

# **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:

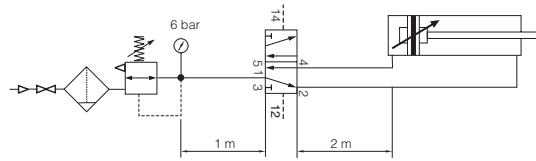
Supply pressure: min 7,0 bar

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	Ø10	Ø12	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100	Ø125	Ø160	Ø200
Tube	4 / 2.7	4 / 2.7	4 / 2.7	6 / 4	6 / 4	6 / 4	8 / 6	8 / 6	10 / 8	12 / 9	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: 128



- 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: 148



- 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: 151



- High flow, compact size
- Push-in or threaded connection
- DIN rail or block mounting
- Light weight construction

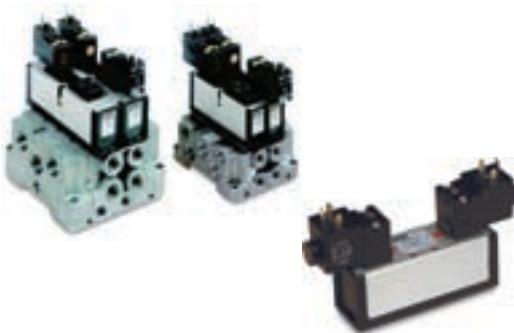
# ISO Valves

ISO 15407 / ISO 5599 - Plug-in / Non plug-in

## General applications

### Isomax valves

See page: 166



- 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: 171

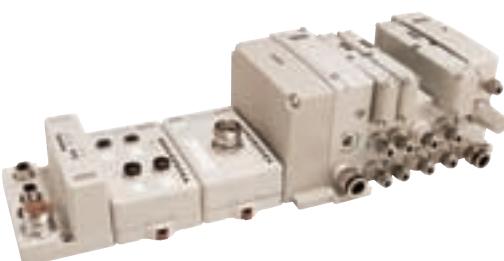


- Complete ISO valve range
- Heavy duty and corrosion resistant body
- Internal led & rectifier
- Vacuum up to 10 bar
- Internal or external pilot supply with same valve.
- Multiple connection, Sub-D25, M23, terminal blocks

## Field Bus

### Isysnet

See page: 192



- 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

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: 205



- 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: 217



- 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: 233



- 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

# Mechanical Valves

## Metal valves

### Midget and Intermediate valves

See page: 239



- 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: 253



- 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: 256



- Rugged valves for heavy duty applications
- Large and robust actuators for easy operation
- Excellent corrosion resistance
- Integral mounting holes
- Panel mounting versions

## General Automation and Assembly Cells

### PXC Limit Switches

See page: 260



- High durability
- Very good repeat accuracy
- Design for process duty cycle
- Push-in connection
- Versatile and easily maintained
- Miniature size

### Logic Processing

See page: 262



- 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: 267



- 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: 269



- 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

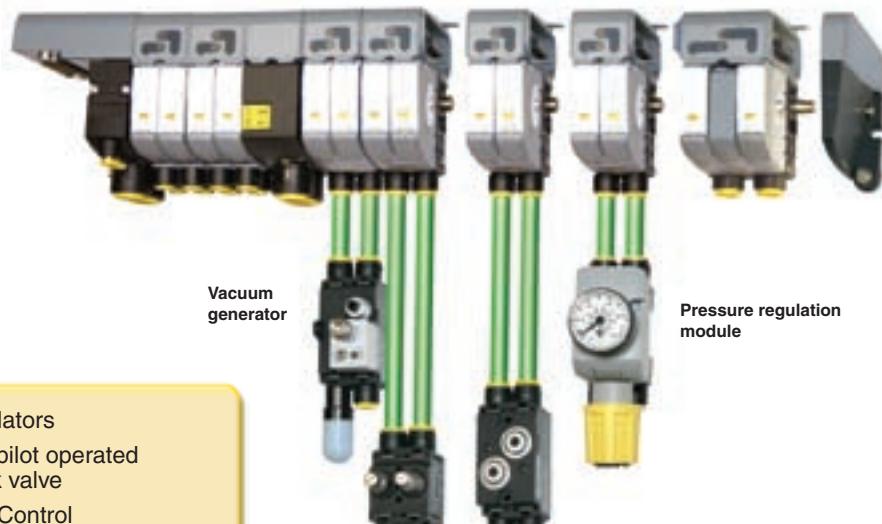


4/2 Valve



## 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
<b>Size 1</b>	<b>Qmax</b>	333 l/min	415 l/min	415 l/min	510 l/min
	<b>Qn</b>	130 l/min	235 l/min	235 l/min	310 l/min
<b>Size 2</b>	<b>Qmax</b>	-	805 l/min	805 l/min	1340 l/min
	<b>Qn</b>	-	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 :

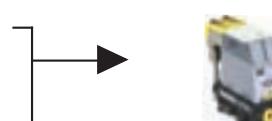
### Basic Modules

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

No.	Description	Part number	Line	Registration
1	Standard 4/2 valve for 9 islands - 24Vdc	P20240101000000		
2	Standard 3/2 valve for 9 islands - 24Vdc	P20240101000001		
3	Monostable 3/2 valve - 24Vdc	P20240101000002		
4	Monostable 3/2 valve - 24Vdc	P20240101000003		
5	Monostable 3/2 valve - 24Vdc	P20240101000004		
6	Monostable 3/2 valve - 24Vdc	P20240101000005		

## V series – Fieldbus and multi-connector valve islands

Pages 132 - 135



## T series – Simple valve islands

Page 136 - 137



## S series – Stand alone valves

Page 138 - 139



## P series – Peripheral control modules

Page 140



### 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

P2M1VDEE2CV



FMD04-1

P2M2V4EE2CV



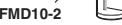
CMD10-2

P2M2VDEE2CV



FMD10-2

P2M2VCEE2CV



CMD12-2

P2M2V3ES2CV



CMD10-2

P2M2VGEE2CV



CMD12-2

#### Size 1 connectors Tube OD \*

Description	W. (g)	Order code
Straight	4mm	2
	6mm	3
Elbow	4mm	5
	6mm	3
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

P2M2HXT01



CMD10-2

P2M2BXV0A



CMD12-2

FMD10-2

CMD12-2

#### Size 2 connectors Tube OD \*

Description	W. (g)	Order code
Straight	6mm	3
	8mm	4
Elbow	10mm	5
	12mm	6
Plug	6mm	5
	8mm	CMD08-2
Muffler	10mm	7
	12mm	8
Clip-on double male union	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

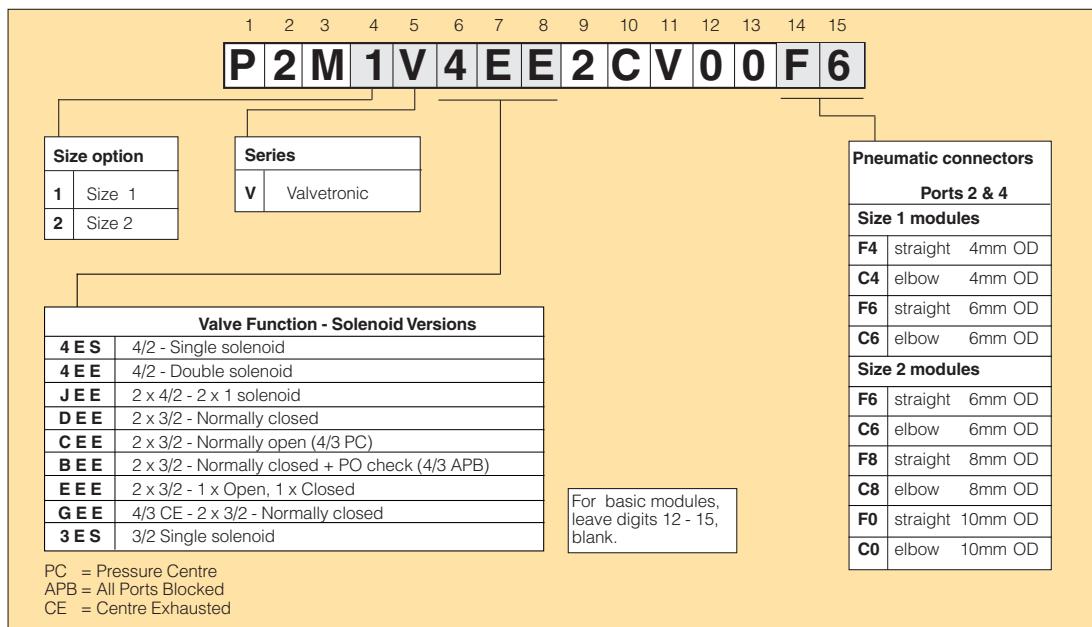
Valve Island Intermediate supply module with a set of 4 configurations plates

P2M2BXV0A

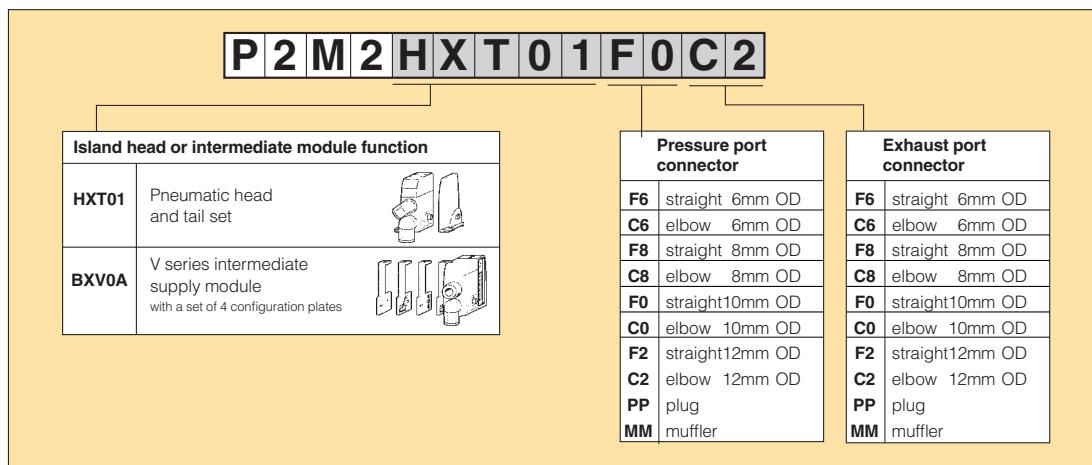
Indicates stocked product.

Size 2 connectors should be specified with head and tail sets.

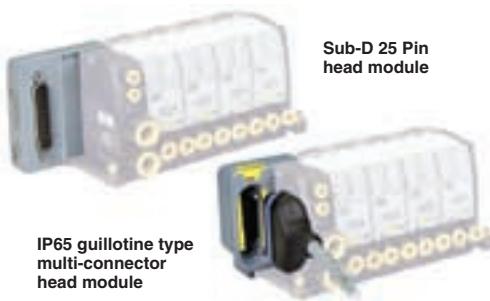
## **Order codes V Series - Complete modules (on order)**



**Head/Tail & Intermediate Module Ordering Guide (on order)**



## 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

**P8LMH20M2A**

2 m. cable

5 m. cable

9 m. cable

**P8LMH20M5A****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

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



### 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

#### Input connections Order code

no input **P2M2HBVA10800**8 M8 inputs **P2M2HBVA10808A**4 inputs on 4 M12 **P2M2HBVA10808B**No inputs **P2M2HBVA10400**4 inputs on 4 M12 **P2M2HBVA10404B**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	<b>P8LS12JACK</b>



Indicates stocked product.

## 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

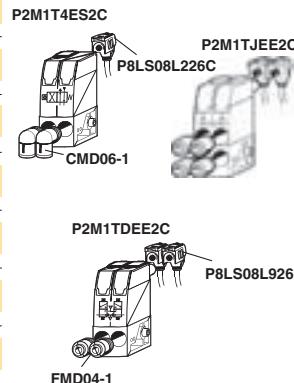
For simple systems, valve islands may be configured using individual valve wiring or air pilot connections.



### 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



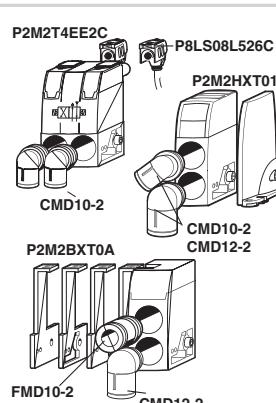
#### Size 1 connectors Tube OD \*

Description	W. (g)	Order code
Straight	4mm	FMD04-1
	6mm	FMD06-1
Elbow	4mm	CMD04-1
	6mm	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	FMD06-2
8mm	FMD08-2
10mm	FMD10-2
12mm	FMD12-2
Elbow	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

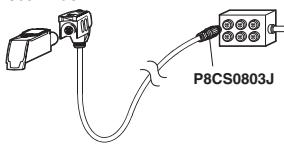
P2M2BXT0A

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
<b>Valve Function - Solenoid Versions</b>														
<b>Size option</b>	<b>Series</b>													
1 Size 1	T Individual connectors													
2 Size 2														
<b>Valve Function - Air Pilot Versions *</b>														
4 PS	4/2 Single air pilot													
4 PP	4/2 Double air pilot													
J PP	2 x 4/2 - 2 x 1 air pilot													
D PP	2 x 3/2 - Normally closed													
C PP	2 x 3/2 - Normally open (4/3 PC)													
B PP	2 x 3/2 - Normally closed + PO check (4/3 APB)													
EEE	2 x 3/2 - 1 x Open, 1 x Closed													
G EE	4/3 CE - 2 x 3/2 - Normally closed													
3 ES	3/2 Single solenoid													
*														
For air pilot versions leave digits 9 - 15 blank. (Basic modules only)														
PC = Pressure Centre APB = All Ports Blocked CE = Centre Exhausted														
For basic modules, leave digits 11 - 15, blank.														

**Head/Tail & Intermediate Module Ordering Guide**

<b>P   2   M   2   H   X   T   0   1   F   0   C   2</b>	
<b>Island head or intermediate module function</b>	
HXT01	Pneumatic head and tail set
BXT0A	T series intermediate supply module with a set of 4 configuration plates
<b>Pressure port connector</b>	
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
<b>Exhaust port connector</b>	
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

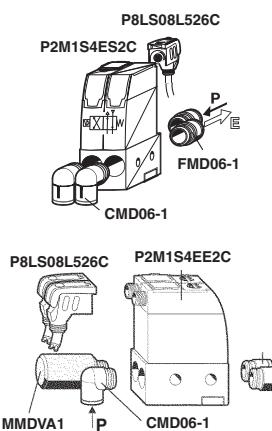
Indicates stocked product.

**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	P2M1SCCEE2C
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

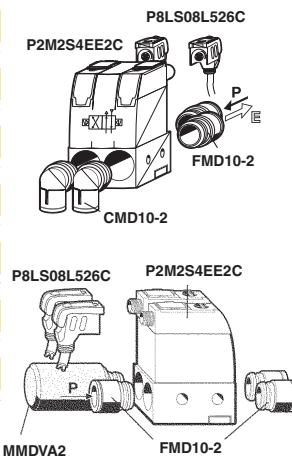
**Size 1 connectors** Tube OD \*

Description	W. (g)	Order code
Straight	4mm	FMD04-1
	6mm	FMD06-1
Elbow	4mm	CMD04-1
	6mm	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	P2M2SCCEE2C
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 \*

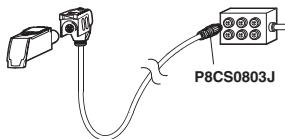
Description	W. (g)	Order code
Straight	6mm	FMD06-2
	8mm	FMD08-2
	10mm	FMD10-2
	12mm	FMD12-2
Elbow	6mm	CMD06-2
	8mm	CMD08-2
	10mm	CMD10-2
	12mm	CMD12-2
Plug	5	PMDXX2
Muffler	3	MMDVA2
Clip-on double male union	8	HMDXX2

\* Pack quantity : 10

Indicates stocked product.

## Electrical connectors

P8LS08L226C



P8CS0803J

Clip-on individual electrical connector, for each solenoid pilot, with LED, voltage surge protection and flying lead cable IP67 protected

Straight cable or thread connector, IP67 protected.



2 m. cable

P8LS08L226C

5 m. cable

P8LS08L526C

9 m. cable

P8LS08L926C



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														
<b>P2M1S4E E2CV5AF6</b>																												
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																												
<b>4 E S</b>	4/2 - Single solenoid																											
<b>4 E E</b>	4/2 - Double solenoid																											
<b>D E E</b>	2 x 3/2 - Normally closed																											
<b>C E E</b>	2 x 3/2 - Normally open (4/3 PC)																											
<b>B E E</b>	2 x 3/2 - Normally closed + PO check (4/3 APB)																											
<b>E E E</b>	2 x 3/2 - 1 x Open, 1 x Closed																											
<b>G E E</b>	4/3 CE - 2 x 3/2 - Normally closed																											
<b>3 E S</b>	3/2 Single solenoid																											
Valve Function - Air Pilot Versions *																												
<b>4 P S</b>	4/2 Single air pilot																											
<b>4 P P</b>	4/2 Double air pilot																											
<b>D P P</b>	2 x 3/2 - Normally closed																											
<b>C P P</b>	2 x 3/2 - Normally open (4/3 PC)																											
<b>B P P</b>	2 x 3/2 - Normally closed + PO check (4/3 APB)																											
<b>E P P</b>	2 x 3/2 - 1 x Open, 1 x Closed																											
<b>G P P</b>	4/3 CE - 2 x 3/2 - Normally closed																											
<b>3 P S</b>	3/2 Single solenoid																											
Pneumatic connectors																												
Ports 1 & 3																												
<b>A</b>	Straight & straight																											
<b>F</b>	Straight & straight																											
Size 1 modules																												
<b>B</b>	Elbow & elbow																											
<b>C</b>	Elbow & elbow																											
<b>D</b>	No connector for plug-in P module																											
Ports 2 & 4																												
<b>4</b>	4mm OD																											
<b>6</b>	6mm OD																											
Size 2 modules																												
<b>6</b>	6mm OD																											
<b>8</b>	8mm OD																											
<b>0</b>	10mm OD																											
Tube 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

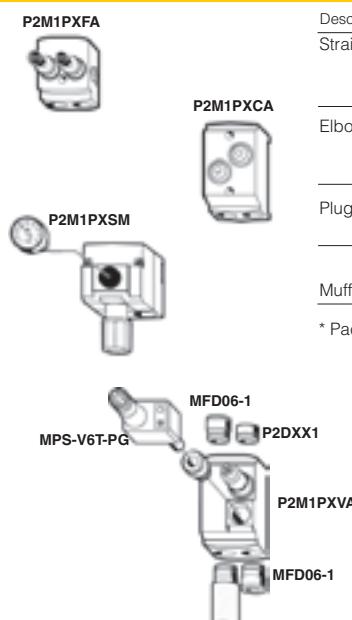
## Basic peripheral modules (without connectors) and corresponding clip-on pneumatic connectors

### 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 0-4 bar 0-8 bar	P2M1PXSR P2M1PXSM P2M1PXSG
	135 135 135	
With pressure gauge		
Vacuum generator	90% Vac	30
		

### Vacuum accessories

Sensor	10	MPS-V6T-PC
	70	MPS-V6T-PG
Silencer	5	P6M-PAB1



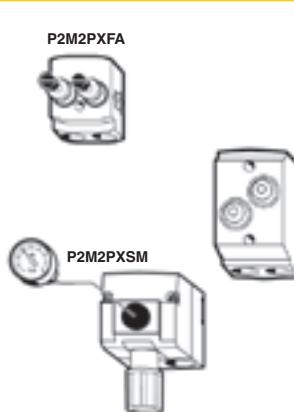
### Size 1 connectors Tube OD \*

Description	W. (g)	Order code
Straight	4mm	2
	6mm	3
Elbow	4mm	5
	6mm	3
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 0-4 bar 0-8 bar	P2M2PXSR P2M2PXSM P2M2PXSG
	165 165 165	
With pressure gauge		



### Size 2 connectors Tube OD \*

Description	W. (g)	Order code
Straight	6mm	3
	8mm	4
	10mm	5
	12mm	6
Elbow	6mm	5
	8mm	6
	10mm	7
	12mm	8
Plug	5	PMDXX2

\* Pack quantity : 10

### Clip-on pressure gauges

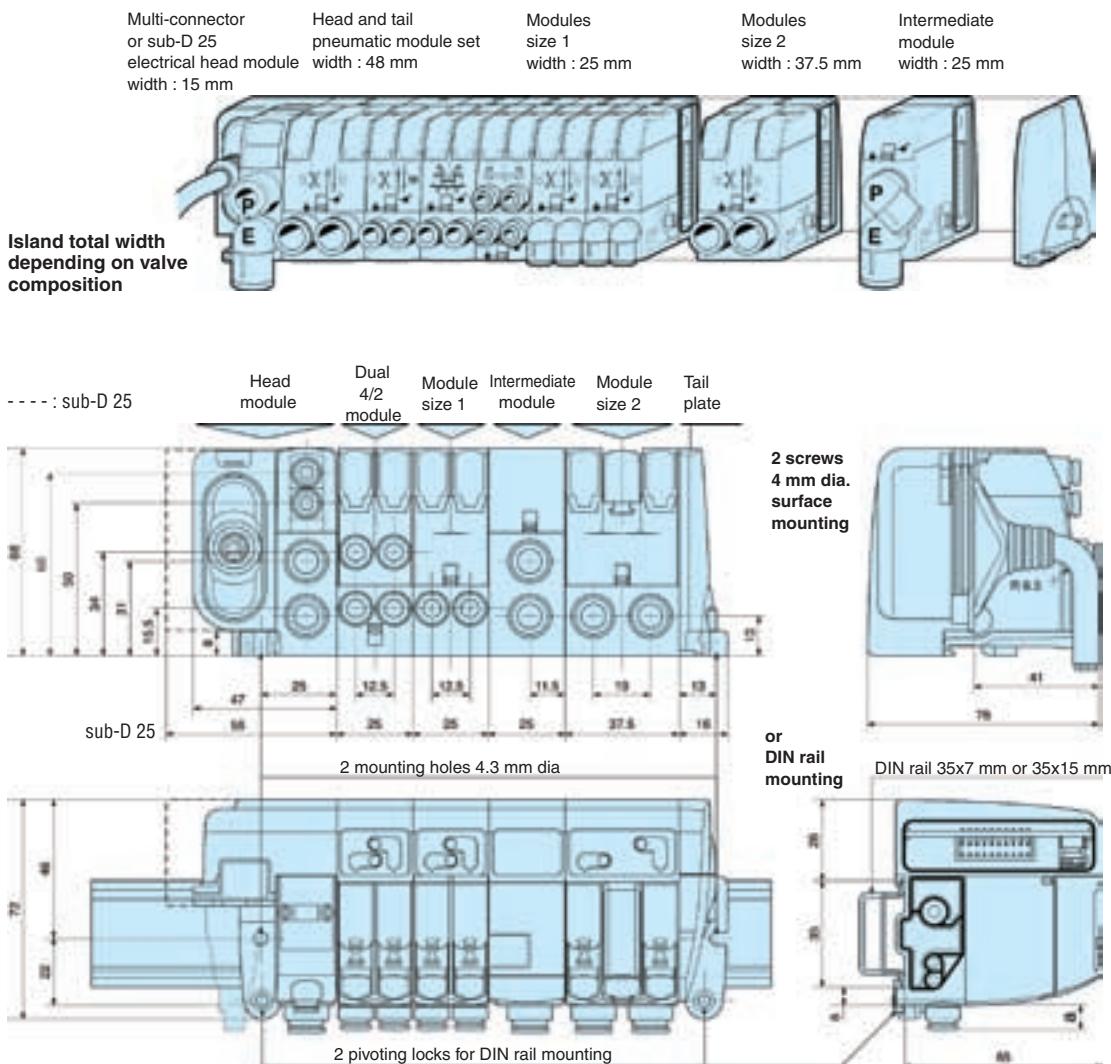
Clip-on pressure gauge for pressure regulator modules, size 1 or size 2. Pressure gauge is equipped with a damper to protect it from pressure oscillations.



	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.

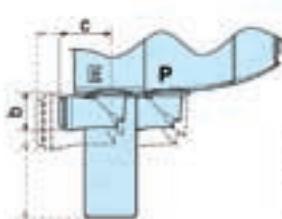
## 1 - Multi-connector or sub-D 25 valve island



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	

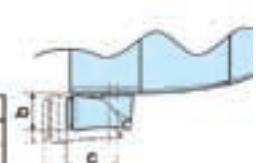


Island valves modules

OD tube	a	b	c
4 mm	8	10	12
6 mm	8	13	16

Size 1 modules	OD tube	a	b	c
	8 mm	9	16	19
	10 mm	13	18	22



## 2 - Field bus connected islands

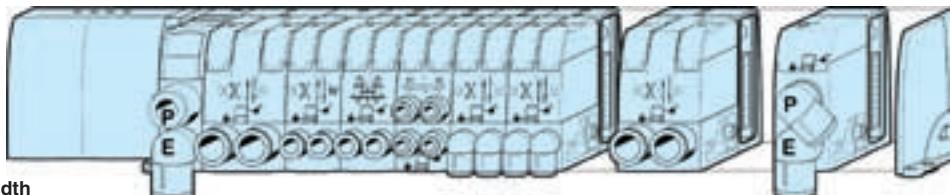
Electrical field  
bus head module  
width : 62 mm

Head and tail  
pneumatic module set  
width : 48 mm

Modules  
size 1  
width : 25 mm

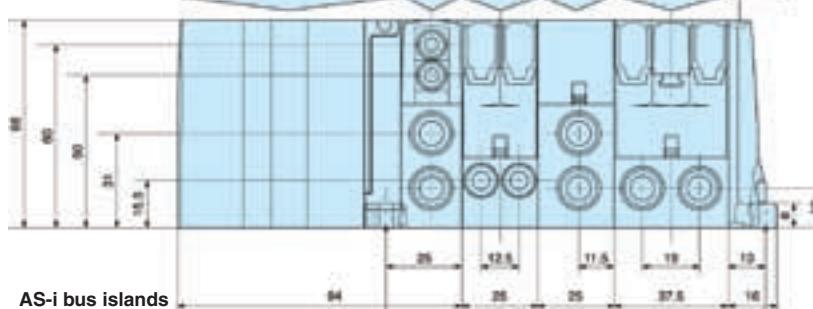
Modules  
size 2  
width : 37.5 mm

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
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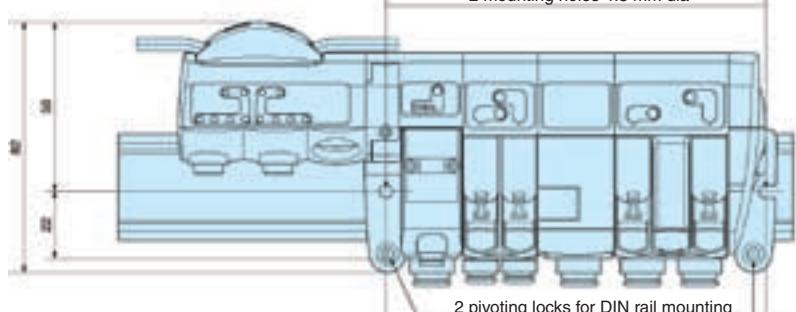


**AS-i bus islands**

2 screws  
4 mm dia.  
surface  
mounting

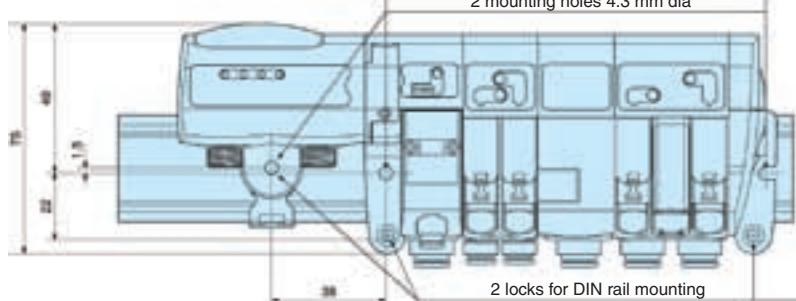
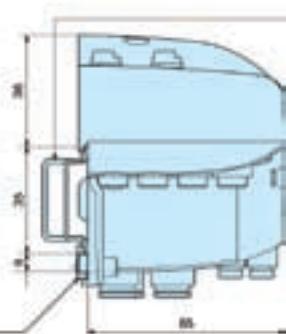
or  
DIN rail  
mounting

DIN rail 35x7 mm or 35x15 mm



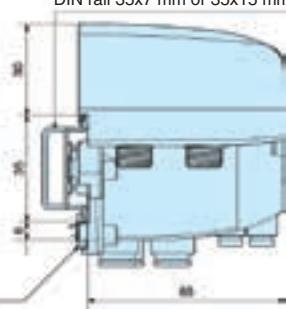
**Device bus islands**

2 pivoting locks for DIN rail mounting



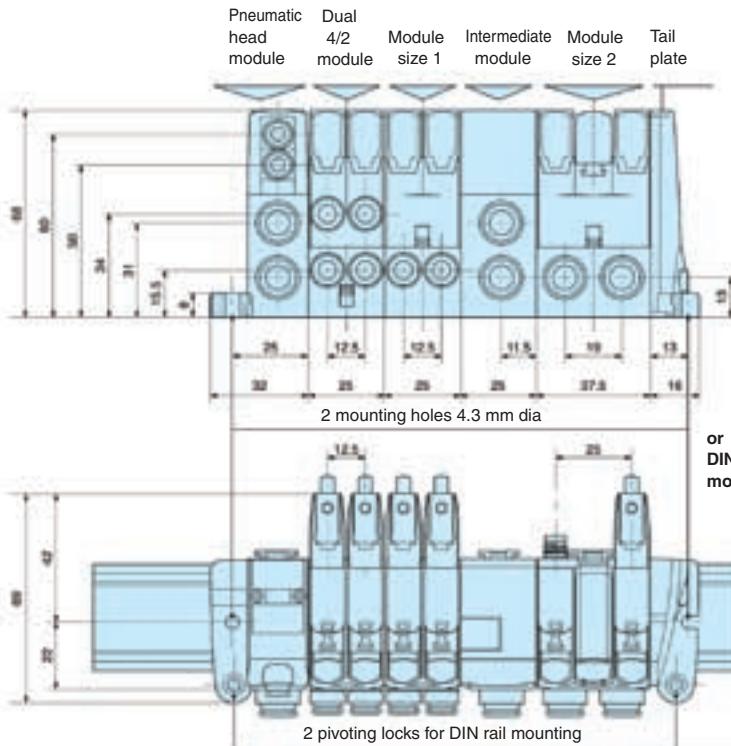
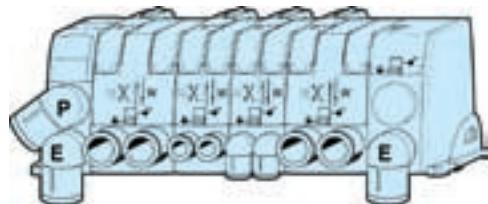
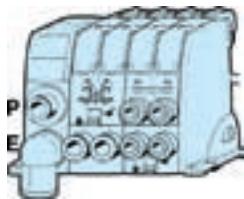
2 locks for DIN rail mounting

DIN rail 35x7 mm or 35x15 mm



**Island total width  
depending on valve  
composition**

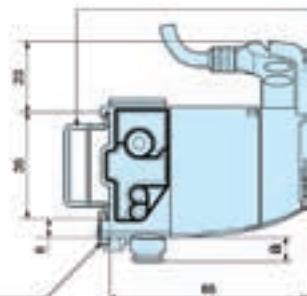
Pneumatic head and tail module width  $\Rightarrow$  48 mm  
 Modules size 1 25 mm  
 Modules size 2 37.5 mm  
 Intermediate module 25 mm



2 screws  
4 mm dia.  
surface  
mounting

DIN rail 35x7 mm or 35x15 mm

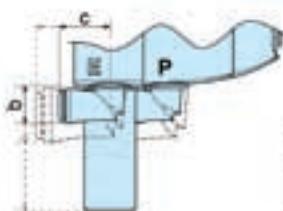
or  
DIN rail  
mounting



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.

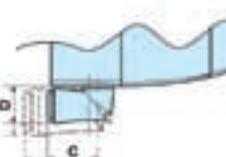
**Island head and intermediate modules**

	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**

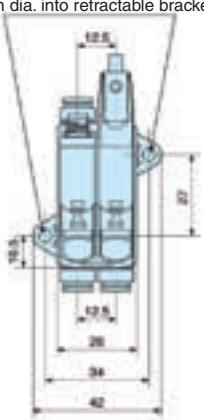
	OD tube	a	b	c
Size 1 modules	4 mm	8	10	12
	6 mm	8	13	16
Size 2 modules	8 mm	9	16	19
	10 mm	13	18	22



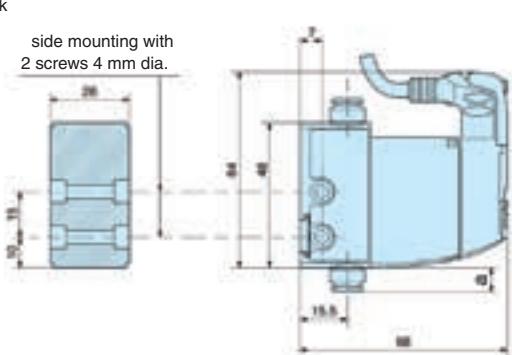
## Stand-alone valve size 1



surface mounting with screws  
4 mm dia. into retractable brackets 3 mm thick



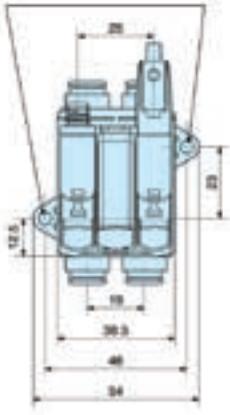
or side mounting with  
2 screws 4 mm dia.



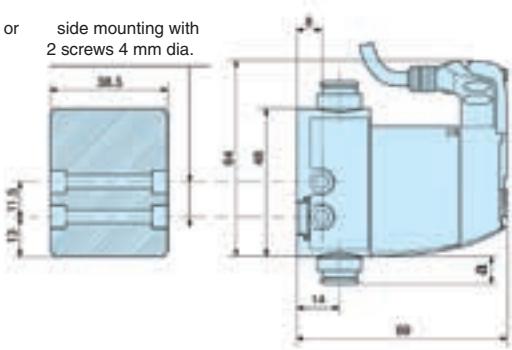
## Stand-alone valve size 2



surface mounting with screws  
4 mm dia. into retractable brackets 3 mm thick



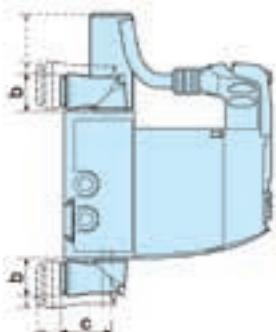
or side mounting with  
2 screws 4 mm dia.



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.

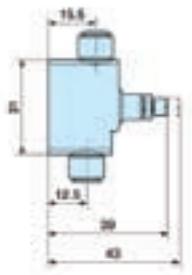
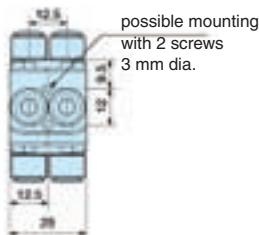
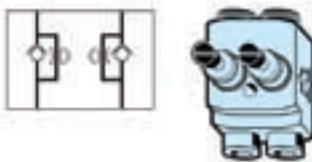
	a	b	c
Size 1 modules			
4 mm tube OD	8	10	12
6 mm tube OD	8	13	16
muffler		31	
Size 2 modules			
8 mm tube OD	9	16	19
10 mm tube OD	13	18	22
muffler		40	



**Reminder :** peripheral modules may either be plugged in the valve output ports or mounted in line separate from the valve



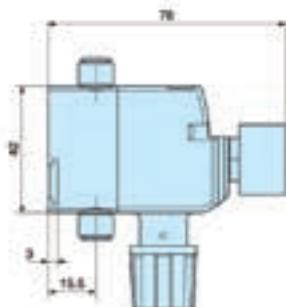
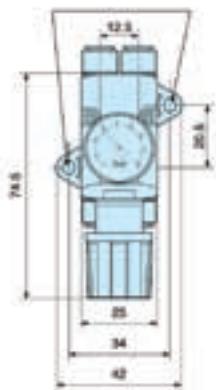
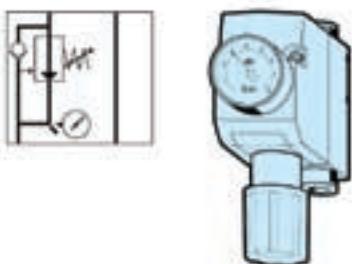
## Dual flow control module size 1



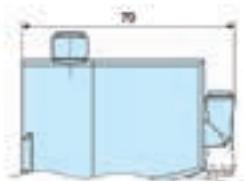
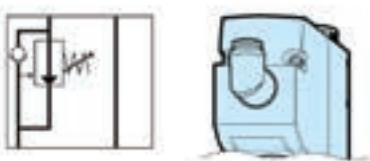
## Pressure regulation module size 1

mounting with 2 screws 4 mm dia.  
on retractable brackets

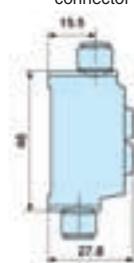
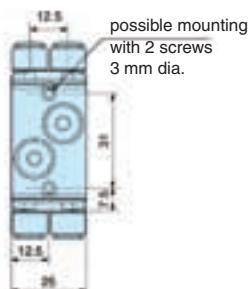
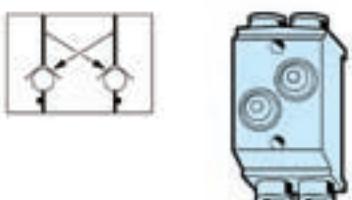
- with gauge



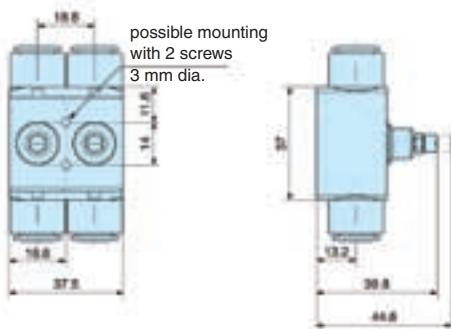
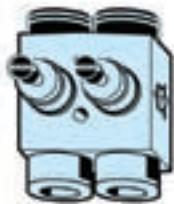
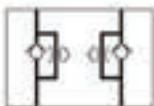
- without gauge



## Dual P.O. check valve module size 1

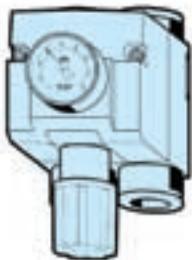


## Dual flow control module size 2

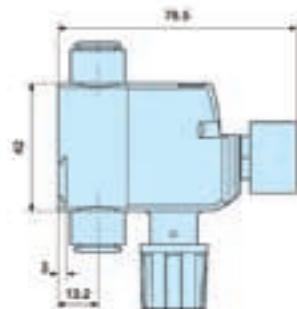
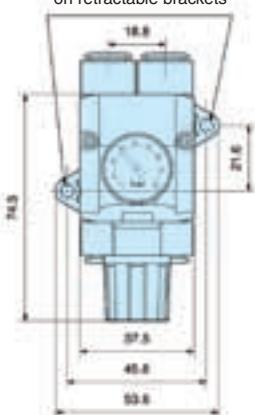


## **Pressure regulation module size 2**

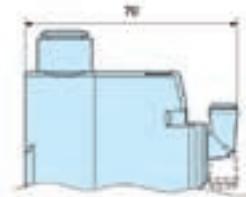
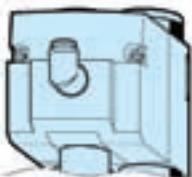
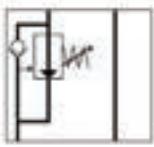
- with gauge



mounting with 2 screws 4 mm dia.  
on retractable brackets

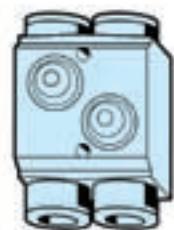
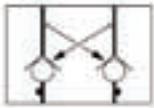


- without gauge

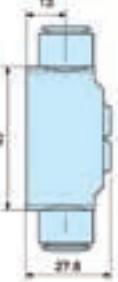
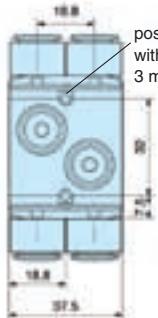


swivel elbow push-in  
connector 4 mm OD tube

## Dual P.O. check valve module size 2

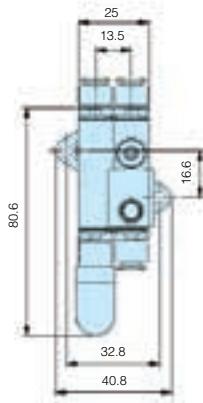


possible mounting  
with 2 screws  
3 mm dia.

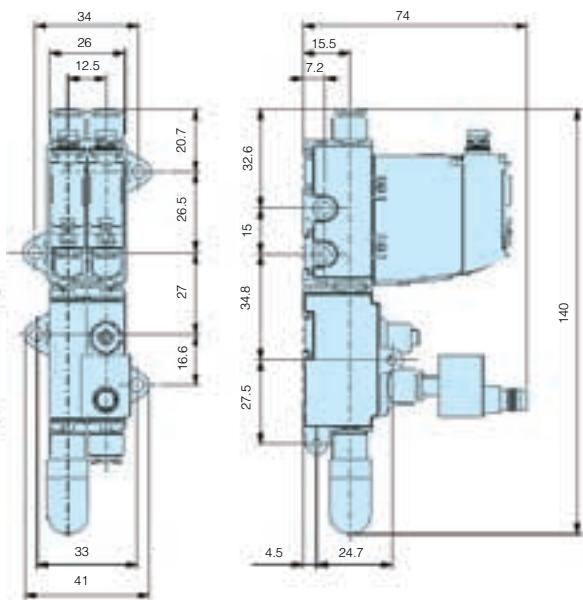


## Vacuum generator module

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
	<b>PS1-E21102B</b>
	<b>PS1-E22102B</b>

### 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
	<b>PS1-E28102B</b>
	<b>PS1-E29102B</b>

### 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 G1/8	1 electrical common terminal 1 main air supply port 1 exhaust port	<b>PS1-E101</b>
	Set for double air supply connection	Push-in Ø 6 mm G1/8	1 electrical common terminal 2 main air supply ports 2 exhaust ports	<b>PS1-E102</b>
	Intermediate air supply module	Threaded G1/8 (see description below)*	1 air supply port 1 exhaust port	<b>PS1-E1028</b>

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 separation 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	Solenoid	Spring	<b>PS1-E111</b>
	Push-in Ø6 mm	Solenoid	Spring	<b>PS1-E116</b>
	Push-in Ø4 mm	Solenoid	Spring	<b>PS1-E121</b>
	Push-in Ø6 mm	Solenoid	Spring	<b>PS1-E126</b>

Visual indication of pneumatic output (NC) red

Visual indication of pneumatic output (NO) red

Visual indication of pneumatic output (NO) yellow

**Electro-Pneumatic modules 3/2**

Modules without solenoid valve\* - 1 to 8 bar version

Symbol	Connection	Actuator	Return	Order code
	Push-in Ø4 mm	Solenoid	Spring	<b>PS1-E311</b>
	Push-in Ø6 mm	Solenoid	Spring	<b>PS1-E316</b>

Visual indication of pneumatic output (NC) red

Visual indication of pneumatic output (NC) red

\* 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	<b>P2E-KS32C1</b>
48 VDC	<b>P2E-KS32D1</b>
24 V 50/60Hz	<b>P2E-KS31C1</b>
48 V 50/60Hz	<b>P2E-KS34D1</b>
115 V 50Hz, 120 V 60Hz	<b>P2E-KS31F1</b>
230 V 50Hz, 240 V 60Hz	<b>P2E-KS31J1</b>

Indexing manual override

Voltage	Order code
24 VDC	<b>P2E-KS32C2</b>
48 VDC	<b>P2E-KS32D2</b>
24 V 50/60Hz	<b>P2E-KS31C2</b>
48 V 50/60Hz	<b>P2E-KS34D2</b>
115 V 50Hz, 120 V 60Hz	<b>P2E-KS31F2</b>
230 V 50Hz, 240 V 60Hz	<b>P2E-KS31J2</b>

Indicates stocked product.

**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	<b>PS1-E191</b>
	Push-in Ø6 mm	Solenoid	Solenoid	<b>PS1-E196</b>
	Push-in Ø4 mm	Solenoid	Spring	<b>PS1-E181</b>
	Push-in Ø6 mm	Solenoid	Spring	<b>PS1-E186</b>

\* 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	<b>P8V-CR26C</b>
		48 V AC/DC	<b>P8V-CR26D</b>
		115 V 50 Hz 120 V 60 Hz	<b>P8V-CR24F</b>
		230 V~50 Hz 240 V~60 Hz	<b>P8V-CR24J</b>

**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.

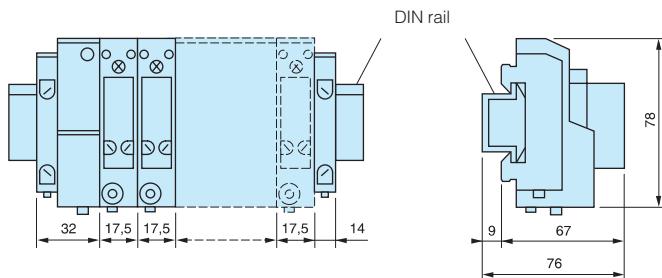
**Pressure switches**

	Order code
	1 changeover contact 5 A/250 V Pneu. Ø 4 mm Fixed operating threshold < 1,3 bar
	1 changeover contact 5 A/250 V Pneu. Ø 4 mm Adjustable operating threshold 2 to 5 bar

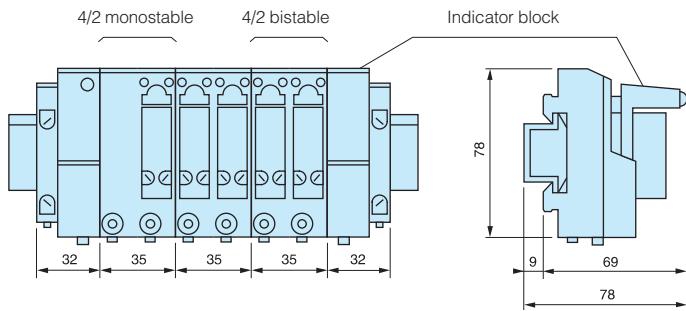
**Note:** The Interface modules have been re-designed to accept the previous 9,4mm spacing solenoids and the new 8mm spacing solenoids listed above. If you are purchasing a solenoid for maintenance on an Interface module purchased before June 2004, then refer to Interface Technical leaflet supplied with this catalogue.

## Dimensions, PS1 valve Series

**Electropneumatic interface modules 3/2  
PS1-E21102• with PS1-E101 head and tail units**



**Electropneumatic interface modules 4/2  
PS1-E28• and PS1-E29 with PS1-E102 head and tail units**



# Compact valves

PVL

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;	2-10 bar	
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):	270 l/min	900 l/min
Flow Qn:	170 l/min	540 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 next page

### Electrically/Pneumatically actuated 2 x 3/2 valves

Symbol	Connect	Order code
	Ø6 mm	PVL-B125606

### 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 To be wired LED+protection 24 VDC	P8C-C P8C-C26C
With standard screw	
Standard to be wired universal To be wired LED+protection 24 VDC	P8C-D P8C-D26C
With cable and standard screw	
Standard with 2 m cable Standard with 5 m cable LED+protection 24 VAC/DC, 2 m LED+protection 24 VAC/DC, 5 m	P8L-C2 P8L-C5 P8L-C226C 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	PVA-P111 PVA-P115

## Components for stacking two sizes of valve

Type of mounting	Description	Valve size	Order code
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"	PVL-LCB19
	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.

# Compact valves

PVL

## 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

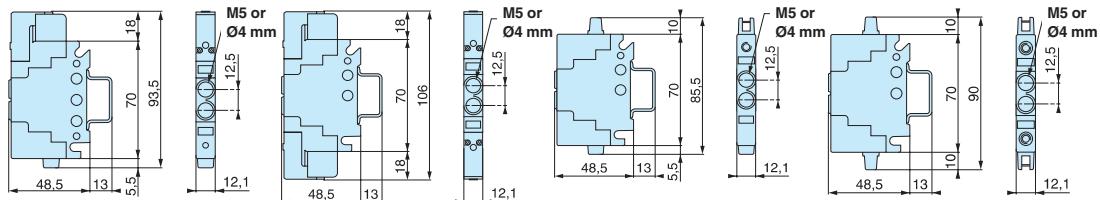
Monostable PVL-A1213\*\*

Bistable PVL-A1223\*

Pneumatic piloting

Monostable PVL-A1211\*\*

Bistable PVL-A1221\*\*

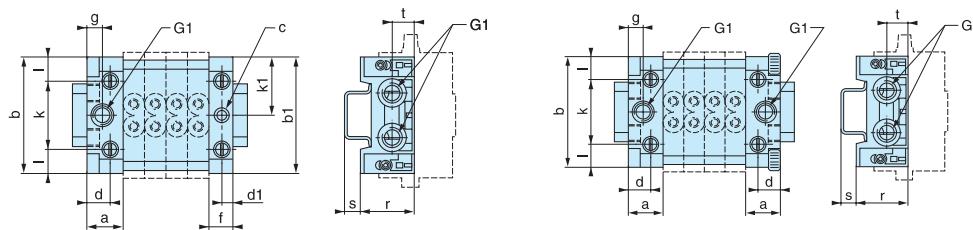


### Head and tail sets

- Mounting on DIN rail

Single air supply PVL-A1718

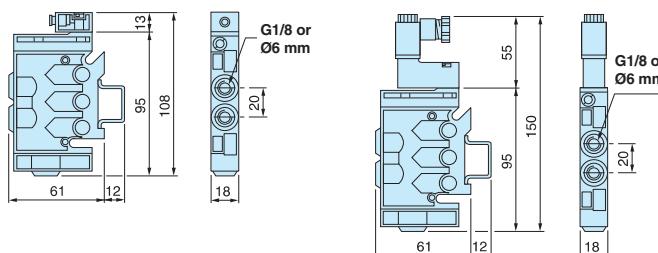
Dual air supply PVL-A1728



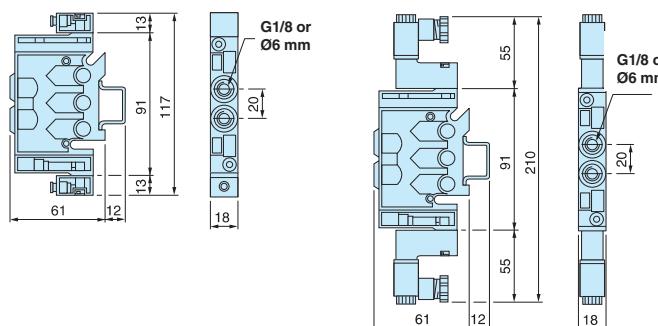
Thread size	a	b	b1	c	d	d1	f	g	G1	k	k1	l	r	s	t
M5	20	65	65	4,2	12,9	5,9	13	8,5	1/8"	38	38	13,5	30	8,8	12,5

### Stacking power valves 1/8" with pneumatic or electrical piloting

Monostable PVL-B1216\*\*, PVL-B1236\*\*



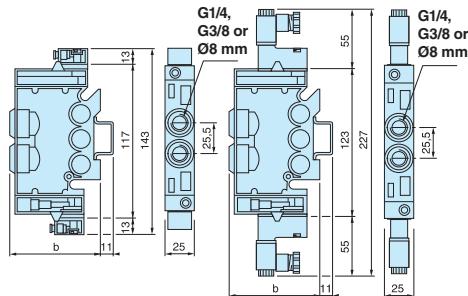
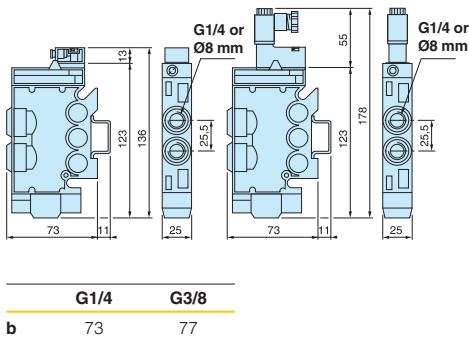
Bistable PVL-B1226\*\*



## Stacking power valves 1/4" with pneumatic or electrical control

With 1 W solenoid actuator and suitable pneumatic connector

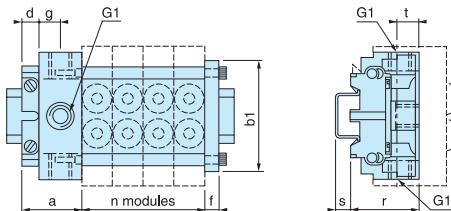
Monostable PVL-C1216•, PVL-C1236•



### Head and tail sets

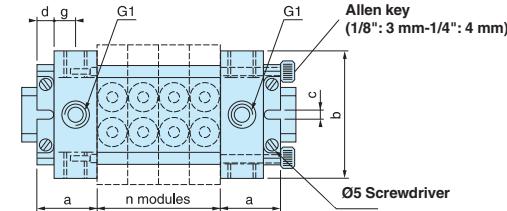
Single air supply

PVL-B1719, PVL-C1713, mounting on DIN rail



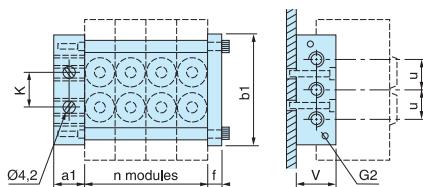
Dual air supply

PVL-B1729, PVL-C1723, mounting on DIN rail



### Single air supply

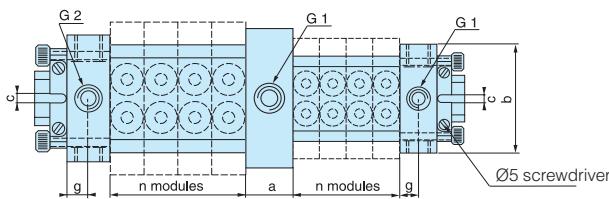
PVL-B1818, PVL-C1819, "stack mounting"



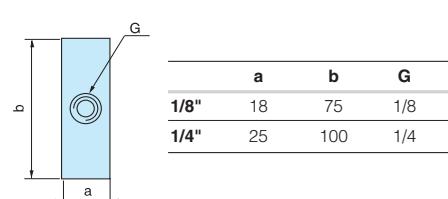
	a	a1	b	b1	c	d	f	g	G1	G2	k	r	s	t	u	v
1/8"	38	16	83	70	4,2	10	8	12	1/4"	1/8"	17,3	44	9	11	16	25
1/4"	38	20	108	100	4,2	10	8	12	3/8"	1/4"	63,5	55	9	13	20	30

### "Transfer / take-off" module, intermediate supply module

For combination of sizes 1/4" - 1/8" - PVU-LCB119

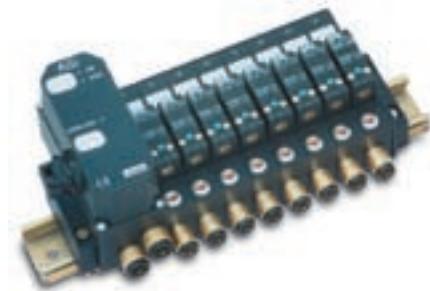


PVUL-BB118 - PVU-LCC119



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
			Ø6	Yes	24 VDC	P2S-EW444ES2CR
	Solenoid 4/2	Spring	Ø4	Yes	24 VDC	P2S-EW444EE2CQ
			Ø6	Yes	24 VDC	P2S-EW446EE2CQ
	Solenoid 4/2	Solenoid	Ø4	Yes	24 VDC	P2S-EW444EE2CQ
			Ø6	Yes	24 VDC	P2S-EW446EE2CQ

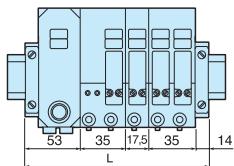
#### Head and tail sets, intermediate accessories

	Electrical connection	Push-in fitting, mm	Order code
	Sub D25 on the top	Ø8	P2S-EA148D25AT
	Intermediate air supply module	Ø6	P2S-EA246

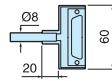
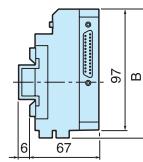
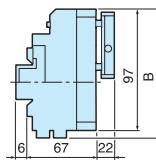
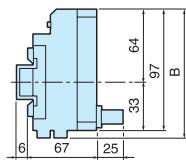
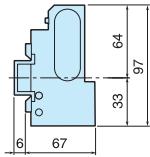
For connecting leads refer to page 158.



Indicates stocked product.

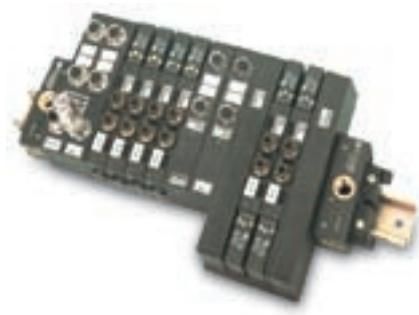
**Dimensions, Valvetronic Interface 2000****With Cable gland or SubD25 Connection Island**

L = 67+(m x 17,5)+(n x 35)  
m = number of 3/2 valves  
n = number of 4/2 valves

Fitting Ø6  
Fitting Ø8B=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



<b>Flow characteristics (Qmax)</b>			<b>Operating information</b>		
<b>Type 2 x 3/2 G1/8 threaded</b>			<b>Push in Ø6 mm</b>		
Flow Qmax	750 l/min	600 l/min	Working Pressure	2 to 10 bar (3 to 10 bar for Monostable)	
Flow Qn	400 l/min	300 l/min	Working temperature	-15 °C to +60 °C (Bus modules: 0°C to 50°C)	
<b>Type 5/2 G1/8 threaded</b>			<b>Push in Ø6 mm</b>		
Flow Qmax	900 l/min	775 l/min	Protection level	IP65	
Flow Qn	540 l/min	420 l/min	<b>Input modules</b>		
<b>Type 5/3 closed centre G1/8 threaded</b>			Protection level	IP65	
Flow Qmax	650 l/min	500 l/min	Voltage and type of output	PNP 24V DC	
Flow Qn	370 l/min	280 l/min	Normal current	100 mA	
<b>Type 5/3 vented centre G1/8 threaded</b>			Maxi. available current island	1 A for all the inputs	
Flow Qmax	900 l/min	775 l/min	<b>Output modules</b>		
Flow Qn	540 l/min	420 l/min	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	<b>PVL-B10560652B</b> <b>PVL-B10561852B</b>
	Solenoid 5/2	Solenoid	Ø6 mm G1/8	24 V DC 24 V DC	<b>PVL-B10260602B</b> <b>PVL-B10261802B</b>
	Solenoid 5/2	Spring	Ø6 mm G1/8	24 V DC 24 V DC	<b>PVL-B10160652B</b> <b>PVL-B10161852B</b>
	Solenoid 5/3 closed centre	Solenoid self centring	Ø6 mm G1/8	24 V DC 24 V DC	<b>PVL-B10760602B</b> <b>PVL-B10761802B</b>
	Solenoid 5/3 vented centre	Solenoid self centring	Ø6 mm	24 V DC	<b>PVL-B10860602B</b>



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 mounting	Description	Port size	Order code
	Single supply head and tail set	G1/4	PVL-B1719
	Dual air supply head and tail set	G1/4	PVL-B1729
	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**

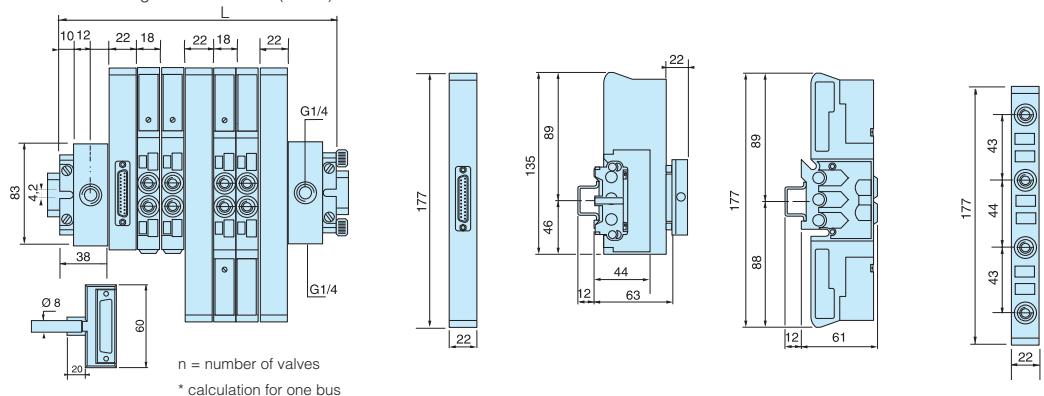
Type	Connection to valve island	Connection to PLC	Length m	Order code
	Leads for head module with Sub D 25 female	20 coloured wires AWG 24	5,0	P8L-MD25A5B
			9,9	P8L-MD25A9B
			15,0	P8L-MD25ACB

Indicates stocked product.

**Dimensions, Valvetronic PVL-B10**

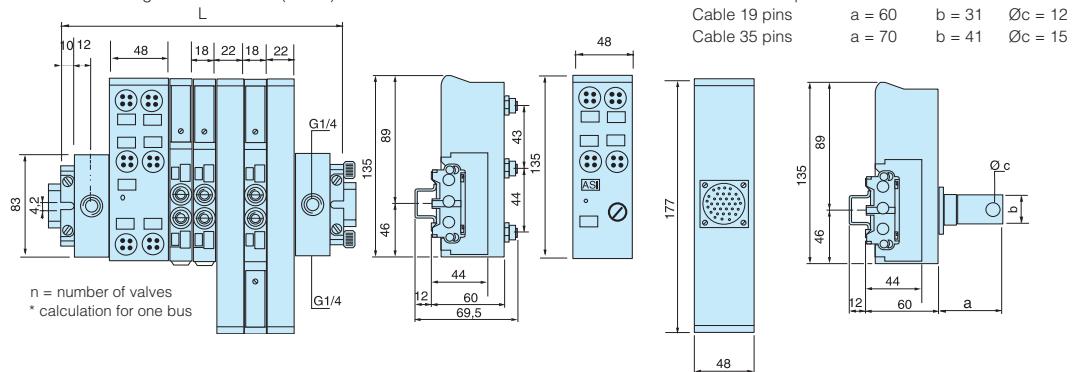
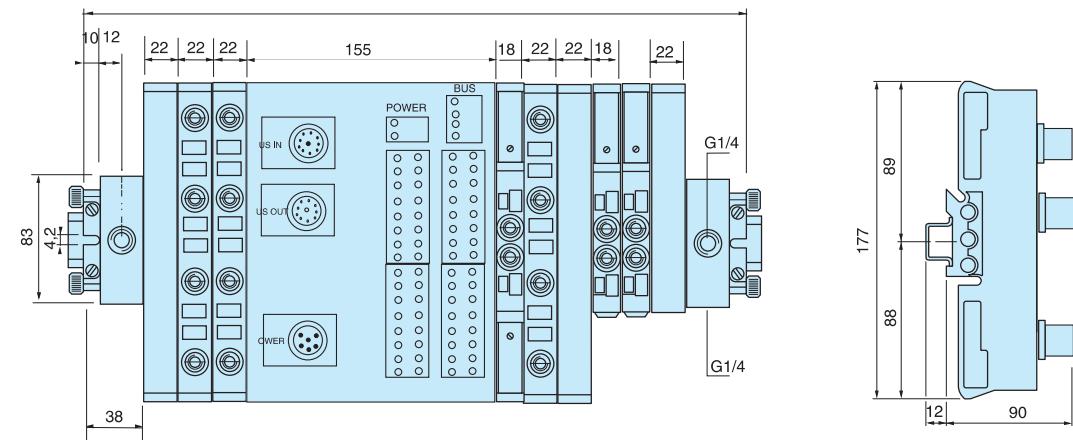
Uniform configuration L = 120 + (n x 18)\*

Mixed configuration L = 142 + (n x 18)\*

**ASi Bus**

Uniform configuration L = 146 + (n x 18) \*

Mixed configuration L = 168 + (n x 18) \*

**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

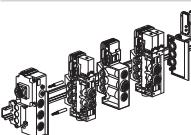
Working Pressure	2 to 10 bar (3 to 10 bar for Monostable)
Working temperature	-15 °C to +60 °C (Bus modules: 0°C to 50°C)
Protection level	IP65

### 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	<b>PVL-C10561952B</b>
	Solenoid 5/2	Solenoid	G1/4	24 V DC	<b>PVL-C10261902B</b>
	Solenoid 5/2	Spring	G1/4	24 V DC	<b>PVL-C10161952B</b>
	Solenoid 5/3 closed centre	Solenoid self centring	G1/4	24 V DC	<b>PVL-C10761902B</b>
	Solenoid 5/3 vented centre	Solenoid self centring	G1/4	24 V DC	<b>PVL-C10861902B</b>

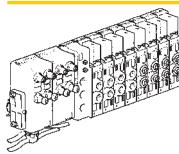
Indicates stocked product.

**Head and tail Electrical pneumatic modules**

Description	Auxiliary Pressure px	Electrical Connection	Pneumatic Connection	Order code
	Without px	Cable gland	G3/8	<b>PVL-C1713H20A</b>
		Sub D 25	G3/8	<b>PVL-C1713D25A</b>
	With px	Cable gland	G3/8	<b>PVL-C2713H20A</b>
Tail air supply module			G3/8	<b>PVU-LC213</b>
Intermediate air supply module			G3/8	<b>PVU-LC213E</b>
Pressure isolating discs				<b>PVL-C1902</b>
			Sold in lots of 10	

For connecting leads see page 162.

**ASI Bus Modules - Inputs and Outputs version**

Description	Connection	Order code
	M12 ASI/24V	<b>PVL-BA1BA44</b>
	Vampire ASI/24V	<b>PVL-BA1BA44V</b>
Intermediate module	M12 ASI/24V	<b>PVL-BA5BA44</b>
Spare vampire cover clip		<b>P8B-AVMP2</b>
Connection LEAD to address terminal		Sold in lots of 5 <b>P8B-AJACK</b>

**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 <b>PVL-C1713B19</b>
	With px version (Ø4mm)*	G1/4 and G3/8 <b>PVL-C2713B19</b>
Combination bus ASI/PVL-C10	Without px version*	G3/8 <b>PVL-C1713B</b>
	With px version (Ø4mm)*	G3/8 <b>PVL-C2713B</b>

\*px = auxilliary air supply for solenoids, separately from the main valves air supply.



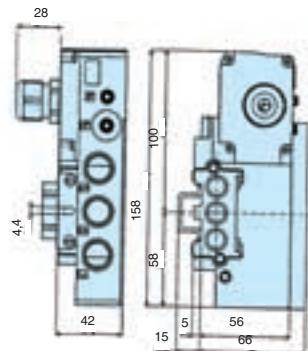
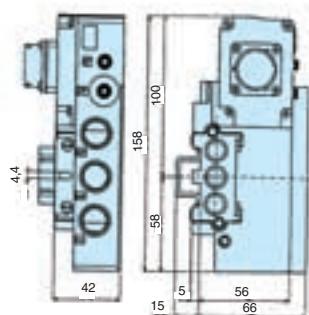
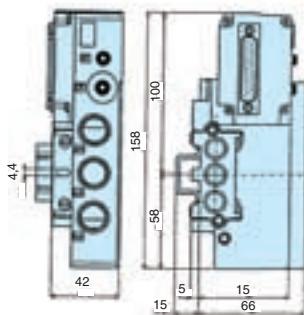
Indicates stocked product.

**Dimensions, Valvetronic PVL-C10**

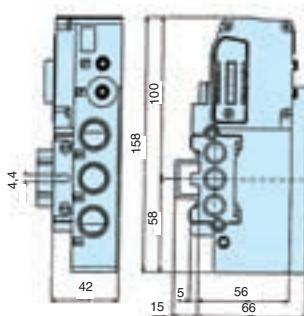
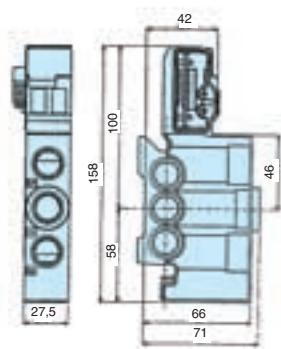
Head modules : SubD25 connector

Cylindrical connector

Cable gland

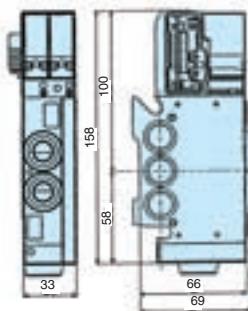
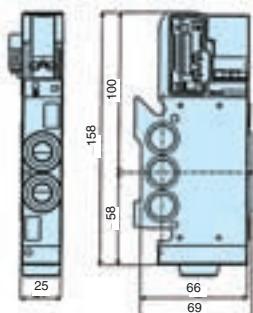


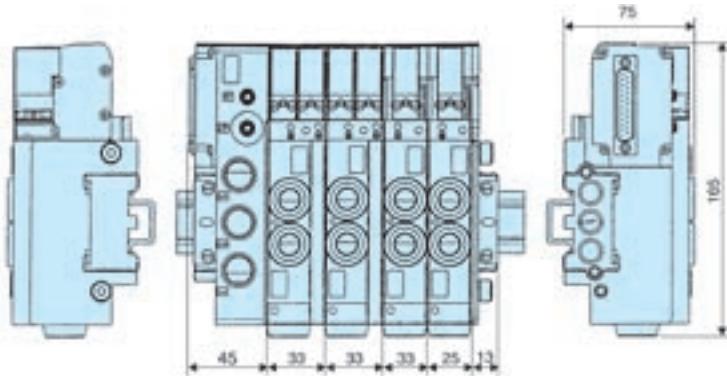
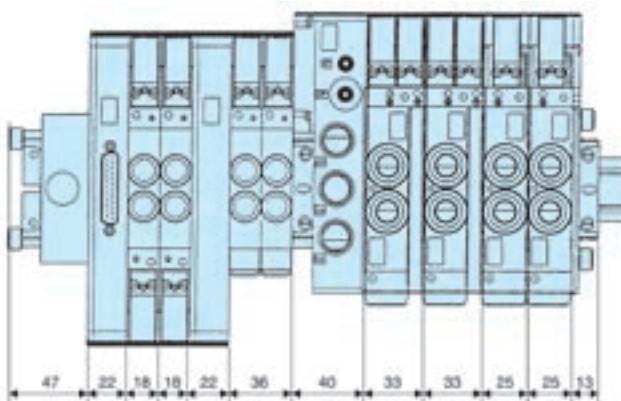
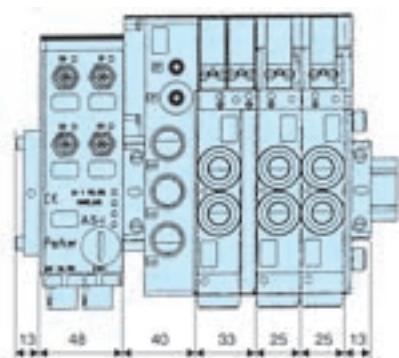
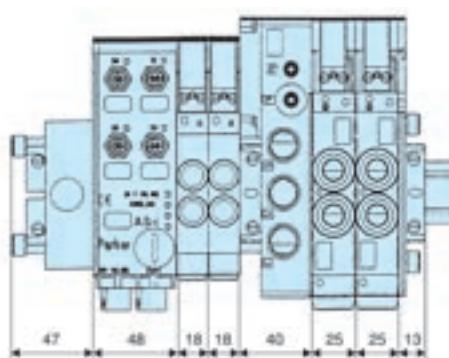
Intermediary air supply module

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**

<b>ISO 15407-1</b>	<b>Individual Connection</b>	DIN C	<b>Isomax</b> 
		M12	<b>ISYS ISO</b> 
		Remote pilot	<b>Isomax</b>  <b>ISYS ISO</b> 
		Subbase, Manifolds	
		Flow Control, Regulator	

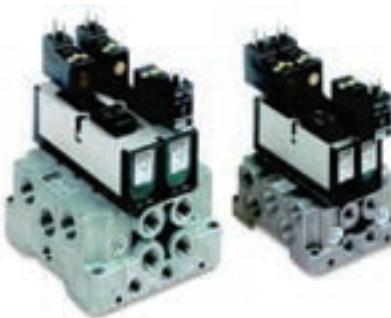
<b>ISO 15407-2</b>	<b>Plug-in</b>	Plug-in	<b>ISYS ISO</b> 
		Subbase, Manifolds	

**ISO 5599****Size 1 / 2 / 3****Cylinders from Ø 63 to 200**

<b>ISO 5599-1</b>	<b>Individual Connection</b>	DIN A, Industrial	<b>Isomax</b> 	<b>ISYS ISO</b> 
	M12, M23	<b>Isomax</b> 	<b>ISYS ISO</b> 	
	Remote pilot	<b>Isomax</b> 	<b>ISYS ISO</b> 	
	Subbase, Manifolds			
	Flow Control, Regulator			

<b>ISO 5599-2</b>	<b>Plug-in</b>	Plug-in	<b>ISYS ISO</b> 
	Subbase, Manifolds		

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
<b>5/2 Valves</b>							
	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	<b>DX02-621-951M DX01-621-951M</b>
	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	<b>DX02-651-951M DX01-651-951M</b>
	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	<b>DX02-606-951M DX01-606-951M</b>
<b>5/3 Valves</b>							
	02 - 18mm 01 - 26mm	Electrical signal Closed center	Electrical signal Self centering	3,3 2,9	20/60 20/60	0.17 0.21	<b>DX02-616-951M DX01-616-951M</b>
	02 - 18mm 01 - 26mm	Electrical signal Vented center	Electrical signal Self centering	3,3 3	20/60 20/60	0.17 0.21	<b>DX02-611-951M DX01-611-951M</b>
	02 - 18mm 01 - 26mm	Electrical signal Press. center	Electrical signal Self centering	3,3 3	20/60 20/60	0.17 0.21	<b>DX02-613-951M DX01-613-951M</b>

### 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
<b>5/2 Valves</b>							
	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	<b>DX02-621-60 DX01-621-60</b>
	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	<b>DX02-651-60 DX01-651-60</b>
	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	<b>DX02-606-60 DX01-606-60</b>
<b>5/3 Valves</b>							
	02 - 18mm 01 - 26mm	Electrical signal Closed center	Electrical signal Self centering	3,3 2,9	20/60 20/60	0.9 0.13	<b>DX02-616-60 DX01-616-60</b>
	02 - 18mm 01 - 26mm	Electrical signal Vented center	Electrical signal Self centering	3,3 3	20/60 20/60	0.9 0.13	<b>DX02-611-60 DX01-611-60</b>
	02 - 18mm 01 - 26mm	Electrical signal Press. center	Electrical signal Self centering	3,3 3	20/60 20/60	0.9 0.13	<b>DX02-613-60 DX01-613-60</b>

**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
<b>5/2 Valves</b>							
	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	<b>DX02-421-60</b> <b>DX01-421-60</b>
	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	<b>DX02-451-60</b> <b>DX01-451-60</b>
	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	<b>DX02-406-60</b> <b>DX01-406-60</b>
<b>5/3 Valves</b>							
	02 - 18mm 01 - 26mm	Air signal Closed center	Air signal Self centering	3,3 2,9	20/50 20/50	0.9 0.13	<b>DX02-416-60</b> <b>DX01-416-60</b>
	02 - 18mm 01 - 26mm	Air signal Vented center	Air signal Self centering	3,3 3	20/50 20/50	0.9 0.13	<b>DX02-411-60</b> <b>DX01-411-60</b>
	02 - 18mm 01 - 26mm	Air signal Press. center	Air signal Self centering	3,3 3	20/50 20/50	0.9 0.13	<b>DX02-413-60</b> <b>DX01-413-60</b>

**Solenoids 15 mm NC standard flow DIN 1,2 W/1,6 VA**

Voltage	Order code	Order code
 24 V DC	<b>P2E-KV32C1</b>	<b>P2E-KV32C2</b>
48 V DC		<b>P2E-KV32D1</b>
24 V AC 50 Hz	<b>P2E-KV31C1</b>	<b>P2E-KV31C2</b>
48 V AC 50/60 Hz	<b>P2E-KV34D1</b>	<b>P2E-KV34D2</b>
115 V AC 50 Hz / 120 V AC 60 Hz	<b>P2E-KV31F1</b>	<b>P2E-KV31F2</b>
230 V AC 50 Hz / 240 V AC 60 Hz	<b>P2E-KV31J1</b>	<b>P2E-KV31J2</b>

Connectors see page 186.



Indicates stocked product.

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.



- Size 1, 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		
<b>For ATEX specific products contact Sales Office</b>			

#### 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
<b>5/2 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Spring Spring Spring	3,9/2,5 3,6/2,4 3,6/2,3	40/55 60/105 85/160	0.5 0.75 1.25	<b>DX1-621-BL49</b> <b>DX2-621-BL49</b> <b>DX3-621-BL49</b>
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Differential Differential Differential	3,3/1,9 3,3/2,0 3,3/1,9	30/70 55/110 80/180	0.5 0.75 1.25	<b>DX1-651-BL49</b> <b>DX2-651-BL49</b> <b>DX3-651-BL49</b>
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Electrical signal Electrical signal Electrical signal	1,0/1,0 1,0/1,0 1,0/1,0	25/25 30/30 40/40	0.65 0.9 1.4	<b>DX1-606-BL49</b> <b>DX2-606-BL49</b> <b>DX3-606-BL49</b>
<b>5/3 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Closed center	Electrical signal Self centering	2,6 2,1 2,1	30/95 40/190 55/330	0.65 0.9 1.4	<b>DX1-616-BL49</b> <b>DX2-616-BL49</b> <b>DX3-616-BL49</b>
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Vented center	Electrical signal Self centering	2,8 2,2 2,1	25/70 40/140 60/270	0.65 0.9 1.4	<b>DX1-611-BL49</b> <b>DX2-611-BL49</b> <b>DX3-611-BL49</b>
	1 - 43mm 2 - 56mm	Electrical signal Press. center	Electrical signal Self centering	2,4 2,1	25/65 40/150	0.65 0.9	<b>DX1-613-BL49</b> <b>DX2-613-BL49</b>

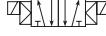
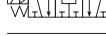
## Solenoid operated ISO valve fitted with CNOMO operator without coil

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
<b>5/2 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Spring Spring Spring	3,9/2,5 3,6/2,4 3,6/2,3	40/55 60/105 85/160	0.4 0.65 1.15	DX1-621-BN DX2-621-BN DX3-621-BN
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Differential Differential Differential	3,3/1,9 3,3/2,0 3,3/1,9	30/70 55/110 80/180	0.4 0.65 1.15	DX1-651-BN DX2-651-BN DX3-651-BN
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Electrical signal Electrical signal Electrical signal	1,0/1,0 1,0/1,0 1,0/1,0	25/25 30/30 40/40	0.55 0.8 1.3	DX1-606-BN DX2-606-BN DX3-606-BN
<b>5/3 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Closed center	Electrical signal Self centering	2,6 2,1 2,1	30/95 40/190 55/330	0.55 0.8 1.3	DX1-616-BN DX2-616-BN DX3-616-BN
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Vented center	Electrical signal Self centering	2,8 2,2 2,1	25/70 40/140 60/270	0.55 0.8 1.3	DX1-611-BN DX2-611-BN DX3-611-BN
	1 - 43mm 2 - 56mm	Electrical signal Press. center	Electrical signal Self centering	2,4 2,1	25/65 40/150	0.55 0.8	DX1-613-BN DX2-613-BN

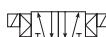
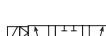
## Pneumatic operated ISO valve without valve spool override

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
<b>5/2 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Air signal Air signal	Spring Spring Spring	3,9/2,5 3,6/2,4 3,6/2,3	30/45 50/95 80/160	0.35 0.6 1.1	DX1-421-60 DX2-421-60 DX3-421-60
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Air signal Air signal	Differential Differential Differential	3,3/1,9 3,3/2,0 3,3/1,9	25/60 45/100 70/170	0.35 0.6 1.1	DX1-451-60 DX2-451-60 DX3-451-60
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Air signal Air signal	Air signal Air signal Air signal	1,0/1,0 1,0/1,0 1,0/1,0	20/20 25/25 35/35	0.35 0.6 1.1	DX1-406-60 DX2-406-60 DX3-406-60
<b>5/3 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Closed center	Air signal Self centering	2,6 2,1 2,1	20/80 30/170 45/330	0.35 0.6 1.1	DX1-416-60 DX2-416-60 DX3-416-60
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Vented center	Air signal Self centering	2,8 2,2 2,1	20/65 30/140 50/270	0.35 0.6 1.1	DX1-411-60 DX2-411-60 DX3-411-60
	1 - 43mm 2 - 56mm	Air signal Press. center	Air signal Self centering	2,4 2,1	20/60 25/140	0.35 0.6	DX1-413-60 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
<b>5/2 Valves</b>							
	1 - 43mm	Electrical signal	Spring	3,9/2,5	40/55	0.5	<b>DX1-621-B619</b>
	2 - 56mm	Electrical signal	Spring	3,6/2,4	60/105	0.75	<b>DX2-621-B619</b>
	3 - 71mm	Electrical signal	Spring	3,6/2,3	85/160	1.25	<b>DX3-621-B619</b>
	1 - 43mm	Electrical signal	Differential	3,3/1,9	30/70	0.5	<b>DX1-651-B619</b>
	2 - 56mm	Electrical signal	Differential	3,3/2,0	55/110	0.75	<b>DX2-651-B619</b>
	3 - 71mm	Electrical signal	Differential	3,3/1,9	80/180	1.25	<b>DX3-651-B619</b>
	1 - 43mm	Electrical signal	Electrical signal	1,0/1,0	25/25	0.65	<b>DX1-606-B619</b>
	2 - 56mm	Electrical signal	Electrical signal	1,0/1,0	30/30	0.9	<b>DX2-606-B619</b>
	3 - 71mm	Electrical signal	Electrical signal	1,0/1,0	40/40	1.4	<b>DX3-606-B619</b>
<b>5/3 Valves</b>							
	1 - 43mm	Electrical signal	Electrical signal	2,6	30/95	0.65	<b>DX1-616-B619</b>
	2 - 56mm	Closed center	Self centering	2,1	40/190	0.9	<b>DX2-616-B619</b>
	3 - 71mm			2,1	55/330	1.4	<b>DX3-616-B619</b>
	1 - 43mm	Electrical signal	Electrical signal	2,8	25/70	0.65	<b>DX1-611-B619</b>
	2 - 56mm	Vented center	Self centering	2,2	40/140	0.9	<b>DX2-611-B619</b>
	3 - 71mm			2,1	60/270	1.4	<b>DX3-611-B619</b>
	1 - 43mm	Electrical signal	Electrical signal	2,4	25/65	0.65	<b>DX1-613-B619</b>
	2 - 56mm	Press. center	Self centering	2,1	40/150	0.9	<b>DX2-613-B619</b>

**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
<b>5/2 Valves</b>							
	1 - 43mm	Electrical signal	Spring	3,9/2,5	40/55	0.65	<b>DX1-621-B219</b>
	2 - 56mm	Electrical signal	Spring	3,6/2,4	60/105	0.9	<b>DX2-621-B219</b>
	3 - 71mm	Electrical signal	Spring	3,6/2,3	85/160	1.4	<b>DX3-621-B219</b>
	1 - 43mm	Electrical signal	Differential	3,3/1,9	30/70	0.65	<b>DX1-651-B219</b>
	2 - 56mm	Electrical signal	Differential	3,3/2,0	55/110	0.9	<b>DX2-651-B219</b>
	3 - 71mm	Electrical signal	Differential	3,3/1,9	80/180	1.4	<b>DX3-651-B219</b>
	1 - 43mm	Electrical signal	Electrical signal	1,0/1,0	25/25	0.8	<b>DX1-606-B219</b>
	2 - 56mm	Electrical signal	Electrical signal	1,0/1,0	30/30	1.05	<b>DX2-606-B219</b>
	3 - 71mm	Electrical signal	Electrical signal	1,0/1,0	40/40	1.55	<b>DX3-606-B219</b>
<b>5/3 Valves</b>							
	1 - 43mm	Electrical signal	Electrical signal	2,6	30/95	0.8	<b>DX1-616-B219</b>
	2 - 56mm	Closed center	Self centering	2,1	40/190	1.05	<b>DX2-616-B219</b>
	3 - 71mm			2,1	55/330	1.55	<b>DX3-616-B219</b>
	1 - 43mm	Electrical signal	Electrical signal	2,8	25/70	0.8	<b>DX1-611-B219</b>
	2 - 56mm	Vented center	Self centering	2,2	40/140	1.05	<b>DX2-611-B219</b>
	3 - 71mm			2,1	60/270	1.55	<b>DX3-611-B219</b>
	1 - 43mm	Electrical signal	Electrical signal	2,4	25/65	0.8	<b>DX1-613-B219</b>
	2 - 56mm	Press. center	Self centering	2,1	40/150	1.05	<b>DX2-613-B219</b>

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
	<b>Size 02</b>
Flow (Qmax.) :	10,8 l/s
Flow (Qn) :	6,5 l/s
	<b>Size 01</b>
	25,3 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
<b>5/2 Valves</b>							
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Spring & Diff. Spring & Diff.	3,1 3,1	20/40 20/45	0.15 0.25	HBEWXBG2G9000FA HAEWXBG2G9000FA
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Differential Differential	2,7 2,7	15/40 15/50	0.15 0.25	HB1WXBG2G9000FA HA1WXBG2G9000FA
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Electrical signal Electrical signal	1,7 1,7	10 10	0.165 0.265	HB2WXBG2G9000FA HA2WXBG2G9000FA
<b>5/3 Valves</b>							
	2 - 18mm 01 - 26mm	Electrical signal Closed center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.165 0.265	HB5WXBG2G9000FA HA5WXBG2G9000FA
	02 - 18mm 01 - 26mm	Electrical signal Vented center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.165 0.265	HB6WXBG2G9000FA HA6WXBG2G9000FA
	02 - 18mm 01 - 26mm	Electrical signal Press. center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.165 0.265	HB7WXBG2G9000FA 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
<b>5/2 Valves</b>							
	02 - 18mm 01 - 26mm	Air signal Air signal	Spring & Diff. Spring & Diff.	3,1 3,1	15/30 15/40	0.115 0.215	HBFWX000XXA HAFWX000XXA
	02 - 18mm 01 - 26mm	Air signal Air signal	Differential Differential	2,7 2,7	10/30 15/35	0.115 0.215	HB3WX000XXA HA3WX000XXA
	02 - 18mm 01 - 26mm	Air signal Air signal	Air signal Air signal	1,7 1,7	8 10	0.115 0.215	HB4WX000XXA HA4WX000XXA
<b>5/3 Valves</b>							
	2 - 18mm 01 - 26mm	Air signal Closed center	Air signal Self centering	2,4 2,4	15/35 15/40	0.115 0.215	HB8WX000XXA HA8WX000XXA
	02 - 18mm 01 - 26mm	Air signal Vented center	Air signal Self centering	2,4 2,4	15/35 15/40	0.115 0.215	HB9WX000XXA HA9WX000XXA
	02 - 18mm 01 - 26mm	Air signal Press. center	Air signal Self centering	2,4 2,4	15/35 15/40	0.115 0.215	HB0WX000XXA HA0WX000XXA

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
<b>Size 02</b>	<b>Size 01</b>
Flow (Qmax.) :	10,8 l/s
Flow (Qn) :	6,5 l/s
	25,3 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	Changover time (ms) at 6 bar actua./return	Weight Kg	Order code
<b>5/2 Valves</b>							
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Spring & Diff. Spring & Diff.	3,1 3,1	20/40 20/45	0.13 0.23	<b>HBEVXBG0G9A</b> <b>HAEVXBG0G9A</b>
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Differential Differential	2,7 2,7	15/40 15/50	0.13 0.23	<b>HB1VXBG0G9A</b> <b>HA1VXBG0G9A</b>
	02 - 18mm 01 - 26mm	Electrical signal Electrical signal	Electrical signal Electrical signal	1,7 1,7	10 10	0.145 0.245	<b>HB2VXBG0G9A</b> <b>HA2VXBG0G9A</b>
<b>5/3 Valves</b>							
	02 - 18mm 01 - 26mm	Electrical signal Closed center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.145 0.245	<b>HB5VXBG0G9A</b> <b>HA5VXBG0G9A</b>
	02 - 18mm 01 - 26mm	Electrical signal Vented center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.145 0.245	<b>HB6VXBG0G9A</b> <b>HA6VXBG0G9A</b>
	02 - 18mm 01 - 26mm	Electrical signal Press. center	Electrical signal Self centering	2,4 2,4	15/60 15/50	0.145 0.245	<b>HB7VXBG0G9A</b> <b>HA7VXBG0G9A</b>

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
<b>5/2 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Spring & Diff. Spring & Diff. Spring & Diff.	3,1/2,5 3,1/2,1 3,8/3,3	25/35 40/70 70/80	0.77 1.19 1.47	H1EWXBBL49C H2EWXBBL49C H3EWXBBL49C
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Differential Differential Differential	1,7/1,9 2,4/1,7 3,5/2,4	25/45 35/80 55/85	0.77 1.19 1.47	H11WXBBL49C H21WXBBL49C H31WXBBL49C
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Electrical signal Electrical signal Electrical signal	1,7 1,7 2,4	15 20 25	0.94 1.36 1.64	H12WXBBL49C H22WXBBL49C H32WXBBL49C
<b>5/3 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Closed center	Electrical signal Self centering	2,4 3,5 3,5	15/60 30/75 23/80	0.94 1.36 1.64	H15WXBBL49C H25WXBBL49C H35WXBBL49C
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Vented center	Electrical signal Self centering	2,4 3,5 3,5	15/60 30/75 23/80	0.94 1.36 1.64	H16WXBBL49C H26WXBBL49C H36WXBBL49C
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Press. center	Electrical signal Self centering	2,4 3,5 3,5	15/60 30/75 23/80	0.94 1.36 1.64	H17WXBBL49C H27WXBBL49C 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
<b>5/2 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Spring & Diff. Spring & Diff. Spring & Diff.	3,1/2,5 3,1/2,1 3,8/3,3	25/35 40/70 70/80	0.65 1.07 1.35	<b>H1EWXBBNXXC</b> <b>H2EWXBBNXXC</b> <b>H3EWXBBNXXC</b>
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Differential Differential Differential	1.7/1,9 2,4/1,7 3,5/2,4	25/45 35/80 55/85	0.65 1.07 1.35	<b>H11WXBBNXXC</b> <b>H21WXBBNXXC</b> <b>H31WXBBNXXC</b>
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Electrical signal Electrical signal Electrical signal	1,7 1,7 2,4	15 20 25	0.7 1.12 1.4	<b>H12WXBBNXXC</b> <b>H22WXBBNXXC</b> <b>H32WXBBNXXC</b>
<b>5/3 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Closed center Electrical signal	Electrical signal Self centering	2,4 3,5 3,5	15/60 30/75 23/80	0.7 1.12 1.4	<b>H15WXBBNXXC</b> <b>H25WXBBNXXC</b> <b>H35WXBBNXXC</b>
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Vented center Electrical signal	Electrical signal Self centering	2,4 3,5 3,5	15/60 30/75 23/80	0.7 1.12 1.4	<b>H16WXBBNXXC</b> <b>H26WXBBNXXC</b> <b>H36WXBBNXXC</b>
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Press. center Electrical signal	Electrical signal Self centering	2,4 3,5 3,5	15/60 30/75 23/80	0.7 1.12 1.4	<b>H17WXBBNXXC</b> <b>H27WXBBNXXC</b> <b>H37WXBBNXXC</b>

**Solenoid operated ISO valve, 24VDC, central M12 connection**

Oriented side 14, Led &amp; 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
<b>5/2 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Spring & Diff. Spring & Diff. Spring & Diff.	3,1/2,5 3,1/2,1 3,8/3,3	30/40 45/70 75/80	0.77 1.29 1.57	<b>H1EWXBG2B9000FC</b> <b>H2EWXBG2B9000FC</b> <b>H3EWXBG2B9000FC</b>
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Differential Differential Differential	1.7/1,9 2,4/1,7 3,5/2,4	30/50 40/80 60/85	0.77 1.29 1.57	<b>H11WXBG2B9000FC</b> <b>H21WXBG2B9000FC</b> <b>H31WXBG2B9000FC</b>
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Electrical signal Electrical signal Electrical signal	1,7 1,7 2,4	20 25 30	1.04 1.46 1.74	<b>H12WXBG2B9000FC</b> <b>H22WXBG2B9000FC</b> <b>H32WXBG2B9000FC</b>
<b>5/3 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Closed center Electrical signal	Electrical signal Self centering	2,4 3,5 3,5	20/65 35/80 40/85	1.04 1.46 1.74	<b>H15WXBG2B9000FC</b> <b>H25WXBG2B9000FC</b> <b>H35WXBG2B9000FC</b>
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Vented center Electrical signal	Electrical signal Self centering	2,4 3,5 3,5	20/65 35/80 40/85	1.04 1.46 1.74	<b>H16WXBG2B9000FC</b> <b>H26WXBG2B9000FC</b> <b>H36WXBG2B9000FC</b>
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Press. center Electrical signal	Electrical signal Self centering	2,4 3,5 3,5	20/65 35/80 40/85	1.04 1.46 1.74	<b>H17WXBG2B9000FC</b> <b>H27WXBG2B9000FC</b> <b>H37WXBG2B9000FC</b>

**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
<b>5/2 Valves</b>							
	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
<b>5/3 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Air signal Closed center Closed center	Air signal Self centering 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 Vented center	Air signal Self centering 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 Press. center	Air signal Self centering Self centering	2,4 3,5 3,5	15/55 20/70 30/80	0.6 1.02 1.3	H10WX000XXC H20WX000XXC H30WX000XXC

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

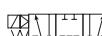
	Size 1	Size 2	Size 3
Working pressure :	2,0 to 10 bar		
Working temperature :	-15 to +50°C		
Flow (Qmax.) :	34,5 l/s	69,0 l/s	130,8 l/s
Flow (Qn) :	20,8 l/s	42,0 l/s	83,7 l/s

## Solenoid operated ISO valve, 24VDC, Plug-in

Led & surge suppressor

Symbol	Size	Actuation	Return	Signal pressure min. (bar) at 6 bar actua./return	Changover time (ms) at 6 bar actua./return	Weight Kg	Order code
<b>5/2 Valves</b>							
	1 - 43mm	Electrical signal	Spring & Diff.	3,1/2,5	30/40	0.77	<b>H1EVXBG0B9C</b>
	2 - 56mm	Electrical signal	Spring & Diff.	3,1/2,1	45/70	1.19	<b>H2EVXBG0B9C</b>
	3 - 71mm	Electrical signal	Spring & Diff.	3,8/3,3	75/80	1.47	<b>H3EVXBG0B9C</b>
	1 - 43mm	Electrical signal	Differential	1,7/1,9	30/50	0.77	<b>H11VXBG0B9C</b>
	2 - 56mm	Electrical signal	Differential	2,4/1,7	40/80	1.19	<b>H21VXBG0B9C</b>
	3 - 71mm	Electrical signal	Differential	3,5/2,4	60/85	1.47	<b>H31VXBG0B9C</b>
	1 - 43mm	Electrical signal	Electrical signal	1,7	20	0.94	<b>H12VXBG0B9C</b>
	2 - 56mm	Electrical signal	Electrical signal	1,7	25	1.36	<b>H22VXBG0B9C</b>
	3 - 71mm	Electrical signal	Electrical signal	2,4	30	1.64	<b>H32VXBG0B9C</b>
<b>5/3 Valves</b>							
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.94	<b>H15VXBG0B9C</b>
	2 - 56mm	Closed center	Self centering	3,5	35/80	1.36	<b>H25VXBG0B9C</b>
	3 - 71mm			3,5	40/85	1.64	<b>H35VXBG0B9C</b>
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.94	<b>H16VXBG0B9C</b>
	2 - 56mm	Vented center	Self centering	3,5	35/80	1.36	<b>H26VXBG0B9C</b>
	3 - 71mm			3,5	40/85	1.64	<b>H36VXBG0B9C</b>
	1 - 43mm	Electrical signal	Electrical signal	2,4	20/65	0.94	<b>H17VXBG0B9C</b>
	2 - 56mm	Press. center	Self centering	3,5	35/80	1.36	<b>H27VXBG0B9C</b>
	3 - 71mm			3,5	40/85	1.64	<b>H37VXBG0B9C</b>

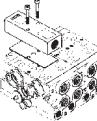
**Solenoid operated ISO valve, with plug in operator, without coil**

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
<b>5/2 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Spring & Diff. Spring & Diff. Spring & Diff.	3,1/2,5 3,1/2,1 3,8/3,3	30/40 45/70 75/80	0.65 1.07 1.35	H1EVXBGNXXC H2EVXBGNXXC H3EVXBGNXXC
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Differential Differential Differential	1,7/1,9 2,4/1,7 3,5/2,4	30/50 40/80 60/85	0.65 1.07 1.35	H11VXBGNXXC H21VXBGNXXC H31VXBGNXXC
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Electrical signal Electrical signal	Electrical signal Electrical signal Electrical signal	1,7 1,7 2,4	20 25 30	0.7 1.12 1.4	H12VXBGNXXC H22VXBGNXXC H32VXBGNXXC
<b>5/3 Valves</b>							
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Closed center	Electrical signal Self centering	2,4 3,5 3,5	20/65 35/80 40/85	0.7 1.12 1.4	H15VXBGNXXC H25VXBGNXXC H35VXBGNXXC
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Vented center	Electrical signal Self centering	2,4 3,5 3,5	20/65 35/80 40/85	0.7 1.12 1.4	H16VXBGNXXC H26VXBGNXXC H36VXBGNXXC
	1 - 43mm 2 - 56mm 3 - 71mm	Electrical signal Press. center	Electrical signal Self centering	2,4 3,5 3,5	20/65 35/80 40/85	0.7 1.12 1.4	H17VXBGNXXC H27VXBGNXXC H37VXBGNXXC

**Side ported subbase**

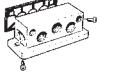
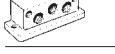
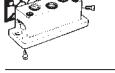
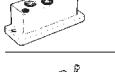
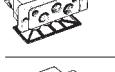
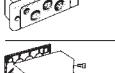
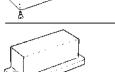
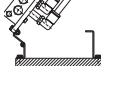
	Description	Port size	Weight	Order code BSPP "G"	Order code NPT
	<b>Individual subbase kit</b> Subbase with side port Size 02 Size 01	G1/8 G1/4	0.07 0.12	<b>PL02-01-70</b> <b>PL01-02-70</b>	<b>PL02-01-80</b> <b>PL01-02-80</b>

**Side ported manifold**

	Description	Port size	Weight	Order code BSPP "G"	Order code NPT
	<b>Two station manifold base with side ports</b> To suit valves with internal supply solenoid Size 02 Size 01	G1/8 G1/4	0.14 0.7	<b>PJLP02-201-70</b> <b>PJLP01-202-70</b>	<b>PJLP02-201-80</b> <b>PJLP01-202-80</b>
	<b>Two station manifold base</b> To suit pneumatic actuated valves Size 01	G1/4	0.73	<b>PJL01-202-70</b>	<b>PJL01-202-80</b>
	<b>End plate kit</b> - for side ported two station manifold base Size 02 Size 01	G1/4 G3/8	0.15 0.52	<b>PEJ02-02-70</b> <b>PEJ01-03-70</b>	<b>PEJ02-02-80*</b> <b>PEJ01-03-80**</b>
	* Use with PJLP02 or PJL01 ** Use with PJLP01 or PJL01 Gaskets and assembly hardware included.				

**Accessories**

	Description	Weight	Order code
	<b>Blanking plate</b> Size 02 Size 01	0.04 0.05	<b>DX02BLK</b> <b>DX01BLK</b>
	<b>Blanking plug</b> (for subbase PJL) Size 02 Size 01	0.01 0.02	<b>D02BD0</b> <b>D01BD0</b>
	<b>Bolt, washer and nut</b> Size 02 Size 01		<b>DX02M2MB</b> <b>DX01M2MB</b>

Accessories	Designation	Weight (kg)	Order code (P2V-A, 18 mm)	Weight (kg)	Order code (P2V-B, 26 mm)
	<b>Multiple manifold</b> 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
	<b>Multiple manifold</b> 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
	<b>Intermediate manifold, 18 to 26 mm</b> 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
	<b>Connection block</b> G-side, including seal and fitting screws. For side connection.	0,18	P2V-AM512GS	0,21	P2V-BM513GS
	<b>Connection block</b> H-side. For side connection.	0,18	P2V-AM512HS	0,21	P2V-BM513HS
	<b>Connection block</b> G-side, including seal and fitting screws. For top connection.	0,18	P2V-AM512GT	0,21	P2V-BM513GT
	<b>Connection block</b> H-side. For top connection.	0,18	P2V-AM512HT	0,21	P2V-BM513HT
	<b>Connection block</b> G-side, including seal and fitting screws. For bottom connection.	0,18	P2V-AM512GB	0,22	P2V-BM513GB
	<b>Connection block</b> H-side. For bottom connection.	0,18	P2V-AM512HB	0,22	P2V-BM513HB
	<b>End cover</b> G-side, including seal and fitting screws.	0,19	P2V-AM500GO	0,24	P2V-BM500GO
	<b>End cover</b> H-side	0,19	P2V-AM500HO	0,24	P2V-BM500HO
	<b>Plug</b> For sealing supply and exhaust air ducts between multiple manifolds with different primary supply pressures.	0,004	P2V-AK0P	0,01	P2V-BK0P
	<b>Angle mounting set</b> 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
	<b>O-ring strip seal</b> 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
 <b>Manifold with two valve positions with terminal Strip (Non collective wiring)</b> Size 01 - 26mm	G1/4	<b>PS551154CP</b>
<b>Manifold with two single solenoid valve positions with single address board</b> Size 02 - 18mm Size 01 - 26mm	G1/8 G1/4	<b>PS561152JP</b> <b>PS551154JP</b>
<b>Manifold with two valve positions with double address board</b> Size 02 - 18mm Size 01 - 26mm	G1/8 G1/4	<b>PS561152MP</b> <b>PS551154MP</b>
<b>Extension Manifold with two valve positions with single address board *</b> Size 02 - 18mm Size 01 - 26mm	G1/8 G1/4	<b>PS561152NP</b> <b>PS551154NP</b>
<b>Extension Manifold with two valve positions with double address board *</b> Size 02 Size 01	G1/8 G1/4	<b>PS561152PP</b> <b>PS551154PP</b>

\* Use only one per manifold assembly to address more 24 solenoid

### Side & bottom ported manifold

Description	Port size	Order code
 <b>Manifold with two valve positions with terminal Strip</b> Size 01 - 26mm	G1/4	<b>PS551164CP</b>
<b>Manifold with two valve positions with single address board</b> Size 02 - 18mm Size 01 - 26mm	G1/8 G1/4	<b>PS561162JP</b> <b>PS551164JP</b>
<b>Manifold with two valve positions with double address board</b> Size 02 - 18mm Size 01 - 26mm	G1/8 G1/4	<b>PS561162MP</b> <b>PS551164MP</b>
<b>Extension Manifold with two valve positions with single address board</b> Size 02 - 18mm Size 01 - 26mm	G1/8 G1/4	<b>PS561162NP</b> <b>PS551164NP</b>
<b>Extension Manifold with two valve positions with double address board</b> Size 02 Size 01	G1/8 G1/4	<b>PS561162PP</b> <b>PS551164PP</b>

### Accessories

Description	Order code
 <b>Blanking plate</b> Size 02 - 18mm Size 01 - 26mm	<b>PS5634P</b> <b>PS5534P</b>
<b>Manifold to Manifold gasket kit</b> HA & HB Gasket Standard HA & HB Gasket 1 Blocked HA & HB Gasket 1 2 3 Blocked	<b>PS561AP</b> <b>PS561BP</b> <b>PS561CP</b>

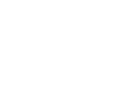


Indicates stocked product.

**Collective wiring end plate kits**

Description	Port size	Order code
	G3/8	<b>PS5631011P</b>
	G3/8	<b>PS5620L21P</b>
	G3/8	<b>PS5620L31P</b>
	G3/8	<b>PS5620L41P</b>
	G3/8	<b>PS5620L51P</b>
	G3/8	<b>PS5620L61P</b>

**Accessories**

Description	Order code
	<b>PSSV32A</b>
	G3/8 <b>PS5624P</b>
	G3/8 <b>PS5632P</b>
	<b>P8LMH25M3A</b>



Indicates stocked product.

**VDMA Side Ported Subbases**

Description	Size	Port size	Weight	Order code
<b>Subbases VDMA</b>				
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
<b>VDMA Form C</b>				
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
<b>VDMA Transition plate</b>				
Size 1 to Size 3	1 to 3	G1/4		P2N-VM500AK
<b>Kit includes:</b> Transition plate only				
<b>VDMA Form D - End plate</b>				
According to VDMA	1 - 43mm	G3/8	0.21	P2N-VM513E
According to VDMA	2 - 56mm	G1/2	0.36	P2N-WM514E
According to VDMA	3 - 71mm	G1	0.68	P2N-YM518E
<b>VDMA Isolation - Main galley</b>				
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
<b>Kit includes:</b> (1) Isolator plug.				

**Accessories**

Description	Size	Port size	Weight	Order code
<b>Blanking plate</b>				
	1 - 43mm	G1/4	0.10	P2N-AA5B
<b>Kit includes:</b> (1) Blanking plate, (1) Gasket and (4) Mounting bolts	2 - 56mm	G3/8	0.15	P2N-BA5B
	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
<b>Single subbase with side ports</b> 1 3 5 2 4 ports & 12 14					
	1 - 43mm	G1/4	0.16	<b>PL1-1/4-70</b>	<b>PL1-1/4-80</b>
	1 - 43mm	G3/8	0.16	<b>PL1-3/8-70</b>	
	2 - 56mm	G3/8	0.28	<b>PL2-3/8-70</b>	<b>PL2-3/8-80</b>
	2 - 56mm	G1/2		<b>P2N-HS514SS</b>	
	3 - 71mm	G1/2		<b>PL3-1/2-70</b>	<b>PL3-1/2-80</b>
	3 - 71mm	G3/4		<b>P2N-JS516SD</b>	

## Bottom ported subbases

Description	Size	Port size	Weight	Order code BSP	Order code NPT
<b>Single subbase with side ports</b> 1 3 5 2 4 ports & 12 14					
	1 - 43mm	G1/4	0.37	<b>PD1-1/4-70</b>	<b>PD1-1/4-80</b>
	2 - 56mm	G3/8	0.59	<b>PD2-3/8-70</b>	<b>PD2-3/8-80</b>
	3 - 71mm	G1/2	0.59	<b>PD3-1/2-70</b>	

## Size 1 bottom ported manifold

Description	Size	Port size	Weight	Order code
<b>Manifold</b> with bottom ports low profile	1 - 43mm	G1/4	0.2	<b>P2N-AM512MB</b>
<b>Connecting block</b> Top or bottom ported connecting block for above manifold "low profile"	1 - 43mm	G3/8	0.15	<b>P2N-AM513GT</b>
<b>End</b> End piece for above manifold "low profile"	1 - 43mm	no	0.06	<b>P2N-AM500J</b>
<b>Intermediate supply</b> Top or bottom ported intermediate supply for above manifold "low profile"	1 - 43mm	G3/8	0.14	<b>P2N-AM513BT</b>
<b>Isolation plugs</b> isolating seal for above manifold "low profile"	1 - 43mm		0.07	<b>P2N-AK0P</b>

## Sizes 1 & 2 side ported manifold

Description	Size	Port size	Weight	Order code
<b>Manifold</b> Manifold with side port	1 - 43mm	G1/4	0.24	<b>P2N-EM512MD</b>
	2 - 56mm	G3/8	0.21	<b>P2N-FM513MD</b>
<b>End</b> Side ported connecting kit for above manifold with side ports	1 - 43mm	G3/8	0.36	<b>P2N-EM513ES</b>
	2 - 56mm	G1/2	0.29	<b>P2N-FM514ES</b>



Indicates stocked product.

### Side ported manifold

Description	Size	Port size	Order code
 <b>Manifold with terminal Strip (non collective wiring)</b>	1 - 43mm 2 - 56mm 3 - 71mm	G3/8 G1/2 G3/4	<b>PS401156CCP</b> <b>PS411158CCP</b> <b>PS421150CCP</b>
<b>Manifold with single address board (single solenoid)</b>	1 - 43mm	G3/8	<b>PS401156JCP</b>
<b>Manifold with double address board</b>	1 - 43mm	G3/8	<b>PS401156MCP</b>

### Accessories

Description	Size	Port size	Order code
 <b>Blanking plate</b>	1 - 43mm 2 - 56mm 3 - 71mm	G3/8 G1/2 G3/4	<b>PS4034CP</b> <b>PS4134CP</b> <b>PS4234CP</b>
<b>Insulation plug</b>	1 - 43mm 2 - 56mm 3 - 71mm	G3/8 G1/2 G3/4	<b>PS4032CP</b> <b>PS4132CP</b> <b>PS4232CP</b>
<b>Manifold to Manifold gasket kit</b>	1 - 43mm	G3/8	<b>PS4013P</b>

### Coils for plug in valve

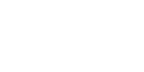
Description		Order code
 12 V DC	5599-2 coil	<b>PS404145P</b>
24 V DC	5599-2 coil	<b>PS4041B9P</b>
24 V AC	5599-2 coil	<b>PS404142P</b>
120 V AC	5599-2 coil	<b>PS404123P</b>
240 V AC	5599-2 coil	<b>PS404157P</b>

 Indicates stocked product.

**Collective wiring end plate kits**

Description	Port size	Order code
		
<b>Left &amp; right ends modules with pressure &amp; exhaust port, auxiliary port, and non collective wiring</b>		
Size 1	G1/2	<b>PS4031011CP</b>
Size 2	G3/4	<b>PS4131011CP</b>
Size 3	G3/4	<b>PS4231011CP</b>
		
<b>Left &amp; right ends modules with pressure &amp; exhaust port, auxiliary port, and SubD25 connection</b>		
Size 1	G1/2	<b>PS4020L21CP</b>
		
<b>Left &amp; right ends modules with pressure &amp; exhaust port, auxiliary port, and 19pin Brad Harrison connection</b>		
Size 1	G1/2	<b>PS4020L31CP</b>
		
<b>Left &amp; right ends modules with pressure &amp; exhaust port, auxiliary port, and 12pin M23 connection</b>		
Size 1	G1/2	<b>PS4020L41CP</b>
		
<b>Left &amp; right ends modules with pressure &amp; exhaust port, auxiliary port, and ISYSNET</b>		
Size 1	G3/8	<b>PS4020L61CP</b>

**Accessories**

Description	Order code
	
<b>32 output driver module for spare part</b>	<b>PSSV32A</b>
	
<b>HA &amp; HB 24 Out Cable</b>	<b>PS4024P</b>
	
<b>25 pin female 25 pin SubD25 cable 3m</b>	<b>P8LMH25M3A</b>
	
<b>H1 H2 H3 Pilot Gasket</b>	<b>PS4007P</b>
	
<b>Valve to base gasket</b>	<b>PS4005CP</b>



Indicates stocked product.

# Regulators - HA & HB - 15407

## 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.

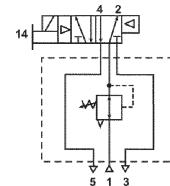


Description	Order code
Gauge kit	PS5651160P

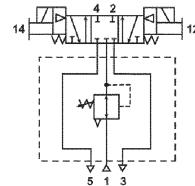
## HB & HA Common Port Regulation

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

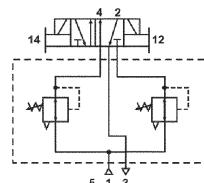
## HB & HA Independent Port Regulation

### Dual Port Regulator

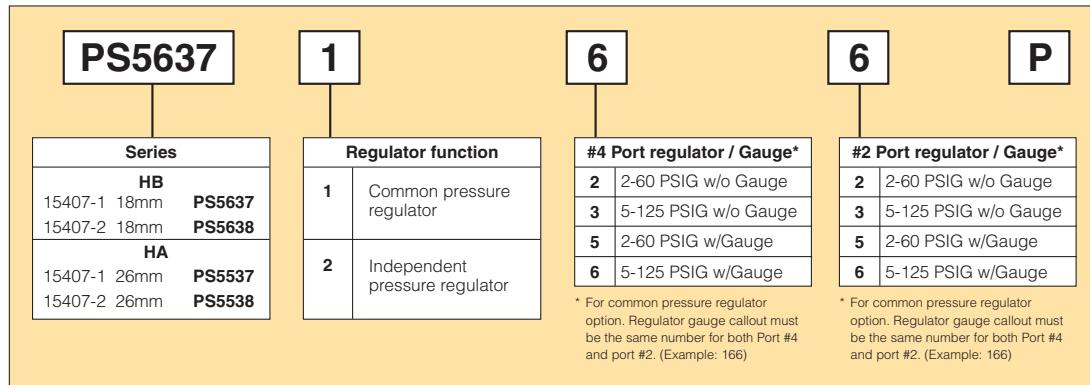
Provides regulated pressure to both ports. Pressure regulation can occur out of the #2 or #4 port of the valve. In this case #2 and #4 have to be cross wired.

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)



## 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	<b>15407-1</b>	
Size 18mm	<b>PS5635P</b>	<b>PS5642P</b>
Size 26mm	<b>PS5535P</b>	<b>PS5542P</b>

## 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.

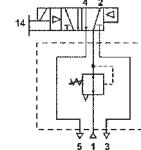


Description	Order code
Gauge kit	PS5651160P

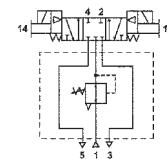
## ISYS ISO 1 / 2 / 3 Common Port Regulation

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	PS4037133CP

## ISYS ISO 1 / 2 / 3 Independent Port Regulation

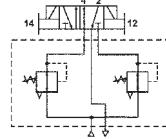
### Dual Port Regulator or Single Port Regulator

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.

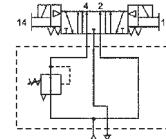


When using an independent Pressure Sandwich Regulator, the cylinder outlet ports are reversed. The 12 end energizes the #2 port. The 3-Position CE and PC functions are also reversed. (See schematics on right).

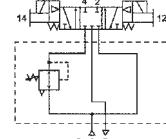
Independent dual port regulator with 4-way, 2-position double solenoid valve



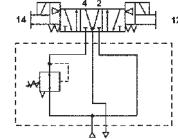
Independent port regulator with 4-way, 3-position inlet to cylinder function



Independent port regulator with 4-way, 3-position all ports blocked valve



Independent port regulator with 4-way, 3-position cylinder to exhaust function



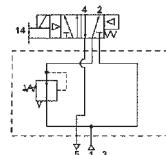
CAUTION: Requires 4-way, 3-position cylinder to exhaust valve

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)

<b>PS4037</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>C</b>	<b>P</b>
<b>Series</b>		<b>Regulator function</b>		<b>#4 Port regulator / Gauge*</b>	<b>#2 Port regulator / Gauge*</b>
<b>ISYS ISO Size 1</b> 5599-1 <b>PS4037</b>	<b>1</b>	Common pressure regulator		<b>0</b> Line By-Pass Plate**	<b>0</b> Line By-Pass Plate**
5599-2 <b>PS4038</b>	<b>2</b>	Independent pressure regulator		<b>1</b> 1-30 PSIG w/o Gauge	<b>1</b> 1-30 PSIG w/o Gauge
<b>ISYS ISO Size 2</b> 5599-1 <b>PS4137</b>	<b>3</b>	Selector Regulator		<b>2</b> 2-60 PSIG w/o Gauge	<b>2</b> 2-60 PSIG w/o Gauge
5599-2 <b>PS4138</b>				<b>3</b> 5-125 PSIG w/o Gauge	<b>3</b> 5-125 PSIG w/o Gauge
<b>ISYS ISO Size 3</b> 5599-1 <b>PS4237</b>				<b>4</b> 1-30 PSIG w/Gauge	<b>4</b> 1-30 PSIG w/Gauge
5599-2 <b>PS4238</b>				<b>5</b> 2-60 PSIG w/Gauge	<b>5</b> 2-60 PSIG w/Gauge
				<b>6</b> 5-125 PSIG w/Gauge	<b>6</b> 5-125 PSIG w/Gauge
				<b>C</b> Air Pilot w/60 PSIG Gauge	<b>C</b> Air Pilot w/60 PSIG Gauge
				<b>D</b> Air Pilot w/60 PSIG Gauge	<b>D</b> 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).

\* 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

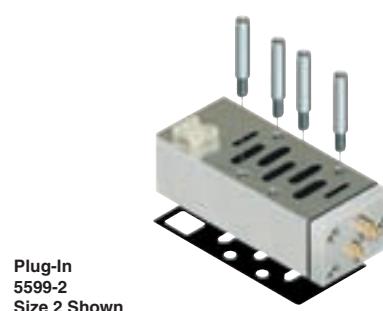
An External Pilot pressure in Port 12 or 14 of the base feeds thru the Sandwich Regulator 12 or 14 galley directly to the 12/14 pilot of the valve.

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
	<b>5599-2</b>	<b>5599-1</b>
Size 1	<b>PS4035CP</b>	<b>PS4042CP</b>
Size 2	<b>PS4135CP</b>	<b>PS4142CP</b>
Size 3	<b>PS4235CP</b>	<b>PS4242CP</b>



## 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

Valves with vented exhaust are fitted  
with diffuser plastic nut

Order code

P2FNP

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.

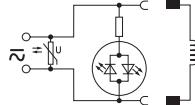
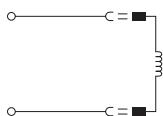
Solenoid pilot operators are fitted to the Viking valve range. Order the above part numbers for spares. The operators are supplied with mounting screws and interface 'O' rings.

**Coils and connectors must be ordered separately.**

# Solenoid Connectors

## 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	<b>P8C-C</b>		
	24V DC LED and protection IP65	<b>P8C-C26C</b>		
	110V AC LED and protection IP65	<b>P8C-C21E</b>		
 With standard screw	Standard IP65 without flying lead	<b>P8C-D</b>	<b>3EV10V10</b>	<b>3EV290V10</b>
	With LED and protection 24V AC/DC	<b>P8C-D26C</b>	<b>3EV10V20-24</b>	<b>3EV290V20-24</b>
	With LED and protection 110V AC	<b>P8C-D21E</b>	<b>3EV10V20-110</b>	<b>3EV290V20-110</b>
	With LED and protection 230V AC		<b>3EV10V20-230</b>	<b>3EV290V20-230</b>
 With cable	Standard with 2m cable IP65	<b>P8L-C2</b>		
	Standard with 5m cable IP65	<b>P8L-C5</b>		
	24V AC/DC, 2m cable LED and protection IP65	<b>P8L-C226C</b>		
	24V AC/DC, 5m cable LED and protection IP65	<b>P8L-C526C</b>	<b>3EV10V20-24L5</b>	<b>3EV290V20-24L5</b>
	24V AC/DC, 10m cable LED and protection IP65	<b>P8L-CA26C</b>		
	110V AC/DC, 2m cable LED and protection IP65	<b>P8L-C221E</b>		
	110V AC/DC, 5m cable LED and protection IP65	<b>P8L-C521E</b>	<b>3EV10V20-110L5</b>	<b>3EV290V20-110L5</b>
	230V AC, 5m cable LED and protection IP65		<b>3EV10V20-230L5</b>	<b>3EV290V20-230L5</b>



<b>P8C-C</b>
<b>P8C-D</b>
<b>P8L-C2</b>
<b>P8L-C5</b>
<b>3EV10V10</b>

<b>P8C-D26C</b>	<b>P8L-C226C</b>
<b>P8C-D21E</b>	<b>P8L-C526C</b>
<b>P8C-C26C</b>	<b>P8L-CA26C</b>
<b>P8C-C21E</b>	<b>P8L-C221E</b>
<b>3EV10V20-24</b>	<b>3EV10V20-24L5</b>
<b>3EV10V20-110</b>	<b>3EV10V20-110L5</b>
<b>3EV10V20-230</b>	<b>3EV10V20-230L5</b>

## 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™**

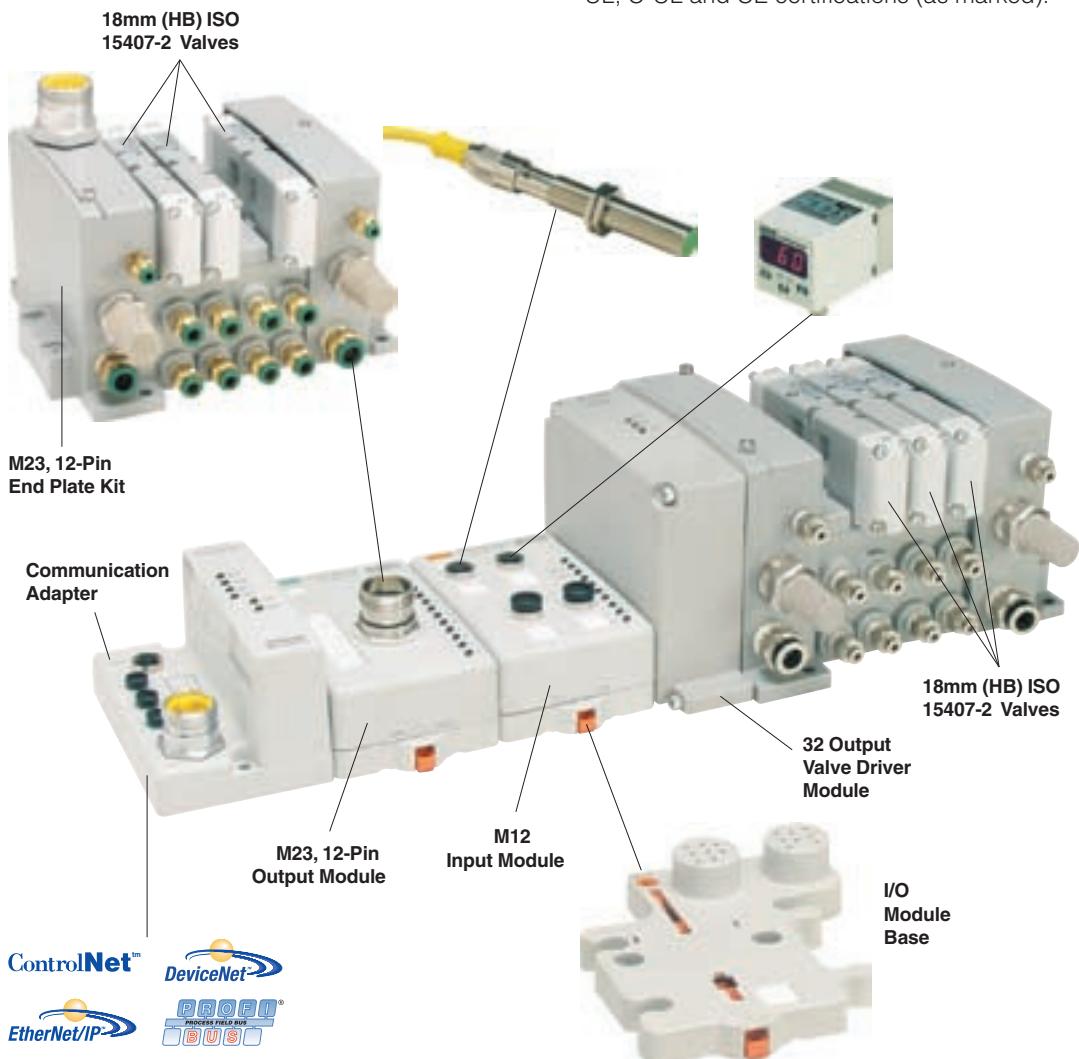
**DeviceNet™**

**EtherNet/IP™**

**PROFIBUS®**

**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™	<b>PSSCDM18PA</b> (M18) or <b>PSSCDM12A</b> (M12)	10 to 28.8VDC
†\$ ControlNet™	<b>PSSCCNA</b>	10 to 28.8VDC
†\$ EtherNet I/P™	<b>PSSCENA</b>	10 to 28.8VDC
†\$ Profibus-DP®	<b>PSSCPBA</b>	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](http://www.parker.com/pneu/isysnet)**I/O Modules**

PSST8M12A



PSST8M23A



PSSNACM12A



PSSTACM12A



PSSN8M8A

† 8 Digital Inputs M12 on 4 M12 connectors for PNP Sensors	<b>PSSN8M12A</b>	10 to 28.8VDC
† 8 Digital Inputs M12 on 4 M12 connectors for NPN Sensors	<b>PSSP8M12A</b>	10 to 28.8VDC
† 8 Digital Inputs M8 for PNP Sensors	<b>PSSN8M8A</b>	10 to 28.8VDC
† 8 Digital Inputs M8 for NPN Sensors	<b>PSSP8M8A</b>	10 to 28.8VDC
+ 8 Digital Outputs M12 (PNP Sourcing)	<b>PSST8M12A</b>	10 to 28.8VDC
+ 8 Digital Outputs M8 (PNP Sourcing)	<b>PSST8M8A</b>	10 to 28.8VDC
§ 4 Digital Output, High Watt Relay M12 (PNP Sourcing) (2 Amp)	<b>PSSTR4M12A</b>	24VDC
+* 8 Digital Outputs M23 (PNP Sourcing)	<b>PSST8M23A</b>	10 to 28.8VDC
+ 2 Analog Inputs Voltage (M12)	<b>PSSNAVM12A</b>	0 to 10V ± 10V
+ 2 Analog Inputs Current (M12)	<b>PSSNACM12A</b>	4 to 20mA or 0 to 20mA
** 2 Analog Outputs Voltage (M12)	<b>PSSTAVM12A</b>	0 to 10V ± 10V
** 2 Analog Outputs Current (M12)	<b>PSSTACM12A</b>	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](http://www.parker.com/pneu/isysnet)

## Valve Driver Modules

32 Point Module – HB, HA, H1, H2, H3	<b>PSSV32A*†</b>
24 Output Cable – HB, HA	<b>PS5624P†</b>
25 - 32 Output Cable – HB, HA	<b>PS5632P†</b>
24 Output Cable – H1, H2, H3	<b>PS4024P†</b>

\* Reference Document E100P for Installation Instructions.  
See [www.parker.com/pneu/isysnet](http://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](http://www.parker.com/pneu/isysnet)

Reference Document E105P and PSS-SG001 for configuration instructions. See [www.parker.com/pneu/isysnet](http://www.parker.com/pneu/isysnet)



**PSSSE24A**

## Bus Extender Cable

1 Meter Cable*	<b>PSSEXT1</b>	24VDC
3 Meter Cable*	<b>PSSEXT3</b>	24VDC

\* Requires a PSSSE24 Power Extender Module.

IP67 Certified

Reference the following Documents for Installation Instructions.  
E117P

See [www.parker.com/pneu/isysnet](http://www.parker.com/pneu/isysnet)

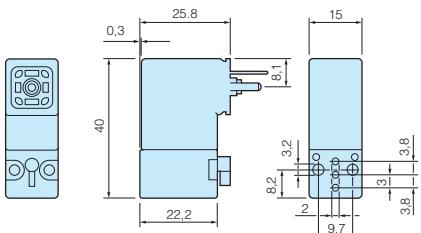


**PSSEXT1**

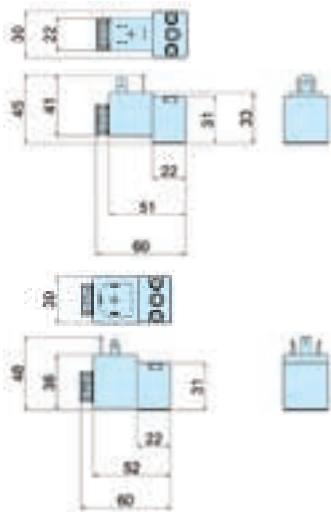
## Solenoid dimensions

## Cable Plug Dimensions (mm)

## Solenoid operators P2E - 15mm

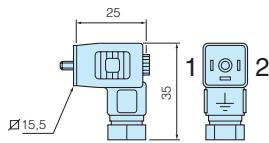


## Solenoid operators P2F - CNOMO - 22 x 30mm



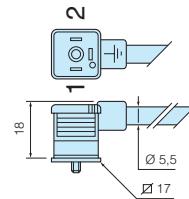
## Cable plugs

- P8L-C  
P8LC5  
P8L-C  
P8L-C  
P8L-C  
P8L-C  
P8L-C



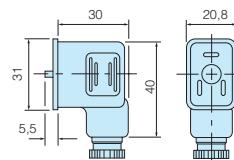
## Cable plugs

- P8C-C  
P8C-C  
P8C-C  
P8C-D  
P8C-D  
P8C-D



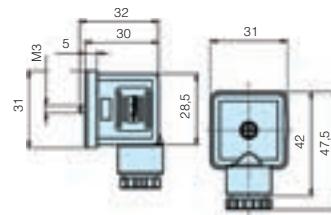
### Cable plugs

- 3EV10V10



### Cable plugs

- 3EV290V10

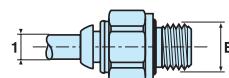


## Accessories

### Silencers



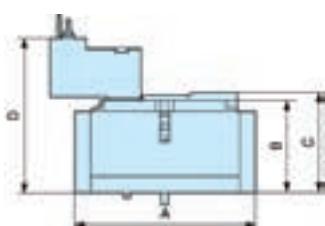
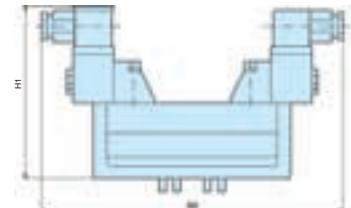
## Fittings



## **Male connector - BSPP**

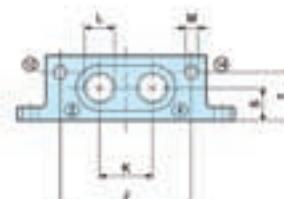
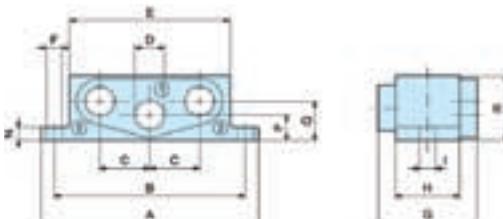
Port	Ordercode	Pack Qty
G1/8	<b>P6M-PAB1</b>	10
G1/4	<b>P6M-PAB2</b>	10
G3/8	<b>P6M-PAB3</b>	10
G1/2	<b>P6M-PAB4</b>	10

Tube dia 1	Thread B	Ordercode	Box Qty
4	1/8	<b>F4PMB4-1/8</b>	20
4	1/8	<b>F4PMB4-1/8</b>	20
6	1/8	<b>F4PMB6-1/8</b>	30
8	1/8	<b>F4PB8-1/8</b>	40
6	1/4	<b>F4PMB6-1/4</b>	30
8	1/4	<b>F4PB8-1/4</b>	30
10	1/4	<b>F4PB10-1/4</b>	20
12	1/4	<b>F4PB12-1/4</b>	10
8	3/8	<b>F4PB8-3/8</b>	20
10	3/8	<b>F4PB10-3/8</b>	20
12	3/8	<b>F4PB12-3/8</b>	10
14	3/8	<b>F4PB14-3/8</b>	10
10	1/2	<b>F4PB10-1/2</b>	10
12	1/2	<b>F4PB12-1/2</b>	10
14	1/2	<b>F4PB14-1/2</b>	10

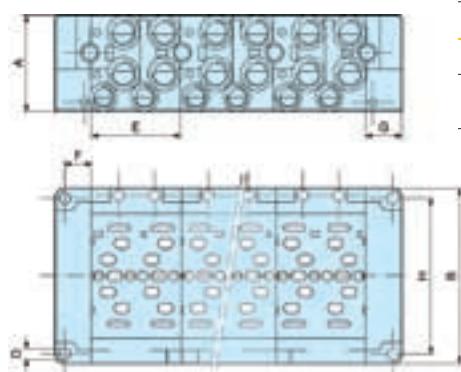
**Isomax - Dimensions (mm)****Pneumatically actuated****With P2F solenoids**

	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

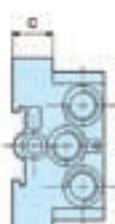
	G	G1	G2	G3	H	H1	I	L
Size 1	120	164	202,5	160	47	119	42	5
Size 2	140	179,5	218	175,5	58,5	130	54	5
Size 3	170	198	235,5	194	71	142,5	68	5

**Single subbases side ported**

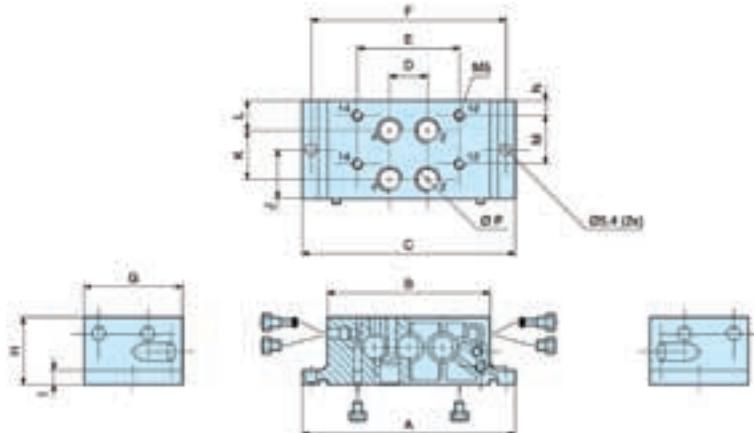
Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	
PL02-01-70	02	80	70	16	G1/8	52	8	27	19	5,5	40	17	G1/8	M5	8	8	8	22	13	6
P2V-BS512SS	01	92	80	21,2	G1/8	68	6,5	42	27	5,5	55	22	G1/8	M5	6	11	17	28	14	21

**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	01	55	100	24	Ø 5,5	54	17	22	90

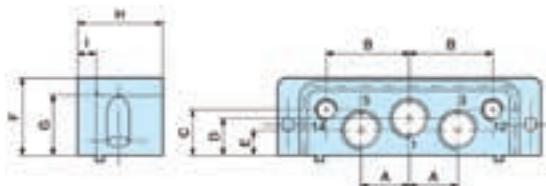


## Bottom ported manifolds for 2 valve positions



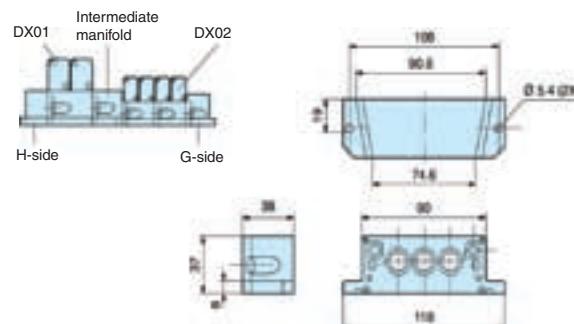
Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
P2V-AM511PB	02	102	74	74,6	16	43	92	38	26	7	19	19	11	19	G1/8
P2V-BM512PB	01	118	90	90,6	21	56,5	108	54	37	8	27	27	16,5	27	8

## 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

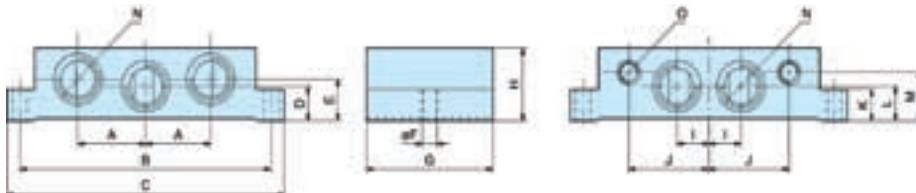
## Transfer plate size 01 to size 02 for above bottom ported manifold



# ISOMAX standard sub-base valves

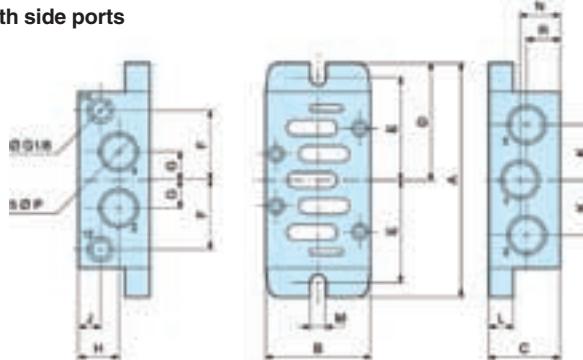
## Dimensions

Single subbase with side ports according to VDMA



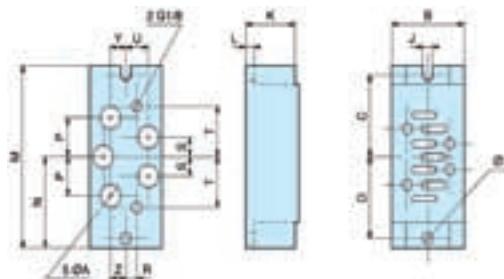
Order code	ISO Size	Port Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P2N-VS512SD	1	G1/4	21,5	98	110	11	20	5,5	48	32	12	29	10	11	23	G1/4	G1/8
P2N-WS513S	2	G3/8	28	112	124	14	26	6,6	56	40	15	37	13	14	30	G3/8	G1/8
P2N-YS514SD	3	G1/2	34	136	149	17	17	6,6	71	32	16	45	18	17	22	G1/2	G1/8

Single subbase with side ports



Order code	ISO Size	OP	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

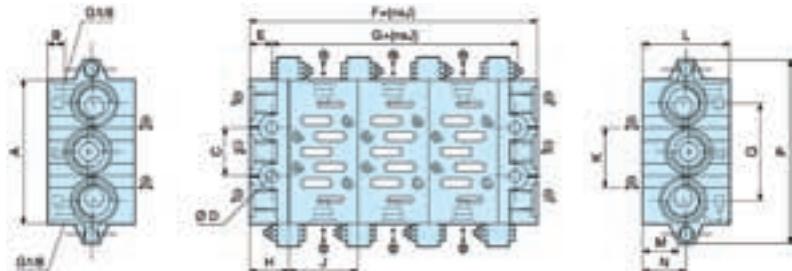
Single subbase with bottom ports



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

# ISOMAX standard sub-base valves

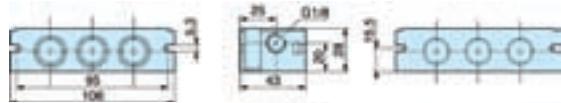
## Manifold and end plates according to VDMA (P2N-VM / WM / YM)



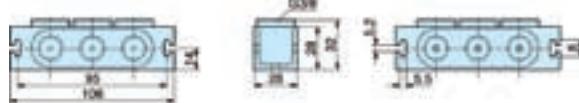
ISO Size	Port 1,3,5	Port 2,4	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
1	G3/8	G1/4	85	8,5	28	7	11	44	22	22	43	26	46	21	24	56	110
2	G1/2	G3/8	100	9	35	9	13	52	26	26	56	30	47	22	24	68	135
3	G1	G1/2	140	10	52	12	15	60	30	30	71	38	56	31	34	104	190

## Manifold and end plates with bottom ports "low profile" (P2N-AM..)

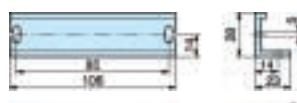
Manifold P2N-AM512MB



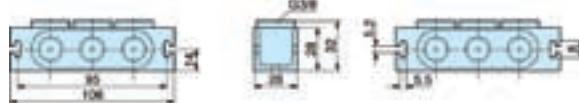
Connecting block P2N-AM513GT



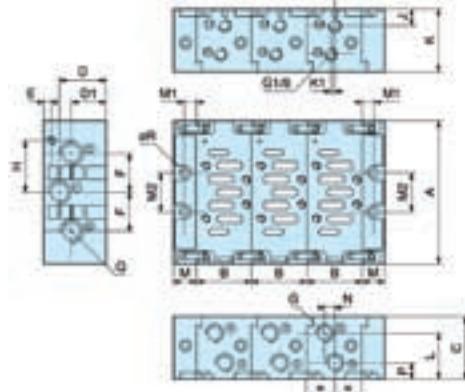
End piece P2N-AM500J



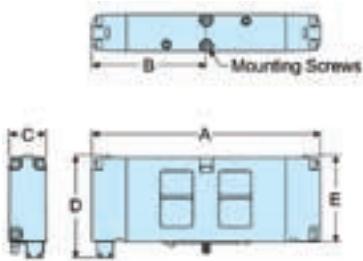
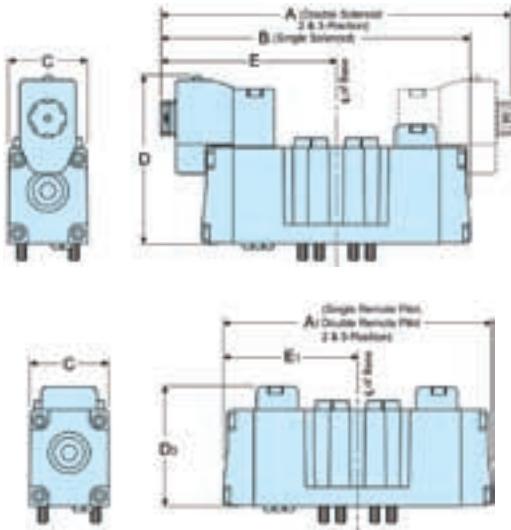
Intermediate supply P2N-AM513BT



## 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****H1 / H2 / H3 Series Valves 5599-2**

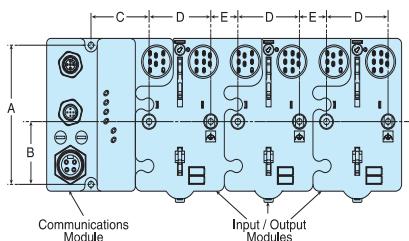
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>HB</b>	113	56	18	50	43
<b>HA</b>	130	65	26	50	42

	<b>A</b>	<b>A<sub>1</sub></b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>D<sub>1</sub></b>	<b>D<sub>2</sub></b>	<b>D<sub>3</sub></b>	<b>D<sub>4</sub></b>	<b>E</b>	<b>E<sub>1</sub></b>
<b>H1</b>	186	142	164	42	90	109	109	63.5	63	93	71
<b>H2</b>	212	168	190	55	103	122	116	76		106	84
<b>H3</b>	241	177	209	55	103	122	116	76		121	89

## Isysnet Field Bus System - Dimensions

### HB-HA

A	B	E	L	G	H
152	137	7,5	106	68	8,4
H <sub>1</sub>	J	K	L	M	P
45,8	4	110	16	137	152
W	W <sub>1</sub>				
40,8	56,8				

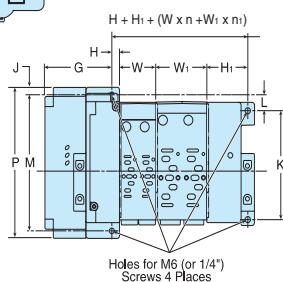


HB-HA

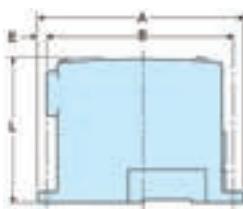
A	B	C	D	E	F
102	46	48	51	22	11

### H1

G	H	H <sub>1</sub>	J	K
56	15,9	15,9	8,5	165
P	W			
182	49			

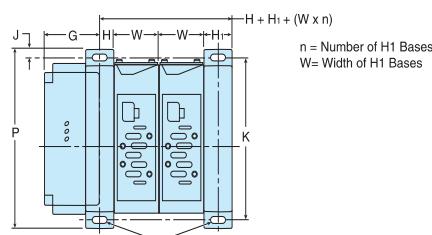


n = Number of 18mm HB Bases  
n1 = Number of 26mm HA Bases  
W= Width of 18mm HB Bases  
W1 = Width of 26mm HA Bases

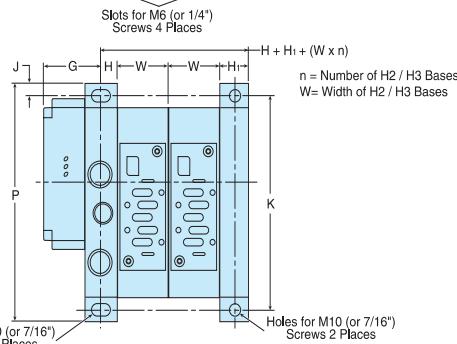


### H2

G	H	H <sub>1</sub>	J	K
58	8,4	15	12	215
P	W			
239	56			



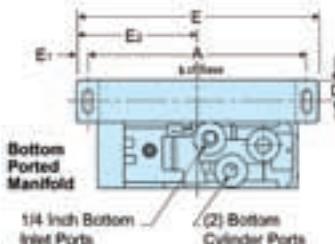
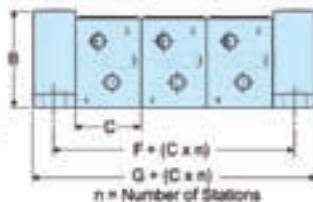
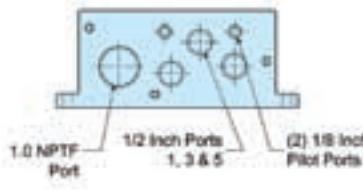
n = Number of H1 Bases  
W= Width of H1 Bases



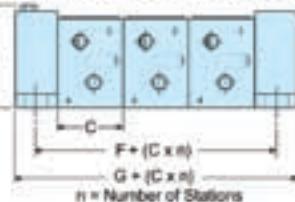
### H3

G	H	H <sub>1</sub>	J	K
64	24	16,5	15	265
P	W			
295	71			

## H1 5599-2 / 5599-1 Manifold

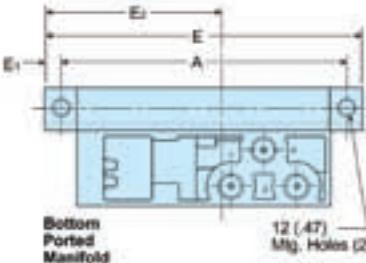
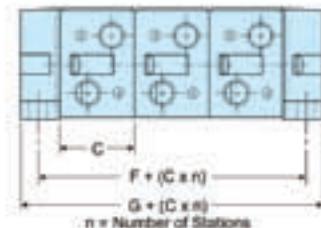
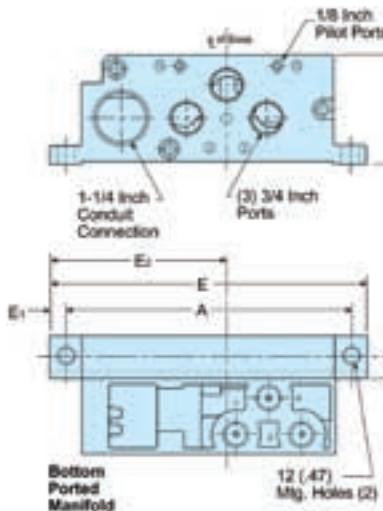


Manifold with Optional Collective Wiring System

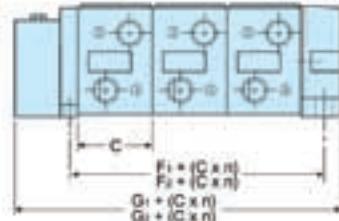


	A	B	C	D	E	E <sub>1</sub>	E <sub>2</sub>	F	G	H
H1	165	73	49	15.9	182	.84	91	31.8	63.5	76

## H2 / H3 5599-2 / 5599-1 Manifold



Manifold with Optional Collective Wiring System:



$n$  = Number of Stations  
 $F_1, G_1$  = Blank End Plate  
 $F_2, G_2$  = Top Port End Plate

	A	B	C	D	E	E <sub>1</sub>	E <sub>2</sub>	F	F <sub>1</sub>	F <sub>2</sub>	G	G <sub>1</sub> *	G <sub>2</sub> *
H2	215	85	56	15	239	12	134	30	27	33	60	87	99

	A	B	C	D	E	E <sub>1</sub>	E <sub>2</sub>	F	F <sub>1</sub>	F <sub>2</sub>	G	G <sub>1</sub> *	G <sub>2</sub> *
H3	265	105	71	17	295	15	159	33	29	41	63	90	114

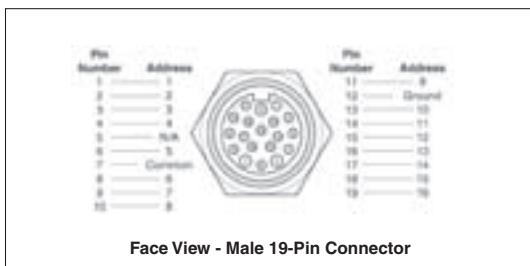
# Interconnect Circuit Boards

## 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



## 19-Pin Round Cable Specifications

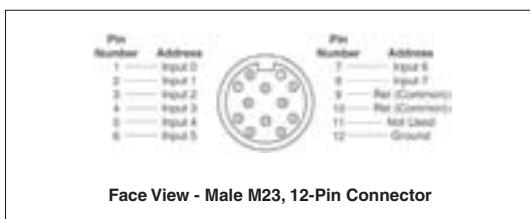
Common Pin "7" is rated for 8 amps. Cable common wire must be greater than total amperage of solenoids on Add-A-Fold assembly.

**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.

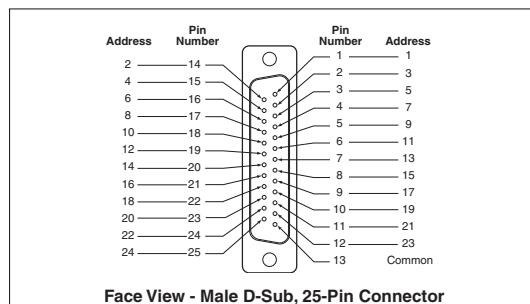
Brad Harrison #333030P80M050      16.40 ft. (Female to Male Cable)

Brad Harrison #333030P80M0100      32.80 ft. (Female to Male Cable)

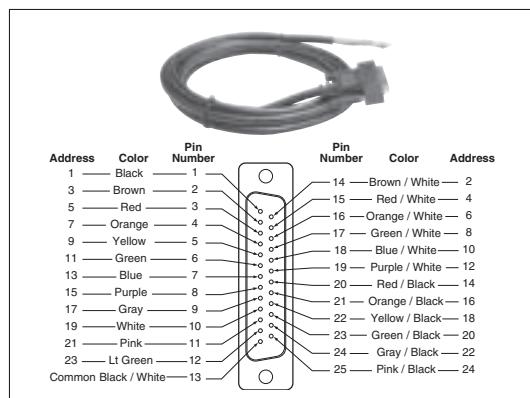
## M23, 12-Pin Round Connector (Male)



## 25-Pin, D-Sub Connector (Male)



## 25-Pin, D-Sub Cable (Female)

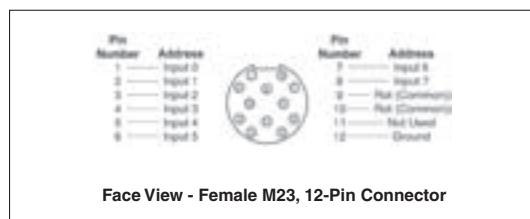


## 25-Pin, D-Sub Cable Specifications

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 (Female)



# Metal spool valves

# Viking Xtreme

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	P2LAX61122
	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 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

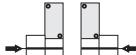
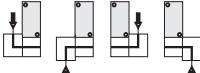
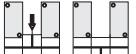
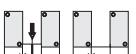
Symbol	Size	Actuator	Return	Order code 22mm solenoid 24 VDC	Order code Without solenoid coil
	G1/8 G1/4 G3/8 G1/2	Solenoid	Solenoid	P2LAX511EENDDB49 P2LBX512EENDDB49 P2LCX513EENDDB49 P2LDX514EENDDB49	P2LAX511EENDDN P2LBX512EENDDN P2LCX513EENDDN P2LDX514EENDDN
	G1/8 G1/4 G3/8 G1/2	Solenoid	Spring	P2LAX511ESNDB49 P2LBX512ESNDB49 P2LCX513ESNDB49 P2LDX514ESNDB49	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. P2LAX/P2LBX 16 bar and P2LCX/P2LDX 12 bar

Symbol	Size	Actuator	Return	Order code 22mm solenoid 24 VDC	Order code Without solenoid coil
	G1/8 G1/4 G3/8 G1/2	Solenoid	Solenoid Low temp.	P2LAX511EEHDB49 P2LBX512EEHDB49 P2LCX513EEHDB49 P2LDX514EEHDB49	P2LAX511EEHDDN P2LBX512EEHDDN P2LCX513EEHDDN P2LDX514EEHDDN
	G1/8 G1/4 G3/8 G1/2	Solenoid	Spring Low temp.	P2LAX511ESHDB49 P2LBX512ESHDB49 P2LCX513ESHDB49 P2LDX514ESHDB49	P2LAX511ESHDDN P2LBX512ESHDDN P2LCX513ESHDDN P2LDX514ESHDDN

# Metal spool valves

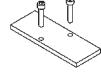
Viking Xtreme

Accessories P2LAX	Connection alternatives	Type	Weight kg	Order code
		<b>Multiple manifold</b> including seals, mounting screws, and guiding pins.	0,11	9121658060
		<b>Connection block S</b> including seals, mounting screws, and guiding pins. G1/4	0,15	9121658064
		<b>Connection block L</b> including seals, mounting screws, and guiding pins. G1/4	0,15	9121658061
		<b>End cover</b> including seals, mounting screws, and guiding pins.	0,16	9121658066
		<b>Intermediate block T</b> including seals, mounting screws, and guiding pins. G1/4	0,17	9121658062
		<b>Intermediate block L</b> including seals, mounting screws, and guiding pins. G1/4	0,17	9121658065
		<b>Blanking plate</b> including seals, mounting screws.	0,05	9121658063

## Accessories P2LAX

Type	Weight kg	Order code
 <b>Manifold bar, P2LA</b> including seals, mounting screws. G3/8 For 4 valves For 6 valves For 8 valves For 10 valves For 12 valves For 14 valves	0,48 0,63 0,80 0,98 1,10 1,23	9121658075 9121658076 9121658077 9121658078 9121658079 9121658099
 <b>Blanking plate, P2LA</b> for Manifold bar	0,05	9121658063
 <b>Pressure bar, P2LA</b> for common air supply incl. O-rings and mounting screws. G1/4 For 2 valves For 4 valves For 6 valves For 8 valves	0,13 0,20 0,26 0,33	9121658070 9121658071 9121658072 9121658073
 <b>Blanking plate, P2LA</b> for Pressure bar	0,05	9121658074
 <b>Assembly screws, P2LA</b> in stainless steel for valve	0,02	9121658043
 <b>Assembly screws, P2LA</b> in stainless steel for blanking plate	0,01	9121658044
 <b>O-ring kit, P2LA</b> O-rings between valve and manifold bar/ Pressure bar	0,01	9121658046

## Accessories P2LBX

Type	Weight kg	Order code
 <b>Manifold bar, P2LB,</b> <b>(not for P2LB with external air supply to solenoid valves)</b> incl. fasteners and O-ring. G3/8 For 2 valves For 4 valves For 6 valves For 8 valves For 10 valves	0,69 1,13 1,56 2,00 2,45	9121594805X 9121594806X 9121594807X 9121594808X 9121594812X
 <b>Blanking plate, P2LB</b> for Manifold bar	0,10	9121594809X
 <b>Pressure bar, P2LB</b> for common air supply incl. O-rings and banjo-bolts. G3/8 For 2 valves For 4 valves For 6 valves For 8 valves For 10 valves	0,38 0,53 0,68 0,83 0,99	9127113301X 9127113302X 9127113303X 9127113304X 9127113305X
 <b>Blanking plug, P2LB</b> for Pressure bar. G1/4	0,02	9127113306X

## 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.

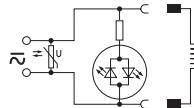
### Solenoid coils for 22mm solenoid operators

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	<b>P8C-C</b>	
	24V DC LED and protection IP65	<b>P8C-C26C</b>	
	110V AC LED and protection IP65	<b>P8C-C21E</b>	
With standard screw	Standard IP65 without flying lead	<b>P8C-D</b>	<b>3EV10V10</b>
	With LED and protection 24V AC/DC	<b>P8C-D26C</b>	<b>3EV10V20-24</b>
	With LED and protection 110V AC	<b>P8C-D21E</b>	<b>3EV10V20-110</b>
	With LED and protection 230V AC		<b>3EV10V20-230</b>
With cable	Standard with 2m cable IP65	<b>P8L-C2</b>	
	Standard with 5m cable IP65	<b>P8L-C5</b>	
	24V AC/DC, 2m cable LED and protection IP65	<b>P8L-C226C</b>	
	24V AC/DC, 5m cable LED and protection IP65	<b>P8L-C526C</b>	<b>3EV10V20-24L5</b>
	24V AC/DC, 10m cable LED and protection IP65	<b>P8L-CA26C</b>	
	110V AC/DC, 2m cable LED and protection IP65	<b>P8L-C221E</b>	
	110V AC/DC, 5m cable LED and protection IP65	<b>P8L-C521E</b>	<b>3EV10V20-110L5</b>
	230V AC, 5m cable LED and protection IP65		<b>3EV10V20-230L5</b>

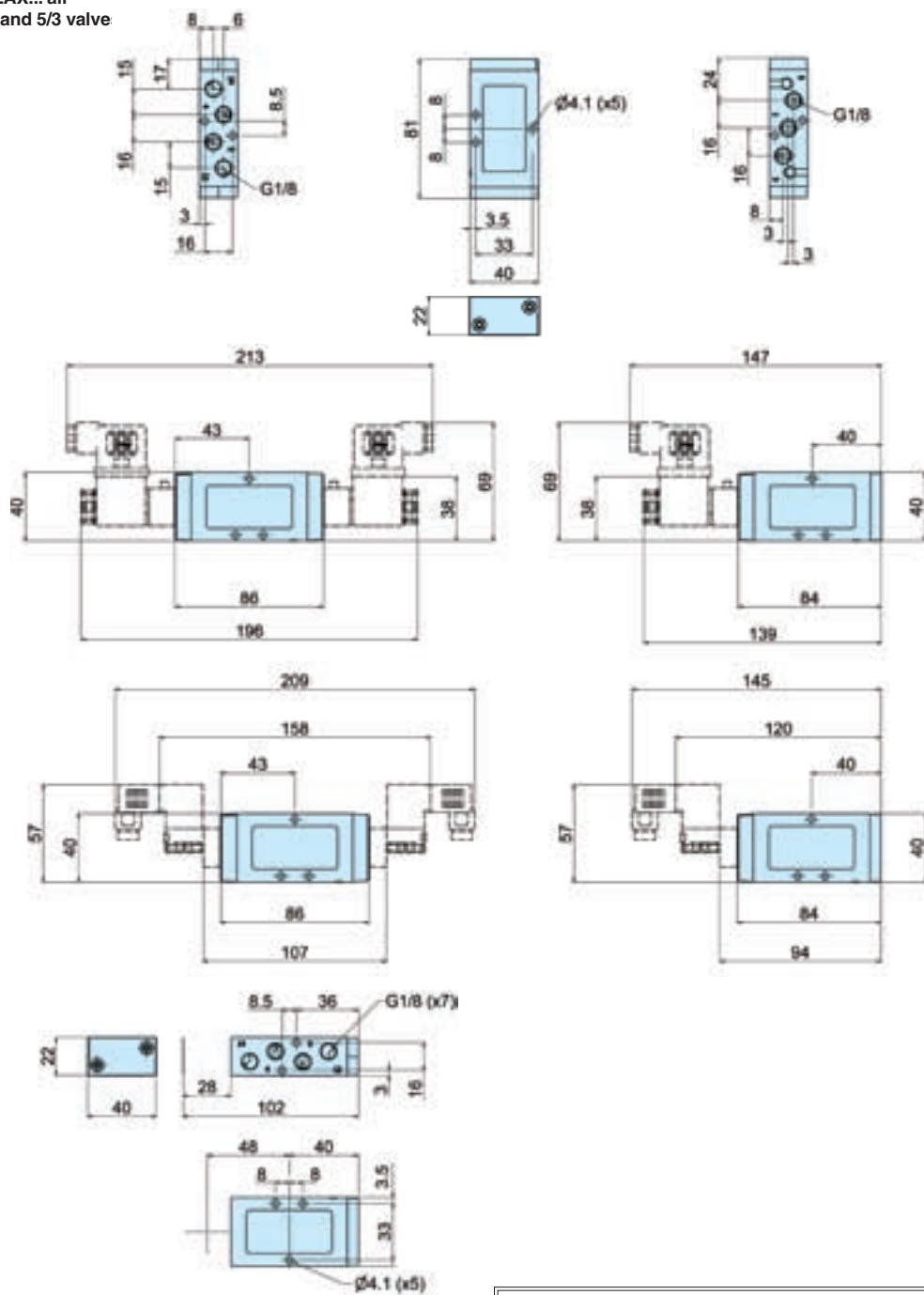


<b>P8C-C</b>
<b>P8C-D</b>
<b>P8L-C2</b>
<b>P8L-C5</b>
<b>3EV10V10</b>

<b>P8C-D26C</b>	<b>P8L-C226C</b>
<b>P8C-D21E</b>	<b>P8L-C526C</b>
<b>P8C-C26C</b>	<b>P8L-CA26C</b>
<b>P8C-C21E</b>	<b>P8L-C221E</b>
<b>P8L-C521E</b>	
<b>3EV10V20-24</b>	<b>3EV10V20-24L5</b>
<b>3EV10V20-110</b>	<b>3EV10V20-110L5</b>
<b>3EV10V20-230</b>	<b>3EV10V20-230L5</b>

## Dimensions

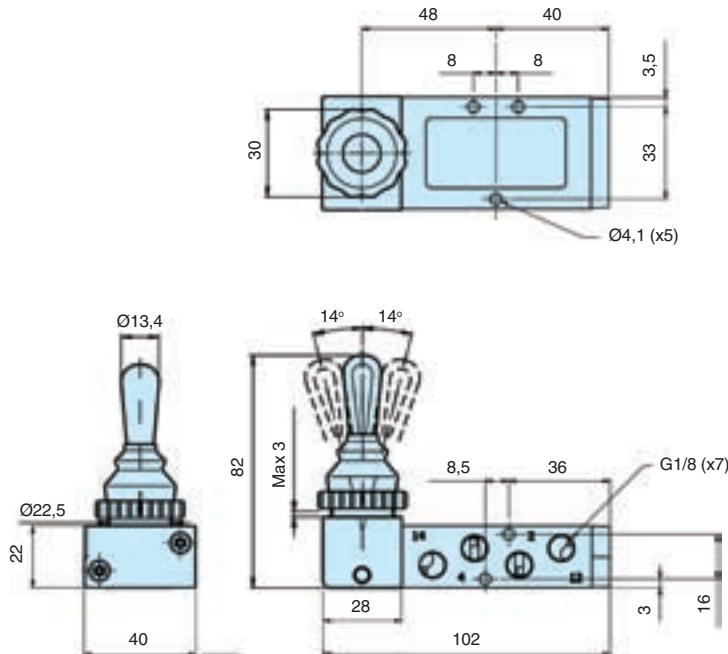
P2LAX... all  
5/2 and 5/3 valve

**Solenoid valves**

Solenoid valves and cable plugs must be ordered separately.  
One pilot valve is required for each E in the valve order code.

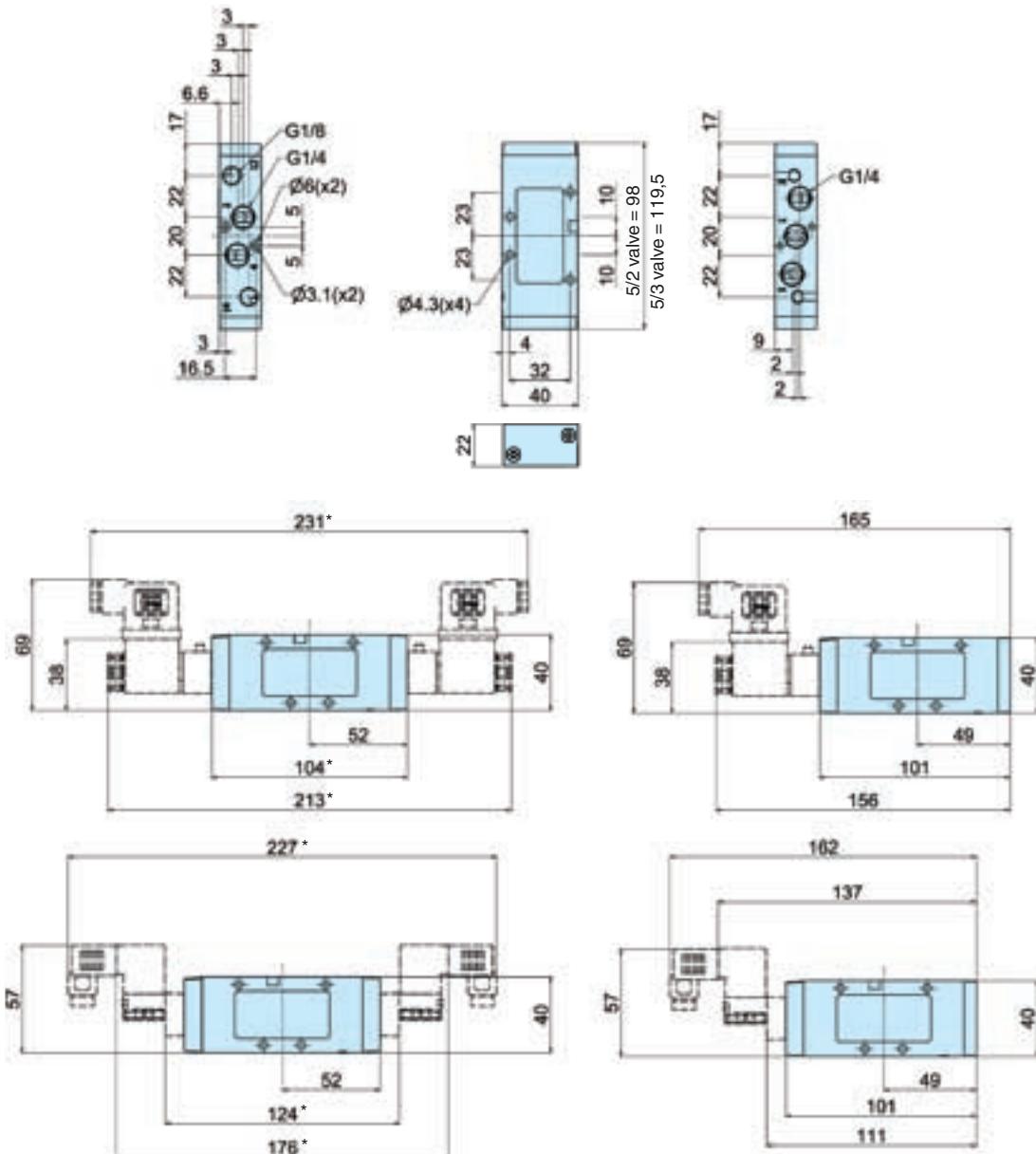
## Dimensions

P2LAX - Lever operated directional control valves



## Dimensions

P2LBX... all  
5/2 and 5/3 valves



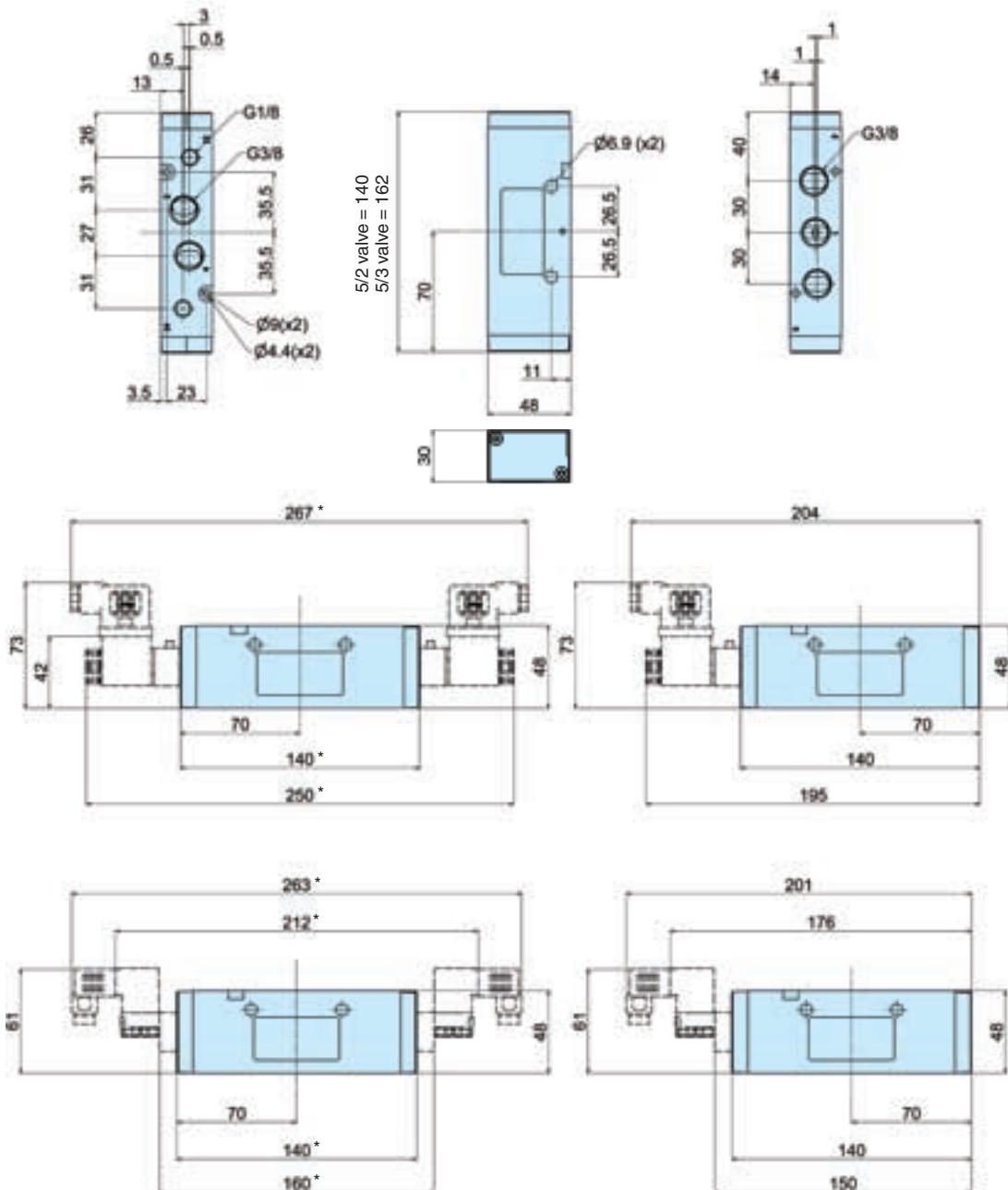
\* Note: 5/3 valves - add 21.5mm

### 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



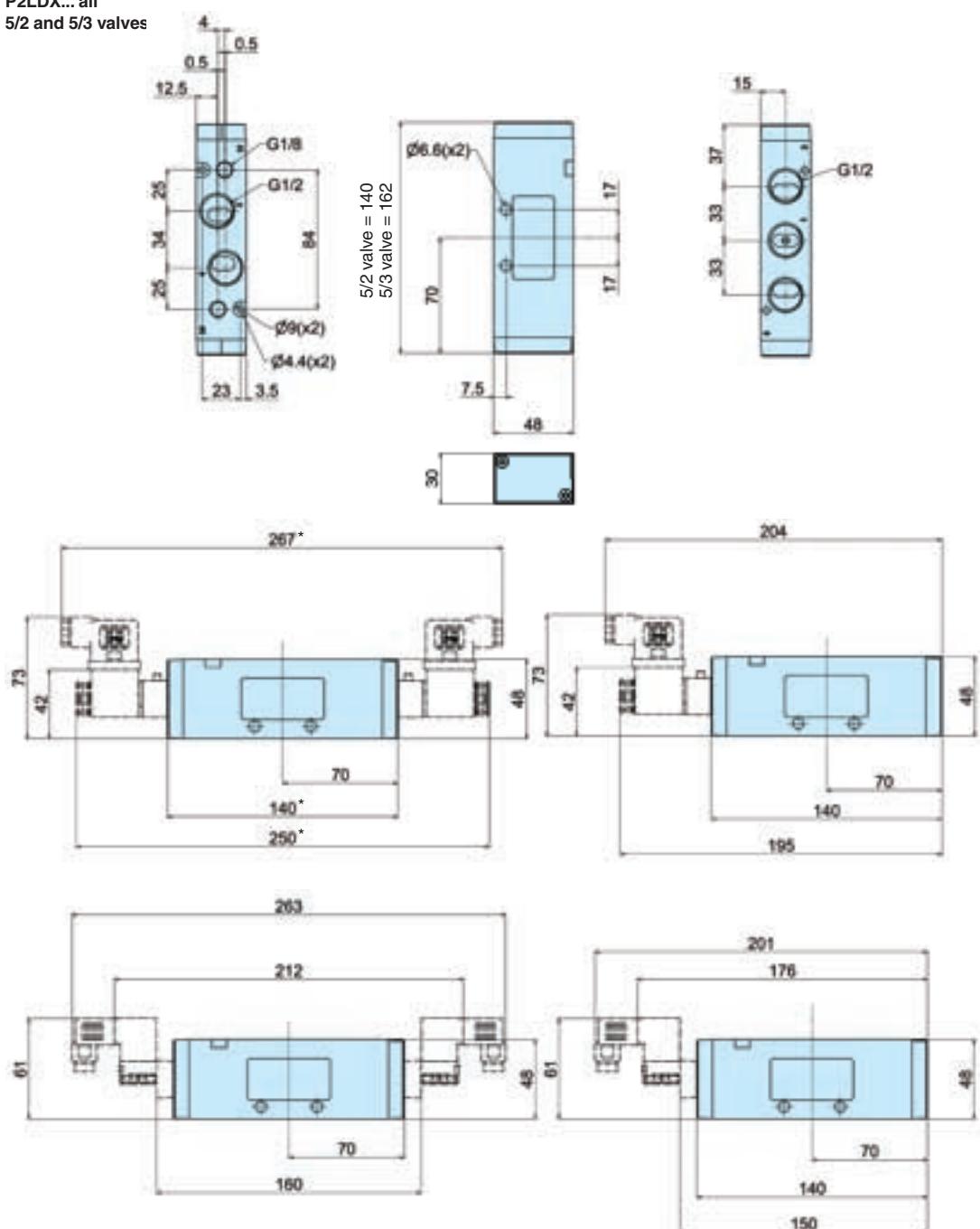
\* Note: 5/3 valves - add 22.0mm

### 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

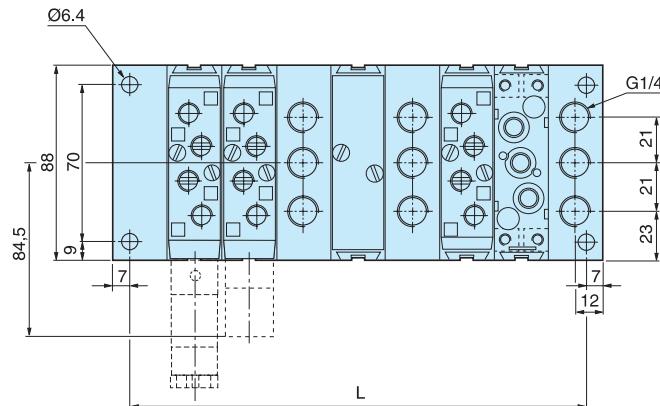


\* Note: 5/3 valves - add 22.0mm

**Solenoid valves**

Solenoid valves and cable plugs must be ordered separately.  
One pilot valve is required for each E in the valve order code.

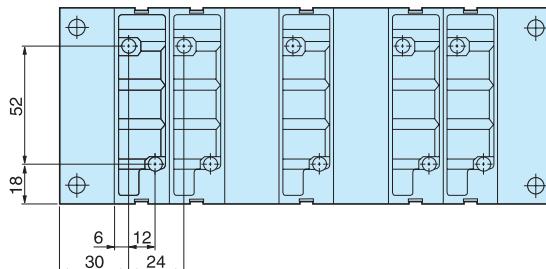
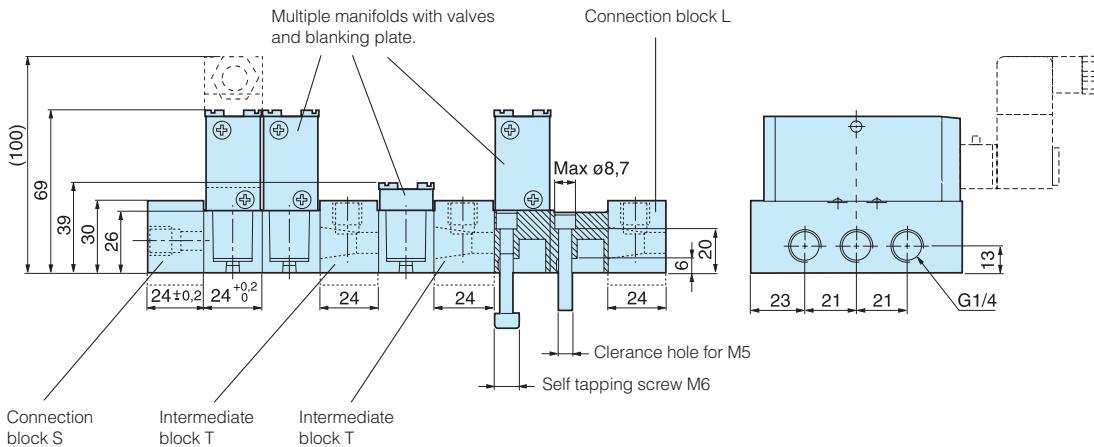
## Dimensions



$$L = 34 + (\text{Number of manifolds and Intermediate blocks} \times 24)$$

Connection block L and intermediate blocks L and T can be turned so that connection can be made from above or below.

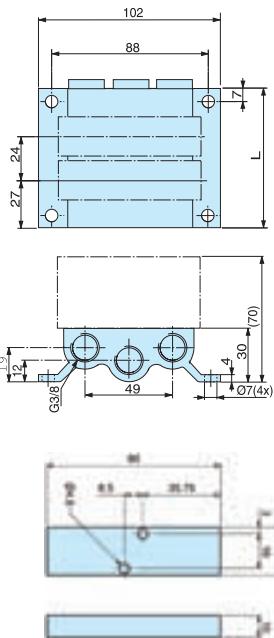
Multiple manifolds must be fitted with the top indication line (a 10 mm long line) facing the same side on all manifolds.



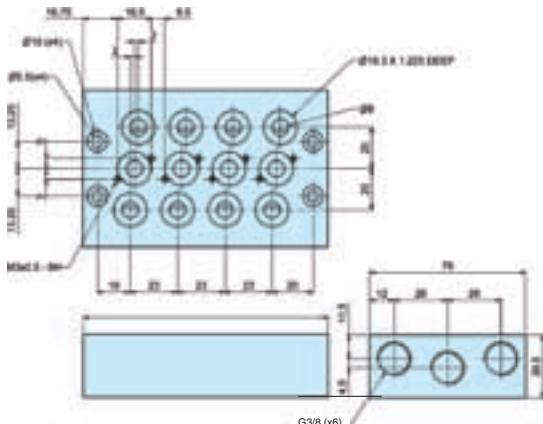
## Dimensions

**Manifold bar, P2LA**

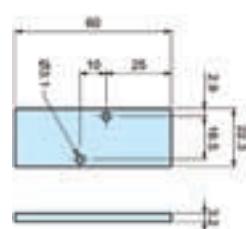
No. of valves	L mm
4	126
6	174
8	222
10	270
12	318
14	366



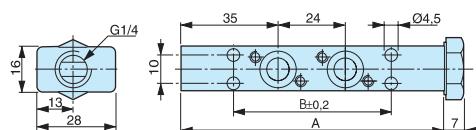
**Manifold bar, P2LB**



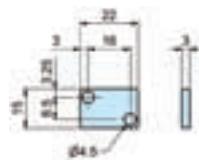
No. of valves	L mm
2	74
4	122
6	170
8	218
10	266



**Pressure bar, P2LA**

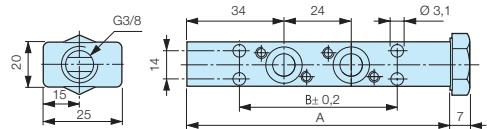


**Pressure bar, P2LA**

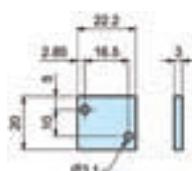


No. of valves	A mm	B mm
2	94	56
4	142	104
6	190	152
8	238	200

**Pressure bar, P2LB**



**Blanking plug, P2LB**



No. of valves	A mm
2	92
4	140
6	188
8	236
10	284

# B Series high performance industrial valves

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.



- 3 sizes: 1/8", 1/4" and highflow 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, B5 : G1/4
Flow (Qn):	
B3	960 l/min
B4	1170 l/min
B5	1440 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	Changover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
<b>Pneumatically actuated 3/2 valves</b>								
	Air	Differential air	1,4/-	16/17	0,07		<b>B3K5000XXH</b>	1
	Air	Spring return	3,0/-	20/18	0,07		<b>B3U5000XXH</b>	1
	Air	Air	1,4/-	2/2	0,08		<b>B3M5000XXH</b>	1
<b>Pneumatically actuated 5/2 and 5/3 valves</b>								
	Air	Differential air	1,4/-	16/17	0,09		<b>B335000XXH</b>	1
	Air	Spring return	3,0/-	20/18	0,09		<b>B3P5000XXH</b>	1
	Air	Air	1,4/1,4	2/2	0,10		<b>B345000XXH</b>	1
	Air	Closed centre position	Air	3,0/3,0	12/12	0,10	<b>B385000XXH</b>	1
	Air	Vented centre position	Air	3,0/3,0	12/12	0,10	<b>B395000XXH</b>	1
	Air	Pressurised centre position	Air	3,0/3,0	12/12	0,10	<b>B305000XXH</b>	1

\* Solenoid and cable plug (must be ordered separately see next page)

\*\* 2 Solenoids and cable plugs (must be ordered separately see next page)

Indicates stocked product.

# B Series high performance industrial valves

## Main data for Directional control valves, B3 Series (G1/8 threaded ports)

Symbol	Actuator	Return	Signal pressure min. bar at 6 bar actua./return	Changover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
<b>Electrically actuated 3/2 valves</b>								
		Electric	Differential air	1,4/-	12/14	0,12 0,08	24 VDC Less solenoid	<b>B3G5BB549H</b> <b>B3G5BXXXXH</b>
		Electric	Spring return	3,0/-	22/28	0,12 0,08	24 VDC Less solenoid	<b>B3R5BB549H</b> <b>B3R5BXXXXH</b>
		Electric	Air	1,4/1/4	9/3	0,13 0,09	24 VDC Less solenoid	<b>B3S5BB549H</b> <b>B3S5BXXXXH</b>
		Electric	Electric	1,4/1/4	8/8	0,13 0,09	24 VDC Less solenoid	<b>B3J5BB549H</b> <b>B3J5BXXXXH</b>
<b>Electrically actuated 5/2 valves</b>								
		Electric	Differential Air	1,4/-	12/14	0,12 0,09	24 VDC Less solenoid	<b>B315BB549H</b> <b>B315BXXXXH</b>
		Electric	Spring return	3,0/-	22/28	0,12 0,09	24 VDC Less solenoid	<b>B3T5BB549H</b> <b>B3T5BXXXXH</b>
		Electric	Air	1,4/1/4	9/3	0,14 0,10	24 VDC Less solenoid	<b>B3A5BB549H</b> <b>B3A5BXXXXH</b>
		Electric	Electric	1,4/1/4	8/8	0,19 0,10	24 VDC Less solenoid	<b>B325BB549H</b> <b>B325BXXXXH</b>
<b>Electrically actuated 5/3 valves</b>								
	Electric Closed centre position	Electric Self centring	3,0/3,0	12/12	0,18 0,09	24 VDC Less solenoid	<b>B355BB549H</b> <b>B355BXXXXH</b>	
	Electric Vented centre position	Electric Self centring	3,0/3,0	12/12	0,18 0,09	24 VDC Less solenoid	<b>B365BB549H</b> <b>B365BXXXXH</b>	
	Electric Pressurised centre position	Electric Self centring	3,0/3,0	12/12	0,10 0,09	24 VDC Less solenoid	<b>B375BB549H</b> <b>B375BXXXXH</b>	

Internal air supply to differential pilots and solenoids via port 1

Valves supplied with solenoid operators include standard P8C-D connector

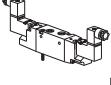
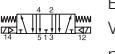
# B Series high performance industrial valves

## Main data for Directional control valves, B4 Series (G1/4 threaded ports)

Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
<b>Pneumatically actuated 3/2 valves</b>								
	Air	Differential air	1.5/-	34/45	0,163		<b>B4K6000XXF</b>	1
	Air	Spring return	3.0/-	32/48	0,16		<b>B4U6000XXF</b>	1
	Air	Air	1.5/1.5	15/17	0,177		<b>B4M6000XXF</b>	1
<b>Pneumatically actuated 5/2 and 5/3 valves</b>								
	Air	Differential air	1.5/-	34/45	0,184		<b>B436000XXF</b>	1
	Air	Spring return	3.0/-	32/48	0,19		<b>B4P6000XXF</b>	1
	Air	Air	1.5/1.5	15/17	0,198		<b>B446000XXF</b>	1
	Air	Closed centre position	Self centring	3.0/3.0	16/19	0,204	<b>B486000XXF</b>	1
	Air	Vented centre position	Self centring	3.0/3.0	16/19	0,204	<b>B496000XXF</b>	1
	Air	Pressurised centre position	Self centring	3.0/3.0	16/19	0,204	<b>B406000XXF</b>	1
<b>Electrically actuated 3/2 valves</b>								
	Electric	Differential air	1.5/-	34/45	0,206 0,157	24 VDC Less solenoid	<b>B4G6AB549F</b> <b>B4G6AXXXXF</b>	1 1
	Electric	Spring return	3.0/-	36/40	0,210 0,161	24 VDC Less solenoid	<b>B4R6AB549F</b> <b>B4R6AXXXXF</b>	1 1
	Electric	Air	1.5/1.5	15/17	0,220 0,170	24 VDC Less solenoid	<b>B4S6AB549F</b> <b>B4S6AXXXXF</b>	1 1
	Electric	Electric	1.5/1.5	15/17	0,262 0,164	24 VDC Less solenoid	<b>B4J6AB549F</b> <b>B4J6AXXXXF</b>	1 1
<b>Electrically actuated 5/2 valves</b>								
	Electric	Differential Air	1.5/-	34/45	0,227 0,178	24 VDC Less solenoid	<b>B416AB549F</b> <b>B416AXXXXF</b>	1 1
	Electric	Spring return	3.0/-	36/40	0,227 0,178	24 VDC Less solenoid	<b>B4T6AB549F</b> <b>B4T6AXXXXF</b>	1 1
	Electric	Air	1.5/1.5	15/17	0,241 0,192	24 VDC Less solenoid	<b>B4A6AB549F</b> <b>B4A6AXXXXF</b>	1 1

# B Series high performance industrial valves

## Main data for Directional control valves, B4 Series (G1/4 threaded ports)

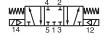
Symbol	Actuator	Return	Signal pressure min, bar at 6 bar actua./return	Changover time, ms at 6 bar actua./return	Weight Kg	Voltage	Order code	Qty
<b>Electrically actuated 5/2 and 5/3 valves</b>								
	Electric	Electric	1,5/1,5	15/15	0,283 0,185	24 VDC Less solenoid	<b>B426AB549F</b> <b>B426AXXXF</b>	1 1
	Electric Closed centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	<b>B456AB549F</b> <b>B456AXXXF</b>	1 1
	Electric Vented centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	<b>B466AB549F</b> <b>B466AXXXF</b>	1 1
	Electric Pressurised centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	<b>B476AB549F</b> <b>B476AXXXF</b>	1 1

Internal air supply to differential pilots and solenoids via port 1

Valves supplied with solenoid operators include standard P8C-D connector

# B Series high performance industrial valves

## 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
<b>Electrically actuated 3/2 valves</b>								
	Electric	Air/Spring Assisted	2,4/2,4	24/26		24 VDC Less solenoid coil	<b>B5V6BCB49C</b> <b>B5V6BCNXXC</b>	1 1
	Electric	Electric	1,5/1/5	15/17		24 VDC Less solenoid coil	<b>B5J6BCB49C</b> <b>B5J6BCNXXC</b>	1 1
<b>Electrically actuated 5/2 valves</b>								
	Electric	Air/Spring Assisted	2,4/2,4	24/26		24 VDC Less solenoid coil	<b>B5E6BCB49C</b> <b>B5E6BCNXXC</b>	1 1
	Electric Closed centre position	Electric Self centring	1,5/1,5	15/15	0,283 0,185	24 VDC Less solenoid	<b>B526BCB49C</b> <b>B526BCNXXC</b>	1 1
	Electric Vented centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	<b>B556BCB49C</b> <b>B556BCNXXC</b>	1 1
	Electric Pressurised centre position	Electric Self centring	3,0/3,0	16/18	0,289 0,191	24 VDC Less solenoid	<b>B566BCB49C</b> <b>B566BCNXXC</b>	1 1
<b>Internal air supply to differential pilots and solenoids via port 1</b>								

# B Series high performance industrial valves

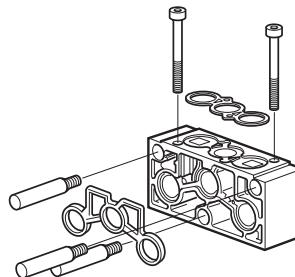
## Inlet Exhaust Manifolds for B3 series valves

### 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	3/2 =	PS2948F 1
Kit	5/2 =	PS2917F 1



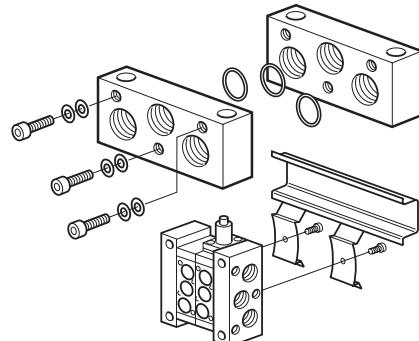
### End plates

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	3/2 =	PS2951F 1
plate kit	5/2 =	PS2916F 1



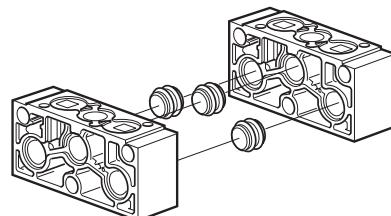
### Isolator Plug Kit

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

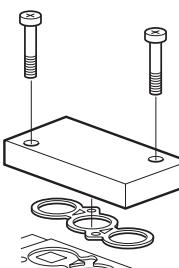


### Manifold Blanking Plate

Each kit contains:

- 1 pcs Cover Plate
  - 2 pcs Mounting Screws
  - 1 pcs Gasket
- Used to blank off unused stations.

	Order code	Qty
Manifold	3/2 =	PS2968F 1
Blanking Plate	5/2 =	PS2969F 1



# B Series high performance industrial valves

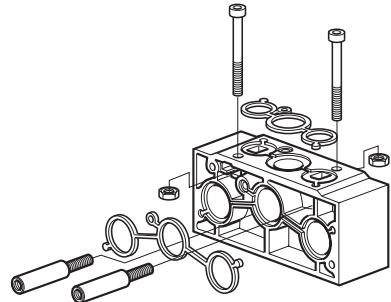
## Inlet Exhaust Manifolds for B4 series valves

### 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



### End plates

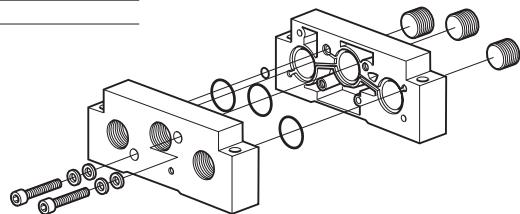
Standard End Plates may be used with either of above

#### 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



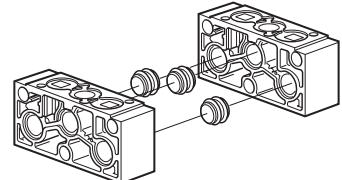
### Isolator Plug Kit

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

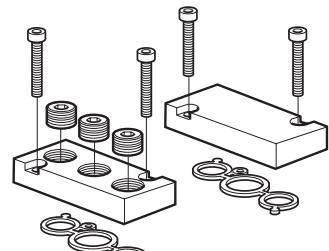


### Manifold Blanking plate

Each kit contains:

- 1 pcs Cover Plate
  - 2 pcs Mounting Screws
  - 1 pcs Gasket
- Used to blank off unused stations.

	Order code	Qty
Manifold	3/2 = PS4568F	1
Blanking plate	5/2 = PS4569F	1



# B Series high performance industrial valves

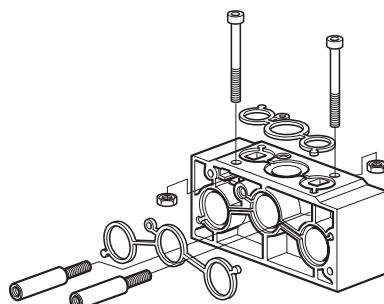
## Inlet Exhaust Manifolds for B5 series valves

### 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



### End plates

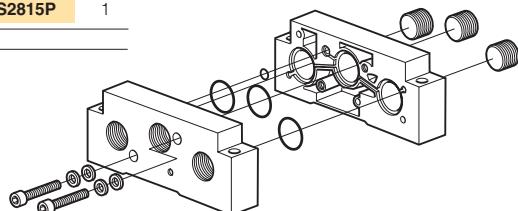
Standard End Plates may be used with either of above

#### 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



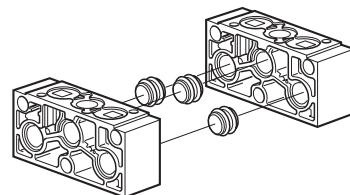
### Isolator Plug Kit

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

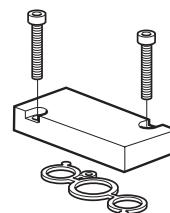


### Manifold Blanking plate

Each kit contains:

- 1 pcs Cover Plate
  - 2 pcs Mounting Screws
  - 1 pcs Gasket
- Used to blank off unused stations.

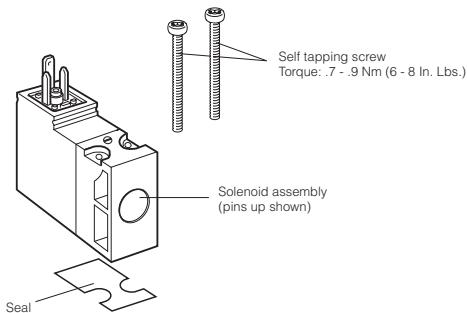
	Order code	Qty
Manifold Blanking plate	PS2869P	1



# B Series high performance industrial valves

## 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	0,038	P2E-KV31F0	0,038	P2E-KV31F1	0,038	P2E-KV31F2
120 VAC 60Hz						
230 VAC 50Hz	0,038	P2E-KV31J0	0,038	P2E-KV31J1	0,038	P2E-KV31J2
240 VAC 60Hz						

### 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:

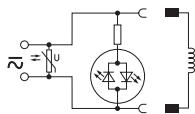
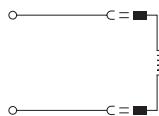
- 1 large 'O' ring for operator base
- 1 small 'O' ring for operator base
- 2 mounting screws
- 1 solenoid/stem nut

	Order code	Qty
Non locking m/o	PS2844BP	1
Locking m/o	PS2844CP	1

# B Series high performance industrial valves

## 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	<b>P8C-C</b>	
	24V DC LED and protection IP65	<b>P8C-C26C</b>	
	110V AC LED and protection IP65	<b>P8C-C21E</b>	
With standard screw	Standard IP65 without flying lead	<b>P8C-D</b>	<b>3EV10V10</b>
	With LED and protection 24V AC/DC	<b>P8C-D26C</b>	<b>3EV10V20-24</b>
	With LED and protection 110V AC	<b>P8C-D21E</b>	<b>3EV10V20-110</b>
	With LED and protection 230V AC		<b>3EV10V20-230</b>
With cable	Standard with 2m cable IP65	<b>P8L-C2</b>	
	Standard with 5m cable IP65	<b>P8L-C5</b>	
	24V AC/DC, 2m cable LED and protection IP65	<b>P8L-C226C</b>	
	24V AC/DC, 5m cable LED and protection IP65	<b>P8L-C526C</b>	<b>3EV10V20-24L5</b>
	24V AC/DC, 10m cable LED and protection IP65	<b>P8L-CA26C</b>	
	110V AC/DC, 2m cable LED and protection IP65	<b>P8L-C221E</b>	
	110V AC/DC, 5m cable LED and protection IP65	<b>P8L-C521E</b>	<b>3EV10V20-110L5</b>
	230V AC, 5m cable LED and protection IP65		<b>3EV10V20-230L5</b>



<b>P8C-C</b>
<b>P8C-D</b>
<b>P8L-C2</b>
<b>P8L-C5</b>
<b>3EV10V10</b>

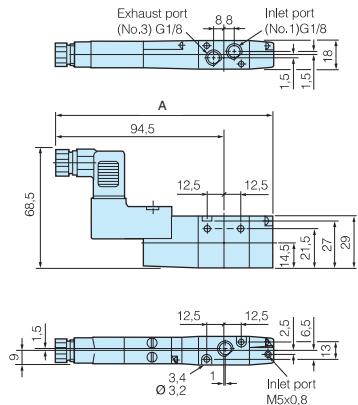
<b>P8C-D26C</b>	<b>P8L-C226C</b>
<b>P8C-D21E</b>	<b>P8L-C526C</b>
<b>P8C-C26C</b>	<b>P8L-CA26C</b>
<b>P8C-C21E</b>	<b>P8L-C221E</b>
<b>P8L-C521E</b>	
<b>3EV10V20-24</b>	<b>3EV10V20-24L5</b>
<b>3EV10V20-110</b>	<b>3EV10V20-110L5</b>
<b>3EV10V20-230</b>	<b>3EV10V20-230L5</b>

# B Series high performance industrial valves

## **Dimensions, B3 Valve Series**

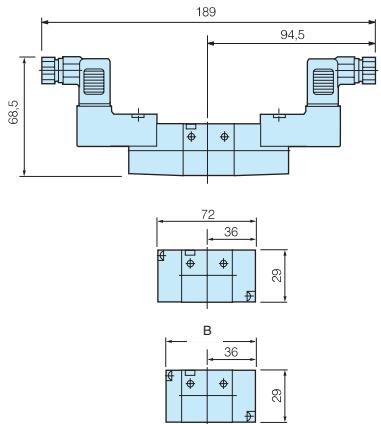
## 3/2 Body ported

#### **Single solenoid operated air spring return / spring return**



	Air differential return	Spring return
A	130,5	136,7

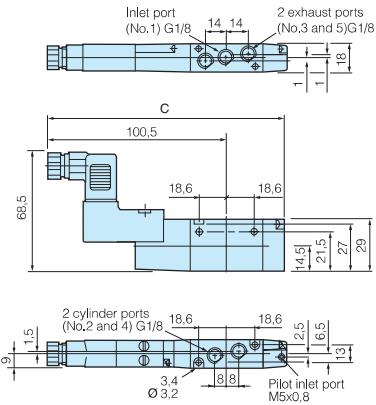
**Double solenoid operated**



	Air differential return	Spring return
B	67,0	73,2

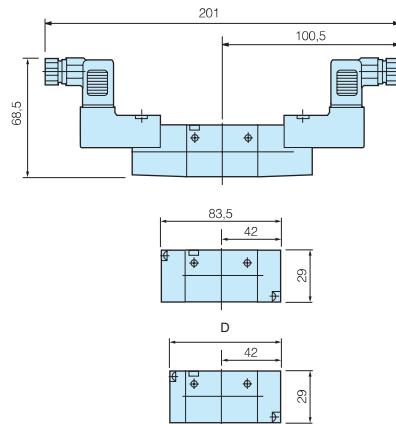
## 5/2 Body ported

#### **Single solenoid operated air spring return / spring return**



	Air differential return	Spring return
C	137,5	143,7

#### **Double solenoid operated**



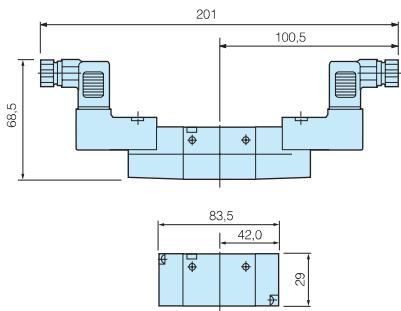
	Air differential return	Spring return
D	79,0	85,2

All dimensions in mm unless otherwise stated

# B Series high performance industrial valves

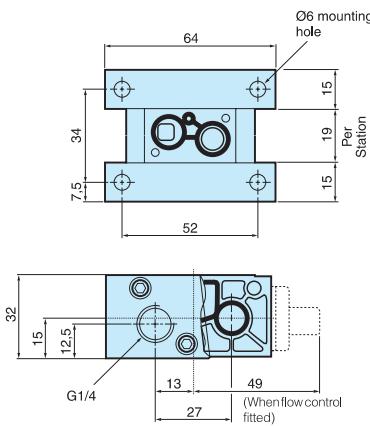
## Dimensions, B3 Valve Series

### 5/3 Body ported

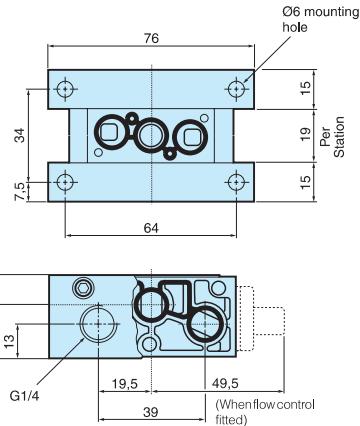


## Manifolds - IEM Inlet Exhaust Manifold System

**3/2 Inlet Exhaust Manifold  
For B3 Body Ported Valves**



**5/2 Inlet Exhaust Manifold  
For B3 Body Ported Valves**



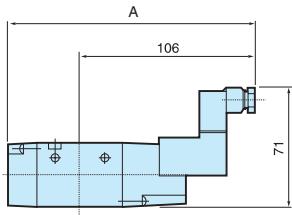
All dimensions in mm unless otherwise stated

# B Series high performance industrial valves

## Dimensions, B4 Valve Series

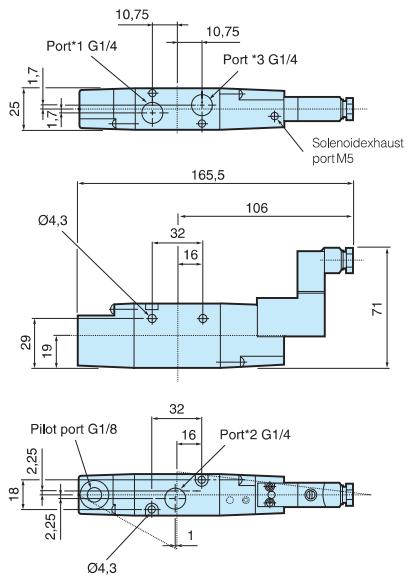
### 3/2 Body ported

Single solenoid operated air spring return / spring return

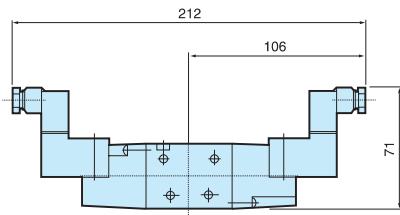


Air differential return	Spring return
A 154,0	156,0

### Single solenoid operated air pilot return

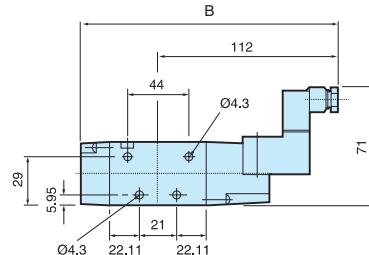


### Double solenoid operated



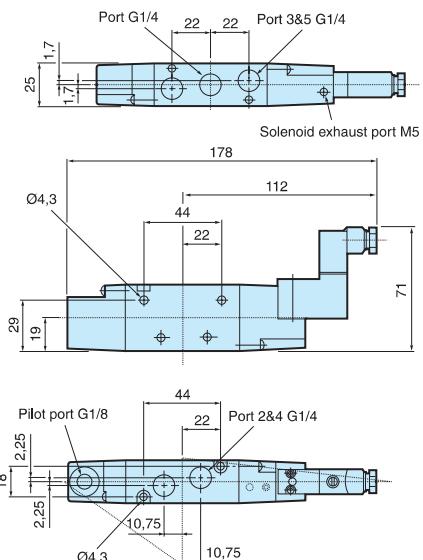
### 5/2 Body ported

Single solenoid operated air spring return / spring return

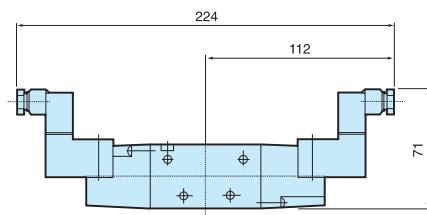


Air differential return	Spring return
B 166,0	168,0

### Single solenoid operated air pilot return



### Double solenoid operated



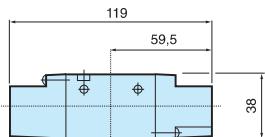
All dimensions in mm unless otherwise stated

# B Series high performance industrial valves

## Dimensions, B4 Valve Series

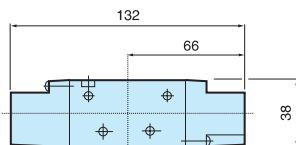
### 3/2 Body ported

Double air pilot operated

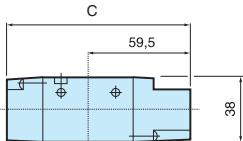


### 5/2 Body ported

Double air pilot operated



### Air pilot operated air spring return / spring return



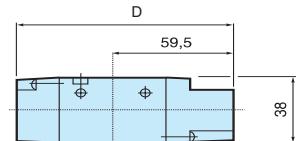
#### Air differential return

#### Spring return

**C** 107,5

109,5

### Air pilot operated air spring return / spring return



#### Air differential return

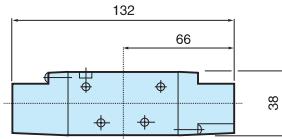
#### Spring return

**D** 120,0

122,0

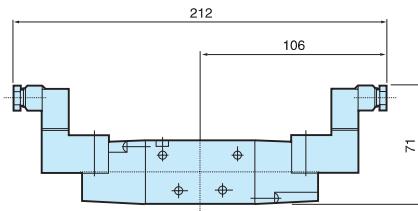
### 5/3 Body ported

Double air pilot return



### 5/3 Body ported

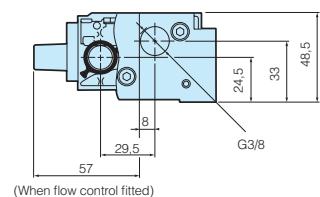
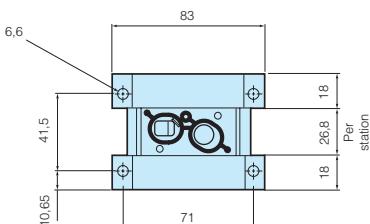
Double solenoid operated



## Manifolds - IEM Inlet Exhaust Manifold System

### 3/2 Inlet Exhaust Manifold

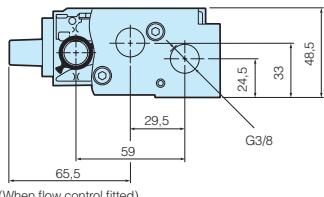
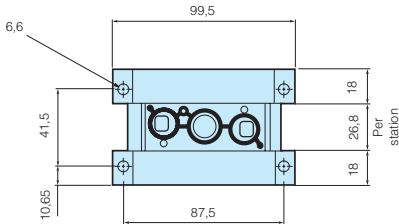
For B4 Body Ported Valves



(When flow control fitted)

### 5/2 Inlet Exhaust Manifold

For B4 Body Ported Valves



(When flow control fitted)

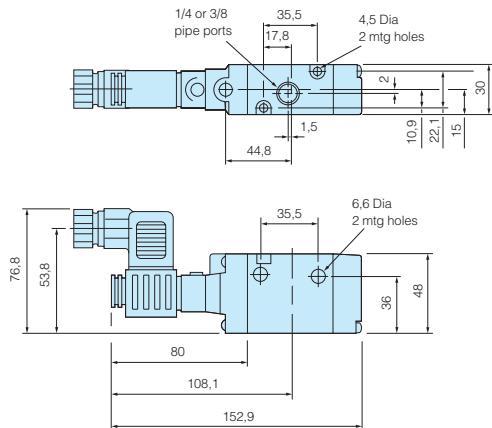
All dimensions in mm unless otherwise stated

# B Series high performance industrial valves

## Dimensions, B5 Valve Series

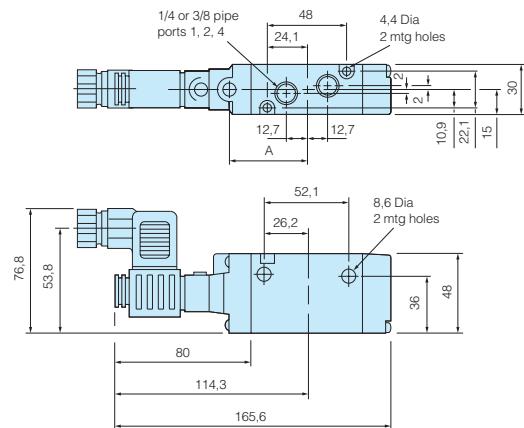
### 3/2 Body ported

Single solenoid operated air spring return / spring return



### 5/2 and 5/3 Body ported

Single solenoid operated air spring return / spring return



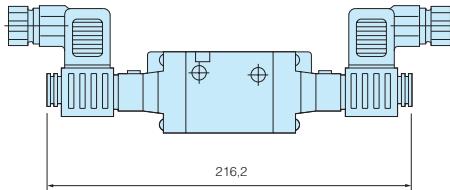
### 2 Position

### 3 Position

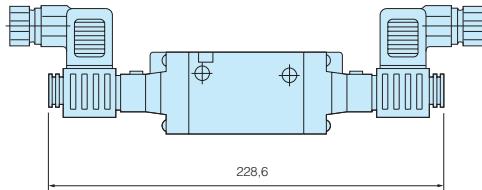
A 51,1

62,7

### Double solenoid operated



### Double solenoid operated



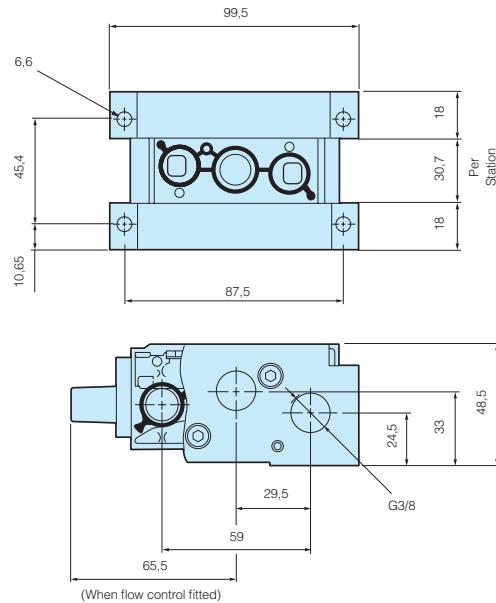
All dimensions in mm unless otherwise stated

# B Series high performance industrial valves

## 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	<b>A05RS251PM5MF</b>	<b>A12RS251PG1MF</b>
	5/2 double solenoid	24V DC	<b>A05RD251PM5MF</b>	<b>A12RD251PG1MF</b>
	5/3 closed centre	24V DC	<b>A05RD351PM5MF</b>	<b>A12RD351PG1MF</b>

#### A05R/A12R Series Manifolds

Manifold for individual wiring threaded type

No. of stations	Port size	Size	Order Code Manifold
4	M5	A05	<b>MMFU4A05G</b>
	G1/8	A12	<b>MMFU4A12G</b>
6	M5	A05	<b>MMFU6A05G</b>
	G1/8	A12	<b>MMFU6A12G</b>
8	M5	A05	<b>MMFU8A05G</b>
	G1/8	A12	<b>MMFU8A12G</b>



Indicates stocked product.

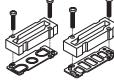
**Directional control valves A05P/A12P series, sub-base version**

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

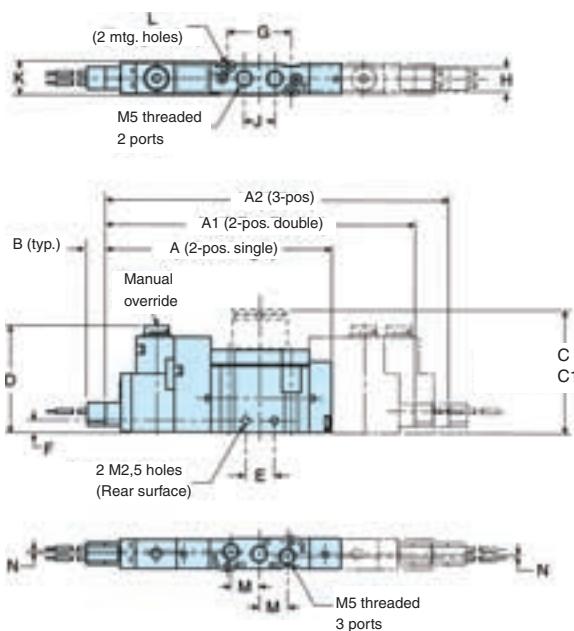
**Mounting and Wiring Accessories**

Description	Order code
	Connector with lead wire black (-) red (+) 500mm <b>A05PDCL5</b>
	IEM blank plate kit (pack of 5) <b>A05RGBP</b> <b>A12RGBP</b>
	Subbase blank plate kit (pack of 5) <b>A05PGBP</b> <b>A12PGBP</b>



Indicates stocked product.

## A05R - Single and double operators - Body ported

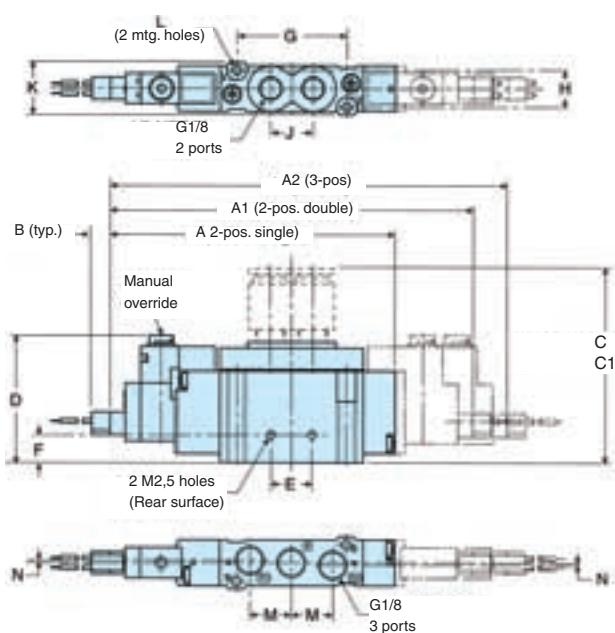


A05R - Body ported

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

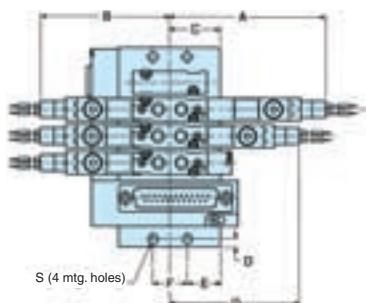
## A12R - Single and double operators - Body ported



A12R - Body ported

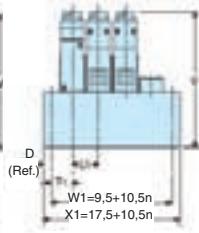
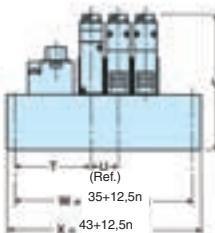
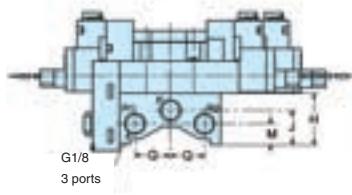
A	A1	A2	B	C
93,5	119	130	6	-
C1	D	E	F	G
-	41,6	13,4	9	36
H	J	K	L	M
12	14	17,2	Ø3,1	13,6
N				
0,8				

Dimensions in mm

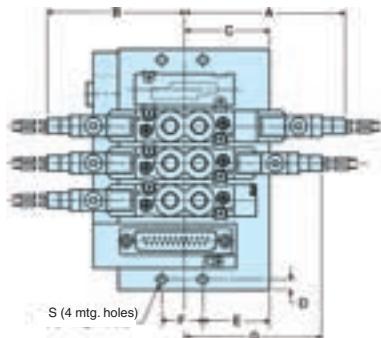
**A05R - Manifold - Valve body ports****A05R - Manifold - valve body port**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
64	56	23,5	4	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

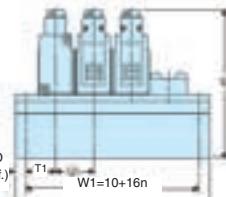
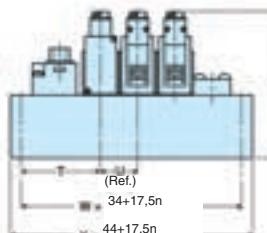
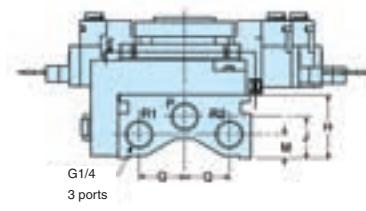
**MMCU...****MMFU...**

n = number of stations

**A12R - Manifold - Valve body ports****A12R - Manifold - valve body port**

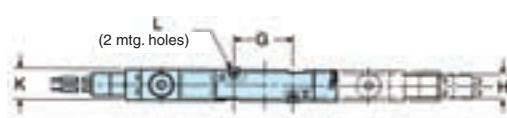
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
77	66	29	5	19,2
F 19,6	G 66	H 27,5	J 18	M 10,5
Q 19,5	S Ø4,5	T 37,5	T1 12,2	U 17,5
U1 16	V 70			

Dimensions in mm



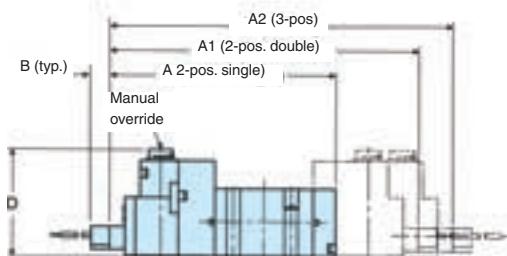
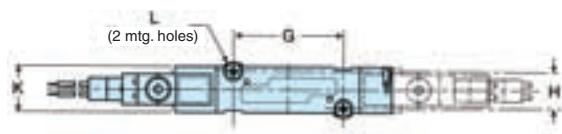
n = number of stations

**MMCU...****MMFU...**

**A05P - Single and double operators - Subbase****A05P - Subbase**

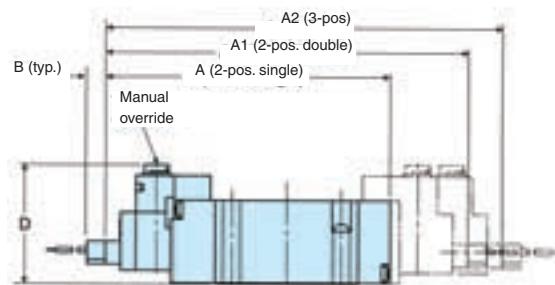
<b>A</b> 74	<b>A1</b> 100	<b>A2</b> 108	<b>B</b> 6	<b>D</b> 35,1
<b>G</b> 19	<b>H</b> 8,5	<b>K</b> 10	<b>L</b> Ø2,1	

Dimensions in mm

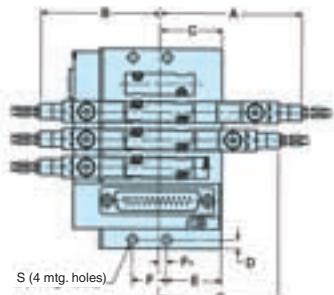
**A12P - Single and double operators - Subbase****A12P - Subbase**

<b>A</b> 93,5	<b>A1</b> 119	<b>A2</b> 130	<b>B</b> 6	<b>D</b> 39,1
<b>G</b> 34	<b>H</b> 12	<b>K</b> 15	<b>L</b> Ø3,1	

Dimensions in mm



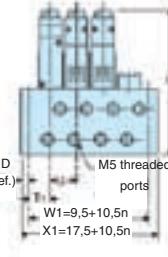
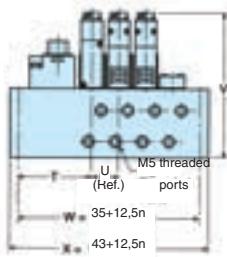
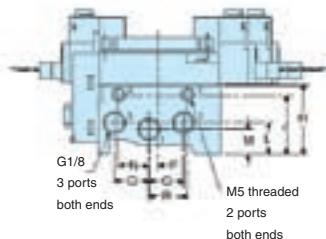
## A05P - Manifold - Side ports



A05P - Manifold - Side ports

A	B	C	D	E
64	56	30,2	4	25,5
F	F1	G	H	J
16	4,7	56	32	28
L	M	N	P	Q
14,5	11,5	14	3	16
R	S	T	T1	U
18	Ø4,5	33,8	10	12,5
U1	V	10,5	67	

Dimensions in mm

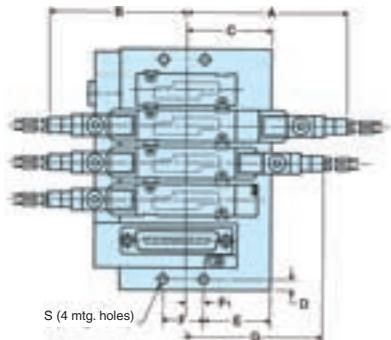


n = number of stations

MMCS...

MMFS...

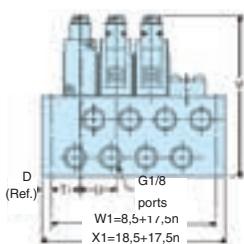
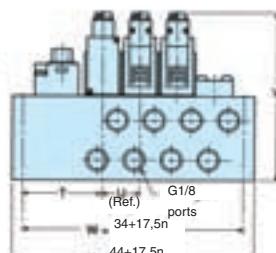
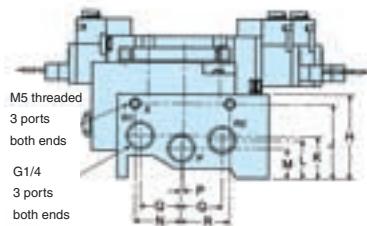
## A12P - Manifolds - Side ports



A12P - Manifold - Side ports

A	B	C	D	E
77	66	40,4	5	31,7
F	F1	G	H	J
19,6	11	66	39,5	35
K	L	M	N	P
20,5	18	14	22	1
Q	R	S	T	T1
19,5	23	Ø4,5	37,2	12,7
U	V	17,5	79	

Dimensions in mm



n = number of stations

MMCS...

MMFS...

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 G1/4
	43 series 53 series
Flow (Qmax);	43 series 53 series
	510 l/min 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	<b>B43003BXS</b> <b>B53003HXS</b>
	3/2	Button black	Air Pilot	G1/4	<b>B53003HXP</b>
	3/2	Button black	Spring	G1/8	<b>B43603BX</b>
	3/2	Button red	Spring	G1/4	<b>B53003HY</b>
	3/2	Button, black	Button	G1/8 G1/4	<b>B43003HXS</b> <b>B53003HX</b>
	5/2	Button, black	Spring	G1/8 G1/4	<b>B43004BXS</b> <b>B53004HXS</b>
	5/2	Button, black	Button	G1/8 G1/4	<b>B43004HXS</b> <b>B53004HX</b>
	5/2	Button black	Air Pilot	G1/8 G1/4	<b>B43004HXP</b> <b>B53004HXP</b>
	5/3	Button closed centre	Button self centring	G1/4	<b>B53004HXX</b>



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
<b>Single-pedal operated</b>						
	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

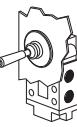
Indicates stocked product.

## Manually operated valves, B43/53 series

### Lever operated

	3/2	Lock down lever	Spring	G1/8	<b>B43003LS</b>
	3/2	Lock down lever	Spring	G1/8	<b>B43603L</b>
	5/2	Lock down lever	Spring	G1/8	<b>B43004LS</b>
	3/2	Lever	Spring	G1/4	<b>B53003LS</b>
	3/2	Lever	Air Pilot	G1/4	<b>B53003LP</b>
	3/2	Lever	Lever	G1/4	<b>B53003LT</b>
	5/2	Lever	Spring	G1/4	<b>B53004LS</b>
	5/2	Lever	Air Pilot	G1/4	<b>B53004LP</b>
	5/2	Lever	Lever	G1/4	<b>B53004LT</b>
	5/3	Lever Closed centre	Lever Held in three positions	G1/4	<b>B53004L</b>
	5/3	Lever Vented centre	Lever Held in three positions	G1/4	<b>B53004LW</b>
	3/3	Lever	Spring	G1/4	<b>B53003LX</b>
	5/3	Lever Closed centre	Lever Self centring	G1/4	<b>B53004LX</b>
	5/3	Lever Vented centre	Lever Self centring	G1/4	<b>B53004LY</b>

### Panel mounting kit - B53 series

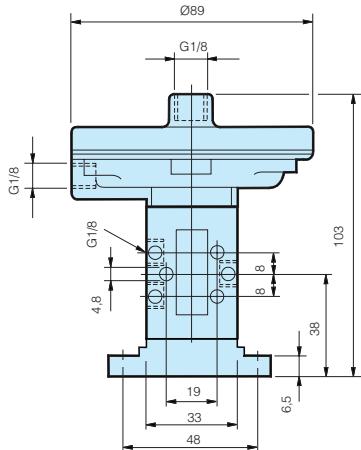
	<b>M53004L-10A</b>
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Indicates stocked product.

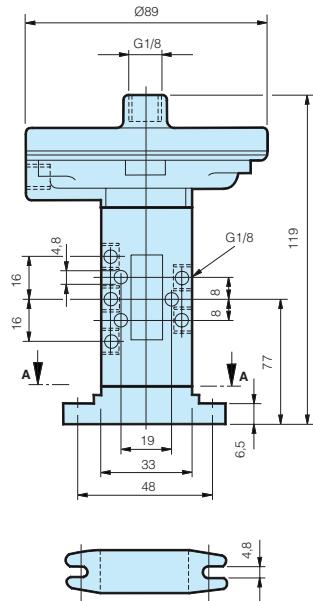
## 3/2 valve dimensions (mm)

**Diaphragm operated  
spring return**

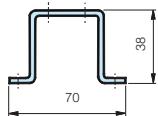
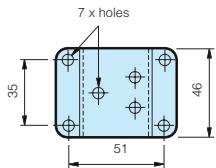


## 5/2 valve dimensions (mm)

**Diaphragm operated  
spring return**

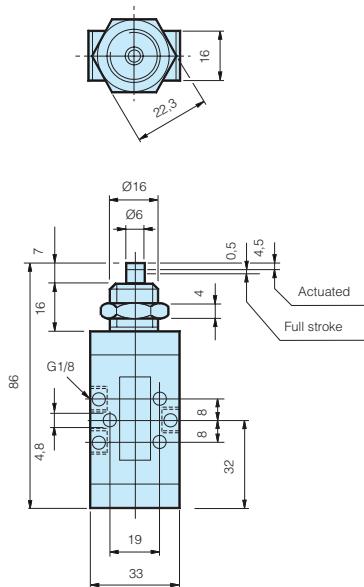


## Mounting brackets



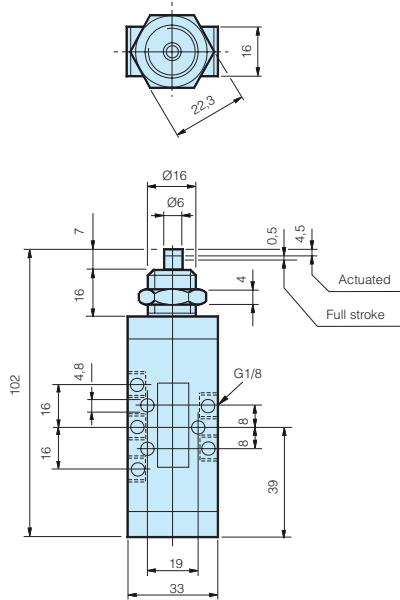
## 3/2 valve dimensions (mm)

**Plunger operated  
spring return**



## 5/2 valve dimensions (mm)

**Plunger operated  
spring return**

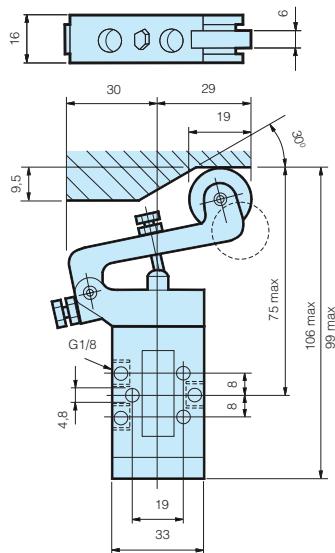


# Metal spool valves

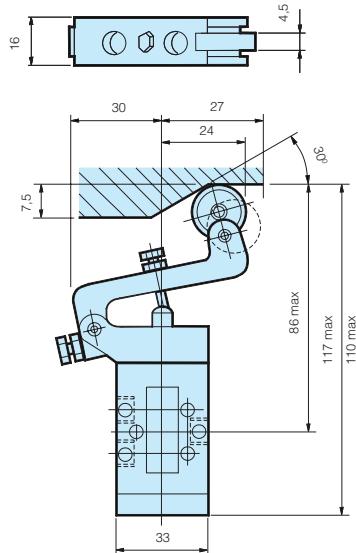
B43/53 series

## 3/2 valve dimensions (mm)

Roller operated  
spring return

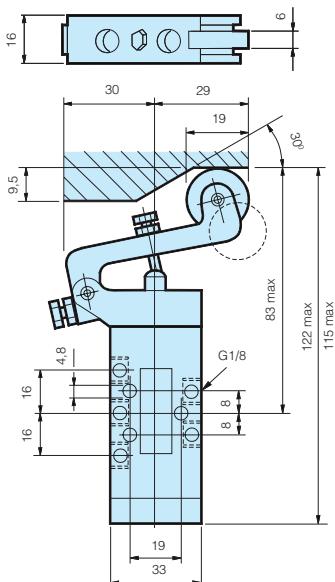


One way roller trip operated  
spring return

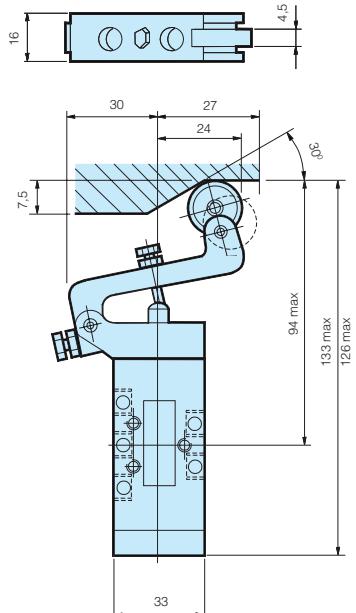


## 5/2 valve dimensions (mm)

Roller operated  
spring return

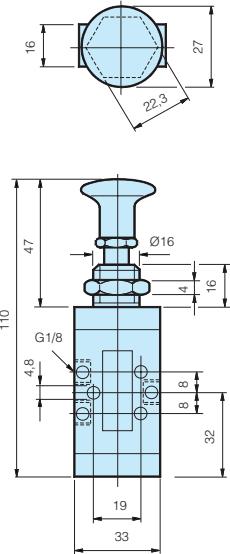


One way roller trip operated  
spring return

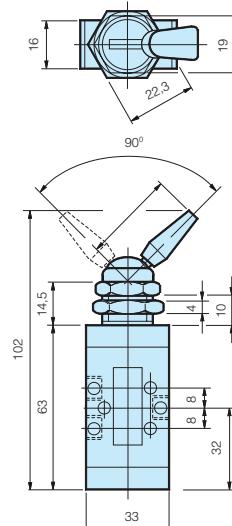


## 3/2 valve dimensions (mm)

**Button operated  
spring or button return**

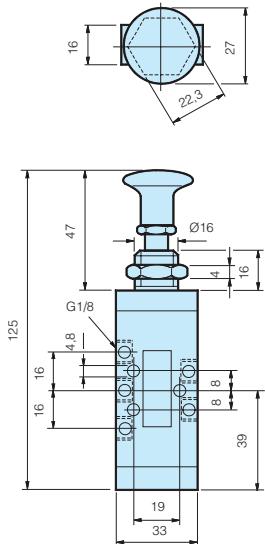


**Lock down lever operated  
spring return**

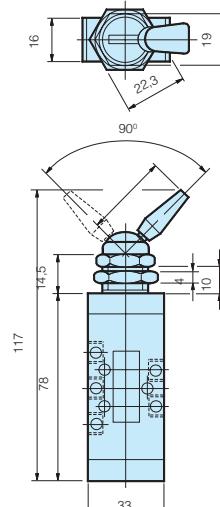


## 5/2 valve dimensions (mm)

**Button operated  
spring or button return**

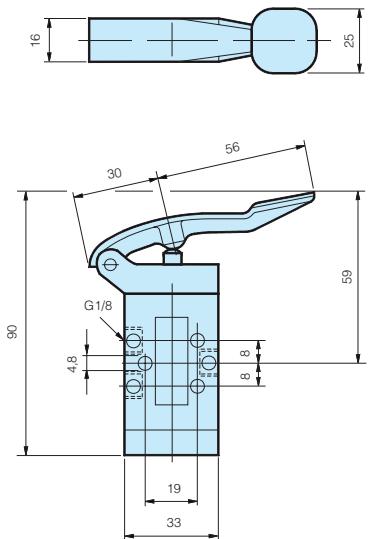


**Lock down lever operated  
spring return**

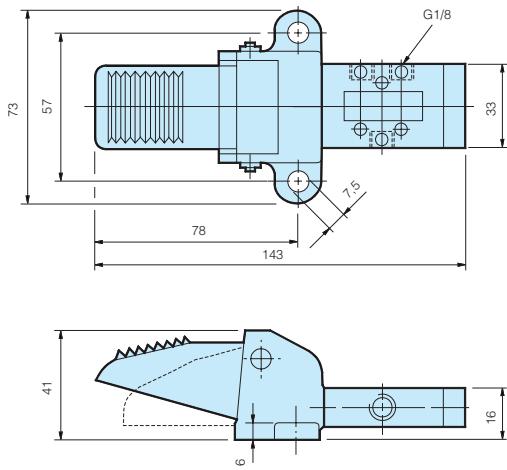


## 3/2 valve dimensions (mm)

**Palm lever operated  
spring return**

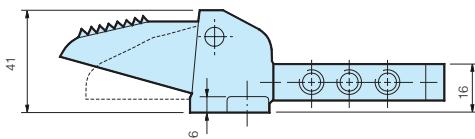
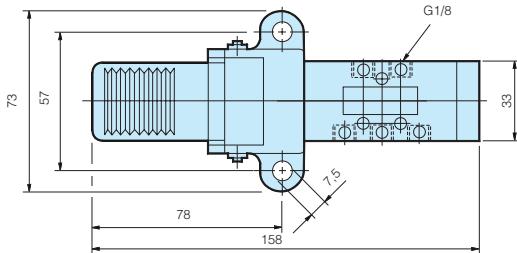


**Foot pedal operated  
spring return**



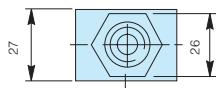
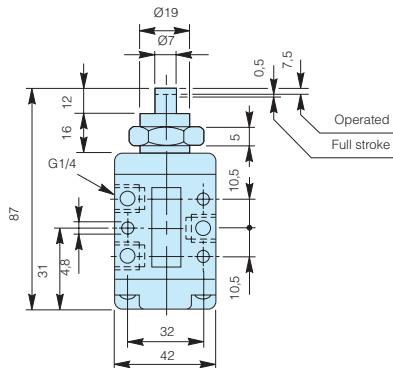
## 5/2 valve dimensions (mm)

**Foot pedal operated  
spring return**

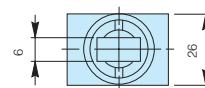
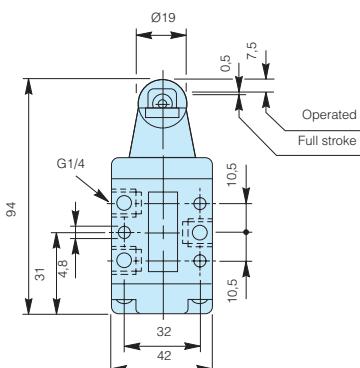


## 3/2 valve dimensions (mm)

**Plunger operated  
spring return**

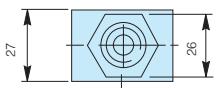
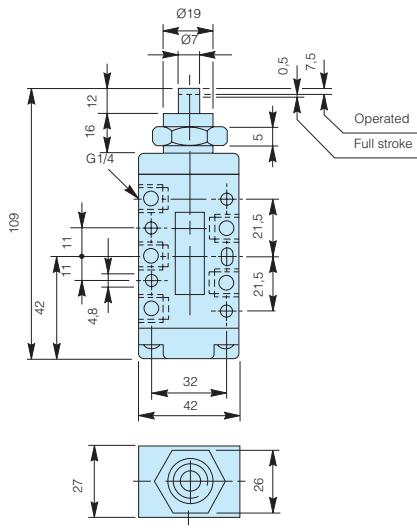


**Roller operated**

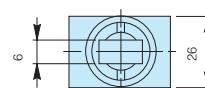
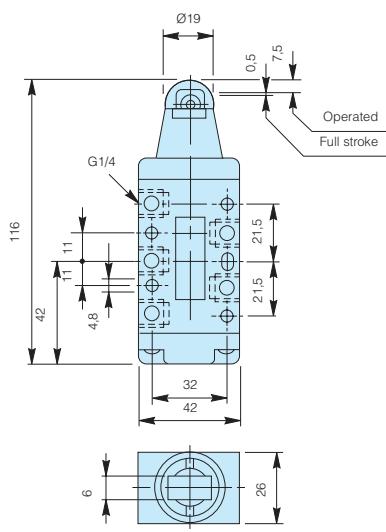


## 5/2 valve dimensions (mm)

**Plunger operated  
spring return**

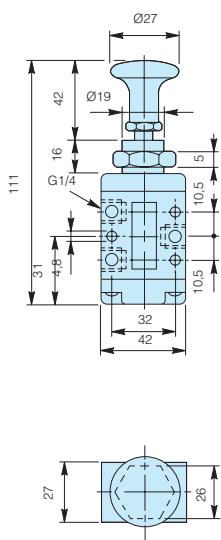


**Roller operated**

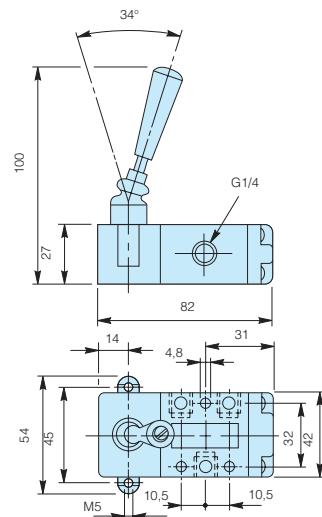


## 3/2 valve dimensions (mm)

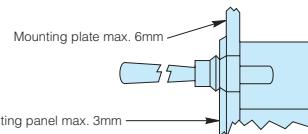
**Button operated  
spring return**



**Lever operated  
spring return**

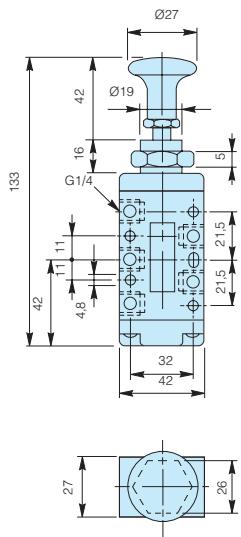


**Panel mounting**

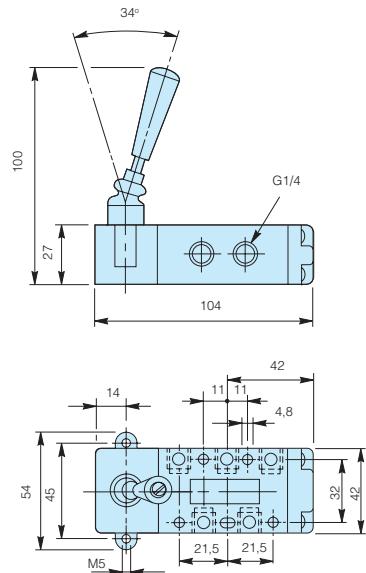


## 5/2 valve dimensions (mm)

**Button operated  
spring return**

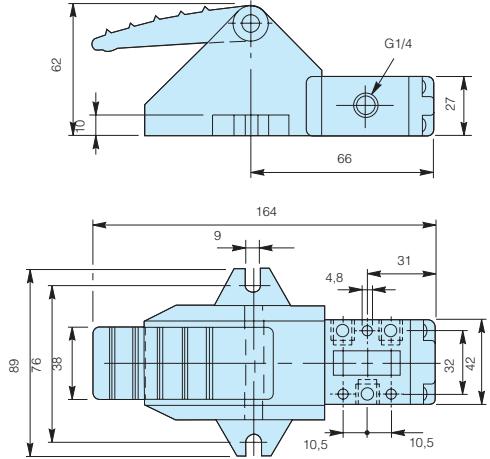


**Lever operated  
spring return**

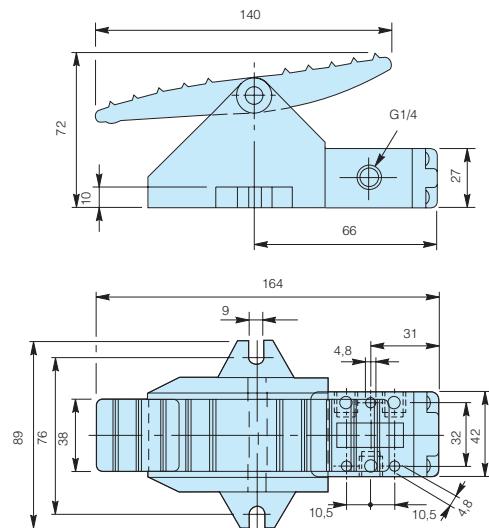


## 3/2 valve dimensions (mm)

**Foot pedal operated  
spring return**

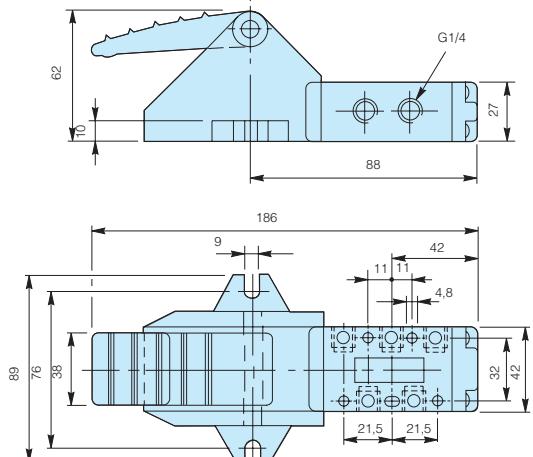


**Foot pedal operated**

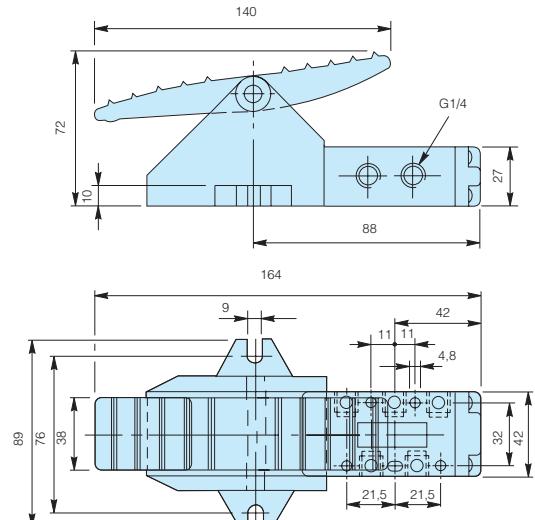


## 5/2 valve dimensions (mm)

**Foot pedal operated  
spring return**

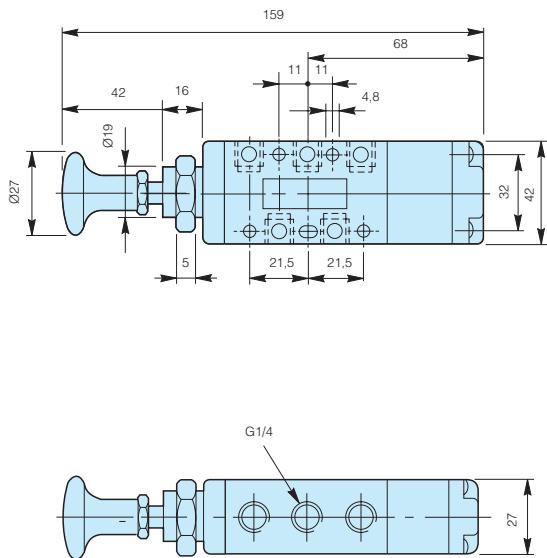


**Foot pedal operated**



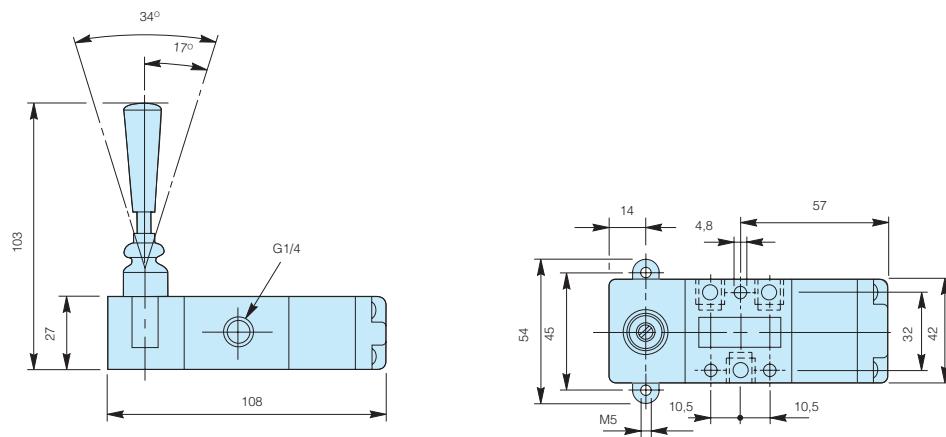
## 5/3 valve dimensions (mm)

Button operated



## 3/3 valve dimensions (mm)

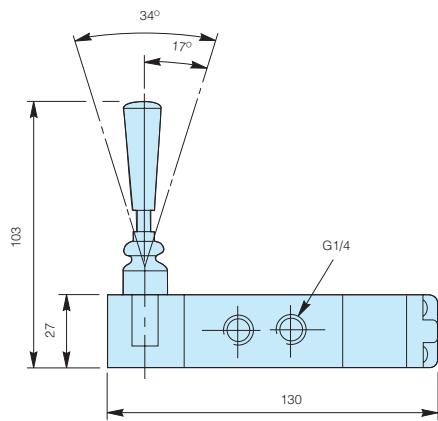
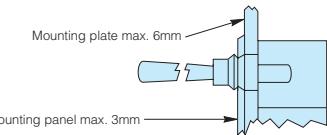
Lever operated



## 5/3 valve dimensions (mm)

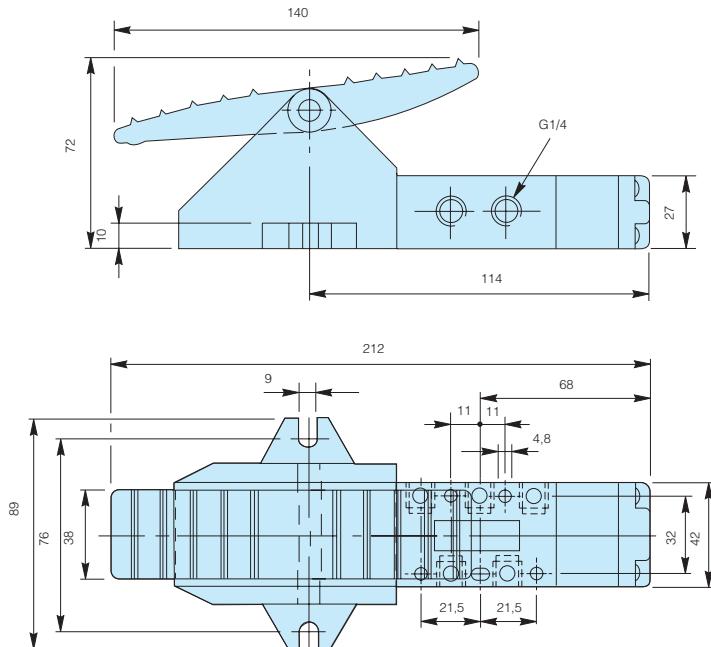
Lever operated

### Panel mounting



## 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 and electrical output signal



## Flow characteristics

<b>PXB-B3••</b>	Qmax = 60 l/min Qn = 30 l/min
<b>PXB-B4••</b>	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
<b>For ATEX specific products contact Sales Office</b>	

## Spring return push buttons

Symbol	Flow	Order code
	60 l/min	<b>PXB-B3111BA2</b>
	240 l/min	<b>PXB-B4131BA2</b>

Black - With 1 NC valve

Symbol	Flow	Order code
	60 l/min	<b>PXB-B3111BA4</b>
	240 l/min	<b>PXB-B4131BA4</b>

Red - With 1 NC valve

Symbol	Flow	Order code
	60 l/min	<b>PXB-B3111BA3</b>
	240 l/min	<b>PXB-B4131BA3</b>

Green - With 1 NC valve

## Mushroom head push buttons

Symbol	Flow	Order code
	60 l/min	<b>PXB-B3111BC2</b>
	240 l/min	<b>PXB-B4131BC2</b>

Black - Spring return - With 1 NC valve

Symbol	Flow	Order code
	60 l/min	<b>PXB-B3111BT4</b>
	240 l/min	<b>PXB-B4131BT4</b>

Red - Latching - With 1 NC valve

## Selector switches

Symbol	Flow	Order code
	60 l/min	<b>PXB-B3111BD2</b>
	240 l/min	<b>PXB-B4131BD2</b>

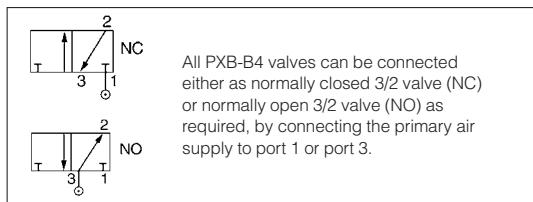
Black - 2 positions - With 1 NC valve

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
	Normally closed NC



Symbol	Flow	Order code
	60 l/min NC	PXB-B3111B
	60 l/min NO	PXB-B3121B

Description	Order code
	Mounting block

## Spring return push buttons

Spring return		
	Colour	Order code
	Black	ZB4-BA2
	Green	ZB4-BA3
Flush	Red	ZB4-BA4

Mushroom head		
	Colour	Order code
	Black	ZB4-BC2
	Green	ZB4-BC3
Ø40 mm spring return	Red	ZB4-BC4

## Selector switches

Black handle		
	Function	Order code
	2 positions fixed	ZB4-BD2
	3 positions fixed	ZB4-BD3
Standard		

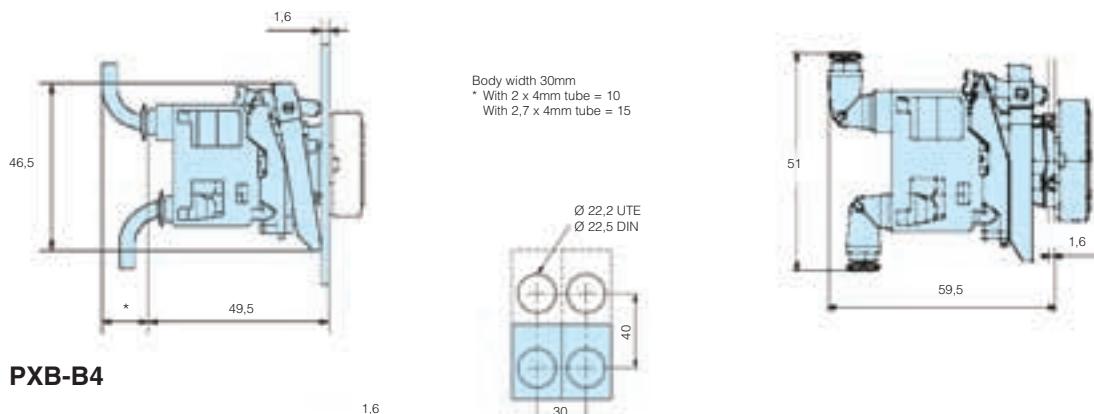
Mushroom head		
	Colour	Order code
	Black	ZB4-BC2
	Green	ZB4-BC3
Ø40 mm spring return	Red	ZB4-BC4

## Visual indicators

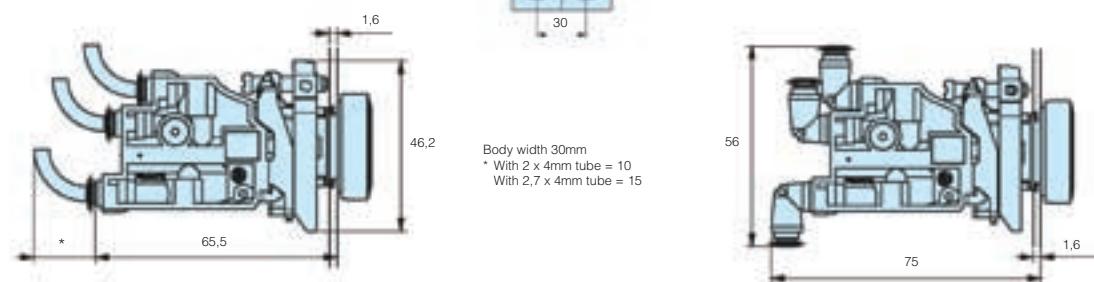
	Colour actuated	Colour unactuated	Order code
	Green	Black	PXV-F131
	Red	Black	PXV-F141
	Yellow	Black	PXV-F151
	Blue	Black	PXV-F161
	White	Black	PXV-F111
	Green	Red	PXV-F1314

Indicates stocked product.

## PXB-B3



## PXB-B4



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.



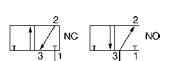
- Rugged valves for heavy duty applications
- Large and robust actuators for easy operation
- Excellent corrosion resistance
- Integral mounting holes
- Panel mounting versions

## 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
<b>Hand actuated</b>					
	Flush-Push button, red	Spring	32,5	Panel	<b>VA13-HIS4</b>
	Flush-Push button, black	Spring	32,5	Panel	<b>VA13-HIS4A06</b>
	Hand lever Held in two positions	Hand lever	8	Panel	<b>VA13-HB24</b>
	Hand lever Held in two positions	Hand lever	8	Side	<b>VA13-HB2</b>
	Button, red Two positions	Button	3	Panel	<b>VA13-KL24</b>
	Button, red	Spring	31,5	Panel	<b>VA13-KS4</b>
	Button, red Two positions	Button	3	Side	<b>VA13-KL2</b>
	Button, red	Spring	31,5	Side	<b>VA13-KS</b>
	Button, red Two positions	Knob/ Air signal	6	Side	<b>VA13-KL2A</b>



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.

# Brass bodied spool valves

VA13/15-H/K

## Push button valves, VA15 Series - G<sup>1/8</sup> connection

Symbol	Actuator	Return	Operating force at 6 bar, N	Mounting	Order code
<b>Hand actuated</b>					
	Flush-Push button, red	Spring	34,5	Panel	<b>VA15-HIS4</b>
	Hand lever Held in two positions	Hand lever	9	Panel	<b>VA15-HB24</b>
	Hand lever Held in three positions Closed centre position	Hand lever	9	Panel	<b>VA15-HB34</b>
	Hand lever Held in three positions Vented centre position	Hand lever	9	Panel	<b>VA15-XHB34</b>
	Hand lever Three positions Closed centre position	Hand lever	9	Panel	<b>VA15-HC4</b>
	Hand lever Three positions Vented centre position	Hand lever Self centring	9	Panel	<b>VA15-XHC4</b>
	Hand lever Held in two positions	Hand lever	9	Side	<b>VA15-HB2</b>
	Button, red Two positions	Button	5	Panel	<b>VA15-KL4</b>
	Button, red Two positions	Button	5	Side	<b>VA15-KL2</b>
	Air signal	Air signal	3/3	Side	<b>VA15-AA</b>
	Air signal	Spring	4/-	Side	<b>VA15-AS</b>

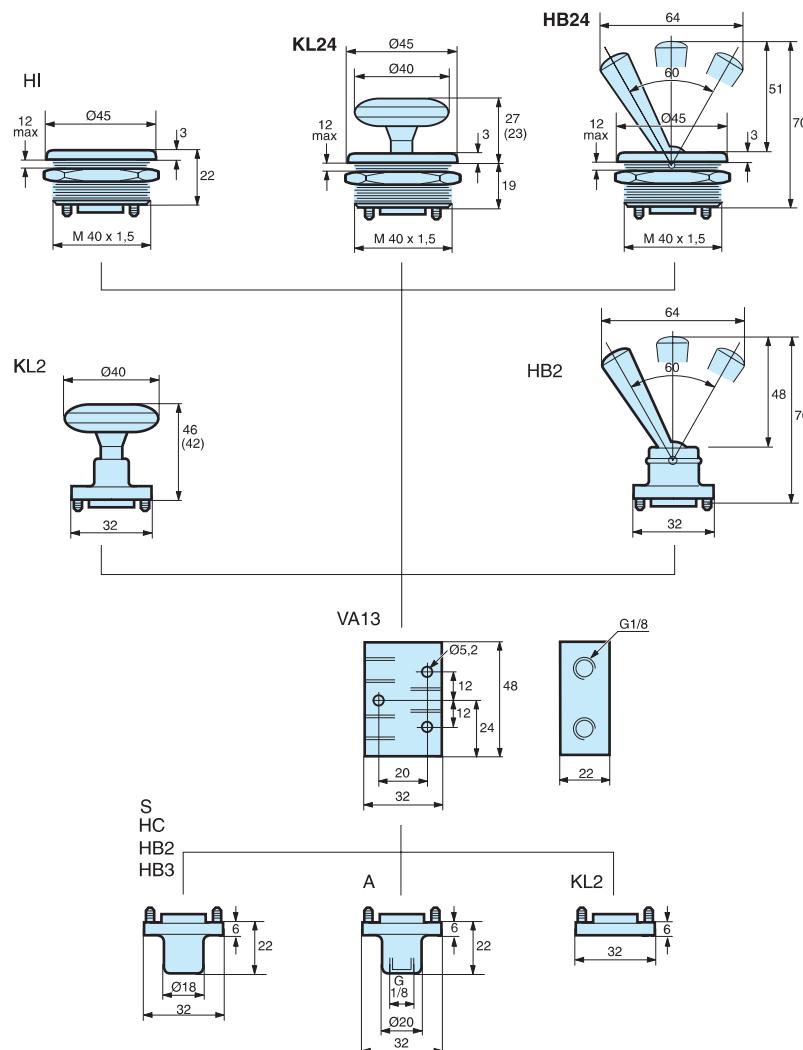
## Accessories for VA13/15HI... Series valves

	Description	Order code
	Diaphragm	
	Diaphragm, black	<b>9127359331</b>
	Diaphragm, yellow	<b>9127359332</b>
	Mounting ring	<b>9127359334</b>

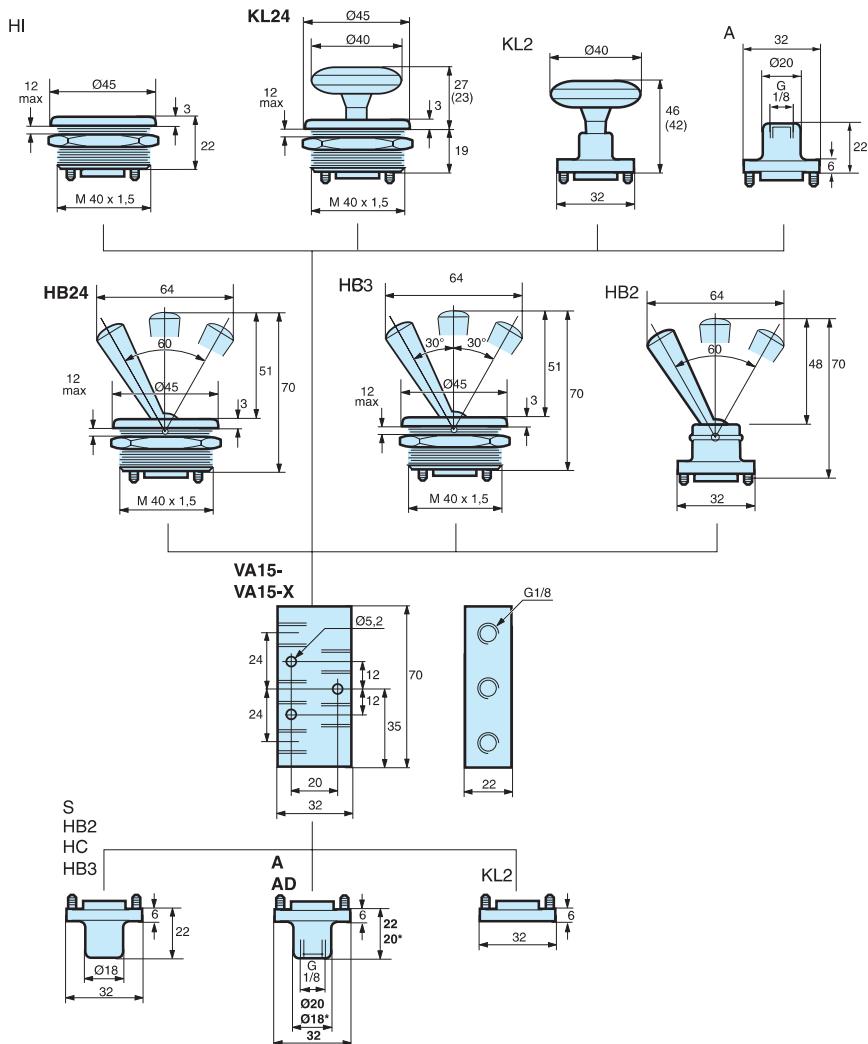


Indicates stocked product.

## Dimensions



## Dimensions



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 NI/min

Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Steel plunger	Spring	11 <b>PXC-M111</b>

#### Bore Ø1,5 mm, flow 85 NI/min

Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Plastic roller	Spring	4,5 <b>PXC-M121</b>
		Steel roller	Spring	4,5 <b>PXC-M131</b>

#### Bore Ø2,5 mm, flow 250 NI/min

Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Plastic roller	Spring	7 <b>PXC-M521</b>

#### 3/2 compact limit switches - With Ø4mm Push-in connections with pipeable exhaust port

#### Bore Ø2,5mm, flow 250 NI/min - With plunger head

Symbol	Actuator	Return	Operating forces at 6 bar, N	Order code
		Steel plunger	Spring	24 <b>PXC-M601A110</b>
		Steel roller plunger	Spring	24 <b>PXC-M601A102</b>
		90° Steel roller plunger	Spring	24 <b>PXC-M601A103</b>

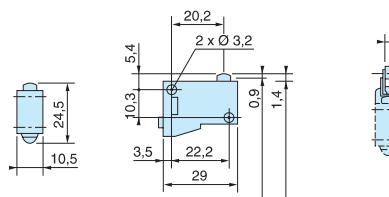
Indicates stocked product.

**Dimensions, Limit switches, Series PXC**

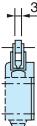
All dimensions in mm unless otherwise stated

**3/2 miniature limit switches**

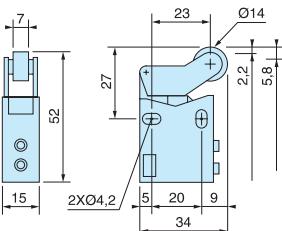
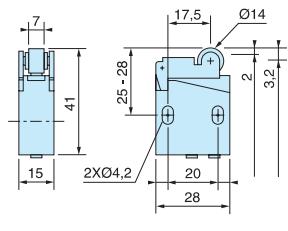
PXC-M111



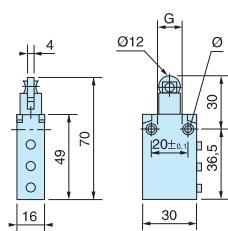
PXC-Z12    PXC-Z11



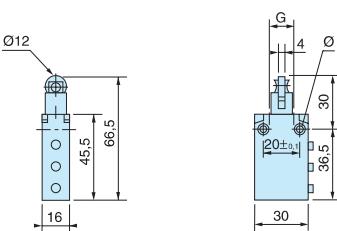
PXC-M121 - PXC-M131    PXC-M521

**3/2 compact limit switches**

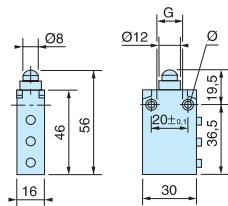
PXC-M601A102



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



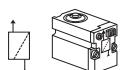
## Operating information

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	<b>PSM-A10</b>
Pneumatic output	
Visual indication of pneumatic output and manual override	<b>PSM-A12</b>
With sub base	<b>PSM-B12</b>

### Step module subbase



Order code

Subbase	<b>PSB-A12</b>
Additional interlock	<b>PSV-A12</b>

### Set of head and tail modules and deviation modules

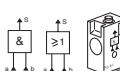


Order code

Head & tail set	<b>PSE-A12</b>
Deviation standard	<b>PSD-A12</b>
Deviation for remote	<b>PSD-B12</b>

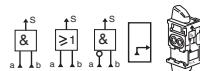
## Logic elements

### Line mounted elements



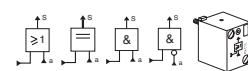
Logic Function	Order code
AND	<b>PLL-A11</b>
OR	<b>PLK-A11</b>
Clip on Din-rail	<b>PZM-L199</b>

### Combinable elements



Logic Function	Order code
AND	<b>PLL-B12</b>
OR	<b>PLK-B12</b>
NOT	<b>PLN-B12</b>
INPUT	<b>PLE-B12</b>

### Subbase mounted elements



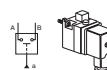
Logic Function	Order code
AND	<b>PLL-C10</b>
NOT inhibit standard	<b>PLN-C10</b>
NOT inhibit threshold	<b>PLN-D10</b>
OR	<b>PLK-C10</b>
YES regenerated	<b>PLJ-C10</b>

3 port subbase to be ordered separately.

## Logic relays

### Pressure switch

To be used with 3 port subbase



Order code

With subbase	<b>PRE-A12</b>
Without subbase	<b>PRE-A10</b>

### Sensor relays



Order code

With subbase	<b>PRF-A12</b>
Without subbase	<b>PRF-A10</b>

Indicates stocked product.

### Amplifier relays

To be used with 4 port subbase



Order code

With subbase	<b>PRD-A12</b>
Without subbase	<b>PRD-A10</b>

### Memory relays

To be used with 4 port subbase

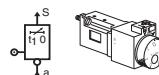


Order code

With subbase	<b>PLM-A12</b>
Without subbase	<b>PLM-A10</b>

## Time delay relays

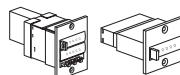
To be mounted on 3 port subbase



Function	Timing	Order code
Output after timed period	0,1 to 3s 0,1 to 30s 10 to 180s	PRT-E10 PRT-A10 PRT-B10
With subbase	0,1 to 30s	PRT-A12
Output during timed period	0,1 to 3s 0,1 to 30s 10 to 180s	PRT-F10 PRT-C10 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

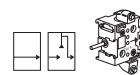


## Not elements

Description	Order code
PLNC10 on PZUA12 subbase	PLN-C12
PLND10 on PZUA12 subbase	PLN-D12

## Subbase for logic elements and relays

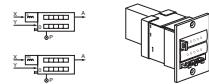
3 port and 4 port subbases



	Order code
Input module	PZU-E12
3 port "common input"	PZU-A12
3 port "cascade"	PZU-C12
4 port subbase*	PZU-B12

\* For combination with memory relay and amplified relay.

## Timers



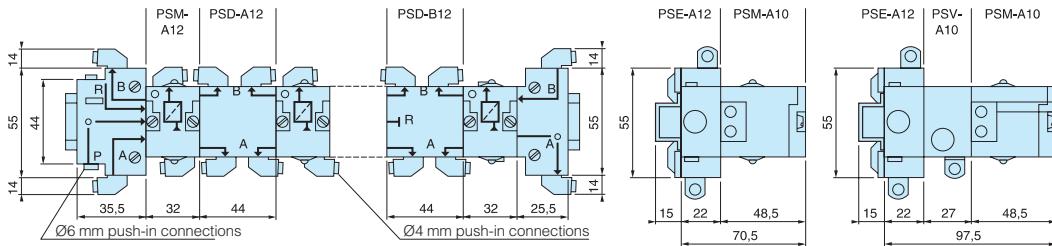
Time base	Time range	Order code
1 second	1 second to 27 hours	PCM-A11
1 minute	1 minute to 69 days	PCM-B11
2 minutes	3 to 100 seconds	PCM-C11
2 minutes	3 to 10 minutes	PCM-D11
2 minutes	3 to 100 minutes	PCM-E11

Indicates stocked product.

# Logic processing

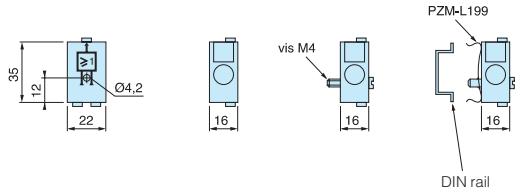
## Dimensions, Logic processing

### Modular sequencer



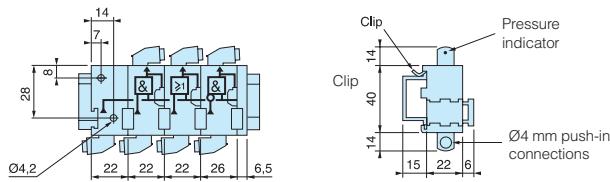
### Line mounted logic elements

PLL-A11 and PLK-A11



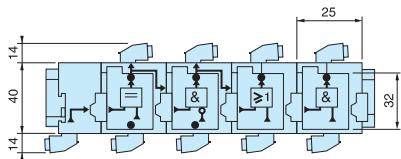
### Combinable logic elements

PLE-B12 — PLL-B12 — PLK-B12 and PLN-B12

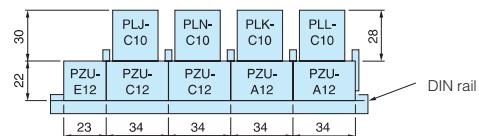


### Logic elements mounted on 3-port modular subbases

PZU-E12

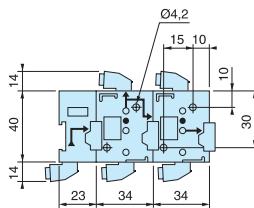


PLJ-C10 — PLN-C10 — PLK-C10 and PLL-C10 mounted on PZU-C12 and PZU-A12

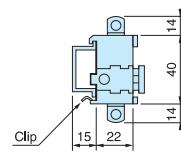
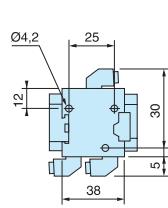


## 3 and 4-port modular subbases

PZU-E12 — PZU-C12 — PZU-A12

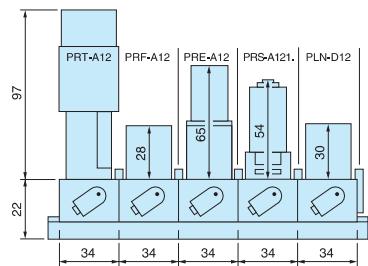
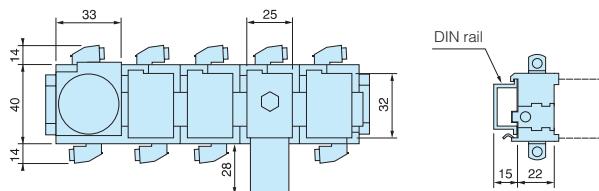


PZU-B12



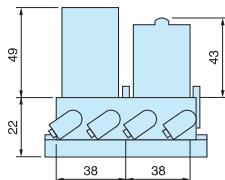
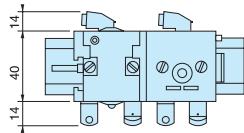
## Relays mounted on 3-port modular subbases

PRT-A12 — PRF-A12 — PRE-A12 — PRS-A121 and PLN-D12



## Relays mounted on 4-port modular subbases

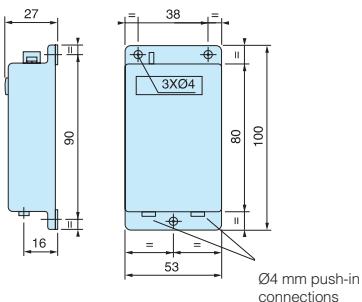
PLM-A12 and PRD-A12



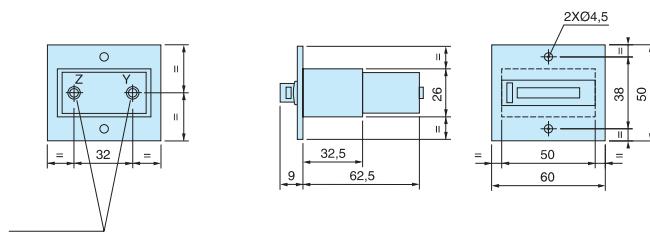
# Logic processing

## Totalising counters

PCT-A11

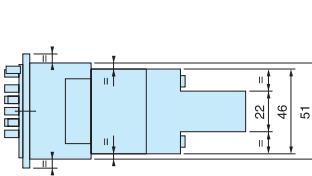
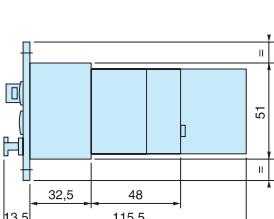
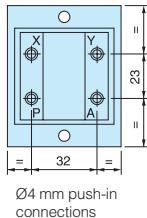


PCT-B11



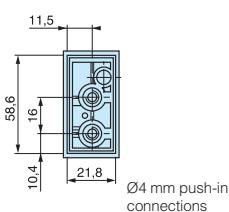
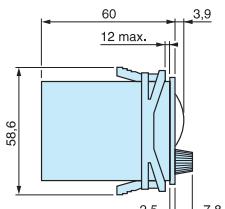
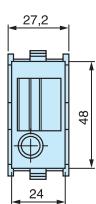
## Digital display timers

PCM-A11 to 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
<b>2-port valves, NC</b>		Air pilot	Spring	3,5	G1/4	<b>VE22-A-S-5*</b>
		Air pilot	Spring	3,5	G1/2	<b>VE22-A-S-5-BOO</b>
		Air pilot	Spring	3,5	G1	<b>VE42-A-S-5*</b>
<b>3-ports valves, NC</b>		Air pilot	Spring	3,5	G1/4	<b>VE23-A-S-5*</b>
		Air pilot	Spring	3,5	G1/2	<b>VE43-A-S-5*</b>
		Air pilot	Spring	3,5	G1	<b>VE83-A-S-5*</b>

\* 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	<b>VE13-ESC042C2</b>
	24 VAC 50Hz	<b>VE13-ESC044C2</b>
	110 VAC 50Hz	<b>VE13-ESC044E2</b>
	220 VAC 50Hz	<b>VE13-ESC044H2</b>
	240 VAC 50Hz	<b>VE13-ESC044K2</b>

#### Adaptor set for VE13-ES

Order code
<b>4145064590</b>



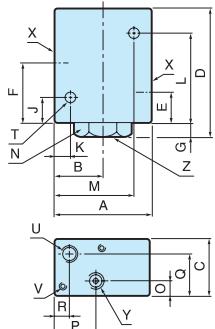
Indicates stocked product.

#### Cable plug, suitable for VE13

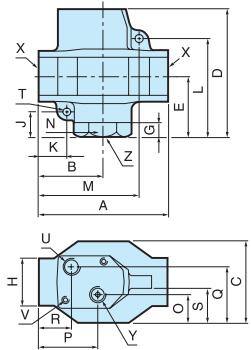
Description	Order code
24V, LED+Diode	<b>9125998004</b>
24V AC/DC, LED+VDR	<b>9125998006</b>
110V AC/DC, LED+VDR	<b>9125998008</b>
240V AC/DC, LED+VDR	<b>9125998010</b>
Black	<b>9125998011</b>

## Dimensions, Airline Isolator Valves

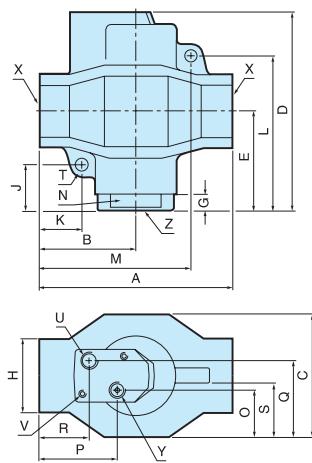
VE22/VE23



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

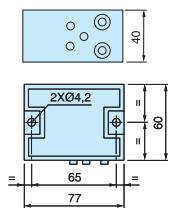
Symbol	Connections	Number of control modules	Order code
	Push-in Ø6 mm for supply Ø4 mm for output	1	PXP-S111
	Push-in Ø6 mm for supply Ø4 mm for output	2	PXP-S121



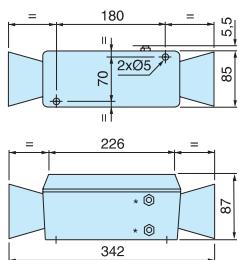
Indicates stocked product.

## Dimensions

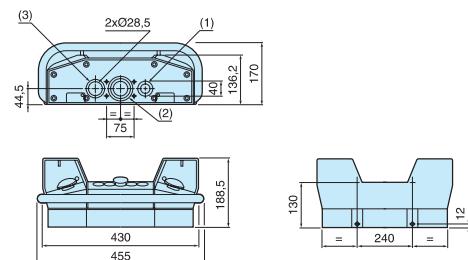
**PXP-A11**



**PXP-C111 and PXP-D121**



**PXP-S111 and PXP-S121**



\* Ø4 mm push-in connections

\*\* Ø6 mm push-in connections