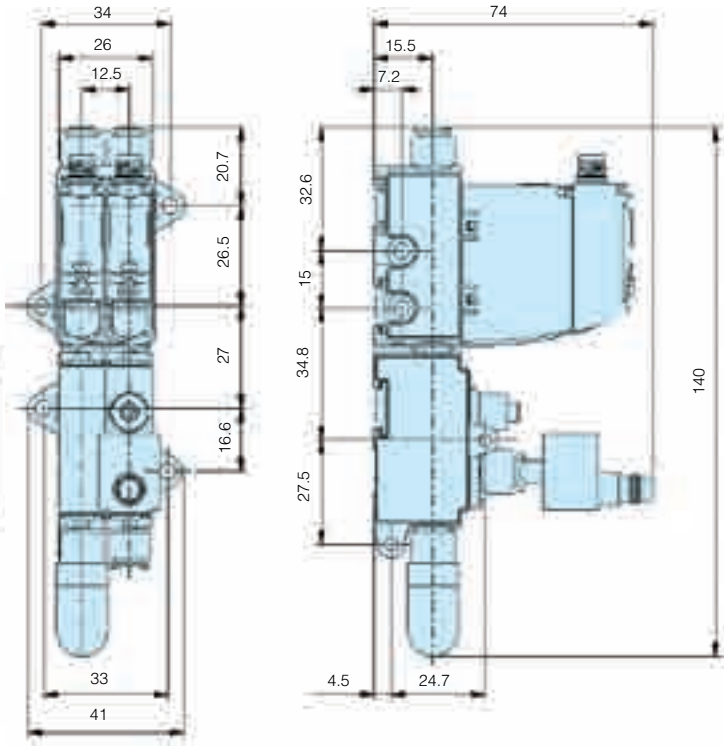
Home

Vacuum generator module

In-line



With Moduflex valve



High speed poppet type solenoid valves with individual electrical connections. Light weight plastic bodies with DIN rail manifold. Ideal for cabinet installations.

- High speed poppet valve
- Push-in connection
- Built-in terminal block
- Pneumatic output indicator
- DIN rail mounting

Poppet valve, not suitable for use with Soft or Slow start Valves. When pressure is applied, the double solenoid interface takes a pre-determined position (non activated). In the absence of electrical signal, output 2 (yellow indicator) is activated, output 4 (red indicator) is non activated. Double solenoid version is delivered as standard with Non locking flush override.

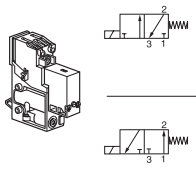
Operating information

Working pressure;	
3/2 and 4/2:	3-8 bar
Low pressure interface 3/2:	1-8 bar
Flow (Qmax):	200 l/min
Working temperature	-15 °C to +60 °C

For technical information see CD

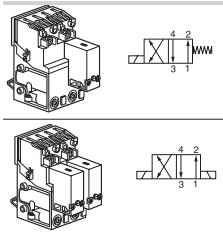
Electro-Pneumatic modules 3/2

With solenoid valve, output with Ø4 mm Push-in connection
Visual indication of pneumatic output (NC) red : (NO) yellow
Spring return manual override. 24V DC

Symbol	Order code
	**PS1-E21102B**
	PS1-E22102B

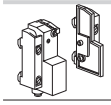
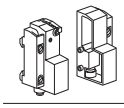
Electro-Pneumatic modules 4/2

With solenoid valve, two outputs with Ø 4 mm Push-in connections
Visual indication of pneumatic output (NC) red and (NO) yellow
Spring return manual override. 24V DC

Symbol	Order code
	**PS1-E28102B**
	PS1-E29102B

Head and tail sets - intermediate supply modules

For 3/2 and 4/2 interface modules

	Description	Pneumatic connection	Characteristics	Order code
	Set for single air supply connection	Push-in Ø 6 mm	1 electrical common terminal 1 main air supply port 1 exhaust port	**PS1-E101**
		G1/8		**PS1-E1018**
	Set for double air supply connection	Push-in Ø 6 mm	1 electrical common terminal 2 main air supply ports 2 exhaust ports	**PS1-E102**
		G1/8		**PS1-E1028**
	Intermediate air supply module	Threaded G1/8 *(see description below)* *	1 air supply port 1 exhaust port	**PS1-E1038**

Incorporating an intermediate supply module into a group of electro-pneumatic modules gives the following options:

Air supply connection

- Additional G1/8 port to supplement the air supply to the manifold
- Blank the common air supply, enabling different pressures to be supplied to groups of modules within the manifold

Exhaust connection

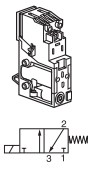
- Additional exhaust flow through the G1/8 port
- Blank the common exhaust, enabling seperation of exhaust from module groups

* The intermediate supply module is supplied with 4 interchangeable connectors to enable the above supply options to be achieved

Indicates stocked product.

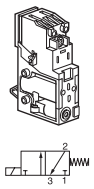
Electro-Pneumatic modules 3/2

Modules without solenoid valve*
3 to 8 bar version

Symbol	Connection	Actuator	Return	Order code
	Push-in Ø4 mm Visual indication of pneumatic output (NC) red	Solenoid	Spring	**PS1-E111**
	Push-in Ø6 mm Visual indication of pneumatic output (NC) red	Solenoid	Spring	**PS1-E116**
	Push-in Ø4 mm Visual indication of pneumatic output (NO) yellow	Solenoid	Spring	**PS1-E121**
	Push-in Ø6 mm Visual indication of pneumatic output (NO) yellow	Solenoid	Spring	**PS1-E126**

Electro-Pneumatic modules 3/2

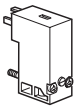
Modules without solenoid valve* - 1 to 8 bar version

Symbol	Connection	Actuator	Return	Order code
	Push-in Ø4 mm Visual indication of pneumatic output (NC) red	Solenoid	Spring	**PS1-E311**
	Push-in Ø6 mm Visual indication of pneumatic output (NC) red	Solenoid	Spring	**PS1-E316**

* To obtain a complete Electro-Pneumatic interface module, order: 1 module without solenoid valve (e.g.: PS1-E121) + 1 solenoid valve (e.g.: PS1-E2302B)

Solenoids 15 mm 1,2 W / 1,6 VA

(8mm pin spacing)



Spring return manual override

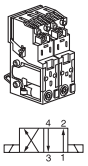
Voltage	Order code
24 VDC	**P2E-KS32C1**
48 VDC	**P2E-KS32D1**
24 V 50/60Hz	**P2E-KS31C1**
48 V 50/60Hz	**P2E-KS34D1**
115 V 50Hz, 120 V 60Hz	**P2E-KS31F1**
230 V 50Hz, 240 V 60Hz	**P2E-KS31J1**

Indexing manual override

Voltage	Order code
24 VDC	**P2E-KS32C2**
48 VDC	**P2E-KS32D2**
24 V 50/60Hz	**P2E-KS31C2**
48 V 50/60Hz	**P2E-KS34D2**
115 V 50Hz, 120 V 60Hz	**P2E-KS31F2**
230 V 50Hz, 240 V 60Hz	**P2E-KS31J2**

Electro-Pneumatic modules 4/2

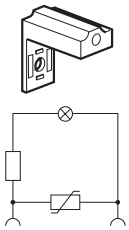
Modules without solenoid valve*
Visual indication of pneumatic output (NC) red and (NO) yellow

Symbol	Connection	Actuator	Return	Order code
	Push-in Ø4 mm	Solenoid	Solenoid	**PS1-E191**
	Push-in Ø6 mm	Solenoid	Solenoid	**PS1-E196**
	Push-in Ø4 mm	Solenoid	Spring	**PS1-E181**
	Push-in Ø6 mm	Solenoid	Spring	**PS1-E186**

* To obtain a complete Electro-Pneumatic interface module, order: 1 module without solenoid valve (e.g.: **PS1-E191**) + 2 solenoids valves (e.g.: **PS1-E2302B**)

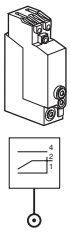
Suppressor and LED indicators

For mounting between the solenoid valve and the cable plug.

Symbol	Description	Voltage	Order code
	LED Indicator	24 V AC/DC	**P8V-CR26C**
		48 V AC/DC	**P8V-CR26D**
		115 V 50 Hz 120 V 60 Hz	**P8V-CR24F**
		230 V~50 Hz 240 V~60 Hz	**P8V-CR24J**

Note: The Interface modules have been re-designed to accept the 9,4mm spacing and the 8mm spacing versions of the suppressor and LED indicators listed above. If you are purchasing a suppressor for maintenance on an Interface module purchased before June 2004, then refer to Interface Technical leaflet supplied with this catalogue.

Pressure switches

			Order code
	1 changeover contact 5 A/250 V Pneu. Ø 4 mm	Fixed operating threshold < 1,3 bar	**PS1-P1081**
	1 changeover contact 5 A/250 V Pneu. Ø 4 mm	Adjustable operating threshold 2 to 5 bar	**PS1-P1091**

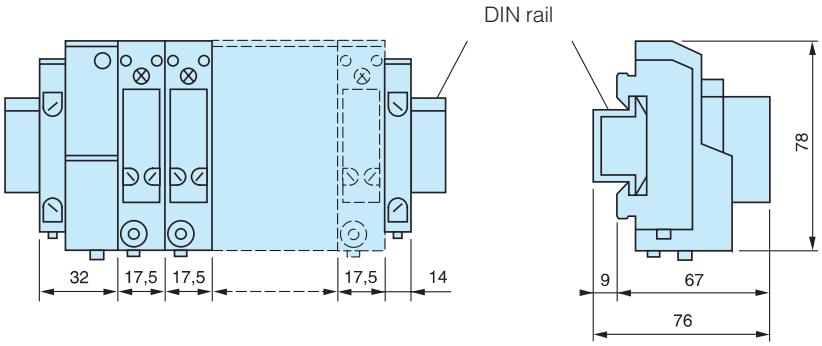
Note: The Interface modules have been re-designed to accept the previous 9,4mm spacing solenoids and the new 8mm spacing solenoids listed above. If you are purchasing a solenoid for maintenance on an Interface module purchased before June 2004, then refer to Interface Technical leaflet supplied with this catalogue.

Indicates stocked product.

Dimensions, PS1 valve Series

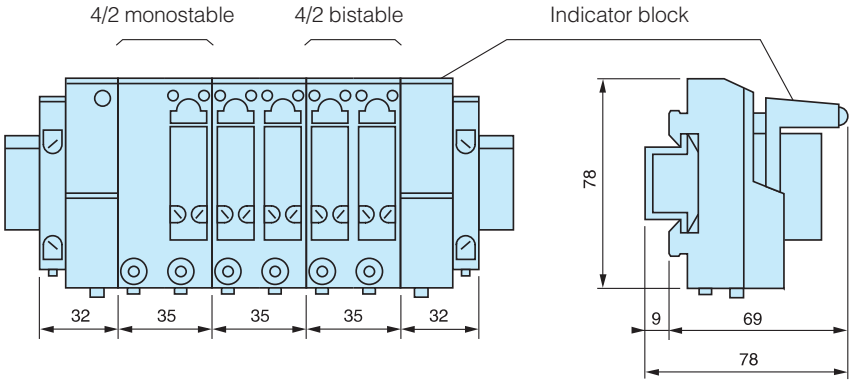
Electropneumatic interface modules 3/2

P1S-E21102• with P1S-E101 head and tail units



Electropneumatic interface modules 4/2

P1S-E28• and P1S-E29 with PS1-E102 head and tail units



Stacking high flow valves with air pilot or solenoid actuation. Lightweight plastic bodies feature push-in or threaded connections. Stacking valves feature modular inlet and exhaust facility.

- High flow, compact size
- Push-in or threaded connection
- DIN rail or block mounting
- Light weight construction

Operating information

Working pressure;			
Pneumatically operated:	2-10 bar		
Electrically operated, bistable:	2-10 bar		
Electrically operated, monostable:	3-10 bar		
Working temperature	-15 °C to +60 °C		
	PVL-A	**PVL-B**	**PVL-C**
Flow (Qmax):	270l/min	900 l/min	1800 l/min
Flow Qn:	170 l/min	540 l/min	1100 l/min
Flow measured with valve stacked in island.			

Pneumatically actuated 5/2 valves - Size M5

Symbol	Connect	Order code
	Ø4 mm	**PVL-A122104**
	M5	**PVL-A122115**
	Ø4 mm	**PVL-A121104**
	M5	**PVL-A121115**

Electrically/Pneumatically actuated 5/2 valves size G1/8*

Symbol	Connect	Order code
	Ø6 mm	**PVL-B122606**
	G1/8	**PVL-B122618**
	Ø6 mm	**PVL-B121606**
	G1/8	**PVL-B121618**

Electrically/Pneumatically actuated 5/2 valves size G1/4*

Symbol	Connect	Order code
	Ø8 mm	**PVL-C122608**
	G1/4	**PVL-C122619**
	Ø8 mm	**PVL-C121608**
	G1/4	**PVL-C121619**

* For solenoids and pilot connectors, see opposite page

Electrically/Pneumatically actuated 2 x 3/2 valves

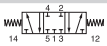
Symbol	Connect	Order code
	Ø6 mm	**PVL-B125606**

Electrically actuated 5/2 valves - Size M5

Complete with 24V DC miniature solenoid and connector with 2m cable.

Symbol	Connect	Order code
	Ø4 mm	**PVL-A122304B40**
	M5	**PVL-A122315B40**
	Ø4 mm	**PVL-A121304B50**
	M5	**PVL-A121315B50**

Electrically/Pneumatically actuated 5/3 valves size G1/8*

Symbol	Connect	Order code
	Ø6 mm	**PVL-B127606**
	G1/8	**PVL-B127618**
	Ø6 mm	**PVL-B128606**
	G1/8	**PVL-B128618**

Electrically/Pneumatically actuated 5/3 valves size G1/4*

Symbol	Connect	Order code
	Ø8 mm	**PVL-C127608**
	G1/4	**PVL-C127619**
	Ø8 mm	**PVL-C128608**
	G1/4	**PVL-C128619**

* For solenoids and pilot connectors, see opposite page

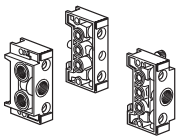
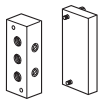
Wiring and connecting accessories for PVL-A

	Order code
Connector only (sold in pack of 10 pcs)	**PES-D10**
Connector with 5 m cable	**PES-D101**

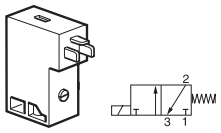
Indicates stocked product.

Head and tail sets

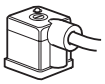
For stacking power valves 5/2, sizes M5, G1/8 and G1/4

	Type of mounting	Description	Valve size	Port size	Order code
	DIN rail mounting	Single air supply head and tail set	M5 1/8" 1/4"	G1/8 G1/4 G3/8	**PVL-A1718** **PVL-B1719** **PVL-C1713**
		Dual air supply head and tail set	M5 1/8" 1/4"	G1/4 G1/4 G3/8	**PVL-A1728** **PVL-B1729** **PVL-C1723**
	Surface mounting	Single air supply head and tail set	1/8" 1/4"	G1/8 G1/4	**PVL-B1818** **PVL-C1819**
		Double air supply head and tail set	1/8" 1/4"	G1/8 G1/4	**PVL-B1828** **PVL-C1829**

Solenoids 15mm NC Standard flow DIN 1.2W/1.6VA

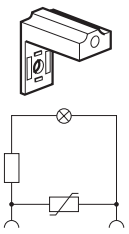
	Voltage	Order code Override flush non locking	Order code Override flush locking
	24 VDC	**P2E-KV32C1**	**P2E-KV32C2**
	48 VDC	**P2E-KV32D1**	
	24 VAC 50Hz	**P2E-KV31C1**	**P2E-KV31C2**
	48 VAC 50/60Hz	**P2E-KV34D1**	**P2E-KV34D2**
	115 VAC 50Hz/ 120 VAC 60Hz	**P2E-KV31F1**	**P2E-KV31F2**
	230 VAC 50Hz/ 240 VAC 60Hz	**P2E-KV31J1**	**P2E-KV31J2**

Cable plugs 15 mm (8 mm pin spacing) IP 65

	Description	Order code
	Large headed screw for inaccessible or recess position	
	Standard to be wired universal	**P8C-C**
	To be wired LED+protection 24 VDC	**P8C-C26C**
	With standard screw	
	Standard to be wired universal	**P8C-D**
	To be wired LED+protection 24 VDC	**P8C-D26C**
	With cable and standard screw	
	Standard with 2 m cable	**P8L-C2**
	Standard with 5 m cable	**P8L-C5**
	LED+protection 24 VAC/DC, 2 m	**P8L-C226C**
	LED+protection 24 VAC/DC, 5 m	**P8L-C526C**

Suppressor and LED indicators

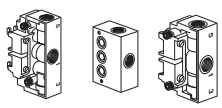
For mounting between the solenoid valve and the cable plug.

Symbol	Description	Voltage	Order code
	LED Indicator	24 V AC/DC	**P8V-CR26C**
		48 V AC/DC	**P8V-CR26D**
		115 V 50 Hz 120 V 60 Hz	**P8V-CR24F**
		230 V~50 Hz 240 V~60 Hz	**P8V-CR24J**

Air Pilot Connectors for PVL - B and C

	Mounting	Type of connection	Order code
	Mounts on the same interface as the 1 W / 1,2 VA solenoid actuator	Push-in Ø4 mm	**PVA-P111**
		Threaded M5	**PVA-P115**

Components for stacking two sizes of valve

	Type of mounting	Description	Valve size	Order code
Components for stacking 2 sizes: "transfer/take-off" module and corresponding head and tail set 	DIN rail	Kit for stacking power valves : - one "transfer/take-off" module - Head and tail set with one in each size.	1/8" and 1/4"	**PVU-LCB119**
Components for inlet/exhaust common gallery sealing		Kit for sealing the commons: - 3 common blanking plugs - 2 drilled and threaded rods - 2 screws for extended tie rods	M5 1/8" 1/4"	**PVL-A1901** **PVL-B1901** **PVL-C1901**

Indicates stocked product.

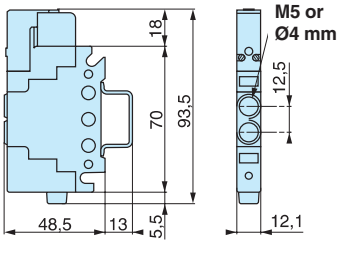
Home

Dimensions, PVL valve Series

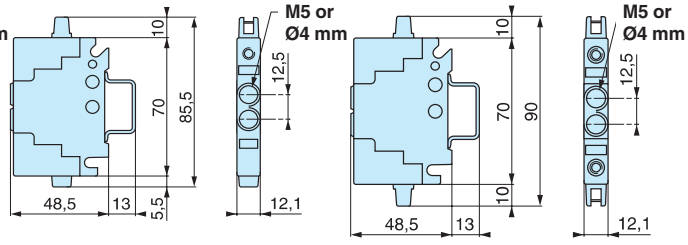
All dimensions in mm unless otherwise stated

M5 stacking power valves with pneumatic or electrical piloting

Electrical piloting with 0,9 W solenoid actuator
Monostable PVL-A1213•• Bistable PVL-A1223•

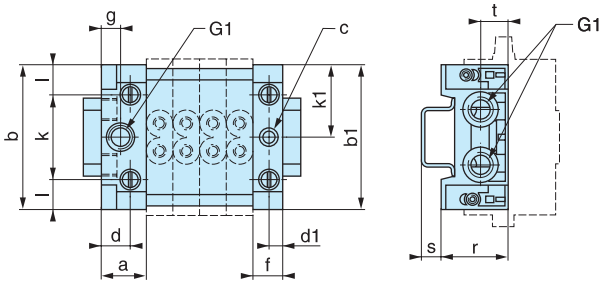


Pneumatic piloting
Monostable PVL-A1211•• Bistable PVL-A1221••

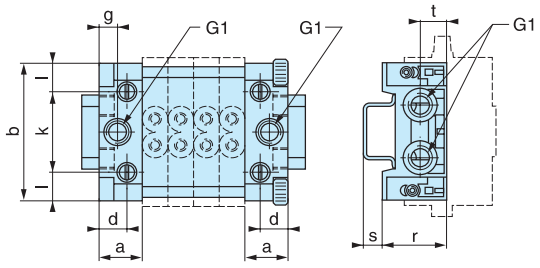


Head and tail sets

- Mounting on DIN rail
Single air supply PVL-A1718



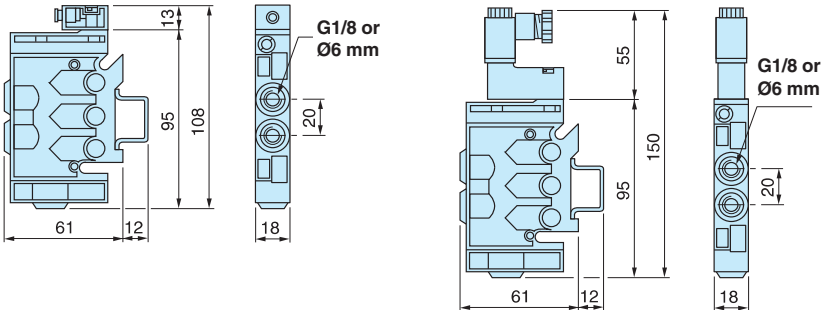
Dual air supply PVL-A1728



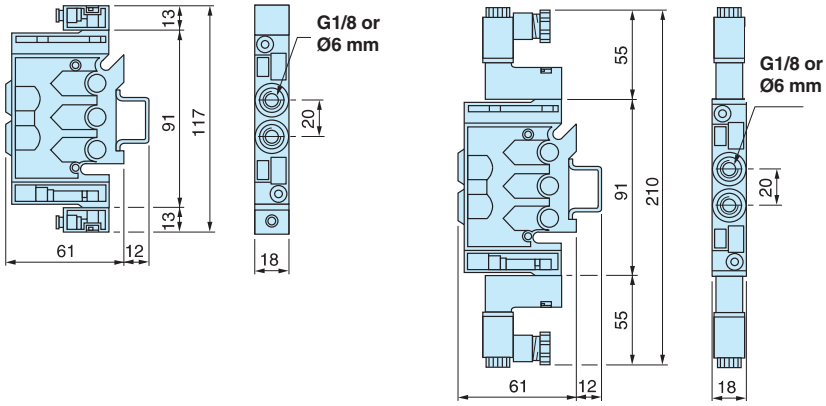
Thread size	a	b	b1	c	d	d1	f	g	G1	k	k1	l	r	s	t
M5	20	65	65	4,2	12,9	5,9	13	8,5	1/8"	38	38	13,5	30	8,8	12,5

Stacking power valves 1/8" with pneumatic or electrical piloting

Monostable PVL-B1216••, PVL-B1236••

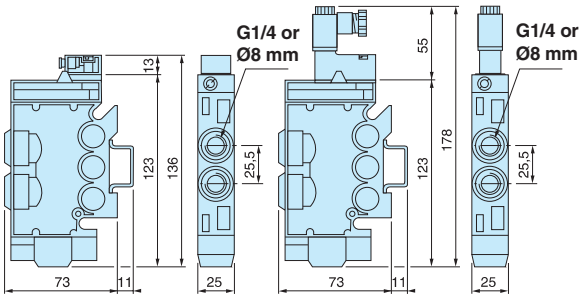


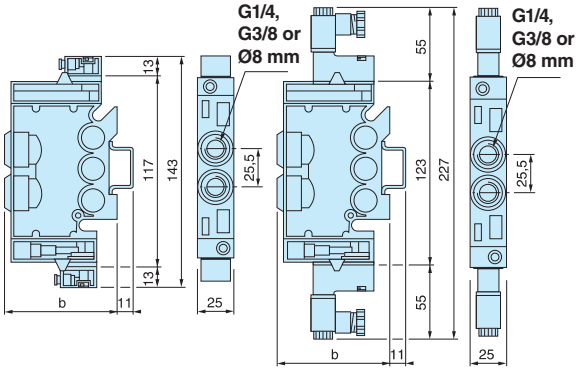
Bistable PVL-B1226••



Stacking power valves 1/4" with pneumatic or electrical control

With 1 W solenoid actuator and suitable pneumatic connector
Monostable PVL-C1216••, PVL-C1236••

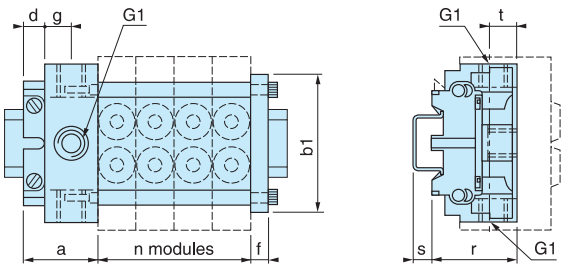




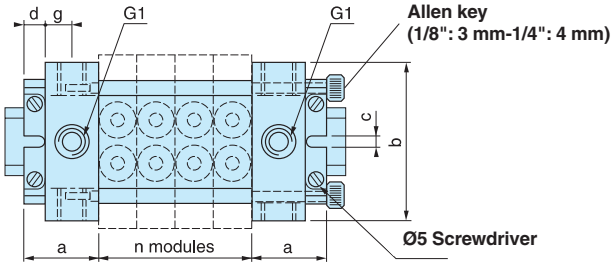
	G1/4	G3/8
b	73	77

Head and tail sets

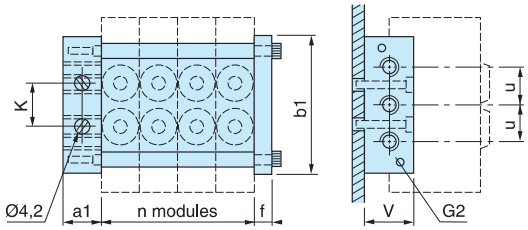
Single air supply
PVL-B1719, PVL-C1713, mounting on DIN rail



Dual air supply
PVL-B1729, PVL-C1723, mounting on DIN rail



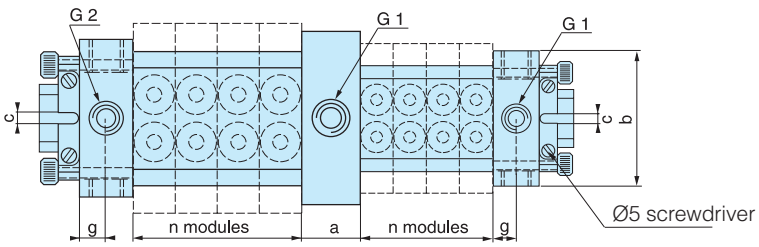
Single air supply
PVL-B1818, PVL-C1819, "stack mounting"



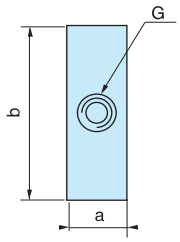
	a	a1	b	b1	c	d	f	g	G1	G2	k	r	s	t	u	v
1/8"	38	16	83	70	4,2	10	8	12	1/4"	1/8"	17,3	44	9	11	16	25
1/4"	38	20	108	100	4,2	10	8	12	3/8"	1/4"	63,5	55	9	13	20	30

"Transfer / take-off" module, intermediate supply module

For combination of sizes 1/4" - 1/8" - PVU-LCB119



PVUL-BB118 - PVU-LCC119



	a	b	G
1/8"	18	75	1/8
1/4"	25	100	1/4

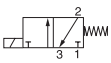
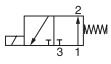
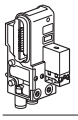
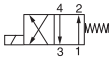
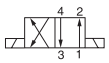
Miniature solenoid valves with modular pneumatic and electrical inputs. Lightweight plastic bodies with DIN rail manifold mounting facility. Ideal for cabinet installations.

- 3/2 and 4/2 module poppet valve
- Push-in connection
- Electrical connection by Cable gland, Sub D25 or industrial connector
- Visual indication by LED with built in surge suppression
- Modular system

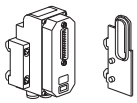
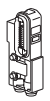
Operating information

Working Pressure	3 to 8 bar
Working temperature	-15 °C to +60 °C
	(Bus modules: 0 °C to 40 °C)
Flow, Qmax = 200 l/min	Qn = 100 l/min
Standard voltage	24 VDC
Protection level	IP65
For technical information see CD	

Valve slices including solenoids

Type		Actuator	Return	Push-in fittings mm	LED indicator and noise suppressor	Voltage	Order code
		Solenoid 3/2 NC	Spring	Ø4	Yes	24 VDC	**P2S-EW344ES2CR**
				Ø6	Yes	24 VDC	**P2S-EW346ES2CR**
		Solenoid 3/2 NO	Spring	Ø4	Yes	24 VDC	**P2S-EW144ES2CR**
		Solenoid 4/2	Spring	Ø4	Yes	24 VDC	**P2S-EW444ES2CR**
				Ø6	Yes	24 VDC	**P2S-EW446ES2CR**
		Solenoid 4/2	Solenoid	Ø4	Yes	24 VDC	**P2S-EW444EE2CQ**
				Ø6	Yes	24 VDC	**P2S-EW446EE2CQ**

Head and tail sets, intermediate accessories

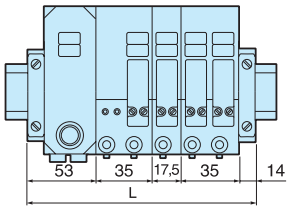
	Electrical connection	Push-in fitting, mm	Order code
	Sub D25 on the top	Ø8	**P2S-EA148D25AT**
	Intermediate air supply module	Ø6	**P2S-EA246**

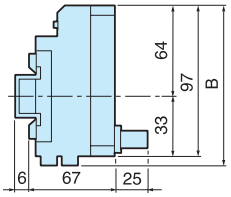
For connecting leads refer to page 168.

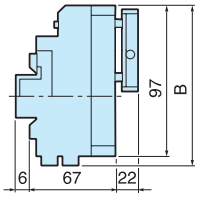
Indicates stocked product.

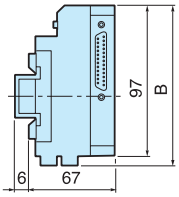
Dimensions, Valvetronic Interface 2000

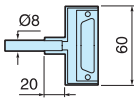
With Cable gland or SubD25 Connection Island









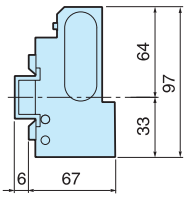


L = 67+(m x 17,5)+(n x 35)
m = number of 3/2 valves
n = number of 4/2 valves

Fitting Ø6
Fitting Ø8

B=105 mm
B=109 mm

Intermediary air supply



Stacking high flow valves with air pilot or solenoid actuation. Lightweight plastic bodies feature push-in or threaded connections. Modular pneumatic inlet, exhaust and modular electrical connections.

- High flow, compact, light weight
- Push-in or threaded pneumatic connections
- 2 x 3/2 - 5/2 - 5/3 functions
- Electrical head connection by Sub D 25 or Industrial Cylindrical Connector.
- Bus protocols: Interbus S, Profibus DP, DeviceNet and ASI
- Modular system

Flow characteristics (Qmax)

	Type 2 x 3/2 G1/8 threaded	Push in Ø6 mm
Flow Qmax	750 l/min	600 l/min
Flow Qn	400 l/min	300 l/min
	Type 5/2 **G1/8 threaded**	**Push in Ø6 mm**
Flow Qmax	900 l/min	775 l/min
Flow Qn	540 l/min	420 l/min
	Type 5/3 closed centre **G1/8 threaded**	**Push in Ø6 mm**
Flow Qmax	650 l/min	500 l/min
Flow Qn	370 l/min	280 l/min
	Type 5/3 vented centre **G1/8 threaded**	**Push in Ø6 mm**
Flow Qmax	900 l/min	775 l/min
Flow Qn	540 l/min	420 l/min

Operating information

Working Pressure	2 to 10 bar (3 to 10 bar for Monostable)
Working temperature	-15 °C to +60 °C (Bus modules: 0°C to 50°C)
Protection level	IP65

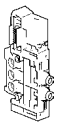
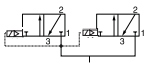
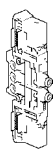
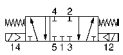
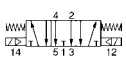
Input modules

Protection level	IP65
Voltage and type of output	PNP 24V DC
Normal current	100 mA
Maxi. available current island	1 A for all the inputs

Output modules

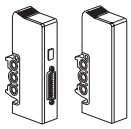
Protection level	IP65
Type and output voltage	PNP 24V DC
Normal current	100 mA
Maxi. available current island	1 A for all the outputs

Valve slices including solenoids

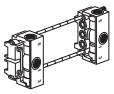
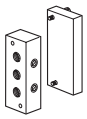
	Symbol	Actuator	Return	Pneumatic connection	Voltage	Order code
		Solenoid double 3/2 NC	Internal air pilot	Ø6 mm G1/8	24 V DC 24 V DC	**PVL-B10560652B** **PVL-B10561852B**
		Solenoid 5/2	Solenoid	Ø6 mm G1/8	24 V DC 24 V DC	**PVL-B10260602B** **PVL-B10261802B**
		Solenoid 5/2	Spring	Ø6 mm G1/8	24 V DC 24 V DC	**PVL-B10160652B** **PVL-B10161852B**
		Solenoid 5/3 closed centre	Solenoid self centring	Ø6 mm G1/8	24 V DC 24 V DC	**PVL-B10760602B** **PVL-B10761802**
		Solenoid 5/3 vented centre	Solenoid self centring	Ø6 mm	24 V DC	**PVL-B10860602B**

Indicates stocked product.

Electrical head and tail sets

	Valves configuration	Type of connector	Order code
	Single solenoid	Sub-D25	**PVL-B191125**
	Double solenoid	Sub-D25	**PVL-B192125**
	Double solenoid	Cylindrical 35-pins	**PVL-B192235**
	Double solenoid then Single solenoid	Sub-D25	**PVL-B194125**
	Single solenoid then Double solenoid	Sub-D25	**PVL-B193125**
Transfer module	Double solenoid then Single solenoid		**PVL-B1940**
	Single solenoid then Double solenoid		**PVL-B1930**
35 pin round cable 5meters			**P8L-MC35A5**

Pneumatic head and tail sets

Type of	Description mounting		Port size	Order code
	DIN rail mounting	Single supply head and tail set	G1/4	**PVL-B1719**
		Dual air supply head and tail set	G1/4	**PVL-B1729**
	Surface mounting	Single air supply head and tail set	G1/8	**PVL-B1818**
		Dual air supply head and tail set	G1/8	**PVL-B1828**
		Pressure isolating disc. (Sold in lots of 10)		**PVL-B1902**

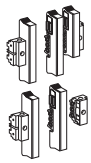
Input Module

Type	Connection	Order code
PVL-B Single solenoid	2 Inputs	**PVL-B1E1302**
PVL-B Double solenoid	4 Inputs	**PVL-B1E2304**

Output Module

Type	Connection	Order code
PVL-B Single solenoid	2 Outputs	**PVL-B1S1302**
PVL-B Double solenoid	4 Outputs	**PVL-B1S2304**

Head and tail sets

	Description	Type	Connection	Order code
	Pneumatic head and tail set with closing plates (and transfer module)	Double solenoid then Single solenoid	G1/4	**PVL-B194729**
		Double solenoid	G1/4	**PVL-B192729**
	Connector	M23 female 6 pins power	Supply	**P8C-MC06B**
		M23 female 12 pins	Profibus	**P8C-MC12BP**
	Plug	M23, IP 65	Bus Out	**P8C-PB1**
	Installation Diskett	Profibus and DeviceNet		**P8C-PDISK**

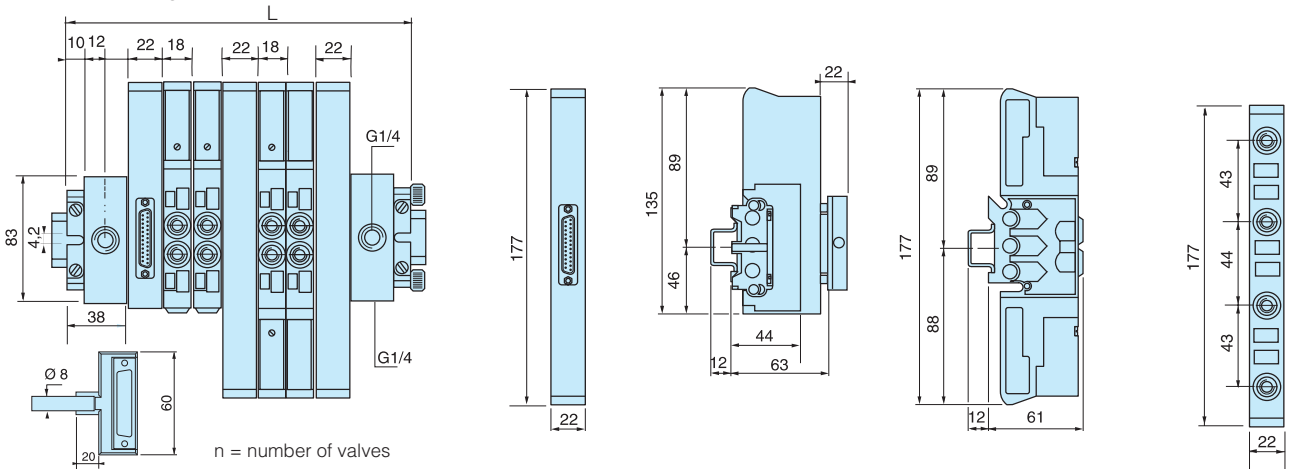
Connecting leads for Head module with Sub D 25

Type	Connection to valve island	Connection to PLC	Length m	Order code
	Leads for head module with Sub D 25 female	20 coloured wires AWG 24	5,0	**P8L-MD25A5B**
			9,9	**P8L-MD25A9B**
			15,0	**P8L-MD25ACB**

Indicates stocked product.

Dimensions, Valvetronic PVL-B10

Uniform configuration L = 120 + (n x 18)*
Mixed configuration L = 142 + (n x 18)*

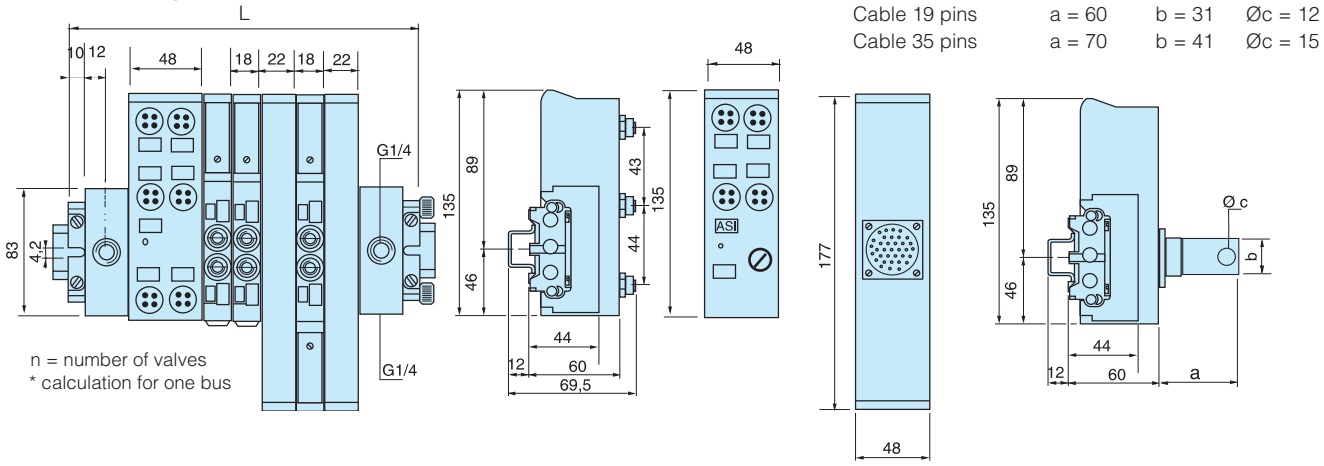


n = number of valves
* calculation for one bus

ASI Bus

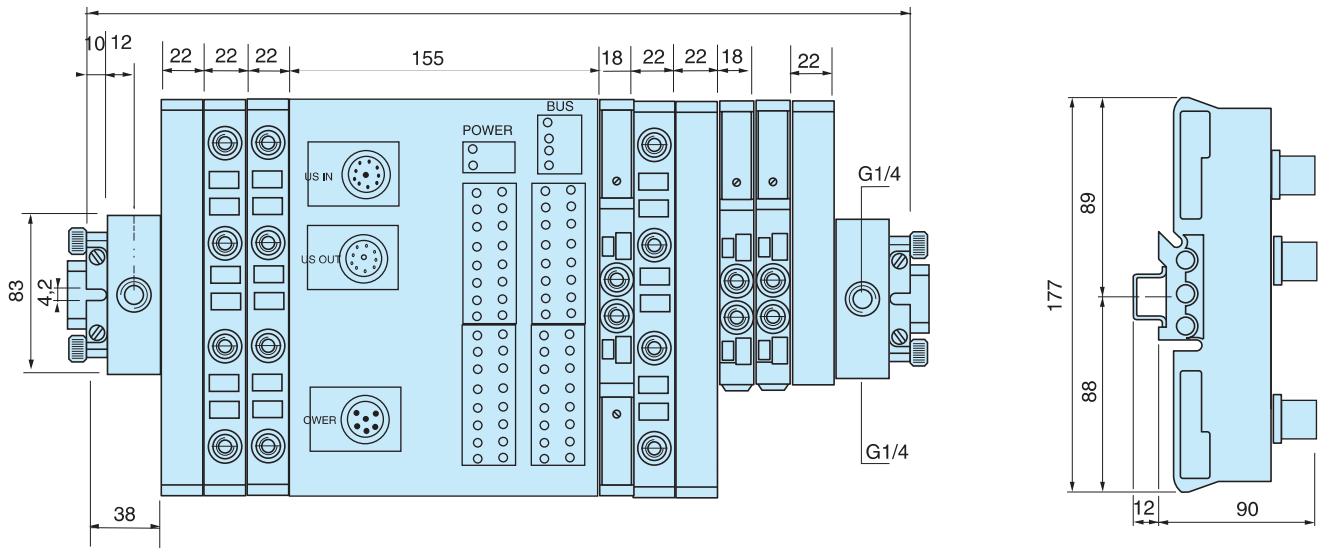
Uniform configuration L = 146 + (n x 18) *
Mixed configuration L = 168 + (n x 18) *

Connector 19 pins	a = 90	b = 31	
Connector 35 pins		a = 115	b = 41
Cable 19 pins	a = 60	b = 31	Øc = 12
Cable 35 pins	a = 70	b = 41	Øc = 15



n = number of valves
* calculation for one bus

DeviceNet, Profibus DP, Interbus S, FIPIO



Stacking high flow valves with air pilot or solenoid actuation. Lightweight plastic bodies feature push-in or threaded connections. Modular pneumatic inlet, exhaust and modular electrical connections.

- High flow, compact, light weight
- Push-in or threaded pneumatic outlets
- Bus protocols: Interbus S, Profibus DP, DeviceNet and ASI
- Electrical head connection by Cable gland, Sub D 25 or cylindrical connection
- Modular system

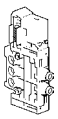
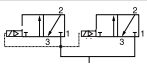
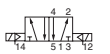
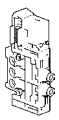
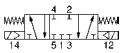
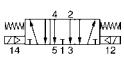
Flow characteristics (Qmax)

	Type 2 x 3/2 G1/4 threaded	Push in Ø8 mm
Flow Qmax	950 l/min	900 l/min
Flow Qn	830 l/min	470 l/min
	Type 5/2 G1/4 threaded	**Push in Ø8 mm**
Flow Qmax	1850 l/min	1400 l/min
Flow Qn	1100 l/min	820 l/min
	Type 5/3 closed centre G1/4 threaded	**Push in Ø8 mm**
Flow Qmax	1300 l/min	1170 l/min
Flow Qn	790 l/min	640 l/min
	Type 5/3 vented centre G1/4 threaded	**Push in Ø8 mm**
Flow Qmax	1850 l/min	1400 l/min
Flow Qn	1100 l/min	830 l/min

Operating information

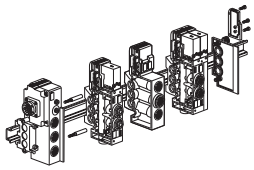
Working Pressure	2 to 10 bar (3 to 10 bar for Monostable)
Working temperature	-15 °C to +60 °C (Bus modules: 0°C to 50°C)
Protection level	IP65

Valve slices including solenoids

	Symbol	Actuator	Return	Pneumatic connection	Voltage	Order code
		Solenoid double 3/2 NC	Internal air pilot	G1/4	24 V DC	**PVL-C10561952B**
		Solenoid 5/2	Solenoid	G1/4	24 V DC	**PVL-C10261902B**
		Solenoid 5/2	Spring	G1/4	24 V DC	**PVL-C10161952B**
		Solenoid 5/3 closed centre	Solenoid self centring	G1/4	24 V DC	**PVL-C10761902B**
		Solenoid 5/3 vented centre	Solenoid self centring	G1/4	24 V DC	**PVL-C10861902B**

Indicates stocked product.

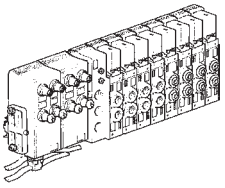
Head and tail Electrical pneumatic modules



Description	Auxiliary Pressure px	Electrical Connection	Pneumatic Connection	Order code
Head modules + tail closing plate	Without px	Cable gland	G3/8	**PVL-C1713H20A**
		Sub D 25	G3/8	**PVL-C1713D25A**
	With px	Cable gland	G3/8	**PVL-C2713H20A**
Tail air supply module			G3/8	**PVU-LC213**
Intermediate air supply module			G3/8	**PVU-LC213E**
Pressure isolating discs			Sold in lots of 10	**PVL-C1902**

For connecting leads see page 168.

ASI Bus Modules - Inputs and Outputs version



Description	Connection	Order code
Head master module with tail closing plate	M12 ASI/24V	**PVL-BA1BA44**
	Vampire ASI/24V	**PVL-BA1BA44V**
Intermediate module	M12 ASI/24V	**PVL-BA5BA44**
Spare vampire cover clip		**P8B-AVMP2** Sold in lots of 5
Connection LEAD to address terminal		**P8B-AJACK**

Combination Kits PVL-B10/PVL-C10 or PVL-C10/ASI bus modules

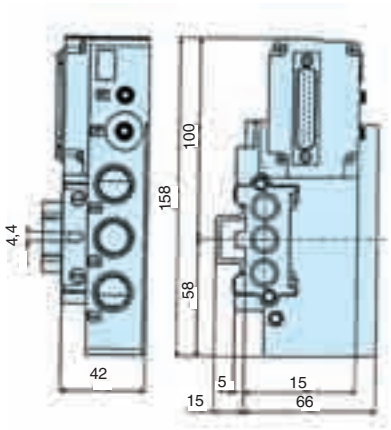
Type of combination module		Connection	Order code
Combination PVL-B10/PVL-C10	Without px version*	G1/4 and G3/8	**PVL-C1713B19**
	With px version (Ø4mm)*	G1/4 and G3/8	**PVL-C2713B19**
Combination bus ASI/PVL-C10	Without px version*	G3/8	**PVL-C1713B**
	With px version (Ø4mm)*	G3/8	**PVL-C2713B**

*px = auxilliary air supply for solenoids, separately from the main valves air supply.

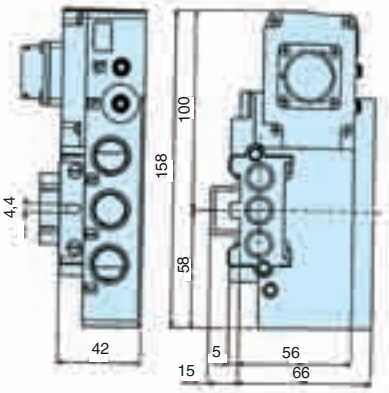
Indicates stocked product.

Dimensions, Valvetronic PVL-C10

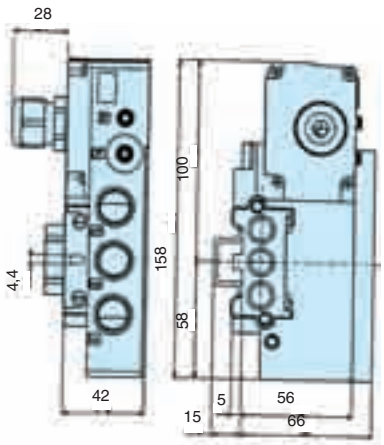
Head modules : SubD25 connector



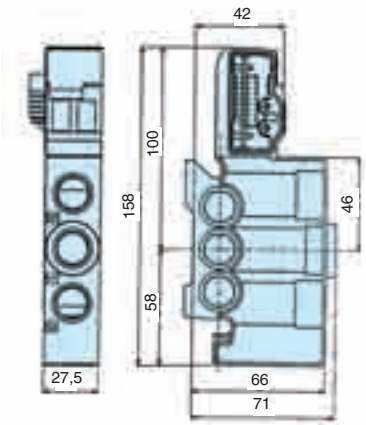
Cylindrical connector



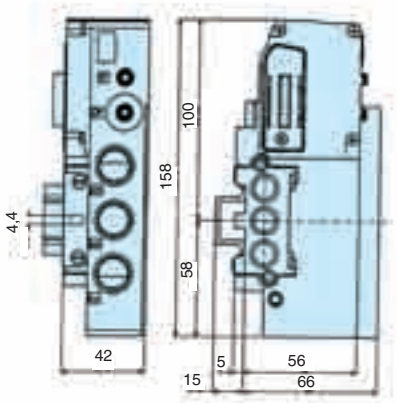
Cable gland



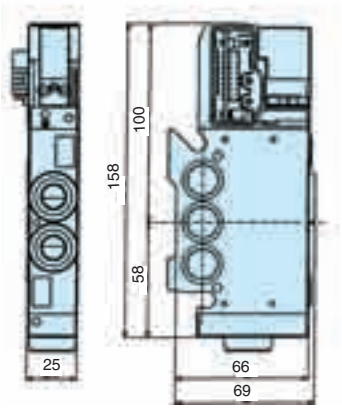
Intermediary air supply module



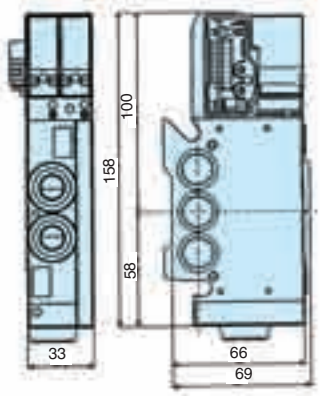
Transfer Module from PVL-B10/PVL-C10 and Head ASI bus / Air feed module PVL-C10



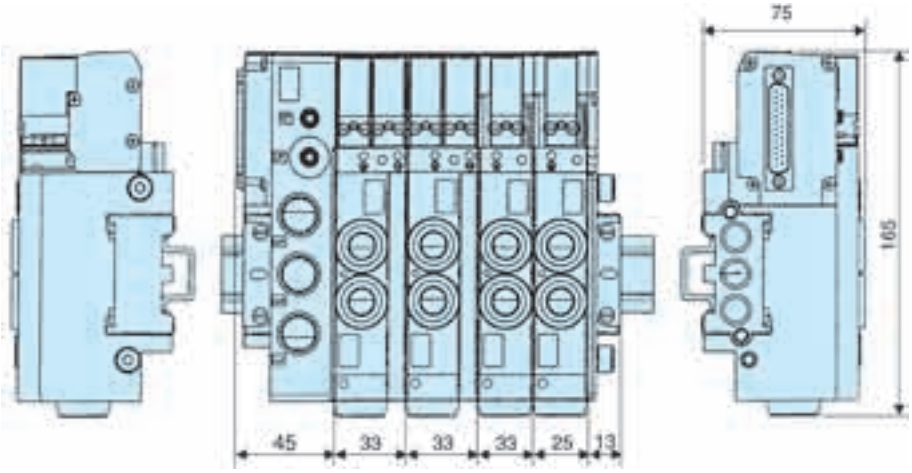
Valve 5/2 monostable



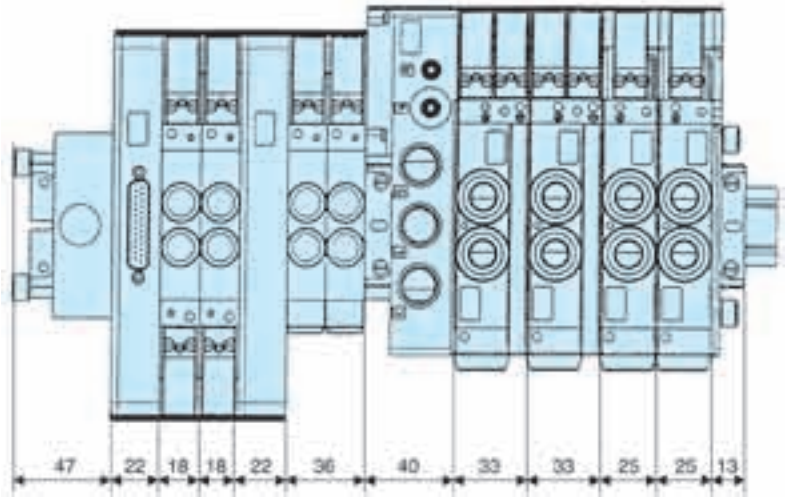
Valve 5/2 bistable - 2x3/2 - 5/3



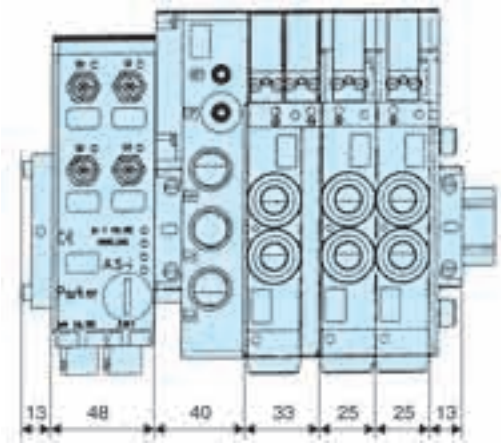
Dimensions, Valvetronic PVL-C10



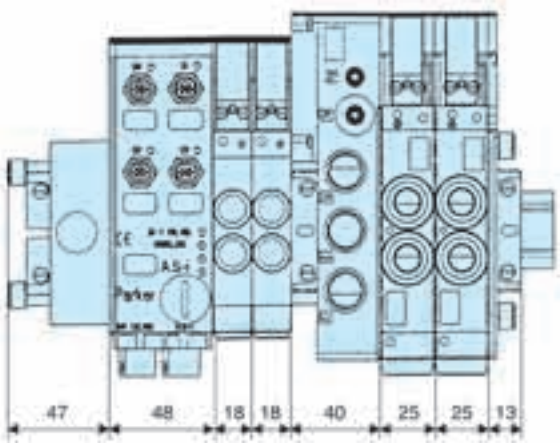
Association PVL-B10 G1/8 and PVL-C10 G1/4



Association ASI and PVL-C10



Association ASI and PVL-B10 and PVL-C10



ISO 15407

Size 02 / 01

Cylinders from Ø 10 to 100

ISO 15407-1

Individual Connection

DIN C	Isomax	
M12	ISYS ISO	
Remote pilot	Isomax	ISYS ISO
Subbase, Manifolds		
Flow Control, Regulator		

ISO 15407-2

Plug-in

Plug-in	ISYS ISO
Subbase, Manifolds	

ISO 5599

Size 1 / 2 / 3

Cylinders from Ø 63 to 200

ISO 5599-1 — Individual Connection

DIN A, Industrial	**Isomax**	**ISYS ISO**
M12, M23	**Isomax**	**ISYS ISO**
Remote pilot	**Isomax**	**ISYS ISO**
Subbase, Manifolds		
Flow Control, Regulator		

ISO 5599-2 — Plug-in

Plug-in	**ISYS ISO**
Subbase, Manifolds	

Home

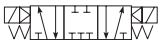
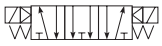
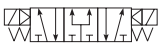
Ceramic slide valves for maximum operational life. Solenoid or air pilot actuation. Vacuum to 10 bar general applications.

- Size 01 and 02 (26 and 18 mm)
- Ceramic technology for long life operation
- From vacuum up to 10 bar applications
- Internal or external pilot supply with same valves
- Capture solenoid exhaust

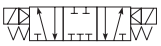
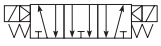
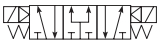
Operation information

Working pressure :	-0,9 to 10 bar	
Working temperature :	-10 to +60°C	
	DX02	**DX01**
Flow (Qmax.) :	630 l/min	1000 l/min
Flow (Qn) :	385 l/min	585 l/min

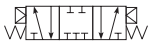
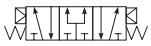
Solenoid operated ISO valve fitted with 15 mm solenoid 24 VDC

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Spring Spring	4,0/2,0 4,3/2,3	15/25 25/35	0.13 0.17	**DX02-621-951M** **DX01-621-951M**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Differential Differential	3,9/1,6 3,8/1,7	15/30 20/40	0.13 0.17	**DX02-651-951M** **DX01-651-951M**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Electrical signal Electrical signal	1,3/1,3 1,0/1,0	12/12 15/15	0.17 0.21	**DX02-606-951M** **DX01-606-951M**
5/3 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Closed center	Electrical signal Self centering	3,3 2,9	20/60 20/60	0.17 0.21	**DX02-616-951M** **DX01-616-951M**
	02 - 18mm 01 - 26mm	Electrical signal Vented center	Electrical signal Self centering	3,3 3	20/60 20/60	0.17 0.21	**DX02-611-951M** **DX01-611-951M**
	02 - 18mm 01 - 26mm	Electrical signal Press. center	Electrical signal Self centering	3,3 3	20/60 20/60	0.17 0.21	**DX02-613-951M** **DX01-613-951M**

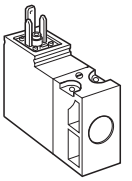
Solenoid operated ISO valve fitted with adaptor to accept 15 mm solenoid

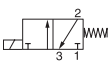
Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Spring Spring	4,0/2,0 4,3/2,3	15/25 25/35	0.9 0.13	**DX02-621-60** **DX01-621-60**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Differential Differential	3,9/1,6 3,8/1,7	15/30 20/40	0.9 0.13	**DX02-651-60** **DX01-651-60**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Electrical signal Electrical signal	1,3/1,3 1,0/1,0	12/12 15/15	0.9 0.13	**DX02-606-60** **DX01-606-60**
5/3 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Closed center	Electrical signal Self centering	3,3 2,9	20/60 20/60	0.9 0.13	**DX02-616-60** **DX01-616-60**
	02 - 18mm 01 - 26mm	Electrical signal Vented center	Electrical signal Self centering	3,3 3	20/60 20/60	0.9 0.13	**DX02-611-60** **DX01-611-60**
	02 - 18mm 01 - 26mm	Electrical signal Press. center	Electrical signal Self centering	3,3 3	20/60 20/60	0.9 0.13	**DX02-613-60** **DX01-613-60**

Pneumatic operated ISO valve

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm 01 - 26mm	Air signal Air signal	Spring Spring	4,0/2,0 4,3/2,3	15/25 25/35	0.9 0.13	**DX02-421-60** **DX01-421-60**
	02 - 18mm 01 - 26mm	Air signal Air signal	Differential Differential	3,9/1,6 3,8/1,7	15/30 20/40	0.9 0.13	**DX02-451-60** **DX01-451-60**
	02 - 18mm 01 - 26mm	Air signal Air signal	Air signal Air signal	1,3/1,3 1,0/1,0	12/12 14/14	0.9 0.13	**DX02-406-60** **DX01-406-60**
5/3 Valves							
	02 - 18mm 01 - 26mm	Air signal Closed center	Air signal Self centering	3,3 2,9	20/50 20/50	0.9 0.13	**DX02-416-60** **DX01-416-60**
	02 - 18mm 01 - 26mm	Air signal Vented center	Air signal Self centering	3,3 3	20/50 20/50	0.9 0.13	**DX02-411-60** **DX01-411-60**
	02 - 18mm 01 - 26mm	Air signal Press. center	Air signal Self centering	3,3 3	20/50 20/50	0.9 0.13	**DX02-413-60** **DX01-413-60**

Solenoids 15 mm NC standard flow DIN 1,2 W/1,6 VA





Voltage	Order code Override flush non locking	Order code Override flush locking
24 V DC	**P2E-KV32C1**	**P2E-KV32C2**
48 V DC	**P2E-KV32D1**	
24 V AC 50 Hz	**P2E-KV31C1**	**P2E-KV31C2**
48 V AC 50/60 Hz	**P2E-KV34D1**	**P2E-KV34D2**
AC 60 Hz	**P2E-KV31F1**	**P2E-KV31F2**
40 V AC 60 Hz	**P2E-KV31J1**	**P2E-KV31J2**

Connectors see page 196.

Indicates stocked product.

ISO 5599-1 - ISOMAX

Ceramic slide valves for maximum operational life. Solenoid or air pilot operated with a wide choice of bases and manifolds. Vacuum to 12 bar general applications.

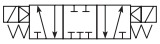
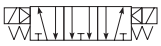
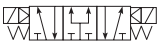
- Size1, 2 and 3
- Ceramic technology for long life operation
- From vacuum up to 12 bar applications
- Internal or external pilot supply with same valves
- M12 on each coil
- Common M12

Operation information

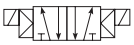
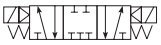
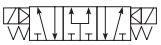
Working pressure :	-0,9 to 12 bar		
Working temperature :	-10 to +60°C		
	DX1	**DX2**	**DX3**
Flow (Qmax.) :	1680 l/min	3640 l/min	6420 l/min
Flow (Qn.) :	1150 l/min	2330 l/min	4050 l/min
ATEX approval:	CE Ex II 2 GD c 85°C		

For ATEX specific products contact Sales Office

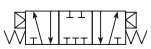
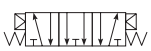
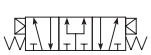
Solenoid operated ISO valve fitted with CNOMO solenoid(s) 24 VDC

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring	3,9/2,5	40/55	0.5	**DX1-621-BL49**
	2 - 56mm	Electrical signal	Spring	3,6/2,4	60/105	0.75	**DX2-621-BL49**
	3 - 71mm	Electrical signal	Spring	3,6/2,3	85/160	1.25	**DX3-621-BL49**
	1 - 43mm	Electrical signal	Differential	3,3/1,9	30/70	0.5	**DX1-651-BL49**
	2 - 56mm	Electrical signal	Differential	3,3/2,0	55/110	0.75	**DX2-651-BL49**
	3 - 71mm	Electrical signal	Differential	3,3/1,9	80/180	1.25	**DX3-651-BL49**
	1 - 43mm	Electrical signal	Electrical signal	1,0/1,0	25/25	0.65	**DX1-606-BL49**
	2 - 56mm	Electrical signal	Electrical signal	1,0/1,0	30/30	0.9	**DX2-606-BL49**
	3 - 71mm	Electrical signal	Electrical signal	1,0/1,0	40/40	1.4	**DX3-606-BL49**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,6	30/95	0.65	**DX1-616-BL49**
	2 - 56mm	Closed center	Self centering	2,1	40/190	0.9	**DX2-616-BL49**
	3 - 71mm			2,1	55/330	1.4	**DX3-616-BL49**
	1 - 43mm	Electrical signal	Electrical signal	2,8	25/70	0.65	**DX1-611-BL49**
	2 - 56mm	Vented center	Self centering	2,2	40/140	0.9	**DX2-611-BL49**
	3 - 71mm			2,1	60/270	1.4	**DX3-611-BL49**
	1 - 43mm	Electrical signal	Electrical signal	2,4	25/65	0.65	**DX1-613-BL49**
	2 - 56mm	Press. center	Self centering	2,1	40/150	0.9	**DX2-613-BL49**

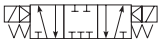
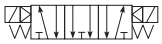
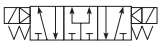
Solenoid operated ISO valve fitted with CNOMO operator without coil

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring	3,9/2,5	40/55	0.4	**DX1-621-BN**
	2 - 56mm	Electrical signal	Spring	3,6/2,4	60/105	0.65	**DX2-621-BN**
	3 - 71mm	Electrical signal	Spring	3,6/2,3	85/160	1.15	**DX3-621-BN**
	1 - 43mm	Electrical signal	Differential	3,3/1,9	30/70	0.4	**DX1-651-BN**
	2 - 56mm	Electrical signal	Differential	3,3/2,0	55/110	0.65	**DX2-651-BN**
	3 - 71mm	Electrical signal	Differential	3,3/1,9	80/180	1.15	**DX3-651-BN**
	1 - 43mm	Electrical signal	Electrical signal	1,0/1,0	25/25	0.55	**DX1-606-BN**
	2 - 56mm	Electrical signal	Electrical signal	1,0/1,0	30/30	0.8	**DX2-606-BN**
	3 - 71mm	Electrical signal	Electrical signal	1,0/1,0	40/40	1.3	**DX3-606-BN**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,6	30/95	0.55	**DX1-616-BN**
	2 - 56mm	Closed center	Self centering	2,1	40/190	0.8	**DX2-616-BN**
	3 - 71mm			2,1	55/330	1.3	**DX3-616-BN**
	1 - 43mm	Electrical signal	Electrical signal	2,8	25/70	0.55	**DX1-611-BN**
	2 - 56mm	Vented center	Self centering	2,2	40/140	0.8	**DX2-611-BN**
	3 - 71mm			2,1	60/270	1.3	**DX3-611-BN**
	1 - 43mm	Electrical signal	Electrical signal	2,4	25/65	0.55	**DX1-613-BN**
	2 - 56mm	Press. center	Self centering	2,1	40/150	0.8	**DX2-613-BN**

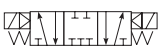
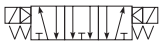
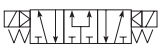
Pneumatic operated ISO valve without valve spool override

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Air signal	Spring	3,9/2,5	30/45	0.35	**DX1-421-60**
	2 - 56mm	Air signal	Spring	3,6/2,4	50/95	0.6	**DX2-421-60**
	3 - 71mm	Air signal	Spring	3,6/2,3	80/160	1.1	**DX3-421-60**
	1 - 43mm	Air signal	Differential	3,3/1,9	25/60	0.35	**DX1-451-60**
	2 - 56mm	Air signal	Differential	3,3/2,0	45/100	0.6	**DX2-451-60**
	3 - 71mm	Air signal	Differential	3,3/1,9	70/170	1.1	**DX3-451-60**
	1 - 43mm	Air signal	Air signal	1,0/1,0	20/20	0.35	**DX1-406-60**
	2 - 56mm	Air signal	Air signal	1,0/1,0	25/25	0.6	**DX2-406-60**
	3 - 71mm	Air signal	Air signal	1,0/1,0	35/35	1.1	**DX3-406-60**
5/3 Valves							
	1 - 43mm	Air signal	Air signal	2,6	20/80	0.35	**DX1-416-60**
	2 - 56mm	Closed center	Self centering	2,1	30/170	0.6	**DX2-416-60**
	3 - 71mm			2,1	45/330	1.1	**DX3-416-60**
	1 - 43mm	Air signal	Air signal	2,8	20/65	0.35	**DX1-411-60**
	2 - 56mm	Vented center	Self centering	2,2	30/140	0.6	**DX2-411-60**
	3 - 71mm			2,1	50/270	1.1	**DX3-411-60**
	1 - 43mm	Air signal	Air signal	2,4	20/60	0.35	**DX1-413-60**
	2 - 56mm	Press. center	Self centering	2,1	25/140	0.6	**DX2-413-60**

Solenoid operated ISO valve, CNOMO, 24 VDC with M12 coil

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring	3,9/2,5	40/55	0.5	**DX1-621-B619**
	2 - 56mm	Electrical signal	Spring	3,6/2,4	60/105	0.75	**DX2-621-B619**
	3 - 71mm	Electrical signal	Spring	3,6/2,3	85/160	1.25	**DX3-621-B619**
	1 - 43mm	Electrical signal	Differential	3,3/1,9	30/70	0.5	**DX1-651-B619**
	2 - 56mm	Electrical signal	Differential	3,3/2,0	55/110	0.75	**DX2-651-B619**
	3 - 71mm	Electrical signal	Differential	3,3/1,9	80/180	1.25	**DX3-651-B619**
	1 - 43mm	Electrical signal	Electrical signal	1,0/1,0	25/25	0.65	**DX1-606-B619**
	2 - 56mm	Electrical signal	Electrical signal	1,0/1,0	30/30	0.9	**DX2-606-B619**
	3 - 71mm	Electrical signal	Electrical signal	1,0/1,0	40/40	1.4	**DX3-606-B619**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,6	30/95	0.65	**DX1-616-B619**
	2 - 56mm	Closed center	Self centering	2,1	40/190	0.9	**DX2-616-B619**
	3 - 71mm			2,1	55/330	1.4	**DX3-616-B619**
	1 - 43mm	Electrical signal	Electrical signal	2,8	25/70	0.65	**DX1-611-B619**
	2 - 56mm	Vented center	Self centering	2,2	40/140	0.9	**DX2-611-B619**
	3 - 71mm			2,1	60/270	1.4	**DX3-611-B619**
	1 - 43mm	Electrical signal	Electrical signal	2,4	25/65	0.65	**DX1-613-B619**
	2 - 56mm	Press. center	Self centering	2,1	40/150	0.9	**DX2-613-B619**

Solenoid operated ISO valve, CNOMO, 24 VDC with Din A coil and M12 connector

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring	3,9/2,5	40/55	0.65	**DX1-621-B219**
	2 - 56mm	Electrical signal	Spring	3,6/2,4	60/105	0.9	**DX2-621-B219**
	3 - 71mm	Electrical signal	Spring	3,6/2,3	85/160	1.4	**DX3-621-B219**
	1 - 43mm	Electrical signal	Differential	3,3/1,9	30/70	0.65	**DX1-651-B219**
	2 - 56mm	Electrical signal	Differential	3,3/2,0	55/110	0.9	**DX2-651-B219**
	3 - 71mm	Electrical signal	Differential	3,3/1,9	80/180	1.4	**DX3-651-B219**
	1 - 43mm	Electrical signal	Electrical signal	1,0/1,0	25/25	0.8	**DX1-606-B219**
	2 - 56mm	Electrical signal	Electrical signal	1,0/1,0	30/30	1.05	**DX2-606-B219**
	3 - 71mm	Electrical signal	Electrical signal	1,0/1,0	40/40	1.55	**DX3-606-B219**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,6	30/95	0.8	**DX1-616-B219**
	2 - 56mm	Closed center	Self centering	2,1	40/190	1.05	**DX2-616-B219**
	3 - 71mm			2,1	55/330	1.55	**DX3-616-B219**
	1 - 43mm	Electrical signal	Electrical signal	2,8	25/70	0.8	**DX1-611-B219**
	2 - 56mm	Vented center	Self centering	2,2	40/140	1.05	**DX2-611-B219**
	3 - 71mm			2,1	60/270	1.55	**DX3-611-B219**
	1 - 43mm	Electrical signal	Electrical signal	2,4	25/65	0.8	**DX1-613-B219**
	2 - 56mm	Press. center	Self centering	2,1	40/150	1.05	**DX2-613-B219**

ISO 15407-1 - ISYS ISO

Solenoid or air pilot actuation. Vacuum to 10 bar heavy duty applications.

- Size HA and HB (26mm and 18mm)
- Heavy duty and corrosion resistant body
- Internal led & rectifier
- Internal or external pilot supply with same valve
- M12 common wiring

Operation information

Working pressure :	2,0 to 10 bar	
Working temperature :	-15 to +50°C	
	Size 02	**Size 01**
Flow (Qmax.) :	10,8 l/s	25,3 l/s
Flow (Qn) :	6,5 l/s	15,3 l/s

Solenoid operated ISO valve, 24VDC, central M12 connection

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm	Electrical signal	Spring & Diff.	3,1	20/40	0.15	**HBEWXBG2G9000FA**
	01 - 26mm	Electrical signal	Spring & Diff.	3,1	20/45	0.25	**HAEWXBG2G9000FA**
	02 - 18mm	Electrical signal	Differential	2,7	15/40	0.15	**HB1WXBG2G9000FA**
	01 - 26mm	Electrical signal	Differential	2,7	15/50	0.25	**HA1WXBG2G9000FA**
	02 - 18mm	Electrical signal	Electrical signal	1,7	10	0.165	**HB2WXBG2G9000FA**
	01 - 26mm	Electrical signal	Electrical signal	1,7	10	0.265	**HA2WXBG2G9000FA**
5/3 Valves							
	2 - 18mm	Electrical signal	Electrical signal	2,4	15/60	0.165	**HB5WXBG2G9000FA**
	01 - 26mm	Closed center	Self centering	2,4	15/50	0.265	**HA5WXBG2G9000FA**
	02 - 18mm	Electrical signal	Electrical signal	2,4	15/60	0.165	**HB6WXBG2G9000FA**
	01 - 26mm	Vented center	Self centering	2,4	15/50	0.265	**HA6WXBG2G9000FA**
	02 - 18mm	Electrical signal	Electrical signal	2,4	15/60	0.165	**HB7WXBG2G9000FA**
	01 - 26mm	Press. center	Self centering	2,4	15/50	0.265	**HA7WXBG2G9000FA**

Pneumatic operated ISO valve

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm	Air signal	Spring & Diff.	3,1	15/30	0.115	**HBFWX000XXA**
	01 - 26mm	Air signal	Spring & Diff.	3,1	15/40	0.215	**HAFWX000XXA**
	02 - 18mm	Air signal	Differential	2,7	10/30	0.115	**HB3WX000XXA**
	01 - 26mm	Air signal	Differential	2,7	15/35	0.215	**HA3WX000XXA**
	02 - 18mm	Air signal	Air signal	1,7	8	0.115	**HB4WX000XXA**
	01 - 26mm	Air signal	Air signal	1,7	10	0.215	**HA4WX000XXA**
5/3 Valves							
	2 - 18mm	Air signal	Air signal	2,4	15/35	0.115	**HB8WX000XXA**
	01 - 26mm	Closed center	Self centering	2,4	15/40	0.215	**HA8WX000XXA**
	02 - 18mm	Air signal	Air signal	2,4	15/35	0.115	**HB9WX000XXA**
	01 - 26mm	Vented center	Self centering	2,4	15/40	0.215	**HA9WX000XXA**
	02 - 18mm	Air signal	Air signal	2,4	15/35	0.115	**HB0WX000XXA**
	01 - 26mm	Press. center	Self centering	2,4	15/40	0.215	**HA0WX000XXA**

ISO 15407-2 - ISYS ISO

Solenoid actuated Iso valve for multiple and centralised field bus (Plug-in)

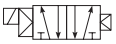
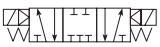
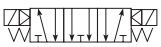
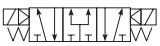
- Size HA and HB (26mm and 18mm)
- Heavy duty and corrosion resistant body
- Internal led & rectifier
- Internal or external pilot supply with same valve
- Multiple connection, Sub D25, M23, Terminal block
- Communication with ISYS NET

Operation information

Working pressure :	2,0 to 10 bar	
Working temperature :	-15 to +50°C	
	Size 02	**Size 01**
Flow (Qmax.) :	10,8 l/s	25,3 l/s
Flow (Qn) :	6,5 l/s	15,3 l/s

Solenoid operated ISO plug-in valve, 24VDC

Manual override non locking, Led & surge suppressor

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Spring & Diff. Spring & Diff.	3,1 3,1	20/40 20/45	0.13 0.23	**HBEVXBG0G9A** **HAEVXBG0G9A**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Differential Differential	2,7 2,7	15/40 15/50	0.13 0.23	**HB1VXBG0G9A** **HA1VXBG0G9A**
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Electrical signal Electrical signal	1,7 1,7	10 10	0.145 0.245	**HB2VXBG0G9A** **HA2VXBG0G9A**
5/3 Valves							
	02 - 18mm 01 - 26mm	Electrical signal Closed center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.145 0.245	**HB5VXBG0G9A** **HA5VXBG0G9A**
	02 - 18mm 01 - 26mm	Electrical signal Vented center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.145 0.245	**HB6VXBG0G9A** **HA6VXBG0G9A**
	02 - 18mm 01 - 26mm	Electrical signal Press. center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.145 0.245	**HB7VXBG0G9A** **HA7VXBG0G9A**

ISO 5599-1 - ISYS ISO

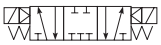
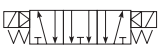
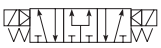
Heavy duty valve. Solenoid or air pilot. Vacuum to 10 bar. Wide choice of electrical connections.

- Size 1, 2, 3
- Heavy duty and corrosion resistant body
- Vacuum to 10 bar
- Internal or external pilot supply with same valve
- Din A, M12, M23 connections

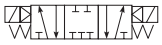
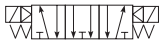
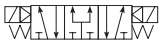
Operation information

Working pressure :	2,0 to 10 bar		
Working temperature :	-15 to +50°C		
	Size 1	**Size 2**	**Size 3**
Flow (Qmax.) :	34,5 l/s	69,0 l/s	130,8 l/s
Flow (Qn) :	20,8 l/s	42,0 l/s	83,7 l/s

Solenoid operated ISO valve fitted with CNOMO solenoid(s) 24 VDC

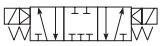
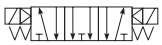
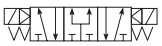
Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring & Diff.	3,1/2,5	25/35	0.77	**H1EWXBBL49C**
	2 - 56mm	Electrical signal	Spring & Diff.	3,1/2,1	40/70	1.19	**H2EWXBBL49C**
	3 - 71mm	Electrical signal	Spring & Diff.	3,8/3,3	70/80	1.47	**H3EWXBBL49C**
	1 - 43mm	Electrical signal	Differential	1,7/1,9	25/45	0.77	**H11WXBBL49C**
	2 - 56mm	Electrical signal	Differential	2,4/1,7	35/80	1.19	**H21WXBBL49C**
	3 - 71mm	Electrical signal	Differential	3,5/2,4	55/85	1.47	**H31WXBBL49C**
	1 - 43mm	Electrical signal	Electrical signal	1,7	15	0.94	**H12WXBBL49C**
	2 - 56mm	Electrical signal	Electrical signal	1,7	20	1.36	**H22WXBBL49C**
	3 - 71mm	Electrical signal	Electrical signal	2,4	25	1.64	**H32WXBBL49C**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.94	**H15WXBBL49C**
	2 - 56mm	Closed center	Self centering	3,5	30/75	1.36	**H25WXBBL49C**
	3 - 71mm			3,5	23/80	1.64	**H35WXBBL49C**
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.94	**H16WXBBL49C**
	2 - 56mm	Vented center	Self centering	3,5	30/75	1.36	**H26WXBBL49C**
	3 - 71mm			3,5	23/80	1.64	**H36WXBBL49C**
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.94	**H17WXBBL49C**
	2 - 56mm	Press. center	Self centering	3,5	30/75	1.36	**H27WXBBL49C**
	3 - 71mm			3,5	23/80	1.64	**H37WXBBL49C**

Solenoid operated ISO valve fitted with CNOMO operator without coil

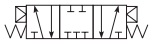
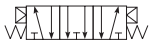
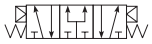
Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring & Diff.	3,1/2,5	25/35	0.65	**H1EWXBBNXXC**
	2 - 56mm	Electrical signal	Spring & Diff.	3,1/2,1	40/70	1.07	**H2EWXBBNXXC**
	3 - 71mm	Electrical signal	Spring & Diff.	3,8/3,3	70/80	1.35	**H3EWXBBNXXC**
	1 - 43mm	Electrical signal	Differential	1,7/1,9	25/45	0.65	**H11WXBBNXXC**
	2 - 56mm	Electrical signal	Differential	2,4/1,7	35/80	1.07	**H21WXBBNXXC**
	3 - 71mm	Electrical signal	Differential	3,5/2,4	55/85	1.35	**H31WXBBNXXC**
	1 - 43mm	Electrical signal	Electrical signal	1,7	15	0.7	**H12WXBBNXXC**
	2 - 56mm	Electrical signal	Electrical signal	1,7	20	1.12	**H22WXBBNXXC**
	3 - 71mm	Electrical signal	Electrical signal	2,4	25	1.4	**H32WXBBNXXC**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.7	**H15WXBBNXXC**
	2 - 56mm	Closed center	Self centering	3,5	30/75	1.12	**H25WXBBNXXC**
	3 - 71mm			3,5	23/80	1.4	**H35WXBBNXXC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.7	**H16WXBBNXXC**
	2 - 56mm	Vented center	Self centering	3,5	30/75	1.12	**H26WXBBNXXC**
	3 - 71mm			3,5	23/80	1.4	**H36WXBBNXXC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	15/60	0.7	**H17WXBBNXXC**
	2 - 56mm	Press. center	Self centering	3,5	30/75	1.12	**H27WXBBNXXC**
	3 - 71mm			3,5	23/80	1.4	**H37WXBBNXXC**

Solenoid operated ISO valve, 24VDC, central M12 connection

Oriented side 14, Led & surge suppressor

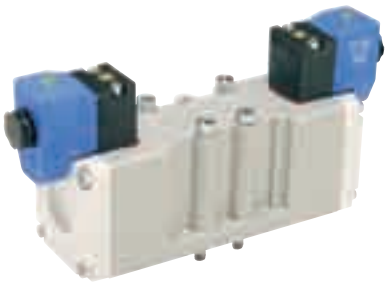
Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring & Diff.	3,1/2,5	30/40	0.77	**H1EWXBG2B9000FC**
	2 - 56mm	Electrical signal	Spring & Diff.	3,1/2,1	45/70	1.29	**H2EWXBG2B9000FC**
	3 - 71mm	Electrical signal	Spring & Diff.	3,8/3,3	75/80	1.57	**H3EWXBG2B9000FC**
	1 - 43mm	Electrical signal	Differential	1,7/1,9	30/50	0.77	**H11WXBG2B9000FC**
	2 - 56mm	Electrical signal	Differential	2,4/1,7	40/80	1.29	**H21WXBG2B9000FC**
	3 - 71mm	Electrical signal	Differential	3,5/2,4	60/85	1.57	**H31WXBG2B9000FC**
	1 - 43mm	Electrical signal	Electrical signal	1,7	20	1.04	**H12WXBG2B9000FC**
	2 - 56mm	Electrical signal	Electrical signal	1,7	25	1.46	**H22WXBG2B9000FC**
	3 - 71mm	Electrical signal	Electrical signal	2,4	30	1.74	**H32WXBG2B9000FC**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	1.04	**H15WXBG2B9000FC**
	2 - 56mm	Closed center	Self centering	3,5	35/80	1.46	**H25WXBG2B9000FC**
	3 - 71mm			3,5	40/85	1.74	**H35WXBG2B9000FC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	1.04	**H16WXBG2B9000FC**
	2 - 56mm	Vented center	Self centering	3,5	35/80	1.46	**H26WXBG2B9000FC**
	3 - 71mm			3,5	40/85	1.74	**H36WXBG2B9000FC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	1.04	**H17WXBG2B9000FC**
	2 - 56mm	Press. center	Self centering	3,5	35/80	1.46	**H27WXBG2B9000FC**
	3 - 71mm			3,5	40/85	1.74	**H37WXBG2B9000FC**

Pneumatic operated ISO valve without manual override

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Air signal Air signal	Spring & Diff. Spring & Diff. Spring & Diff.	3,1/2,5 3,1/2,1 3,8/3,3	20/30 35/70 65/75	0.6 1.02 1.3	**H1FWX000XXC** **H2FWX000XXC** **H3FWX000XXC**
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Air signal Air signal	Differential Differential Differential	1,7/1,9 2,4/1,7 3,5/2,4	20/40 30/80 50/85	0.6 1.02 1.3	**H13WX000XXC** **H23WX000XXC** **H33WX000XXC**
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Air signal Air signal	Air signal Air signal Air signal	1,7 1,7 2,4	12 16 20	0.6 1.02 1.3	**H14WX000XXC** **H24WX000XXC** **H34WX000XXC**
5/3 Valves							
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Closed center	Air signal Self centering	2,4 3,5 3,5	15/55 20/70 30/80	0.6 1.12 1.3	**H18WX000XXC** **H28WX000XXC** **H38WX000XXC**
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Vented center	Air signal Self centering	2,4 3,5 3,5	15/55 20/70 30/80	0.6 1.02 1.3	**H19WX000XXC** **H29WX000XXC** **H39WX000XXC**
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Press. center	Air signal Self centering	2,4 3,5 3,5	15/55 20/70 30/80	0.6 1.02 1.3	**H10WX000XXC** **H20WX000XXC** **H30WX000XXC**

ISO 5599-2 - ISYS ISO

Solenoid actuator Iso valve for multiple and centralised field bus



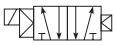
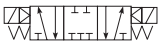
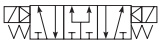
- Size 1, 2, 3
- Heavy duty and corrosion resistant body
- Internal led rectifier
- Internal or external pilot supply with same valve
- Multiple connection, SubD25, M23, Terminal block
- Communication with ISYS NET

Operation information

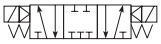
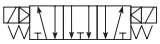
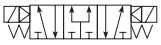
Working pressure :	2,0 to 10 bar		
Working temperature :	-15 to +50°C		
	Size 1	**Size 2**	**Size 3**
Flow (Qmax.) :	34,5 l/s	69,0 l/s	130,8 l/s
Flow (Qn) :	20,8 l/s	42,0 l/s	83,7 l/s

Solenoid operated ISO valve, 24VDC, Plug-in

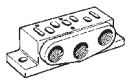
Led & surge suppressor

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring & Diff.	3,1/2,5	30/40	0.77	**H1EVXBG0B9C**
	2 - 56mm	Electrical signal	Spring & Diff.	3,1/2,1	45/70	1.19	**H2EVXBG0B9C**
	3 - 71mm	Electrical signal	Spring & Diff.	3,8/3,3	75/80	1.47	**H3EVXBG0B9C**
	1 - 43mm	Electrical signal	Differential	1,7/1,9	30/50	0.77	**H11VXBG0B9C**
	2 - 56mm	Electrical signal	Differential	2,4/1,7	40/80	1.19	**H21VXBG0B9C**
	3 - 71mm	Electrical signal	Differential	3,5/2,4	60/85	1.47	**H31VXBG0B9C**
	1 - 43mm	Electrical signal	Electrical signal	1,7	20	0.94	**H12VXBG0B9C**
	2 - 56mm	Electrical signal	Electrical signal	1,7	25	1.36	**H22VXBG0B9C**
	3 - 71mm	Electrical signal	Electrical signal	2,4	30	1.64	**H32VXBG0B9C**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.94	**H15VXBG0B9C**
	2 - 56mm	Closed center	Self centering	3,5	35/80	1.36	**H25VXBG0B9C**
	3 - 71mm			3,5	40/85	1.64	**H35VXBG0B9C**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.94	**H16VXBG0B9C**
	2 - 56mm	Vented center	Self centering	3,5	35/80	1.36	**H26VXBG0B9C**
	3 - 71mm			3,5	40/85	1.64	**H36VXBG0B9C**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.94	**H17VXBG0B9C**
	2 - 56mm	Press. center	Self centering	3,5	35/80	1.36	**H27VXBG0B9C**
	3 - 71mm			3,5	40/85	1.64	**H37VXBG0B9C**

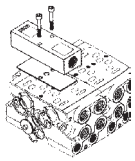
Solenoid operated ISO valve, with plug in operator, without coil

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changeover time (ms) at 6 bar actua./return	Weight Kg	Order code
5/2 Valves							
	1 - 43mm	Electrical signal	Spring & Diff.	3,1/2,5	30/40	0.65	**H1EVXBGNXXC**
	2 - 56mm	Electrical signal	Spring & Diff.	3,1/2,1	45/70	1.07	**H2EVXBGNXXC**
	3 - 71mm	Electrical signal	Spring & Diff.	3,8/3,3	75/80	1.35	**H3EVXBGNXXC**
	1 - 43mm	Electrical signal	Differential	1,7/1,9	30/50	0.65	**H11VXBGNXXC**
	2 - 56mm	Electrical signal	Differential	2,4/1,7	40/80	1.07	**H21VXBGNXXC**
	3 - 71mm	Electrical signal	Differential	3,5/2,4	60/85	1.35	**H31VXBGNXXC**
	1 - 43mm	Electrical signal	Electrical signal	1,7	20	0.7	**H12VXBGNXXC**
	2 - 56mm	Electrical signal	Electrical signal	1,7	25	1.12	**H22VXBGNXXC**
	3 - 71mm	Electrical signal	Electrical signal	2,4	30	1.4	**H32VXBGNXXC**
5/3 Valves							
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.7	**H15VXBGNXXC**
	2 - 56mm	Closed center	Self centering	3,5	35/80	1.12	**H25VXBGNXXC**
	3 - 71mm			3,5	40/85	1.4	**H35VXBGNXXC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.7	**H16VXBGNXXC**
	2 - 56mm	Vented center	Self centering	3,5	35/80	1.12	**H26VXBGNXXC**
	3 - 71mm			3,5	40/85	1.4	**H36VXBGNXXC**
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.7	**H17VXBGNXXC**
	2 - 56mm	Press. center	Self centering	3,5	35/80	1.12	**H27VXBGNXXC**
	3 - 71mm			3,5	40/85	1.4	**H37VXBGNXXC**

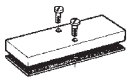
Side ported subbase

	Description	Port size	Weight	Order code BSPP "G"	Order code NPT
	**Individual subbase kit**				
	Subbase with side port				
	Size 02	G1/8	0.07	**PL02-01-70**	**PL02-01-80**
	Size 01	G1/4	0.12	**PL01-02-70**	**PL01-02-80**

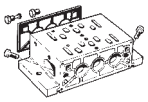
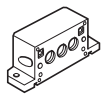
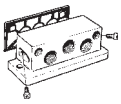
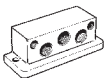
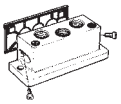
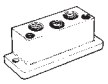
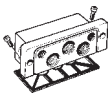
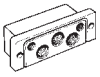
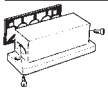
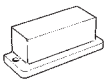
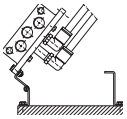
Side ported manifold

	Description	Port size	Weight	Order code BSPP "G"	Order code NPT
	**Two station manifold base with side ports**				
	To suit valves with internal supply solenoid				
	Size 02	G1/8	0.14	**PJLP02-201-70**	**PJLP02-201-80**
	Size 01	G1/4	0.7	**PJLP01-202-70**	**PJLP01-202-80**
	Two station manifold base				
	To suit pneumatic actuated valves				
	Size 01	G1/4	0.73	**PJL01-202-70**	**PJL01-202-80**
	End plate kit - for side ported two station manifold base				
	Size 02	G1/4	0.15	**PEJ02-02-70**	**PEJ02-02-80***
	Size 01	G3/8	0.52	**PEJ01-03-70**	**PEJ01-03-80****
	* Use with PJLP02				
	** Use with PJLP01 or PJL01				
	Gaskets and assembly hardware included.				

Accessories

	Description	Weight	Order code
	**Blanking plate**		
	Size 02	0.04	**DX02BLK**
	Size 01	0.05	**DX01BLK**
	Blanking plug (for subbase PJL)		
	Size 02	0.01	**D02BD0**
	Size 01	0.02	**D01BD0**
	Bolt, washer and nut		
	Size 02		**DX02M2MB**
	Size 01		**DX01M2MB**

ISO 15407-1 - Bottom ported manifold

Accessories	Designation	Weight (kg)	Order code **(P2V-A**, 18 mm)	Weight (kg)	Order code **(P2V-B**, 26 mm)
	**Multiple manifold** Including seal, fitting screws and plugs. Ports 2, 4, and 14 are bottom-connected. Fit plugs as required to provide common supply of operating air and common exhausts for solenoid valves.	0,20	**P2V-AM511NB**	0,40	**P2V-BM512NB**
	Multiple manifold Multiple manifold as above, but with the plugs fitted to suit use with valves with internal supply to solenoid.	0,20	**P2V-AM511PB**	0,40	**P2V-BM512PB**
	**Intermediate manifold, 18 to 26 mm** Including seals and fitting screws. For connecting P2V-AM511NB/PB multiple manifolds to P2V-BM511NB/PB multiple manifolds.	0,33	**P2V-AM500BE**	0,33	**P2V-AM500BE**
	**Connection block** G-side, including seal and fitting screws. For side connection.	0,18	**P2V-AM512GS**	0,21	**P2V-BM513GS**
	**Connection block** H-side. For side connection.	0,18	**P2V-AM512HS**	0,21	**P2V-BM513HS**
	**Connection block** G-side, including seal and fitting screws. For top connection.	0,18	**P2V-AM512GT**	0,21	**P2V-BM513GT**
	**Connection block** H-side. For top connection.	0,18	**P2V-AM512HT**	0,21	**P2V-BM513HT**
	**Connection block** G-side, including seal and fitting screws. For bottom connection.	0,18	**P2V-AM512GB**	0,22	**P2V-BM513GB**
	**Connection block** H-side. For bottom connection.	0,18	**P2V-AM512HB**	0,22	**P2V-BM513HB**
	**End cover** G-side, including seal and fitting screws.	0,19	**P2V-AM500G0**	0,24	**P2V-BM500G0**
	**End cover** H-side	0,19	**P2V-AM500H0**	0,24	**P2V-BM500H0**
	Plug For sealing supply and exhaust air ducts between multiple manifolds with different primary supply pressures.	0,004	**P2V-AK0P**	0,01	**P2V-BK0P**
	**Angle mounting set** For raising multiple manifolds so that angle connections can be fitted to the underside. The parts are designed so that the entire manifold can be angled to simplify connection of the pipes. The set consists of four mounts, complete with all necessary screws and nuts.	0,14	**P2V-AK0M**	0,14	**P2V-AK0M**
	O-ring strip seal For sealing between bases and multiple manifolds. 3.53 mm diameter, Supplied in 5 m lengths.	0,07	**9304331543**	0,07	**9304331543**

Side ported manifold

Description	Port size	Order code
Manifold with two valve positions with terminal Strip (Non collective wiring)		
Size 01 - 26mm	G1/4	**PS551154CP**
Manifold with two single solenoid valve positions with single address board		
Size 02 - 18mm	G1/8	**PS561152JP**
Size 01 - 26mm	G1/4	**PS551154JP**
Manifold with two valve positions with double address board		
Size 02 - 18mm	G1/8	**PS561152MP**
Size 01 - 26mm	G1/4	**PS551154MP**
Extension Manifold with two valve positions with single address board *		
Size 02 - 18mm	G1/8	**PS561152NP**
Size 01 - 26mm	G1/4	**PS551154NP**
Extension Manifold with two valve positions with double address board *		
Size 02	G1/8	**PS561152PP**
Size 01	G1/4	**PS551154PP**

* Use only one per manifold assembly to address more 24 solenoid

Side & bottom ported manifold

Description	Port size	Order code
Manifold with two valve positions with terminal Strip		
Size 01 - 26mm	G1/4	**PS551164CP**
Manifold with two valve positions with single address board		
Size 02 - 18mm	G1/8	**PS561162JP**
Size 01 - 26mm	G1/4	**PS551164JP**
Manifold with two valve positions with double address board		
Size 02 - 18mm	G1/8	**PS561162MP**
Size 01 - 26mm	G1/4	**PS551164MP**
Extension Manifold with two valve positions with single address board		
Size 02 - 18mm	G1/8	**PS561162NP**
Size 01 - 26mm	G1/4	**PS551164NP**
Extension Manifold with two valve positions with double address board		
Size 02	G1/8	**PS561162PP**
Size 01	G1/4	**PS551164PP**

Accessories

Description	Order code
Blanking plate	
Size 02 - 18mm	**PS5634P**
Size 01 - 26mm	**PS5534P**
Manifold to Manifold gasket kit	
HA & HB Gasket Standard	**PS561AP**
HA & HB Gasket 1 Blocked	**PS561BP**
HA & HB Gasket 1 2 3 Blocked	**PS561CP**

Indicates stocked product.

Collective wiring end plate kits

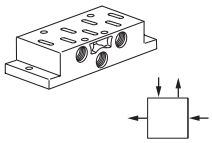
	Description	Port size	Order code
	Left & right ends modules with pressure & exhaust port, auxiliary port , and non collective wiring (only for PS551154CP) Size 02 / 01	G3/8	**PS5631011P**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and SubD25 connection Size 02 / 01	G3/8	**PS5620L21P**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and 19pin Brad Harrison connection Size 02 / 01	G3/8	**PS5620L31P**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and 12pin M23 connection Size 02 / 01	G3/8	**PS5620L41P**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and 16 point terminal strip Size 02 / 01	G3/8	**PS5620L51P**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and ISYSNET (32 output driver is included) Size 02 / 01	G3/8	**PS5620L61P**

Accessories

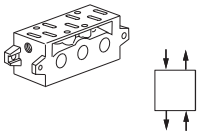
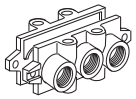
	Description		Order code
	32 output driver module for spare part		**PSSV32A**
	HA & HB 24 Out Cable Size 02 / 01	G3/8	**PS5624P**
	HA & HB 32 Out cable Size 02 / 01	G3/8	**PS5632P**
	25 pin female 25 pin SubD25 cable 3m		**P8LMH25M3A**

Indicates stocked product.

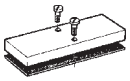
VDMA Side Ported Subbases

	Description	Size	Port size	Weight	Order code
	**Subbases VDMA**				
	Side port according to VDMA	1 - 43mm	G1/4	0.16	**P2N-VS512SD**
	Side port according to VDMA	2 - 56mm	G3/8	0.28	**P2N-WS513SD**
	Side port according to VDMA	3 - 71mm	G1/2	0.35	**P2N-YS514SD**

VDMA Bottom Ported Manifold

	Description	Size	Port size	Weight	Order code
	**VDMA Form C**				
	Bottom port according to VDMA	1 - 43mm	G1/4	0.24	**P2N-VM512MB**
	Bottom port according to VDMA	2 - 56mm	G3/8	0.36	**P2N-WM513MB**
	Bottom port according to VDMA	3 - 71mm	G1/2	0.70	**P2N-YM514MB**
	VDMA Transition plate				
	Size 1 to Size 3	1 to 3	G1/4		**P2N-VM500AK**
	Kit includes: Transition plate only				
	VDMA Form D - End plate				
	According to VDMA	1 - 43mm	G3/8	0.21	**P2N-VM513ES**
	According to VDMA	2 - 56mm	G1/2	0.36	**P2N-WM514ES**
	According to VDMA	3 - 71mm	G1	0.68	**P2N-YM518ES**
	VDMA Isolation - Main galley				
	According to VDMA	1 - 43mm	G3/8	0.21	**P2N-VK0P**
	According to VDMA	2 - 56mm	G1/2	0.36	**P2N-WK0P**
	According to VDMA	3 - 71mm	G1	0.68	**P2N-YK0P**
	Kit includes: (1) Isolator plug.				

Accessories

	Description	Size	Port size	Weight	Order code
	**Blanking plate**				
		1 - 43mm	G1/4	0.10	**P2N-AA5B**
	Kit includes: (1) Blanking plate, (1) Gasket	2 - 56mm	G3/8	0.15	**P2N-BA5B**
	and (4) Mounting bolts	3 - 71mm	G1/2	0.20	**P2N-CA5B**

Indicates stocked product.

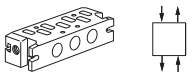
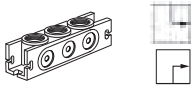
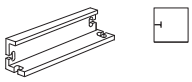
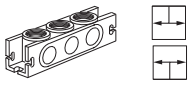
Side ported subbases

	Description	Size	Port size	Weight	Order code BSP	Order code NPT
	Single subbase with side ports 1 3 5 2 4 ports & 12 14	1 - 43mm 1 - 43mm	G1/4 G3/8	0.16 0.16	**PL1-1/4-70** **PL1-3/8-70**	**PL1-1/4-80**
		2 - 56mm 2 - 56mm	G3/8 G1/2	0.28	**PL2-3/8-70** **P2N-HS514SS**	**PL2-3/8-80**
		3 - 71mm 3 - 71mm	G1/2 G3/4		**PL3-1/2-70** **P2N-JS516SD**	**PL3-1/2-80**

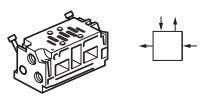
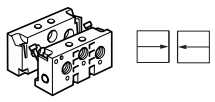
Bottom ported subbases

	Description	Size	Port size	Weight	Order code BSP	Order code NPT
	Single subbase with side ports 1 3 5 2 4 ports & 12 14	1 - 43mm 2 - 56mm 3 - 71mm	G1/4 G3/8 G1/2	0.37 0.59 0.59	**PD1-1/4-70** **PD2-3/8-70** **PD3-1/2-70**	**PD1-1/4-80** **PD2-3/8-80**

Size 1 bottom ported manifold

	Description	Size	Port size	Weight	Order code
	**Manifold** with bottom ports low profile	1 - 43mm	G1/4	0.2	**P2N-AM512MB**
	**Connecting block** Top or bottom ported connecting block for above manifold "low profile"	1 - 43mm	G3/8	0.15	**P2N-AM513GT**
	**End** End piece for above manifold "low profile"	1 - 43mm	no	0.06	**P2N-AM500J**
	**Intermediate supply** Top or bottom ported intermediate supply for above manifold "low profile"	1 - 43mm	G3/8	0.14	**P2N-AM513BT**
	Isolation plugs isolating seal for above manifold "low profile"	1 - 43mm		0.07	**P2N-AK0P**

Sizes 1 & 2 side ported manifold

	Description	Size	Port size	Weight	Order code
	**Manifold** Manifold with side port	1 - 43mm 2 - 56mm	G1/4 G3/8	0.24 0.21	**P2N-EM512MD** **P2N-FM513MD**
	**End** Side ported connecting kit for above manifold with side ports	1 - 43mm 2 - 56mm	G3/8 G1/2	0.36 0.29	**P2N-EM513ES** **P2N-FM514ES**

Indicates stocked product.

Side ported manifold

Description	Size	Port size	Order code
Manifold with terminal Strip (non collective wiring)	1 - 43mm 2 - 56mm 3 - 71mm	G3/8 G1/2 G3/4	**PS401156CCP** **PS411158CCP** **PS421150CCP**
Manifold with single address board (single solenoid)	1 - 43mm	G3/8	**PS401156JCP**
Manifold with double address board	1 - 43mm	G3/8	**PS401156MCP**

Accessories

Description	Size	Port size	Order code
Blanking plate	1 - 43mm 2 - 56mm 3 - 71mm	G3/8 G1/2 G3/4	**PS4034CP** **PS4134CP** **PS4234CP**
Insulation plug	1 - 43mm 2 - 56mm 3 - 71mm	G3/8 G1/2 G3/4	**PS4032CP** **PS4132CP** **PS4232CP**
Manifold to Manifold gasket kit	1 - 43mm	G3/8	**PS4013P**

Coils for plug in valve

Description		Order code
12 V DC	5599-2 coil	**PS404145P**
24 V DC	5599-2 coil	**PS4041B9P**
24 V AC	5599-2 coil	**PS404142P**
120 V AC	5599-2 coil	**PS404123P**
240 V AC	5599-2 coil	**PS404157P**

Indicates stocked product.

Collective wiring end plate kits

	Description	Port size	Order code
	Left & right ends modules with pressure & exhaust port, auxiliary port , and non collective wiring		
	Size 1	G1/2	**PS4031011CP**
	Size 2	G3/4	**PS4131011CP**
	Size 3	G3/4	**PS4231011CP**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and SubD25 connection		
	Size 1	G1/2	**PS4020L21CP**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and 19pin Brad Harrison connection		
	Size 1	G1/2	**PS4020L31CP**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and 12pin M23 connection		
	Size 1	G1/2	**PS4020L41CP**
	Left & right ends modules with pressure & exhaust port, auxiliary port , and ISYSNET		
	Size 1	G3/8	**PS4020L61CP**

Accessories

	Description	Order code
	32 output driver module for spare part	**PSSV32A**
	HA & HB 24 Out Cable	**PS4024P**
	25 pin female 25 pin SubD25 cable 3m	**P8LMH25M3A**
	H1 H2 H3 Pilot Gasket	**PS4007P**
	Valve to base gasket	**PS4005CP**

Indicates stocked product.

Accessories - Sandwich Regulator

Features

- Remote air pilot operated for hard-to-reach pressure control.
- Unregulated pilot pressure to valve for consistent valve shifting regardless of pressure adjustment.

Gauge adaptor kit

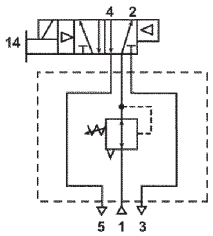
Included with all HB Regulators. Both kits are required on all HA & HB Regulators when the Regulator is on the last station on the right (14) end.

Description	Order code
Gauge kit	PS5651160P

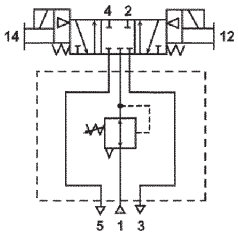
HB & HA Common Port Regulation

Provides adjustable regulated air pressure to the valves #1 port which gives the same pressure to both the #2 and #4 port of the manifold or subbase. The regulator is always on the 14 end of the valve.

Common port regulator with 4-way, 2-position single solenoid valve



Common port regulator with 4-way, 3-position APB valve



HA - 26mm
(Common Port Regulator shown)

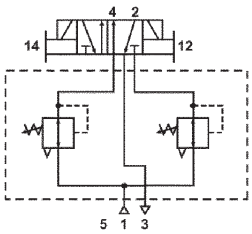
8 bar	Order code	
	Plug-in	Non Plug-in
Size 18mm	PS5638133P	PS5637133P
Size 26mm	PS5538133P	PS5537133P

HB & HA Independent Port Regulation

Dual Port Regulator

Provides regulated pressure to both ports. Pressure regulation can occur out of the #2 or #4 port of the valve. In this case #2 and #4 have to be cross wired.
3 position CP have to be used as a COE
3 position COE have to be used as a CP

Independent dual port regulator with 4-way, 2-position double solenoid valve



Order chart - Sandwich Regulator (please contact Parker Sales Office)

PS5637	1	6	6	P

Series	
HB	
15407-1 18mm	**PS5637**
15407-2 18mm	**PS5638**
HA	
15407-1 26mm	**PS5537**
15407-2 26mm	**PS5538**

Regulator function	
1	Common pressure regulator
2	Independent pressure regulator

#4 Port regulator / Gauge*	
2	2-60 PSIG w/o Gauge
3	5-125 PSIG w/o Gauge
5	2-60 PSIG w/Gauge
6	5-125 PSIG w/Gauge

* For common pressure regulator option. Regulator gauge callout must be the same number for both Port #4 and port #2. (Example: 166)

#2 Port regulator / Gauge*	
2	2-60 PSIG w/o Gauge
3	5-125 PSIG w/o Gauge
5	2-60 PSIG w/Gauge
6	5-125 PSIG w/Gauge

* For common pressure regulator option. Regulator gauge callout must be the same number for both Port #4 and port #2. (Example: 166)

How to Configure Sandwich Regulator / Valve Combinations

Ordering Components

- Manifold or Subbase Kit required.
- Sandwich Regulator Kit configured for Internal Pilot as standard.
- Order valve as External Pilot.

Internal Pilot Configuration -

Pressure in Base Port 1 feeds regulator configured for Internal Pilot which feeds valve configured for External Pilot.

Flow control - ISO 15407 - Sandwich flow controls features

- Both adjustment screws are located on the 12 end of the unit.
- Sandwich Flow Control mounts with its own studs, which means the valve uses standard bolts for mounting.
- Sandwich Flow Control is not to be used as a shut off device and is not bubble tight when needles are fully turned down.

Plug-In
15407-2
18mm Shown

Size	Order code	
	Plug-in	Non Plug-in
	15407-2	**15407-1**
Size 18mm	**PS5635P**	**PS5642P**
Size 26mm	**PS5535P**	**PS5542P**

Accessories - Sandwich Regulator

Features

- Remote air pilot operated for hard-to-reach pressure control.
- Unregulated pilot pressure to valve for consistent valve shifting regardless of pressure adjustment.

Gauge adaptor kit

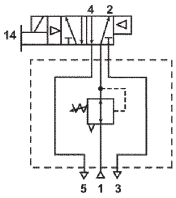
Included with all HB Regulators. Both kits are required on all HA & HB Regulators when the Regulator is on the last station on the right (14) end.

Description	Order code
Gauge kit	PS5651160P

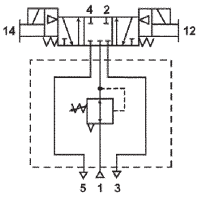
ISYS ISO 1 / 2 / 3 Common Port Regulation

Provides adjustable regulated air pressure to the valves #1 port which gives the same regulated pressure to both the #2 and #4 port of the manifold or subbase. The regulator is always on the 14 end of the valve.

Common port regulator with 4-way, 2-position single solenoid valve



Common port regulator with 4-way, 3-position APB valve



		Order code	
		Plug-in	Non Plug-in
Size 1	8 bar	PS4038133CP	PS5037133CP

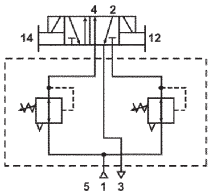
ISYS ISO 1 / 2 / 3 Independent Port Regulation

Dual Port Regulator or Single Port Regulator

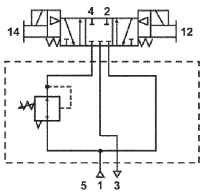
Provides regulated pressure to both ports. Pressure regulation can occur out of the #2 or #4 port of the valve. Full line pressure would be provided with a pass plate.

When using an independent Pressure Sandwich Regulator, the cylinder outlet ports are reversed. The 12 end energizes the #2 port. The 3-Position CE and PC functions are also reversed. (See schematics on right).

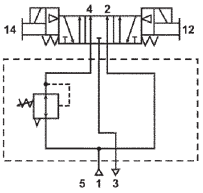
Independent dual port regulator with 4-way, 2-position double solenoid valve



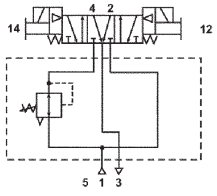
Independent port regulator with 4-way, 3-position all ports blocked valve



Independent port regulator with 4-way, 3-position inlet to cylinder function



Independent port regulator with 4-way, 3-position cylinder to exhaust function



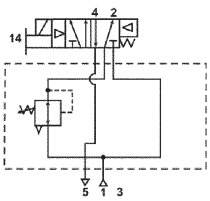
⚠ **CAUTION: Requires 4-way, 3-position, cylinder to exhaust valve**

⚠ **CAUTION: Requires 4-way, 3-position, cylinder to exhaust valve**

ISYS ISO 1 / 2 / 3 Selector Regulation

Supplies two different pressures to the valves #1 and #3 flow paths. Shifting the valve "selects" one or the other of these two pressures to flow out port #2. A Selector Regulator can: 1) Provide regulated pressure to one flow path and full line pressure to the other by use of the Line Pressure By-Pass Plate.

Selector regulator with 4-way, 2-position single solenoid valve



Order chart - Sandwich Regulator (please contact Parker Sales Office)

PS4037 | **1** | **6** | **6** | **C** | **P**

Series	
ISYS ISO Size 1	
5599-1	**PS4037**
5599-2	**PS4038**
ISYS ISO Size 2	
5599-1	**PS4137**
5599-2	**PS4138**
ISYS ISO Size 3	
5599-1	**PS4237**
5599-2	**PS4238**

Regulator function	
1	Common pressure regulator
2	Independent pressure regulator
3	Selector Regulator

#4 Port regulator / Gauge*	
0	Line By-Pass Plate**
1	1-30 PSIG w/o Gauge
2	2-60 PSIG w/o Gauge
3	5-125 PSIG w/o Gauge
4	1-30 PSIG w/Gauge
5	2-60 PSIG w/Gauge
6	5-125 PSIG w/Gauge
C	Air Pilot w/60 PSIG Gauge
D	Air Pilot w/60 PSIG Gauge

* For common pressure regulator option. Regulator gauge callout must be the same number for both Port #4 and port #2. (Example: 166)

** Pressure Line By-Pass Option can only be used with independent and Selector Regulators (Option 2 & 3 in Sandwich Block Function).

#2 Port regulator / Gauge*	
0	Line By-Pass Plate**
1	1-30 PSIG w/o Gauge
2	2-60 PSIG w/o Gauge
3	5-125 PSIG w/o Gauge
4	1-30 PSIG w/Gauge
5	2-60 PSIG w/Gauge
6	5-125 PSIG w/Gauge
C	Air Pilot w/60 PSIG Gauge
D	Air Pilot w/60 PSIG Gauge

* For common pressure regulator option. Regulator gauge callout must be the same number for both Port #4 and port #2. (Example: 166)

** Pressure Line By-Pass Option can only be used with independent and Selector Regulators (Option 2 & 3 in Sandwich Block Function).

How to Configure Sandwich Regulator / Valve Combinations

Ordering Components

- Manifold or Subbase Kit required.
- Sandwich Regulator Kit configured for Internal Pilot as standard.
- Order valve as External Pilot.

Internal Pilot Configuration -

Pressure in Base Port 1 feeds regulator configured for Internal Pilot which feeds valve configured for External Pilot.

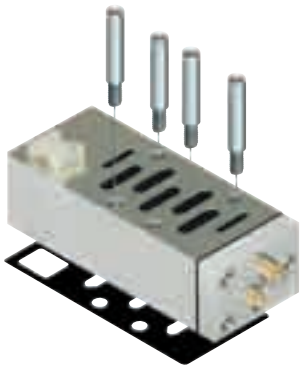
External Pilot Configuration - H1, H2, H3

An External Pilot pressure in Port 12 or 14 of the base feeds thru the Sandwich Regulator 12 or 14 galley directly to the 12/14 pilot of the valve.
This configuration takes an External Pilot from the 12 port of the base and passes it thru the regulator to feed the 12 galley of the valve.

Flow Control - Size 1 / 2 / 3 - ISO 5599 - Sandwich flow controls features

- Both adjustment screws are located on the 12 end of the unit.
- Sandwich Flow Control mounts with its own studs, which means the valve uses standard bolts for mounting.

Size	Order code	
	Plug-in	Non Plug-in
	5599-2	**5599-1**
Size 1	**PS4035CP**	**PS4042CP**
Size 2	**PS4135CP**	**PS4142CP**
Size 3	**PS4235CP**	**PS4242CP**



Plug-In
5599-2
Size 2 Shown

Solenoid coils with Din A or Industrial connection

Voltage	Order code Din A Standard 30 x 30	Weight (Kg)	Order code Din A Mobile 30 x 30	Weight (Kg)	Order code Industrial standard 22 x 30	Weight (Kg)
Direct current						
12V DC	**P2FCA445**	0.105	**P2FCA447**	0.105	**P2FCB445**	0.093
24V DC	**P2FCA449**	0.105	**P2FCA448**	0.105	**P2FCB449**	0.093
48V DC	**P2FCA453***	0.105	**P2FCA474**	0.105	**P2FCB451**	0.093
72V DC			**P2FCA470**	0.105		
96V DC			**P2FCA471**	0.105		
110V DC			**P2FCA472**	0.105		
Alternative current						
12V 50/60Hz	**P2FCA440**	0.105			**P2FCB440**	0.093
24V 50/60Hz	**P2FCA442**	0.105			**P2FCB442**	0.093
48V 50/60Hz	**P2FCA469#**	0.105				
110V 50Hz, 120V 60Hz	**P2FCA453**	0.105			**P2FCB453**	0.093
230V 50Hz, 230V 60Hz	**P2FCA457**	0.105			**P2FCB457**	0.093

* P2FCA453 is compatible with 110 V AC and 48 V DC

\# P2FCA469 is 24 V DC 6.8W or 48 V 50Hz 9.9 VA

Solenoid coils with M12 connection

Voltage	Order code 30 x 30	Weight (Kg)	Order code 22 x 30	Weight (Kg)
Direct current				
24V DC	**P2FC6419**	0.065	**P2FC7419**	0.065

Spare Solenoid Nuts

Valves requiring captured exhaust should be fitted with plastic knurled nut

Order code
P2FNP

Valves with vented exhaust are fitted with diffuser plastic nut

Order Code
P2FND

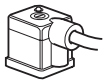
Spare Solenoid Operators

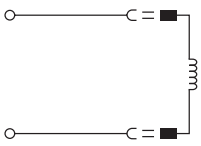
Solenoid pilot operator CNOMO NC

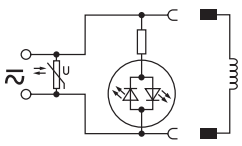
Description	Order code No manual override	Weight (Kg)	Order code Non-lock manual override	Weight (Kg)	Order code Locking manual override	Weight (Kg)
Standard duty	**P2FP23N4A**	0.065	**P2FP23N4B**	0.065	**P2FP23N4C**	0.065
Mobile metal	**P2FP43M4A**	0.1				

Note.
Solenoid pilot operators are fitted to the Viking valve range. Order the above part numbers for spares. The operators are supplied with mounting screws and interface 'O' rings.
Coils and connectors must be ordered separately.

Solenoid Connectors / Cable Plugs EN175301-803

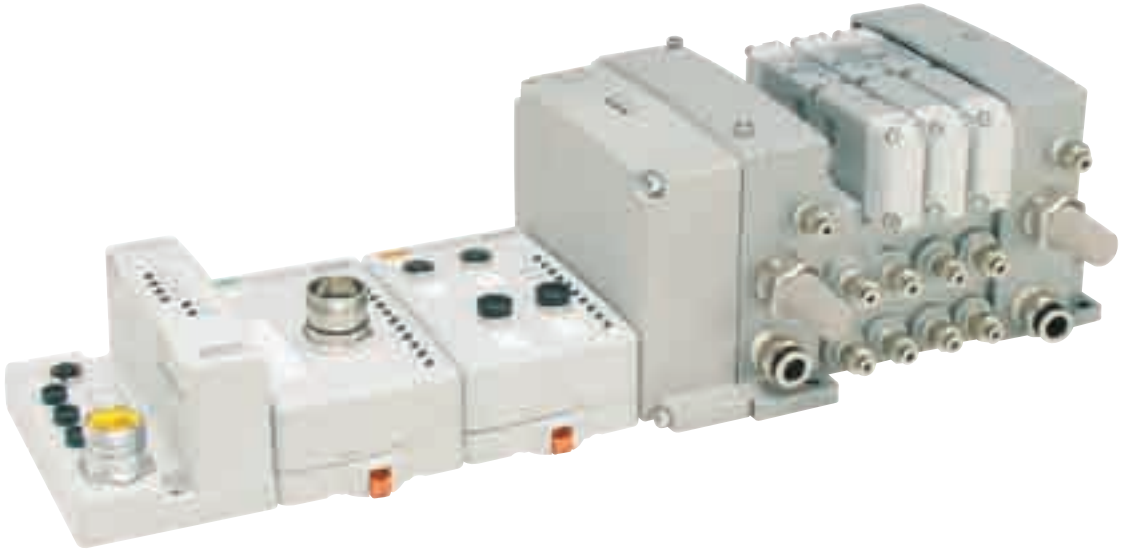
	Description	Order code 15mm Form C/ISO15217	Order code 22mm Industrial Form B	Order code 30mm Form A/ISO4400
With large headed screw suitable for mounting in inaccessible or recess position	Standard IP65	**P8C-C**		
	24V DC LED and protection IP65	**P8C-C26C**		
	110V AC LED and protection IP65	**P8C-C21E**		
With standard screw	Standard IP65 without flying lead	**P8C-D**	**3EV10V10**	**3EV290V10**
	With LED and protection 24V AC/DC	**P8C-D26C**	**3EV10V20-24**	**3EV290V20-24**
	With LED and protection 110V AC	**P8C-D21E**	**3EV10V20-110**	**3EV290V20-110**
	With LED and protection 230V AC		**3EV10V20-230**	**3EV290V20-230**
With cable 	Standard with 2m cable IP65	**P8L-C2**		
	Standard with 5m cable IP65	**P8L-C5**		
	24V AC/DC, 2m cable LED and protection IP65	**P8L-C226C**		
	24V AC/DC, 5m cable LED and protection IP65	**P8L-C526C**	**3EV10V20-24L5**	**3EV290V20-24L5**
	24V AC/DC, 10m cable LED and protection IP65	**P8L-CA26C**		
	110V AC/DC, 2m cable LED and protection IP65	**P8L-C221E**		
	110V AC/DC, 5m cable LED and protection IP65	**P8L-C521E**	**3EV10V20-110L5**	**3EV290V20-110L5**
	230V AC, 5m cable LED and protection IP65		**3EV10V20-230L5**	**3EV290V20-230L5**





P8C-C	**P8C-D26C**	**P8L-C226C**
P8C-D	**P8C-D21E**	**P8L-C526C**
P8L-C2	**P8C-C26C**	**P8L-CA26C**
P8L-C5	**P8C-C21E**	**P8L-C221E**
3EV10V10		**P8L-C521E**
	3EV10V20-24	**3EV10V20-24L5**
	3EV10V20-110	**3EV10V20-110L5**
	3EV10V20-230	**3EV10V20-230L5**

Field Bus System



Integrated Solution

- A complete field bus communication offering for all ISO valves.
- Extremely fast I/O backplane uses change-of-state (COS) connections to maximize performance.
- UL, C-UL and CE certifications (as marked).

I/O Modules

- Accepts signals from sensors, photo eyes, limits and other field input devices.
- Provides signals to remotely operating solenoid valves and other field operating output devices.
- Choice of digital, analog, high watt I/O Modules.
- Choose from a broad range of color coded I/O types with connector choices of 8mm, 12mm or M23.
- Built-in miswiring, short circuit, open circuit detection with electronic feedback.

Modularity

- Ease of module replacement with unique latching mechanisms eliminating the need for screws.
- Auto Device Replacement allows OEMs to add I/O modules without making changes to the control software.
- Built-in panel grounding.
- Electronic and mechanical keying prevents users from placing I/O modules in the wrong sequence.

Communication Modules

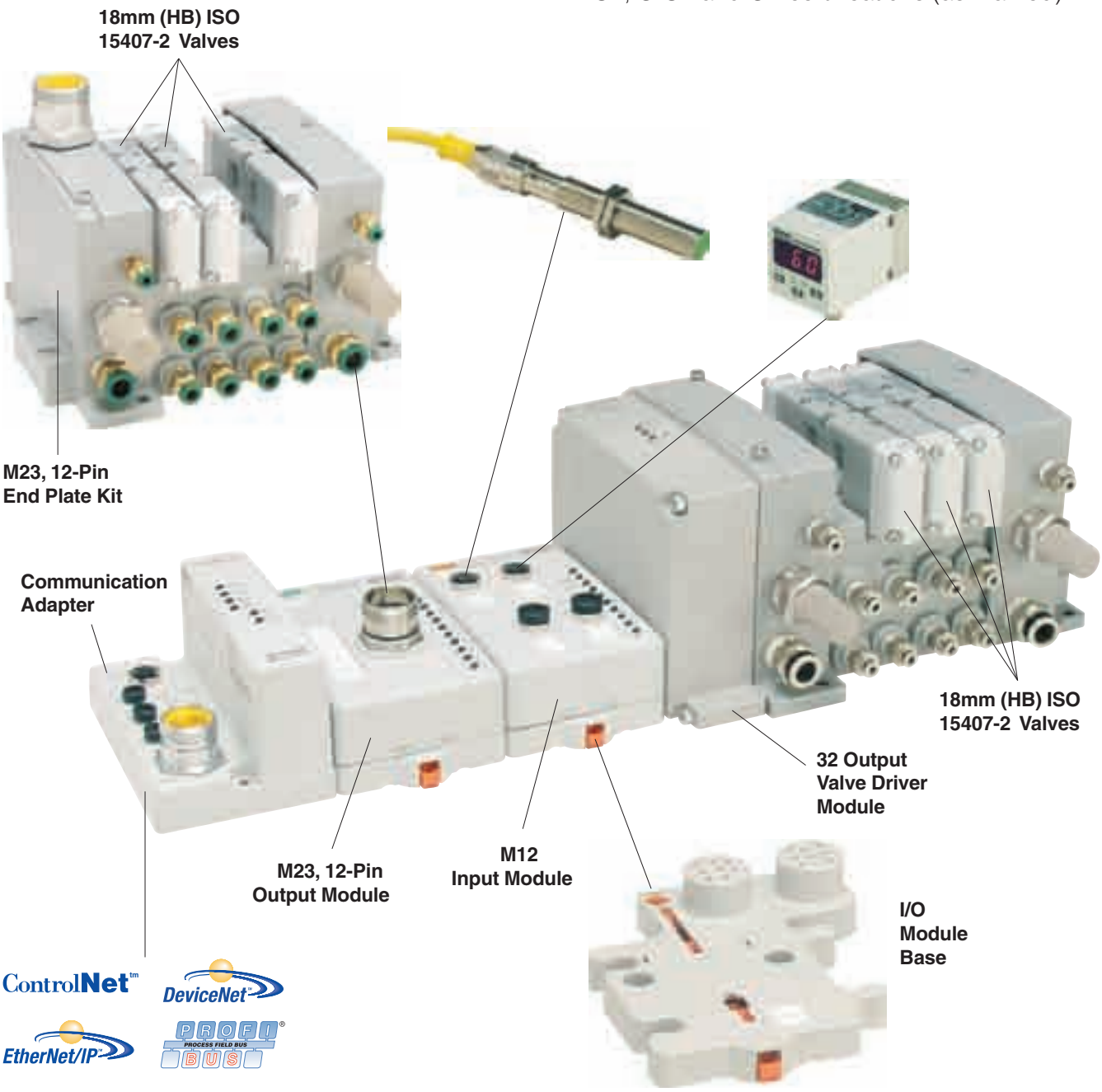
- A Communication Module supports up to a maximum of 63 I/O modules and up to 264 Inputs and 264 Outputs.

ControlNet™ DeviceNet™ EtherNet/IP™ PROFIBUS PROCESS FIELD BUS

ISYSNET Field Bus System

Centralised Solution

- A complete field bus communication offering for all ISO valves.
- UL, C-UL and CE certifications (as marked).



I/O Configuration

- Centralized isysnet system.
- Pneumatics and I/O are in close proximity to one another
- I/O density per module = 8.

Communication Modules

PSSCENA

PSSCCNA

†§	DeviceNet™ (M18 or M12)	**PSSCDM18PA** (M18) or **PSSCDM12A** (M12)	10 to 28.8VDC
†§	ControlNet™	**PSSCCNA**	10 to 28.8VDC
†§	EtherNet I/P™	**PSSCENA**	10 to 28.8VDC
†§	Profibus-DP®	**PSSCPBA**	10 to 28.8VDC

* IP67 Certified

† Reference the following documents for installation instructions.
DeviceNet - E101P, PSS-UM001A; ControlNet - E103P
Ethernet I/P - E104P; Profibus-DP - E102P

§ Requires a PSST8M23A or PSSV32A in all manifold assemblies. PSSV32A is included in factory assembled manifolds and ISYSNET end plate kits.

EDS and GSD files located at www.parker.com/pneu/isysnet

I/O Modules

PSST8M12A

PSST8M23A

PSSNACM12A

PSSTACM12A

PSSN8M8A

†	8 Digital Inputs M12 on 4 M12 connectors for PNP Sensors	**PSSN8M12A**	10 to 28.8VDC
†	8 Digital Inputs M12 on 4 M12 connectors for NPN Sensors	**PSSP8M12A**	10 to 28.8VDC
†	8 Digital Inputs M8 for PNP Sensors	**PSSN8M8A**	10 to 28.8VDC
†	8 Digital Inputs M8 for NPN Sensors	**PSSP8M8A**	10 to 28.8VDC
+	8 Digital Outputs M12 (PNP Sourcing)	**PSST8M12A**	10 to 28.8VDC
+	8 Digital Outputs M8 (PNP Sourcing)	**PSST8M8A**	10 to 28.8VDC
§	4 Digital Output, High Watt Relay M12 (PNP Sourcing) (2 Amp)	**PSSTR4M12A**	24VDC
+#	8 Digital Outputs M23 (PNP Sourcing)	**PSST8M23A**	10 to 28.8VDC
‡	2 Analog Inputs Voltage (M12)	**PSSNAVM12A**	0 to 10V ± 10V
‡	2 Analog Inputs Current (M12)	**PSSNACM12A**	4 to 20mA or 0 to 20mA
**	2 Analog Outputs Voltage (M12)	**PSSTAVM12A**	0 to 10V ± 10V
**	2 Analog Outputs Current (M12)	**PSSTACM12A**	4 to 20mA or 0 to 20mA

* IP67 Certified

Reference the following Documents for Installation Instructions.
† E106P § E109P ** E111P
+ E107P ** E111P
#Can be used with PSSTERM.
See www.parker.com/pneu/isysnet

Home

Valve Driver Modules

32 Point Module – HB, HA, H1, H2, H3	**PSSV32A*†**
24 Output Cable – HB, HA	**PS5624P†**
25 - 32 Output Cable – HB, HA	**PS5632P†**
24 Output Cable – H1, H2, H3	**PS4024P†**

* Reference Document E100P for Installation Instructions. See www.parker.com/pneu/isysnet

† Isysnet Add-A-Folds assemblies and end plate kits include a valve driver module (PSSV32A) and cable.

HB / HA 24 output manifolds require a PS5624P.

HB / HA 32 output manifolds require a PS5624P + PS5632P.

H1, H2, H3 manifolds require a PS4024P, allowing 21 outputs.

Included in kits:- **PS5620L61P**
PS4020L61CP

PSSV32A

Terminating Module	**PSSTERM**

Used as the last Terminating Module for a Stand Alone isysnet Assembly.

A PSST8M23A must be located in the isysnet assembly.

PSSTERM

Power Extender Module

24VDC Field Power Module	**PSSSE24A**	24VDC

A Power Extender Module must be used on every 12th Module in an isysnet assembly. See www.parker.com/pneu/isysnet

Reference Document E105P and PSS-SG001 for configuration instructions. See www.parker.com/pneu/isysnet

PSSSE24A

Bus Extender Cable

1 Meter Cable*	**PSSEXT1**	24VDC
3 Meter Cable*	**PSSEXT3**	24VDC

* Requires a PSSSE24 Power Extender Module.

IP67 Certified

Reference the following Documents for Installation Instructions. E117P

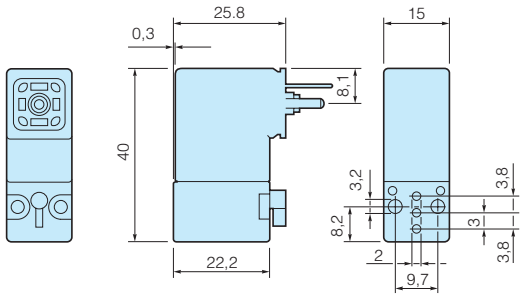
See www.parker.com/pneu/isysnet

PSSEXT1

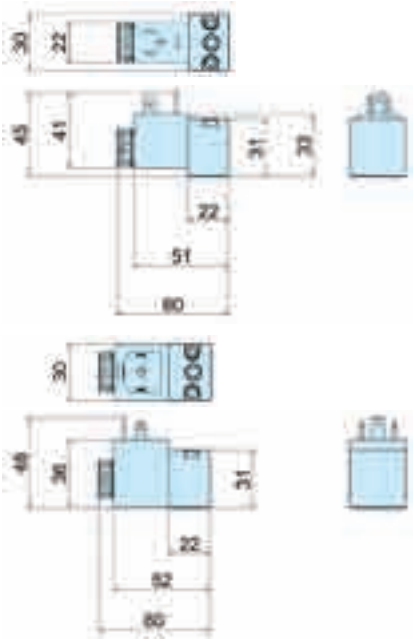
Solenoid dimensions

Cable Plug Dimensions (mm)

Solenoid operators P2E - 15mm

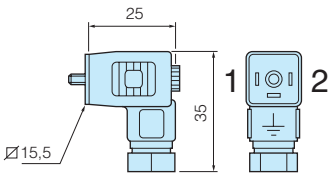


Solenoid operators P2F - CNOMO - 22 x 30mm



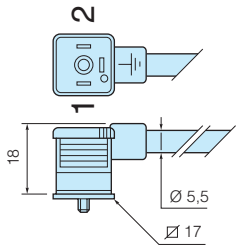
Cable plugs

P8L-C2
P8LC5
P8L-C226C
P8L-C526C
P8L-CA26C
P8L-C221E
P8L-C521E



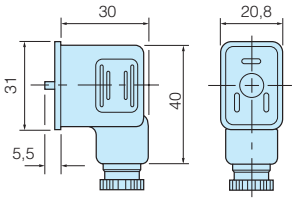
Cable plugs

P8C-C
P8C-C26C
P8C-C21E
P8C-D
P8C-D26C
P8C-D21E



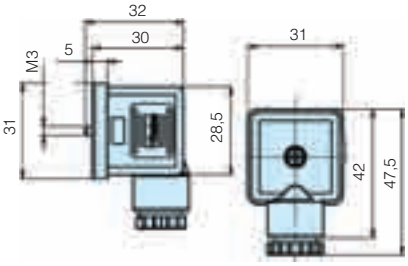
Cable plugs

3EV10V10



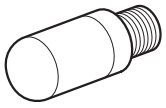
Cable plugs

3EV290V10



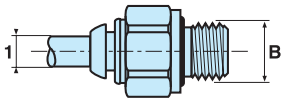
Accessories

Silencers



Port	Ordercode	Pack Qty
G1/8	P6M-PAB1	10
G1/4	P6M-PAB2	10
G3/8	P6M-PAB3	10
G1/2	P6M-PAB4	10

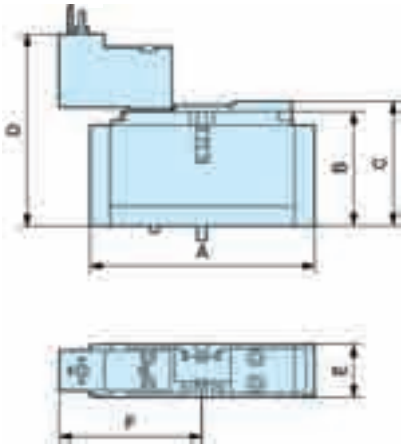
Fittings



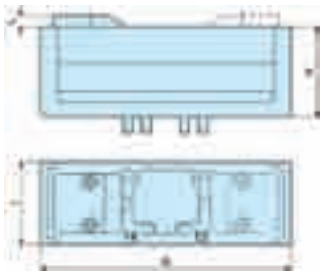
Male connector - BSPP

Tube dia 1	Thread B	Ordercode	Box Qty
4	1/8	F4PMB4-1/8	20
4	1/8	F4PMB4-1/8	20
6	1/8	F4PMB6-1/8	30
8	1/8	F4PB8-1/8	40
6	1/4	F4PMB6-1/4	30
8	1/4	F4PB8-1/4	30
10	1/4	F4PB10-1/4	20
12	1/4	F4PB12-1/4	10
8	3/8	F4PB8-3/8	20
10	3/8	F4PB10-3/8	20
12	3/8	F4PB12-3/8	10
14	3/8	F4PB14-3/8	10
10	1/2	F4PB10-1/2	10
12	1/2	F4PB12-1/2	10
14	1/2	F4PB14-1/2	10

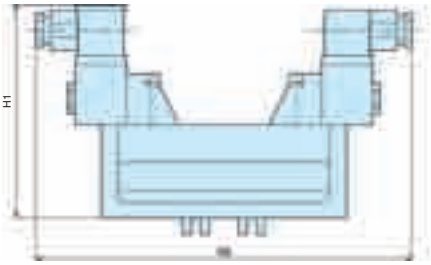
Isomax - Dimensions (mm)



Pneumatically actuated



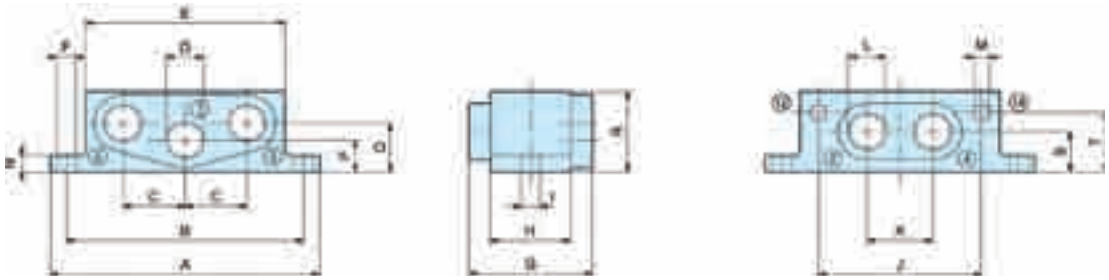
With P2F solenoids



	A	B	C	D	E	F
Isomax 02	80	41	44,5	67,8	18	51,2
Isomax 01	100	42	45,5	68,8	26	51,2

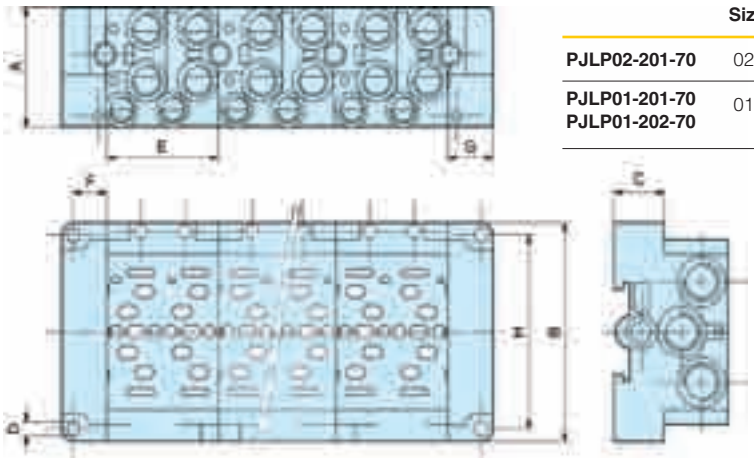
	G	G1	G2	G3	H	H1	I	L
Size 1	120	164	202,5	160	47	119	42	5
Size 2	140	179,5	218	175,5	58,5	130	54	5
Size 3	170	198	235,5	194	71	142,5	68	5

Single subbases side ported



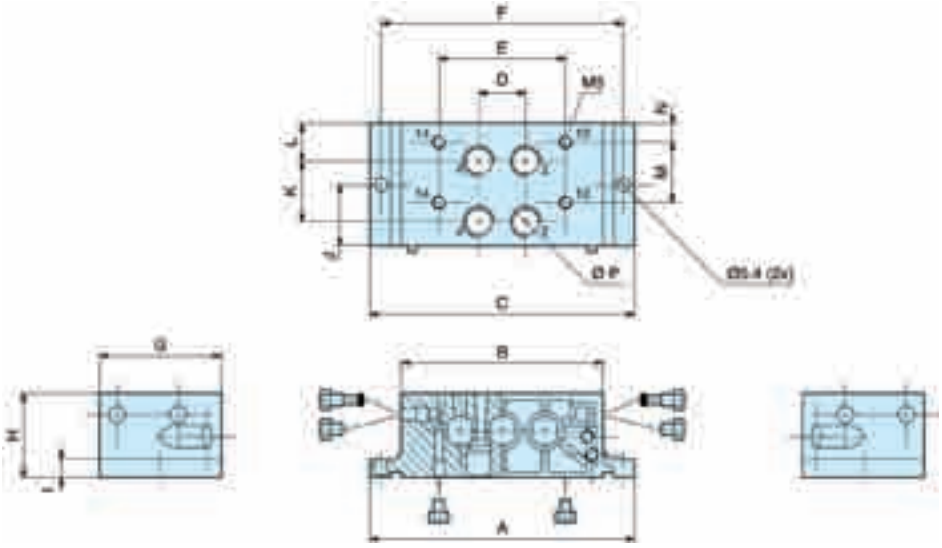
	Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T
PL02-01-70	02	80	70	16	G1/8	52	8	27	19	5,5	40	17	G1/8	M5	8	8	8	22	13	6
P2V-BS512SS	01	92	80	21,2	G1/8	68	6,5	42	27	5,5	55	22	G1/8	M5	6	11	17	28	14	21

Side ported manifolds for 2 valve positions



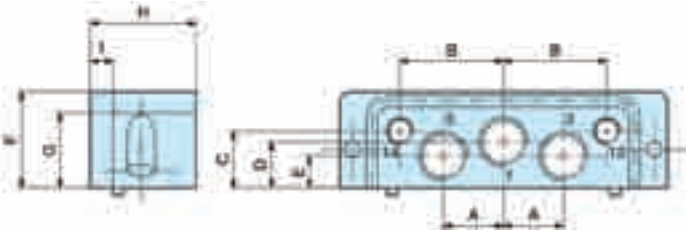
	Size	A	B	C	D	E	F	G	H
PJLP02-201-70	02	38,5	80	12	Ø 4,2	38	14	18	72
PJLP01-201-70 **PJLP01-202-70**	01	55	100	24	Ø 5,5	54	17	22	90

Bottom ported manifolds for 2 valve positions



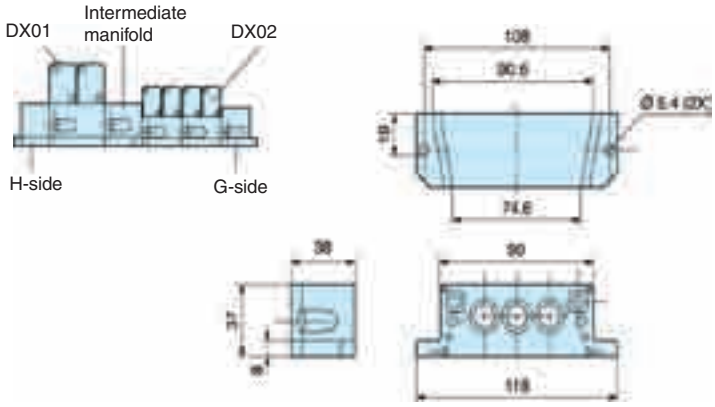
	Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
P2V-AM511PB	**02**	102	74	74,6	16	43	92	38	26	7	19	19	11	19	5	G1/8
P2V-BM512PB	**01**	118	90	90,6	21	56,5	108	54	37	8	27	27	16,5	27	8	G1/4

G and H side end plate bottom ported for above bottom ported manifold



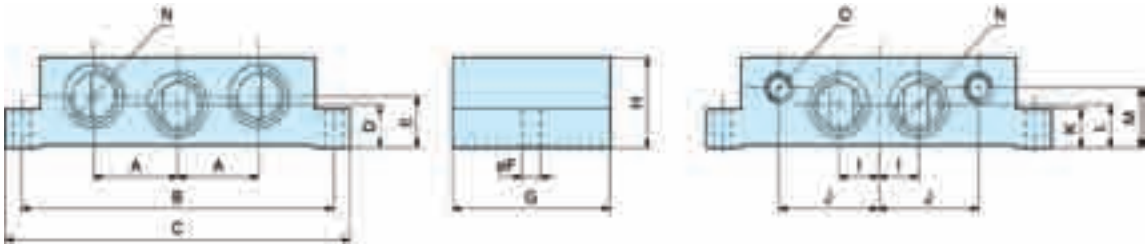
	Size	Port size 1,2,3	Port size 12, 14	A	B	C	D	E	F	G	H	I
P2V-AM512GB and P2V-AM512HB	**02**	G1/4	G1/8	17	29	21	18,5	9,5	35,5	28	33	7
P2V-BM513GB and P2V-BM513HB	**01**	G3/8	G1/8	21,5	37	20	16	11	34,5	28	38	8

Transfer plate size 01 to size 02 for above bottom ported manifold



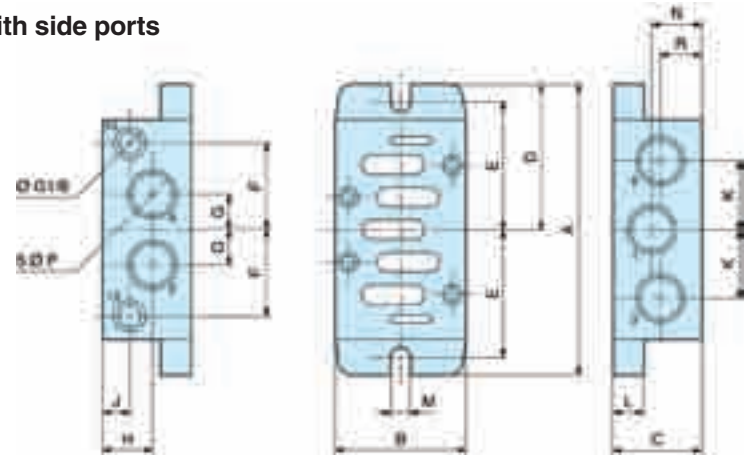
Dimensions

Single subbase with side ports according to VDMA



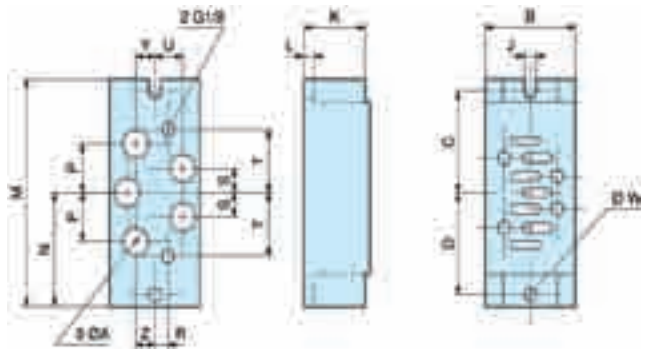
Order code	ISO Size	Port Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P2N-VS512SD	1	G1/4	21,5	98	110	11	20	5,5	48	32	12	29	10	11	23	G1/4	G1/8
P2N-WS513S	2	G3/8	28	112	124	14	26	6,6	56	40	15	37	13	14	30	G3/8	G1/8
P2N-YS514SD	3	G1/2	34	136	149	17	17	6,6	71	32	16	45	18	17	22	G1/2	G1/8

Single subbase with side ports



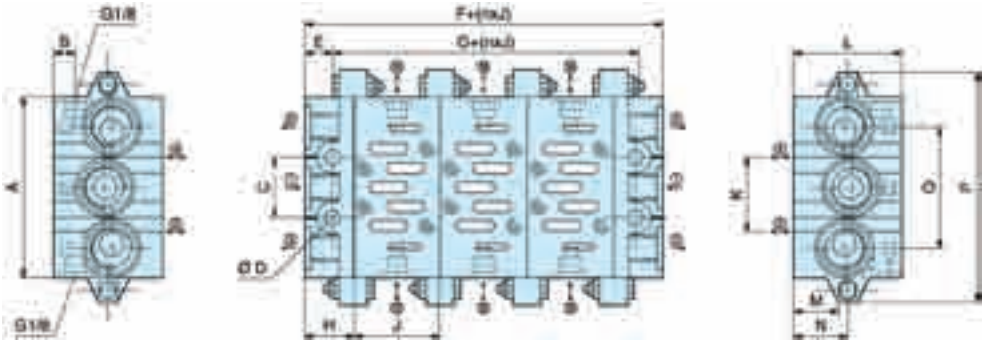
Order code	ISO Size	ØP	A	B	C	D	E	F	G	H	J	K	L	M	N	R
PL1-1/4-70	1	G1/4	110	46	29	55	49	30	11	17,75	17,75	22	6	5,5	17,75	17,75
PL2-3/8-70	2	G3/8	124	56	37	62	55	37	14,5	22,5	14	28	6	5,5	22,5	14,5
P2N-JS516SD	3	G3/4	149	71	60	74,5	68	45	21	33	10	40	18	6,6	37,5	22,5

Single subbase with bottom ports



Order code	A	B	C	D	J	K	L	M	N	P	R	S	T	U	W	Y	Z
PD1-1/4-70	G1/4	46	49	49	5,5	29	6	110	55	22	10	11	30	10	5,5	10	10
PD2-3/8-70	G3/8	56	55	55	5,5	37	6	124	62	29	10	14,5	37	12,5	5,5	12,5	12,5
PD3-1/2-70	G1/2	77	68	68	6,6	32	18	149	74,5	34	10	17	45	17	6,5	17	17

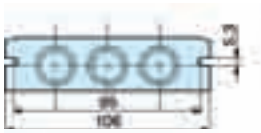
Manifold and end plates according to VDMA (P2N-VM / WM / YM)



ISO Size	Port 1, 3, 5	Port 2, 4	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
1	G3/8	G1/4	85	8,5	28	7	11	44	22	22	43	26	46	21	24	56	110
2	G1/2	G3/8	100	9	35	9	13	52	26	26	56	30	47	22	24	68	135
3	G1	G1/2	140	10	52	12	15	60	30	30	71	38	56	31	34	104	190

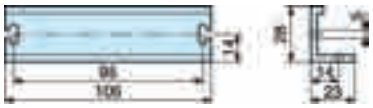
Manifold and end plates with bottom ports "low profile" (P2N-AM..)

Manifold P2N-AM512MB



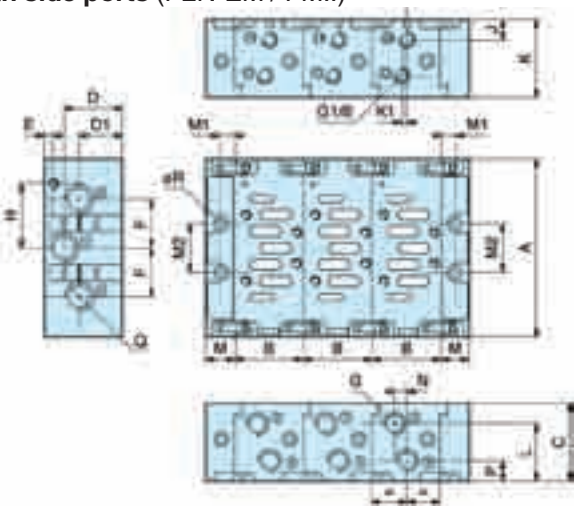
Connecting block P2N-AM513GT

End piece P2N-AM500J



Intermediate supply P2N-AM513BT

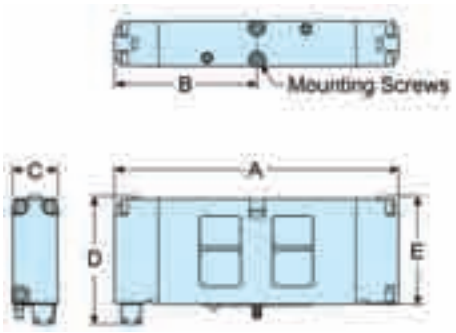
Manifold and end plates with side ports (P2N-EM / FM..)



Order code	A	B	C	D	D1	E	F	G	H	J	K	K1	L	M	M1	M2	N	P	Q	R
P2N-EM . . .	110	43	48	35,5	26,5	5,5	28	G1/4	36	15,5	35	3	32	20	11	28	12	12,5	G3/8	6
P2N-FM . . .	129	56	60	44,5	35,5	6	34,5	G3/8	45	16	41,5	3	41	24	13	35	12,5	16	G1/2	8

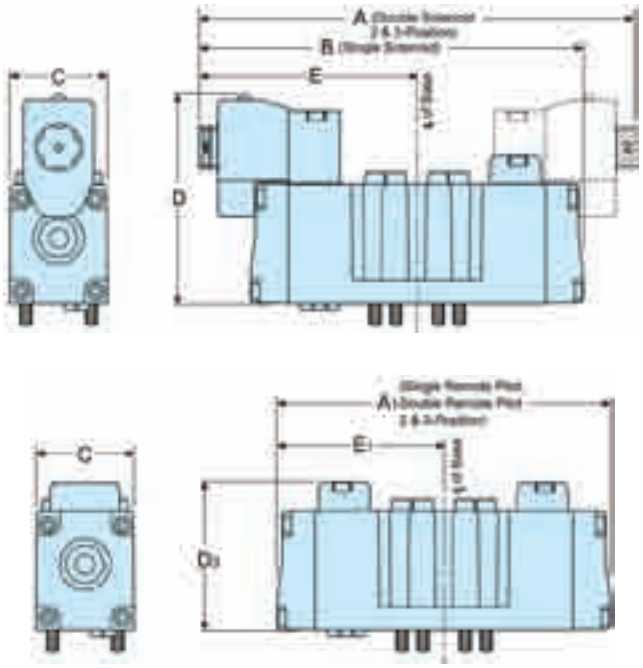
Isysnet Field Bus System - Dimensions

15407-2 Series Valves



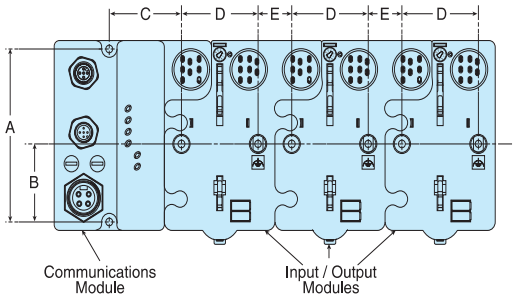
	A	B	C	D	E
HB	113	56	18	50	43
HA	130	65	26	50	42

H1 / H2 / H3 Series Valves 5599-2



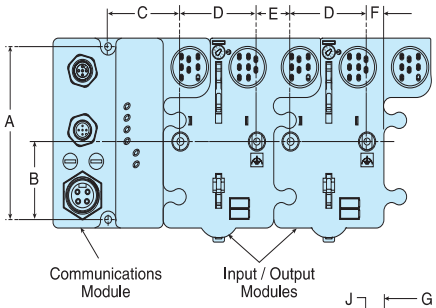
	A	A1	B	C	D	D1	D2	D3	D4	E	E1
H1	186	142	164	42	90	109	109	63.5	63	93	71
H2	212	168	190	55	103	122	116	76		106	84
H3	241	177	209	55	103	122	116	76		121	89

Isysnet Field Bus System - Dimensions



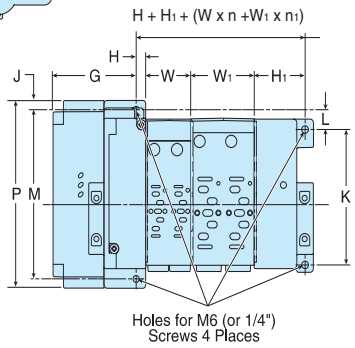
HB-HA

A	B	C	D	E	F
102	46	48	51	22	11

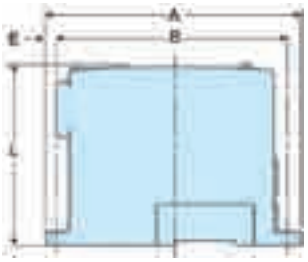


HB-HA

A	B	E	L	G	H
152	137	7,5	106	68	8,4
H_1	**J**	**K**	**L**	**M**	**P**
45,8	4	110	16	137	152
W	**W_1**				
40,8	56,8				

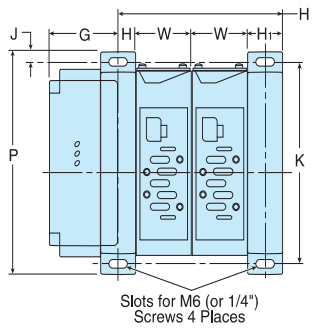


n = Number of 18mm HB Bases
n1 = Number of 26mm HA Bases
W= Width of 18mm HB Bases
W1 = Width of 26mm HA Bases



H1

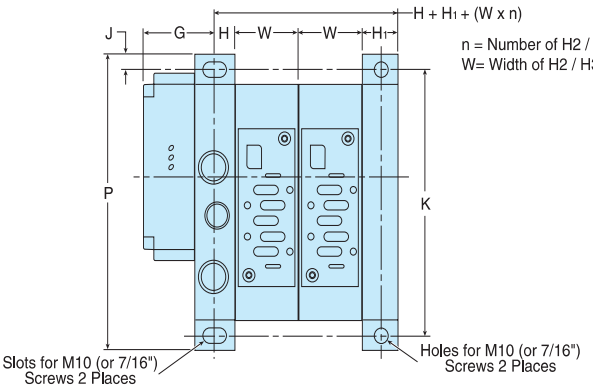
G	H	H_1	J	K
56	15,9	15,9	8,5	165
P	**W**			
182	49			



n = Number of H1 Bases
W= Width of H1 Bases

H2

G	H	H_1	J	K
58	8,4	15	12	215
P	**W**			
239	56			

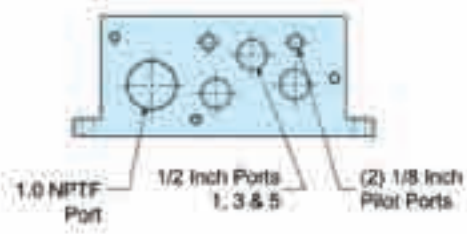


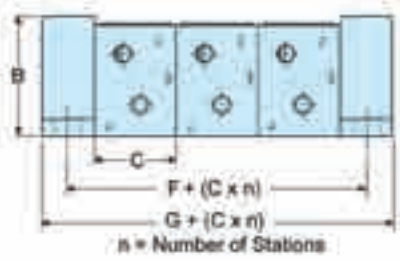
n = Number of H2 / H3 Bases
W= Width of H2 / H3 Bases

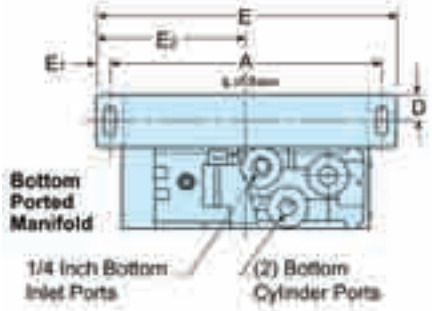
H3

G	H	H_1	J	K
64	24	16,5	15	265
P	**W**			
295	71			

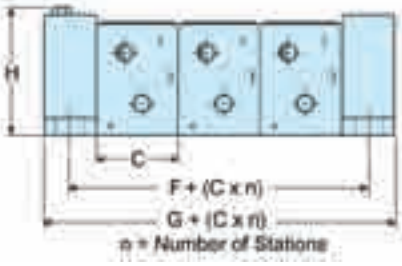
H1 5599-2 / 5599-1 Manifold





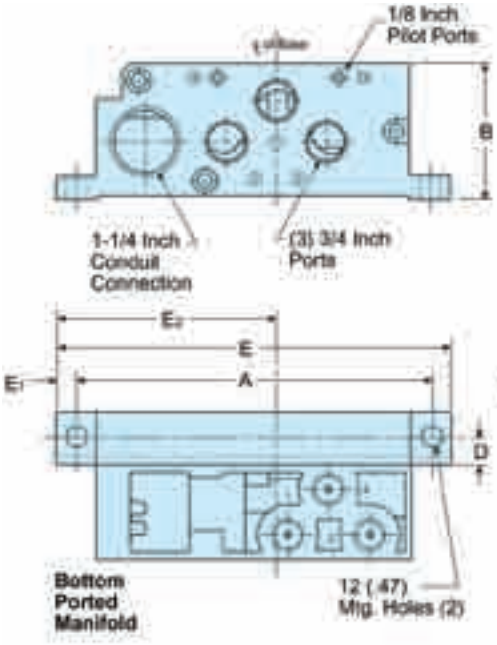


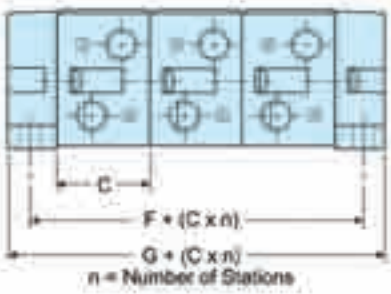
Manifold with Optional Collective Wiring System



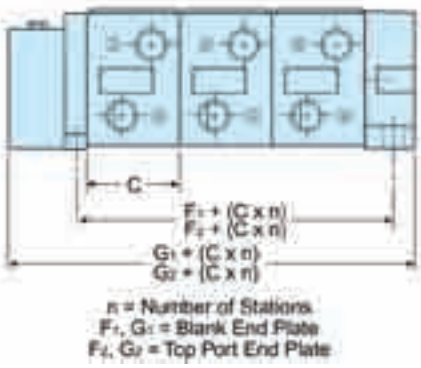
	A	B	C	D	E	E1	E2	F	G	H
H1	165	73	49	15.9	182	.84	91	31.8	63.5	76

H2 / H3 5599-2 / 5599-1 Manifold





Manifold with Optional Collective Wiring System



	A	B	C	D	E	E1	E2	F	F1	F2	G	G1*	G2*
H2	215	85	56	15	239	12	134	30	27	33	60	87	99

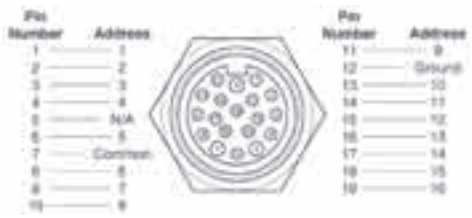
	A	B	C	D	E	E1	E2	F	F1	F2	G	G1*	G2*
H3	265	105	71	17	295	15	159	33	29	41	63	90	114

Maximum Solenoids Energized Simultaneously

HA HB	Voltage code	25-pin D-Sub	19-pin round	Single 12-pin M23	Isysnet	
24 V DC	B9 / G9	24	16	8	32	
120 V AC*	23	24	16	8	32	
H1 H2 H3	Voltage code	25-pin D-Sub	19-pin round	Single 12-pin M23	Isysnet	SAM 3.0
12 V DC	45	13	13	8	N/A	N/A
24 V AC*	42	24	16	8	N/A	N/A
24 V DC	B9	20	16	8	21	4
120 V AC*	23	24	16	8	N/A	N/A

* Not CSA certified for 25-pin, D-Sub option.

19-Pin Round Brad Harrison



Face View - Male 19-Pin Connector

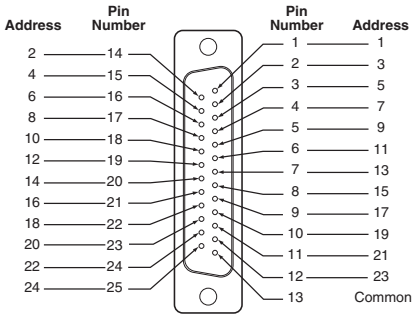
19-Pin Round Cable Specifications

Common Pin "7" is rated for 8 amps. Cable common wire must be greater than total amperage of solenoids on Add-A-Fold assembly.

Example:- 8 station manifold, 16 solenoids,
120VAC - 16 x .039 amps = .63 total amp rating.
NEMA 4 rated with properly assembled NEMA 4 rated cable.

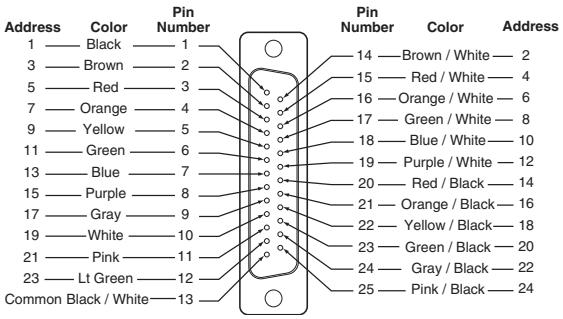
Brad Harrison #333030P80M050	16.40 ft. (Female to Male Cable)
Brad Harrison #333030P80M0100	32.80 ft. (Female to Male Cable)

25-Pin, D-Sub Connector (Male)



Face View - Male D-Sub, 25-Pin Connector

25-Pin, D-Sub Cable (Female)



25-Pin, D-Sub Cable Specifications

Common Pin “13” is rated for 3 amps. Common wire rating must be greater than total amperage of all solenoids on a Add-A-Fold assembly.

IP65 rated with properly assembled IP65 rated cable.

M23, 12-Pin Round Connector (Male)

Face View - Male M23, 12-Pin Connector

M23, 12-Pin Round Connector (Female)

Face View - Female M23, 12-Pin Connector

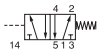
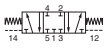
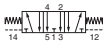
The Viking Xtreme valve range is robust, versatile and combines high performance with compact installation dimensions. Large flow capacity, short change-over times and low change-over pressure are important characteristics of this valve range.

- 4 sizes: G1/8, G1/4, G3/8 and G1/2.
- Wide operating temperature range
- Compact design with good corrosion resistance.
- Wide range of 5/2 and 5/3 versions.
- High and low temperature versions available for transport applications.

Operating information

	P2L-AX	P2L-BX	P2L-CX	P2L-DX
Working pressure:	16 bar	16 bar	12 bar	12 bar
Working temperature, standard				
Air pilot solenoid		-40 °C to +60 °C		
Standard and food version		-10 °C to +50 °C		
Mobile version		-40 °C to +60 °C		
Flow (Qmax);	**P2L-AX**	**P2L-BX**	**P2L-CX**	**P2L-DX**
	19,0 l/s	38,0 l/s	72,0 l/s	78,0 l/s

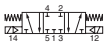
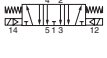
Pneumatically actuated 5/2 and 5/3 valves

Symbol	Size	Actuator	Return	Order code
	G1/8 G1/4 G3/8 G1/2	Air pilot	Air pilot	**P2LAX511PP** **P2LBX512PP** **P2LCX513PP** **P2LDX514PP**
	G1/8 G1/4 G3/8 G1/2	Air pilot	Spring	**P2LAX511PS** **P2LBX512PS** **P2LCX513PS** **P2LDX514PS**
	G1/8 G1/4 G3/8 G1/2	Air pilot Closed centre	Air pilot Self centring	**P2LAX611PP** **P2LBX612PP** **P2LCX613PP** **P2LDX614PP**
	G1/8 G1/4 G3/8 G1/2	Air pilot Vented centre	Air pilot Self centring	**P2LAX811PP** **P2LBX812PP** **P2LCX813PP** **P2LDX814PP**
	G1/8 G1/4 G3/8 G1/2	Air pilot Pressure centre	Air pilot Self centring	**P2LAX711PP** **P2LBX712PP** **P2LCX713PP** **P2LDX714PP**

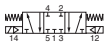
Lever actuated 5/2 and 5/3 valves

Symbol	Size	Actuator	Return	Order code
	G1/8	Lever	Lever	**P2LAX511VV**
	G1/8	Lever	Spring	**P2LAX511VS**
	G1/8	Lever	Lever	**P2LAX61122**
	G1/8	Lever	Lever	**P2LAX81122**
	G1/8	Lever	Lever	**P2LAX61111**
	G1/8	Lever	Lever	**P2LAX81111**

Electrically actuated 5/2 and 5/3 valves - 15mm solenoid

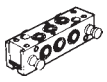
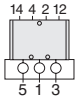
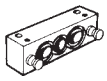
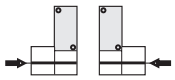
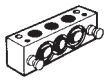
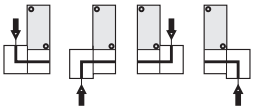
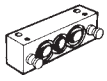
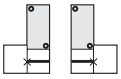
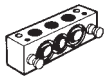
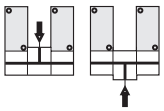
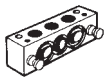
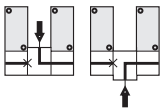
Symbol	Size	Actuator	Return	Order code 15mm solenoid with 24 VDC sol	Order code Internal supply to solenoid without 15mm solenoid
	G1/8 G1/4 G3/8 G1/2	Solenoid	Solenoid	**P2LAX511EENXB549** **P2LBX512EENXB549** **P2LCX513EENXB549** **P2LDX514EENXB549**	**P2LAX511EENXXX** **P2LBX512EENXXX** **P2LCX513EENXXX** **P2LDX514EENXXX**
	G1/8 G1/4 G3/8 G1/2	Solenoid	Spring	**P2LAX511ESNXB549** **P2LBX512ESNXB549** **P2LCX513ESNXB549** **P2LDX514ESNXB549**	**P2LAX511ESNXXX** **P2LBX512ESNXXX** **P2LCX513ESNXXX** **P2LDX514ESNXXX**
	G1/8 G1/4 G3/8 G1/2	Solenoid Closed centre	Solenoid Self centring	**P2LAX611EENXB549** **P2LBX612EENXB549** **P2LCX613EENXB549** **P2LDX614EENXB549**	**P2LAX611EENXXX** **P2LBX612EENXXX** **P2LCX613EENXXX** **P2LDX614EENXXX**
	G1/8 G1/4 G3/8 G1/2	Solenoid Vented centre	Solenoid Self centring	**P2LAX811EENXB549** **P2LBX812EENXB549** **P2LCX813EENXB549** **P2LDX814EENXB549**	**P2LAX811EENXXX** **P2LBX812EENXXX** **P2LCX813EENXXX** **P2LDX814EENXXX**
	G1/8 G1/4 G3/8 G1/2	Solenoid Pressure centre	Solenoid Self centring	**P2LAX711EENXB549** **P2LBX712EENXB549** **P2LCX713EENXB549** **P2LDX714EENXB549**	**P2LAX711EENXXX** **P2LBX712EENXXX** **P2LCX713EENXXX** **P2LDX714EENXXX**

Electrically actuated 5/2 and 5/3 valves - 22mm solenoid

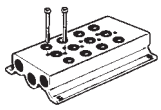
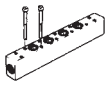
Symbol	Size	Actuator	Return	Order code 22mm solenoid 24 VDC	Order code Internal supply to solenoid without coil
	G1/8 G1/4 G3/8 G1/2	Solenoid	Solenoid	**P2LAX511EENDDB49** **P2LBX512EENDDB49** **P2LCX513EENDDB49** **P2LDX514EENDDB49**	**P2LAX511EENDDN** **P2LBX512EENDDN** **P2LCX513EENDDN** **P2LDX514EENDDN**
	G1/8 G1/4 G3/8 G1/2	Solenoid	Spring	**P2LAX511ESNDDB49** **P2LBX512ESNDDB49** **P2LCX513ESNDDB49** **P2LDX514ESNDDB49**	**P2LAX511ESNDDN** **P2LBX512ESNDDN** **P2LCX513ESNDDN** **P2LDX514ESNDDN**
	G1/8 G1/4 G3/8 G1/2	Solenoid Closed centre	Solenoid Self centring	**P2LAX611EENDDB49** **P2LBX612EENDDB49** **P2LCX613EENDDB49** **P2LDX614EENDDB49**	**P2LAX611EENDDN** **P2LBX612EENDDN** **P2LCX613EENDDN** **P2LDX614EENDDN**
	G1/8 G1/4 G3/8 G1/2	Solenoid Vented centre	Solenoid Self centring	**P2LAX811EENDDB49** **P2LBX812EENDDB49** **P2LCX813EENDDB49** **P2LDX814EENDDB49**	**P2LAX811EENDDN** **P2LBX812EENDDN** **P2LCX813EENDDN** **P2LDX814EENDDN**
	G1/8 G1/4 G3/8 G1/2	Solenoid Pressure centre	Solenoid Self centring	**P2LAX711EENDDB49** **P2LBX712EENDDB49** **P2LCX713EENDDB49** **P2LDX714EENDDB49**	**P2LAX711EENDDN** **P2LBX712EENDDN** **P2LCX713EENDDN** **P2LDX714EENDDN**

Electrically actuated 5/2 - Xtreme duty 16 bar - 40°C to +60°C

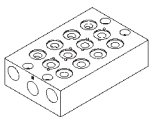
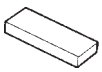
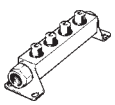
Symbol	Size	Actuator	Return	Order code 22mm solenoid 24 VDC	Order code Internal supply to solenoid without coil
	G1/8 G1/4 G3/8 G1/2	Solenoid	Solenoid Low temp.	**P2LAX511EEHDDB49** **P2LBX512EEHDDB49** **P2LCX513EEHDDB49** **P2LDX514EEHDDB49**	**P2LAX511EEHDDN** **P2LBX512EEHDDN** **P2LCX513EEHDDN** **P2LDX514EEHDDN**
	G1/8 G1/4 G3/8 G1/2	Solenoid	Spring Low temp.	**P2LAX511ESHDDB49** **P2LBX512ESHDDB49** **P2LCX513ESHDDB49** **P2LDX514ESHDDB49**	**P2LAX511ESHDDN** **P2LBX512ESHDDN** **P2LCX513ESHDDN** **P2LDX514ESHDDN**

Accessories P2LAX	Connection alternatives	Type	Weight kg	Order code
		**Multiple manifold** including seals, mounting screws, and guiding pins.	0,11	**9121658060**
		**Connection block S** including seals, mounting screws, and guiding pins. G1/4	0,15	**9121658064**
		**Connection block L** including seals, mounting screws, and guiding pins. G1/4	0,15	**9121658061**
		**End cover** including seals, mounting screws, and guiding pins.	0,16	**9121658066**
		**Intermediate block T** including seals, mounting screws, and guiding pins. G1/4	0,17	**9121658062**
		**Intermediate block L** including seals, mounting screws, and guiding pins. G1/4	0,17	**9121658065**
		Blanking plate including seals, mounting screws.	0,05	**9121658063**

Accessories P2LAX

	Type	Weight kg	Order code
	**Manifold bar, P2LA** including seals, mounting screws. G3/8		
	For 4 valves	0,48	**9121658075**
	For 6 valves	0,63	**9121658076**
	For 8 valves	0,80	**9121658077**
	For 10 valves	0,98	**9121658078**
	For 12 valves	1,10	**9121658079**
	For 14 valves	1,23	**9121658099**
	Blanking plate, P2LA for Manifold bar	0,05	**9121658063**
	**Pressure bar, P2LA** for common air supply incl. O-rings and mounting screws. G1/4		
	For 2 valves	0,13	**9121658070**
	For 4 valves	0,20	**9121658071**
	For 6 valves	0,26	**9121658072**
	For 8 valves	0,33	**9121658073**
	Blanking plate, P2LA for Pressure bar	0,05	**9121658074**
	Assembly screws, P2LA in stainless steel for valve	0,02	**9121658043**
	Assembly screws, P2LA in stainless steel for blanking plate	0,01	**9121658044**
	O-ring kit, P2LA O-rings between valve and manifold bar/ Pressure bar	0,01	**9121658046**

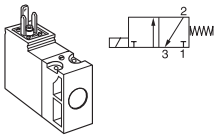
Accessories P2LBX

	Type	Weight kg	Order code
	**Manifold bar, P2LB, (not for P2LB with external air supply to solenoid valves)** incl. fasteners and O-ring. G3/8		
	For 2 valves	0,69	**9121594805X**
	For 4 valves	1,13	**9121594806X**
	For 6 valves	1,56	**9121594807X**
	For 8 valves	2,00	**9121594808X**
	For 10 valves	2,45	**9121594812X**
	**Blanking plate, P2LB** for Manifold bar	0,10	**9121594809X**
	**Pressure bar, P2LB** for common air supply incl. O-rings and banjo-bolts. G3/8		
	For 2 valves	0,38	**9127113301X**
	For 4 valves	0,53	**9127113302X**
	For 6 valves	0,68	**9127113303X**
	For 8 valves	0,83	**9127113304X**
	For 10 valves	0,99	**9127113305X**
	Blanking plug, P2LB for Pressure bar. G1/4	0,02	**9127113350**

Solenoid Operators - Electrical connection EN175301-803 C/ISO15217 (Ex DIN 43650C)

Solenoids 15 mm NC, standard

(Note! Mounting screws included in basic valve)



Voltage	Weight Kg	Order code Without manual override	Weight Kg	Order code Override, blue, non locking flush	Weight Kg	Order code Override, yellow, locking flush
12 VDC	0,038	**P2E-KV32B0**	0,038	**P2E-KV32B1**	0,038	**P2E-KV32B2**
24 VDC	0,038	**P2E-KV32C0**	0,038	**P2E-KV32C1**	0,038	**P2E-KV32C2**
48 VDC	0,038	**P2E-KV32D0**	0,038	**P2E-KV32D1**	0,038	**P2E-KV32D2**
24 VAC 50Hz	0,038	**P2E-KV31C0**	0,038	**P2E-KV31C1**	0,038	**P2E-KV31C2**
48 VAC 50/60Hz	0,038	**P2E-KV34D0**	0,038	**P2E-KV34D1**	0,038	**P2E-KV34D2**
115 VAC 50Hz/ 120 VAC 60Hz	0,038	**P2E-KV31F0**	0,038	**P2E-KV31F1**	0,038	**P2E-KV31F2**
230 VAC 50Hz/ 240 VAC 60Hz	0,038	**P2E-KV31J0**	0,038	**P2E-KV31J1**	0,038	**P2E-KV31J2**

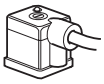
In accordance with the EU Machine Directive, EN 983, solenoid valves with manual override should have spring-return operating arms for safety.

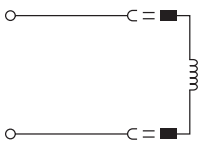
Solenoid coils for 22mm solenoid operators

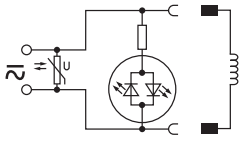
Voltage	Order code Form B	Weight (Kg)
12V 60Hz	**P2FCB440**	0.093
24V 50/60Hz	**P2FCB442**	0.093
12V DC	**P2FCB445**	0.093
12V DC Mobile	**P2FCB447**	0.093
24v DC Mobile	**P2FCB448**	0.093
24V DC	**P2FCB449**	0.093
48V DC	**P2FCB451**	0.093
110V/50Hz, 120V/60Hz	**P2FCB453**	0.093
230V/50Hz, 230V/60Hz	**P2FCB457**	0.093

Note: Mobile solenoids are only suitable for Viking Xtreme valves with 'H' specification having 0,8/1,0 operator type P2FP13H4D

Solenoid Connectors / Cable Plugs EN175301-803

	Description	Order code 15mm Form C/ISO15217	Order code 22mm Industrial Form B
With large headed screw suitable for mounting in inaccessible or recess position	Standard IP65	**P8C-C**	
	24V DC LED and protection IP65	**P8C-C26C**	
	110V AC LED and protection IP65	**P8C-C21E**	
With standard screw	Standard IP65 without flying lead	**P8C-D**	**3EV10V10**
	With LED and protection 24V AC/DC	**P8C-D26C**	**3EV10V20-24**
	With LED and protection 110V AC	**P8C-D21E**	**3EV10V20-110**
	With LED and protection 230V AC		**3EV10V20-230**
With cable 	Standard with 2m cable IP65	**P8L-C2**	
	Standard with 5m cable IP65	**P8L-C5**	
	24V AC/DC, 2m cable LED and protection IP65	**P8L-C226C**	
	24V AC/DC, 5m cable LED and protection IP65	**P8L-C526C**	**3EV10V20-24L5**
	24V AC/DC, 10m cable LED and protection IP65	**P8L-CA26C**	
	110V AC/DC, 2m cable LED and protection IP65	**P8L-C221E**	
	110V AC/DC, 5m cable LED and protection IP65	**P8L-C521E**	**3EV10V20-110L5**
	230V AC, 5m cable LED and protection IP65		**3EV10V20-230L5**



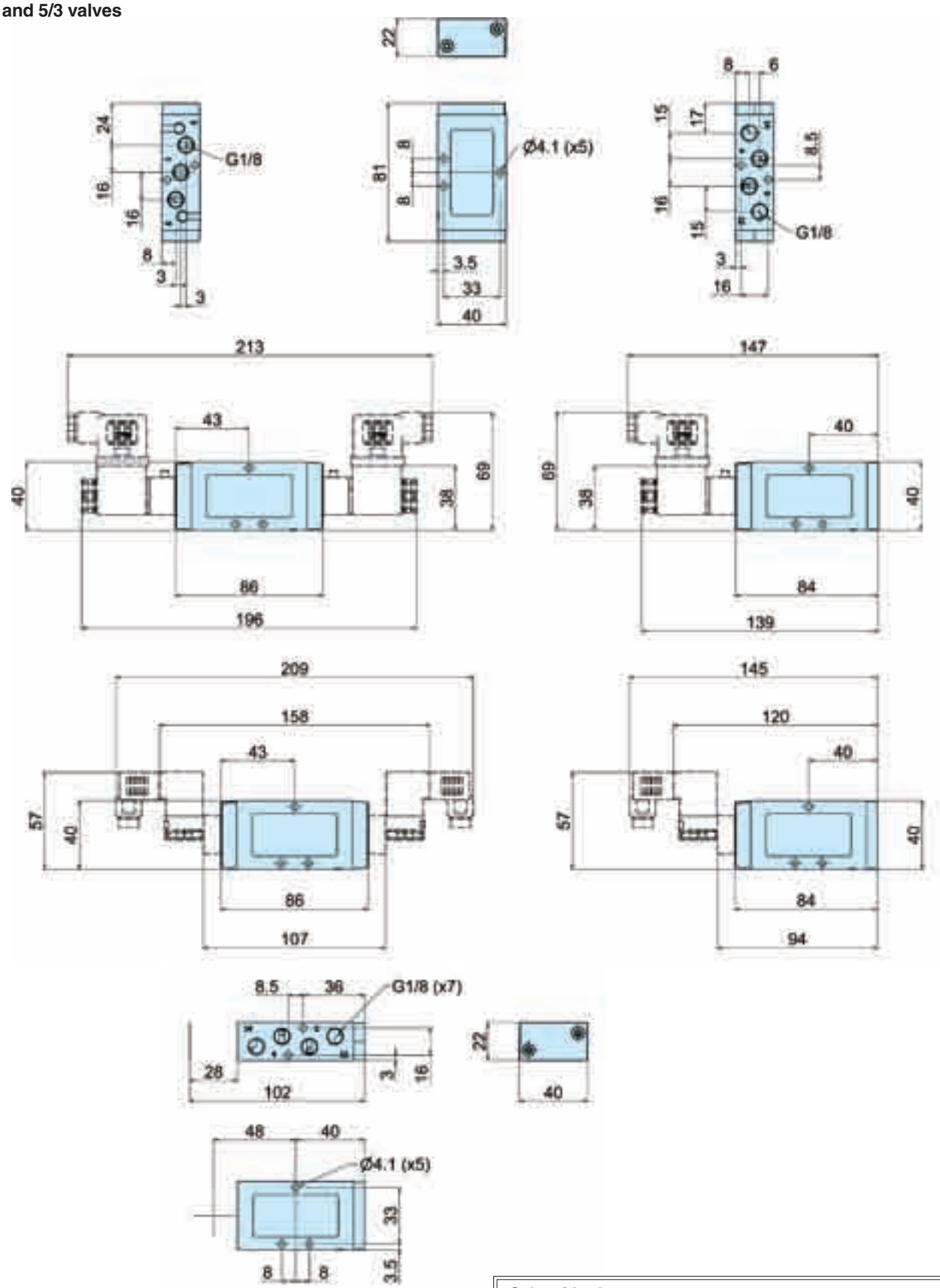


P8C-C
P8C-D
P8L-C2
P8L-C5
3EV10V10

P8C-D26C	**P8L-C226C**
P8C-D21E	**P8L-C526C**
P8C-C26C	**P8L-CA26C**
P8C-C21E	**P8L-C221E**
	P8L-C521E
3EV10V20-24	**3EV10V20-24L5**
3EV10V20-110	**3EV10V20-110L5**
3EV10V20-230	**3EV10V20-230L5**

Dimensions

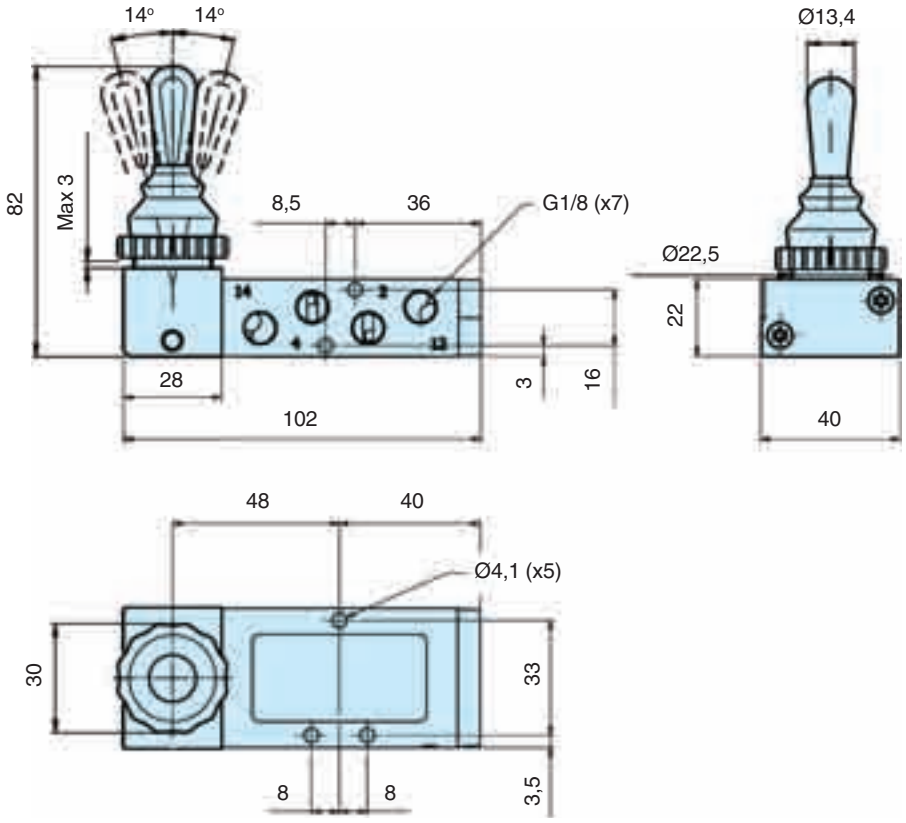
P2LAX... all
5/2 and 5/3 valves



Solenoid valves
Solenoid valves and cable plugs must be ordered separately.
One pilot valve is required for each E in the valve order code.

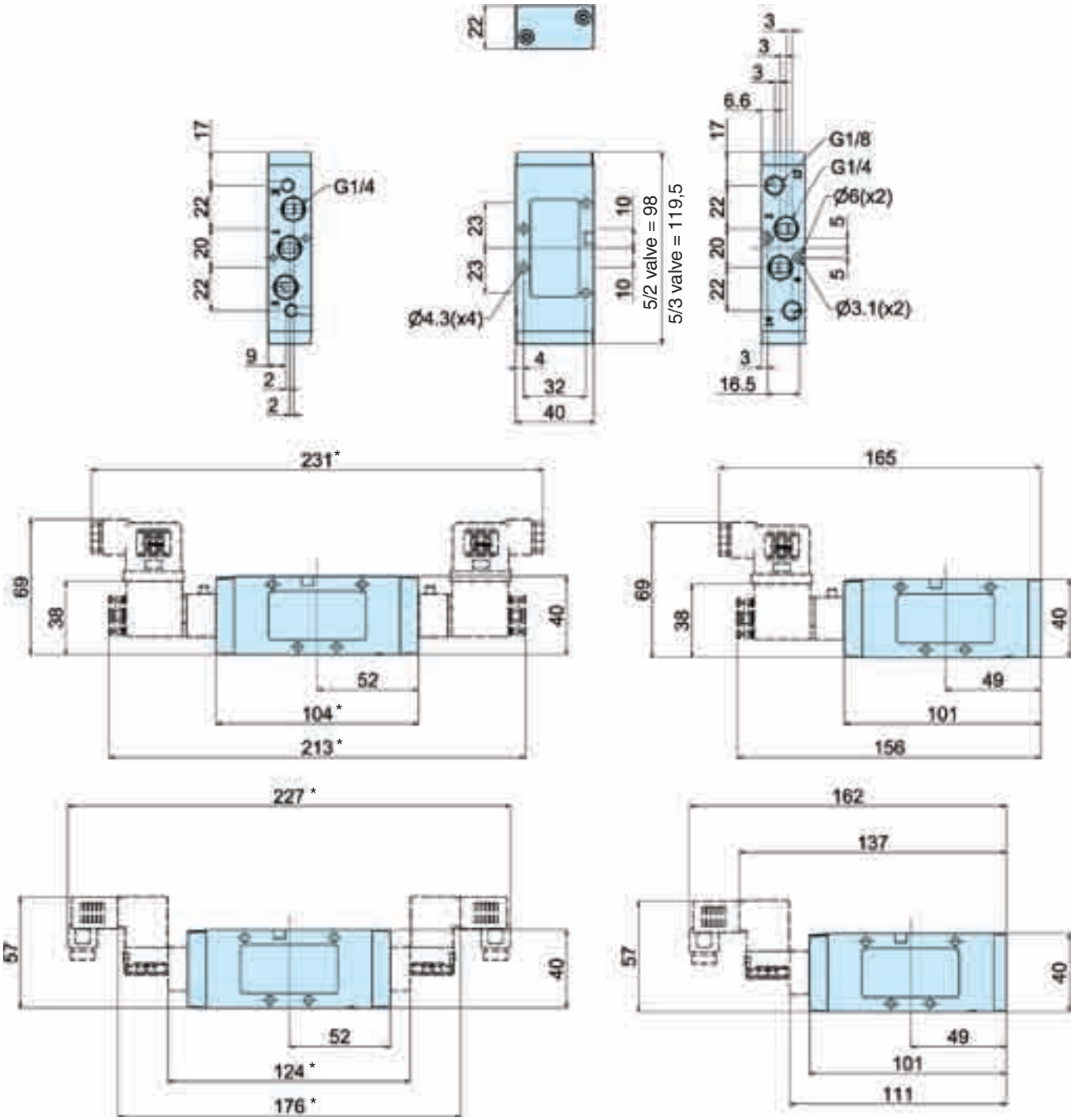
Dimensions

P2LAX - Lever operated directional control valves



Dimensions

P2LBX... all
5/2 and 5/3 valves

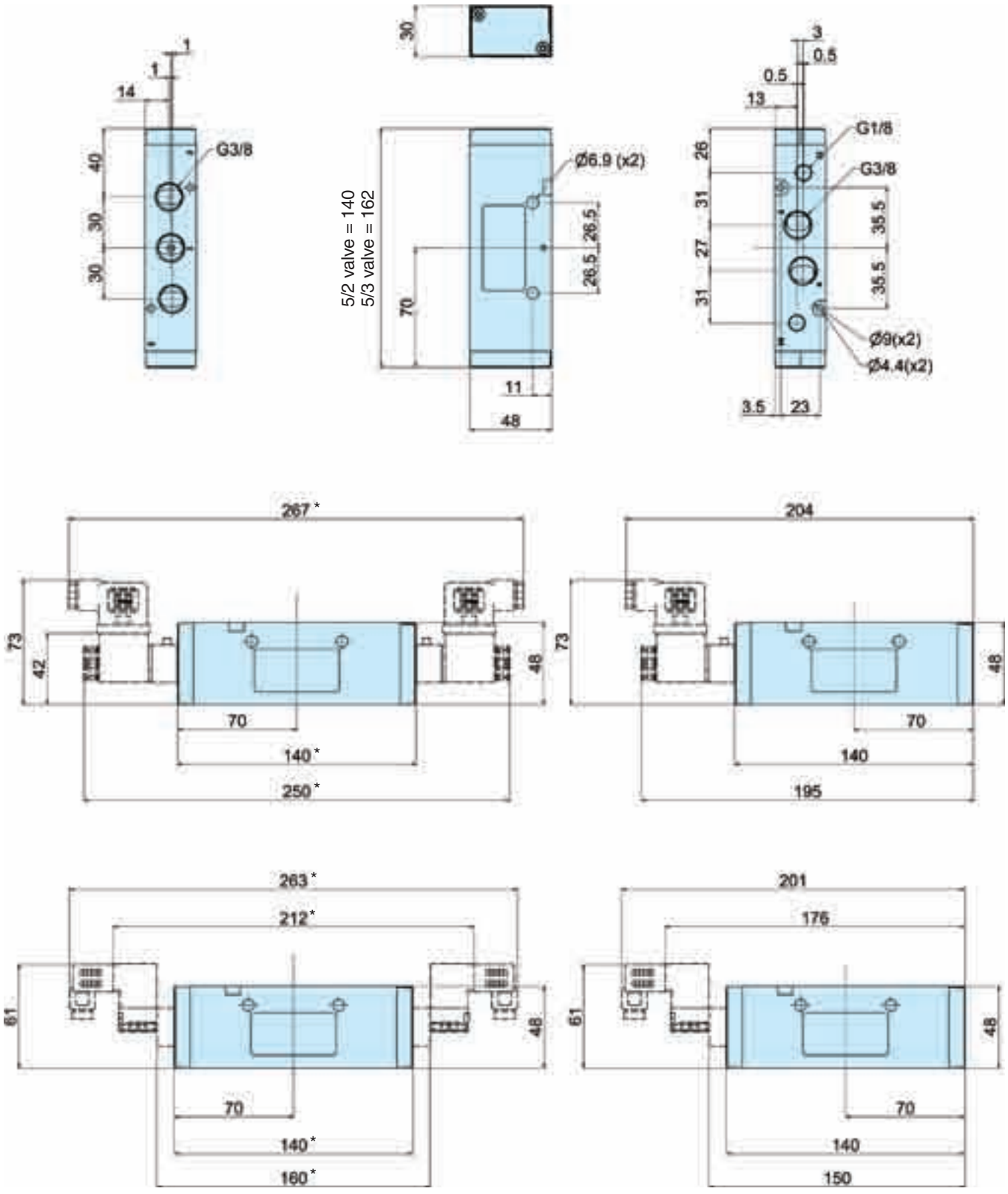


*** Note:** 5/3 valves - add 21.5mm

Solenoid valves
Solenoid valves and cable plugs must be ordered separately.
One pilot valve is required for each E in the valve order code.

Dimensions

P2LCX... all
5/2 and 5/3 valves

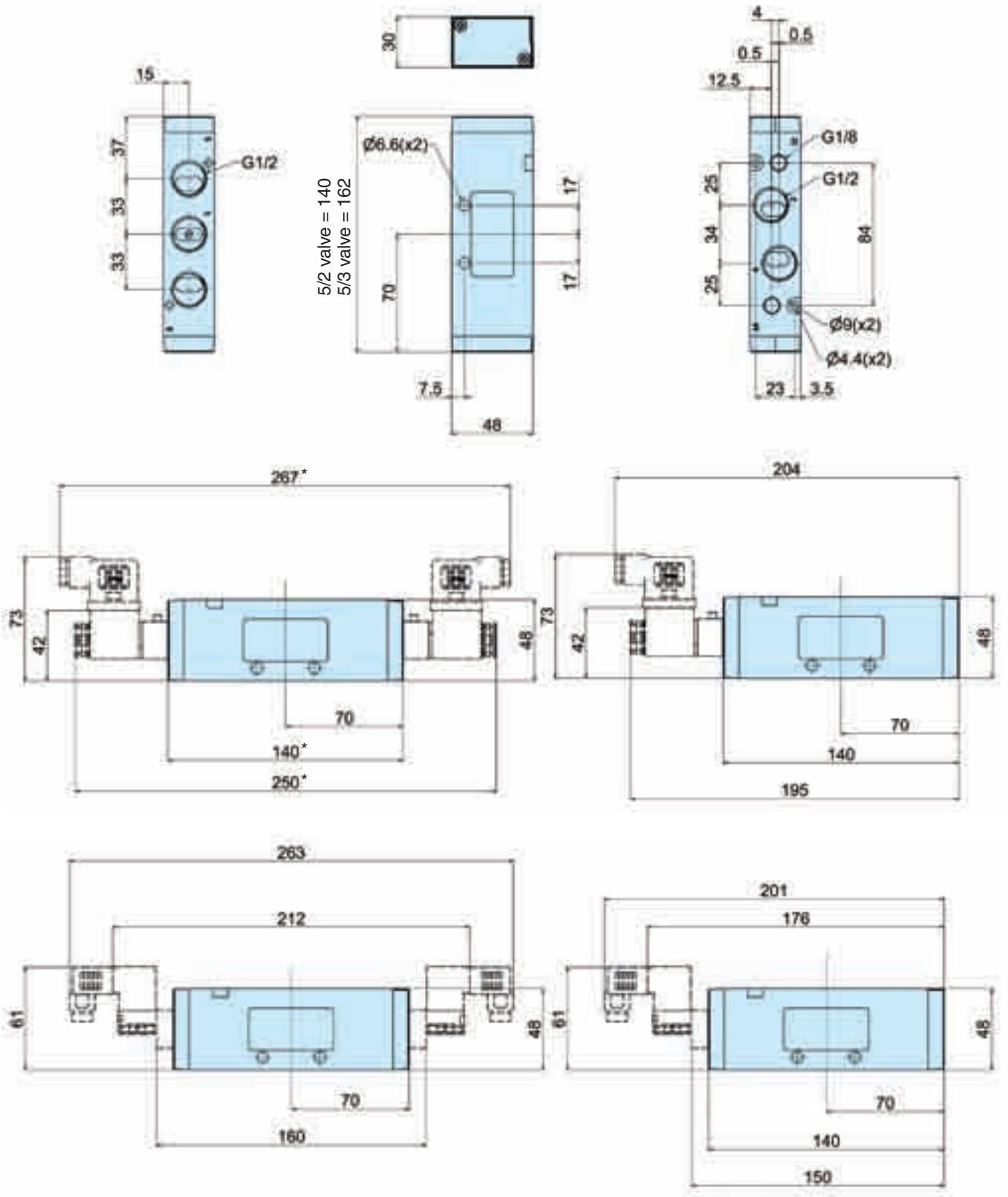


*** Note:** 5/3 valves - add 22.0mm

Solenoid valves
Solenoid valves and cable plugs must be ordered separately.
One pilot valve is required for each E in the valve order code.

Dimensions

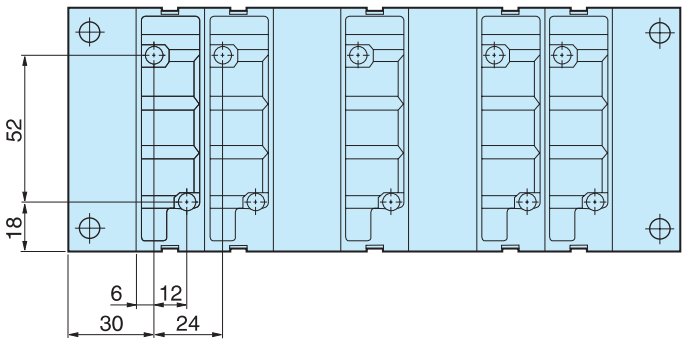
P2LDX... all
5/2 and 5/3 valves



*** Note:** 5/3 valves - add 22.0mm

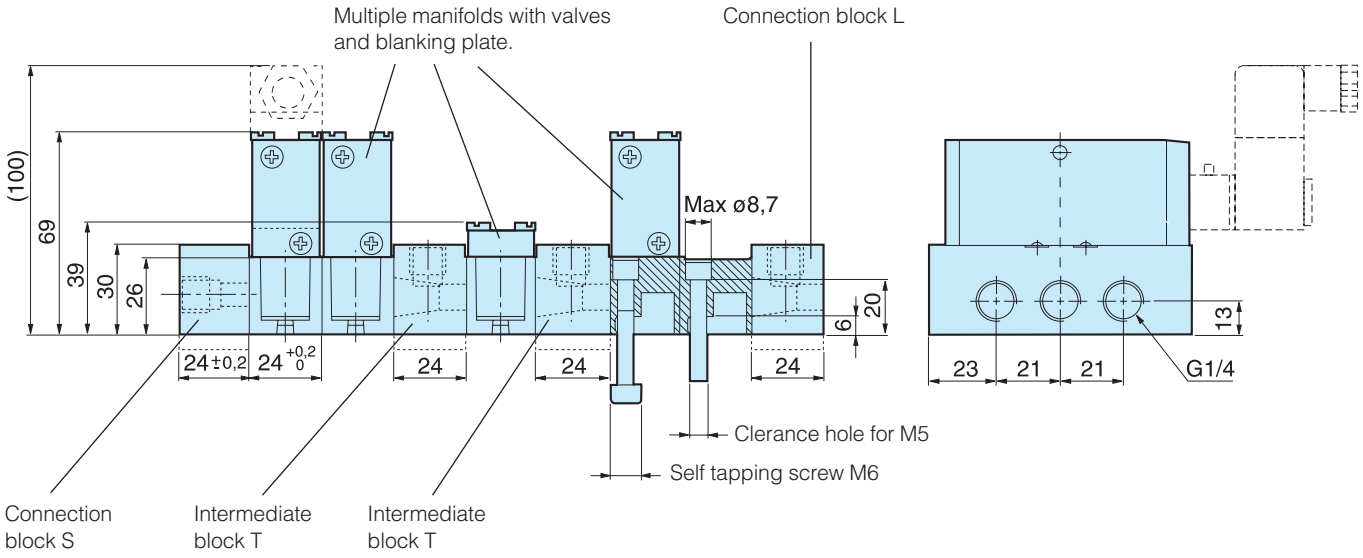
Solenoid valves
Solenoid valves and cable plugs must be ordered separately.
One pilot valve is required for each E in the valve order code.

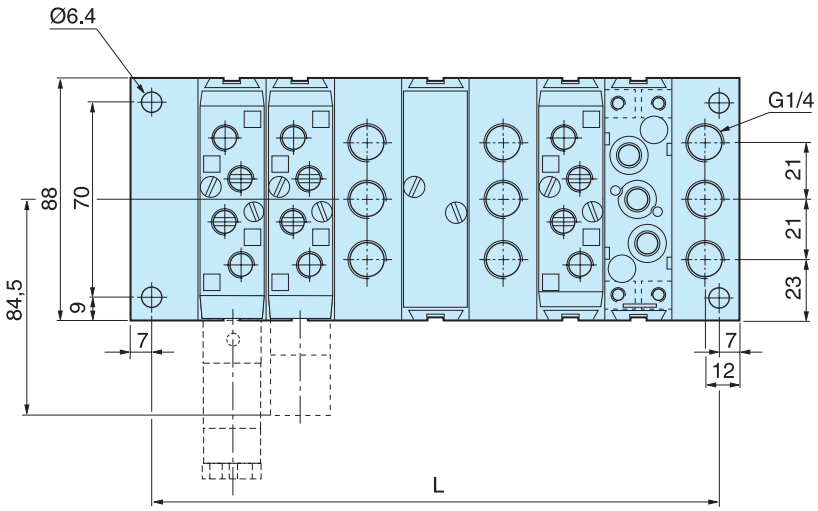
Dimensions



Connection block L and intermediate blocks L and T can be turned so that connection can be made from above or below.

Multiple manifolds must be fitted with the top indication line (a 10 mm long line) facing the same side on all manifolds.

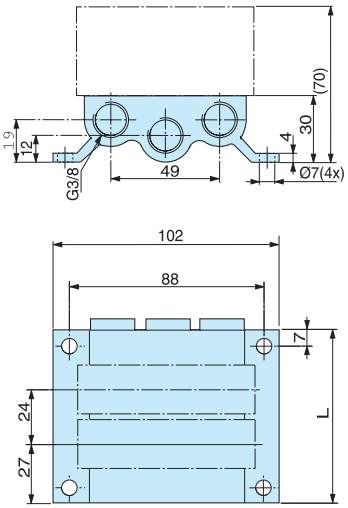




L = 34 + (Number of manifolds and Intermediate blocks x 24)

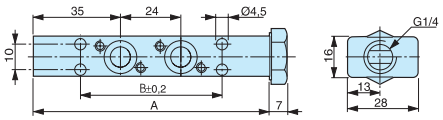
Dimensions

Manifold bar, P2LA



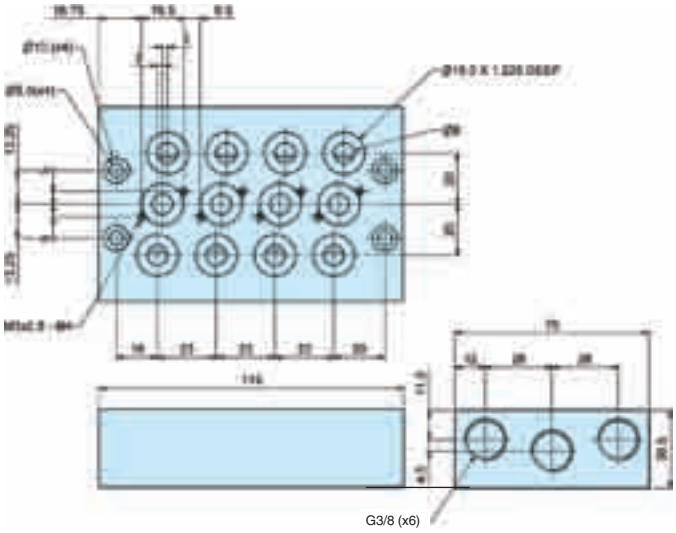
No. of valves	L mm
4	126
6	174
8	222
10	270
12	318
14	366

Pressure bar, P2LA



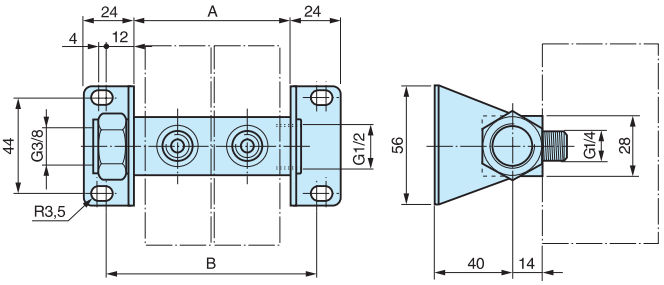
No. of valves	A mm	B mm
2	94	56
4	164	142
6	190	152
8	238	200

Manifold bar, P2LB

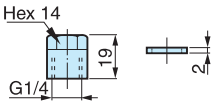


No. of valves	L mm
2	94
4	158
6	222
8	286
10	350

Pressure bar, P2LB



Blanking plug, P2LB



No. of valves	A mm	B mm
2	54	78
4	100	124
6	146	188
8	192	216
10	238	262

High performance metal bodied industrial valves with air pilot or solenoid actuation. Featuring the 'Wear Compensating Seal System' these valves have integral mounting holes and an inlet exhaust manifold option.

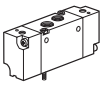
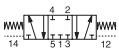
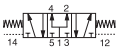
- 2 sizes: 1/8" and 1/4"
- Compact size
- Inlet-exhaust-mounting facility
- Fast response, high flow
- Integrated mounting holes
- Wear compensating seal system
- DIN rail mountable manifolds

Operating information

Working pressure		1,5 to 10 bar
Working temperature		-10 °C to +50 °C
Port size		B3 : G1/8, B4 : G1/4
Flow (Qn):	B3	960 l/min
	B4	1170 l/min

For technical information see CD

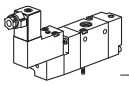
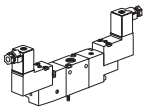
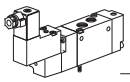
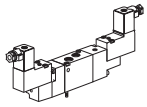
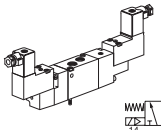
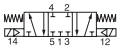
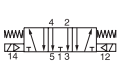
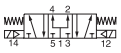
Main data for Directional control valves, B3 Series

	Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changeover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
Pneumatically actuated 3/2 valves									
		Air	Differential air	1,4/-	16/17	0,07		**B3K5000XXH**	1
		Air	Spring return	3,0/-	20/18	0,07		**B3U5000XXH**	1
		Air	Air	1,4/-	2/2	0,08		**B3M5000XXH**	1
Pneumatically actuated 5/2 and 5/3 valves									
		Air	Differential air	1,4/-	16/17	0,09		**B335000XXH**	1
		Air	Spring return	3,0/-	20/18	0,09		**B3P5000XXH**	1
		Air	Air	1,4/1,4	2/2	0,10		**B345000XXH**	1
		Air Closed centre position	Air Self centring	3,0/3,0	12/12	0,10		**B385000XXH**	1
		Air Vented centre position	Air Self centring	3,0/3,0	12/12	0,10		**B395000XXH**	1
		Air Pressurised centre position	Air Self centring	3,0/3,0	12/12	0,10		**B305000XXH**	1

* Solenoid and cable plug (must be ordered separately see opposite page)
** 2 Solenoids and cable plugs (must be ordered separately see opposite page)

Indicates stocked product.

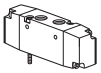
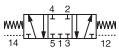
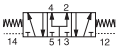
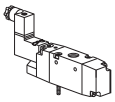
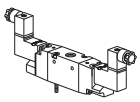
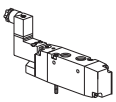
Main data for Directional control valves, B3 Series

	Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changeover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
Electrically actuated 3/2 valves									
		Electric	Differential air	1,4/-	12/14	0,12 0,08	24 VDC Less solenoid	**B3G5BB549H** **B3G5BXXXXH**	1 1
		Electric	Spring return	3,0/-	22/28	0,12 0,08	24 VDC Less solenoid	**B3R5BB549H** **B3R5BXXXXH**	1 1
		Electric	Air	1,4/1/4	9/3	0,13 0,09	24 VDC Less solenoid	**B3S5BB549H** **B3S5BXXXXH**	1 1
		Electric	Electric	1,4/1/4	8/8	0,13 0,09	24 VDC Less solenoid	**B3J5BB549H** **B3J5BXXXXH**	1 1
Electrically actuated 5/2 valves									
		Electric Air	Differential Air	1,4/-	12/14	0,12 0,09	24 VDC Less solenoid	**B315BB549H** **B315BXXXXH**	1 1
		Electric	Spring return	3,0/-	22/28	0,12 0,09	24 VDC Less solenoid	**B3T5BB549H** **B3T5BXXXXH**	1 1
		Electric	Air	1,4/1/4	9/3	0,14 0,10	24 VDC Less solenoid	**B3A5BB549H** **B3A5BXXXXH**	1 1
		Electric	Electric	1,4/1/4	8/8	0,19 0,10	24 VDC Less solenoid	**B325BB549H** **B325BXXXXH**	1 1
Electrically actuated 5/3 valves									
		Electric Closed centre position	Electric Self centring	3,0/3,0	12/12	0,18 0,09	24 VDC Less solenoid	**B355BB549H** **B355BXXXXH**	1 1
		Electric Vented centre position	Electric Self centring	3,0/3,0	12/12	0,18 0,09	24 VDC Less solenoid	**B365BB549H** **B365BXXXXH**	1 1
		Electric Pressurised centre position	Electric Self centring	3,0/3,0	12/12	0,10 0,09	24 VDC Less solenoid	**B375BB549H** **B375BXXXXH**	1 1

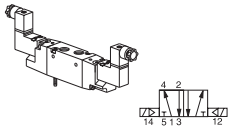
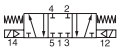
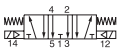
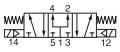
Internal air supply to differential pilots and solenoids via port 1

Valves supplied with solenoid operators include standard P8C-D connector

Main data for Directional control valves, B4 Series

	Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changeover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
Pneumatically actuated 3/2 valves									
		Air	Differential air	1,5/-	34/45	0,163		**B4K6000XXF**	1
		Air	Spring return	3,0/-	32/48	0,16		**B4U6000XXF**	1
		Air	Air	1,5/1,5	15/17	0,177		**B4M6000XXF**	1
Pneumatically actuated 5/2 and 5/3 valves									
		Air	Differential air	1,5/-	34/45	0,184		**B436000XXF**	1
		Air	Spring return	3,0/-	32/48	0,19		**B4P6000XXF**	1
		Air	Air	1,5/1,5	15/17	0,198		**B446000XXF**	1
		Air Closed centre position	Air Self centring	3,0/3,0	16/19	0,204		**B486000XXF**	1
		Air Vented centre position	Air Self centring	3,0/3,0	16/19	0,204		**B496000XXF**	1
		Air Pressurised centre position	Air Self centring	3,0/3,0	16/19	0,204		**B406000XXF**	1
Electrically actuated 3/2 valves									
		Electric	Differential air	1,5/-	34/45	0,206 0,157	24 VDC Less solenoid	**B4G6AB549F** **B4G6AXXXXF**	1 1
		Electric	Spring return	3,0/-	36/40	0,210 0,161	24 VDC Less solenoid	**B4R6AB549F** **B4R6AXXXXF**	1 1
		Electric	Air	1,5/1,5	15/17	0,220 0,170	24 VDC Less solenoid	**B4S6AB549F** **B4S6AXXXXF**	1 1
		Electric	Electric	1,5/1/5	15/17	0,262 0,164	24 VDC Less solenoid	**B4J6AB549F** **B4J6AXXXXF**	1 1
Electrically actuated 5/2 valves									
		Electric Air	Differential Air	1,5/-	34/45	0,227 0,178	24 VDC Less solenoid	**B416AB549F** **B416AXXXXF**	1 1
		Electric Air	Spring return	3,0/-	36/40	0,227 0,178	24 VDC Less solenoid	**B4T6AB549F** **B4T6AXXXXF**	1 1
		Electric	Air	1,5/1/5	15/17	0,241 0,192	24 VDC Less solenoid	**B4A6AB549F** **B4A6AXXXXF**	1 1

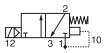
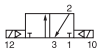
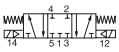
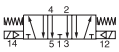
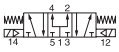
Main data for Directional control valves, B4 Series

Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changeover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
Electrically actuated 52 and 5/3 valves								
	Electric	Electric	1,5/1,5	15/15	0,283 0,185	24 VDC Less solenoid	**B426AB549F** **B426AXXXXF**	1 1
	Electric Closed centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B456AB549F** **B456AXXXXF**	1 1
	Electric Vented centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B466AB549F** **B466AXXXXF**	1 1
	Electric Pressurised centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B476AB549F** **B476AXXXXF**	1 1

Internal air supply to differential pilots and solenoids via port 1

Valves supplied with solenoid operators include standard P8C-D connector

Main data for Directional control valves, B5 Series (G1/4 threaded ports)

Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changeover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
Electrically actuated 3/2 valves								
	Electric	Air/Spring Assisted	2,4/2,4	24/26		24 VDC Less solenoid coil	**B5V6BCB49C** **B5V6BCNXXC**	1 1
	Electric	Electric	1,5/1/5	15/17		24 VDC Less solenoid coil	**B5J6BCB49C** **B5J6BCNXXC**	1 1
Electrically actuated 5/2 valves								
	Electric	Air/Spring Assisted	2,4/2,4	24/26		24 VDC Less solenoid coil	**B5E6BCB49C** **B5E6BCNXXC**	1 1
Electrically actuated 5/2 valves								
	Electric	Electric	1,5/1,5	15/15	0,283 0,185	24 VDC Less solenoid	**B526BCB49C** **B526BCNXXC**	1 1
	Electric Closed centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B556BCB49C** **B556BCNXXC**	1 1
	Electric Vented centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B566BCB49C** **B566BCNXXC**	1 1
	Electric Pressurised centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	**B576BCB49C** **B576BCNXXC**	1 1

Internal air supply to differential pilots and solenoids via port 1

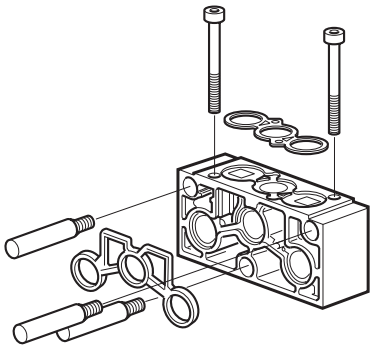
Inlet Exhaust Manifolds for B3 series valves

Standard Base without Flow Controls
Each kit contains:
1 pcs Manifold Base
2 pcs Mounting screws and nuts
3 pcs Tie Rods
1 pcs Body-to-base Gasket and
1 pcs Base-to-Base Gasket

		Order code	Qty
Manifold Base Kit	3/2 =	PS2948F	1
	5/2 =	PS2917F	1

Base with Flow Controls
Each kit contains:
1 pcs Manifold Base with Flow Controls
2 pcs Mounting screws and nuts
3 pcs Tie Rods
1 pcs Body-to-base Gasket
1 pcs Base-to-Base Gasket

		Order code	Qty
Manifold Base Kit	3/2 =	PS2949F	1
	5/2 =	PS2918F	1



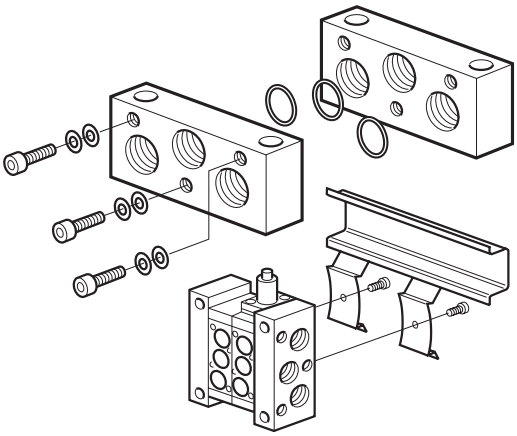
End plates

Standard End Plates may be used with either of above Manifold Bases

Each kit contains:
1 right and 1 left End Plate
3 pcs O-Rings
3 pcs Blanking Plugs
3 pcs Socket Head Cap Screws
3 pcs Flat Washers
3 pcs Lockwashers

		Order code	Qty
Manifold End plate kit	3/2 =	PS2951F	1
	5/2 =	PS2916F	1

	Order code	Qty
DIN rail mounting kit for IEM manifold	PS2970F	1

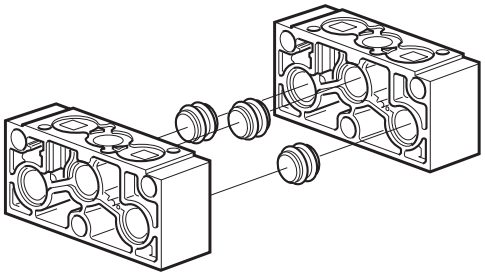


Isolator Plug Kit

Used to isolate the 1, 3 or 5 gallery between two Manifold Bases

Each kit contains:
3 pcs Isolator Plugs complete with O-rings.

	Order code	Qty
Isolator Plug Kit	PS2919F	1

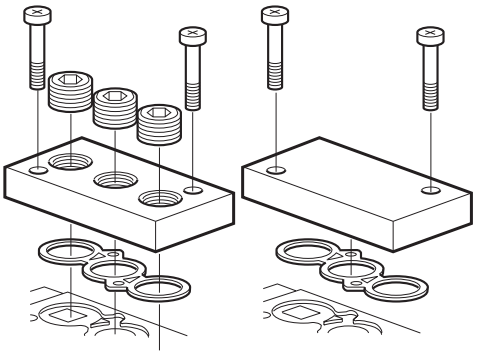


Manifold Ported Plate
Each kit contains:
1 pcs Inlet Plate
2 pcs Mounting Screws
3 pcs G1/8 Plugs
1 pcs Gasket

		Order code	Qty
Manifold Ported Plate	3/2 =	PS2967F	1
	5/2 =	PS2921F	1

Manifold Blanking Plate
Each kit contains:
1 pcs Cover Plate
2 pcs Mounting Screws
1 pcs Gasket
Used to blank off unused stations.

		Order code	Qty
Manifold Blanking Plate	3/2 =	PS2968F	1
	5/2 =	PS2969F	1



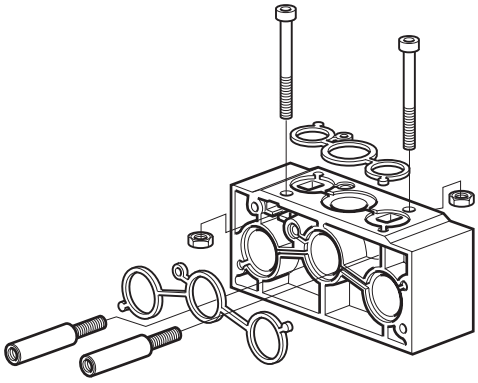
Inlet Exhaust Manifolds for B4 series valves

Standard Base without Flow Controls
Each kit contains:
1 pcs Manifold Base
2 pcs Mounting screws and nuts
2 pcs Tie Rods
1 pcs Body-to-base Gasket and
1 pcs Base-to-Base Gasket

		Order code	Qty
Manifold Base Kit	3/2 =	PS4548F	1
	5/2 =	PS4517F	1

Base with Flow Controls
Each kit contains:
1 pcs Manifold Base with Flow Controls
2 pcs Mounting screws and nuts
2 pcs Tie Rods
1 pcs Body-to-base Gasket
1 pcs Base-to-Base Gasket

		Order code	Qty
Manifold Base Kit	3/2 =	PS4549F	1
	5/2 =	PS4518F	1



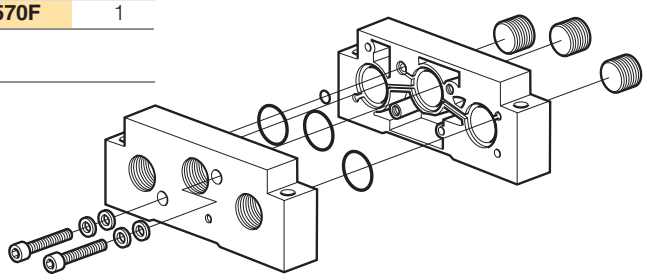
End plates

Standard End Plates may be used with either of above Manifold Bases

Each kit contains:
1 right and 1 left End Plate
3 pcs O-Rings
3 pcs Blanking Plugs
2 pcs Socket Head Cap Screws
2 pcs Flat Washers
2 pcs Lockwashers

	Port Size		Order code	Qty
Manifold End plate kit	3/8 BSP	3/2 =	PS4551F	1
	3/8 BSP	5/2 =	PS4516F	1

	Order code	Qty
DIN rail mounting kit for IEM manifold	PS4570F	1

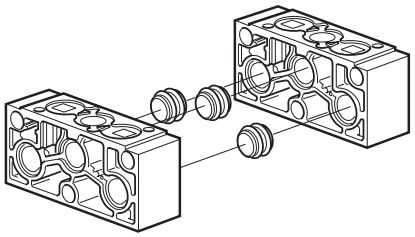


Isolator Plug Kit

Used to isolate the 1, 3 or 5 gallery between two Manifold Bases

Each kit contains:
3 pcs Isolator Plugs complete with O-rings

	Order code	Qty
Isolator Plug kit	PS4519F	1

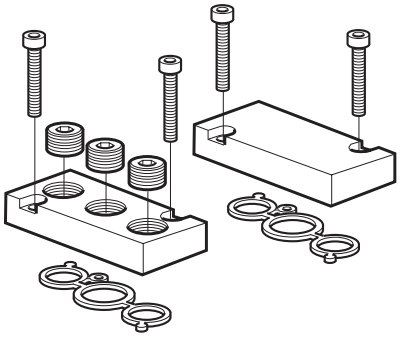


Manifold Ported Plate
Each kit contains:
1 pcs Inlet Plate
2 pcs Mounting screws
3 pcs G1/4 Plugs
1 pcs Gasket

		Order code	Qty
Manifold Ported plate	3/2 =	PS4567F	1
	5/2 =	PS4521F	1

Manifold Blanking plate
Each kit contains:
1 pcs Cover Plate
2 pcs Mounting Screws
1 pcs Gasket
Used to blank off unused stations.

		Order code	Qty
Manifold Blanking plate	3/2 =	PS4568F	1
	5/2 =	PS4569F	1



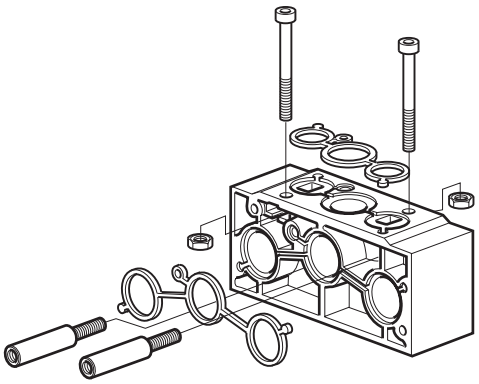
Inlet Exhaust Manifolds for B5 series valves

Standard Base without Flow Controls
Each kit contains:
1 pcs Manifold Base
2 pcs Mounting screws and nuts
2 pcs Tie Rods
1 pcs Body-to-base Gasket and
1 pcs Base-to-Base Gasket

	Order code	Qty
Manifold Base Kit	**PS2817P**	1

Base with Flow Controls
Each kit contains:
1 pcs Manifold Base with Flow Controls
2 pcs Mounting screws and nuts
2 pcs Tie Rods
1 pcs Body-to-base Gasket
1 pcs Base-to-Base Gasket

	Order code	Qty
Manifold Base Kit	**PS2818P**	1

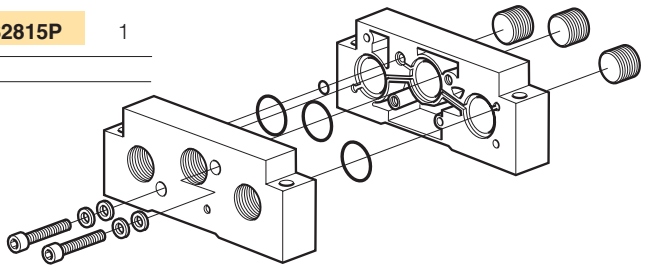


End plates

Standard End Plates may be used with either of above Manifold Bases

Each kit contains:
1 right and 1 left End Plate
3 pcs O-Rings
3 pcs Blanking Plugs
2 pcs Socket Head Cap Screws
2 pcs Flat Washers
2 pcs Lockwashers

	Port Size	Order code	Qty
Manifold End plate kit	G3/8	**PS2815P**	1

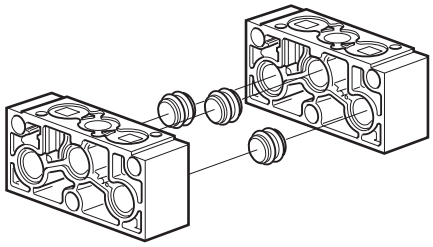


Isolator Plug Kit

Used to isolate the 1, 3 or 5 gallery between two Manifold Bases

Each kit contains:
3 pcs Isolator Plugs complete with O-rings

	Order code	Qty
Isolator Plug kit	**PS2819P**	1

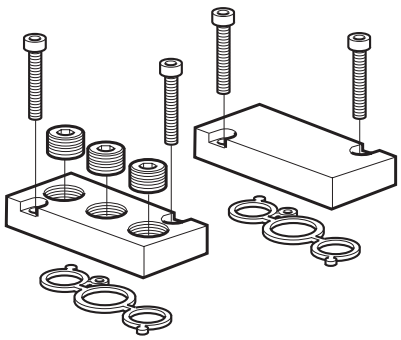


Manifold Ported Plate
Each kit contains:
1 pcs Inlet Plate
2 pcs Mounting screws
3 pcs G3/8 Plugs
1 pcs Gasket

	Order code	Qty
Manifold Ported plate	**PS2821P**	1

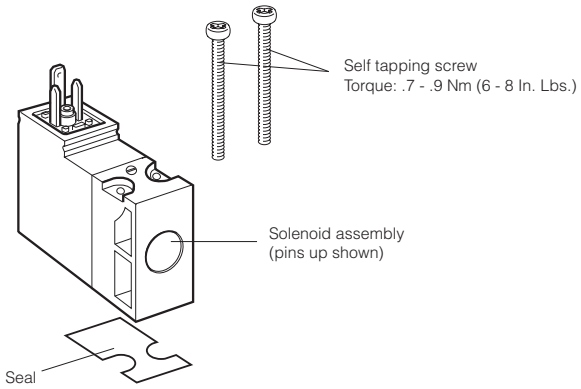
Manifold Blanking plate
Each kit contains:
1 pcs Cover Plate
2 pcs Mounting Screws
1 pcs Gasket
Used to blank off unused stations.

	Order code	Qty
Manifold Blanking plate	**PS2869P**	1



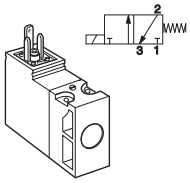
15mm Solenoid Operators for B3 and B4 Valves

Electrical connection EN 175302-803 C/ISO15217 (Ex DIN 43650C)



Solenoids 15mm NC, standard

(**Note!** Mounting screws included with basic valve)



Voltage	Weight Kg	Order code Without manual override		Weight Kg	Order code Override, blue, non locking flush		Weight Kg	Order code Override, yellow, locking flush	
12 VDC	0,038	**P2E-KV32B0**	Ⓛ	0,038	**P2E-KV32B1**	Ⓛ	0,038	**P2E-KV32B2**	Ⓛ
24 VDC	0,038	**P2E-KV32C0**	Ⓛ	0,038	**P2E-KV32C1**	Ⓛ	0,038	**P2E-KV32C2**	Ⓛ
48 VDC	0,038	**P2E-KV32D0**	Ⓛ	0,038	**P2E-KV32D1**	Ⓛ	0,038	**P2E-KV32D2**	Ⓛ
24 VAC 50Hz	0,038	**P2E-KV31C0**	Ⓛ	0,038	**P2E-KV31C1**	Ⓛ	0,038	**P2E-KV31C2**	Ⓛ
48 VAC 50/60Hz	0,038	**P2E-KV34D0**	Ⓛ	0,038	**P2E-KV34D1**	Ⓛ	0,038	**P2E-KV34D2**	Ⓛ
115 VAC 50Hz 120 VAC 60Hz	0,038	**P2E-KV31F0**	Ⓛ	0,038	**P2E-KV31F1**	Ⓛ	0,038	**P2E-KV31F2**	Ⓛ
230 VAC 50Hz 240 VAC 60Hz	0,038	**P2E-KV31J0**	Ⓛ	0,038	**P2E-KV31J1**	Ⓛ	0,038	**P2E-KV31J2**	Ⓛ

Solenoid coils for B5 valves

Solenoid coils to suit 'N' enclosure type 22mm 3-Pin EN 175301-803 Industrial Form B

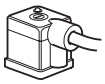
Coil Voltage	Order code	Weight (kg)
24 VAC	**PS2828B42P**	0.093
12 VDC	**PS2828B45P**	0.093
24 VDC	**PS2828B49P**	0.093
110 VAC	**PS2828B53P**	0.093
230 VAC	**PS2828B57P**	0.093

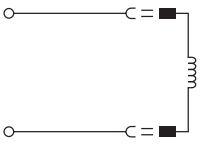
Solenoid Operator Kit

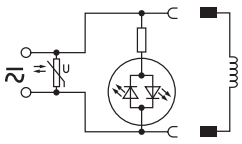
Each kit contains:
1 large 'O' ring for operator base
1 small 'O' ring for operator base
2 mounting screws
1 solenoid/stem nut

	Order code	Qty
Non locking m/o	**PS2844BP**	1
Locking m/o	**PS2844CP**	1

Solenoid Connectors / Cable Plugs EN175301-803

	Description	Order code 15mm Form C/ISO15217 Suitable for B3 & B4 valves	Order code 22mm Industrial Form B Suitable for B5 valves
With large headed screw suitable for mounting in inaccessible or recess position	Standard IP65	**P8C-C**	
	24V DC LED and protection IP65	**P8C-C26C**	
	110V AC LED and protection IP65	**P8C-C21E**	
With standard screw	Standard IP65 without flying lead	**P8C-D**	**3EV10V10**
	With LED and protection 24V AC/DC	**P8C-D26C**	**3EV10V20-24**
	With LED and protection 110V AC	**P8C-D21E**	**3EV10V20-110**
	With LED and protection 230V AC		**3EV10V20-230**
With cable 	Standard with 2m cable IP65	**P8L-C2**	
	Standard with 5m cable IP65	**P8L-C5**	
	24V AC/DC, 2m cable LED and protection IP65	**P8L-C226C**	
	24V AC/DC, 5m cable LED and protection IP65	**P8L-C526C**	**3EV10V20-24L5**
	24V AC/DC, 10m cable LED and protection IP65	**P8L-CA26C**	
	110V AC/DC, 2m cable LED and protection IP65	**P8L-C221E**	
	110V AC/DC, 5m cable LED and protection IP65	**P8L-C521E**	**3EV10V20-110L5**
	230V AC, 5m cable LED and protection IP65		**3EV10V20-230L5**





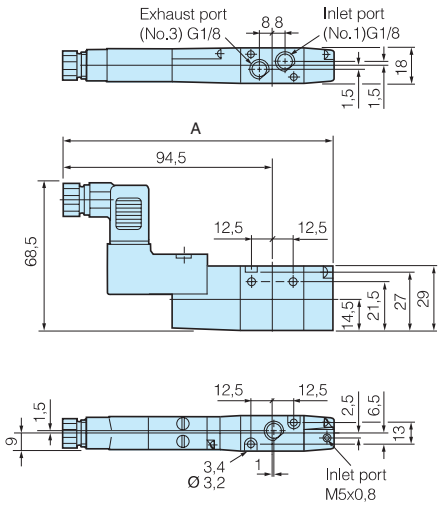
P8C-C
P8C-D
P8L-C2
P8L-C5
3EV10V10

P8C-D26C	**P8L-C226C**
P8C-D21E	**P8L-C526C**
P8C-C26C	**P8L-CA26C**
P8C-C21E	**P8L-C221E**
	P8L-C521E
3EV10V20-24	**3EV10V20-24L5**
3EV10V20-110	**3EV10V20-110L5**
3EV10V20-230	**3EV10V20-230L5**

Dimensions, B3 Valve Series

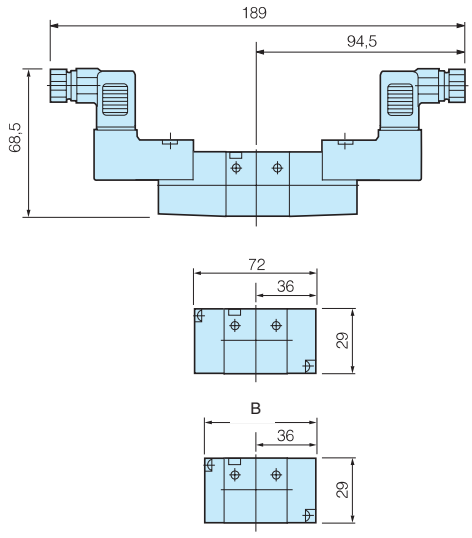
3/2 Body ported

Single solenoid operated air spring return / spring return



	Air differential return	Spring return
A	130,5	136,7

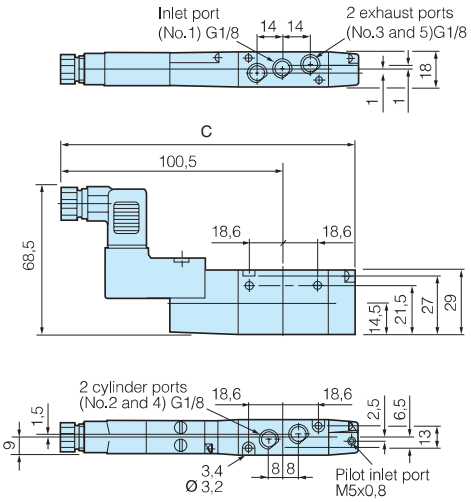
Double solenoid operated



	Air differential return	Spring return
B	67,0	73,2

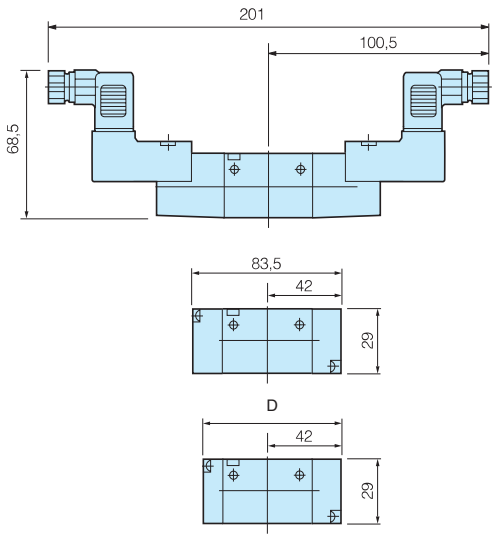
5/2 Body ported

Single solenoid operated air spring return / spring return



	Air differential return	Spring return
C	137,5	143,7

Double solenoid operated

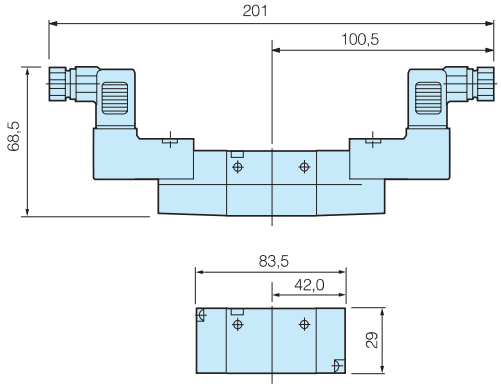


	Air differential return	Spring return
D	79,0	85,2

All dimensions in mm unless otherwise stated

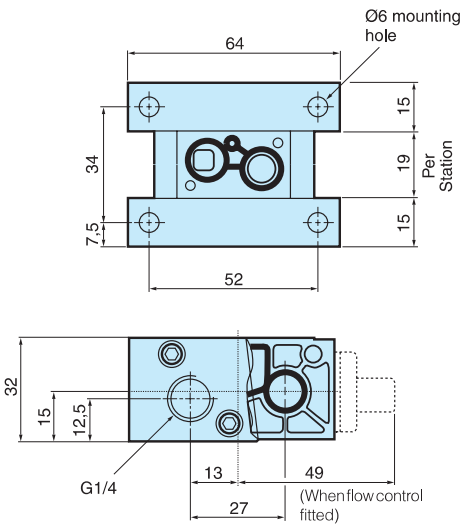
Dimensions, B3 Valve Series

5/3 Body ported

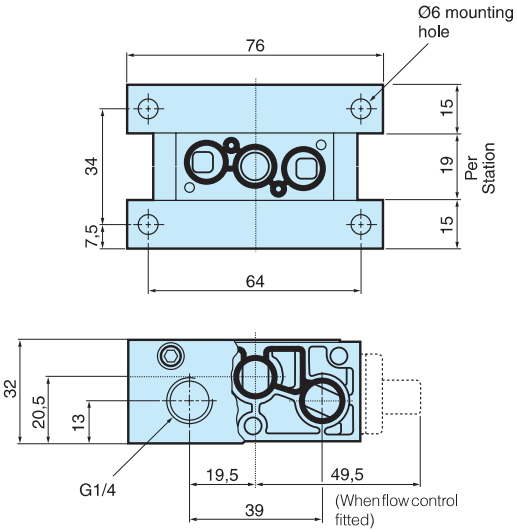


Manifolds - IEM Inlet Exhaust Manifold System

3/2 Inlet Exhaust Manifold
For B3 Body Ported Valves



5/2 Inlet Exhaust Manifold
For B3 Body Ported Valves

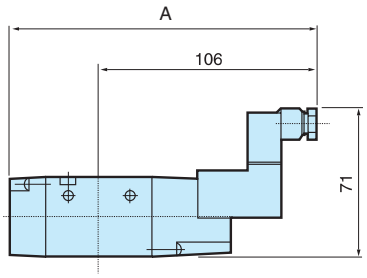


All dimensions in mm unless otherwise stated

Dimensions, B4 Valve Series

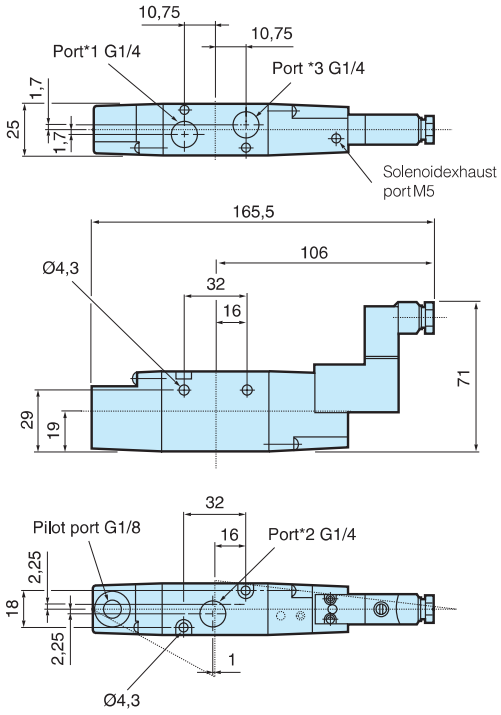
3/2 Body ported

Single solenoid operated air spring return / spring return

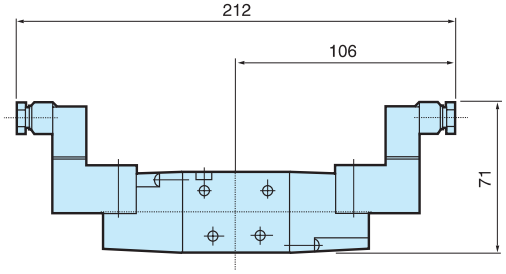


	Air differential return	Spring return
A	154,0	156,0

Single solenoid operated air pilot return

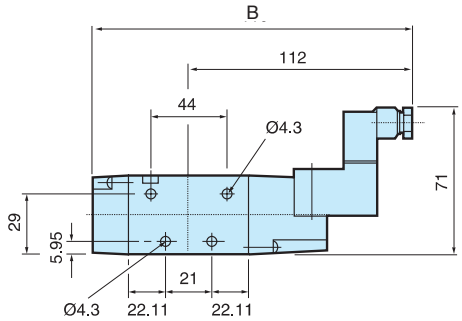


Double solenoid operated



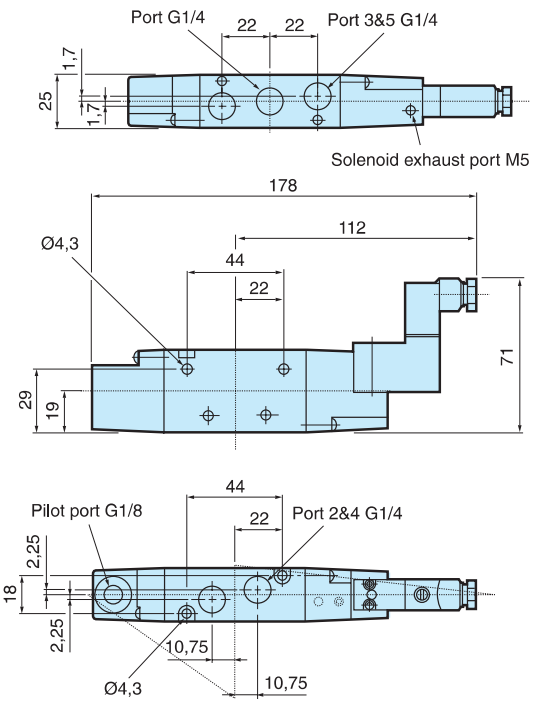
5/2 Body ported

Single solenoid operated air spring return / spring return

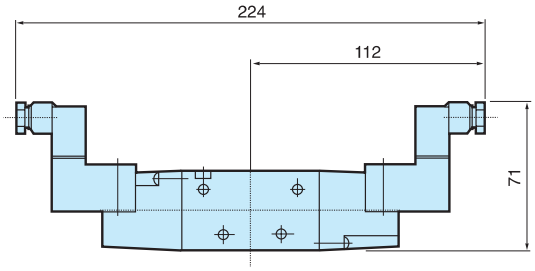


	Air differential return	Spring return
B	166,0	168,0

Single solenoid operated air pilot return



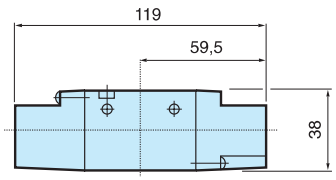
Double solenoid operated



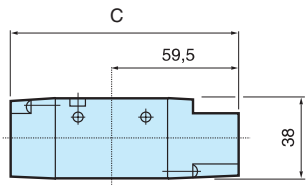
All dimensions in mm unless otherwise stated

Dimensions, B4 Valve Series

3/2 Body ported
Double air pilot operated

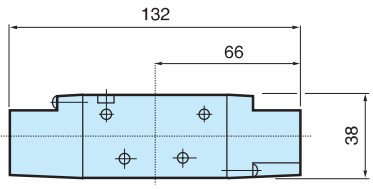


Air pilot operated air spring return / spring return

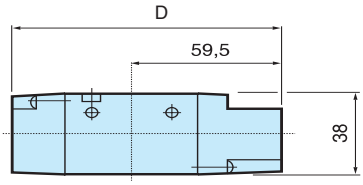


	Air differential return	Spring return
C	107,5	109,5

5/2 Body ported
Double air pilot operated

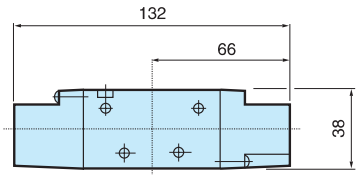


Air pilot operated air spring return / spring return

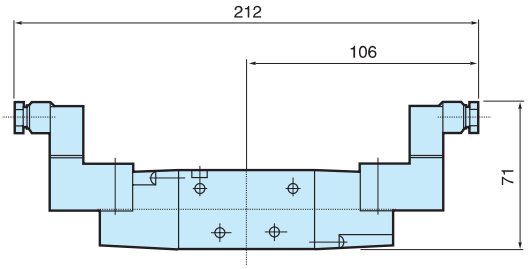


	Air differential return	Spring return
D	120,0	122,0

5/3 Body ported
Double air pilot return

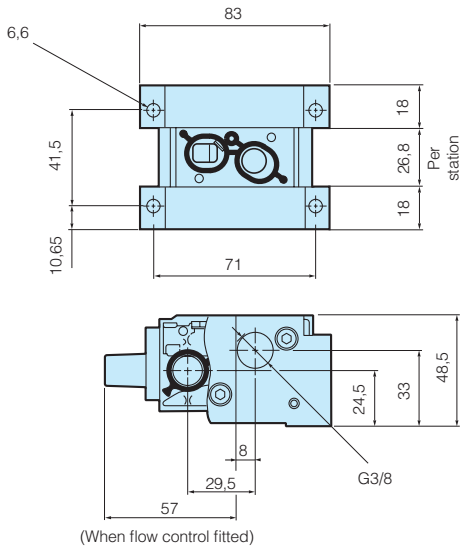


5/3 Body ported
Double solenoid operated

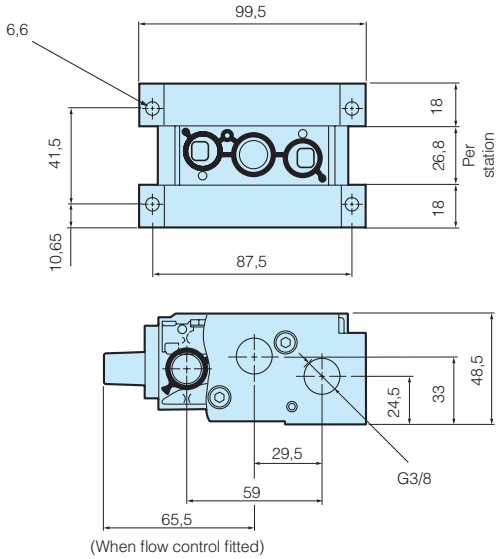


Manifolds - IEM Inlet Exhaust Manifold System

3/2 Inlet Exhaust Manifold
For B4 Body Ported Valves



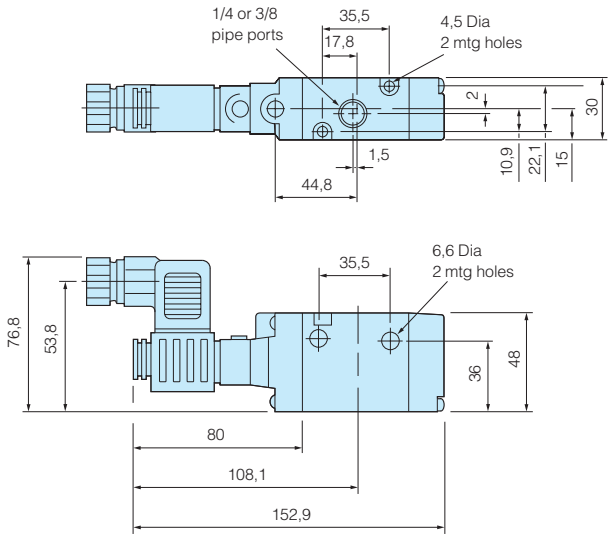
5/2 Inlet Exhaust Manifold
For B4 Body Ported Valves



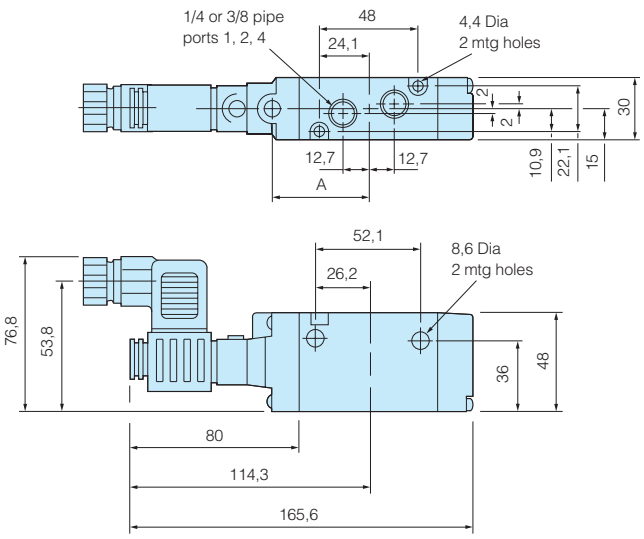
All dimensions in mm unless otherwise stated

Dimensions, B5 Valve Series

3/2 Body ported
Single solenoid operated air spring return / spring return

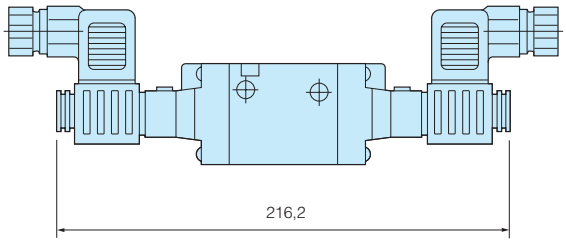


5/2 and 5/3 Body ported
Single solenoid operated air spring return / spring return

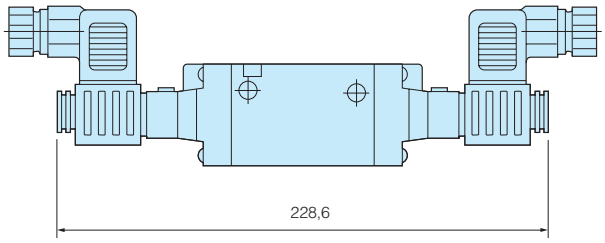


	2 Position	3 Position
A	51,1	62,7

Double solenoid operated



Double solenoid operated

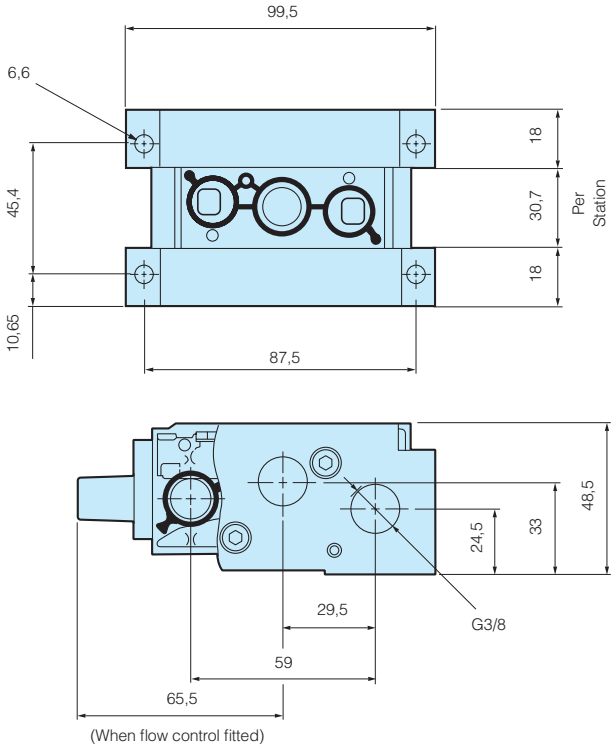


All dimensions in mm unless otherwise stated

Home

Manifolds - IEM Inlet Exhaust Manifold System

5/2 Inlet Exhaust Manifold
For B5 Body Ported Valves



Miniature low voltage solenoid valves, ideal for powering small cylinders in the packaging and process industries. Metal bodies with stand alone or manifold mounted versions.

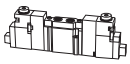
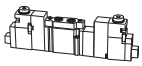
- 2 sizes: M5 and 1/8"
- Compact body with large flow
- Quick response time, faster than 10ms
- Expected life time more than 50,000,000 cycles
- Low power consumption only 0.6W
- Optional multipin connector manifold
- Manual override

Operating information

Working pressure : 1.5 to 7 bar
Working temperature : -5°C to +50°C
Flow (Qmax) A05 : 260 l/min
A12 : 850 l/min
Flow Qn A05 : 160 l/min
A12 : 510 L/min

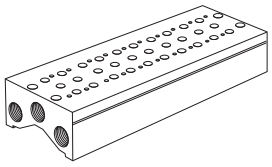
For technical information see CD

Directional control valves A05R and A12R series, inline / IEM manifold

	Symbol	Description (Electrically Actuated)	Voltage	Order code A05R - M5 ports	Order code A12R - G1/8 ports
		5/2 single solenoid	24V DC	**A05RS251PM5MF**	**A12RS251PG1MF**
		5/2 double solenoid	24V DC	**A05RD251PM5MF**	**A12RD251PG1MF**
		5/3 closed centre	24V DC	**A05RD351PM5MF**	**A12RD351PG1MF**

A05R/A12R Series Manifolds

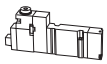
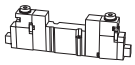
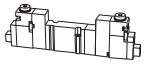
Manifold for individual wiring threaded type



No. of stations	Port size	Size	Order Code Manifold
4	M5	A05	**MMFU4A05G**
	G1/8	A12	**MMFU4A12G**
6	M5	A05	**MMFU6A05G**
	G1/8	A12	**MMFU6A12G**
8	M5	A05	**MMFU8A05G**
	G1/8	A12	**MMFU8A12G**

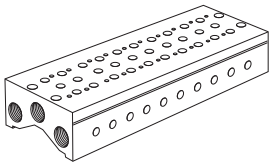
Indicates stocked product.

Directional control valves A05P/A12P series, sub-base version

Symbol	Description	Voltage	Order code A05P	Order code A12P
	Electrically actuated 5/2 single solenoid	24V DC	**A05PS251P**	**A12PS251P**
	Electrically actuated 5/2 double solenoid	24V DC	**A05PD251P**	**A12PD251P**
	Electrically actuated 5/3 closed centre	24V DC	**A05PD351P**	**A12PD351P**

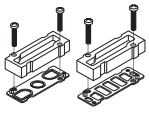
A05P/A12P Series manifold sub-bases

Manifolds individual wiring threaded type



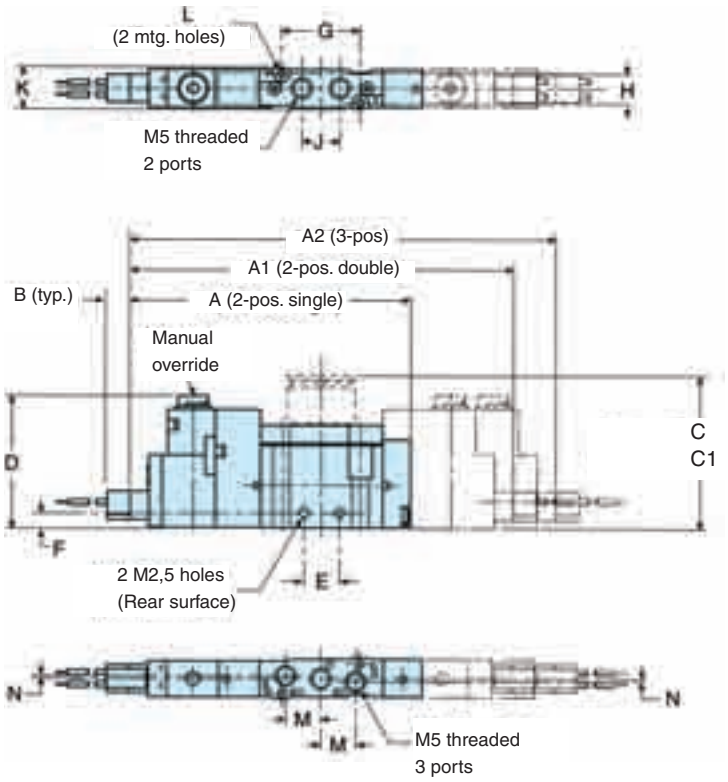
No. of stations	Port size	Size	Order Code Manifold
4	M5	A05	**MMFS4A05GM5**
	G1/8	A12	**MMFS4A12GG1**
6	M5	A05	**MMFS6A05GM5**
	G1/8	A12	**MMFS6A12GG1**
8	M5	A05	**MMFS8A05GM5**
	G1/8	A12	**MMFS8A12GG1**

Mounting and Wiring Accessories

	Description	Order code
	Connector with lead wire black (-) red (+) 500mm	**A05PDCCL5**
	IEM blank plate kit (pack of 5)	**A05RGBP** **A12RGBP**
	Subbase blank plate kit (pack of 5)	**A05PGBP** **A12PGBP**

Indicates stocked product.

A05R - Single and double operators - Body ported

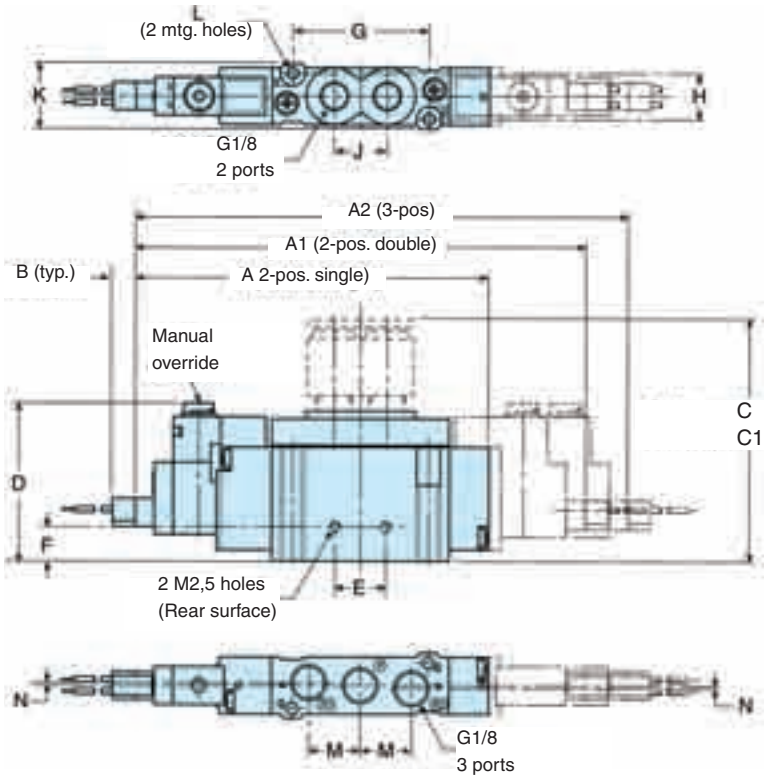


A05R - Body ported

A	A1	A2	B	C
74	100	108	6	-
C1	**D**	**E**	**F**	**G**
-	34,6	9,6	4	21
H	**J**	**K**	**L**	**M**
8,5	10,2	11,4	Ø2,1	9,5
N				
1				

Dimensions in mm

A12R - Single and double operators - Body ported

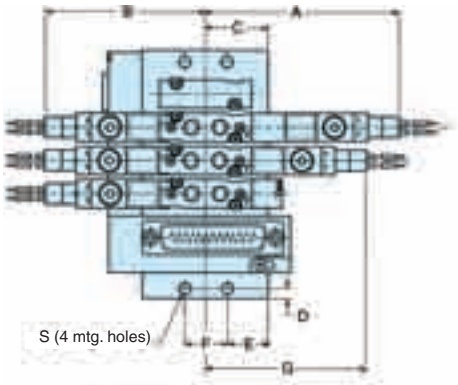


A12R - Body ported

A	A1	A2	B	C
93,5	119	130	6	-
C1	**D**	**E**	**F**	**G**
-	41,6	13,4	9	36
H	**J**	**K**	**L**	**M**
12	14	17,2	Ø3,1	13,6
N				
0,8				

Dimensions in mm

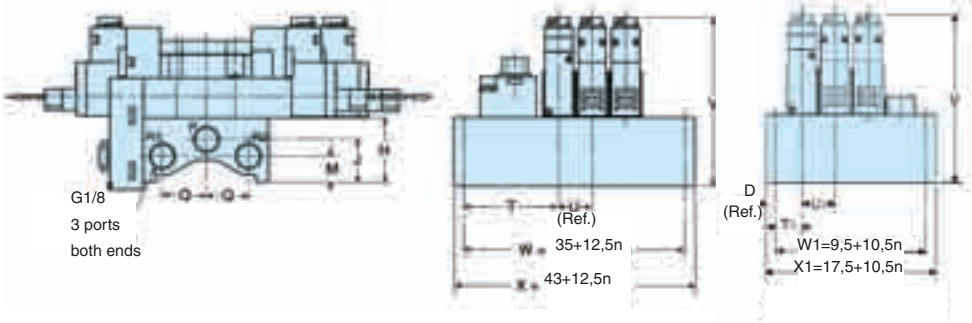
A05R - Manifold - Valve body ports



A05R - Manifold - valve body port

A 64	**B** 56	**C** 23,5	**D** 4	**E** 15,5
F 16	**G** 56	**H** 24	**J** 15,5	**M** 9,5
Q 16	**S** Ø4,5	**T** 34	**T1** 10	**U** 12,5
U1 10,5	**V** 63			

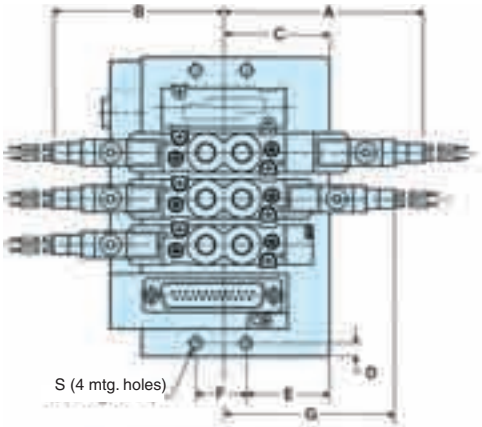
Dimensions in mm



n = number of stations

MMCU... **MMFU...**

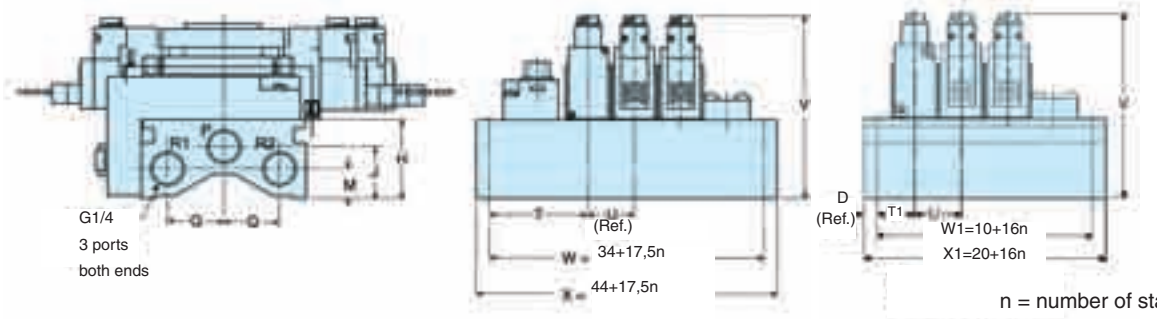
A12R - Manifold - Valve body ports



A12R - Manifold - Valve body port

A 77	**B** 66	**C** 29	**D** 5	**E** 19,2
F 19,6	**G** 66	**H** 27,5	**J** 18	**M** 10,5
Q 19,5	**S** Ø4,5	**T** 37,5	**T1** 12,2	**U** 17,5
U1 16	**V** 70			

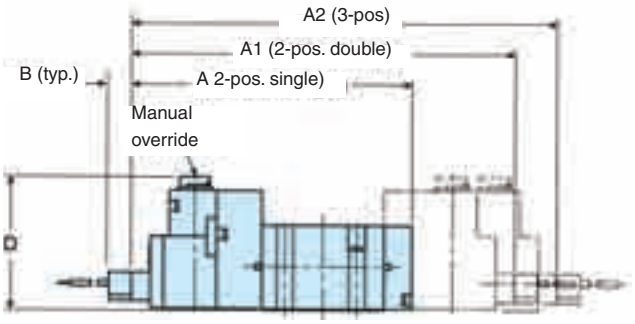
Dimensions in mm



n = number of stations

MMCU... **MMFU...**

A05P - Single and double operators - Subbase

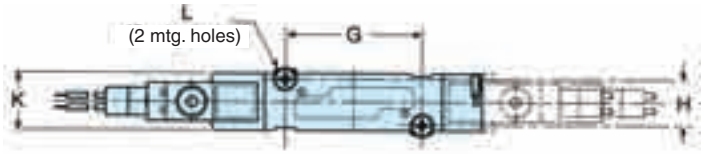


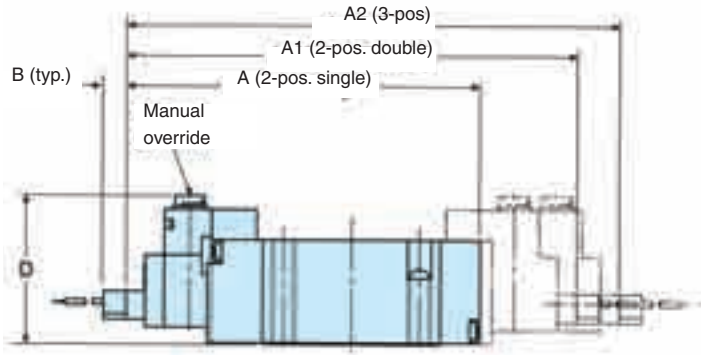
A05P - Subbase

A	A1	A2	B	D
74	100	108	6	35,1
G	**H**	**K**	**L**	
19	8,5	10	Ø2,1	

Dimensions in mm

A12P - Single and double operators - Subbase



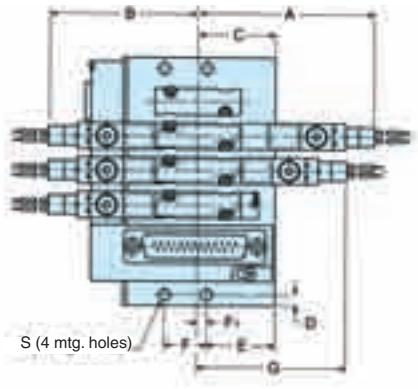


A12P - Subbase

A	A1	A2	B	D
93,5	119	130	6	39,1
G	**H**	**K**	**L**	
34	12	15	Ø3,1	

Dimensions in mm

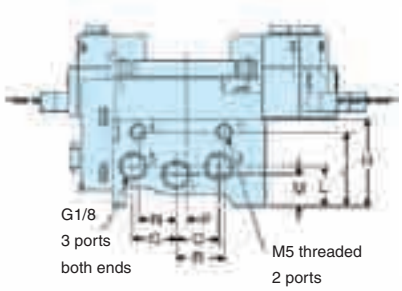
A05P - Manifold - Side ports

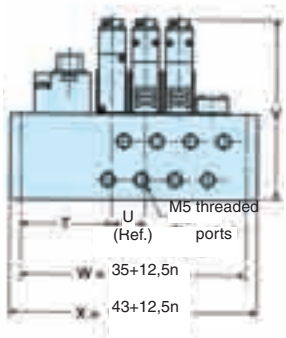


A05P - Manifold - Side ports

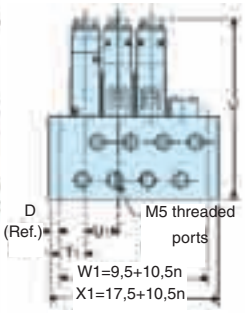
A 64	**B** 56	**C** 30,2	**D** 4	**E** 25,5
F 16	**F1** 4,7	**G** 56	**H** 32	**J** 28
L 14,5	**M** 11,5	**N** 14	**P** 3	**Q** 16
R 18	**S** Ø4,5	**T** 33,8	**T1** 10	**U** 12,5
	U1 10,5	**V** 67		

Dimensions in mm





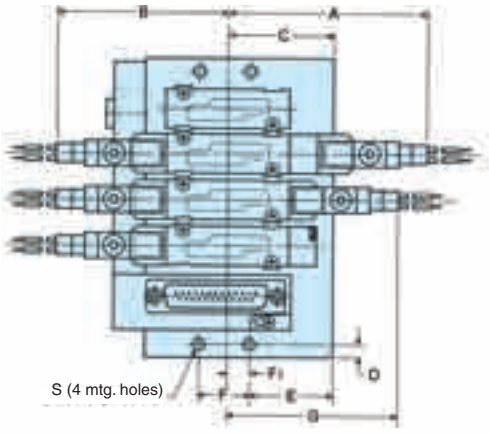
MMCS...



MMFS...

n = number of stations

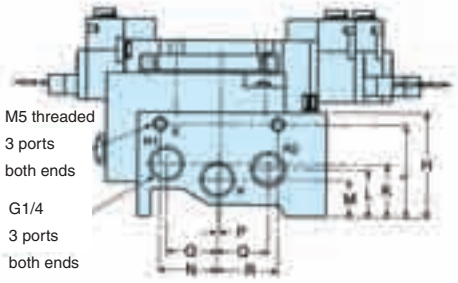
A12P - Manifolds - Side ports

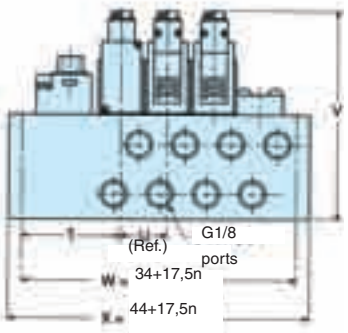


A12P - Manifold - Side ports

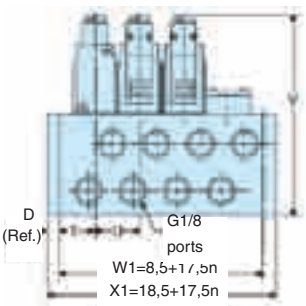
A 77	**B** 66	**C** 40,4	**D** 5	**E** 31,7
F 19,6	**F1** 11	**G** 66	**H** 39,5	**J** 35
K 20,5	**L** 18	**M** 14	**N** 22	**P** 1
Q 19,5	**R** 23	**S** Ø4,5	**T** 37,2	**T1** 12,7
U 17,5	**V** 79			

Dimensions in mm





MMCS...



MMFS...

n = number of stations

G1/8 and G1/4 Body ported spool valves with excellent reliability. Viton seals as standard provide long service life even in arduous conditions.

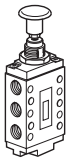
- 43 series G1/8 body ported
- 53 series G1/4 body ported
- Stainless steel spool
- 3/2, 5/2 and 5/3 versions
- Viton body seals as standard
- Integral mounting holes

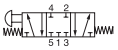
Operating information

Working pressure		Vacuum-10 bar
Working temperature		-10 °C to +80 °C
Port size	G1/8	43 series
	G1/4	53 series
Flow (Qmax);	43 series	510 l/min
	53 series	1740 l/min

For technical information see CD

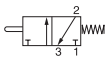
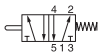
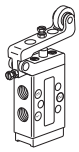
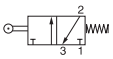
Push button operated valves, B43 / B53 Series



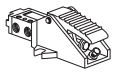
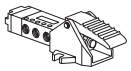
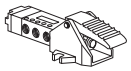
Symbol	Type	Actuator	Return	Size	Order code
	3/2	Button, black	Spring	G1/8 G1/4	**B43003BXS** **B53003HXS**
	3/2	Button black	Air Pilot	G1/4	**B53003HXP**
	3/2	Button black	Spring	G1/8	**B43603BX**
	3/2	Button red	Spring	G1/4	**B53003HY**
	3/2	Button, black	Button	G1/8 G1/4	**B43003HXS** **B53003HX**
	5/2	Button, black	Spring	G1/8 G1/4	**B43004BXS** **B53004HXS**
	5/2	Button, black	Button	G1/8 G1/4	**B43004HXS** **B53004HX**
	5/2	Button black	Air Pilot	G1/8 G1/4	**B43004HXP** **B53004HXP**
	5/3	Button closed centre	Button self centring	G1/4	**B53004HXX**

Indicates stocked product.

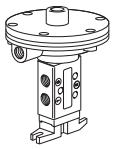
Mechanically operated valves, B43 / B53 Series

	Symbol	Type	Actuator	Return	Size	Order code
		3/2	Plunger Plunger Plunger	Spring Spring Spring	G1/8 G1/8 G1/4	**B43003CS** **B43603C** **B53003CS**
		5/2	Plunger Plunger	Spring Spring	G1/8 G1/4	**B43004CS** **B53004CS**
		3/2	Roller lever Roller lever Roller	Spring Spring Spring	G1/8 G1/8 G1/4	**B43003RS** **B43603R** **B53003RS**
		3/2	One way roller trip	Spring	G1/8	**B43003RTS**
		5/2	Roller lever Roller	Spring Spring	G1/8 G1/4	**B43004RS** **B53004RS**
		5/2	Roller	Air Pilot	G1/8	**B43004RP**

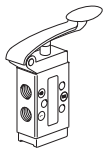
Manually operated valves, B43/53 series

	Symbol	Type	Actuator	Return	Size	Mid-position	Order code
Single-pedal operated							
		3/2	Foot pedal	Spring	G1/8 G1/4		**B43003FS** **B53003FS**
			Foot pedal	Foot Pedal	G1/4		**B53003G**
		5/2	Foot pedal	Spring	G1/8 G1/4		**B43004FS** **B53004FS**
			Foot pedal	Foot Pedal	G1/4		**B53004G**
		5/3	Foot pedal	Foot Pedal	G1/4	Closed centre	**B53004GX**
			Foot pedal	Foot Pedal	G1/4	Vented centre	**B53004GY**

Diaphragm operated valves

	Symbol	Type	Actuator	Return	Size	Mid-position	Order code
		3/2	Diaphragm	Spring	G1/8		**B43003DF**
		5/2	Diaphragm	Spring	G1/8		**B43004DF**

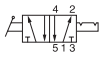
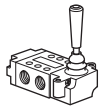
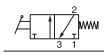
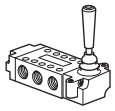
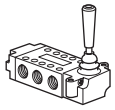
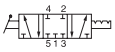
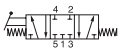
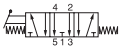
Palm lever operated valves

	Symbol	Type	Actuator	Return	Size	Mid-position	Order code
		3/2	Palm lever	Spring	G1/8		**B43003ES**

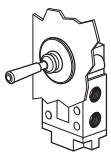
Indicates stocked product.

Manually operated valves, B43/53 series

Lever operated

		3/2	Lock down lever	Spring	G1/8	**B43003LS**
		3/2	Lock down lever	Spring	G1/8	**B43603L**
		5/2	Lock down lever	Spring	G1/8	**B43004LS**
		3/2	Lever	Spring	G1/4	**B53003LS**
		3/2	Lever	Air Pilot	G1/4	**B53003LP**
		3/2	Lever	Lever	G1/4	**B53003LT**
		5/2	Lever	Spring	G1/4	**B53004LS**
		5/2	Lever	Air Pilot	G1/4	**B53004LP**
		5/2	Lever	Lever	G1/4	**B53004LT**
		5/3	Lever Closed centre	Lever Held in three positions	G1/4	**B53004L**
		5/3	Lever Vented centre	Lever Held in three positions	G1/4	**B53004LW**
		3/3	Lever	Spring	G1/4	**B53003LX**
		5/3	Lever Closed centre	Lever Self centring	G1/4	**B53004LX**
		5/3	Lever Vented centre	Lever Self centring	G1/4	**B53004LY**

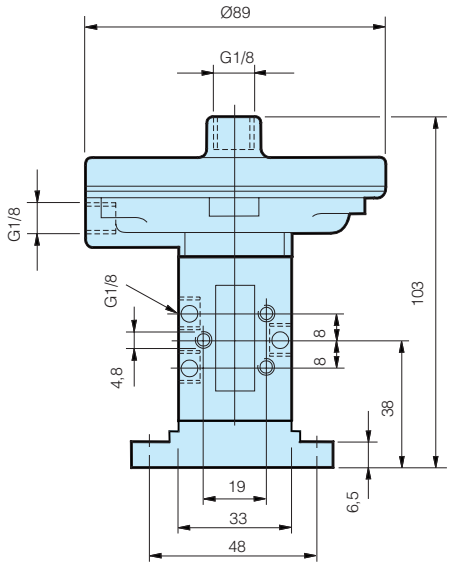
Panel mounting kit - B53 series

	**M53004L-10A**

Indicates stocked product.

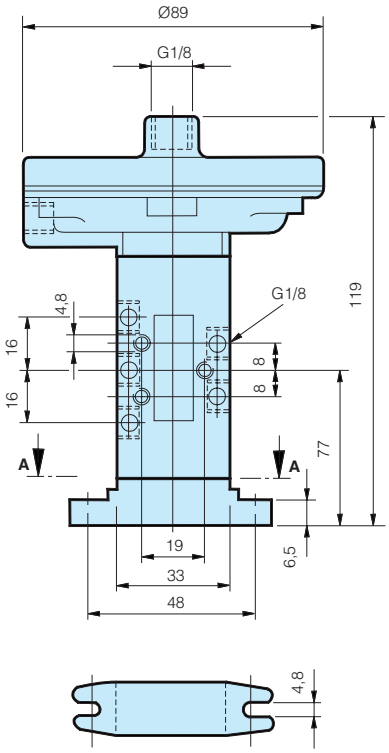
3/2 valve dimensions (mm)

Diaphragm operated spring return

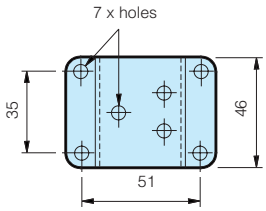


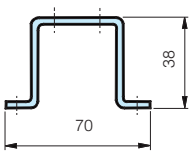
5/2 valve dimensions (mm)

Diaphragm operated spring return



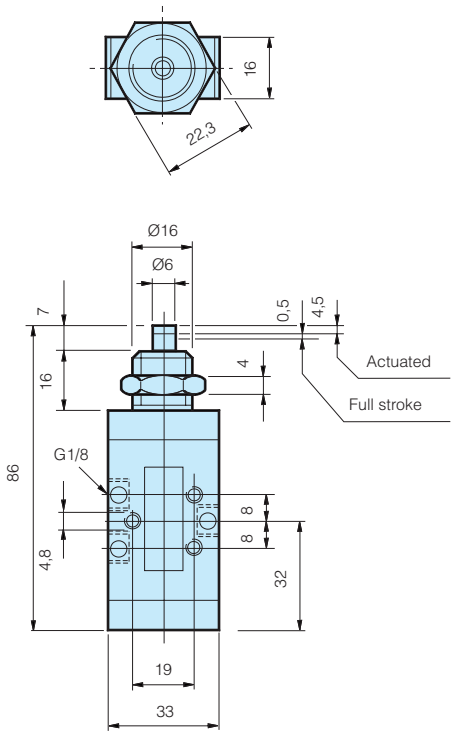
Mounting brackets





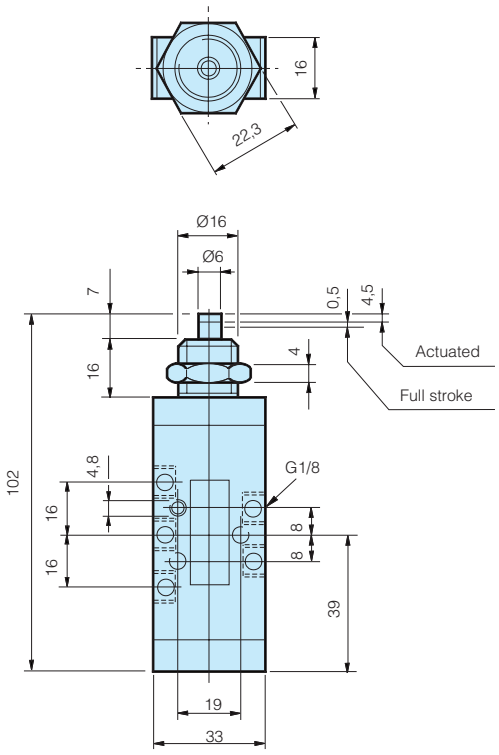
3/2 valve dimensions (mm)

Plunger operated spring return



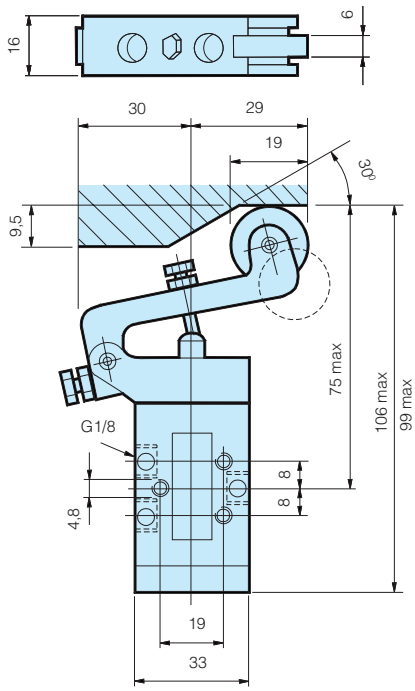
5/2 valve dimensions (mm)

Plunger operated spring return

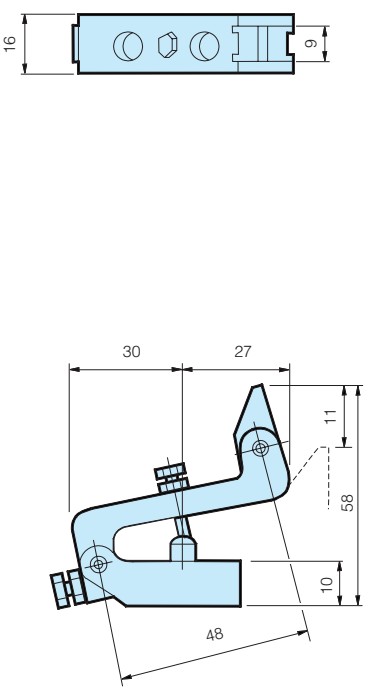


3/2 valve dimensions (mm)

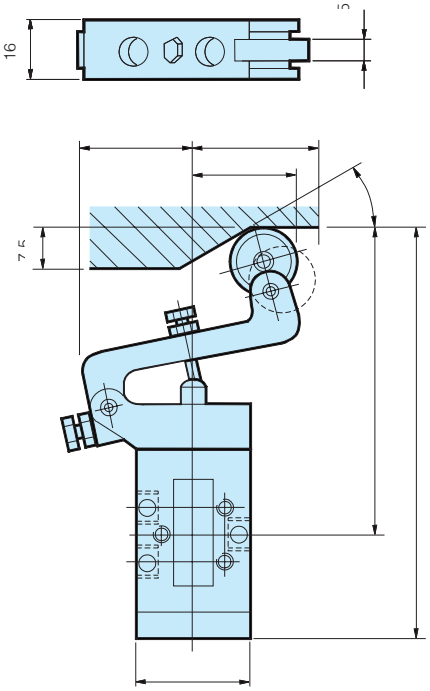
Roller operated spring return



One way trip

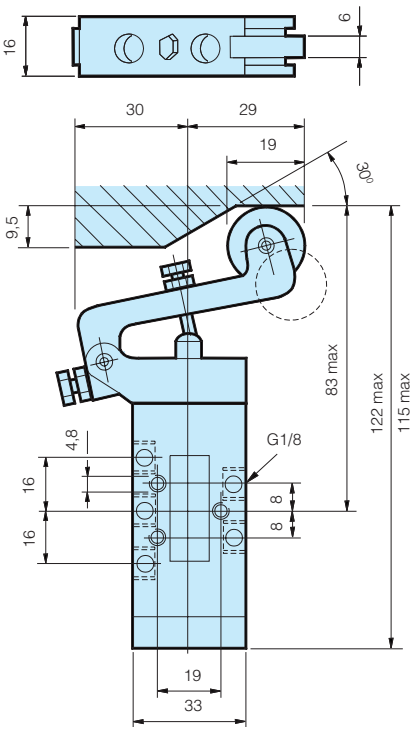


One way roller trip operated spring return

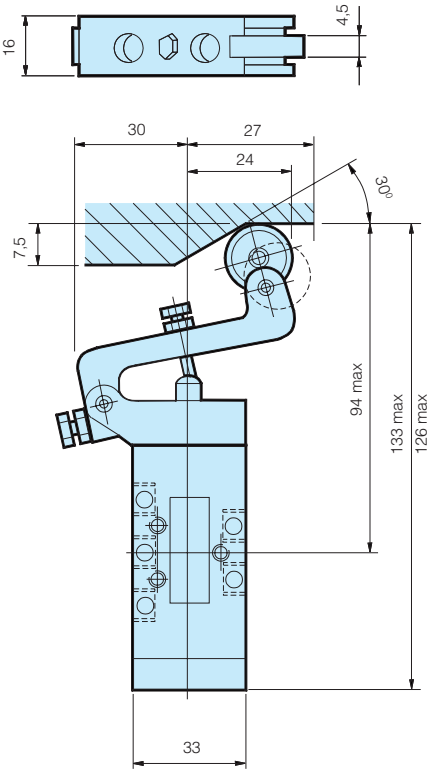


5/2 valve dimensions (mm)

Roller operated spring return

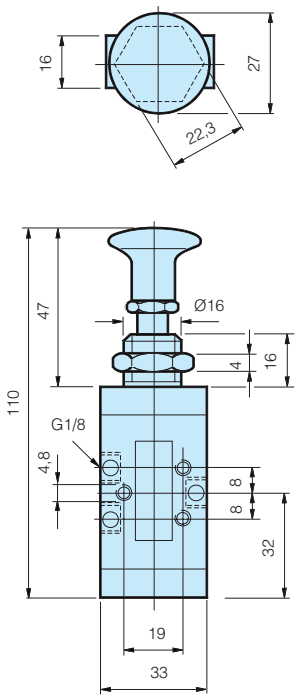


One way roller trip operated spring return

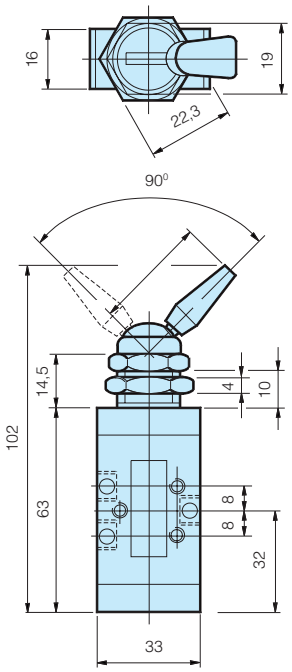


3/2 valve dimensions (mm)

Button operated
spring or button return

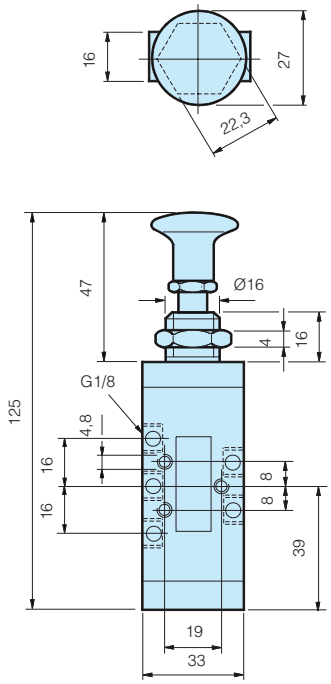


Lock down lever operated
spring return

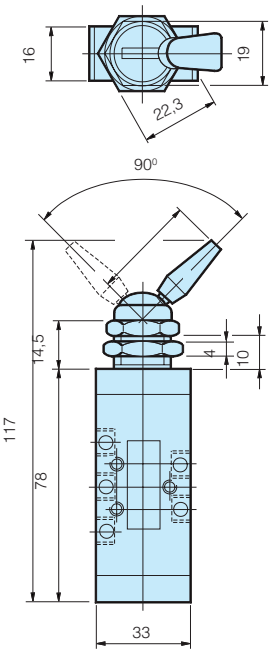


5/2 valve dimensions (mm)

Button operated
spring or button return

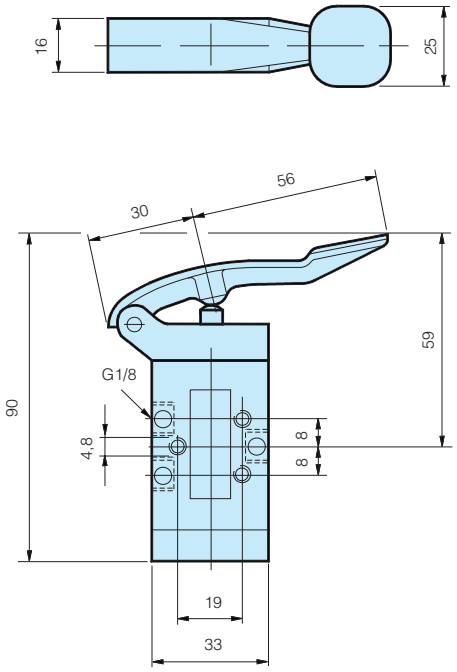


Lock down lever operated
spring return

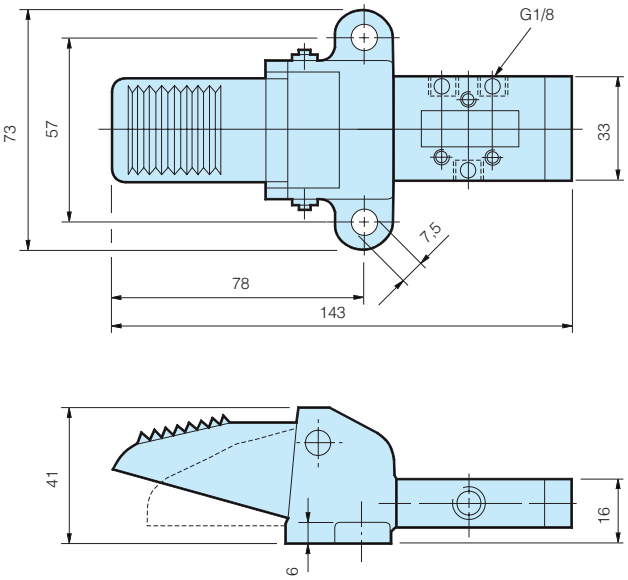


3/2 valve dimensions (mm)

Palm lever operated spring return

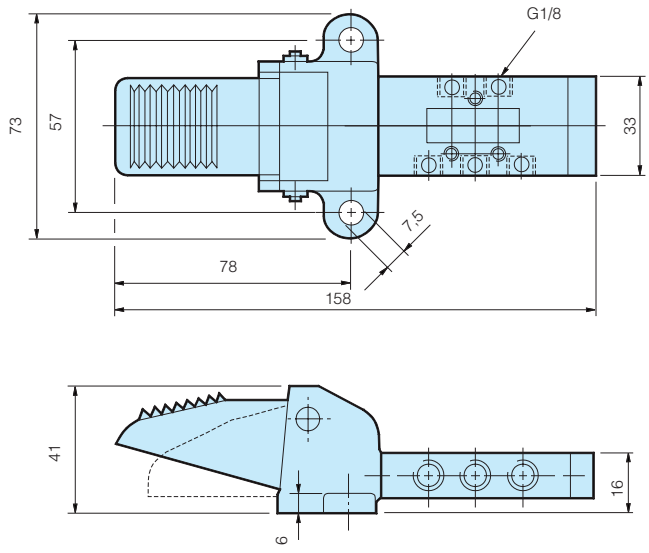


Foot pedal operated spring return



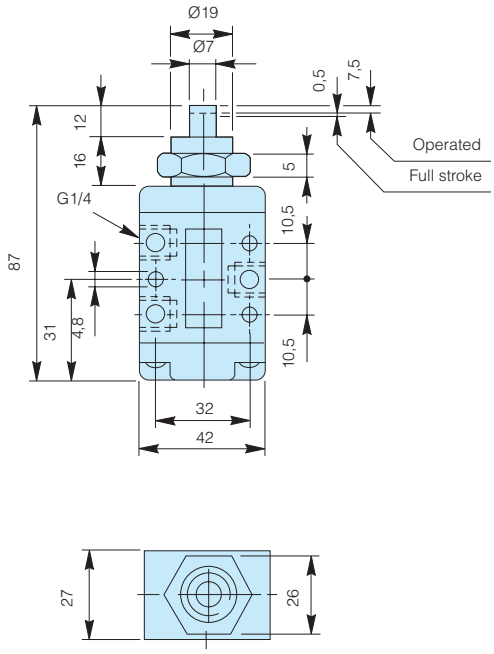
5/2 valve dimensions (mm)

Foot pedal operated spring return

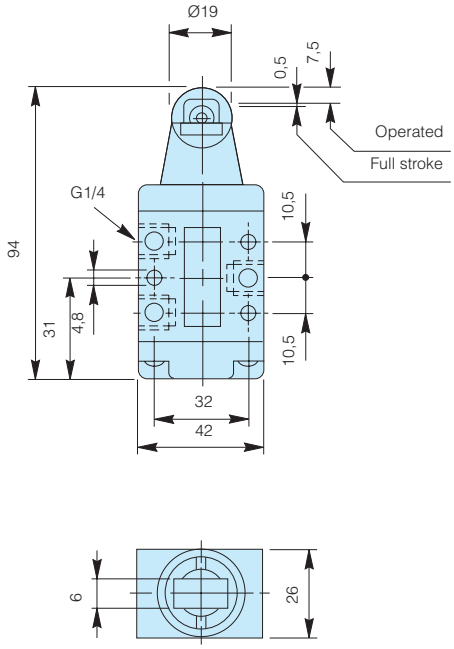


3/2 valve dimensions (mm)

Plunger operated spring return

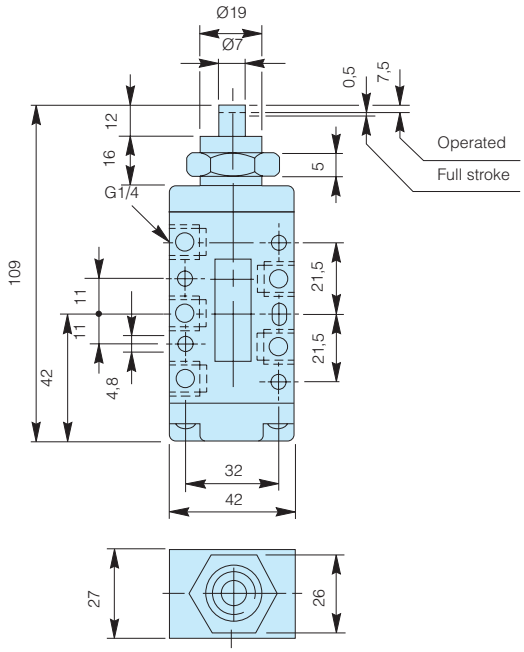


Roller operated

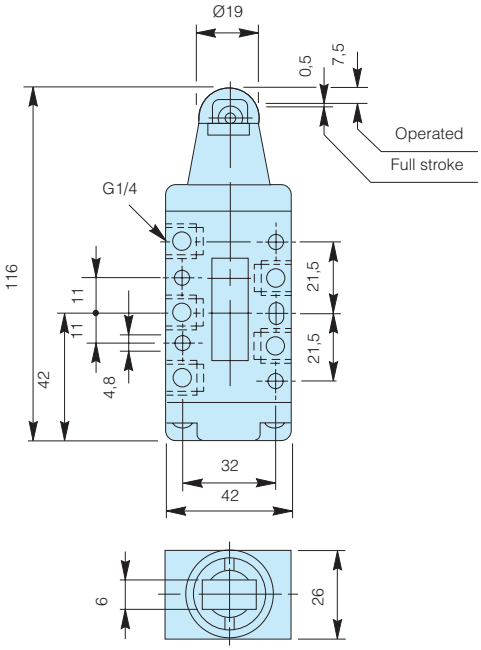


5/2 valve dimensions (mm)

Plunger operated spring return

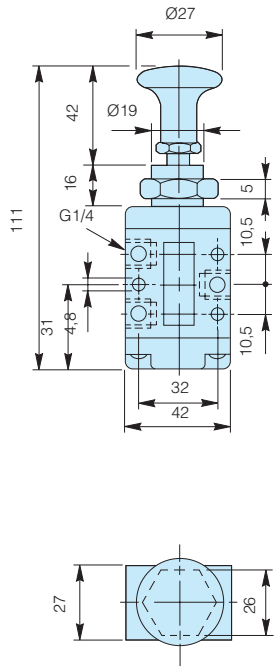


Roller operated

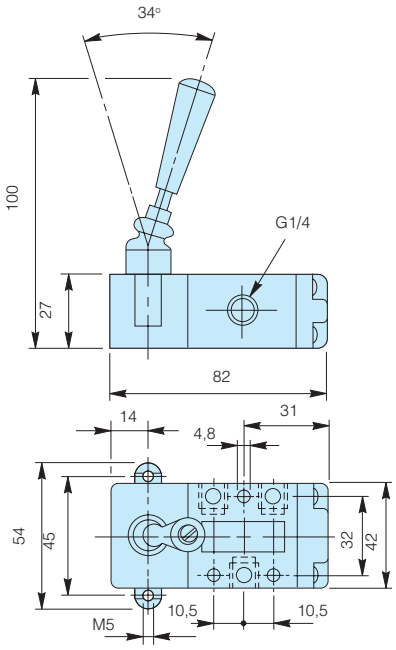


3/2 valve dimensions (mm)

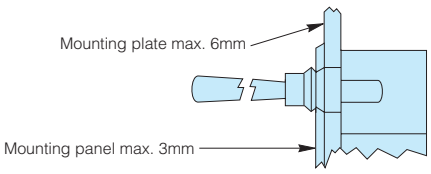
Button operated spring return



Lever operated spring return

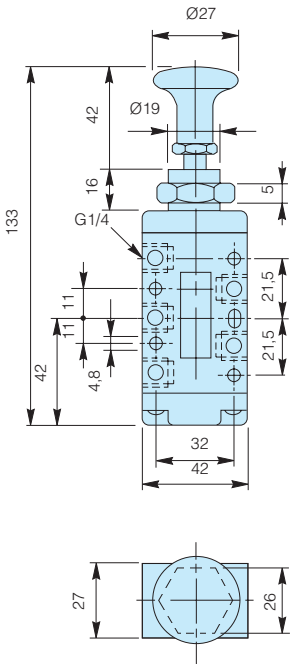


Panel mounting

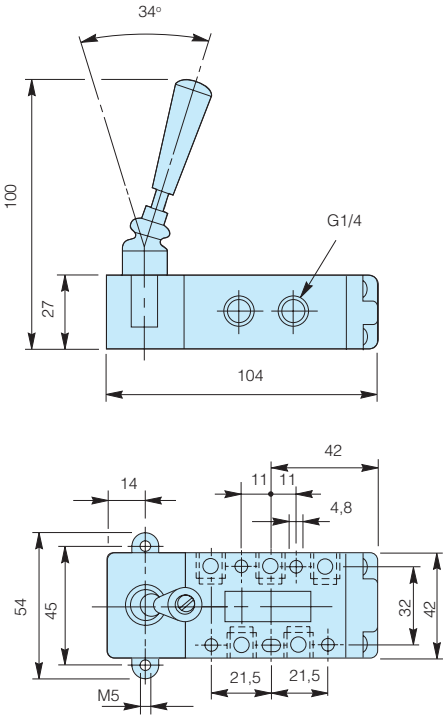


5/2 valve dimensions (mm)

Button operated spring return

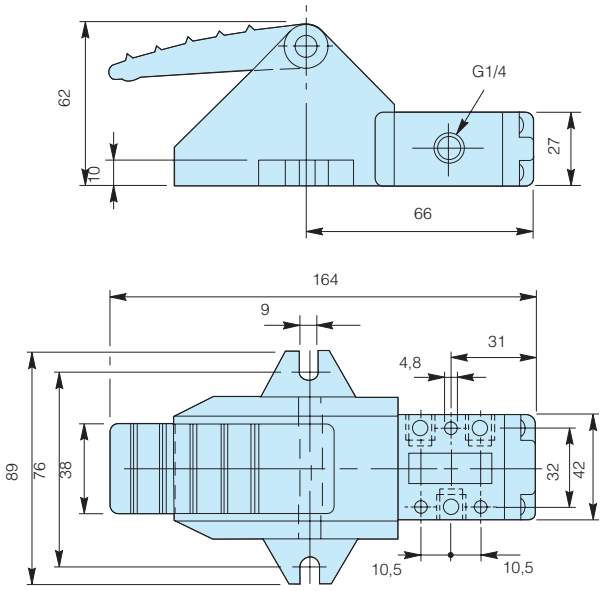


Lever operated spring return

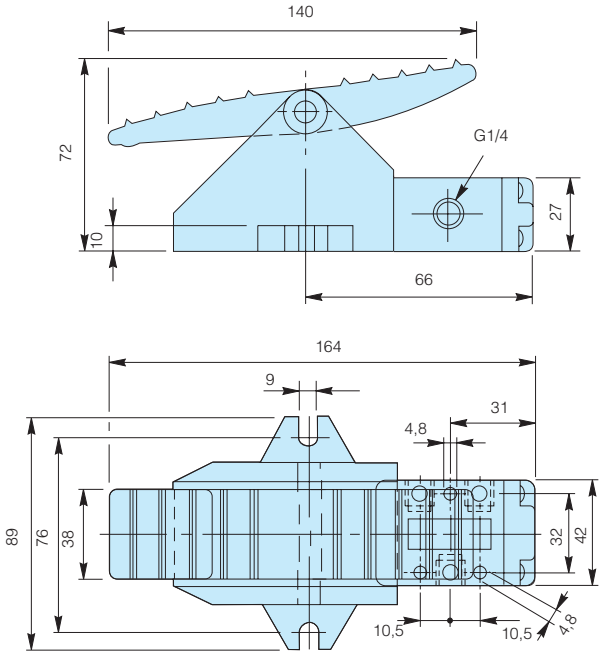


3/2 valve dimensions (mm)

Foot pedal operated spring return

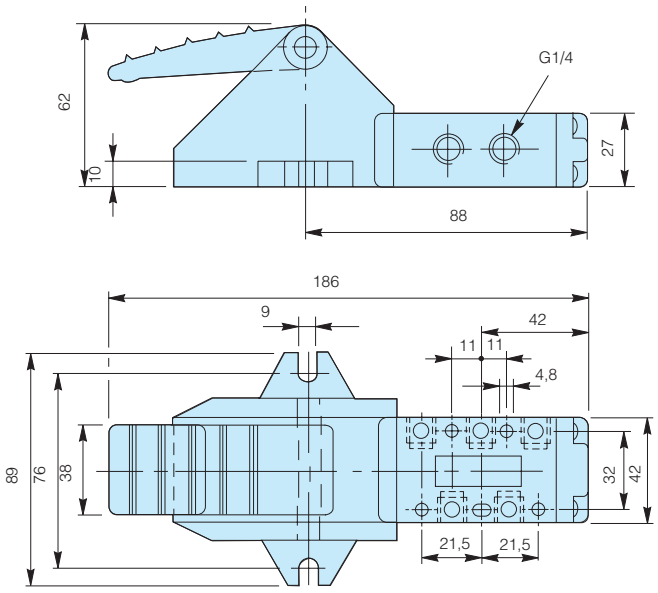


Foot pedal operated

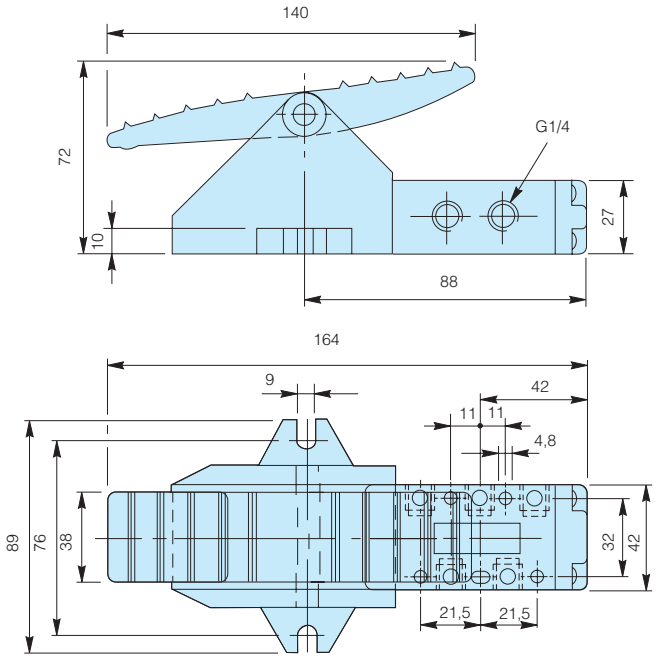


5/2 valve dimensions (mm)

Foot pedal operated spring return

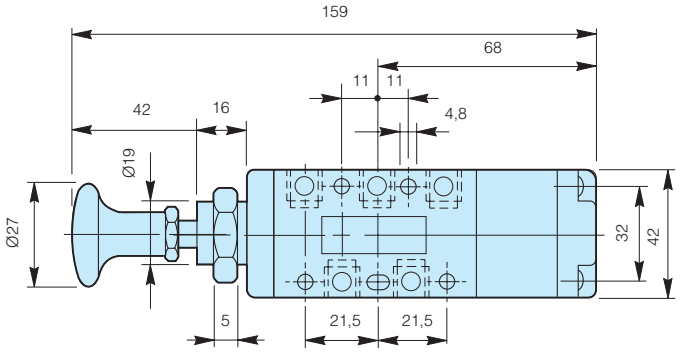


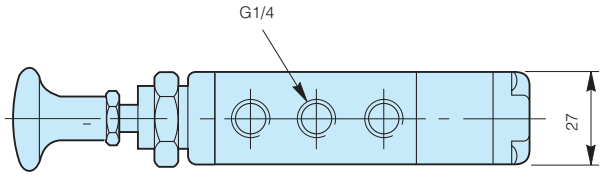
Foot pedal operated



5/3 valve dimensions (mm)

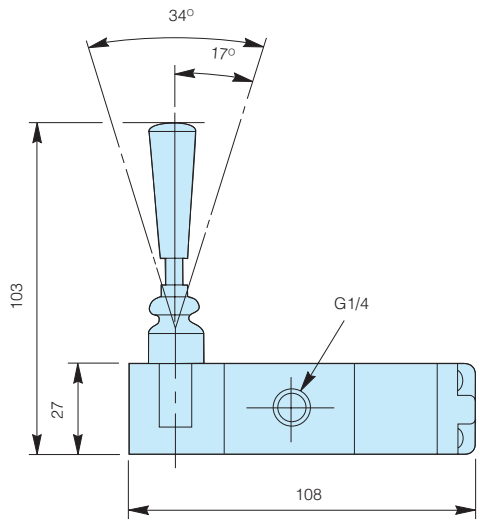
Button operated

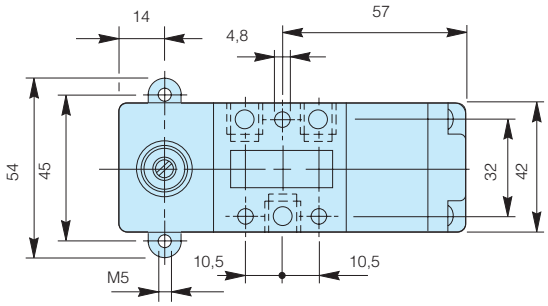




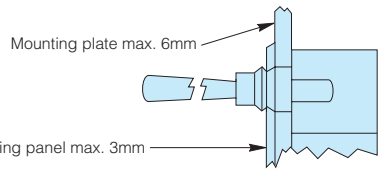
3/3 valve dimensions (mm)

Lever operated



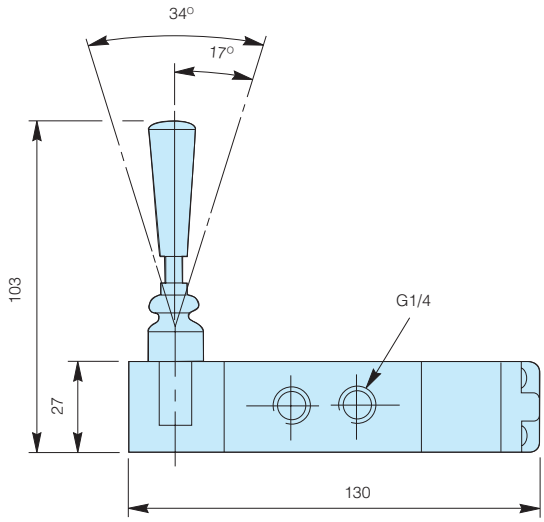


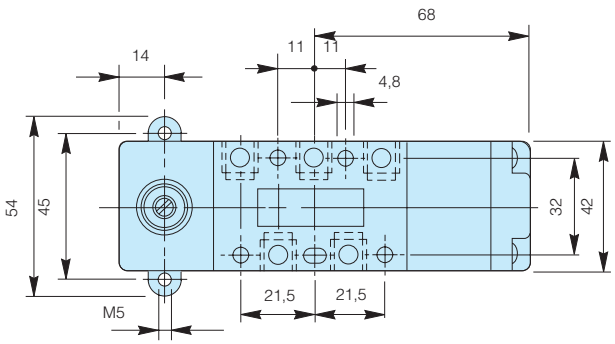
Panel mounting



5/3 valve dimensions (mm)

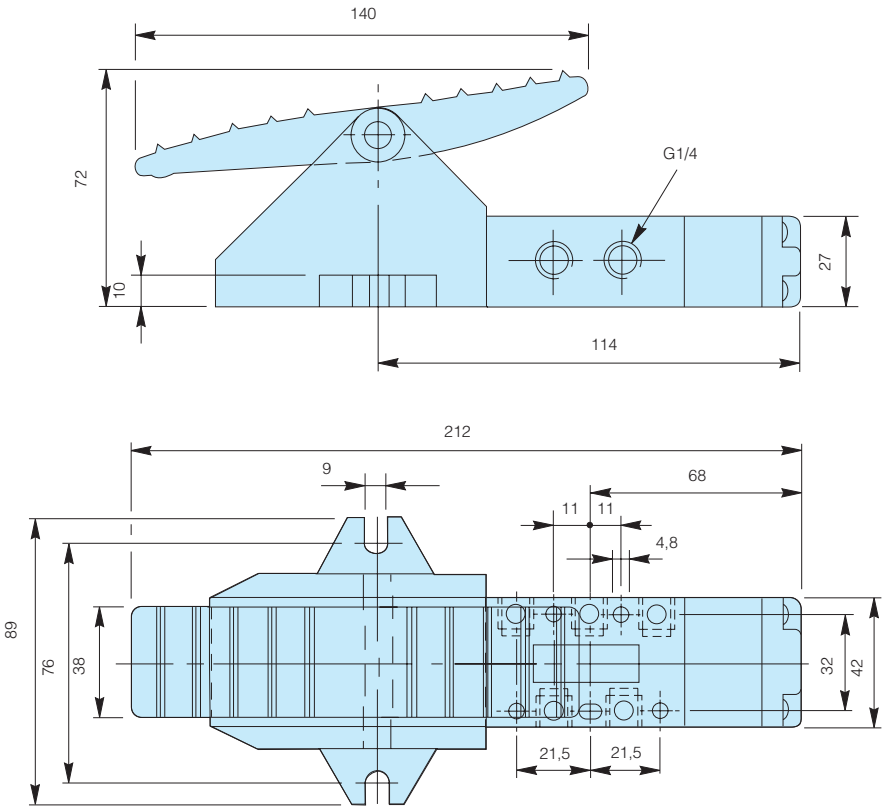
Lever operated





5/3 valve dimensions (mm)

Foot pedal operated spring return



Designed to fit the standard electrical Ø22mm knock out, they can provide dual pneumatic and electrical output signals. A variety of button and switch actuators are available.

- Facia mounted operation
- 3/2 NO or NC
- Modular construction
- Wide range of actuators
- Dual pneumatic an electrical output signal

Flow characteristics

PXB-B3••	Qmax = 60 l/min Qn = 30 l/min
PXB-B4••	Qmax = 240 l/min Qn = 120 l/min
Connections	Ø 4 mm push-in

Operating information

Push button valves - Visual indicators

Working pressure	
PXB-B3••	1 to 9 bar
PXB-B4••	1 to 10 bar
PXV-••	1 to 8 bar
Working temperature	-15°C to +60°C
ATEX approval:	CE Ex II 3 GD

For ATEX specific products contact Sales Office

Spring return push buttons

Symbol	Flow	Order code
	60 l/min	**PXB-B3111BA2**
	240 l/min	**PXB-B4131BA2**

Black - With 1 NC valve

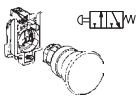
Symbol	Flow	Order code
	60 l/min	**PXB-B3111BA3**
	240 l/min	**PXB-B4131BA3**

Green - With 1 NC valve

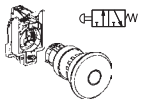
Symbol	Flow	Order code
	60 l/min	**PXB-B3111BA4**
	240 l/min	**PXB-B4131BA4**

Red - With 1 NC valve

Mushroom head push buttons

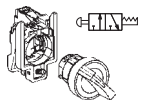
Symbol	Flow	Order code
	60 l/min	**PXB-B3111BC2**
	240 l/min	**PXB-B4131BC2**

Black - Spring return - With 1 NC valve

Symbol	Flow	Order code
	60 l/min	**PXB-B3111BT4**
	240 l/min	**PXB-B4131BT4**

Red - Latching - With 1 NC valve

Selector switches

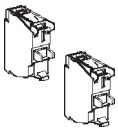
Symbol	Flow	Order code
	60 l/min	**PXB-B3111BD2**
	240 l/min	**PXB-B4131BD2**

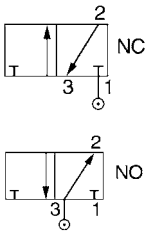
Black - 2 positions - With 1 NC valve

Indicates stocked product.

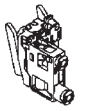
Additional switch valves, electrical contact block and mounting brackets

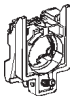
Symbol	Flow	Order code
	60 l/min NC	**PXB-B3911**
	240 l/min NC	**PXB-B4931**
	60 l/min NO	**PXB-B3921**
	240 l/min NO	**PXB-B4931**
	60 l/min NC	**PXB-B3912**
	60 l/min NO	**PXB-B3922**

Contact	Order code
 Normally open NO	**ZBE-101**
Normally closed NC	**ZBE-102**



All PXB-B4 valves can be connected either as normally closed 3/2 valve (NC) or normally open 3/2 valve (NO) as required, by connecting the primary air supply to port 1 or port 3.

Symbol	Flow	Order code
	60 l/min NC	**PXB-B3111B**
	60 l/min NO	**PXB-B3121B**

	Description	Order code
	Mounting block	**ZB4-BZ009**

Spring return push buttons

Spring return

	Colour	Order code
Flush	Black	**ZB4-BA2**
	Green	**ZB4-BA3**
	Red	**ZB4-BA4**

Mushroom head

	Colour	Order code
Ø40 mm spring return	Black	**ZB4-BC2**
	Green	**ZB4-BC3**
	Red	**ZB4-BC4**

Selector switches

Black handle

	Function	Order code
Standard	2 positions fixed	**ZB4-BD2**
	3 positions fixed	**ZB4-BD3**

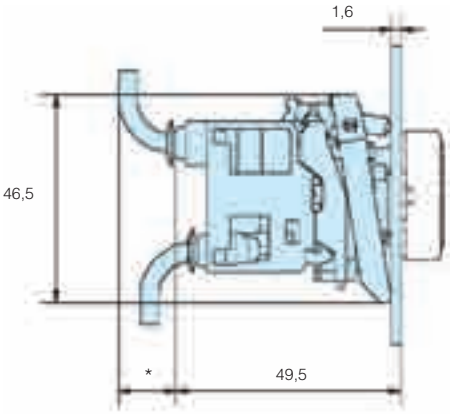
Visual indicators

	Colour actuated	Colour unactuated	Order code
	Green	Black	**PXV-F131**
	Red	Black	**PXV-F141**
	Yellow	Black	**PXV-F151**
	Blue	Black	**PXV-F161**
	White	Black	**PXV-F111**
	Green	Red	**PXV-F1314**

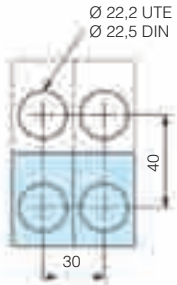
Indicates stocked product.

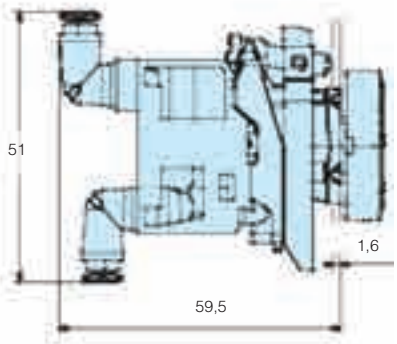
Home

PXB-B3

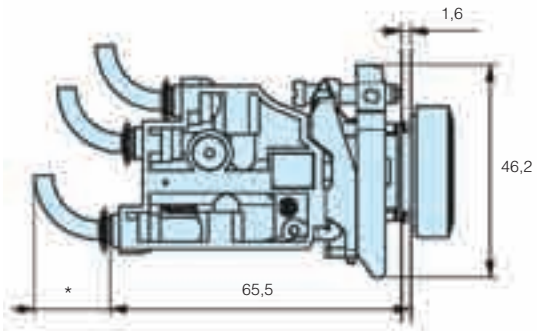


Body width 30mm
* With 2 x 4mm tube = 10
With 2,7 x 4mm tube = 15

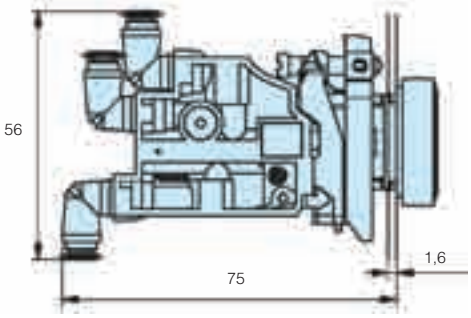




PXB-B4



Body width 30mm
* With 2 x 4mm tube = 10
With 2,7 x 4mm tube = 15



Rugged brass bodies with excellent corrosion resistance make these valves the ideal choice for arduous applications. Large and robust manual actuators are available together with air pilot actuators.

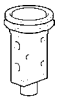
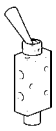
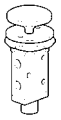
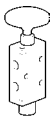
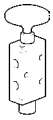
- Rugged valves for heavy duty applications
- Large and robust actuators for easy operation
- Excellent corrosion resistance
- Integral mounting holes
- Panel mounting versions

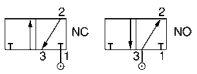
Operating information

Working temperature	-20 °C to +70 °C
Working pressure	Max 10 bar
Flow (Qmax):	380 l/min

For technical information see CD

Push button valves, VA13 Series - G1/8

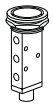
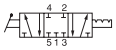
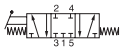
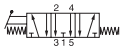
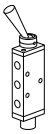
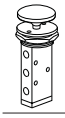
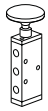
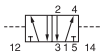
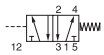
	Symbol	Actuator	Return	Operating force at 6 bar, N	Mounting	Order code
Hand actuated						
		Flush-Push button, red	Spring	32,5	Panel	**VA13-HIS4**
		Flush-Push button, black	Spring	32,5	Panel	**VA13-HIS4A06**
		Hand lever Held in two positions	Hand lever	8	Panel	**VA13-HB24**
		Hand lever Held in two positions	Hand lever	8	Side	**VA13-HB2**
		Button, red Two positions	Button	3	Panel	**VA13-KL24**
		Button, red	Spring	31,5	Panel	**VA13-KS4**
		Button, red Two positions	Button	3	Side	**VA13-KL2**
		Button, red	Spring	31,5	Side	**VA13-KS**
		Button, red Two positions	Knob/ Air signal	6	Side	**VA13-KL2A**



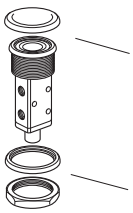
All 3/2 type VA13 valves can be connected either as normally closed 3/2 valve (NC) or normally open 3/2 valve (NO) as required, by connecting the primary air supply to port 1 or port 3

Indicates stocked product.

Push button valves, VA15 Series - G1/8 connection

	Symbol	Actuator	Return	Operating force at 6 bar, N	Mounting	Order code
Hand actuated						
		Flush-Push button, red	Spring	34,5	Panel	**VA15-HIS4**
		Hand lever Held in two positions	Hand lever	9	Panel	**VA15-HB24**
		Hand lever Held in three positions Closed centre position	Hand lever	9	Panel	**VA15-HB34**
		Hand lever Held in three positions Vented centre position	Hand lever	9	Panel	**VA15-XHB34**
		Hand lever Three positions Closed centre position	Hand lever	9	Panel	**VA15-HC4**
		Hand lever Three positions Vented centre position	Hand lever Self centring	9	Panel	**VA15-XHC4**
		Hand lever Held in two positions	Hand lever	9	Side	**VA15-HB2**
		Button, red Two positions	Button	5	Panel	**VA15-KL24**
		Button, red Two positions	Button	5	Side	**VA15-KL2**
		Air signal	Air signal	3/3	Side	**VA15-AA**
		Air signal	Spring	4/-	Side	**VA15-AS**

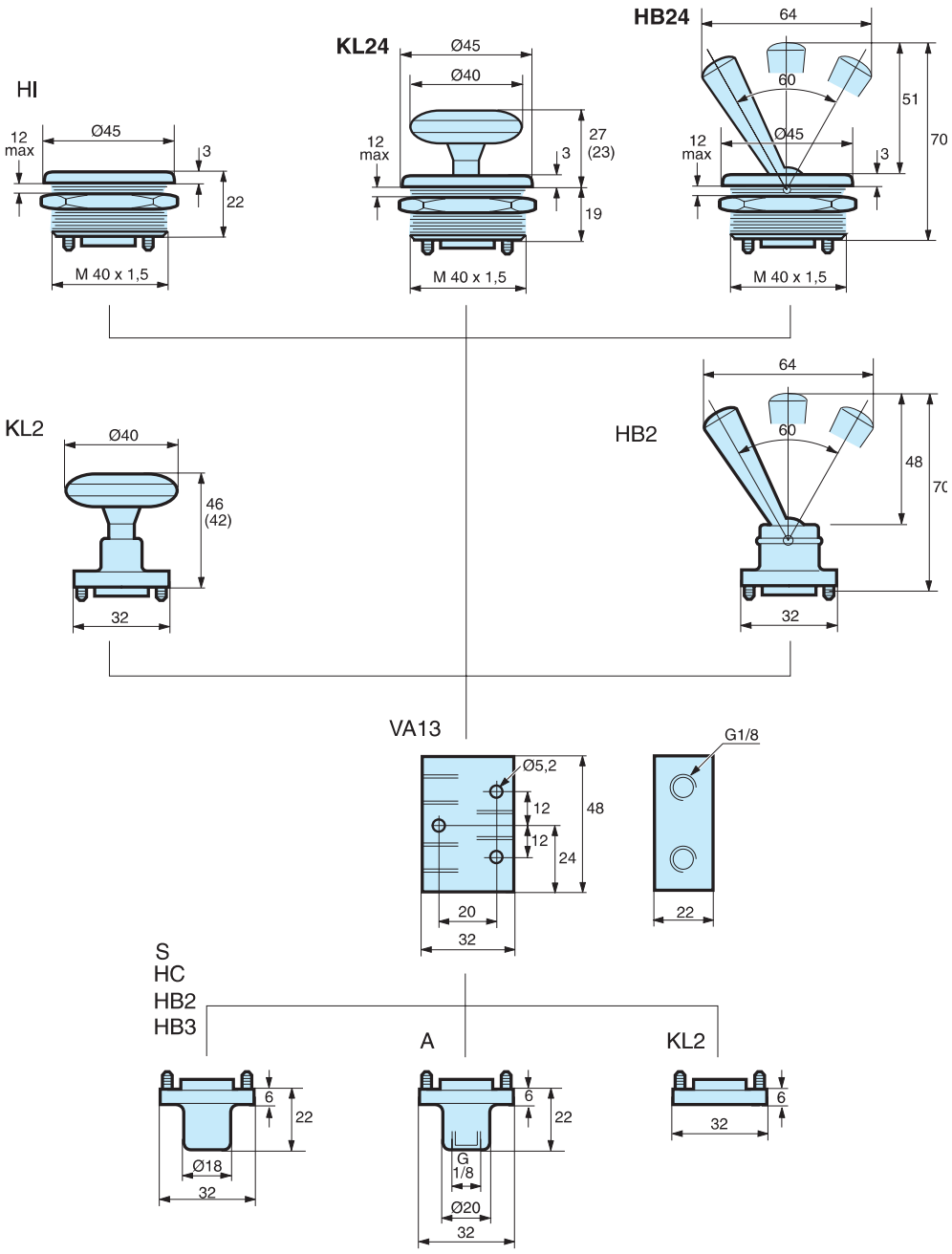
Accessories for VA13/15HI... Series valves



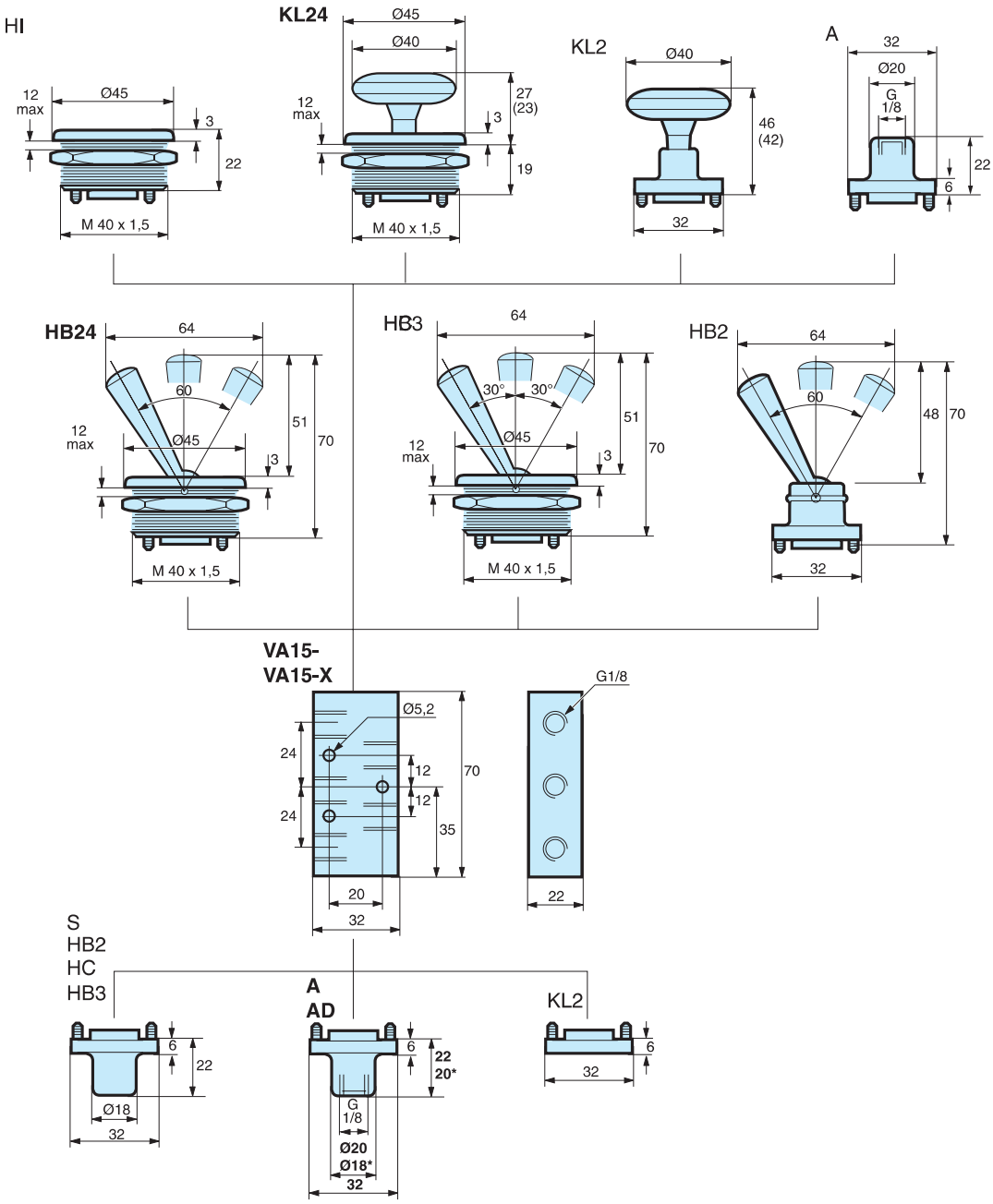
Description	Order code
Diaphragm, black	**9127359331**
Diaphragm, yellow	**9127359332**
Mounting ring	**9127359334**

Indicates stocked product.

Dimensions


HI
12 max
Ø45
3
22
M 40 x 1,5
KL24
Ø45
Ø40
12 max
27 (23)
3
19
M 40 x 1,5
HB24
64
60
51
70
12 max
Ø45
3
M 40 x 1,5
KL2
Ø40
46 (42)
32
HB2
64
60
48
70
32
VA13
Ø5,2
12
12
48
24
20
32
G1/8
22
S
HC
HB2
HB3
6
22
Ø18
32
A
6
22
G 1/8
Ø20
32
KL2
6
32

Dimensions


HI
12 max
Ø45
3
22
M 40 x 1,5
KL24
Ø45
Ø40
12 max
27 (23)
3
19
M 40 x 1,5
KL2
Ø40
46 (42)
32
A
32
Ø20
G 1/8
22
6
HB24
64
60
12 max
Ø45
3
51
70
M 40 x 1,5
HB3
64
30°
30°
51
12 max
Ø45
3
70
M 40 x 1,5
HB2
64
60
48
70
32
VA15-
VA15-X
Ø5,2
24
12
12
24
70
35
20
32
G1/8
22
S
HB2
HC
HB3
6
22
Ø18
32
A
AD
6
22
20*
G 1/8
Ø20
Ø18*
32
KL2
6
32

Compact 3/2 normally closed metal bodied valves with push-in air connections. Designed for the process duty cycle with high durability. Ideal for the process or packaging industry.

- High durability
- Very good repeat accuracy
- Design for process duty cycle
- Push-in connection
- Versatile and easily maintained
- Miniature size

Operating information

Working pressure; PXC-M	3 to 8 bar			
Working temperature	-15 °C to +60 °C			
	PXC-M111	**PXC-M121**	**PXC-M521**	**PXC-M601**
Flow (Qmax):	60 l/min	85 l/min	250 l/min	250 l/min

Bore Ø1,5 mm, flow 60 Nl/min

	Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Steel plunger	Spring	11	**PXC-M111**

Bore Ø1,5 mm, flow 85 Nl/min

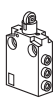
	Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Plastic roller	Spring	4,5	**PXC-M121**
		Steel roller	Spring	4,5	**PXC-M131**

Bore Ø2,5 mm, flow 250 Nl/min

	Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Plastic roller	Spring	7	**PXC-M521**

3/2 compact limit switches - With Ø4mm Push-in connections with pipeable exhaust port

Bore Ø2,5mm, flow 250 Nl/min - With plunger head

	Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Steel plunger	Spring	24	**PXC-M601A110**
		Steel roller plunger	Spring	24	**PXC-M601A102**
		90° Steel roller plunger	Spring	24	**PXC-M601A103**

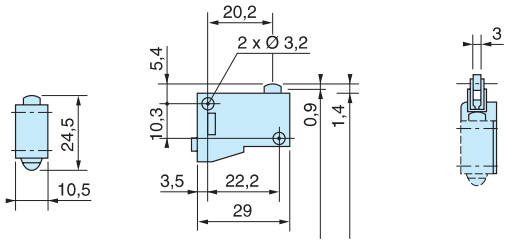
Indicates stocked product.

Dimensions, Limit switches, Series PXC

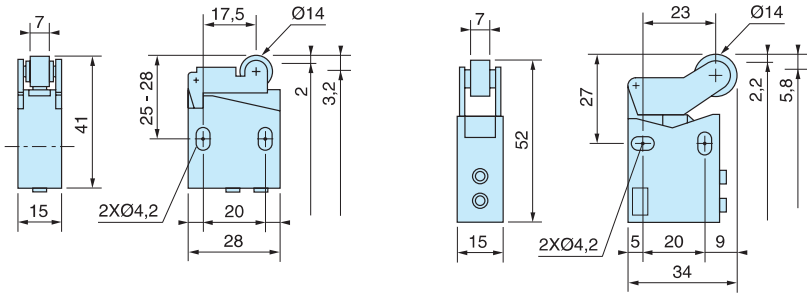
All dimensions in mm unless otherwise stated

3/2 miniature limit switches

PXC-M111 **PXC-Z12** **PXC-Z11**

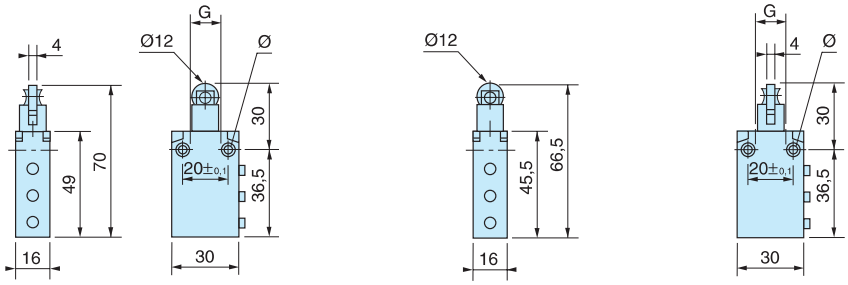


PXC-M121 - PXC-M131 **PXC-M521**

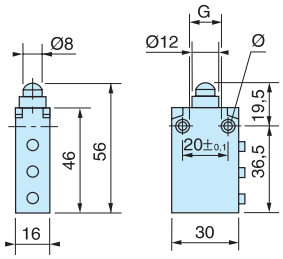


3/2 compact limit switches

PXC-M601A102 **PXC-M601A103**



PXC-M601A110



Logic processing

Miniature high-speed valves in stand alone, stackable or combined modules, incorporating standard logic functions. The range also includes timers and impulse modules.

- Complete range
- Stand alone, stackable or combinable modules
- Very fast response time
- Flexible and highly maintainable system
- DIN rail mounting
- Ø 4mm connection

Operating information

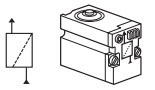
Working pressure	3 to 8 bar
Working temperature	-15 °C to 60 °C
Flow (Qmax)	180 l/min (PRD = 60 l/min)
ATEX approval:	CE Ex II 2 GD c 85°C

For ATEX specific products contact Sales Office

For technical information see CD

Logic sequencer

Step modules

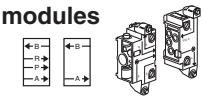


	Order code
Without sub base Pneumatic output	**PSM-A10**
Visual indication of pneumatic output and manual override	**PSM-A12**
With sub base Wihtout manual overide	**PSM-B12**

Step module subbase

	Order code
Subbase	**PSB-A12**
Additional interlock	**PSV-A12**

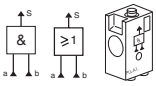
Set of head and tail modules and deviation modules



	Order code
Head & tail set	**PSE-A12**
Deviation standard	**PSD-A12**
Deviation for remote	**PSD-B12**

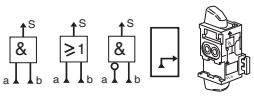
Logic elements

Line mounted elements



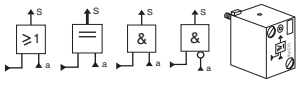
Logic Function	Order code
AND	**PLL-A11**
OR	**PLK-A11**
Clip on Din-rail	**PZM-L199**

Combinable elements



Logic Function	Order code
AND	**PLL-B12**
OR	**PLK-B12**
NOT	**PLN-B12**
INPUT	**PLE-B12**

Subbase mounted elements



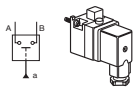
Logic Function	Order code
AND	**PLL-C10**
NOT inhibit standard	**PLN-C10**
NOT inhibit threshold	**PLN-D10**
OR	**PLK-C10**
YES regenerated	**PLJ-C10**

3 port subbase to be ordered separately.

Logic relays

Pressure switch

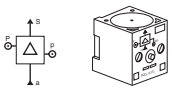
To be used with 3 port subbase



	Order code
With subbase	**PRE-A12**
Without subbase	**PRE-A10**

Amplifier relays

To be used with 4 port subbase



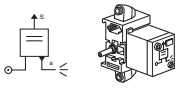
	Order code
With subbase	**PRD-A12**
Without subbase	**PRD-A10**

Memory relays

To be used with 4 port subbase

	Order code
With subbase	**PLM-A12**
Without subbase	**PLM-A10**

Sensor relays



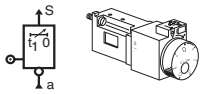
	Order code
With subbase	**PRF-A12**
Without subbase	**PRF-A10**

Indicates stocked product.

Home

Time delay relays

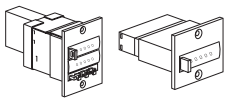
To be mounted on 3 port subbase



Function	Timing	Order code
Output after timed period	0,1 to 3s	**PRT-E10**
	0,1 to 30s	**PRT-A10**
	10 to 180s	**PRT-B10**
With subbase	0,1 to 30s	**PRT-A12**
Output during timed period	0,1 to 3s	**PRT-F10**
	0,1 to 30s	**PRT-C10**
	10 to 180s	**PRT-D10**

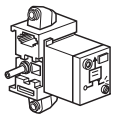
Impulse counters

Flush mounting
Pneumatic or manual reset



	Order code
*Surface mounting	**PCT-A11**
*Flush mounting	**PCT-B11**
Surface mounting	**PCP-A11**

* Totalising counters

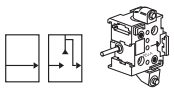


Not elements

Description	Order code
PLNC10 on PZUA12 subbase	**PLN-C12**
PLND10 on PZUA12 subbase	**PLN-D12**

Subbase for logic elements and relays

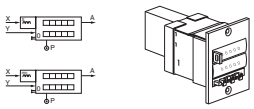
3 port and 4 port subbases



	Order code
Input module	**PZU-E12**
3 port "common input"	**PZU-A12**
3 port "cascade"	**PZU-C12**
port subbases	**PZU-B12**

* For combination with memory relay and amplified relay.

Timers with calibrated dial



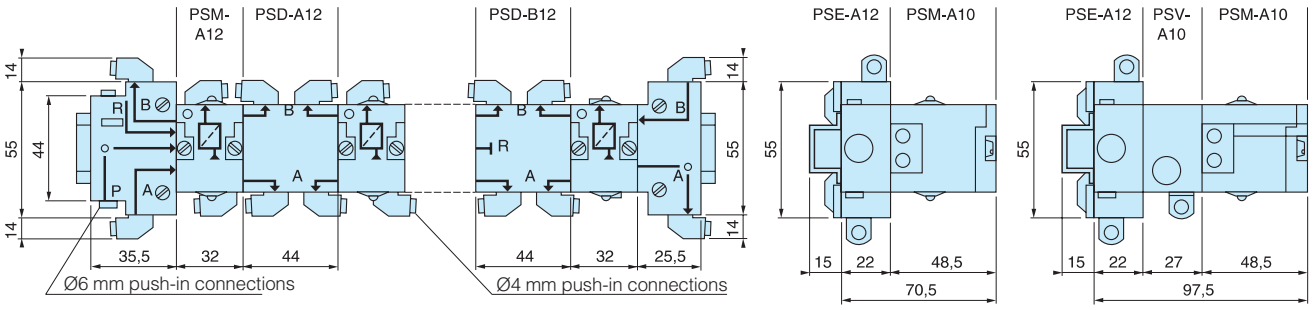
Time base	Time range	Order code
1 second	1 second to 27 hours	**PCM-A11**
1 minute	1 minute to 69 days	**PCM-B11**
2 minutes	3 to 100 seconds	**PCM-C11**
2 minutes	3 to 10 minutes	**PCM-D11**
2 minutes	3 to 100 minutes	**PCM-E11**

Indicates stocked product.

Home

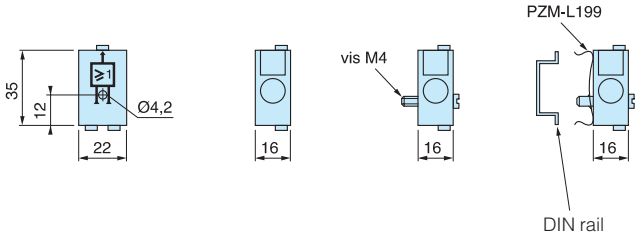
Dimensions, Logic processing

Modular sequencer



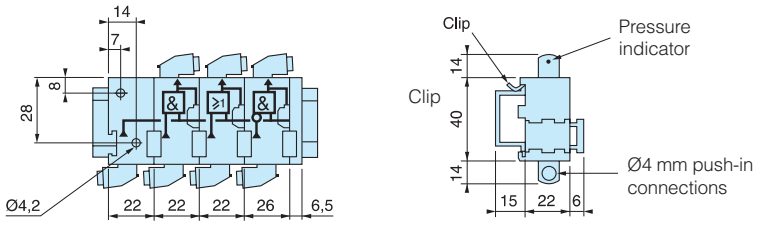
Line mounted logic elements

PLL-A11 and PLK-A11



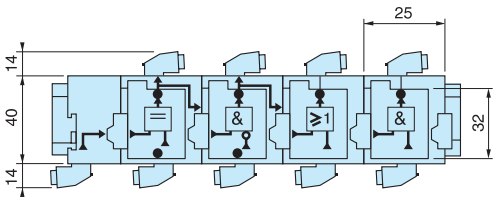
Combinable logic elements

PLE-B12 — PLL-B12 — PLK-B12 and PLN-B12

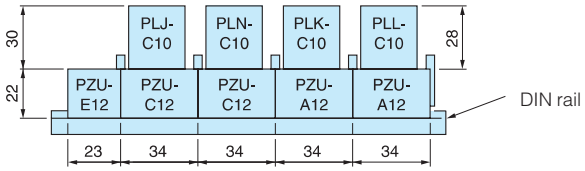


Logic elements mounted on 3-port modular subbases

PZU-E12

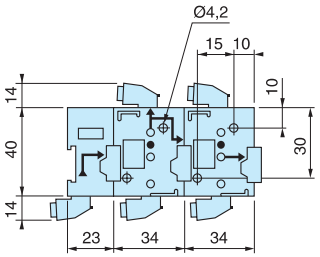


PLJ-C10 — PLN-C10 — PLK-C10 and PLL-C10 mounted on PZU-C12 and PZU-A12

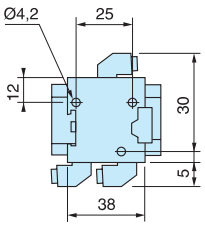


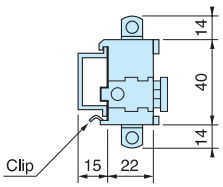
3 and 4-port modular subbases

PZU-E12 — PZU-C12 — PZU-A12



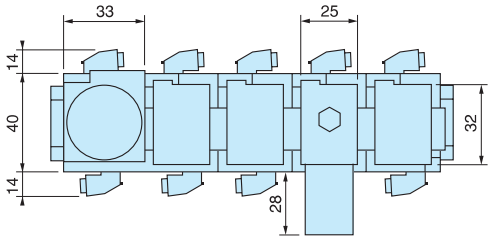
PZU-B12

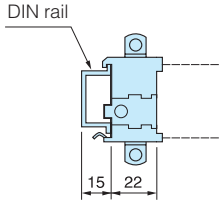


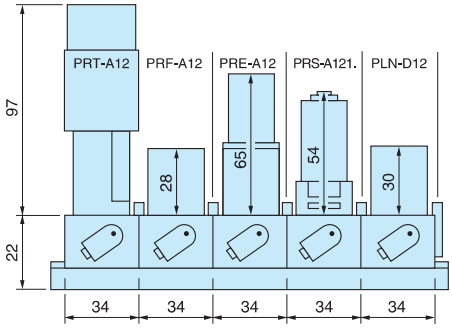


Relays mounted on 3-port modular subbases

PRT-A12 — PRF-A12 — PRE-A12 — PRS-A121 and PLN-D12

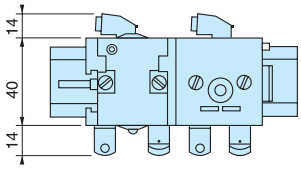


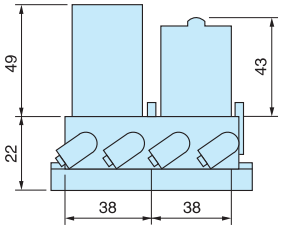




Relays mounted on 4-port modular subbases

PLM-A12 and PRD-A12

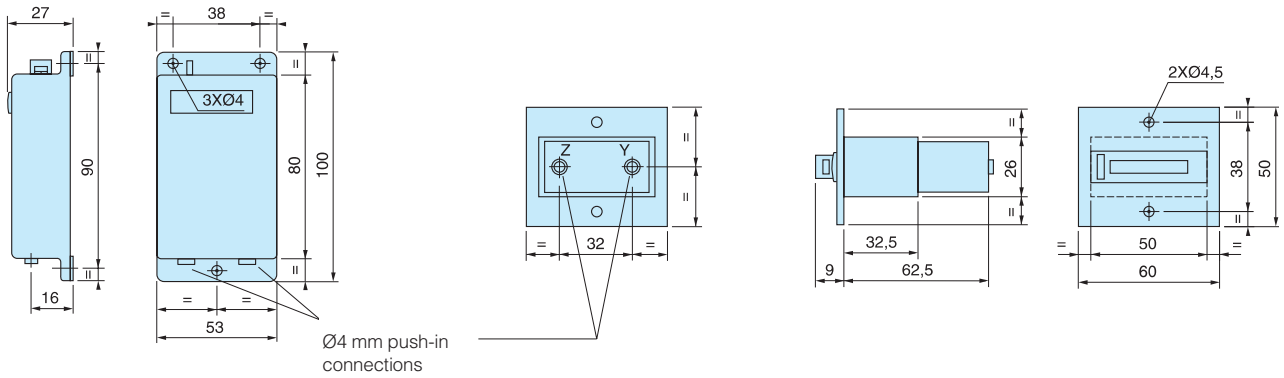




Logic processing

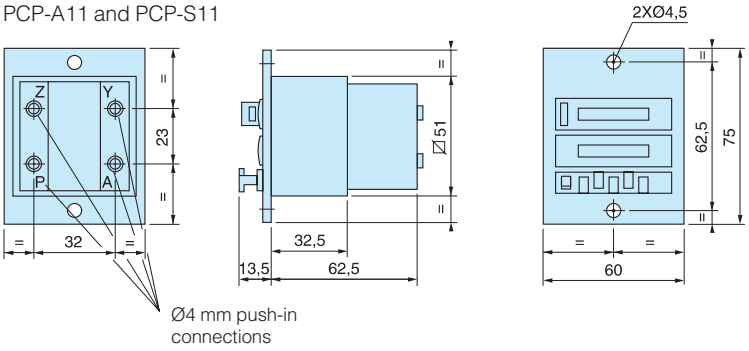
Totalising counters

PCT-A11 PCT-B11



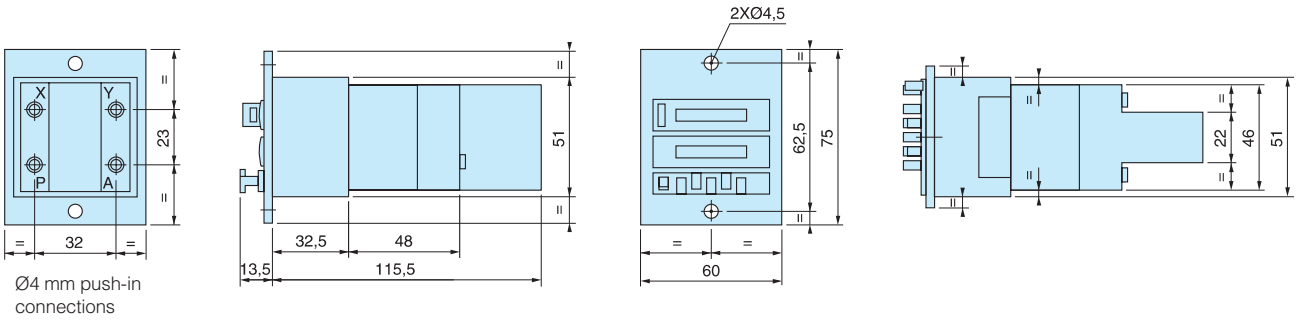
Preselection counters

PCP-A11 and PCP-S11



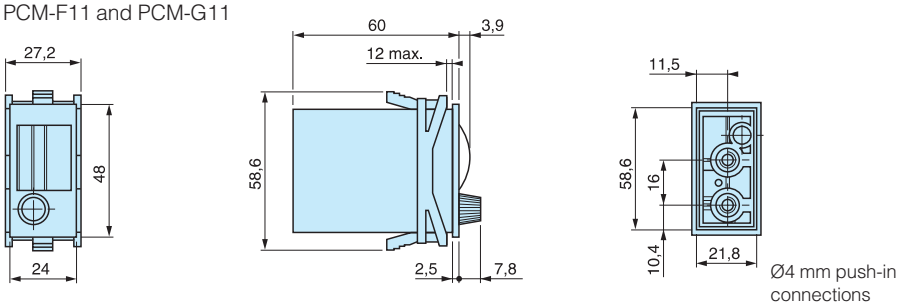
Digital display timers

PCM-A11 and PCM-B11



Timers with calibrated dial

PCM-F11 and PCM-G11



High flow shut off valves for isolating downstream equipment. Air pilot or solenoid actuated versions available.

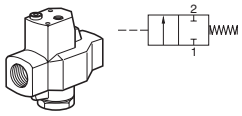
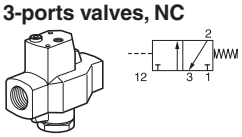
- In line installation
- High flow
- Internal supply for signal air
- Suitable as main shut-off or as power valve for cylinder and air motor
- Optional low-pressure hydraulic version

Operating information

	VE22/23	VE42/43	VE82/83
Working pressure	Max 10 bar	Max 10 bar	Max 10 bar
Working temperature	-10 °C to +70 °C		
Flow, C=	5,4 l/s, bar	20,3 l/s, bar	52 l/s, bar
(acc. to ISO 6358)	(b=0,4)	(b=0,4)	(b=0,35)
Qn=	24,5 l/s	92 l/s	228 l/s
Qmax=	37,8 l/s	142,1 l/s	364 l/s
Signal pressure at 6 bar	Min 3,5 bar	Min 3,5 bar	Min 3 bar

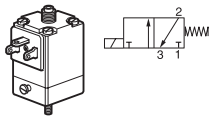
Port 3 must not be plugged or pressurised
Prelubricated, further lubrication is not normally necessary
If additional lubrication is introduced it must be continued

Airline Isolator Valves, VE22-83 series

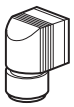
Type	Symbol	Actuator	Return	Operating pressure, at 6 bar	Port size	Order code
2-port valves, NC		Air pilot	Spring	3,5	G1/4	**VE22-A-S-5***
						VE22-A-S-5-BOO
		Air pilot	Spring	3,5	G1/2	**VE42-A-S-5***
						VE42-A-S-5-BOO
		Air pilot	Spring	3,5	G1	**VE82-A-S-5***
						VE82-A-S-5-BOO
3-ports valves, NC		Air pilot	Spring	3,5	G1/4	**VE23-A-S-5***
		Air pilot	Spring	3,5	G1/2	**VE43-A-S-5***
		Air pilot	Spring	3,5	G1	**VE83-A-S-5***

* For electrically actuated, please order 1 pcs adaptor set, 1 pcs solenoid VE13 and 1 pcs cable connector

Solenoid 32mm form A without cable plug

NC	Voltage	Order code
VE13, Standard power, With manual override		
	24 VDC	**VE13-ESC042C2**
	24 VAC 50Hz	**VE13-ESC044C2**
	110 VAC 50Hz	**VE13-ESC044E2**
	220 VAC 50Hz	**VE13-ESC044H2**
	240 VAC 50Hz	**VE13-ESC044K2**

Cable plug, suitable for VE13

	Description	Order code
	24V, LED+Diode	**9125998004**
	24V AC/DC, LED+VDR	**9125998006**
	110V AC/DC, LED+VDR	**9125998008**
	240V AC/DC, LED+VDR	**9125998010**
	Black	**9125998011**

Adaptor set for VE13-ES

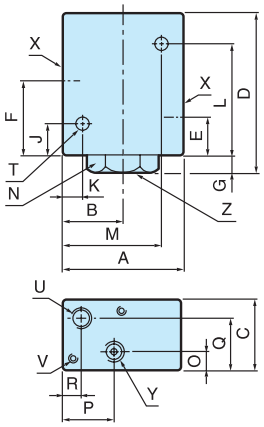
	Order code
	4145064590

Indicates stocked product.

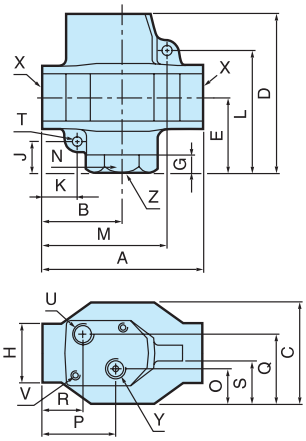
Home

Dimensions, Airline Isolator Valves

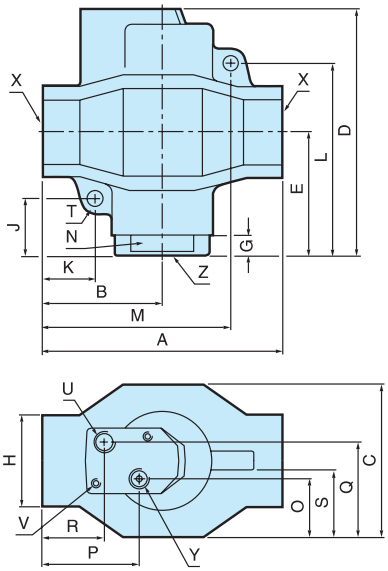
VE22/VE23



VE42/VE43



VE82/VE83



Type	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S
VE22/VE23	60	30	35	82,5	21	36	6	-	14	10	54	50	30	9,0	26,0	26,0	9,0	-
VE42/43	82	41	50	88,8	40	-	8	30	17	18	63	64	30	16,5	38,5	33,5	21,5	21,0
VE82/VE83	120	60	75	133,3	60	-	10	45	26	26	94	94	45	29,0	46,5	46,0	29,5	32,5

Type	T	U	V	X	Y	Z
VE22/VE23	6,5	G1/8	M4	G1/4	G1/8	G1/4
VE42/43	6,5	G1/8	M4	G1/2	G1/8	G1/2
VE82/VE83	8,5	G1/8	M4	G1	G1/8	G1

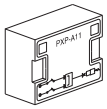
Ergonomically designed units to provide protection against accidental operation of machines. Completely sealed units prevent tampering and comply with latest European safety standards.

- Ergonomic design
- Robust polymer or metal enclosure
- Meets requirements for protection against accidental operation and tampering
- Metal enclosure features a wrist-rest bar which helps prevent illness due to repetitive actions
- Conforms to EN574 and EN954-1 requirements

Operating information

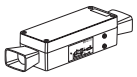
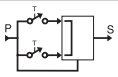
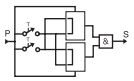
Working pressure	3 to 8 bar
Working temperature	-5 °C to +60 °C
For technical information see CD	

Control module only

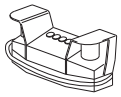
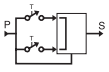
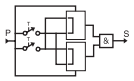
	Symbol	Connections	Order code
		Ø4 mm Push-in	**PXP-A11**

Complete units

Polymer enclosure, with two Ø40 mm push button with protective guards and control module

	Symbol	Connections	Number of control modules	Order code
		Ø4 mm Push-in	1	**PXP-C111**
		Ø4 mm Push-in	2	**PXP-D121**

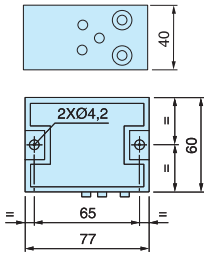
Metal enclosure, with two Ø60 push buttons, wrist restbar, built in protective guard and control module

	Symbol	Connections	Number of control modules	Order code
		Push-in Ø6 mm for supply Ø4 mm for output	1	**PXP-S111**
		Push-in Ø6 mm for supply Ø4 mm for output	2	**PXP-S121**

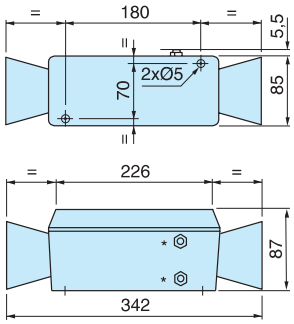
Indicates stocked product.

Dimensions

PXP-A11

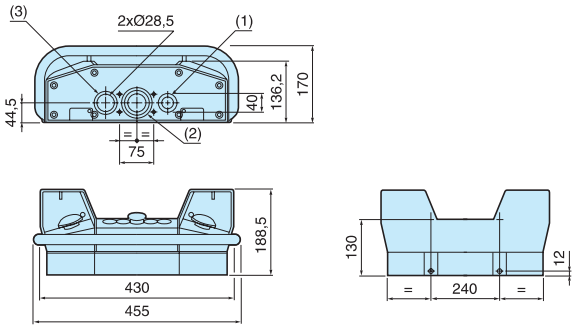


PXP-C111 and PXP-D121



* Ø4 mm push-in connections
** Ø6 mm push-in connections

PXP-S111 and PXP-S121



Air Preparation and Control Accessories

Moduflex FRLs

The Moduflex modular air preparation system is constructed out of aluminium providing the advantages of both lightweight and strength.

Combinations may be assembled quickly and easily, the individual units combine face to face with no intermediate block and .....
No increase in overall dimension.

The unique 'Cliplok' fastener enables combinations of units to be built in a fraction of the time taken by more traditional systems.

Body ported as standard with alternative port sizes via optional port blocks.

'Cliploks' locate and fix units in combination, allowing easy removal for servicing with no width penalty.

Manual, semi-automatic and fully automatic drain options are available, recessed into the base plate for extra safety & protection from damage.

The unique one piece body design overcomes the need for a separate bowl, large sight slots are provided as standard.

Filter

Moduflex Series standard Filter units feature 5 micron elements as standard with a 40 micron option.

Options include Coalescing units for the removal of oil and water aerosols and Adsorber units with activated carbon elements for the removal of hydrocarbon vapours.

Regulator

The Moduflex Series Regulators feature precise control with low hysteresis.

The rolling diaphragms also provide longer service life than flat diaphragm designs.

An optional version of the regulator may be Manifold Mounted for common inlet installations, providing any number of subsidiary p2 pressures.

Lubricator

The Moduflex Series Lubricators provide constant, controlled lubrication to down stream equipment, increasing service life and reducing down time.

Moduflex Series Oil Mist type lubricators offer up to twice the oil capacity than traditional designs.

Filter/Regulator

Moduflex Series Filter-Regulators combine precise control with precise control with the advantages of integral filtration.

The ideal solution to space saving in combined installations.

Optional tamperproof kit for Regulators and Filter/ Regulators

Home

Soft Start Valves

Moduflex Series Combined Soft Start/Dump Valves, provide for the safe introduction of pressure to machines or systems.

Soft Start/Dump Valves when set, allow the pressure to gradually build to the set point before fully opening to deliver full flow at line pressure.

Dump Valves

Moduflex Series Dump Valves enable the depressurisation of downstream air in the event of an emergency or system failure. They are provided with high visibility large red striker knobs and vent through the exhaust port.

Moduflex Series Dump Valves may be used as stand alone units or assembled into Moduflex combination units.

Ball Valves

Moduflex Series Ball Valves provide shut off line pressure with non-sticking 90° turn handle locking versions to prevent unauthorised adjustment. When the inlet pressure is turned off the downstream vent through the exhaust port.

'Cliplock System'

The unique 'Cliplok' allows units to be pipe connected together, without the use of connectors, saving space whilst providing constant mounting centres.

For wall mounting 'Cliploks' with integral wall brackets are available. They are assembled in exactly the same way and are locked in position with a sliding clip. Wall mounted 'Cliploks' cab be left attached to the wall and the unit will slide off, once the sliding clips have been lifted.

Optional Port Block Kits

To change port sizes a selection of Port Block Kits which are attached to any unit with 'Cliplok' system. Allows assemblies to be removed from a hard piped system.

Rear Entry Connector Kits

The Rear Entry Connector is available in G1/2. port size and enables single units or combinations to be mounted on a bulkhead with the air connections made from the rear.

'Cliploks' locate and fix units in combination, allowing easy removal for servicing with no width penalty.

Off the Shelf Air Preparation

- Boxed set combinations available
- Air service sets with mounting brackets and pressure gauge
- High efficiency water and particle removal
- Rolling diaphragm for extended life
- No tools for servicing
- Easy to service filter cartridge

ATEX approval:
CE Ex II 3 GD

Safety norms:
ISO 4414 EN 983

Body ported as standard with a choice of BSPP, BSPT and NPT threadforms

Manual, semi-auto and automatic drain options are available.

Large sights provided as standard

Standard filter units feature 5 micron element.

Condensate bowl

One hand operation for easy servicing, no small easily lost part to worry about.

Moduflex Series Filter Elements

Moduflex Series standard Filter units feature 5 micron elements as standard.

Options include Coalescing units for the removal of oil and water aerosols and Adsorber units with activated carbon elements for the removal of hydrocarbon vapours.

The unique one piece body design overcomes the need for a separate bowl. Featuring an easy to use 1/8 turn base plate for filter element removal with positive latch to ensure correct and safe refitting.

The element cartridge is a snap fit, one piece cartridge assembly which is easy to remove and replace for servicing, no tools required.

Filter + Regulator + Lubricator

Port size	Description	P3H Series	P3K Series	P3M Series
1/4	Manual drain	P3HCB12SEMNGLMB		
1/4	Semi auto drain	P3HCB12SESNGLMB		
1/2	Manual drain		P3KCB14SEMNGLMB	
1/2	Semi auto drain		P3KCB14SESNGLMB	
1/2	Auto drain		P3KCB14SEANGLMB	
3/4	Manual drain			P3MCB16SEMNGLMB
3/4	Auto drain			P3MCB16SEANGLMB
1"	Manual drain			P3MCB18SEMNGLMB
1"	Auto drain			P3MCB18SEANGLMB

Ball Valve + Filter/Regulator

Port size	Description	P3H Series	P3K Series	P3M Series
1/4	Manual drain	P3HAN12SEMNGB		
1/4	Semi auto drain	P3HAN12SESNGB		
1/2	Manual drain		P3KAN14SEMNGB	
1/2	Semi auto drain		P3KAN14SESNGB	
1/2	Auto drain		P3KAN14SEANGB	
3/4	Manual drain			P3MAN16SEMNGB
3/4	Auto drain			P3MAN16SEANGB
1"	Manual drain			P3MAN18SEMNGB
1"	Auto drain			P3MAN18SEANGB

Ball Valve + Filter/Regulator + Lubricator

Port size	Description	P3H Series	P3K Series	P3M Series
1/4	Manual drain	P3HAA12SEMNGLMB		
1/4	Semi auto drain	P3HAA12SESNGLMB		
1/2	Manual drain		P3KAA14SEMNGLMB	
1/2	Semi auto drain		P3KAA14SESNGLMB	
1/2	Auto drain		P3KAA14SEANGLMB	
3/4	Manual drain			P3MAA16SEMNGLMB
3/4	Auto drain			P3MAA16SEANGLMB
1"	Manual drain			P3MAA18SEMNGLMB
1"	Auto drain			P3MAA18SEANGLMB

Filter/Regulator + Lubricator

Port size	Description	P3H Series	P3K Series	P3M Series
1/4	Manual drain	P3HCA12SEMNGLMB		
1/4	Semi auto drain	P3HCA12SESNGLMB		
1/2	Manual drain		P3KCA14SEMNGLMB	
1/2	Semi auto drain		P3KCA14SESNGLMB	
1/2	Auto drain		P3KCA14SEANGLMB	
3/4	Manual drain			P3MCA16SEMNGLMB
3/4	Auto drain			P3MCA16SEANGLMB
1"	Manual drain			P3MCA18SEMNGLMB
1"	Auto drain			P3MCA18SEANGLMB

All combination sets include: pressure gauge and mounting brackets.
Other combinations available on request.

Standard Filter

- Integral 1/8, 1/4, 3/8, 1/2, 3/4 or 1" ports (BSPP & NPT)
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No small easily lost parts
- No tools required for servicing

Operating Information

Flow:

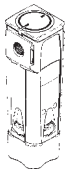
P3H Series		P3K Series		P3M Series		
1/8	1/4	3/8	1/2	1/2	3/4	1"
15 l/s	18 l/s	45 l/s	50 l/s	80 l/s	101 l/s	105 l/s

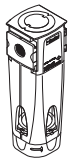
Flow with 6.3 bar inlet and 0.5 bar pressure drop.

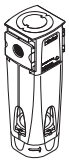
Working pressure:	Max 17 bar
Working temperature:	-20 to +80 °C
ATEX approval:	CE Ex II 3 GD

For ATEX specific products contact Sales Office

Filters - 5 micron element







Port size	Description	Order code		
		P3H Series	P3K Series	P3M Series
1/8	Manual drain	P3HFA11ESMN		
1/8	Semi auto drain	P3HFA11ESSN		
1/4	Manual drain	P3HFA12ESMN		
1/4	Semi auto drain	P3HFA12ESSN		
3/8	Manual drain		P3KFA13ESMN	
3/8	Semi auto drain		P3KFA13ESSN	
3/8	Auto drain		P3KFA13ESAN	
1/2	Manual drain		P3KFA14ESMN	P3MFA14ESMN
1/2	Semi auto drain		P3KFA14ESSN	
1/2	Auto drain		P3KFA14ESAN	P3MFA14ESAN
3/4	Manual drain			P3MFA16ESMN
3/4	Auto drain			P3MFA16ESAN
1"	Manual drain			P3MFA18ESMN
1"	Auto drain			P3MFA18ESAN

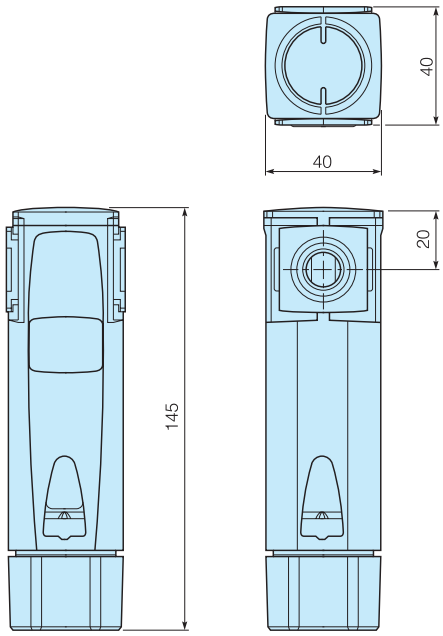
Service kits

Description	Order code		
	P3H Series	P3K Series	P3M Series
5 micron element kit	P3HKA00ESE	P3KKA00ESE	P3MKA00ESE
Sight glass & manual drain kit	P3HKA00BSM	P3KKA00BSM	P3MKA00BSM
Sight glass & semi-auto drain kit	P3HKA00BSS	P3KKA00BSS	P3MKA00BSS
Sight glass & auto drain kit		P3KKA00BSA	P3MKA00BSA

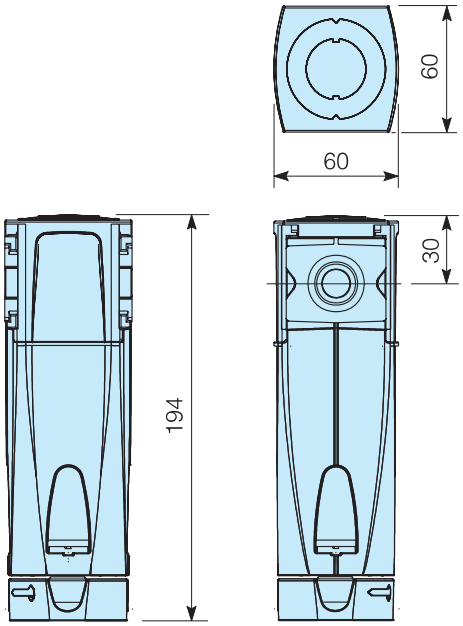
Material Specification

Body:	Aluminium
Sight glass:	Technopolymer
Body cover:	Polyester
Element:	Sintered polypropylene
Elastomers:	Nitrile NBR
Bayonet support:	Nylon
Drain:	Acetal

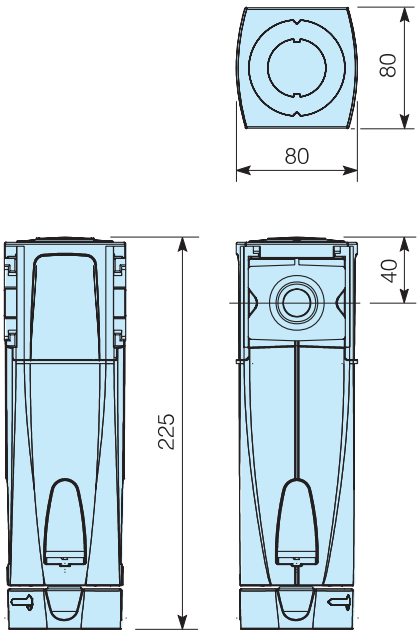
P3H - Dimensions (mm)



P3K - Dimensions (mm)



P3M - Dimensions (mm)



Coalescing Filters

- Integral 1/8, 1/4, 3/8, 1/2, 3/4 or 1" ports (BSPP & NPT)
- Removes liquid aerosols and sub micron particles
- Oil free air for critical applications, such as air gauging, pneumatic instrumentation and control
- 0.01µm element as standard (coalescer)
- Differential Pressure Indicator (DPI) as standard on Coalescing Filters
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No tools required for servicing

Note: To optimise the life of coalescing element, it is advisable to install a P3KFA / P3M FA pre-filter with a 5 micron element upstream of the coalescing filter.

Operating Information

Flow:

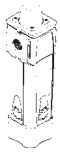
P3H Series		P3K Series		P3M Series		
1/8	**1/4**	**3/8**	**1/2**	**1/2**	**3/4**	**1”**
3.5 l/s	4 l/s	15 l/s	16 l/s	44 l/s	57 l/s	58 l/s

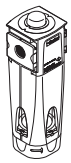
Flow with 6.3 bar inlet and 0.2 bar pressure drop.

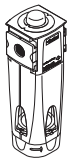
Working pressure:	Max 17 bar
Working temperature:	-20 to +66 °C
ATEX approval:	CE Ex II 3 GD

For ATEX specific products contact Sales Office

Coalescing Filters - 0.01 micron element







Port size	Description	Order code		
		P3H Series	P3K Series	P3M Series
1/8	Manual drain	**P3HFA11DSMN**		
1/8	Semi auto drain	**P3HFA11DSSN**		
1/4	Manual drain	**P3HFA12DSMN**		
1/4	Semi auto drain	**P3HFA12DSSN**		
3/8	Manual drain		**P3KFA13DSMN**	
3/8	Auto drain		**P3KFA13DSAN**	
1/2	Manual drain		**P3KFA14DSMN**	**P3MFA14DSMN**
1/2	Auto drain		**P3KFA14DSAN**	**P3MFA14DSAN**
3/4	Manual drain			**P3MFA16DSMN**
3/4	Auto drain			**P3MFA16DSAN**
1"	Manual drain			**P3MFA18DSMN**
1"	Auto drain			**P3MFA18DSAN**

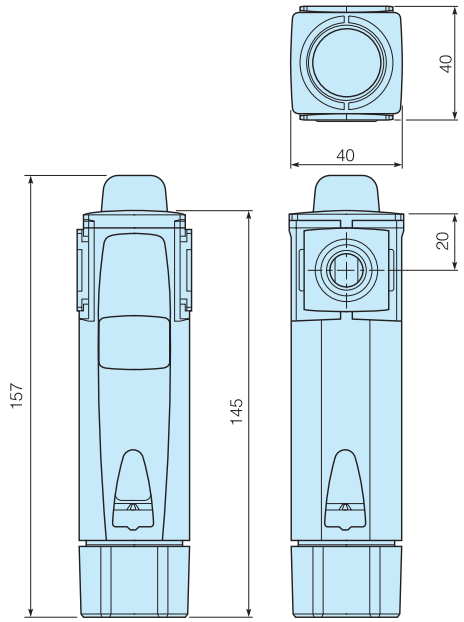
Service kits

Description	Order code		
	P3H Series	P3K Series	P3M Series
0.01 micron coalescing element kit	P3HKA00ESC	P3KKA00ESC	P3MKA00ESC
Sight glass & manual drain kit	P3HKA00BSM	P3KKA00BSM	P3MKA00BSM
Sight glass & semi-auto drain kit	P3HKA00BSS	P3KKA00BSS	P3MKA00BSS
Sight glass & auto drain kit		P3KKA00BSA	P3MKA00BSA
Differential pressure indicator kit	P3HKA00RQ	P3KKA00RQ	P3MKA00RQ

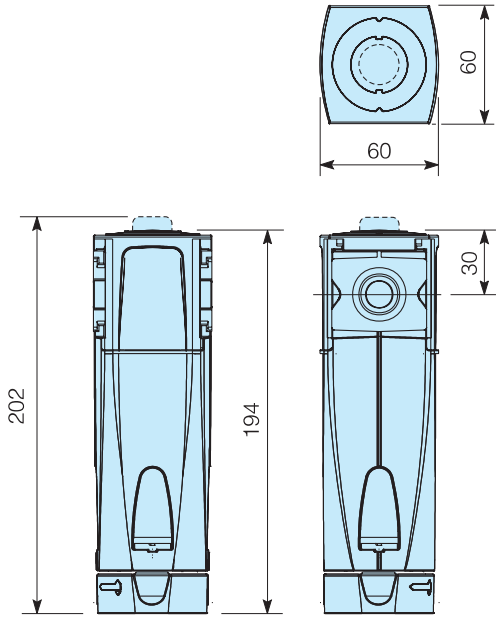
Material Specification

Body:	Aluminium		
Sight glass:	Technopolymer		
Filter cover:	Polyester		
Coalescing Element:	Borosilicate & felt glass fibres		
Elastomers:	Nitrile NBR		
Bayonet support:	**P3H**	**P3K**	**P3M**
	Nylon	Acetal	Nylon
Drain:	Acetal		

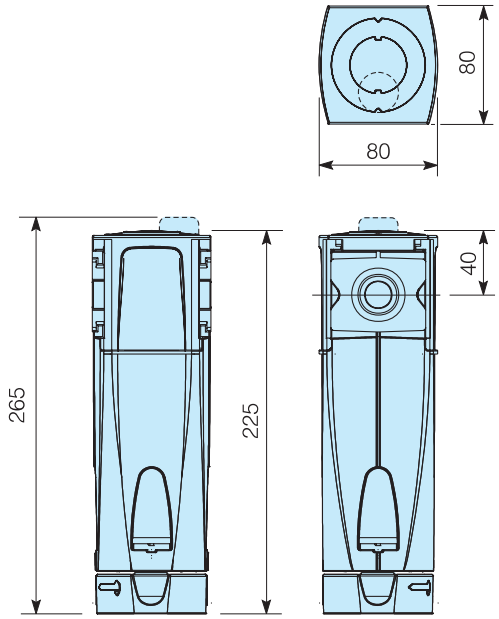
P3H - Dimensions (mm)



P3K - Dimensions (mm)



P3M - Dimensions (mm)



Adsorber Filters

- Integral 1/8, 1/4, 3/8, 1/2, 3/4 or 1" ports (BSPP & NPT)
- Adsorbing activated carbon element removes oil vapours and most hydrocarbons.
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No tools required for servicing

Operating Information

Flow:

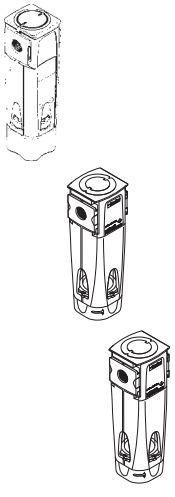
P3H Series		P3K Series		P3M Series		
1/8	1/4	3/8	1/2	1/2	3/4	1”
6 l/s	8 l/s	21 l/s	28 l/s	37 l/s	41 l/s	42 l/s

Flow with 6.3 bar inlet and 0.2 bar pressure drop.

Working pressure:	Max 17 bar
Working temperature:	-20 to +50 °C
ATEX approval:	CE Ex II 3 GD

For ATEX specific products contact Sales Office

Adsorber Filters - activated charcoal element



Port size	Description	Order code		
		P3H Series	P3K Series	P3M Series
1/8	Manual drain	**P3HFA11ASMN**		
1/4	Manual drain	**P3HFA12ASMN**		
3/8	Manual drain		**P3KFA13ASMN**	
1/2	Manual drain		**P3KFA14ASMN**	**P3MFA14ASMN**
3/4	Manual drain			**P3MFA16ASMN**
1"	Manual drain			**P3MFA18ASMN**

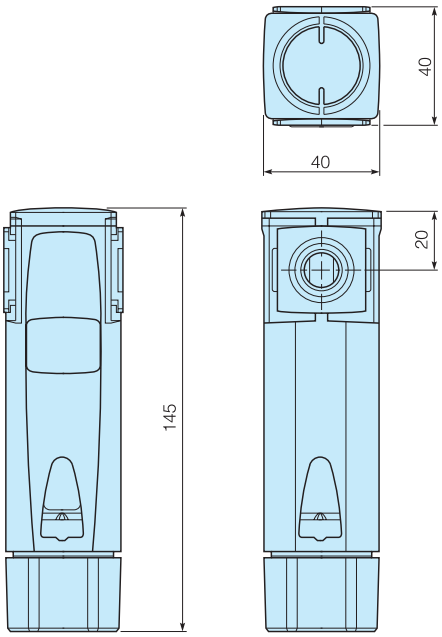
Service kits

Description	Order code		
	P2H Series	P3K Series	P3M Series
Adsorber element kit	P3HKA00ESA	P3KKA00ESA	P3MKA00ESA
Sight glass & manual drain kit	P3HKA00BSM	P3KKA00BSM	P3MKA00BSM
Sight glass & semi-auto drain kit	P3HKA00BSS	P3KKA00BSS	P3MKA00BSS
Sight glass & auto drain kit		P3KKA00BSA	P3MKA00BSA
Differential pressure indicator kit	P3HKA00RQ	P3KKA00RQ	P3MKA00RQ

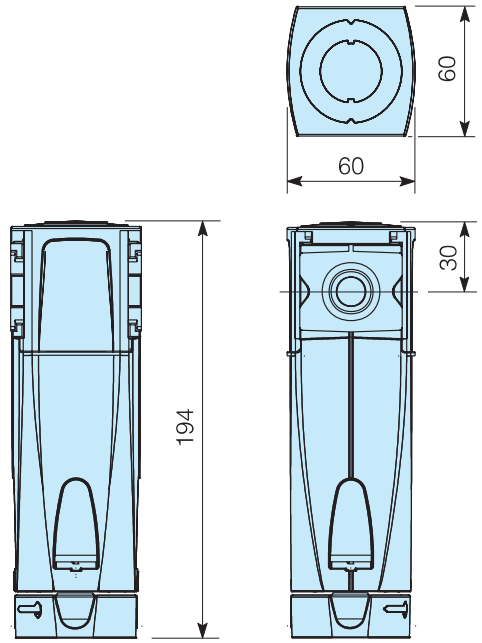
Material Specification

Body:	Aluminium		
Sight glass:	Technopolymer		
Filter cover:	Polyester		
Adsorber Element:	Activated charcoal		
Elastomers:	Nitrile NBR		
Bayonet support:	**P3H**	**P3K**	**P3M**
	Nylon	Acetal	Nylon
Drain:	Acetal		

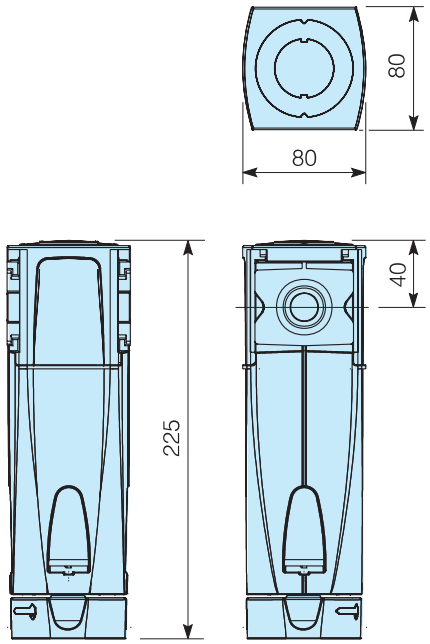
P3H - Dimensions (mm)



P3K - Dimensions (mm)



P3M - Dimensions (mm)



Regulators

- Integral 1/8, 1/4, 3/8, 1/2, 3/4 or 1" ports (BSPP & NPT)
- Robust but lightweight aluminium construction
- Secondary pressure ranges 2, 4, 8 & 16 bar
- Rolling diaphragm for extended life
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Padlockable tamperproof kit
- Relieving & Non-relieving types
- Removable non-rising knob for panel mounting and tamper resistance.

Operating Information

Flow:

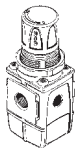
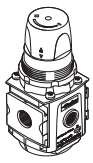
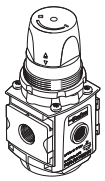
P3H Series		P3K Series		P3M Series		
1/8	1/4	3/8	1/2	1/2	3/4	1”
15 l/s	29 l/s	63 l/s	73 l/s	100 l/s	129 l/s	130 l/s

Flow with 6.3 bar inlet and 0.5 bar pressure drop.

Working pressure:	Max 17 bar
Working temperature:	-20 to +80 °C
ATEX approval:	CE Ex II 3 GD

For ATEX specific products contact Sales Office

Regulators - 2, 4, 8 and 16 bar pressure and non relieving options available

	Port size	Description	Order code		
			P3H Series	P3K Series	P3M Series
	1/8	8 bar relieving	P3HRA11BNNP		
	1/8	8 bar relieving + gauge	P3HRA11BNGP		
	1/4	8 bar relieving	P3HRA12BNNP		
	1/4	8 bar relieving + gauge	P3HRA12BNGP		
	3/8	8 bar relieving		P3KRA13BNNP	
	3/8	8 bar relieving + gauge		P3KRA13BNGP	
	1/2	8 bar relieving		P3KRA14BNNP	P3MRA14BNNN
	1/2	8 bar relieving + gauge		P3KRA14BNGP	P3MRA14BNGN
	1/2	2 bar relieving		P3KRA14BNYP	
	1/2	4 bar relieving		P3KRA14BNLP	
	1/2	16 bar relieving		P3KRA14BNHP	
	3/4	8 bar relieving			P3MRA16BNNN
	3/4	8 bar relieving + gauge			P3MRA18BNGN
	1"	8 bar relieving			P3MRA18BNNN
	1"	8 bar relieving + gauge			P3MRA18BNGN
	1"	2 bar relieving			P3MRA18BNLN
	1"	4 bar relieving			P3MRA18BNLN
	1"	16 bar relieving			P3MRA18BNHN

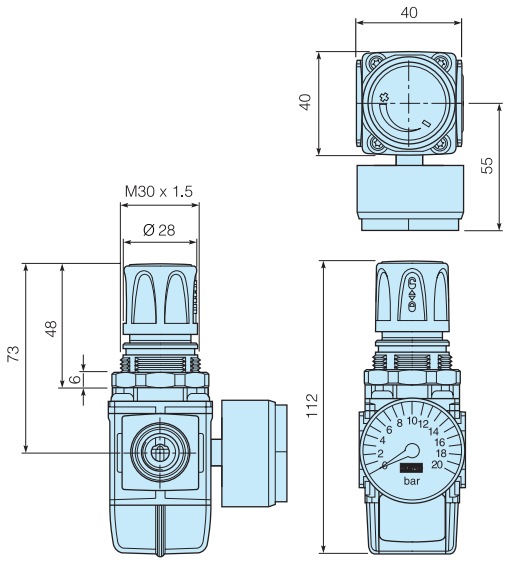
Service kits

Description	Order code		
	P3H Series	P3K Series	P3M Series
Angle bracket + metal lock ring	P3HKA00MS	P3KKA00MS	P3MKA00MS
Angle bracket + plastic lock ring	P3HKA00MR	P3KKA00MR	
Panel Mounting nut (aluminium)	P3HKA00MM	P3KKA00MM	P3MKA00MM
Plastic lock ring	P3HKA00MP	P3KKA00MP	
Diaphragm kit (relieving)	P3HKA00RR	P3KKA00RR	P3MKA00RR
Diaphragm kit (non-relieving)	P3HKA00RN	P3KKA00RN	P3MKA00RN
Lockable tamperproof kit	P3HKA00AL	P3KKA00AL	P3MKA00AL
Tamperproof knob kit	P3HKA00AT	P3KKA00AT	P3MKA00AT

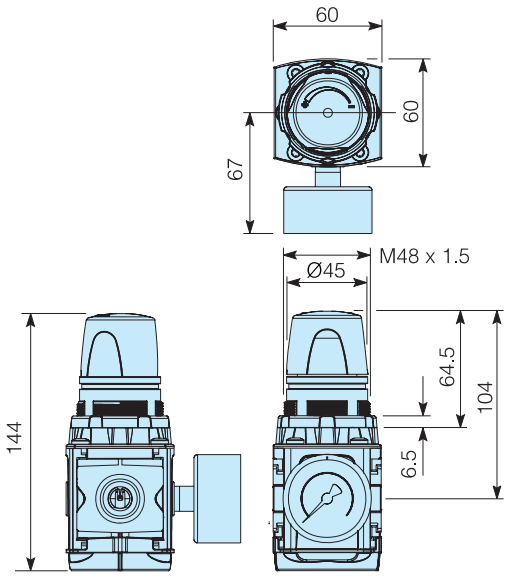
Material Specification

Body:	Aluminium
Bonnet:	Glass filled polyamide
Regulator cover:	Polyester
Control Knob:	Polyamide
Valve:	Composite
Elastomers:	Nitrile NBR
Screws:	Steel / zinc plated

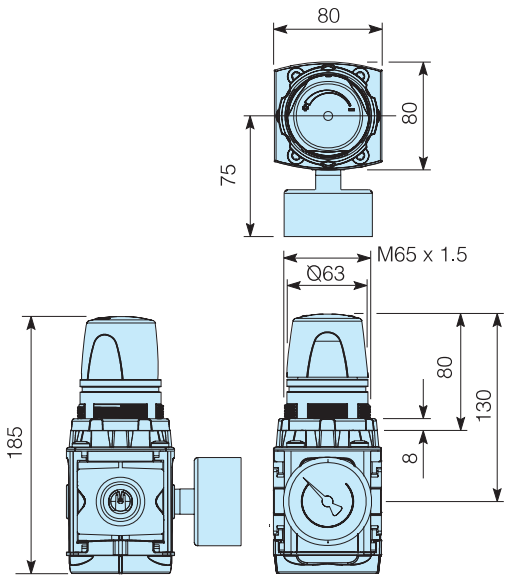
P3H - Dimensions (mm)



P3K - Dimensions (mm)



P3M - Dimensions (mm)



Lockable Tamperproof Kit

This facilitates the tamperproofing of the Reglator and Filter-Regulator units. The hinged black part clamps over the control knob and is locked in place by sliding over the yellow cover.

Four pad lock location holes are provided for added security if required.

Order code	P3H Series	P3K Series	P3M Series
	P3HKA00AL	P3KKA00AL	P3MKA00AL

Note: Pad lock not included

Filter Regulators

- Integral 1/8, 1/4, 3/8, 1/2, 3/4 or 1" ports (BSPP & NPT)
- High efficiency 5 micron element as standard (optional 40 micron)
- Excellent water removal efficiency
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting
- No tools required for servicing filter element
- Secondary pressure ranges 2, 4, 8 and 16 bar
- Rolling diaphragm for extended life
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.

CE Ex

Operating Information

Flow:

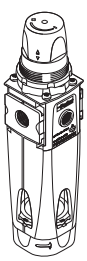
P3H Series		P3K Series		P3M Series		
1/8	1/4	3/8	1/2	1/2	3/4	1"
15 l/s	25 l/s	48 l/s	61 l/s	113 l/s	120 l/s	120 l/s

Flow with 6.3 bar inlet and 1 bar pressure drop.

Working pressure:	Max 17 bar
Working temperature:	-20 to +80 °C
ATEX approval:	CE Ex II 3 GD

For ATEX specific products contact Sales Office

Filter/Regulators - 2, 4 and 16 bar and non relieving options available

	Port size	Description	Order code		
			P3H Series	P3K Series	P3M Series
	1/8	8 bar relieving, manual drain	P3HEA11ESMBNNP		
	1/8	8 bar relieving, semi auto drain	P3HEA11ESSBNNP		
	1/8	8 bar relieving, gauge, manual drain	P3HEA11ESMBNGP		
	1/8	8 bar relieving, gauge, semi auto drain	P3HEA11ESSBNGP		
	1/4	8 bar relieving, manual drain	P3HEA12ESMBNNP		
	1/4	8 bar relieving, semi auto drain	P3HEA12ESSBNNP		
	1/4	8 bar relieving, gauge, manual drain	P3HEA12ESMBNGP		
	1/4	8 bar relieving, gauge, semi auto drain	P3HEA12ESSBNGP		
	3/8	8 bar relieving, manual drain		P3KEA13ESMBNNP	
	3/8	8 bar relieving, semi auto drain		P3KEA13ESSBNNP	
	3/8	8 bar relieving, auto drain		P3KEA13ESABNNP	
	3/8	8 bar relieving, gauge, manual drain		P3KEA13ESMBNGP	
	3/8	8 bar relieving, gauge, semi auto drain		P3KEA13ESSBNGP	
	3/8	8 bar relieving, gauge, auto drain		P3KEA13ESABNGP	
	1/2	8 bar relieving, manual drain		P3KEA14ESMBNNP	P3MEA14ESMBNNN
	1/2	8 bar relieving, semi auto drain		P3KEA14ESSBNNP	
	1/2	8 bar relieving, auto drain		P3KEA14ESABNNP	P3MEA14ESABNNN
	1/2	16 bar relieving, manual drain		P3KEA14ESMBNHP	
	1/2	8 bar relieving, gauge, manual drain		P3KEA14ESMBNGP	P3MEA14ESMBNGN
	1/2	8 bar relieving, gauge, semi auto drain		P3KEA14ESSBNGP	
	1/2	8 bar relieving, gauge, auto drain		P3KEA14ESABNGP	P3MEA14ESABNGN
	3/4	8 bar relieving, manual drain			P3MEA16ESMBNNN
	3/4	8 bar relieving, auto drain			P3MEA16ESABNNN
	3/4	8 bar relieving, gauge, manual drain			P3MEA16ESMBNGN
	3/4	8 bar relieving, gauge, auto drain			P3MEA16ESABNGN
	1"	8 bar relieving, manual drain			P3MEA18ESMBNNN
	1"	8 bar relieving, auto drain			P3MEA18ESABNNN
	1"	16 bar relieving, manual drain			P3MEA18ESMBNHN
	1"	8 bar relieving, gauge, manual drain			P3MEA18ESMBNGN
	1"	8 bar relieving, gauge, auto drain			P3MEA18ESABNGN

Home

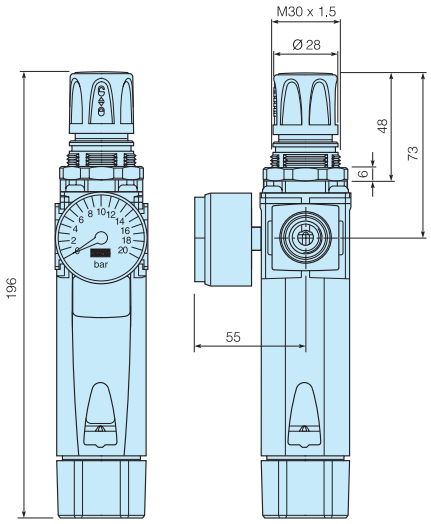
Service kits

Description	Order code		
	P3H Series	P3K Series	P3M Series
5 micron element kit	P3HKA00ESE	P3KKA00ESE	P3MKA00ESE
Sight glass & manual drain	P3HKA00BSM	P3KKA00BSM	P3MKA00BSM
Sight glass & semi-auto drain	P3HKA00BSS	P3KKA00BSS	P3MKA00BSS
Sight glass & auto drain		P3KKA00BSA	P3MKA00BSA
Angle bracket + metal lock ring	P3HKA00MS	P3KKA00MS	P3MKA00MS
Angle bracket + plastic lock ring	P3HKA00MR	P3KKA00MR	
Panel Mounting nut (aluminium)	P3HKA00MM	P3KKA00MM	P3MKA00MM
Diaphragm kit (relieving)	P3HKA00RR	P3KKA00RR	P3MKA00RR
Diaphragm kit (non-relieving)	P3HKA00RN	P3KKA00RN	P3MKA00RN
Lockable tamperproof kit	P3HKA00AL	P3KKA00AL	P3MKA00AL
Tamperproof knob kit	P3HKA00AT	P3KKA00AT	P3MKA00AT

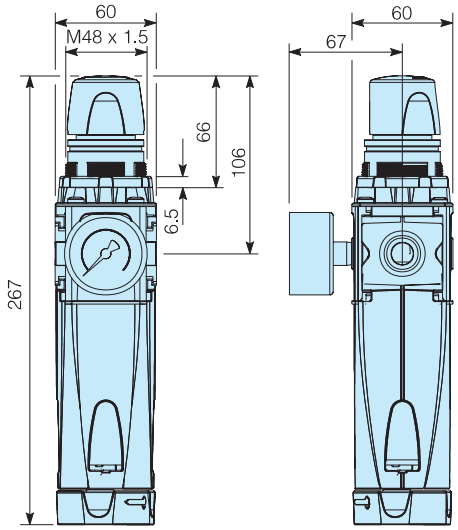
Material Specification

Body:	Aluminium		
Sight glass:	Technopolymer		
Body cover:	Polyesther		
Element:	Sintered polypropylene		
Elastomers:	Nitrile NBR		
Bayonet support:	Acetal		
Drain:	Acetal		
Bayonet support:	**P3H**	**P3K**	**P3M**
	Nylon	Acetal	Nylon
Control knob:	Polyamide		
Valve:	Composite		
Screws:	Steel/ zinc plated		

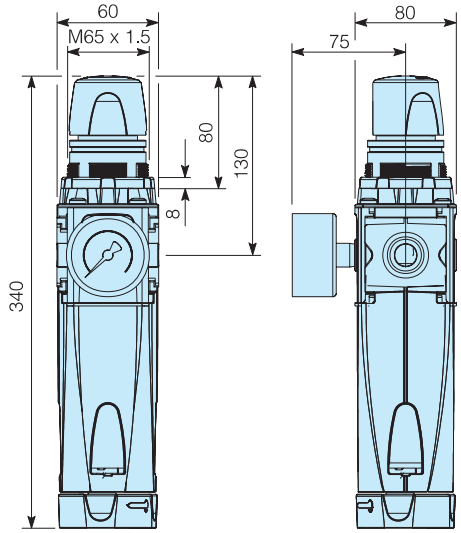
P3H - Dimensions (mm)



P3K - Dimensions (mm)



P3M - Dimensions (mm)



Lubricators

- Integral 1/8, 1/4, 3/8, 1/2, 3/4 or 1" ports (BSPP & NPT)
- Robust but lightweight aluminium construction
- Proportional oil delivery over a wide range of air flows.
- Finger tip rachet control for precise oil drip rate adjustment
- Fill from top under system pressure (P3K / P3M series only)
- '2 stage' bayonet to reveal large filling orifice
- Large oil reservoir

Operating Information

Flow:

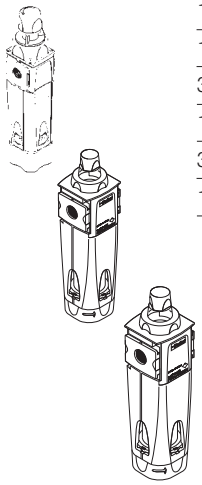
P3H Series		P3K Series		P3M Series		
1/8	1/4	3/8	1/2	1/2	3/4	1"
13 l/s	26 l/s	44 l/s	70 l/s	87 l/s	103 l/s	108 l/s

Flow with 6.3 bar inlet and 0.5 bar pressure drop.

Working pressure:	P3H	Max 10 bar
	P3K / P3M	Max 17 bar
Working temperature:		-20 to +80 °C
ATEX approval:		CE Ex II 3 GD

For ATEX specific products contact Sales Office

Lubricators



Port size	Description	Order code		
		P3H Series	P3K Series	P3M Series
1/8	Oil mist	**P3HLA11LSMN**		
1/4	Oil mist	**P3HLA12LSMN**		
3/8	Oil mist, fill under pressure		**P3KLA13LSMN**	
1/2	Oil mist, fill under pressure		**P3KLA14LSMN**	**P3MLA14LSMN**
3/4	Oil mist, fill under pressure			**P3MLA16LSMN**
1"	Oil mist, fill under pressure			**P3MLA18LSMN**

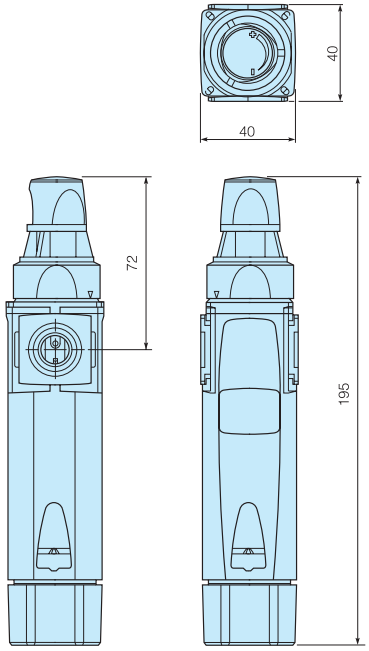
Service kits

Description	Order code		
	P3H Series	P3K Series	P3M Series
Sight glass & manual drain kit	P3HKA00BSM	P3KKA00BSM	P3MKA00BSM
Drip control assembly kit	P3HKA00PG	P3KKA00PG	P3MKA00PG

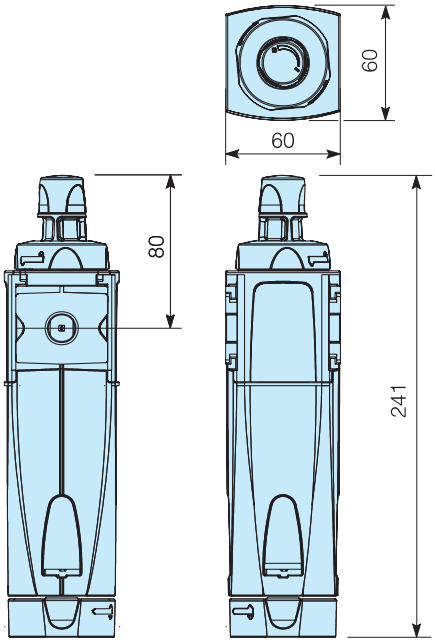
Material Specification

Body:	Aluminium
Bowl sight glass:	Technopolymer
Sight dome:	Technopolymer
Lubricator cover:	Polyester
Bayonet support:	Nylon
Drain:	Acetal
Elastomers:	Nitrile NBR

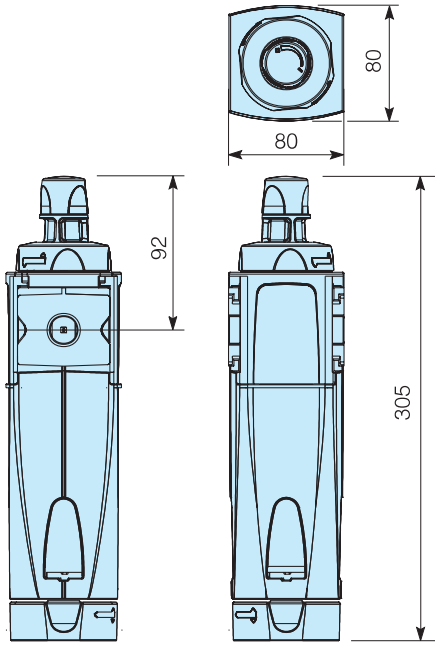
P3H - Dimensions (mm)



P3K - Dimensions (mm)



P3M - Dimensions (mm)



Accessories

	Port size	Description	Order code P3H Series	Order code P3K Series	Order code P3M Series
		Shut-off Valves			
	1/8	Bistable 3/2 valve with lockout facility	**P3HVA11LN**		
	1/4	Bistable 3/2 valve with lockout facility	**P3HVA12LN**		
	3/8	Bistable 3/2 valve with lockout facility		**P3KVA13LN**	
	1/2	Bistable 3/2 valve with lockout facility		**P3KVA14LN**	**P3MVA14LN**
	3/4	Bistable 3/2 valve with lockout facility			**P3MVA16LN**
	1"	Bistable 3/2 valve with lockout facility			**P3MVA18LN**
		Manifold Regulators - 2, 4, 16 bar options available.			
	1/4	8 bar relieving + Pressure gauge	**P3HRA12BNGP**		
	3/8	8 bar relieving		**P3KHA13BNNP**	
	3/8	8 bar relieving + Pressure gauge		**P3KHA13BNGP**	
	1/2	8 bar relieving		**P3KHA14BNNP**	
	1/2	8 bar relieving + Pressure gauge		**P3KHA14BNGP**	
		Manual Dump Valves			
	1/4	Bistable 3/2 valve with lockout facility	**P3HDA12RLN**		
	1/2	Bistable 3/2 valve with lockout facility		**P3KDA14RLN**	
	1/4	Monostable 3/2 valve with lockout facility	**P3HDA12NLN**		
		Manifold Block			
	1/4	2 air "take off" ports	**P3HMA1V0N**		
	1/2	4 air "take off" ports		**P3KMA1V0N**	**P3MMA140N**
	3/4	4 air "take off" ports			**P3MMA160N**
	1"	4 air "take off" ports			**P3MMA180N**

Accessories

Combined Soft Start/Dump Valves

Port size	Description	P3H Series	Order code P3K Series	P3M Series
1/4	Solenoid operated (not included)	P3HTA12SGN0000		
1/4	24 VDC (Solenoid and cable plug included)	P3HTA12SGNC2CN		
1/4	Air Pilot Operated	P3HTA12PPN		
1/2	Solenoid operated (not included)		P3KTA14SCN0000	P3MTA14SCN0000
1/2	24 VDC (Solenoid and cable plug included)		P3KTA14SCNB2CN	P3MTA14SGNB2CN
1/2	Air Pilot Operated		P3KTA14PPN	P3MTA14PPN
3/4	Solenoid operated (not included)			P3MTA16SCN0000
3/4	24 VDC (Solenoid and cable plug included)			P3MTA16SGNB2CN
3/4	Air Pilot Operated			P3MTA16PPN
1"	Solenoid operated (not included)			P3MTA18SCN0000
1"	24 VDC (Solenoid and cable plug included)			P3MTA18SGNB2CN
1"	Air Pilot Operated			P3MTA18PPN

Soft Start Valves

Port size	Description	P3H Series	Order code P3K Series	P3M Series
1/4	Solenoid operated (not included)	P3HSA12SGN0000		
1/4	24 VDC (Solenoid and cable plug included)	P3HSA12SGNC2CN		
1/4	Internal Air Pilot Operated	P3HSA12Y0N		

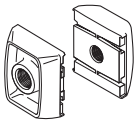
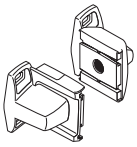
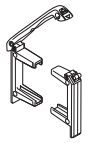
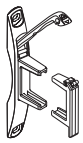
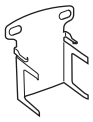
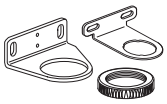
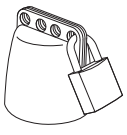
Soft Start Valves (CNOMO interface can be fitted with either 22mm or 30mm coils)

Port size	Description	P3H Series	Order code P3K Series	P3M Series
1/2	Solenoid operated (not included)		P3KSA14SCN0000	P3MSA14SCN0000
1/2	24 VDC (Solenoid and cable plug included)		P3KSA14SCNB2CN	P3MSA14SCNB2CN
1/2	Internal Air Pilot Operated		P3KSA14Y0N	P3MSA14Y0N
3/4	Solenoid operated (not included)			P3MSA16SCN0000
3/4	24 VDC (Solenoid and cable plug included)			P3MSA16SCNB2CN
3/4	Internal Air Pilot Operated			P3MSA16Y0N
1"	Solenoid operated (not included)			P3MSA18SCN0000
1"	24 VDC (Solenoid and cable plug included)			P3MSA18SCNB2CN
1"	Internal Air Pilot Operated			P3MSA18Y0N

Remote Operated Dump Valves

Port size	Description	P3H Series	Order code P3K Series	P3M Series
1/4	Solenoid operated (not included)	P3HDA12SGN0000		
1/4	24 VDC (Solenoid and cable plug included)	P3HDA12SGNC2CN		
1/4	Air Pilot Operated	P3HDA12PPN		
1/2	Solenoid operated (not included)		P3KDA14SCN0000	P3MDA14SCN0000
1/2	24 VDC (Solenoid and cable plug included)		P3KDA14SCNB2CN	P3MDA14SCNB2CN
1/2	Air Pilot Operated		P3KDA14PPN	P3MDA14PPN
3/4	Solenoid operated (not included)			P3MDA16SCN0000
3/4	24 VDC (Solenoid and cable plug included)			P3MDA16SCNB2CN
3/4	Air Pilot Operated			P3MDA16PPN
1"	Solenoid operated (not included)			P3MDA18SCN0000
1"	24 VDC (Solenoid and cable plug included)			P3MDA18SCNB2CN
1"	Air Pilot Operated			P3MDA18PPN

Accessories

	Port size	Description	P3H Series	Order code P3K Series	P3M Series
		**Port Block Kits**			
	1/8		P3HKAD1CP		
	1/4		P3HKAD2CP		
	3/8			P3KKAD3CP	
	1/2			P3KKAD4CP	P3MKAD4CP
	3/4				P3MKAD6CP
	1"				P3MKAD8CP
		**Rear Entry Connector Kits**			
	1/2	BSPP		P3KKAR4CR	
	1/2	NPT		P3KKBR4CR	
		**Modular Connector (Cliplok) Kits**	P3HKA00CB	P3KKB00CB	P3MKA00CB
		**Wall Mounting Bracket Connector Kits**	P3HKA00CW	P3KKB00CW	P3MKA00CW
		Din Rail Mounting Kit	P3HKA00MD		
		**Single Unit Mounting Bracket**	P3HKA00MW	P3KKA00MW	P3MKA00MW
		Regulator & Filter Regulator Angle Bracket			
		Angle bracket + plastic nut	P3HKA00MR	P3KKA00MR	
		Angle bracket + metal nut	P3HKA00MS	P3KKA00MS	P3MKA00MS
		Panel Mounting Nut			
		Aluminium	P3HKA00MM	P3KKA00MM	P3MKA00MM
		**Regulator & Filter/Regulator - Tamperproof Kit**	P3HKA00AL	P3KKA00AL	P3MKA00AL
		Pressure Gauges			
	1/8	0 to 2 bar	P3D-KAB1AYN		
	1/8	0 to 4 bar	P3D-KAB1ALN		
	1/8	0 to 10 bar	P3D-KAB1ANN		
	1/8	0 to 20 bar	P3D-KAB1AHN		
	1/4	0 to 4 bar		P6G-ERB2040	P6G-ERB2040
	1/4	0 to 11 bar		P6G-ERB2110	P6G-ERB2110
	1/4	0 to 20 bar		P6G-ERB2200	P6G-ERB2200

Moduflex Proportional Technology

Man-machine interface

High visability LED display
Easy to read characters
All controls on the same face

Total flexibility

User friendly and easily programmable software.
One basic unit suits all customer requirements.

Compact & light weight

Small envelope
Light weight (P3PH = 285g)

Outstanding performence

Very fast response times
Full flow exhaust
Excellent linearity

Flexible mounting options

Stand-alone
Foot braket mounting
DIN-rail mounting

The new MPT40 Regulator is designed to quickly and accurately adjust and maintain a set output pressure.

The unit will operate regardless of flow, in response to an electronic control signal. The medium can be compressed air or an inert gas.

Applications for this technology are virtually unlimited; from paint spay control, paper manufacture and printing to weaving and laser cutting control; in fact anywhere that requires accurate remote pressure control.

- Very fast response times
- Accurate output pressure
- Micro parameter settings
- Selectable I/O parameters
- Quick, full flow exhaust.
- LED display indicates output pressure
- Auto enable function
- No air consumption in steady state

Standard Features

Micro Processor Parameter settings
Auto-Enable function
Selectable I/O parameters
M12 Electrical Connection

Operating information

Inlet pressure range	MPT40: max. 10 bar EPD: max. 16 bar
Outlet pressure range	0 to 2 bar, 0 to 7 bar, 0 to 10 bar or 0 to 12 bar
Temperature range	0°C to max. 50°C
Supply voltage	24 VDC
Control signal	0 - 10 V or 4-20 mA
Electrical connection	IP65
Hysteresis	1.1% FS
Flow G 1/4 (MPT40)	1500 l/min.
G 1/2 (EPD)	1800 l/min.

For technical information see CD

Order Key

P	3	H	P	A	1	2	A	S	2	V	D	1	A

	Port type
1	G Thread (BSP) Female
9	NPT Female

	Port or tube size
1	1/8
2	1/4

	Pressure range
Z	0 - 2 bar
S	0 - 7 bar
D	0 - 10 bar

	Power supply
2	24 volts

	Control signal
A	4-20mA
V	0-10 V

	Output Signal	
D	Digital, PNP	1)
P	PNP or 0-10V	2)
N	NPN or 0-10V	3)
M	4-20mA fixed	4)

1) Digital PNP output only, no analogue output selectable
2) Digital PNP and analogue 0-10V outputs selectable, by means of parameter 6. (Factory default 0-10V)
3) Digital NPN and analogue 0-10 V outputs selectable by means of parameter 6. (Factory default 0-10V)
4) Analogue 4-20mA output only.

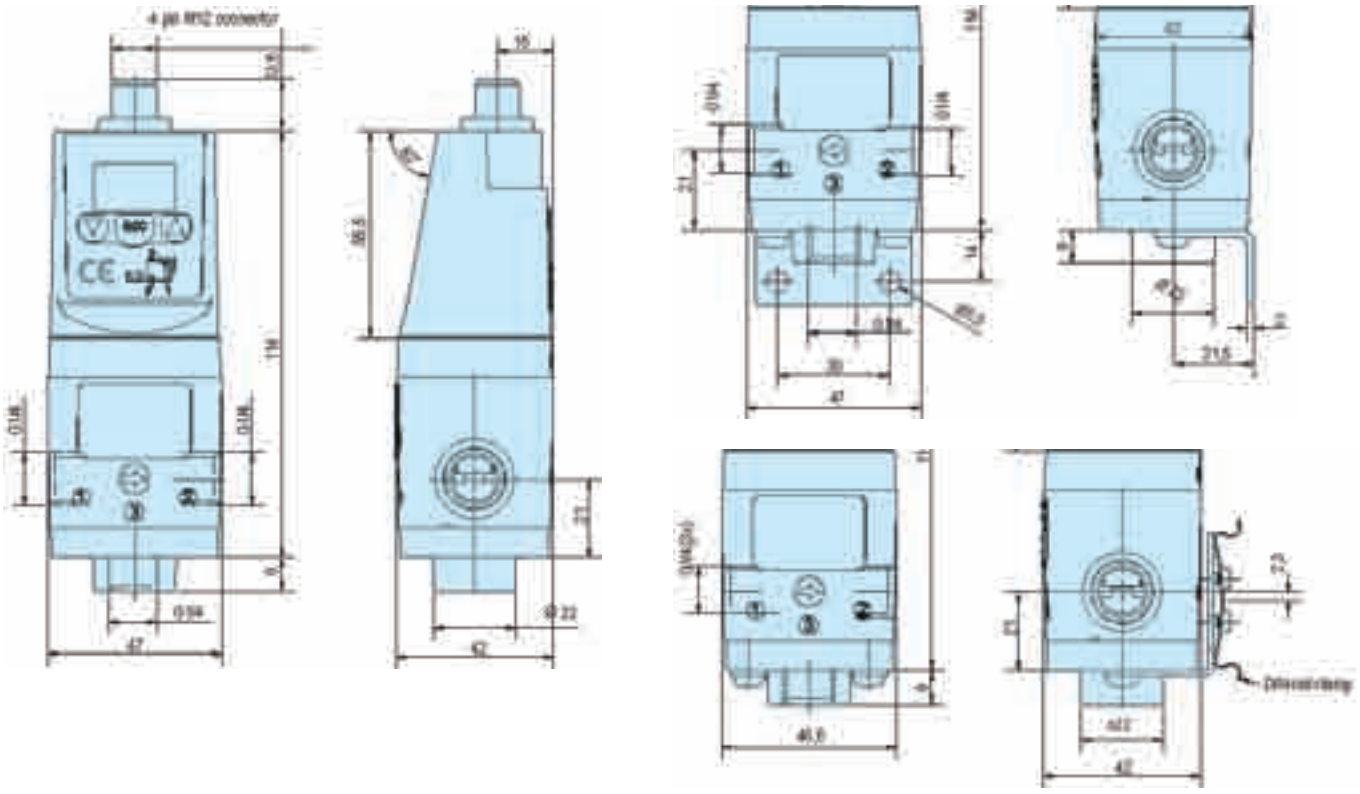
Note: On all analogue outputs the F.S. value can be adjusted by means of parameter 8

Connection	Pressure control Range (bar)	Control Signal	Description	Order code
G1/4	0-2	4 - 20mA	MPT40	**P3HPA12AZ2AD1A**
G1/4	0-7	4 - 20mA	MPT40	**P3HPA12AS2AD1A**
G1/4	0-10	4 - 20mA	MPT40	**P3HPA12AD2AD1A**
G1/4	0-2	0-10 V	MPT40	**P3HPA12AZ2VD1A**
G1/4	0-7	0-10 V	MPT40	**P3HPA12AS2VD1A**
G1/4	0-10	0-10 V	MPT40	**P3HPA12AD2VD1A**
G1/2	0-12	0-10 V	EPDN4-MP-0-12B-0U10	**3505500**
G1/2	0-7	0-10 V	EPDN4-MP-0-7B-0U10	**3505700**

Indicates stocked product.

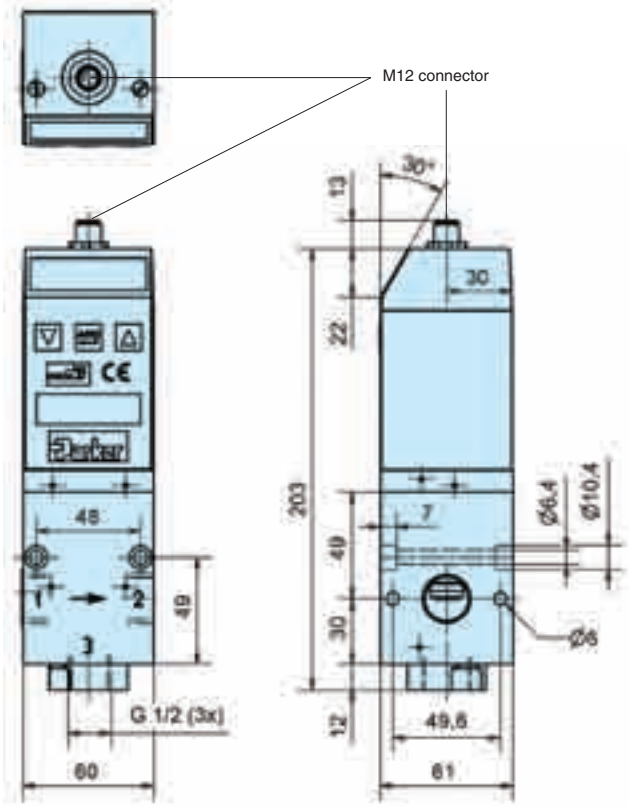
Dimensions (mm)

MPT40 - Bottom exhaust version



Dimensions (mm)

EPDN Series



Mounting options for P3HP

	Decription	Order code
	Din rail mounting kit	P3HKA00MK

	Decription	Order code
	Foot bracket mounting kit	P3HKA00MF

Cables

Decription	Order code
2m cable with moulded straight M12 x 1 connector	P8L-MC04A2A-M12
2m cable with moulded 90° M12 x 1 connector	P8L-MC04R2A-M12

Prep-Air II® Miniature FRLs

- Compact body ported units
- Port sizes G1/8 and G1/4
- Unique deflector plate ensuring maximum water and particulate removal
- Solid control piston with lip seal for extended life.
- Proportional oil delivery over a wide range of air flows.

Operating information

Working pressure:	Max 10 bar
Working temperature:	0 °C to +52 °C

Flow characteristics

Flow	Filter	11 l/s
	Regulator	9,3 l/s
	Filter Regulator	9,3 l/s
	Lubricator	10 l/s

For technical information see CD

Filters - 5 micron element, transparent bowl

Port size	Description	Order Code
G1/8	Manual drain	**14F01BB1**
G1/8	Auto drain	**14F05BB1**
G1/4	Manual drain	**14F11BB1**
G1/4	Auto drain	**14F15BB1**
	Mounting bracket	**PS417BP**

Regulators - relieving type - non relieving options available

Port size	Description	Order Code
G1/8	2 bar	**14R010FC1**
G1/8	4 bar	**14R011FC1**
G1/8	8 bar	**14R013FC1**
G1/4	2 bar	**14R110FC1**
G1/4	4 bar	**14R111FC1**
G1/4	8 bar	**14R113FC1**
	Mounting bracket (Includes panel mounting nut)	**PS417BP**

Lubricators - transparent bowl

Port size	Order Code
G1/8	**04L00GB1**
G1/4	**04L10GB1**
Mounting bracket	**PS419**

Pressure Gauges

	Order Code
0 - 2 bar	**P3D-KAB1AYN**
0 - 4 bar	**P3D-KAB1ALN**
0 - 8 bar	**P3D-KAB1ANN**

Coalescing Filters - 0.01 micron element

Port size	Description	Order Code
Poly bowl		
G1/8	Manual drain	**10F01ED1**
G1/8	Auto drain	**10F05ED1**
G1/4	Manual drain	**10F11ED1**
G1/4	Auto drain	**10F15ED1**
	Mounting bracket	**PS417BP**

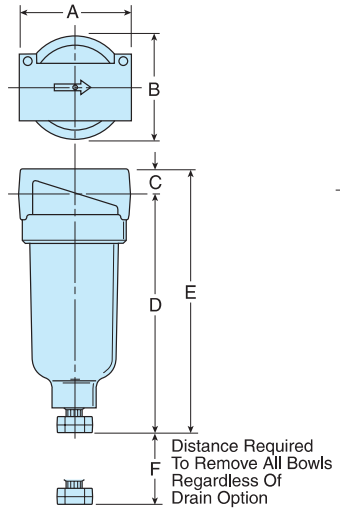
Filter/Regulators

- transparent bowl - 2 and 4 bar and non relieving options available

Port size	Description	Order Code
G1/8	2 bar, manual drain	**14E01B10FC1**
G1/8	2 bar, auto drain	**14E05B10FC1**
G1/4	2 bar, manual drain	**14E11B10FC1**
G1/4	2 bar, auto drain	**14E15B10FC1**
G1/8	4 bar, manual drain	**14E01B11FC1**
G1/8	4 bar, auto drain	**14E05B11FC1**
G1/4	4 bar, manual drain	**14E11B11FC1**
G1/4	4 bar, auto drain	**14E15B11FC1**
G1/8	8 bar, manual drain	**14E01B13FC1**
G1/8	8 bar, auto drain	**14E05B13FC1**
G1/4	8 bar, manual drain	**14E11B13FC1**
G1/4	8 bar, auto drain	**14E15B13FC1**
	Mounting bracket (Includes panel mounting nut)	**PS417BP**

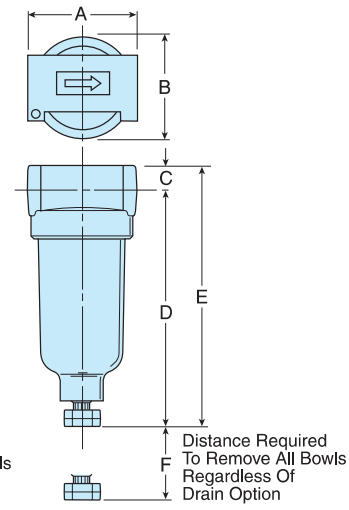
Dimensions (mm)

Filters



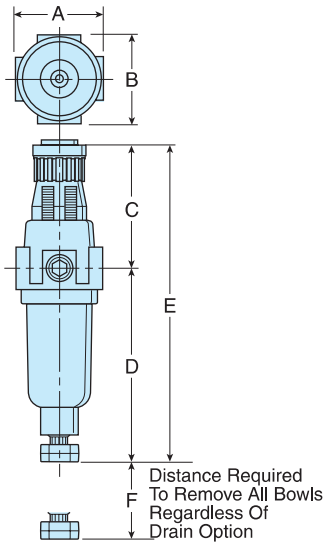
A	B	C	D	D†	E	E†	F
43	39	10	97	99	107	108	41

Coalescing Filters



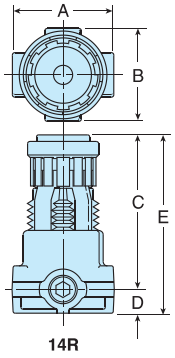
A	B	C	D	D†	E	E†	F
43	39,6	10	97	93	107	103	41

Filter/Regulators



A	B	C	D	D†	E	E†	F
41	40	61	96	92	158	154	41

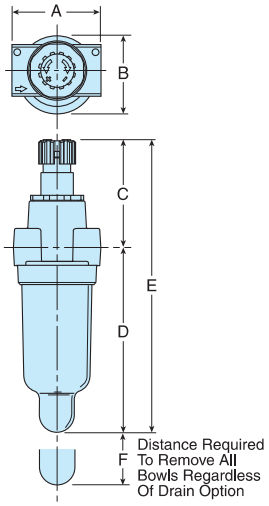
Regulators



14R

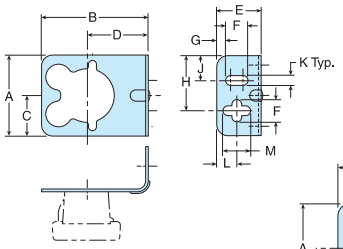
14R	**A**	**B**	**C**	**D**	**E**				
	42	40	63,5	10	731				
14RL***	**A**	**B**	**C**	**D**	**E**				
	42	40	57,9	10	68				
14RM	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**
	38	38	60	13	73	30	15	8	18

Lubricators

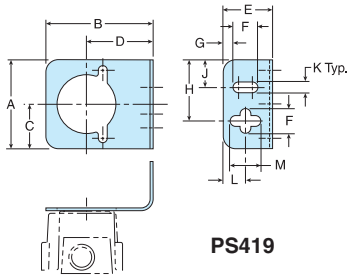


A	B	C	D	D†	E	E†	F
44	40	55	92	96	147	151	41

Mounting Bracket Kits



PS417BP
(Includes Panel Mount Nut)



PS419

PS417BP - 10F, 14F, 14R, 14E

A	B	C	D	E	F	G	H	J	K	L	M
46	60	23	34	25	13	5	31	14	6	11	16

PS419 - 04L

A	B	C	D	E	F	G	H	J	K	L	M
46	55	23	34	25	13	5	31	14	6	11	16

Service kits

Description	Order Code
5 micron particulate element	**PS403P**
0.01 micron coalescing element	**PS446P**
Poly bowl with manual drain	**PS404P**
Poly bowl with pulse drain	**PS408BP**
Lubricator bowl	**PS421P**
Regulator	
Relieving type	**PS422P**
Non-relieving type	**PS428P**

The all metal P3N Series FRLs are ideal for most medium sized ring main installations. The fully modular system allows units to be connected together, without the use of pipe connectors, saving space; providing constant mounting centres; whilst maintaining a modern aesthetically pleasing appearance.

- Self relieving feature plus balanced poppet provides quick response and accurate pressure regulation.
- Port blocks available to provide G3/4 and G1 1/2 port extension to G1 ported bodies.
- Proportional oil delivery over a wide range of air flows.

Operating information

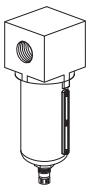
Working pressure:	Max 17 bar
Working temperature:	-20 °C to +80 °C

Flow characteristics

Flow	Filter	166,6 l/s
	Regulator	166,6 l/s
	Filter/Regulator	166,6 l/s
	Lubricator	166,6 l/s

For technical information see CD

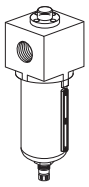
Filters - 40 micron element, metal bowl



Port size	Description	Order Code
G3/4	Manual drain	**P3NFA16GSM**
G3/4	Auto drain	**P3NFA16GSA**
G1	Manual drain	**P3NFA18GSM**
G1	Auto drain	**P3NFA18GSA**

5 micron element options available on request

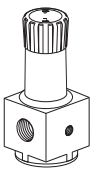
Coalescing Filters - 0.01 micron element, metal bowl



Port size	Description	Order Code
G3/4	Manual drain	**P3NFA16DSM**
G3/4	Auto drain	**P3NFA16DSA**
G1	Manual drain	**P3NFA18DSM**
G1	Auto drain	**P3NFA18DSA**

Adsorber filter option available on request

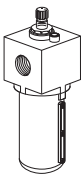
Regulators



Port size	Description	Order Code
G3/4	4 bar, relieving type	**P3NRA16BNL**
G3/4	8 bar, relieving type	**P3NRA16BNN**
G3/4	16 bar, relieving type	**P3NRA16BNH**
G1	4 bar, relieving type	**P3NRA18BNL**
G1	8 bar, relieving type	**P3NRA18BNN**
G1	16 bar, relieving type	**P3NRA18BNH**

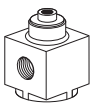
None relieving options available on request

Lubricators - metal bowl



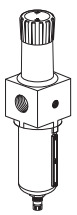
Port size	Description	Order Code
G3/4	No drain	**P3NLA16LSN**
G1	Manual drain	**P3NLA18LSM**
G1	No drain	**P3NLA18LSN**

Air Pilot Controlled Regulator



Port size	Description	Order Code
G1	8 bar, relieving type	**P3NRA18BPP**

Filter/Regulators - 40 micron, metal bowl, relieving type



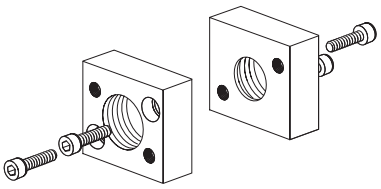
Port size	Description	Order Code
G3/4	8 bar, manual drain	**P3NEA16GSMBNN**
G3/4	8 bar, auto drain	**P3NEA16GSABNN**
G1	8 bar, manual drain	**P3NEA18GSMBNN**
G1	8 bar, auto drain	**P3NEA18GSABNN**

None relieving and other pressure options available on request

Indicates stocked product.

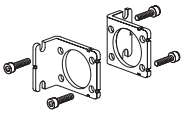
Home

Port Block Kits



Description	Connection	Order Code
Kits for single Units or Combinations without Lubricators (2 port blocks + 2 seals)	G3/4	**P3NKB16CP**
	G1	**P3NKB18CP**
	G1 1/2	**P3NKB1BCP**
Kits for Combinations with Lubricators (2 port blocks + 2 seals)	G3/4	**P3NKB16CL**
	G1	**P3NKB18CL**
	G1 1/2	**P3NKB1BCL**

Wall Mounting Bracket Kit



Description	Order code
3/4" and 1"	**P3NKA00MW**
1.1/2"	**P3NKA0BMW**

Gauges

Port size	Description	Order Code
G1/4	Gauge 0 to 4 bar	**P6G-ERB2040**
G1/4	Gauge 0 to 11 bar	**P6G-ERB2110**
G1/4	Gauge 0 to 14 bar	**P6G-ERB2140**
G1/4	Gauge 0 to 20 bar	**P6G-ERB2200**

Service kits

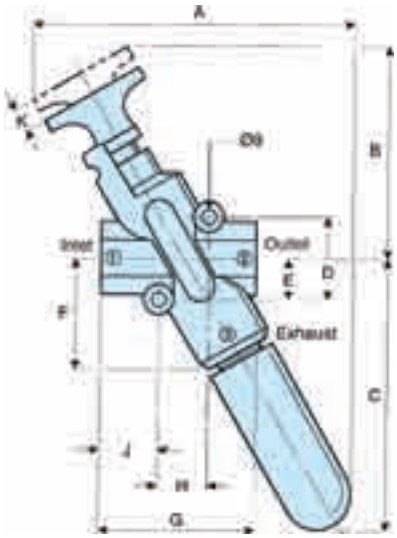
Description	Order Code
5 micron particulate element	**P3NKA00ESE**
40 micron particulate element	**P3NKA00ESG**
0.3 micron coalescing element	**P3NKA00ESC**
Adsorber element	**P3NKA00ESA**
Regulator	
Relieving type	**P3NKA00RR**
Non-relieving type	**P3NKA00RN**
Relieving (Air pilot)	**P3NKA00PD**

Lockout valves - LV Series

- High flow 1" exhaust
- G1/4 to G1 inlet port sizes
- Detented spool
- Padlock, lockout facility
- High visibility yellow body

Symbol	Port size	Exhaust port (Port will except a BSPT or NPT male silencer)	Order code
	G1	1"	**LV8BA8**

Dimensions (mm)



	A	B	C	D	E	F	G	H	J	K
mm	212	143	169	56	28	75	105	34	39	18

Double male adaptor

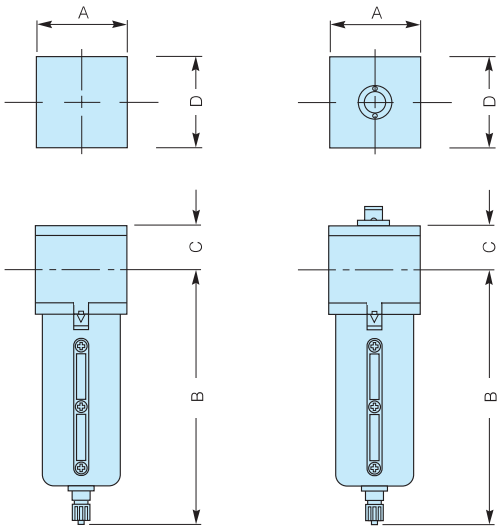
Thread BSPT	Order code	Pack Qty
1" x 1"	**1FF33BL**	5

Indicates stocked product.

Home

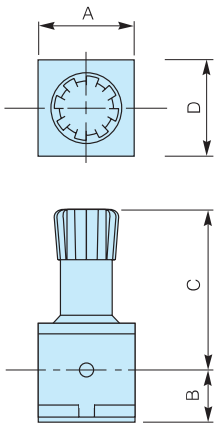
Dimensions (mm)

Filters and Coalescing Filters



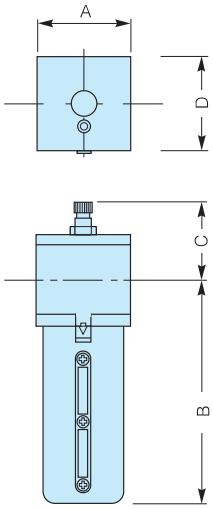
Port sizes	A	B	C	D
3/4" & 1"	92	254	35	92

Regulators



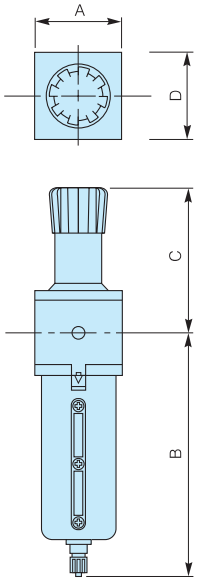
Port sizes	A	B	C	D
3/4" & 1"	92	53	162	92

Lubricators



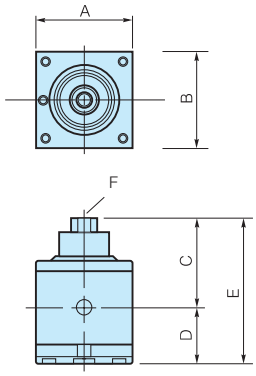
Port sizes	A	B	C	D
3/4" & 1"	92	230	71.3	92

Filter/Regulators



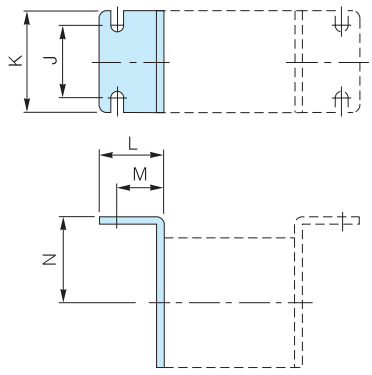
Port sizes	A	B	C	D
3/4" & 1"	92	243	162	92

Air pilot regulators



A	A (PB)	B	C	D	E	F
92	142	92	86	53	139	G1/4

Wall mounting brackets



L	M	N	J	K
45	33	60	50	70

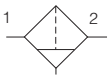
Standard Series FRLs are ideal for large ring main installations. The rugged all metal body ported design provides high flow with minimum pressure drop.

- Individual body ported and mounted units
- High flow with minimum pressure drop
- Lubricator fillable under pressure

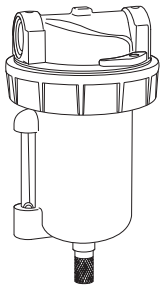
Operating information

Max operating pressure	17 bar (Filter + Lubricator) 12 bar when fitted with auto-drain
Max inlet pressure for regulators	20 bar
Max temperature	50°C
For technical information see CD	

Standard Particulate Filters



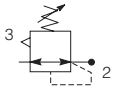
- Fitted with 40µ element as standard

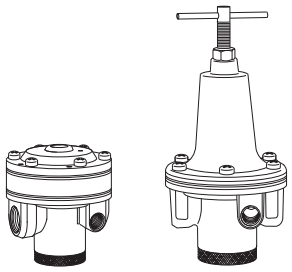


Port size	Description	* Flow @ 7 bar l/min	Order code Zinc bowl with sight glass
1.1/4	Manual drain	11000	**F06G10WJ**
1.1/2	Manual drain	12500	**F602G12WJ**
2	Manual drain	31800	**F602G16WJ**
2.1/2	Manual drain	31800	**F602G20WJ**

* Flow with pressure drop 0.34 bar

Regulators

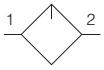




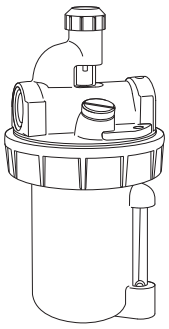
Port size	Flow @ 7 bar l/min	Order code **Manual Adjust**	**Remote operated**
1.1/4	12000	**R119G10C**	
1.1/2	12000	**R119G12C**	**R119G12J**
2	42480		**R119G16J**
2.1/2	42480		**R119G20J**

Indicates stocked product.

Lubricators



- High performance over wide flow range
- Lubricator may be filled while under pressure

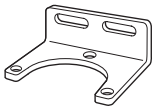


Port size	* Flow @ 7 bar l/min	**Order code** Zinc bowl with sight glass
1.1/4	9200	**L606G10W**
1.1/2	11300	**L606G12W**

* Flow with pressure drop 0.34 bar

Standard Series Accessories

Regulator Mounting Bracket



Size	**Order code**
G1.1/4 & G1.1/2	**18B57**

Gauges

Size	Pressure range	**Order code**
1/4 x 50mm	0 - 4 bar	**P6G-ERB2040**
1/4 x 50mm	0 - 11 bar	**P6G-ERB2110**
1/4 x 50mm	0 - 14 bar	**P6G-ERB2140**
1/4 x 50mm	0 - 20 bar	**P6G-ERB2200**

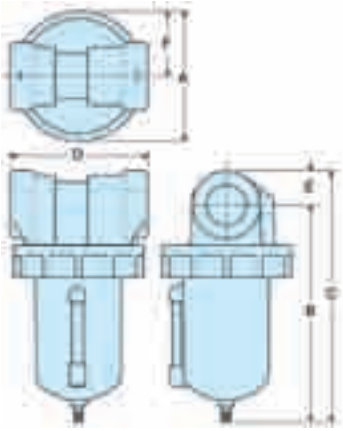
Service kits

Port size	Description	Order Code
Filters		
G1.1/4 & G1.1/2	40 micron particulate element	**EK602B**
G2 & G2.1/2	40 micron particulate element	**EK602G**

Indicates stocked product.

Dimensions (mm)

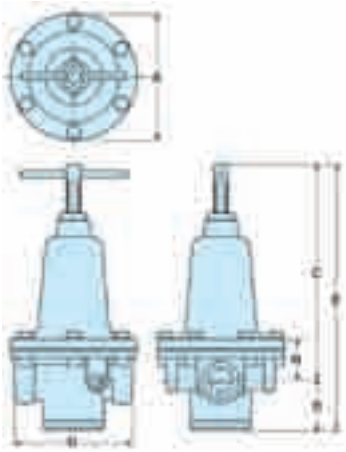
Filters - 1.1/4" & 1.1/2"



F602-10W, F602-12W

A	B	C	D	E	F
124	208	240	132	32,4	62,2

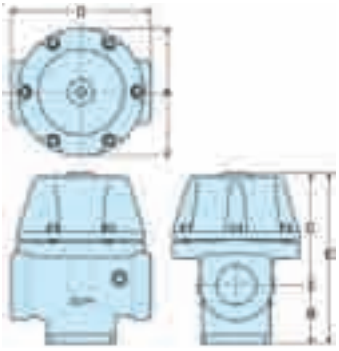
Regulators - 1.1/4" & 1.1/2"



R119-10C, R119-12C

125	46	217	125	263	50,6

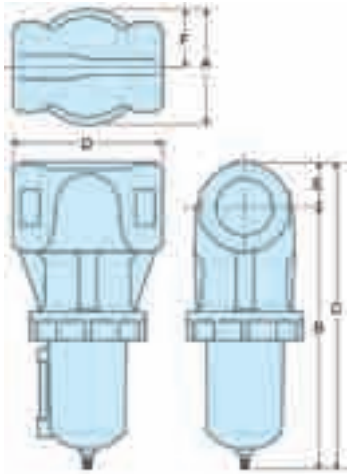
Pilot Operated Regulators - 1.1/2"



R119-12J

124	290	322	132	32,4	62,2

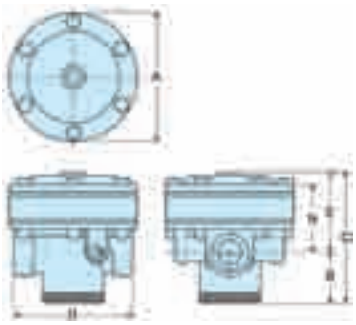
Filters - 2" & 2.1/2"



F602-16W, F602-20W

A	B	C	D	E	F
160	281	124	160	48,7	62,2

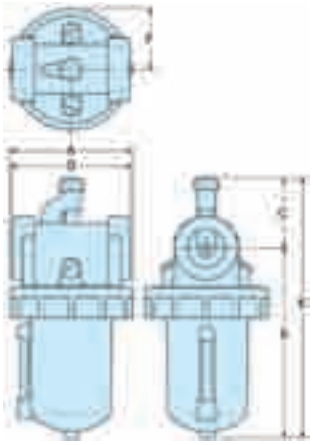
Pilot Operated Regulators - 2" & 2.1/2"



R119-16J, R119-20J

A	B	C	D	E
168	79	147	185	276

Lubricators - 1.1/4" & 1.1/2"



L606-10W, L606-12W

A	B	C	D	E	F
126	194	72,2	122	266	63,1

Stainless Steel FRLs

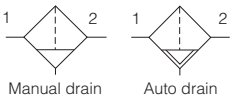
The range of Stainless Steel FRLs are ideal for use in the food industry, the petrochemical or process industries or any application in a particularly harsh or aggressive environment.

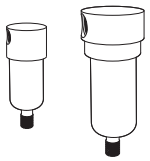
- Suitable for Marine & Offshore applications
- Chemical / Petroleum and process industries
- Coalescing filters are designed for removing oil and water aerosols down to 0.01µ
- Suitable for food industry applications

Operating information

Max operating pressure	20 bar 12 bar when fitted with auto-drain
Max operating temperature	Regulator 65°C Filter + Regulator 80°C, 50°C when fitted with auto-drain
For technical information see CD	

Particulate Filter

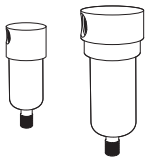




Port size	Flow l/min @ 7 bar	Filter element	Order code with manual drain	Order code with auto drain
G1/4	660	20µ	**PF504G02DHSS**	
G1/2	1800	40µ	**PF10G04DJSS**	**PF10G04DJRSS**

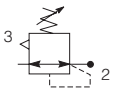
* For 5µ filter element substitute **H** or **J** with **G**

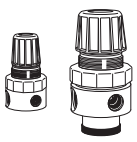
Coalescing Filter



Port size	Flow l/min @ 7 bar	Filter element	Order code with manual drain	Order code with auto drain
G1/4	240	0.3µ	**PF501G02DHSS**	
G1/2	480	0.01µ	**PF11G04DJSS**	**PF11G04DJRSS**

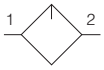
Regulator

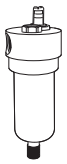




Port size	Flow l/min @ 7 bar	Order code fitted with 0-8.5 bar spring
G1/4	450	**PR364G02CSS**
G1/2	2820	**PR10G04CSS**

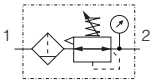
Lubricator

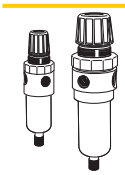




Port size	Flow l/min @ 7 bar	Order code
G1/2	3000	**PL10G04DSS**

Filter/Regulator



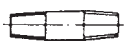


Port size	Flow l/min @ 7 bar	Order code fitted with 0-8.5 bar spring
G1/4	450	**PB548G02DHCSS**
G1/2	1800	**PB11G04DJCSS**

Panel mounting nut for G1/4: **PR05X51SS**
G1/2: **PR10X51SS**

Indicates stocked product.

Connectors



Port size	Order code
G1/4	**AC-2SS**
G1/2	**AC-4SS**

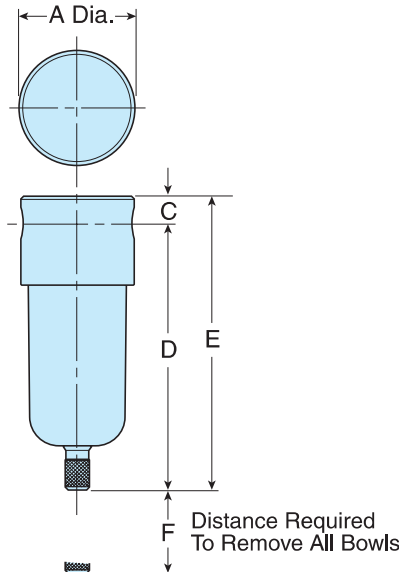
Stainless steel pressure gauge	**M1/4G40S-10 (0 to 10 bar)**

Home

Dimensions (mm) - 1/4"

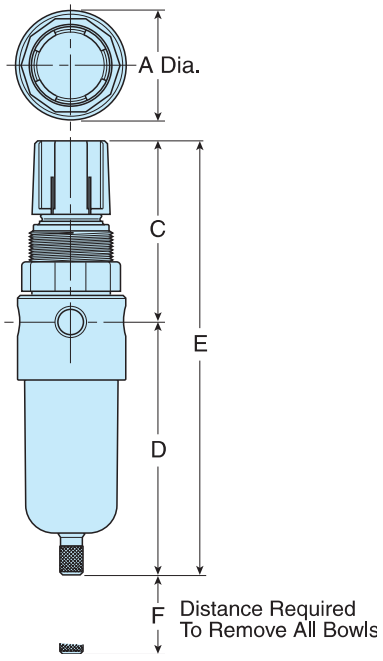
Filters

Coalescing Filters



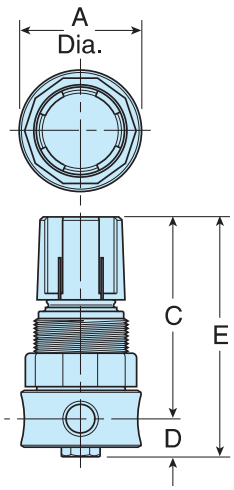
A	C	D	E	F
40mm	8mm	94mm	102mm	40mm

Filter/Regulators



A	C	D	E	F
40mm	67mm	92mm	159mm	40mm

Regulators



A	C	D	E
40mm	65mm	13mm	78mm

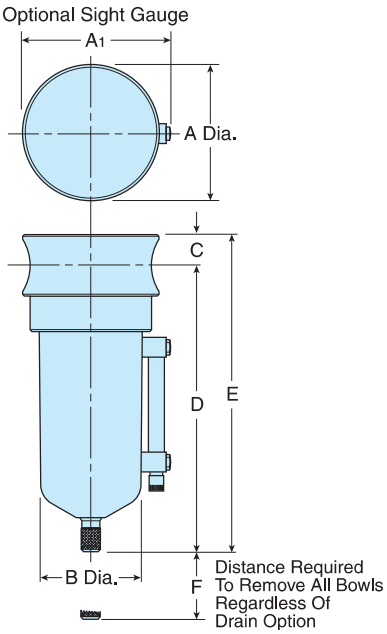
Service kits

Port size	Description	Order Code
Filter		
1/4	20 micron particulate element	**EK504Y**
1/4	5 micron particulate element	**EK504VY**
1/2	40 micron particulate element	**EK55J**
1/2	5 micron particulate element	**EK55G**
Coalescing Filter		
1/4	0.3 micron coalescing element	**EKF501H**
1/2	0.01 micron coalescing element	**EKF71**
Regulator		
1/4	Relieving type	**RKR364YSS**
1/4	Non-relieving type	**RKR36KYSS**
1/2	Relieving type	**RKR10YSS**
1/2	Non-relieving type	**RKR10KYSS**
Filter/Regulator		
1/4	20 micron particulate element	**EK504Y**
1/4	5 micron particulate element	**EK504VY**
1/2	40 micron particulate element	**EKF10Y**
1/2	5 micron particulate element	**EKF10VY**
Lubricator		
	Sight dome kit	**RKL10SS**

Dimensions (mm) - 1/2"

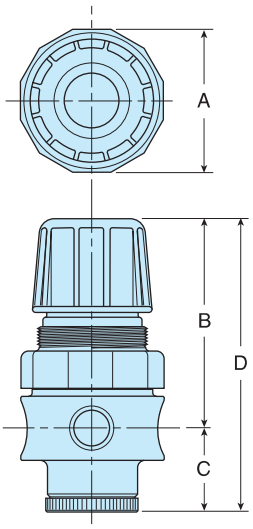
Filters

Coalescing Filters



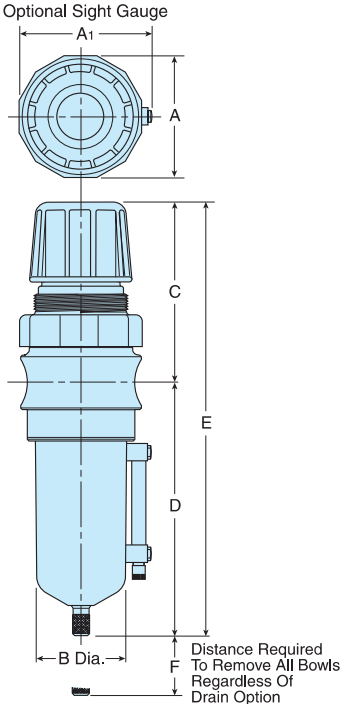
A	A1	B	C	D	E	F
60mm	64mm	44mm	14mm	127mm	141mm	54mm

Regulators



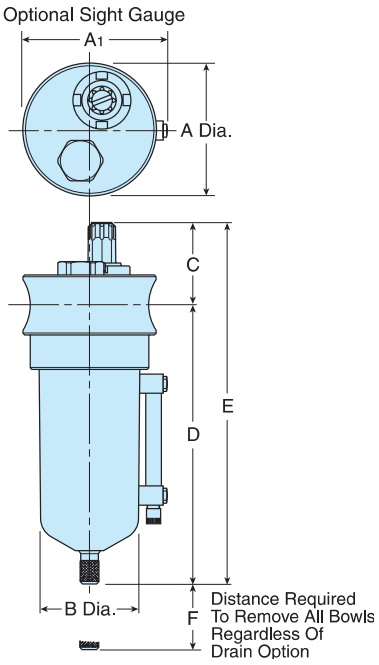
A	C	D	E
60mm	91mm	35mm	126mm

Filter/Regulators



A	A1	B	C	D	E	F
60mm	64mm	44mm	91mm	127mm	218mm	54mm

Lubricators



A	A1	B	C	D	E	F
60mm	64mm	44mm	46mm	127mm	173mm	89mm

Highly accurate units, suitable for applications such as instrumentation where precision regulation is required.

- High repeatability
- High relief capacity on R220 model
- High flow capacity on R230 model

Operating information

Max operating pressure	10 bar
Max operating temperature	66°C
Repeatability:	R210 model 0.3 mbar
	R220 model 0.3 mbar
	R230 model 0.6 mbar

For technical information see CD

	Port size	Reduced Pressure range	Flow l/min	Relief capacity l/min	**Order code**
	G1/4	0.13 - 2.7	396	57	**R210G02A**
	G1/4	0.13 - 8.1	396	57	**R210G02C**
	G1/4	0.13 - 8.1	396	282	**R220G02C**
	G1/4	0 - 2	2280	114	**R230G02B**
	G1/4	0.13 - 4	2280	114	**R230G02C**
	G1/4	0.13 - 10	2280	114	**R230G02D**

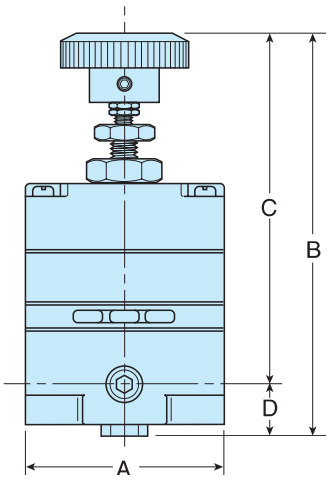
Mounting brackets

Series	**Order code**
R210 / R220	**446-707-045**
R230	**446-707-025**

Indicates stocked product.

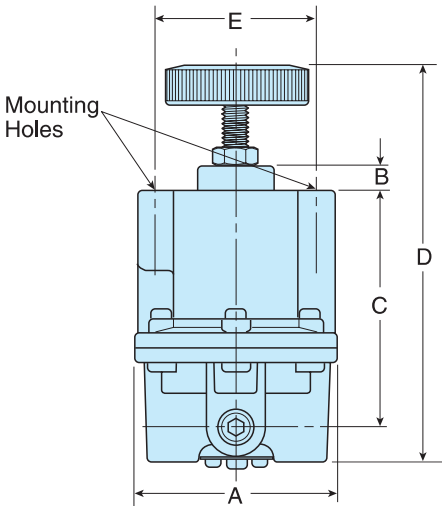
Dimensions (mm)

R210 / 220 High Precision Regulator



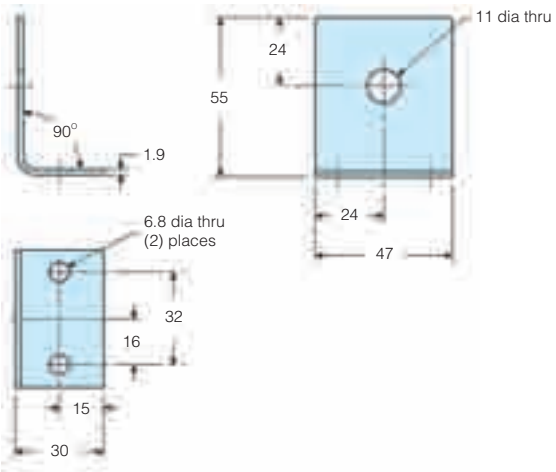
A	C	D	E
52mm	110mm	97mm	13.5mm

R230 High Flow Precision Regulator

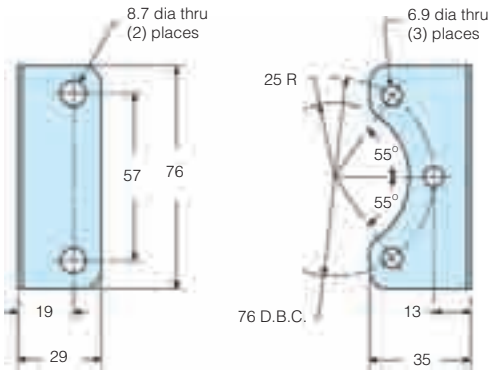


A	B	C	D	E
76mm	10mm	86mm	154mm	57mm

Mounting bracket - 446-707-045



Mounting bracket - 446-707-025



A range of speed controls, flow controls and back pressure sensors designed to be mounted directly onto the cylinder in the optimum position for maximum performance.

- "Push-in" or threaded connection
- Multifunction options
- Fit directly to cylinder ports
- Swivelling pilot banjo
- Pneumatic, Electric or Electronic back pressure sensor

Operating information

Working pressure;

PWR-L, PWR-H, PWR-A, PWR-B	1-10 bar
PWB-A, PWS-M, PWS-E, PWS-P	0-10 bar
PWA-L	0,2-10 bar

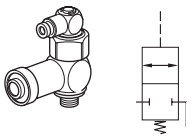
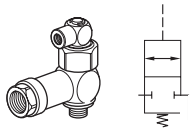
Working temperature	:	-15°C to +60°C
PWR-L		-15°C to +70°C

Pilot pressure at 6 bar supply;

PWB-A and PWR-HB	(1/8", 1/4" versions)	:	4 bar
	(1/2" and 3/8" versions)	:	2,9 bar
PWS-P111		:	4,4 bar
PWS-M1012		:	1,5 bar
PWS-E101 and E111		:	0,7 bar

For technical information see CD

2/2 Blockers

Symbol	Connection for pilot port	Thread for cylinder connection	Connection for tube Ø, mm	Tightening torque Nm	Qmax input at 6 bar, l/min*	Order code
With push-in connection						
	**Push-in *, Ø4 mm**	**G1/8**	6	8	500	**PWB-A1468**
		G1/4	6	12	600	**PWB-A1469**
			8	12	650	**PWB-A1489**
		G3/8	8	30	1600	**PWB-A1483**
			10	30	1750	**PWB-A1493**
		G1/2	12	35	2050	**PWB-A1412**
With threaded connection						
	**Push-in *, Ø4 mm**	**G1/8**	G1/4	8	500	**PWB-A1898**
		G1/4	G1/4	12	650	**PWB-A1899**
		G3/8	G3/8	30	1750	**PWB-A1833**
		G1/2	G1/2	35	2050	**PWB-A1822**

* M5 without banjo

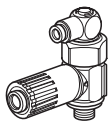
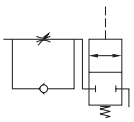
Indicates stocked product.

Home

Cylinder controls

Multifunction flow control + blockers

Symbol	Connection for pilot port	Thread for cylinder connection	Connection for tube Ø, mm	Tightening torque Nm	Qmax input at 6 bar, l/min*	Order code
With push-in connection						
barrel adjustment and locknut	**Push-in, Ø4 mm**	**G1/8**	4	8	330	**PWR-HB1448**
			6	8	500	**PWR-HB1468**
		G1/4	6	12	500	**PWR-HB1469**
			8	12	600	**PWR-HB1489**
		G3/8	8	30	1200	**PWR-HB1483**
			10	30	1300	**PWR-HB1493**
		G1/2	10	35	1400	**PWR-HB1492**

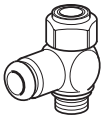



* Screw closed

Compact flow regulator with push-in connection

For direct port cylinder mounting

Symbol	Thread for cylinder connection	Push-in connection Ø, mm	Order code
With push-in connection and locknut (not M5)	**M5**	4	**PTF8PB4M5**
	G1/8	4	**PTF4PB4-1/8**
		6	**PTF4PB6-1/8**
	G1/4	6	**PTF4PB6-1/4**
	G3/8	8	**PTF4PB8-3/8**
		10	**PTF4PB10-3/8**
	G1/2	12	**PTF4PB12-1/2**



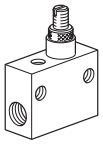
Flow regulator with adjustable exhaust restriction

For direct port cylinder mounting

Symbol	Thread for cylinder connection	Push-in connection Ø, mm	Order code
With push-in connection Allen key adjustment and locknut	**M5**	4	**PTFL8PB4M5**
	G1/8	4	**PTFL4PB4-1/8**
		6	**PTFL4PB6-1/8**
		8	**PTFL4PB8-1/8**
	G1/4	6	**PTFL4PB6-1/4**
		8	**PTFL4PB8-1/4**
		10	**PTFL4PB10-1/4**
	G3/8	8	**PTFL4PB8-3/8**
		10	**PTFL4PB10-3/8**
	G1/2	12	**PTFL4PB12-1/2**

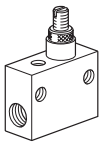
Flow control valves with by-pass

Symbol	Thread	Number of turns	Qmax input at 6 bar, l/min	Order code
	G1/8	13	240	**VQB12-Q-O-5**
	G1/4	13	1320	**VQB22-Q-O-5**
	G1/2	13	3600	**VQB42-Q-O-5**



Indicates stocked product.

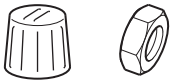
Flow control valves with by-directional control



Thread	Number of turns	Qmax input at 6 bar, l/min	Order code
G1/8	13	72	**VQB12-OX-5***
G1/8	13	240	**VQB12-O-5**
G1/4	13	1320	**VQB22-O-5**
G1/2	13	3600	**VQB42-O-5**

* Extra fine adjustment

Knob and nut for panel mounting

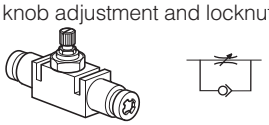


To suit	Order code
VQB12	**9128177212**
VQB22	**9128177222**
VQB42	**9128177242**

Inline speed controls, PWR-L series

For inline mounting

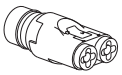
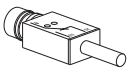
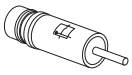
With push-in connection,
knob adjustment and locknut



4	**PWR-L1444**
6	**PWR-L1466**
8	**PWR-L1488**
10	**PWR-L1499**
12	**PWR-L1411**

Plug-in sensors

For use with banjo sockets

	Sensing function	Output function	Output connection	Output characteristics		Order code
	Exhaust back pressure decay	Pneumatic	Push-in Ø 4 mm	NO valve flow rate at 6 bar 1,5 l/s		**PWS-P111**
		Electrical ~ Ie = 3 A	3 wires 0,5 mm² length 2 m	CO contact 12 to 230 V ~ / 10 VA* 12 to 48 VDC/ 5 W*		**PWS-M1012**
		Solid state	3 wires 0,1 mm² length 2m	PNP type 10/30 VDC** 75 mA	NC	**PWS-E101**
					NO	**PWS-E111**

* Suitable for low currents : 250 V ~ / 4 mA ; 24 VDC / 10 mA ** Including ripple

Banjo sockets for plug-in sensors

With sensor locking clip,for direct port cylinder mounting

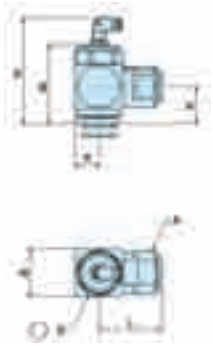
Thread size for cylinder port	Female thread	Tool required	Order code
M5	M5	8 mm flat spanner	**PWS-B155**
G1/8	G1/8	5 mm Allen key	**PWS-B188**
G1/4	G1/4	8 mm Allen key	**PWS-B199**
G3/8	G3/8	10 mm Allen key	**PWS-B133**
G1/2	G1/2	12 mm Allen key	**PWS-B122**

Indicates stocked product.

Home

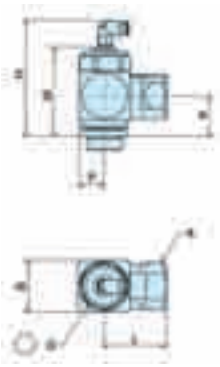
Dimensions (mm)

Blocker with push-in connection



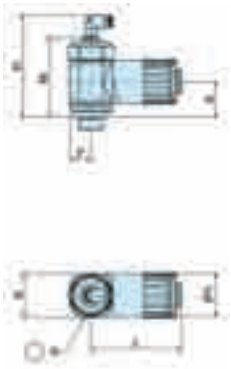
Order code	A	B	D	H	K	L	P	M
PWB-A1468	Ø 22	21	21	59,0	16,5	39	11	43
PWB-A1469	Ø 22	21	21	59,0	16,5	39	11	43
PWB-A1489	Ø 22	21	21	59,0	16,5	39	11	43
PWB-A1483	□ 27	30	27	66,5	22,5	39	15	52
PWB-A1493	□27	30	27	66,5	22,5	39	15	52
PWB-A1412	□27	30	27	66,5	22,5	39	15	52

Blocker with threaded connection



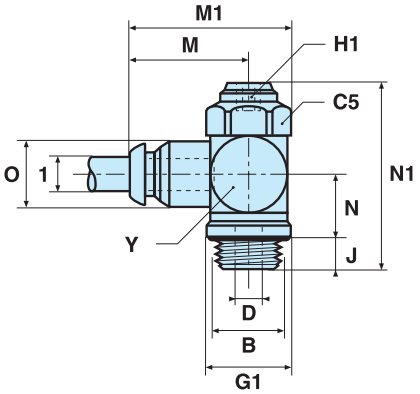
Order code	A	B	D	H	K	L	C	P	M
PWB-A1898	Ø 22	21	21	59,0	16,5	43,5	⎔24	11	43
PWB-A1899	Ø 22	21	21	59,0	16,5	43,5	⎔24	11	43
PWB-A1833	□ 27	30	27	66,5	22,5	36,0	□27	15	52
PWB-A1822	□ 27	30	27	66,5	22,5	36,0	□27	15	52

Blocker/Flow regulator



Order code	ØA	B	D	H	K	L	P
PWR-HB1448	22,5	21	21	59	16,5	47,0	12,5
PWR-HB1468	22,5	21	21	59	16,5	47,0	12,5
PWR-HB1469	22,5	21	21	59	16,5	47,0	12,5
PWR-HB1489	22,5	21	21	59	16,5	47,0	12,5
PWR-HB1483	29,0	30	27	64,5	22,5	60,0	15,0
PWR-HB1493	29,0	30	27	64,5	22,5	60,0	15,0
PWR-HB1492	29,0	30	27	64,5	22,5	60,0	15,0

PTF4/8PB - Flow regulator with push-in connection

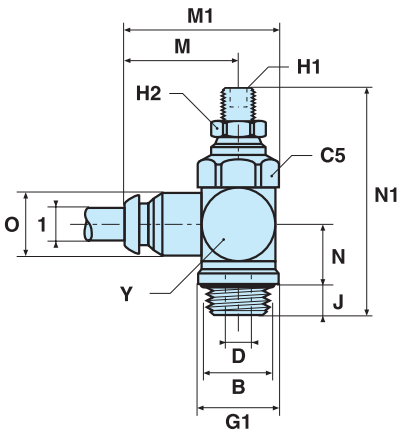


Exhaust flow control

Order code	C5	D	G1	H1	J	M	M1	N	N1	O	Y
PTF8PB4M5**	8	1,65	10,0	1,5	4	19,5	24,5	6,3	22,0	10	10
PTF4PB4-1/8	14	3,00	14,4	2,0	6	22,0	30,1	10,7	34,5	10	14
PTF4PB6-1/8	14	3,20	14,4	2,0	6	23,5	31,6	10,7	34,5	12	14
PTF4PB6-1/4	17	5,20	18,4	4,0	7	25,0	34,9	13,8	41,0	12	17
PTF4PB8-1/8	14	3,20	14,4	2,0	6	25,0	33,1	10,7	34,5	14	14
PTF4PB10-3/8	22	6,00	21,6	4,0	7	34,0	46,7	17,3	51,0	17	22
PTF4PB12-1/2	27	8,50	26,5	4,0	9	36,5	52,1	20,1	61,0	20	27

Dimensions (mm)

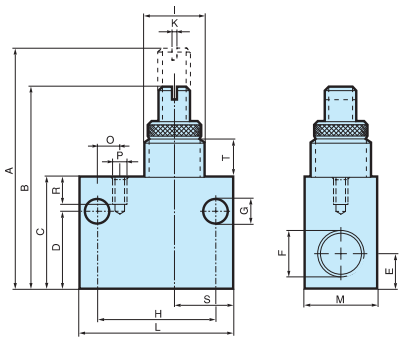
PTFL4/8PB - Flow regulator with push-in connection



Exhaust flow control

Order code	C5	D	G1	H1	H2	J	M	M1	N	N1	O	Y
PTFL8PB4M5**	8	1,65	10,0	1,5	8	4	19,5	24,5	6,3	28,5	10	10
PTFL4PB4-1/8	14	3,00	14,4	2,0	7	6	22,0	30,1	10,7	43,7	10	14
PTFL4PB6-1/8	14	3,20	14,4	2,0	7	6	23,5	31,6	10,7	43,7	12	14
PTFL4PB6-1/4	17	5,20	18,4	4,0	11	7	25,0	34,9	13,8	51,8	12	17
PTFL4PB8-1/8	14	3,20	14,4	2,0	7	6	25,0	33,1	10,7	43,7	14	14
PTFL4PB8-1/4	17	5,20	18,4	4,0	11	7	28,5	38,3	13,8	51,8	14	17
PTFL4PB8-3/8	22	6,00	21,6	4,0	11	7	29,5	42,2	17,3	63,7	14	22
PTFL4PB10-3/8	22	6,00	21,6	4,0	11	7	34,0	46,7	17,3	63,7	17	22
PTFL4PB12-1/2	27	8,50	26,5	4,0	14	9	36,5	52.,1	20,1	76,1	20	27

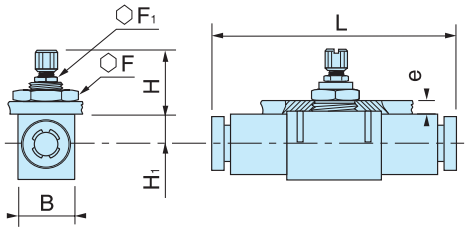
Flow Control Valves



Order code	A	B	C	D	E	F	G	H	I
VQB12-(Q)-OX-5	49	42	22	15	6,5	G1/8	5,8	24	M12x1
VQB12-(Q)-O-5	49	42	22	15	6,5	G1/8	5,8	24	M12x1
VQB22-(Q)-O-5	64	53	30	21	8,5	G1/4	7,0	32	M16x1
VQB42-(Q)-O-5	99	85	50	36	16,5	G1/2	7,0	50	M24x1,5

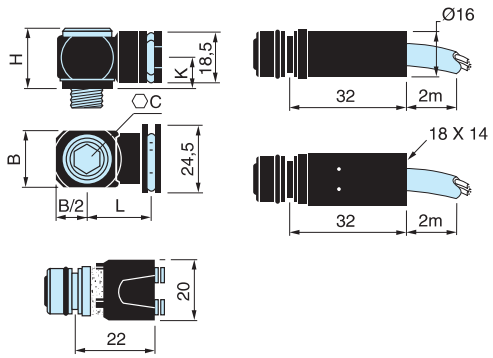
Order code	K	L	M	O	P	R	S	T
VQB12-(Q)-OX-5	1,2	32	15	-	-	-	13,5	8,8
VQB12-(Q)-O-5	1,2	32	15	-	-	-	13,5	8,8
VQB22-(Q)-O-5	1,2	42	20	6,0	M4	7	16,0	10,0
VQB42-(Q)-O-5	1,8	62	30	19,5	M4	7	20,5	15,2

Speed Controls, PWR-L Series



Order code	B	F	F1	e	H+	H-	H1	L	Q
PWR-L1444	12,0	14	*	6	25,5	21,5	6,5	39,0	10,5
PWR-L1466	17,0	19	*	7	32,5	27,5	7,5	54,0	17,0
PWR-L1488	18,5	24	11	7	34,5	28,5	9,0	60,5	19,0
PWR-L1499	24,0	30	14	7	38,5	29,5	11,5	76,0	25,0
PWR-L1411	28,0	32	14	8	42,0	32,0	12,5	86,0	28,0

Back Pressure Sensors - Modular



Order code	C	B	H	K	L
PWS-B155	8	11	16,5	10	17
PWS-B188	5	16	20,0	10	20
PWS-B199	8	21	20,0	10	22
PWS-B133	10	28	22,0	12	25
PWS-B122	12	33	26,0	14	26

Shuttle valve and Quick exhaust valves

Quick Exhaust Valves

- Increases piston speeds, super sensitive diaphragm.
- May be used as differential shuttle valve.

Shuttle Valves

- Allows two separate signals to be applied to the air pilot.
- 0,6 bar differential, Viton seals as standard.

Non Return Valves

- Aluminium or polymer bodies
- Compact

Operating information

Shuttle valve •••005

Working pressure	1,3 - 17 bar
Working temperature; Standard	-10 °C to +180 °C

Quick exhaust valve P4Q

Working pressure:	0,2 - 10 bar
Working temperature; Standard:	-10 °C to +80 °C

VB

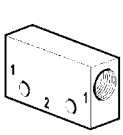
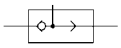
Working pressure	Max 10 bar
Working temperature	-20 °C to +70 °C

PWA-L

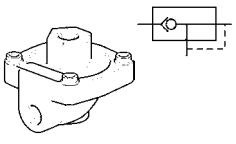
Working pressure	0,2 - 10 bar
Working temperature;	-15 °C to +60 °C

For technical information see CD

Shuttle Valves

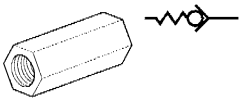
Symbol	Port size	Order code
 	M5	**M33005**
	G1/8	**B43005B**
	G1/4	**B53005A**

Quick Exhaust Valves P4Q Series

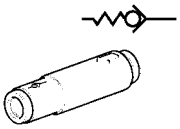
Symbol	Port size	Order code
	**Standard Version**	
	G1/4	**P4Q-BA12**
	G3/8	**P4Q-BA13**
	G1/2	**P4Q-CA14**
	G3/4	**P4Q-CA16**
	High Temperature Version (Flurocarbon diaphragm)	
	G3/8	**P4Q-BV13**
	G1/2	**P4Q-CV14**
	G3/4	**P4Q-CV16**

Non Return Valves

Aluminium VB Series

Symbol	Port size	Order code
	G1/8	**VB12-Q-NQ-5**
	G1/4	**VB22-Q-NQ-5**
	G1/2	**VB42-Q-NQ-5**

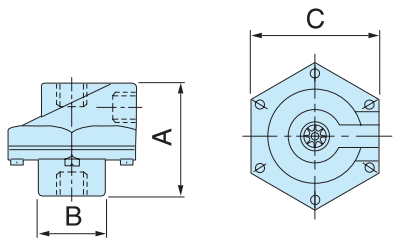
Line mounted non-return valves

Symbol	Push-in connection Ø, mm	Flow rate 6 bar, l/s	Order code
	4	3,33	**PWA-L1444**
	6	11,00	**PWA-L1466**
	8	26,67	**PWA-L1488**

Indicates stocked product.

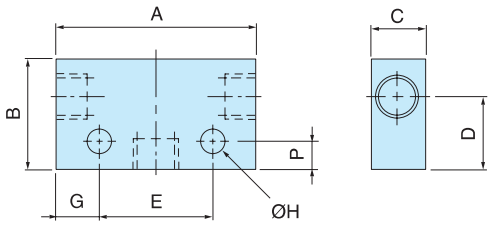
Dimensions (mm)

Quick Exhaust Valves



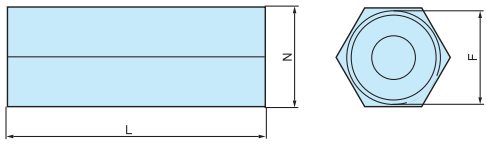
Order code	Port Size	A	B	C
P4Q-B*12	G1/4	52	25	62
P4Q-B*13	G3/8	52	25	62
P4Q-B*14	G1/2	73	38	86
P4Q-B*16	G3/4	73	38	86

Shuttle Valves



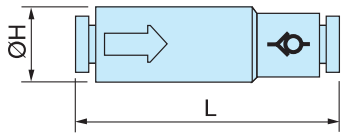
Order code	Port Size	A	B	C	D	E	F	G	H
M33005	M5	27,5	24	15	16,0	15	6	6,3	3,2
M43005B	G1/8	44,0	24	15	16,0	25	6	9,5	4,5
B53005A	G1/4	52,0	30	22	20,5	35	10	8,5	5,5

Non Return Valves - VB - Female



Order code	F	L	N
VB12-Q-NQ-5	G1/8	31	14
VQB22-Q-NQ-5	G1/4	40	17
VB42-Q-NQ-5	G1/2	59	27

Non Return Valves - Push-in



Order code	ØH	L
PWA-L1444	11,0	43,0
PWA-L1466	13,0	49,5
PWA-L1488	13,5	55,0

Fittings and Airline Accessories

Exhaust Silencers

The efficient reduction in noise from exhausting compressed air is not only desirable but a legal requirement.
The range of silencers illustrated below covers plastic, sintered metal and 'can' versions suitable for almost all general applications from M5 to G1" sizes.

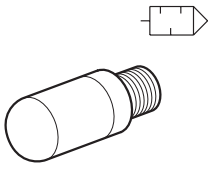
- All plastic ultra light weight versions
- Aluminium body versions
- Sintered metal
- Versions with push-in connections
- High noise level reduction
- Low back pressure generation

Operating information

Plastic	Working temperature:	-10°C to +80°C
	Efficiency	92%
Metal	Working temperature:	-10°C to +74°C
	Working pressure	up to 17 bar

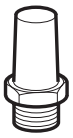
For technical information see CD

P6M plastic series



Port	Order code	Pack Qty
M5	**P6M-PAC5**	10
G1/8	**P6M-PAB1**	10
G1/4	**P6M-PAB2**	10
G3/8	**P6M-PAB3**	10
G1/2	**P6M-PAB4**	5
G3/4	**P6M-PAB6**	1
G1	**P6M-PAB8**	1

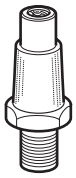
Sintered bronze series



Port	Order code
M5	**9721900005**
G1/8	**9090050700**
G1/4	**P6M-BAA2**
G3/8	**9090050900**
G1/2	**9090051000**
G3/4	**9090051100**
G1	**9090051500**

Restrictor Silencers

Sintered metal series

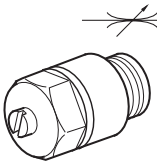


Port	Order code
M5	**33006**
R1/8	**43006**
R1/4	**T53006**
R3/8	**T63006A**
G1/2	**B73006**

Instant push-in version

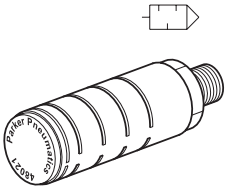
Port	Order code
Ø4mm	**PXC-X14**
Ø6mm	**PZC-S1006**
Ø8mm	**PZC-S1008**

Sintered plastic version



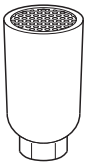
Port	Order code
G1/8	**9301050901**
G1/4	**9301050902**
G3/8	**9301050903**
G1/2	**9301050904**

Self cleaning Exhaust silencers, 48 series



Port	Order code
R1/8	**48021000**
R1/4	**48041000**
R3/8	**48061000**
R1/2	**48081000**
R3/4	**48121000**
R1"	**48161000**

Heavy Duty Series



Port	Order code
G3/8	**P6M-MA13**
G1/2	**P6M-MA14**
G3/4	**P6M-MA16**
G1	**P6M-MA18**

Indicates stocked product.

The safe disposal of compressed air exhaust promotes better working conditions and improves the environment.
The units illustrated provide excellent noise level reduction and oil aerosol removal for safer working

- Removes oil mist from exhaust air
- Efficiently silences exhaust air
- Easily replaceable element

Operating information

Reclassifier - Metal repairable version

Working temperature	0 °C to 66 °C max.
Working pressure	Max 7 bar
Efficiency	Better than 99%
Maximum flow rate	G1/2, G3/4 small unit 27,8 l/s
	G3/4, G1 large unit 50 l/s

For technical information see CD

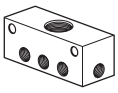
Metal repairable version

	Symbol	Port size	Type of reclassifier	Order code
		G1/2	Small	**3514S**
		G3/4	Small	**3516S**
		G3/4	Large	**3516**
		G1	Large	**3518**

Replacement element

	For reclassifier	Type	Order code
	3514S, 3516S	Small	**3514S-2**
	3516, 3518	Large	**3516-2**

Manifold for metal repairable version

	Number of ports	Order code
	5	**M3516-5**
	7	**M3516-7**
	9	**M3516-9**
Wall mounting kit		**3516W**

The manifold is available for G3/4 sizes only.
For other sizes consult technical sales.

Indicates stocked product.

Home

Ball valves and sliding sleeve valves

Ball valves

- 3 distinct series
- Vented and non vented
- Bubble tight shut-off
- Positive 90 ° movement
- Wide variety of fluids

Sliding sleeve valves

- Linear sleeve operated 3/2 valve
- Simple airline isolation
- Compact
- Minimum space for valve operation

Ball Valves

Fluids in circulation	Temperature Min °C	Max°C	Fluids in circulation	Temperature Min°C	Max°C
Compressed air	-20	+100	Natural gas	-20	+40
Methylated spirits	-20	+40	Glycerine	-20	+40
Diluted anti-freeze	-20	+90	Glycol	-20	+40
Butane	-20	+60	Cutting oils	-20	+100
Carbonate of soda		+40	Oils and greases	-20	+90
Carbonated water		+40	Hydraulic oils	-20	+90
Sea water		+90	Saponified liquids		+30
Distilled water		+90	Fuel oil	-20	+40
Water+carb gas		+40	Methane	-20	+60
Tap water		+90	Paraffin		+60
Petroleum	-20	+40	Propane	-20	+60
CO^2	-20	+60	Stearine		+60
Town gas	-20	+40			

Operating information

Ball valves

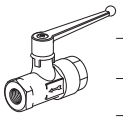
	3/2 Standard	2/2 Light	2/2 Heavy Duty
Pressure	Vacuum to 40 bar	Vacuum to 11,7 bar	Vacuum to 40 bar
Temperature	-20 °C to +100 °C		
Fluids	Air only	Air, oil, gases	Air, oil, gases

Sliding sleeve valves

Working pressure	Max 40 bar
Working temperature	-20 °C to +100 °C

For technical information see CD

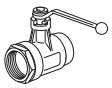
3/2 Standard series Ball valves

Symbol	Ø Flow passage mm	Ø Exhaust passage mm	Port size	Order code	Box Qty
	13	2	G1/4	**BVG4P-1/4LOCK**	12
	13	2	G3/8	**BVG4P-3/8LOCK**	12
	16	2	G1/2	**BVG4P-1/2LOCK**	8
	18	2,5	G3/4	**BVG4P-3/4LOCK**	12
	19	3	G1	**BVG4P-1LOCK**	8

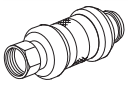
2/2 Light series Ball valves

Symbol	Ø Flow passage mm	Port size	Order code	Box Qty
	4	G1/4	**MBVG4-1/4**	12
	7	G3/8	**MBVG4-3/8**	12
	10	G1/2	**MBVG4-1/2**	6

2/2 Heavy duty series Ball valves

Symbol	Ø Flow passage mm	Port size	Order code	Box Qty
	32	G1 1/2	**BVG4-1 1/2L**	6
	40	G2	**BVG4-2L**	4

Sliding sleeve valve

Symbol	Connection	Order code	Box Qty
	G1/8	**9721900560**	1
	G1/4	**9721900561**	1
	G3/8	**9721900562**	1
	G1/2	**9721900563**	1

Quick acting couplers (check units) allow air tools or other portable equipment to be connected at convenient points.
The Intercheck series feature industry interchangeable adaptor forms and the sleeve action allows one hand operation.

- Interchangeable with:-
  Series 35 - CEJN 310 & Rectus 25
- Single hand operation
- High flow with minimum pressure drop

Operating information

Working pressure	0 - 30 bar
Working temperature	-10 °C to +80 °C

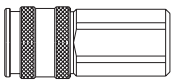
Flow: Qmax

Intercheck 35	3300 l/min
Mini	1080 l/min
Euro	1080 l/min
Schrader Standard Series	1416 l/min
Schrader Heavy Duty Series	3120 l/min

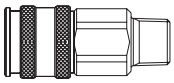
For technical information see CD

Intercheck 35

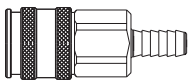
Check units



Connection	Order Code
1/4" BSPP	**P6C-JS12**
3/8" BSPP	**P6C-JS13**
1/2" BSPP	**P6C-JS14**

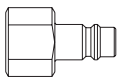


Connection	Order Code
1/4" BSPT	**P6C-JSB2**
3/8" BSPT	**P6C-JSB3**
1/2" BSPT	**P6C-JSB4**

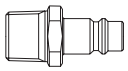


Hose ID	Order Code
6mm	**P6C-JSH6**
8mm	**P6C-JSH8**
10mm	**P6C-JSHA**
13mm	**P6C-JSHC**

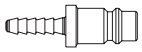
Adaptors



Connection	Order Code	Pack Qty
1/4" BSPP	**P6A-JS12-005**	5
3/8" BSPP	**P6A-JS13-005**	5



Connection	Order Code	
1/4" BSPT	**P6A-JSB2-005**	5
3/8" BSPT	**P6A-JSB3-005**	5
1/2" BSPT	**P6A-JSB4-005**	5



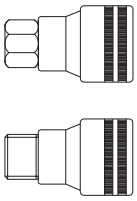
Hose ID	Order Code	
6mm - Hose tail	**P6A-JSH6-005**	5
8mm - Hose tail	**P6A-JSH8-005**	5
10mm - Hose tail	**P6A-JSHA-005**	5
13mm - Hose tail	**P6A-JSHC-005**	5

Indicates stocked product.

Quick acting couplers

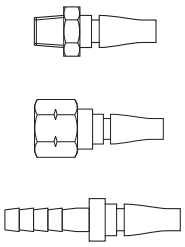
Schrader standard series

Check units



Connection	Order Code	Pack Qty
G1/4 BSPP - Female	**8952DL-12**	10
R1/4 BSPT - Male	**9793D-12**	10
R3/8 BSPT - Male	**9792D-12**	10

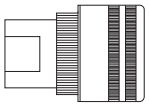
Adaptors



Connection	Order Code	Pack Qty
R1/8 BSPT	**8051B-11**	10
R1/4 BSPT	**8050B-11**	10
G1/8 BSPP	**2047B**	10
G1/4 BSPP	**8278L-11**	10
1/4" 6mm Hose tail	**8787-11**	10
5/16" 8mm Hose tail	**9750-11**	10
3/8" 10mm Hose tail	**8788-11**	10
G1/4 BSPP Non-whip	**9031**	10

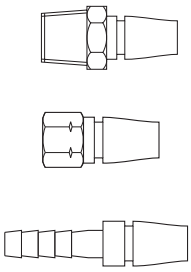
Schrader heavy duty series

Check units



Connection	Order Code	Pack Qty
G1/4 BSPP - Female	**1054EL-12**	5
G3/8 BSPP - Female	**1095EL-12**	5
G1/2 BSPP - Female	**1461EL-12**	5
G3/4 BSPP - Female	**1462EL-12**	5

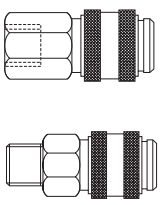
Adaptors



Connection	Order Code	Pack Qty
R1/4 BSPT	**8624B-11**	10
R3/8 BSPT	**9739-11**	10
R1/2 BSPT	**8807-11**	10
G3/4 BSPP	**1462B-11**	10
G1/4 BSPP	**1261L-11**	10
G3/8 BSPP	**1096B-11**	10
3/8" 10mm Hose tail	**1097-11**	10
1/2" 12mm Hose tail	**1098-11**	10
G3/8 BSPP Non-whip	**9042**	10

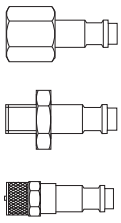
Mini series

Check units



Connection	Order Code	Pack Qty
G1/8 BSPP - Female	**7073**	10
G1/8 BSPP - Male	**7071**	10

Adaptors



Connection	Order Code	Pack Qty
G1/8 BSPP	**7370**	10
G1/8 BSPP	**7170**	10
4mm - Finger tight	**7470**	10

Indicates stocked product.

- Use with plastic or metal tubing
- Positive hold by a flexible grab ring
- Ready to use fitting
- Plastic push button
- Taper thread fittings for general use
- Parallel thread fittings for use with plastic bodied valves
- Other versions available, refer to CD

Ordering information

Prestolok fittings are sold in packs. The package quantities are indicated adjacent to the part numbers.
When ordering, order by the quantity required. For example : to obtain 20 Prestolok 2 Equal Union 4mm Tees, purchase order should state:-

Qty 20 **EPB4**

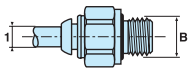
Note
Orders received for Prestolok fittings in quantities other than pack quantity multiples will be rounded up to the nearest multiple

Operating information

	Prestolok Micro
Working pressure	0,01 to 16 bar
Working temperature	-25 °C to +80 °C
	Prestolok 2
Working pressure	0,01 to 25 bar
Working temperature	-25 °C to +70 °C
	Prestolok
Working pressure	0,01 to 25 bar
Working temperature	-25 °C to +100 °C

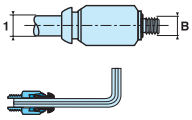
For technical information see CD

Male straight connectors - Parallel thread



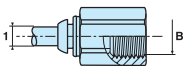
Tube Ø1	Thread B	Order code	Box Qty
4	M5x,0,8	**F8PMB4M5**	30
6	M5x,0,8	**F8PMB6M5**	20
4	1/8	**F4PMB4-1/8**	20
4	1/4	**F4PMB4-1/4**	20
6	1/8	**F4PMB6-1/8**	30
6	1/4	**F4PMB6-1/4**	30
8	1/8	**F4PB8-1/8**	40
8	1/4	**F4PB8-1/4**	30
8	3/8	**F4PB8-3/8**	20
10	1/4	**F4PB10-1/4**	20
10	3/8	**F4PB10-3/8**	20
10	1/2	**F4PB10-1/2**	10
12	1/4	**F4PB12-1/4**	10
12	3/8	**F4PB12-3/8**	10
12	1/2	**F4PB12-1/2**	10
14	3/8	**F4PB14-3/8**	10
14	1/2	**F4PB14-1/2**	10

Male straight connectors



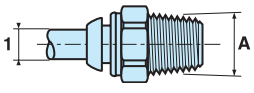
Tube Ø1	Thread B	Order code	Box Qty
4	M5x,0,8	**F28PMB4M5**	30
6	M5x,0,8	**F28PMB6M5**	20

Female connectors



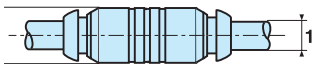
Tube Ø1	Thread B	Order code	Box Qty
4	M5x0,8	**G8PMB4M5**	10
4	1/8	**G4PMB4-1/8**	20
4	1/4	**G4PMB4-1/4**	10
6	1/8	**G4PMB6-1/8**	20
6	1/4	**G4PMB6-1/4**	10
8	1/8	**G4PB8-1/8**	10
8	1/4	**G4PB8-1/4**	10

Male Connector - BSPT



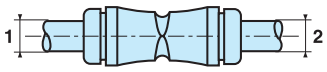
Tube Ø1	Thread A	Order code	Box Qty
4	1/8	**F3PMB4-1/8**	40
4	1/4	**F3PMB4-1/4**	30
6	1/8	**F3PMB6-1/8**	40
6	1/4	**F3PMB6-1/4**	40
8	1/8	**F3PB8-1/8**	40
8	1/4	**F3PB8-1/4**	40
8	3/8	**F3PB8-3/8**	30
10	1/4	**F3PB10-1/4**	20
10	3/8	**F3PB10-3/8**	20
10	1/2	**F3PB10-1/2**	10
12	1/4	**F3PB12-1/4**	10
12	3/8	**F3PB12-3/8**	10
12	1/2	**F3PB12-1/2**	10
14	3/8	**F3PB14-3/8**	10
14	1/2	**F3PB14-1/2**	10

Equal union



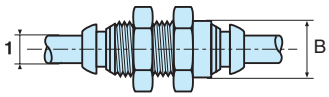
Tube Ø1	Plastic Order code	Box Qty	Metal Order code	Box Qty
4	**HPMK4**	20	**HPB4**	30
6	**HPMK6**	30	**HPB6**	20
8	**HPK8**	30	**HPB8**	20
10	**HPK10**	20	**HPB10**	10
12	**HPK12**	10	**HPB12**	10
14	**HPK14**	10	**HPB14**	5

Unequal union



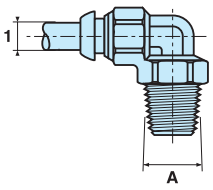
Tube Ø1	Tube Ø2	Plastic Order code	Box Qty
6	4	**HPMK6-4**	20
8	4	**HPK8-4**	20
8	6	**HPK8-6**	20
10	6	**HPK10-6**	10
10	8	**HPK10-8**	10
12	10	**HPK12-10**	10

Bulkhead equal union



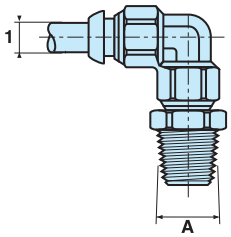
Tube Ø1	Thread B	Metal (Micro) Order code	Box Qty	Metal Order code	Box Qty
4	M11x0.75	**WPMB4**	10	**WPB4**	10
6	M13x1	**WPMB6**	10	**WPB6**	10
8	M15x1.25			**WPB8**	10
10	M18x1			**WPB10**	5
12	M23x1.5			**WPB12**	5
14	M24x1.5			**WPB14**	3

Compact elbow - BSPT



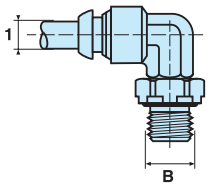
Tube Ø1	Thread A	Metal Order code	Box Qty
4	1/8	**C3PB4-1/8**	20
6	1/8	**C3PB6-1/8**	10
6	1/4	**C3PB6-1/4**	10
8	1/8	**C3PB8-1/8**	10
8	1/4	**C3PB8-1/4**	10
10	1/4	**C3PB10-1/4**	10
10	3/8	**C3PB10-3/8**	10
12	3/8	**C3PB12-3/8**	5
12	1/2	**C3PB12-1/2**	5
14	3/8	**C3PB14-3/8**	5
14	1/2	**C3PB14-1/2**	5

Adjustable male elbow - BSPT



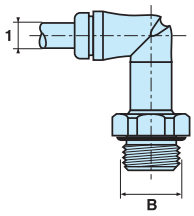
Tube Ø1	Thread A	Plastic Order code	Box Qty	Metal Order code	Box Qty
4	1/8	**C63PMK4-1/8**	30	**C63PB4-1/8**	20
4	1/4	**C63PMK4-1/4**	20	**C63PB4-1/4**	20
6	1/8	**C63PMK6-1/8**	20	**C63PB6-1/8**	20
6	1/4	**C63PMK6-1/4**	20	**C63PB6-1/4**	20
8	1/8	**C63PK8-1/8**	20	**C63PB8-1/8**	20
8	1/4	**C63PK8-1/4**	20	**C63PB8-1/4**	10
8	3/8	**C63PK8-3/8**	10	**C63PB8-3/8**	10
10	1/4	**C63PK10-1/4**	10	**C63PB10-1/4**	10
10	3/8	**C63PK10-3/8**	10	**C63PB10-3/8**	10
10	1/2	**C63PK10-1/2**	10		
12	1/4	**C63PK12-1/4**	10	**C63PB12-1/4**	10
12	3/8	**C63PK12-3/8**	10	**C63PB12-3/8**	10
12	1/2	**C63PK12-1/2**	10	**C63PB12-1/2**	5
14	3/8	**C63PK14-3/8**	10	**C63PB14-3/8**	5
14	1/2	**C63PK14-1/2**	10	**C63PB14-1/2**	5

Compact adjustable male elbow - Parallel



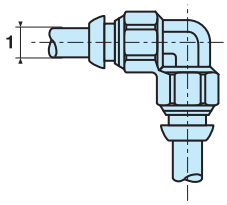
Tube Ø1	Thread B	Plastic Order code	Box Qty	Metal Order code	Box Qty
4	M5x0,8	**C68SPK4M5**	20	**C68SPB4M5**	10
4	1/8	**C64SPK4-1/8**	20	**C64SPB4-1/8**	10
4	1/4	**C64SPK4-1/4**	20		
6	1/8	**C64SPK6-1/8**	20	**C64SPB6-1/8**	10
6	1/4	**C64SPK6-1/4**	20	**C64SPB6-1/4**	10
8	1/8	**C64SPK8-1/8**	20	**C64SPB8-1/8**	10
8	1/4	**C64SPK8-1/4**	20	**C64SPB8-1/4**	10
8	3/8	**C64SPK8-3/8**	10	**C64SPB8-3/8**	10
10	1/4			**C64SPB10-1/4**	10
10	3/8			**C64SPB10-3/8**	10
12	1/4			**C64SPB12-1/4**	10
12	3/8			**C64SPB12-3/8**	5
12	1/2			**C64SPB12-1/2**	5

Adjustable extended male elbow - Parallel



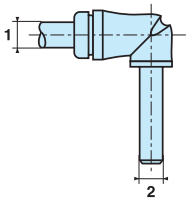
Tube Ø1	Thread B	Plastic Order code	Box Qty
4	1/8	**C64LPMK4-1/8**	10
4	1/4	**C64LPMK4-1/4**	10
6	1/8	**C64LPMK6-1/8**	10
6	1/4	**C64LPMK6-1/4**	10

Equal union elbow



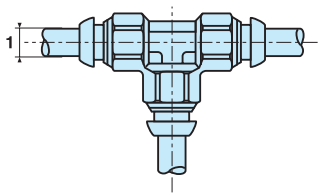
Tube Ø1	Plastic Order code	Box Qty	Metal Order code	Box Qty
4	**EPMK4**	20	**EPB4**	20
6	**EPMK6**	20	**EPB6**	20
8	**EPK8**	20	**EPB8**	10
10	**EPK10**	10	**EPB10**	10
12	**EPK12**	10	**EPB12**	10
14	**EPK14**	10	**EPB14**	5

Compact plug in elbow



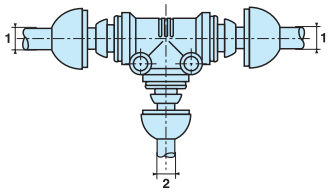
Tube Ø1	Tube Ø2	Plastic Order code	Box Qty
4	4	**T2ESPMK4**	20
6	6	**T2ESPMK6**	20
4	6	**T2ESPMK4-6**	30
8	8	**T2ESPK8**	20

Equal union tee



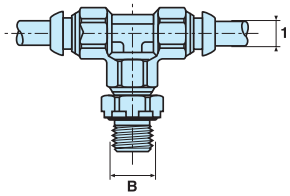
Tube Ø1	Plastic Order code	Box Qty	Metal Order code	Box Qty
4	**JPMK4**	20	**JPB4**	10
6	**JPMK6**	20	**JPB6**	10
8	**JPK8**	10	**JPB8**	10
10	**JPK10**	10	**JPB10**	10
12	**JPK12**	10	**JPB12**	5
14	**JPK14**	5	**JPB14**	5

Unequal union tee



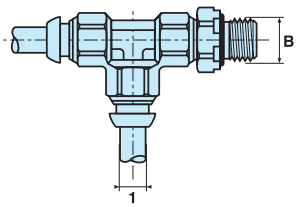
Tube Ø1	Tube Ø2	Plastic Order code	Box Qty
6	4	**JPK6-6-4**	10
8	6	**JPK8-8-6**	10
10	8	**JPK10-10-8**	10
12	10	**JPK12-12-10**	10
4	6	**JPK4-4-6**	10
6	8	**JPK6-6-8**	10
8	10	**JPK8-8-10**	10
10	12	**JPK10-10-12**	5

Adjustable male run tee - Parallel



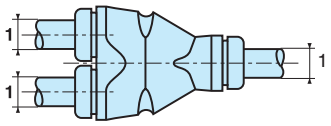
Tube Ø1	Thread B	Plastic Order code	Box Qty	Metal Order code	Box Qty
4	M5x0,8	**R68PMK4M5**	10	**R68PB4M5**	10
6	M5x0,8	**R68PMK6M5**	10	**R68PB6M5**	10
4	1/8	**R64PMK4-1/8**	10	**R64PB4-1/8**	10
4	1/4	**R64PMK4-1/4**	10	**R64PB4-1/4**	10
6	1/8	**R64PMK6-1/8**	10	**R64PB6-1/8**	10
6	1/4	**R64PMK6-1/4**	10	**R64PB6-1/4**	10
8	1/8	**R64PK8-1/8**	10	**R64PB8-1/8**	10
8	1/4	**R64PK8-1/4**	10	**R64PB8-1/4**	10
8	3/8	**R64PK8-3/8**	10	**R64PB8-3/8**	10
10	1/4	**R64PK10-1/4**	10	**R64PB10-1/4**	5
10	3/8	**R64PK10-3/8**	5	**R64PB10-3/8**	5
12	1/4	**R64PK12-1/4**	5	**R64PB12-1/4**	5
12	3/8	**R64PK12-3/8**	5	**R64PB12-3/8**	5
14	3/8	**R64PK14-3/8**	5	**R64PB14-3/8**	3
14	1/2	**R64PK14-1/2**	5	**R64PB14-1/2**	3

Adjustable male branch tee - Parallel



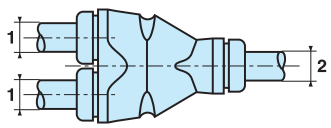
Tube Ø1	Thread B	Plastic Order code	Box Qty	Metal Order code	Box Qty
4	M3x0,5	**S68PMK4M3**	10		
4	M5x0,8	**S68PMK4M5**	10	**S68PB4M5**	10
6	M5x0,8	**S68PMK6M5**	10	**S68PB6M5**	10
4	1/8	**S64PMK4-1/8**	10	**S64PB4-1/8**	10
4	1/4	**S64PMK4-1/4**	10	**S64PB4-1/4**	10
6	1/8	**S64PMK6-1/8**	10	**S64PB6-1/8**	10
6	1/4	**S64PMK6-1/4**	10	**S64PB6-1/4**	10
8	1/8	**S64PK8-1/8**	10	**S64PB8-1/8**	10
8	1/4	**S64PK8-1/4**	10	**S64PB8-1/4**	5
8	3/8	**S64PK8-3/8**	10	**S64PB8-3/8**	5
10	1/4	**S64PK10-1/4**	10	**S64PB10-1/4**	5
10	3/8	**S64PK10-3/8**	5	**S64PB10-3/8**	5
12	1/4	**S64PK12-1/4**	5	**S64PB12-1/4**	5
12	3/8	**S64PK12-3/8**	5	**S64PB12-3/8**	5
14	3/8	**S64PK14-3/8**	5	**S64PB14-3/8**	3
14	1/2	**S64PK14-1/2**	5	**S64PB14-1/2**	3

Equal union Y connector



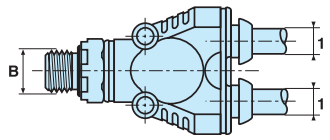
Tube Ø1	Plastic Order code	Box Qty
4	**YJPMK4**	20
6	**YJPMK6**	10
8	**YJPK8**	10
10	**YJPK10**	10

Unequal union Y connector



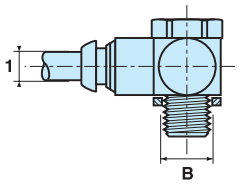
Tube Ø1	Tube Ø2	Plastic Order code	Box Qty
3	4	**YJPMK4-3**	10
3	6	**YJPMK6-3**	10
4	6	**YJPMK6-4**	10
6	8	**YJPK6-6-8**	10
8	10	**YJPK8-8-10**	5

Adjustable male Y connector - Parallel



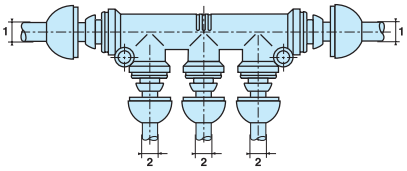
Tube Ø1	Thread B	Plastic Order code	Box Qty
4	M5x0,8	**YJ68PMK4M5**	10
6	M5x0,8	**YJ68PMK6M5**	10
4	1/8	**YJ64PK4-1/8**	10
4	1/4	**YJ64PK4-1/4**	10
6	1/8	**YJ64PK6-1/8**	10
6	1/4	**YJ64PK6-1/4**	10
8	1/8	**YJ64PK8-1/8**	5
8	1/4	**YJ64PK8-1/4**	5

Single banjo - assembled - Parallel



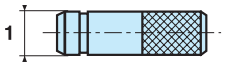
Tube Ø1	Tube Ø2	Metal Order code	Box Qty
4	M5x0,8	**COR8PB4M5**	20
4	1/8	**COR4PB4-1/8**	10
6	1/8	**COR4PB6-1/8**	20
6	1/4	**COR4PB6-1/4**	20
8	1/8	**COR4PB8-1/8**	10
8	1/4	**COR4PB8-1/4**	20
10	3/8	**COR4PB10-3/8**	10

Multiple tee - 5 connections



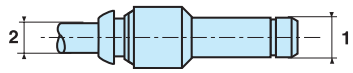
Tube Ø1	Tube Ø2	Plastic Order code	Box Qty
6	4	**J5PK6-4**	10
8	4	**J5PK8-4**	5
8	6	**J5PK8-6**	5
10	6	**J5PK10-6**	5

Plug



Tube Ø1	Plastic Order code	Box Qty	Metal Order code	Box Qty
4	**FNPK4**	50	**FNPB4**	50
6	**FNPK6**	50	**FNPB6**	50
8	**FNPK8**	50	**FNPB8**	50
10	**FNPK10**	50	**FNPB10**	30
12	**FNPK12**	30	**FNPB12**	20
14	**FNPK14**	30	**FNPB14**	20

Tube end reducer



Tube Ø1	Tube Ø2	Plastic Order code	Box Qty	Metal Order code	Box Qty
4	3	**TR2PMK4-3**	20		
6	4	**TR2PK6-4**	40	**TRPB6-4**	20
8	4	**TR2PK8-4**	40	**TRPB8-4**	20
8	6	**TR2PK8-6**	30	**TRPB8-6**	10
10	4	**TR2PK10-4**	30	**TRPB10-4**	10
10	6	**TR2PK10-6**	30	**TRPB10-6**	10
10	8	**TR2PK10-8**	20	**TRPB10-8**	10
12	6	**TR2PK12-6**	20	**TRPB12-6**	10
12	8	**TR2PK12-8**	20	**TRPB12-8**	10
12	10	**TR2PK12-10**	10	**TRPB12-10**	10
14	8	**TR2PK14-8**	20	**TRPB14-8**	10
14	10	**TR2PK14-10**	10	**TRPB14-10**	10
14	12	**TR2PK14-12**	10	**TRPB14-12**	5

Flexible tubing

All Parker tubing is manufactured to a very high specification and is compatible with Parker Push-in fittings.
Nylon tubing is very tough and abrasion resistant and is suitable for the vast majority of pneumatic applications.
For complicated piping including tight bend radii such as with cabinets, the highly flexible Polyurethane tubing is ideal.

- Tubing available in several colours for easy identification
- Good vibration/damping properties,
- Light weight
- High abrasion resistance

Operating information

Nylon tube

Tube OD	Tolerance (mm)
4 mm	+ 0.05 -0.08
6 to 12 mm	+0.05 -0.10

Polyurethane tube

Tube OD	Tolerance (mm)
4 to 8 mm	±0.1
10 to 12 mm	±0.15

For technical information see CD

Nylon tube - 25m

Tube Size	Outside Ømm	Wall Thickness	Colour	Order code 25 m length
4x2	4	1,00	Clear	**N4X1/1-25**
4x2	4	1,00	Blue	**N4X1/3-25**
4x2	4	1,00	Black	**N4X1/5-25**
4x2,7	4	0,65	Clear	**N4X0,65/1-25**
4x2,7	4	0,65	Blue	**N4X0,65/3-25**
4x2,7	4	0,65	Black	**N4X0,65/5-25**
6x4	6	1,00	Clear	**N6X1/1-25**
6x4	6	1,00	Blue	**N6X1/3-25**
6x4	6	1,00	Black	**N6X1/5-25**
8x6	8	1,00	Clear	**N8X1/1-25**
8x6	8	1,00	Blue	**N8X1/3-25**
8x6	8	1,00	Black	**N8X1/5-25**
10x8	10	1,00	Clear	**N10X1/1-25**
10x8	10	1,00	Blue	**N10X1/3-25**
10x8	10	1,00	Black	**N10X1/5-25**
12x10	12	1,00	Clear	**N12X1/1-25**
12x10	12	1,00	Blue	**N12X3/1-25**
12x10	12	1,00	Black	**N12X5/1-25**

Polyurethane tube - 25m

Tube Size	Outside Ømm	Wall Thickness	Colour	Order code 25 m length
4x2,5	4	0,75	Clear	**TPU4X0,75/1-25**
4x2,5	4	0,75	Blue	**TPU4X0,75/3-25**
4x2,5	4	0,75	Black	**TPU4X0,75/5-25**
6x4,0	6	1,00	Clear	**TPU6X1/1-25**
6x4,0	6	1,00	Blue	**TPU6X1/3-25**
6x4,0	6	1,00	Black	**TPU6X1/5-25**
8x5,5	8	1,25	Clear	**TPU8X1,25/1-25**
8x5,5	8	1,25	Blue	**TPU8X1,25/3-25**
8x5,5	8	1,25	Black	**TPU8X1,25/5-25**
10x7,0	10	1,50	Clear	**TPU10X1,5/1-25**
10x7,0	10	1,50	Blue	**TPU10X1,5/3-25**
10x7,0	10	1,50	Black	**TPU10X1,5/5-25**
12x8,0	12	2,00	Clear	**TPU12X2/1-25**
12x8,0	12	2,00	Blue	**TPU12X2/3-25**
12x8,0	12	2,00	Black	**TPU12X2/5-25**

Tube cutter

Order code
P6T-C

Ideal for general cleaning and bench dusting. The variety of nozzles available enable users to configure the ideal unit for most applications. NB. When used with compressed air pressure above 2 bar adequate safety precautions must be taken.

- 2 different types for various applications
- Different types of safety nozzle available
- Ergonomically designed
- Lightweight operating forces

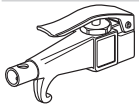
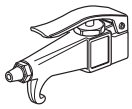
Operating information

Blowguns 600

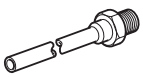
Working pressure	Max 7 bar
Working temperature	-20 °C to +100 °C

For technical information see CD

600-601

Symbol	Note	Inlet Thread	Order code
	Standard Safety	G1/4	**600**
	Air shield	G1/4	**601**

Accessories

Type	Description	Order code
	Aluminium nozzle with 1mm orifice*	**607**
	Aluminium nozzle, blank*	**606**
	Domed nozzle*	**8972-8**
	Aspirator Safety nozzle	**401C**
	Flexible nozzle*	**8726A**

*** Note!** When used with pressure above 2 bar, adequate safety precautious must be taken.

Indicates stocked product.

European Headquarters - Parker House
European Product Information Centre
Hemel Hempstead, HP2 4SJ, UK
Freephone: 00800 27 27 5374
Fax:+44 (0) 1442 458112

Argentina
Parker Hannifin Corporation
Stephenson 2711, Buenos Aires
Tel: +54 11 4752-4129
Fax: +54 1 1 4752-3704

Australia
Parker Hannifin Corporation
Castle Hill, NSW 2154
Tel: +61 2 9634 7777
Fax: +61 2 9899 6184

Austria
Parker Hannifin GmbH
Badener Strasse 12
AT-2700 Wiener Neustadt
Tel: +43 2622-23501-0
Fax: +43 2622-66212

Belarus
Parker Hannifin Corporation
Pr. Nezavisimosti, 11, Office 524
BY-220030 Minsk
Tel: +375 17 209 9399
Fax: +375 17 209 9227

Belgium
Parker Hannifin S.A-N.V. ZI Sud 2
23, Rue du Bosquet
BE-1400 Nivelles
Tel: +32 67 280 900
Fax: +32 67 280 999

Brazil
Parker Hannifin Corporation
12300-000 Jacarei, SP
Tel: +55 123 54 5100
Fax: +55 123 54 5262

Canada
Parker Hannifin
Toronto, Ontario M8Z 5E6
Tel: +1 416 255 7371
Fax: +1 416 255 2107

China
Parker Hannifin Motion & Control Co. Ltd
280 Yunqiao Road
Jin Qiao Export Processing Zone
CN Shangai 201206
Tel: +86 21 5031 2525
Fax: +86 21 5834 8975

Czech Republic
Parker Hannifin S.R.O
Parkerova 623
CZ-250 67 Klecany
Tel: +420 284 083 111
Fax: +420 284 083 112

Denmark
Parker Hannifin Danmark A/S
Industriparken 35-37
DK-2750 Ballerup
Tel: +45 43 56 04 00
Fax: +45 43 73 31 07

France
Parker Hannifin France SAS
142 rue de la Forêt
FR-741 30 Contamine Sur Arve
Tel : +33 4 50 25 80 25
Fax : +33 4 50 25 24 25

Finland
Parker Hannifin Oy
Ylästöntie 16
FI-01520 Vantaa
Tel: +358 20 753 2500
Fax: +358 20 753 2200

Germany
Parker Hannifin GmbH & Co. KG
Pat-Parker-Platz 1
DE-41564 Kaarst
Tel: +49 2131 4016 0
Fax: +49 2131 4016 9199

Great Britain
Parker Hannifin Ltd
Tachbrook Park Drive, Tachbrook Park
Warwick CV34 6TU
Tel: +44 1926 317 878
Fax: +44 1926 317 855

Greece
Parker Hannifin Corporation
197 Syngrou Av.
GR-171 21 Athens
Tel: +30 210 933 6450
Fax: +30 210 933 6451

Hong Kong
Parker Hannifin Ltd
8/F, Kin Yip Plaza
9 Cheung Yee Street
Cheung Sha Wan
Tel: +852 2428 8008
Fax: +852 2425 6896

Hungary
Parker Hannifin Corporation
Hungarian Trade Representative Office
Egressy u. 100
HU-1149 Budapest
Tel: +36 1 220 4155
Fax: +36 1 422 1525

India
Parker Hannifin India Pvt Ltd
Plot No. EL-26, MIDC, TTC Industrial Area
Mahape, Navi Mumbai 400 709
Tel: +91 22 5613 7081/92/83/84/85
Fax: +91 22 2768 6841

Ireland
Parker Sales (Ireland) Ltd
Baldonnell Business Park
Baldonnell, Naas Road, Co. Dublin
Tel: + 353 1 466 6370
Fax: + 353 1 466 6376

Italy
Parker Hannifin SpA
Via Privata Archimede 1
IT-200 94 Corsico (MI)
Tel: +39 02-45 19 21
Fax: +3902-44 79 340

Japan
Parker Hannifin Japan Ltd
Shirokanedai Building 2nd Floor
3-2-10, Shirokanedai,
Minato-ku, Tokyo 108-0071
Tel: +81 3 6408 3900
Fax: +81 3 5449 7201

Kazakhstan
Gateway Ventures CA Ltd
7a Kabanbai Batira
KZ-480100 Almaty
Tel: +7 3272 505 800
Fax: +7 3272 505 801

Korea
Parker Hannifin Korea Ltd
6F Daehwa Plaza
169 Samsung-dong, Gangnam-gu
Seoul 135-090
Tel: +82 2 559 0400
Fax: +82 2 556 8187

Latvia (Lithuania, Kaliningrad)
Parker Hannifin Corporation
79a Slokas Street, No. 6
LV-1007 Riga
Tel: +371 74 52 601
Fax: +371 74 52 608

Malaysia
Parker Hannifin Singapore Pte Ltd
(Malaysia Branch Office)
Lot 558A, Jalan Subang 3
Off Persiaran Subang
Sungai Penaga Industrial park
MY-47610 Subang Jaya
Tel: +60 (0) 3 5638 1476
Fax: +60 (0) 3 5638 1527

Netherlands
Parker Hannifin BV
Edisonstraat 1
NL-7575 AT Oldenzaal
Tel: +31 541 585 000
Fax: +31 541 585 459

Norway
Parker Hannifin A/S
Handverksvegen
Berghagan Industriomrade
NO-1405 Langhus
Tel: +47 64-91 10 00
Fax: +47 64-91 10 90

Poland
Parker Hannifin Sp.zo.o
ul. Równolegia 8
PL-02-235 Warszawa
Tel: +48 22 573 24 00
Fax: +48 22 573 24 03

Portugal
Parker Hannifin Portugal, Lda
Travessa da Bataria 184, R/C
Dto./1 Esq.
PT-4450-625 Leca Da Palmeira
Tel: +351 22 999 7360
Fax: + 351 22 996 1527

Romania
Hidro Consulting Impex SRL
Bld Ferdinand nr 27, Sect 2
RO-021381 Bucharest
Tel: +40 21 252 13 82
Fax: +40 21 252 33 81

Russia
Parker Hannifin llc
8th March st. 6A, Build 1
RU-123083 Moscow
Tel: +7 495 645 2156
Fax: +7 495 612 1860

Russia-Krasnoyarsk
Parker Hannifin llc
Prospect Mira 10, Office 724
RU-660049 Krasnoyarsk
Tel: +7 3912 52 73 35
Fax: +7 3912 52 73 35

Russia-Sakhalin
Parker Hannifin llc
Zheleznodorozhnaya str. 174-A
RU-693008 Yushno-Sakhalinsk
Tel: +7 4242 42 35 27
Fax: +7 4242 42 35 27

Russia-St. Petersburg
Parker Hannifin llc
Fokins Str., 2
RU-194044 St. Petersburg
Tel: +7 812 320 49 30
Fax: +7 812 320 49 31

Singapore
Parker Hannifin Singapore
No. 11 Fourth Chin Bee Road
Jurong Town, Singapore 619702
Republic of Singapore
Tel: +65 6887 6300
Fax: +65 6265 5125

Slovenia
Parker Hannifin Corporation
Vel. Bucna vas 7
SI-8000 Novo mesto
Tel: +386 7 337 6650
Fax: +386 7 337 6651

South Africa
Parker Hannifin Africa Pty Ltd
P.O Box 1153
Kempton Park 1620
Tel: +27 11-961 0700
Fax: +27 11-392 7213

Spain
Parker Hannifin Espana SA
P.O Box No. 74
P.I. Las Monjas, c/Estaciones, 8
ES-28850 Torrejón de Ardoz (Madrid)
Tel: +34 91-675 73 00
Fax: +34 91 675 77 11

Sweden
Parker Hannifin AB
Fagerstagatan 51
Box 8314
SE-163 08 Spånga
Tel: +46 8 5979 50 00
Fax: +46 8 5979 51 10

Switzerland
Parker Hannifin
Bolligen
Tel: +41 31 917 18 50
Fax: +41 31 917 18 59

Turkey
Parker Hannifin Corporation
Liaison Office of Turkey
Merter Is Merkezi
Gen. Ali Riza Gurcan cad. No: 2 / 67
TR-34067 Merter/Istanbul
Tel: +90 212 482 91 06
Fax: +90 212 482 91 10

Ukraine
Parker Hannifin Corporation
Representation Office in Ukraine
Vul. Velyka Vasylkivska 9/2 Office 59
UA-01004 Kyiv
Tel: +380 44 494 2731/2732/2724
Fax: +380 44 494 2730

United States of America
Parker Corporation
Cleveland, Ohio 44124-4141
Tel: 1-800-C-PARKER
Fax: +1 216 896 4000

For information in Belgium, France, Germany, Austria, Switzerland, Ireland and UK, call free **00800 27 27 5374**. See Parker's web site: www.parker.com

Parker Hannifin Sales Offices

AE - United Arab Emirates
Abu Dhabi
Tel.:+971 2 67 88 587

AR - Argentina
Buenos Aires
Tel.: +54 3327 44 4129

AT - Austria
Wiener Neustadt
Tel.: +43 (0)2622 23501
Austria (Eastern Europe)
Wiener Neustadt
Tel.: +43 (0)2622 23501-970

AU - Australia
Castle Hill
Tel.: +61 (0)2-9634 7777

AZ - Azerbaijan
Baku
Tel.: +99 412 598 3966

BE - Belgium
Nivelles
Tel.: +32 (0)67 280 900

BR - Brazil
Cachoeirinha RS
Tel.: +55 51 3470 9144

BY - Belarus
Minsk
Tel.: +375 17 209 9399

CA - Canada
Milton, Ontario
Tel.: +1 905-693-3000

CH - Switzerland
Ref. Germany

CN - China
Beijing
Tel.: +86 10 6561 0520
Shanghai
Tel.: +86 21 5031 2525

CZ - Czech Republic
Klecany
Tel.: +420 284 083 111

DE - Germany
Kaarst
Tel.: +49 (0)2131 4016 0

DK - Denmark
Ballerup
Tel.: +45 4356 0400

ES - Spain
Madrid
Tel.: +34 91 675 73 00

FI - Finland
Vantaa
Tel.: +358 20 753 2500

FR - France
Contamine-sur-Arve
Tel.: +33 (0)450 25 80 25

GR - Greece
Athens
Tel.: +30 210 933 6450

HK - Hong Kong
Tel.: +852 2428 8008

HU - Hungary
Budapest
Tel.: +36 1 220 4155

IE - Ireland
Dublin
Tel.: +353 (0)1 466 6370

IN - India
Mumbai
Tel.: +91 22 5613 7081/
82-85

IT - Italy
Corsico (MI)
Tel.: +39 02 45 19 21

JP - Japan
Tokyo
Tel.: +81 3 6408 3900

KR - South Korea
Seoul
Tel.: +82 2 559 0400

KZ - Kazakhstan
Almaty
Tel.: +7 3272 505 800

LV - Latvia
Riga
Tel.: +371 74 52601

MX - Mexico
Apodaca
Tel.: +52 81 8156 6000

MY - Malaysia
Subang Jaya
Tel.: +60 3 5638 1476

NL - The Netherlands
Oldenzaal
Tel.: +31 (0)541 585000

NO - Norway
Ski
Tel.: +47 64 91 10 00

NZ - New Zealand
Mt Wellington
Tel.: +64 9 574 1744

PL - Poland
Warsaw
Tel.: +48 22 573 24 00

PT - Portugal
Leca da Palmeira
Tel.: +351 22 9997 360

RO - Romania
Bucharest
Tel.: +40 21 252 1382

RU - Russia
Moscow
Tel.: +7 495 580 9145
Krasnoyarsk
Tel.: +7 3912 52 73 35
Yuzhno-Sakhalinsk
Tel.: +7 4242 42 35 27
St. Petersburg
Tel.: +7 812 320 49 37

SE - Sweden
Spånga
Tel.: +46 (0)8 597 950 00

SG - Singapore
Tel.: +65 6887 6300

SI - Slovenia
Novo Mesto
Tel.: +386 7 337 6650

SK - Slovakia
Ref. Czech Republic

TH - Thailand
Bangkok
Tel.: +662 717 8140

TR - Turkey
Merter/Istanbul
Tel.: +90 212 482 91 06 or 07

TW - Taiwan
Taipei
Tel.: +8862 2298 8987

UA - Ukraine
Kyiv
Tel.: +380 44 494 2731

UK - United Kingdom
Warwick
Tel.: +44 (0)1926 317 878

US - USA
Cleveland (industrial)
Tel.: +1 216-896-3000
Lincolnshire (mobile)
Tel.: +1 847-821-1500
Miami (Pan American Div.)
Tel.: +305 470 8800

VE - Venezuela
Caracas
Tel.: +58 212 238 5422

ZA - South Africa
Kempton Park
Tel.: +27 (0)11-961 0700

Edition: July 2007 / Catalogue no. PDE2500GPUK-ca

Parker Hannifin Ltd
Tachbrook Park Drive
Tachbrook Park
Warwick CV34 6TU
United Kingdom

We reserve the right to make alterations without prior notification.

Home