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hydraulics  
**pneumatics**  
process control  
sealing & shielding



# Global ISO Valves ISOMAX / ISYS

A complete range of pneumatic ISO valves

## Industrial Communication

Catalogue PDE2589TCUK May 2015



ENGINEERING YOUR SUCCESS.



**Important !**

Before carrying out any service work, ensure that the valve and manifold have been vented. Remove the primary supply air hose to ensure total disconnection of the air supply before dismantling valves or blank connection blocks.



**NB !**

All technical data in this catalogue is typical only. The air quality is decisive for the valve life: see ISO 8573.



**WARNING**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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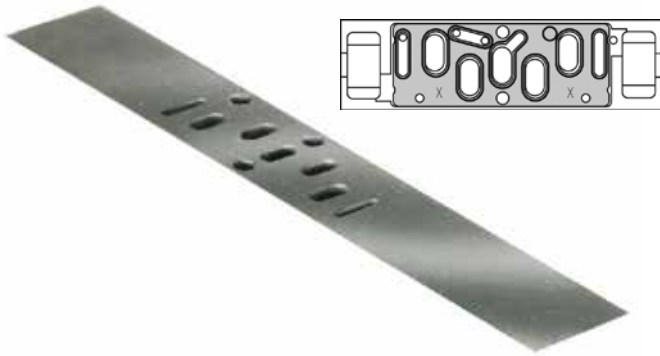
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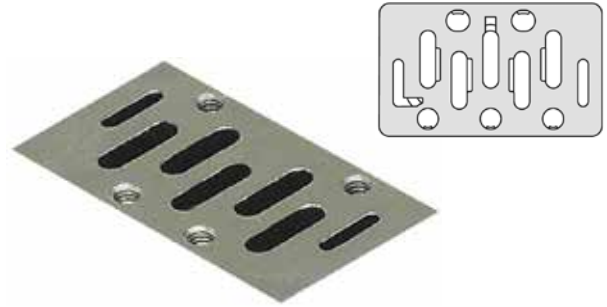
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**ISO Specifications**

**Individual connection**



**15407-1** (VDMA 24563)  ISO 15407-1



**5599-1**  ISO 5599-1

**External electrical connection subbase valves**

The ISO Standard 15407-1 specifies an interface pattern for a common subbase valve consisting of pressure passages 1, 3, 5, 2 & 4 and pilot passages 12 & 14. The width of the pattern and location of the 4 bolt holes are also specified. There are no specifications for the type of external electrical connection used to control the valve.

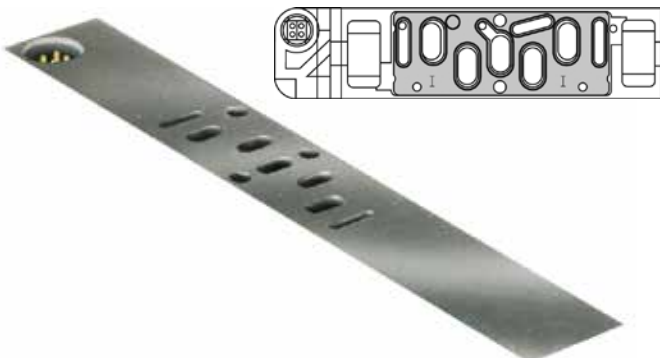
**Size :** 02 01

**External electrical connection subbase valves**

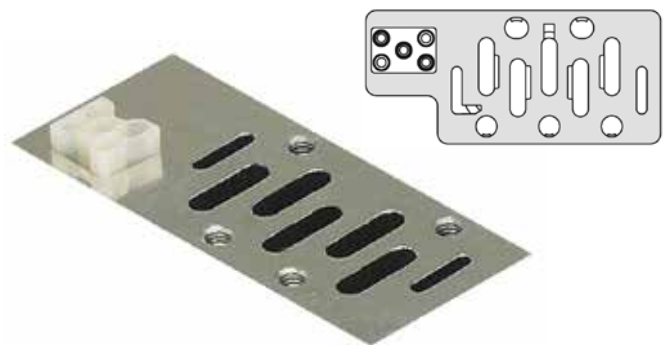
The ISO Standard 5599-1 specifies an interface pattern for a common subbase valve consisting of pressure passages 1, 3, 5, 2 & 4 and pilot passages 12 & 14. The width of the pattern and location of the 4 bolt holes are also specified. There are no specifications for the type of external electrical connection used to control the valve.

**Size :** 1 2 3

**Plug-in connection**



**15407-2**  ISO 15407-2



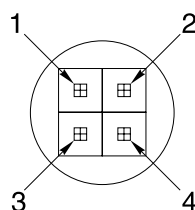
**5599-2**  ISO 5599-2

**Body-to-base plug-in subbase valves**

Same as 15407-1 for pneumatic pressure passages, 15407-2 standard also specifies a plug-in electrical connection.

**Size :** 01 02

- Pin 1 = 14 solenoid
- Pin 2 = 12 solenoid
- Pin 3 = Ground +
- Pin 4 = Common -

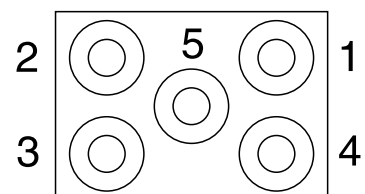


**Body-to-base plug-in subbase valves**

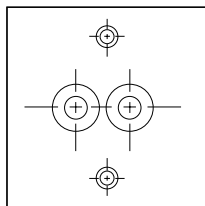
Same as 5599-1 for pneumatic pressure passages, 5599-2 standard also specifies a plug-in electrical connection.

**Sizes :** 1 2 3

- 1 = 12 solenoid
- 2 = 14 solenoid
- 3 = 12 solenoid
- 4 = 14 solenoid
- 5 = Ground

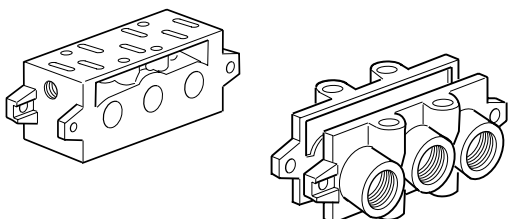


**CNOMO and VDMA Standards**



**CNOMO 06-05-01**

The solenoid pilot interface often used with ISO 5599-1 valves is the CNOMO interface. The CNOMO interface specifies the pressure and actuator port, and the screw holes for the mounting of this solenoid pilot. It is commonly used in European automotive plants, and its usage is becoming more prevalent for industrial ISO 5599-1 valves.



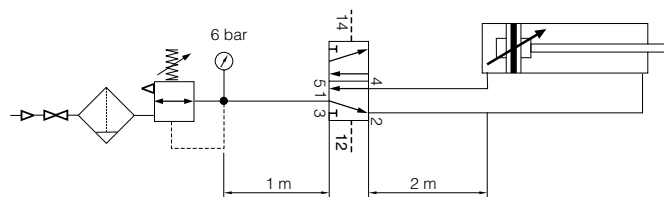
**VDMA 24345**

The VDMA 24345 is a standard for Manifolds and Subbase specifying a common base mounting footprint in addition to ISO 5599-1 Interface standard. (VDMA is a German organisation - Verband Deutscher Maschinen und Anlagen-Bauer - which is translated to Federation of German Machine and Unit Builders.)

**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.

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








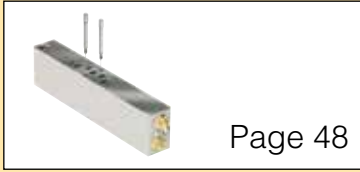
Cylinder bore	<Ø20	Ø20-32	Ø40-50	Ø63	Ø80	Ø100	Ø125	Ø160	Ø200
Cylinder port	M5	G1/8	G1/4	G3/8	G3/8	G1/2	G1/2	G3/4	G3/4
Tubing Ext / Int	4 / 2.7	6 / 4	8 / 6	10 / 7	10 / 7 12 / 9	12 / 9 14 / 11	14 / 11	18 / 15	20 / 18
Size 02 ISOMAX	G1/8	G1/8	G1/8	G1/8	G1/8				
Isys	G1/8	G1/8	G1/8	G1/8	G1/8	G1/8			
Size 01 ISOMAX	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4			
Isys	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4		
Size 1 ISOMAX	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4		
Isys	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4		
Isys			G3/8	G3/8	G3/8	G3/8	G3/8	G3/8	
Size 2 ISOMAX			G3/8	G3/8	G3/8	G3/8	G3/8	G3/8	
Isys			G3/8	G3/8	G3/8	G3/8	G3/8	G3/8	
Isys				G1/2	G1/2	G1/2	G1/2	G1/2	G1/2
Size 3 ISOMAX				G1/2	G1/2	G1/2	G1/2	G1/2	G1/2
Isys				G1/2	G1/2	G1/2	G1/2	G1/2	G1/2
Isys						G3/4	G3/4	G3/4	G3/4

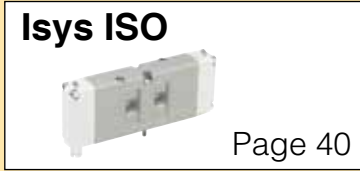


Cylinder speed < 0.5 m/s
  Cylinder speed < 1 m/s
  Cylinder speed > 1 m/s

ISO 15407 -1 / -2

Size 02 (18 mm) / 01 (26 mm)

**Cylinders from 10 to 100 mm bore**








ISO 15407-1	Individual Connection	DIN C 15mm Solenoid	 <p><b>ISOMAX</b> Page 12</p>	
		M12 Connector	 <p><b>Isys ISO</b> Page 26</p>	
		Pneumatic Remote Pilot	 <p><b>ISOMAX</b> Page 12</p>	 <p><b>Isys ISO</b> Page 26</p>
		Subbase, Manifolds	 <p>Page 32</p>	
		Flow Control, Regulator	 <p>Page 48</p>	




ISO 15407-2	Plug-in	Plug-in	 <p><b>Isys ISO</b> Page 40</p>	
		Subbase, Manifolds	 <p><b>Isys ISO</b> Page 36</p>	
		Flow Control, Regulator	 <p><b>Isys ISO</b> Page 48</p>	

ISO 5599 -1 / -2

Size 1 / 2 / 3

**For Cylinders from 63 to 200 mm bore**

<b>ISO 5599-1</b>	<b>Individual Connection</b>	DIN A, Industrial	 <p><b>ISOMAX</b> Page 14</p>	 <p><b>Isys ISO</b> Page 28</p>
		M12	 <p><b>Isys ISO</b> Page 30</p>	
		Remote pilot	 <p><b>ISOMAX</b> Page 14</p>	 <p><b>Isys ISO</b> Page 30</p>
		Subbase, Manifolds	 <p>Page 32</p>	
		Flow Control, Regulator	 <p>Page 48</p>	

<b>ISO 5599-2</b>	<b>Plug-in</b>	Plug-in	 <p><b>Isys ISO</b> Page 46</p>	
		Subbase, Manifolds	 <p>Page 42</p>	
		Flow Control, Regulator	 <p>Page 48</p>	

## ISOMAX - General Applications

### Market Application

- Automotive Handling
- Packaging
- Manufacturing
- General application



### Ceramic technology

All ISOMAX products use high-tech ceramic switching technology :

- **Excellent reliability :**

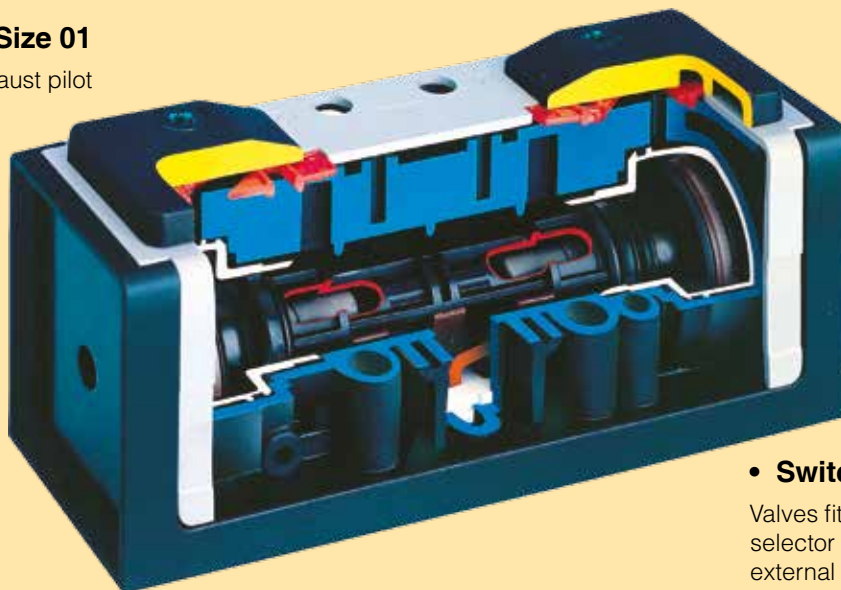
Long life in excess of 100 million operations\*.  
Operates with lubricated or non lubricated air.  
Low sensitivity to air quality changes ;  
switching without seal.  
Stiction free.

- **Size 02 & Size 01**

Solenoid exhaust pilot

- **High performances :**

Slide valve concept allows high flow / size ratio and short response time due to short slide stroke and low friction.



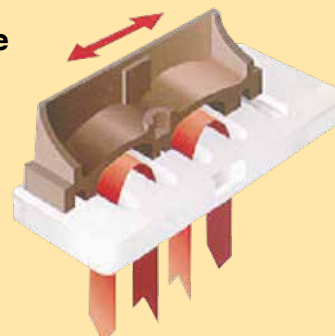
- **Switchable selector**

Valves fitted with switchable selector to give internal or external pilot supply

- **Stable long lasting performances**

Low friction switching : minimum wear of the valve member/seal assembly.

Ceramic plate





### Rust and corrosion resistant body

With the valve body in polyamide reinforced fiberglass and the casting in anodised aluminium, the Isomax range presents a comprehensive modern design to suit most industrial environments.

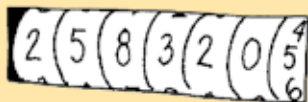
### Central M12 connection or M12 coil

All sizes of ISO 5599-1 are supplied with central M12 integrated connector, a M12 bridge cable or with a 30 x 30mm coil having M12 interface.

### External supply selection

In order to use actuator with low pressure, it is possible to connect an external pressure on port 14 to supply both solenoids. Selection is easily made by reversing the gasket under the operator.

### High reliability



Valves easily comply with the requirements for the component reliability in accordance with EU Machinery Directive standards EN292-2 and EN983.

### Maintenance

Spares are not required for the main valve or spool but solenoid operators can be replaced if required.

### Manual Override

Solenoids are available with locking or non-locking manual overrides so that valves can be operated when the electrical supply is turned off.

### Solenoid valves, CNOMO interface, 15mm solenoid



The standard valve is fitted with a 30mm solenoid having DIN 43650 Industrial form A connector for sizes 1, 2 and 3 15mm solenoid for sizes 01 and 02.

### Low noise level

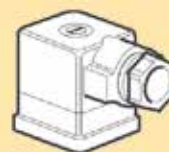
Size 01 and 02 valves fitted with the 15mm solenoid option use captured pilot exhaust which is channelled through the valve body and exhausts to atmosphere through channel 12

### High electrical encapsulation class



The solenoid valves are protected to IP65 with the standard cable plug. Available with DIN A or M12 connection.

### Wide choice of solenoid connectors/cable plugs

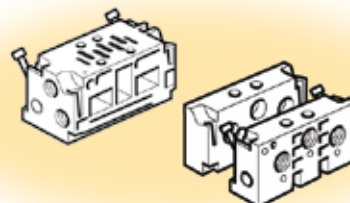


Solenoid connectors are available with or without LED and rectifier and may be selected fitted pre-wired with flying leads.

### Valves having ATEX approval

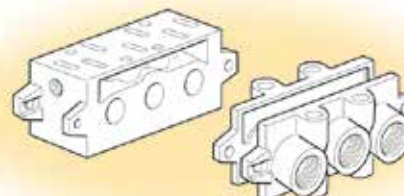
ATEX approved options are available for use in explosive atmospheres. Consult our Technical Sales Department for further information.

### Bottom or side ported manifold



Manifolds with common ducts for ports 1,3 and 5, outlet port 2 and 4, and supply port for 12 and 14 are available side or bottom ported. Those manifolds are common for Isomax and Isys ISO.

### Subbase installation VDMA

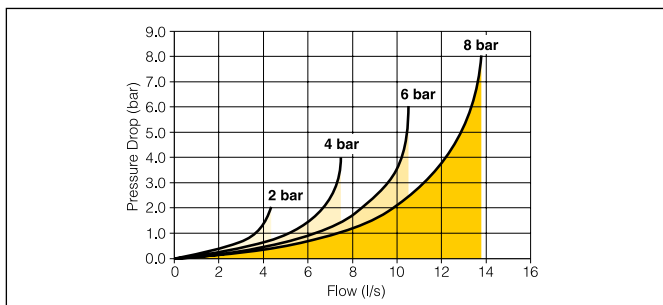


A large range of subbase, VDMA or not VDMA, bottom or side ported.

## ISOMAX Flow Characteristics

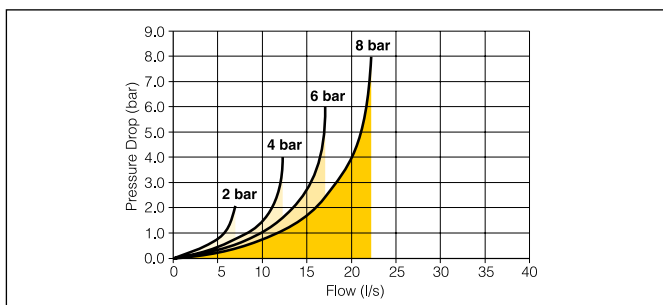
Flow capacities in accordance with ISO6358, for 5/2 function. 5/3 function are around 10 to 20% less.

### Technical Data ISOMAX Size 02



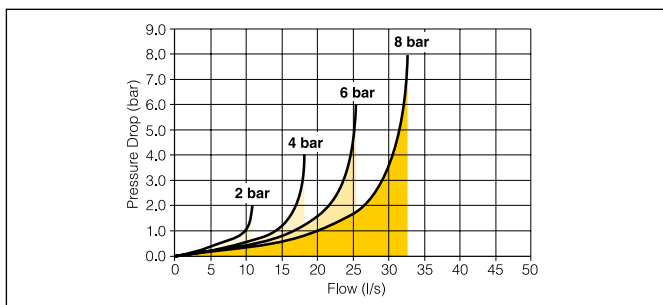
Operating pressure.	
5/2 Spring return	4,0 - 10 bar
5/2 Differential	3,0 - 10 bar
5/2 Double solenoid or pneumatic	2,0 - 10 bar
5/3 Double solenoid or pneumatic	4,0 - 10 bar
Working temperature.	
-10°C to + 60°C	
Flow (acc. to ISO 6358)	
c = 1,5 NI/s x bar	
b = 0,25	
Qn = 6,3 l/s	
Qmax = 10,6 l/s	

### Technical Data ISOMAX Size 01



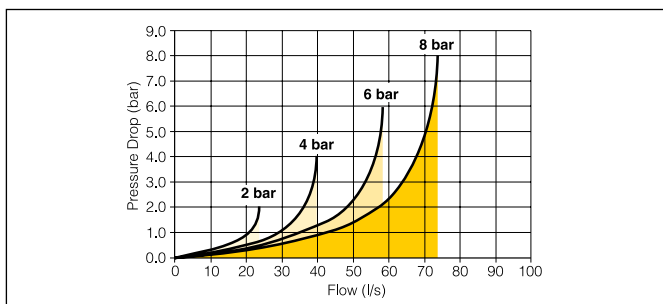
Operating pressure.	
5/2 Spring return	4,0 - 10 bar
5/2 Differential	3,0 - 10 bar
5/2 Double solenoid or pneumatic	2,0 - 10 bar
5/3 Double solenoid or pneumatic	4,0 - 10 bar
Working temperature.	
-10°C to + 60°C	
Flow (acc. to ISO 6358)	
c = 2,5 NI/s x bar	
b = 0,25	
Qn = 9,8 l/s	
Qmax = 17,1 l/s	

### Technical Data ISOMAX Size 1



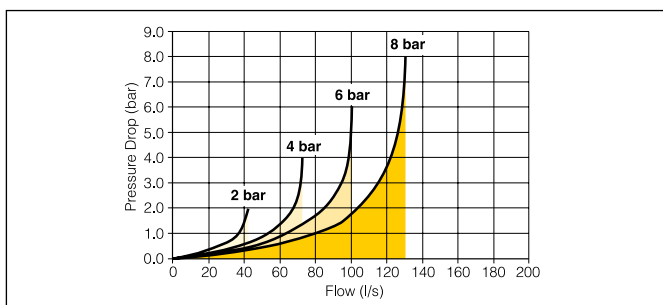
Operating pressure.	
5/2 Spring return	3,0 - 10 bar
5/2 Differential	2,0 - 10 bar
5/2 Double solenoid	1,0 - 10 bar
5/3 Double solenoid	3,5 - 10 bar
Pneumatic version	
12 bar	
Working temperature.	
-10°C to + 60°C	
Flow (acc. to ISO 6358)	
c = 3,8 NI/s x bar	
b = 0,35	
Qn = 17,2 l/s	
Qmax = 25,5 l/s	

### Technical Data ISOMAX Size 2



Operating pressure.	
5/2 Spring return	2,5 - 10 bar
5/2 Differential	2,0 - 10 bar
5/2 Double solenoid	1,0 - 10 bar
5/3 Double solenoid	3,0 - 10 bar
Pneumatic version	
12 bar	
Working temperature.	
-10°C to + 60°C	
Flow (acc. to ISO 6358)	
c = 8,2 NI/s x bar	
b = 0,35	
Qn = 38,3 l/s	
Qmax = 58,7 l/s	

### Technical Data ISOMAX Size 3



Operating pressure.	
5/2 Spring return	2,5 - 10 bar
5/2 Differential	2,0 - 10 bar
5/2 Double solenoid	1,0 - 10 bar
5/3 Double solenoid	3,0 - 10 bar
Pneumatic version	
12 bar	
Working temperature.	
-10°C to + 60°C	
Flow (acc. to ISO 6358)	
c = 14,5 NI/s x bar	
b = 0,35	
Qn = 64,0 l/s	
Qmax = 101,0 l/s	

## ISOMAX Material Specification and Characteristics


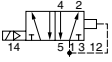
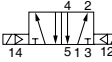
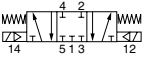
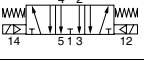
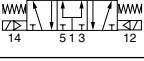
### Material Specification

Valve member - seat :	Self lubricating acetal - ceramic
Body :	Polyamide reinforced fibreglass
Casing - End plates :	Anodised aluminium - Painted zinc - Plated steel
Valve plate :	Zamak
Seals :	Nitrile
Springs :	Stainless steel
Screws :	Zinc plated steel
Top cover - Seal :	Polyamide reinforced fiberglass - Polyester

### Technical Characteristics


Fluid :	Air or inert gas filtered 40u class 5 according to ISO 8573-1 Dry class 4 according to ISO 8573-1 non-lubricated, or lubricated
Storage temperature :	-20° to + 70°
Vibration :	2g - from 2 to 150 Hz according to IEC 68-2-6
Shock :	15g - 11ms according to IEC 68-2-7

### Changeover time (ms) at 6 bar - Actua. / Return

Valve Function	Solenoid Operated Valves					Pneumatic Operated Valves				
	02	01	1	2	3	02	01	1	2	3
	15/25	25/35	40/55	60/105	85/160	15/25	25/35	30/45	50/95	80/160
	15/30	20/40	30/70	55/110	80/180	15/30	20/40	25/60	45/100	70/170
	12/12	15/15	25/25	30/30	40/40	12/12	14/14	20/20	25/25	35/35
	20/60	20/60	30/95	40/190	55/330	20/50	20/50	20/80	30/170	45/330
	20/60	20/60	25/70	40/140	60/270	20/50	20/50	20/65	30/140	50/270
			25/65	40/150				20/60	25/140	

**ISOMAX - ISO 15407-1 - Sizes 02 & 01**  
**Pneumatic remote pilot or 15 mm DIN C solenoid valve operated**

**Order chart**



**For Electro-Pneumatic pilot valve only  
Solenoid valve operator definition**

**DX 01 - 6 21 - 95 1 M S**

Size	
02	Size 02 : 18 mm
01	Size 01 : 26 mm

Pilot	
4	Pneumatic
6	Electro-Pneumatic

Valve function	
06	5/2 double solenoid
56	5/2 double solenoid, 14 prioritised
21	5/2 single solenoid, spring return
51	5/2 single solenoid, differential return
11	5/3 double solenoid vented centre
16	5/3 double solenoid closed centre

Internal pilot supply / Capture exhaust 12	
06	5/2 double solenoid
56	5/2 double solenoid, 14 prioritised
21	5/2 single solenoid, spring return
51	5/2 single solenoid, differential return
11	5/3 double solenoid vented centre
16	5/3 double solenoid closed centre

External pilot 14 supply / Capture exhaust 12	
05	5/2 double solenoid
59	5/2 double solenoid, 14 prioritised
23	5/2 single solenoid, spring return
54	5/2 single solenoid, differential return
09	5/3 double solenoid vented centre
19	5/3 double solenoid closed centre

Connector	
Blank	Without any
C	Standard connector No cable
S	Connector with LED and protection - No cable
S3	Connector with LED and protection - 3 m cable
S5	Connector with LED and protection - 5 m cable

Voltage	
L	12 Vdc
M	24 Vdc
N	48 Vdc
C	24 Vac - 50 Hz
D	48 Vac - 50/60 Hz
J	110 Vac - 50/60 Hz
A	230 VAC - 50/60 Hz

Manual override	
0	Without any
1	Flush non locking
2	Flush non locking (extended 15 mm)
3	Flush locking
5	Flush locking (extended 15 mm)

Operator	
60	Remote pneumatic pilot operated

For pneumatic pilot valve	
60	Remote pneumatic pilot operated

For electro-pneumatic pilot valve	
60	Without 15 mm solenoid valve operator*
95	15 mm solenoid valve operator - DIN 43650 Form C


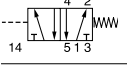
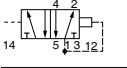
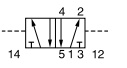
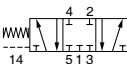
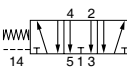
\* 15 mm solenoid valve operator to be ordered separately

Shaded part numbers constituted with shaded voltage code are available from stock.  
 Shaded part numbers constituted by unshaded voltage code are available on request but are subject to a minimum order quantity. Otherwise, select « Blank » as voltage code and order coil separately.

## ISOMAX - ISO 15407-1 - Sizes 02 & 01


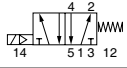
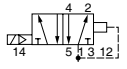
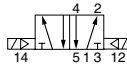
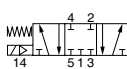
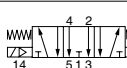
### Pneumatic remote pilot operated

Without valve spool manual override

Symbol	Description	Size	Weight (g)	Order code
	 5/2 Air pilot - Spring return	02 - 18 mm	90	<b>DX02-421-60</b>
		01 - 26mm	130	<b>DX01-421-60</b>
	 5/2 Air pilot - Differential	02 - 18 mm	90	<b>DX02-451-60</b>
		01 - 26mm	130	<b>DX01-451-60</b>
	 5/2 Double air pilot	02 - 18 mm	90	<b>DX02-406-60</b>
		01 - 26mm	130	<b>DX01-406-60</b>
	 5/3 Closed Centre	02 - 18 mm	90	<b>DX02-416-60</b>
		01 - 26mm	130	<b>DX01-416-60</b>
	 5/3 Vented Center	02 - 18 mm	90	<b>DX02-411-60</b>
		01 - 26mm	130	<b>DX01-411-60</b>

## ISOMAX - ISO 15407-1 - Sizes 02 & 01


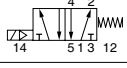
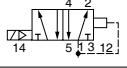

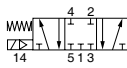
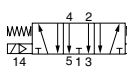
### 15 mm DIN C / 24 Vdc / 1,2 W solenoid valve operator

Symbol	Description	Size	Weight (g)	Order code
	 5/2 Single solenoid - Spring return	02 - 18 mm	130	<b>DX02-621-951M</b>
		01 - 26mm	170	<b>DX01-621-951M</b>
	 5/2 Single solenoid - Differential	02 - 18 mm	130	<b>DX02-651-951M</b>
		01 - 26mm	170	<b>DX01-651-951M</b>
	 5/2 Double solenoid	02 - 18 mm	130	<b>DX02-606-951M</b>
		01 - 26mm	170	<b>DX01-606-951M</b>
	 5/3 Closed Centre	02 - 18 mm	130	<b>DX02-616-951M</b>
		01 - 26mm	170	<b>DX01-616-951M</b>
	 5/3 Vented Center	02 - 18 mm	160	<b>DX02-611-951M</b>
		01 - 26mm	170	<b>DX01-611-951M</b>

Solenoid connectors & cable plugs to be ordered separately. See solenoid section

## ISOMAX - ISO 15407-1 - Sizes 02 & 01

### Without 15 mm DIN C solenoid valve operator


Symbol	Description	Size	Weight (g)	Order code
	 5/2 Single solenoid - Spring return	02 - 18 mm	130	<b>DX02-621-60</b>
		01 - 26mm	170	<b>DX01-621-60</b>
	 5/2 Single solenoid - Differential	02 - 18 mm	130	<b>DX02-651-60</b>
		01 - 26mm	170	<b>DX01-651-60</b>
	 5/2 Double solenoid	02 - 18 mm	130	<b>DX02-606-60</b>
		01 - 26mm	170	<b>DX01-606-60</b>
	 5/3 Closed Centre	02 - 18 mm	130	<b>DX02-616-60</b>
		01 - 26mm	170	<b>DX01-616-60</b>
	 5/3 Vented Center	02 - 18 mm	160	<b>DX02-611-60</b>
		01 - 26mm	170	<b>DX01-611-60</b>

15mm solenoid valve operator, solenoid connectors & cable plug to be ordered separately. See solenoid section

**ISOMAX - ISO 5599-1 - Sizes 1, 2 & 3**

**Pneumatic remote pilot or CNOMO operator - DIN or M12 connection**

**Order chart**



**For Electro-Pneumatic pilot valve only  
Solenoid valve operator definition**

**DX 1 - 6 51 - B L 49**

Size	
1	Size 1
2	Size 2
3	Size 3

Pilot	
4	Pneumatic
6	Electro-Pneumatic

Valve function	
----------------	--

Internal pilot supply	
06	5/2 double solenoid
56	5/2 double solenoid, 14 prioritised
21	5/2 single solenoid, spring return
51	5/2 single solenoid, differential return
11	5/3 double solenoid vented centre
13	5/3 double solenoid pressurised center *
16	5/3 double solenoid closed centre

External pilot 14 supply / Capture exhaust 12	
05	5/2 double solenoid
59	5/2 double solenoid, 14 prioritised
23	5/2 single solenoid, spring return
54	5/2 single solenoid, differential return
09	5/3 double solenoid vented centre
14	5/3 double solenoid pressurised center *
19	5/3 double solenoid closed centre

Voltage	
---------	--

Blank	Operator only (without coil)
-------	------------------------------

M12 connection	
----------------	--

19	24 Vdc
----	--------

DIN connector	
---------------	--

45	12 Vdc
49	24 Vdc
40	12 Vac - 50/60 Hz
42	24 Vac - 50/60 Hz
53	110 Vac - 50Hz / 120 Vac - 60Hz
57	230 Vac - 50/60 Hz

Solenoid enclosure	
--------------------	--

CNOMO 30 x 30 Operator for Low Power Coil	
---	--

L	Operator with coil
N	Operator only without coil

M12 connector	
---------------	--

2	One connector per distributor
6	One built-in connector per coil

Manual override	
-----------------	--

On Pneumatic Valves or Electric Valves without operator	
---	--

60	Without direct spool override
70	With direct spool override

On electric operator *	
------------------------	--

A	Without any
B	Non locking - Flush - Metal
C	Locking - Flush - Plastic


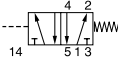
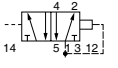
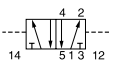
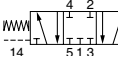
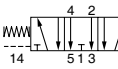
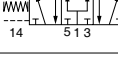
\* Without direct valve spool manual override

Shaded part numbers constituted with shaded voltage code are available from stock.  
 Shaded part numbers constituted by unshaded voltage code are available on request but are subject to a minimum order quantity. Otherwise, select « Blank » as voltage code and order coil separately.

## ISOMAX - ISO 5599-1 - Sizes 1, 2 & 3

### Pneumatic remote pilot operated


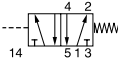
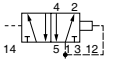
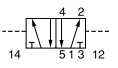
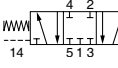
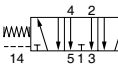
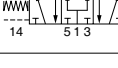
With direct valve spool manual override

Symbol	Description	Size	Weight (g)	Order code	
		5/2 Air pilot - Spring return	1 - 43 mm	350	<b>DX1-421-70</b>
		2 - 56 mm	600	<b>DX2-421-70</b>	
		3 - 71 mm	1100	<b>DX3-421-70</b>	
	5/2 Air pilot - Differential	1 - 43 mm	350	<b>DX1-451-70</b>	
		2 - 56 mm	600	<b>DX2-451-70</b>	
		3 - 71 mm	1100	<b>DX3-451-70</b>	
	5/2 Double air pilot	1 - 43 mm	350	<b>DX1-406-70</b>	
		2 - 56 mm	600	<b>DX2-406-70</b>	
		3 - 71 mm	1100	<b>DX3-406-70</b>	
	5/3 Closed Center	1 - 43 mm	350	<b>DX1-416-70</b>	
		2 - 56 mm	600	<b>DX2-416-70</b>	
		3 - 71 mm	1100	<b>DX3-416-70</b>	
	5/3 Vented Center	1 - 43 mm	350	<b>DX1-411-70</b>	
		2 - 56 mm	600	<b>DX2-411-70</b>	
		3 - 71 mm	1100	<b>DX3-411-70</b>	
	5/3 Pressurised Center	1 - 43 mm	350	<b>DX1-413-70</b>	
		2 - 56 mm	600	<b>DX2-413-70</b>	

## ISOMAX - ISO 5599-1 - Sizes 1, 2 & 3




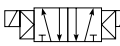
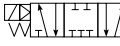


### Pneumatic remote pilot operated

Without direct valve spool manual override

Symbol	Description	Size	Weight (g)	Order code	
		5/2 Air pilot - Spring return	1 - 43 mm	350	<b>DX1-421-60</b>
		2 - 56 mm	600	<b>DX2-421-60</b>	
		3 - 71 mm	1100	<b>DX3-421-60</b>	
	5/2 Air pilot - Differential	1 - 43 mm	350	<b>DX1-451-60</b>	
		2 - 56 mm	600	<b>DX2-451-60</b>	
		3 - 71 mm	1100	<b>DX3-451-60</b>	
	5/2 Double air pilot	1 - 43 mm	350	<b>DX1-406-60</b>	
		2 - 56 mm	600	<b>DX2-406-60</b>	
		3 - 71 mm	1100	<b>DX3-406-60</b>	
	5/3 Closed Center	1 - 43 mm	350	<b>DX1-416-60</b>	
		2 - 56 mm	600	<b>DX2-416-60</b>	
		3 - 71 mm	1100	<b>DX3-416-60</b>	
	5/3 Vented Center	1 - 43 mm	350	<b>DX1-411-60</b>	
		2 - 56 mm	600	<b>DX2-411-60</b>	
		3 - 71 mm	1100	<b>DX3-411-60</b>	
	5/3 Pressurised Center	1 - 43 mm	350	<b>DX1-413-60</b>	
		2 - 56 mm	600	<b>DX2-413-60</b>	

## ISOMAX - ISO 5599-1 - Sizes 1, 2 & 3 CNOMO operator with 30 x 30 DIN Form A / 24 Vdc / 2,7 W solenoid








With non locking manual override on solenoid valve operator - Without direct valve spool manual override

Symbol	Description	Size	Weight (g)	Order code
	5/2 Single solenoid - Spring return 	1 - 43 mm	500	<b>DX1-621-BL49</b>
		2 - 56 mm	750	<b>DX2-621-BL49</b>
		3 - 71 mm	1250	<b>DX3-621-BL49</b>
	5/2 Single solenoid - Differential	1 - 43 mm	500	<b>DX1-651-BL49</b>
		2 - 56 mm	750	<b>DX2-651-BL49</b>
		3 - 71 mm	1250	<b>DX3-651-BL49</b>
	5/2 Double solenoid	1 - 43 mm	650	<b>DX1-606-BL49</b>
		2 - 56 mm	900	<b>DX2-606-BL49</b>
		3 - 71 mm	1400	<b>DX3-606-BL49</b>
	5/3 Closed Center	1 - 43 mm	560	<b>DX1-616-BL49</b>
		2 - 56 mm	900	<b>DX2-616-BL49</b>
		3 - 71 mm	1400	<b>DX3-616-BL49</b>
	5/3 Vented Center	1 - 43 mm	650	<b>DX1-611-BL49</b>
		2 - 56 mm	900	<b>DX2-611-BL49</b>
		3 - 71 mm	1400	<b>DX3-611-BL49</b>
	5/3 Pressurised Center	1 - 43 mm	650	<b>DX1-613-BL49</b>
		2 - 56 mm	900	<b>DX2-613-BL49</b>

Solenoid connectors & cable plug to be ordered separately. See solenoid section

## ISOMAX - ISO 5599-1 - Sizes 1, 2 & 3 CNOMO operator without coil

With non locking manual override on solenoid valve operator - Without direct valve spool manual override


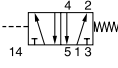
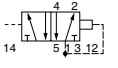
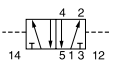
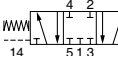
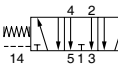
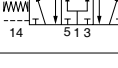
Symbol	Description	Size	Weight (g)	Order code
	5/2 Single solenoid - Spring return 	1 - 43 mm	400	<b>DX1-621-BN</b>
		2 - 56 mm	650	<b>DX2-621-BN</b>
		3 - 71 mm	1150	<b>DX3-621-BN</b>
	5/2 Single solenoid - Differential	1 - 43 mm	400	<b>DX1-651-BN</b>
		2 - 56 mm	650	<b>DX2-651-BN</b>
		3 - 71 mm	1150	<b>DX3-651-BN</b>
	5/2 Double solenoid	1 - 43 mm	550	<b>DX1-606-BN</b>
		2 - 56 mm	800	<b>DX2-606-BN</b>
		3 - 71 mm	1300	<b>DX3-606-BN</b>
	5/3 Closed Center	1 - 43 mm	550	<b>DX1-616-BN</b>
		2 - 56 mm	800	<b>DX2-616-BN</b>
		3 - 71 mm	1300	<b>DX3-616-BN</b>
	5/3 Vented Center	1 - 43 mm	550	<b>DX1-611-BN</b>
		2 - 56 mm	800	<b>DX2-611-BN</b>
		3 - 71 mm	1300	<b>DX3-611-BN</b>
	5/3 Pressurised Center	1 - 43 mm	550	<b>DX1-613-BN</b>
		2 - 56 mm	800	<b>DX2-613-BN</b>

30 x 30 DIN Form A or 22 x 30 DIN Form B coil & coil connectors to be ordered separately. See solenoid section




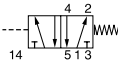
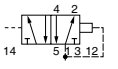
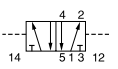
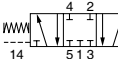
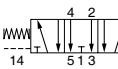
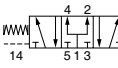
## ISOMAX - ISO 5599-1 - Sizes 1, 2 & 3 Valve alone without operator

With direct valve spool manual override

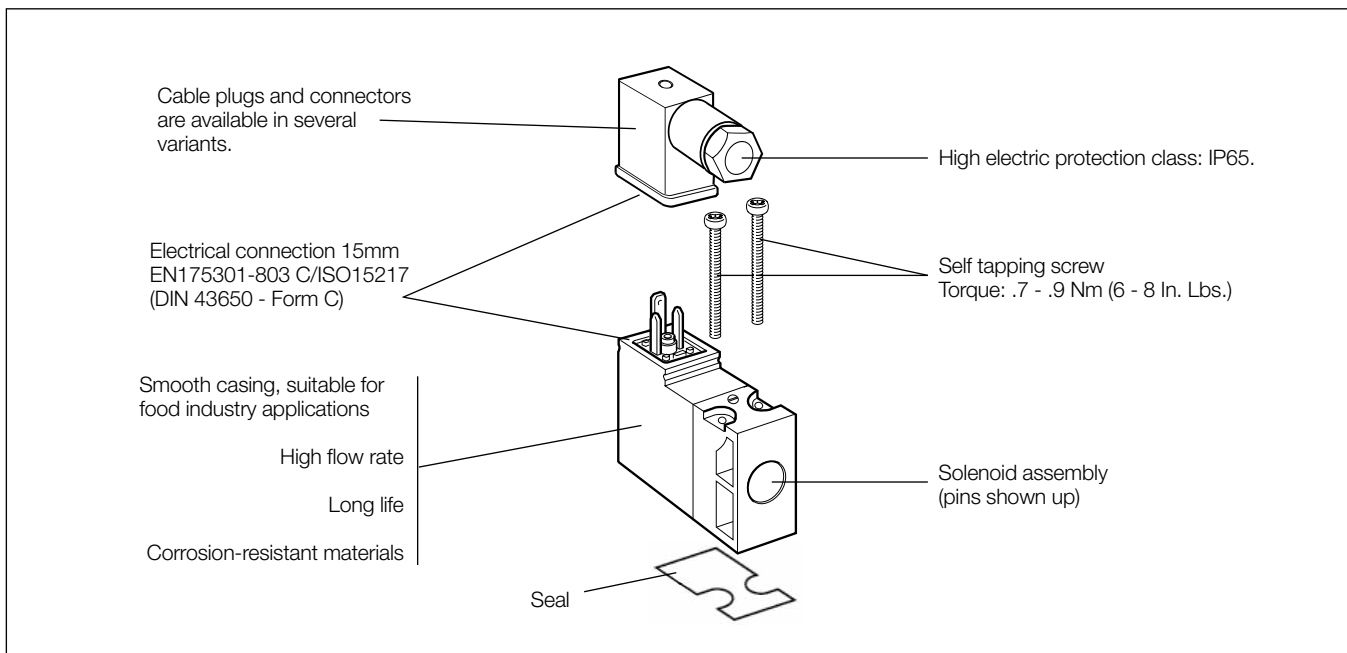
Symbol	Description	Size	Weight (g)	Order code	
		5/2 Single pilot - Spring return	1 - 43 mm	350	<b>DX1-621-70</b>
		2 - 56 mm	600	<b>DX2-621-70</b>	
		3 - 71 mm	1100	<b>DX3-621-70</b>	
	5/2 Single pilot - Differential	1 - 43 mm	350	<b>DX1-651-70</b>	
		2 - 56 mm	600	<b>DX2-651-70</b>	
		3 - 71 mm	1100	<b>DX3-651-70</b>	
	5/2 Double pilot	1 - 43 mm	350	<b>DX1-606-70</b>	
		2 - 56 mm	600	<b>DX2-606-70</b>	
		3 - 71 mm	1100	<b>DX3-606-70</b>	
	5/3 Closed Center	1 - 43 mm	350	<b>DX1-616-70</b>	
		2 - 56 mm	600	<b>DX2-616-70</b>	
		3 - 71 mm	1100	<b>DX3-616-70</b>	
	5/3 Vented Center	1 - 43 mm	350	<b>DX1-611-70</b>	
		2 - 56 mm	600	<b>DX2-611-70</b>	
		3 - 71 mm	1100	<b>DX3-611-70</b>	
	5/3 Pressurised Center	1 - 43 mm	350	<b>DX1-613-70</b>	
		2 - 56 mm	600	<b>DX2-613-70</b>	

## ISOMAX - ISO 5599-1 - Sizes 1, 2 & 3 Valve alone without operator

Without direct valve spool manual override

Symbol	Description	Size	Weight (g)	Order code	
		5/2 Single pilot - Spring return	1 - 43 mm	350	<b>DX1-621-60</b>
		2 - 56 mm	600	<b>DX2-621-60</b>	
		3 - 71 mm	1100	<b>DX3-621-60</b>	
	5/2 Single pilot - Differential	1 - 43 mm	350	<b>DX1-651-60</b>	
		2 - 56 mm	600	<b>DX2-651-60</b>	
		3 - 71 mm	1100	<b>DX3-651-60</b>	
	5/2 Double pilot	1 - 43 mm	350	<b>DX1-606-60</b>	
		2 - 56 mm	600	<b>DX2-606-60</b>	
		3 - 71 mm	1100	<b>DX3-606-60</b>	
	5/3 Closed Center	1 - 43 mm	350	<b>DX1-616-60</b>	
		2 - 56 mm	600	<b>DX2-616-60</b>	
		3 - 71 mm	1100	<b>DX3-616-60</b>	
	5/3 Vented Center	1 - 43 mm	350	<b>DX1-611-60</b>	
		2 - 56 mm	600	<b>DX2-611-60</b>	
		3 - 71 mm	1100	<b>DX3-611-60</b>	
	5/3 Pressurised Center	1 - 43 mm	350	<b>DX1-613-60</b>	
		2 - 56 mm	600	<b>DX2-613-60</b>	

## 15 mm N.C. Solenoid Operator - DIN Form C for ISOMAX 15407-1 Sizes 02 & 01



### Technical data

	<b>NC, Standard</b>	<b>NC, Food<sup>1)</sup></b>	<b>NC, Mobile<sup>2)</sup></b>
Working pressure	0 to 10 bar	0 to 10 bar	0 to 10 bar
Working temperature	-15 °C to +60 °C	-15 °C to +60 °C	-40 °C to +70 °C
Orifice	1,0 mm	1,0 mm	1,0 mm
Flow Q <sub>max</sub>	33 Nl/min	33 Nl/min	22 Nl/min
Power, hold	DC 1,2 W / AC 1,6 VA *	DC 1,2 W / AC 1,6 VA *	DC 1,4 W
Power, surge	DC 1,2 W / AC 3,5 VA *	DC 1,2 W / AC 3,5 VA *	DC 1,4 W
Connection time	100%	100%	100%
Voltage tolerance	+10%/-15%	+10%/-15%	+25%/-30%
Electric connection:	Form C/ISO15217		
Port pattern:	To future CNOMO standard		
Protection:	IP 65		
Approval:	Some valves are UL 429 recognised and marked with the following symbol		
Working media:	All neutral media, such as compressed air, water, hydraulic oil and many gases.		
1) Design:	Completely smooth exterior, suitable for food industry.		
2) Mobile standard	According to European standard EN 50 155.		

\* Power, hold for 230VAC 2.4VA  
 Power, surge for 230VAC 5.5VA

### Transients

Interrupting the current through the solenoid coil produces momentary voltage peaks which, under unfavourable conditions, can amount to several hundred times the rated operating voltage. Normally, these transients do not cause problems, but to achieve the maximum life of relays in the circuit (and particularly of transistors, thyristors and integrated circuits) it is desirable to provide protection by means of voltage-dependent resistors (varistors). All cable plugs with a yellow LED also incorporate such protection.

### Service life

With compressed air at 6 bar, 20 °C and complying with the requirements for compressed air quality as set out in ISO8573-1 norm (class 4 for dry and class 5 for filtered air), the valves should have a life of at least 50 million cycles.

### Materials

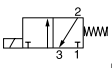


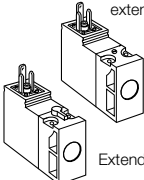




#### Operator

Body, coil casing	Thermoplastic
Internal metal parts	Steel
Screws	Stainless steel
Bottom plug	Thermoplastic
Sealing materials	FPM (Viton™) and nitrile rubber

#### Cable head

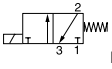
Sheath	Thermoplastic
Retaining screw	Stainless steel, zinc-plated steel

## 15 mm N.C. Solenoid Operator - Standard version

Voltage	W (g)	Order code	Not Extended			Extended	
			Without Manual Override	Blue Override non locking flush	Yellow Override Locking flush	Blue Override non locking flush	Yellow Override Locking flush
 Not extended	12 Vdc	38	 <b>P2E-KV32B0</b>	<b>P2E-KV32B1</b>	<b>P2E-KV32B2</b>		
	24 Vdc	38	 <b>P2E-KV32C0</b>	<b>P2E-KV32C1</b>	<b>P2E-KV32C2</b>	<b>P2E-KV32C3</b>	<b>P2E-KV32C4</b>
 Extended	48 Vdc	38	 <b>P2E-KV32D0</b>	<b>P2E-KV32D1</b>	<b>P2E-KV32D2</b>		
	24 Vac 50 Hz	38	 <b>P2E-KV31C0</b>	<b>P2E-KV31C1</b>	<b>P2E-KV31C2</b>	<b>P2E-KV31C3</b>	<b>P2E-KV31C4</b>
	48 Vac 50/60Hz	38	 <b>P2E-KV34D0</b>	<b>P2E-KV34D1</b>	<b>P2E-KV34D2</b>		
	115 Vac 50Hz/ 120 Vac 60Hz	38	 <b>P2E-KV31F0</b>	<b>P2E-KV31F1</b>	<b>P2E-KV31F2</b>		
	230 Vac 50Hz	38	<b>P2E-KV31J0</b>	<b>P2E-KV31J1</b>	<b>P2E-KV31J2</b>		
	240 Vac 60Hz/						

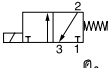





Mounting screws included with the solenoid valve operator

## 15 mm N.C. Solenoid Operator - Mobile version

Voltage	W (g)	Order code	Without Manual Override	Not Extended Blue Override non locking flush
			Order code	Order code
 Not extended	12 Vdc	38	<b>P2E-MV35B0</b>	<b>P2E-MV35B1</b>
	24 Vdc	38	<b>P2E-MV35C0</b>	<b>P2E-MV35C1</b>
	37,5 Vdc	38	<b>P2E-MV35W0</b>	<b>P2E-MV35W1</b>
	48 Vdc	38	<b>P2E-MV35D0</b>	<b>P2E-MV35D1</b>
	72 Vdc	38	<b>P2E-MV35T0</b>	<b>P2E-MV35T1</b>
	78 Vdc	38	<b>P2E-MV35Y0</b>	<b>P2E-MV35Y1</b>
	96 Vdc	38	<b>P2E-MV35V0</b>	<b>P2E-MV35V1</b>
	110 Vdc	38	<b>P2E-MV35E0</b>	<b>P2E-MV35E1</b>



Mounting screws included with the solenoid valve operator

## 15 mm N.C. Solenoid Operator - Food Industry version

Voltage	W (g)	Order code	Not Extended			Extended	
			Without Manual Override	Blue Override non locking flush	Yellow Override Locking flush	Blue Override non locking flush	Yellow Override Locking flush
 Not extended	24 Vdc	38	 <b>P2E-QV32C0</b>	<b>P2E-QV32C1</b>	<b>P2E-QV32C2</b>	<b>P2E-QV32C3</b>	<b>P2E-QV32C4</b>
	48 Vdc	38	 <b>P2E-QV32D0</b>	<b>P2E-QV32D1</b>	<b>P2E-QV32D2</b>		
	24 Vac 50 Hz	38	 <b>P2E-QV31C0</b>	<b>P2E-QV31C1</b>	<b>P2E-QV31C2</b>	<b>P2E-QV31C3</b>	<b>P2E-QV31C4</b>
	48 Vac 50/60Hz	38	 <b>P2E-QV34D0</b>	<b>P2E-QV34D1</b>	<b>P2E-QV34D2</b>		
	115 Vac 50Hz/ 120 Vac 60Hz	38	 <b>P2E-QV31F0</b>	<b>P2E-QV31F1</b>	<b>P2E-QV31F2</b>	<b>P2E-QV31F3</b>	<b>P2E-QV31F4</b>
	230 Vac 50Hz	38	<b>P2E-QV31J0</b>	<b>P2E-QV31J1</b>	<b>P2E-QV31J2</b>	<b>P2E-QV31J3</b>	<b>P2E-QV31J4</b>
	240 Vac 60Hz/						

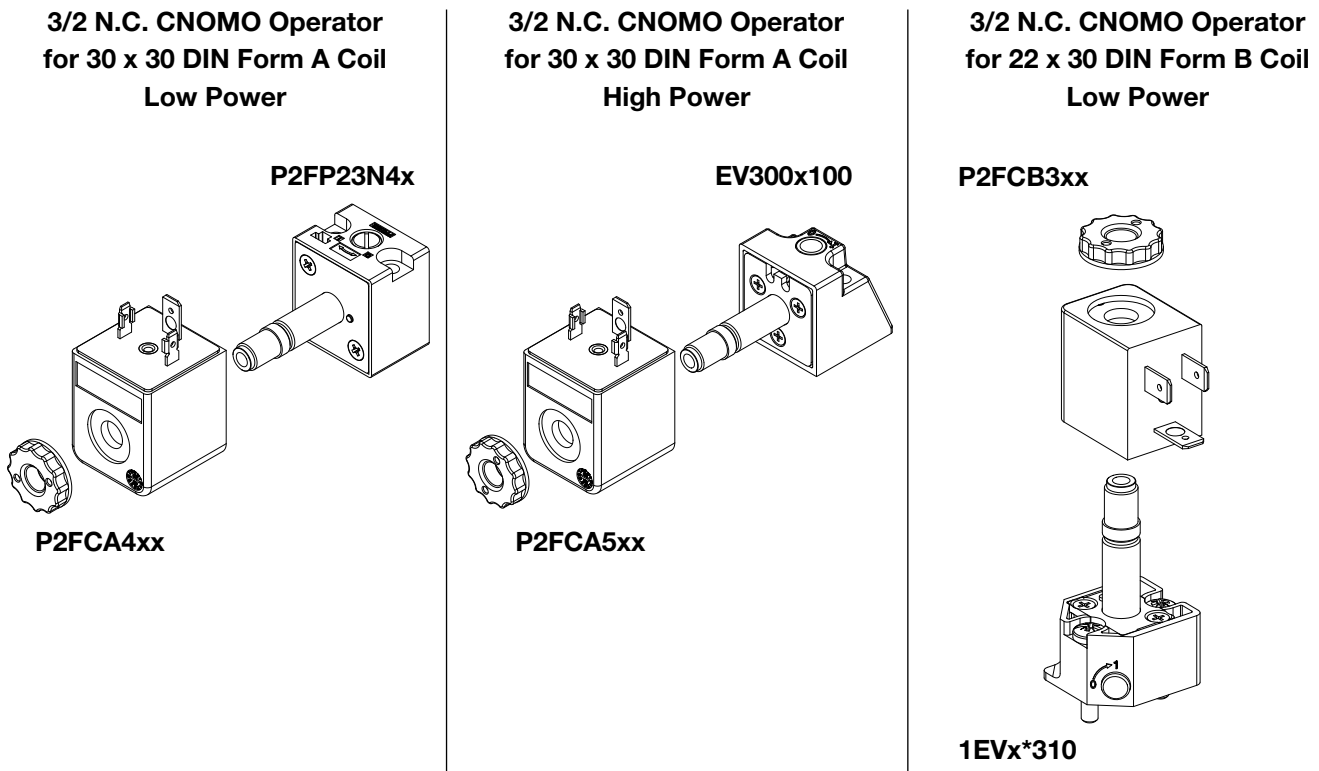
Mounting screws included with the solenoid valve operator

## Solenoid Connectors 15 mm DIN Form C / ISO15217

Description	Characteristic	Visualisation	Cable length	W (g)	Order code
 With large headed screw suitable for mounting in inaccessible or recess position	Standard IP65	No LED	No cable	20	<b>P8C-C</b>
		24 Vdc LED	No cable	20	<b>P8C-C26C</b>
		110 Vac LED	No cable	20	<b>P8C-C21E</b>
 With standard screw	Standard IP65	No LED	No cable	15	<b>P8C-D</b>
			2 meters	115	<b>P8L-C2</b>
			5 meters	240	<b>P8L-C5</b>
		24 Vdc/Vac LED	No cable	15	<b>P8C-D26C</b>
			2 meters	170	<b>P8L-C226C</b>
			5 meters	240	<b>P8L-C526C</b>
		110 Vac LED	10 meters	440	<b>P8L-CA26C</b>
			No cable	115	<b>P8C-D21E</b>
			2 meters	115	<b>P8L-C221E</b>
			5 meters	230	<b>P8L-C521E</b>

In accordance with the EU Machine Directive, EN 983, solenoid valves with manual override should have spring-return operating arms for safety.




### 3/2 N.C. CNOMO Operator for 30 x 30 DIN Form A or 22 x 30 DIN Form B coils




### Technical data - Solenoid operator & Coil combinations

		3/2 N.C. CNOMO Operators		
		30 x 30 DIN Form A Coil		22 x 30 DIN Form B Coil
		Low Power	High Power	Low Power
Working pressure		0 to 10 bar		
Ambient temperature		-10°C to 60°C (1)	-10°C to 60°C (1)	-25°C to 60°C (1)
Orifice		1.3/1.5mm	1.3/1.5mm	1.2/1.3mm
Nominal Flow Qn		0.84 dm³/s	0.84 dm³/s	0.7 dm³/s
Power	AC Voltages	2,5W	4,5W	3 W
	DC Voltages	3VA	5VA	50 Hz : 5 VA / 60 Hz : 4,2 VA
Voltage tolerance		+/- 10%		
Duty cycle		100%		
Insulation class		F		
Electric connection		DIN A		DIN B
Protection IP65		IP65		
Shock		According to IEC 68-2-6 (2G - from 2 to 150 Hz)		
Vibration		According to IEC 68 - 2 - 7 (15G - 11 m/s)		
Working media		All neutral media such as compressed air and inert gases		

### 3/2 N.C. CNOMO Operator - Without Coil

Description	Manual override	W (g)	Order code
 Solenoid operator for 30 x 30 DIN Form A Coil Dedicated to Low Power 2,5W / 3VA Coil	No manual override	65	<b>P2FP23N4A</b>
	Pulse non locking	65	<b>P2FP23N4B</b>
	Locking	65	<b>P2FP23N4C</b>
 Solenoid operator for 30 x 30 DIN Form A Coil Dedicated to High Power 4,5W / 5VA Coil	No manual override	65	<b>EV3000100</b>
	Pulse non locking	65	<b>EV3001100</b>
	Locking	65	<b>EV3003100</b>
 Solenoid operator for 22 x 30 DIN Form B Coil Dedicated to Low Power 2,5W / 4,5VA Coil	No manual override	65	<b>1EV0*310</b>
	Pulse non locking	65	<b>1EV1*310</b>
	Locking	65	<b>1EV3*310</b>



### 30 x 30 DIN Form A and 22 x 30 DIN Form B Coils for CNOMO Operator

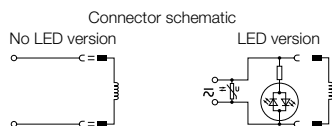
Voltage	W (g)	30 x 30 DIN Form A		22 x 30 DIN Form B		
		Order code	Order code	W (g)	Order code	
	12 Vdc	105	<b>P2FCA445</b>	<b>P2FCA545</b>	93	<b>P2FCB345</b>
	24 Vdc	105	<b>P2FCA449</b>	<b>P2FCA549</b>	93	<b>P2FCB349</b>
	48 Vdc	105	<b>P2FCA451</b>	<b>P2FCA551</b>	93	<b>P2FCB351</b>
	12 Vac 50/60 Hz	105	<b>P2FCA440</b>	<b>P2FCA540</b>	93	<b>P2FCB340</b>
	24 Vac 50/60 Hz	105	<b>P2FCA445</b>	<b>P2FCA545</b>	93	<b>P2FCB345</b>
	48 Vac 50/60 Hz	105	<b>P2FCA449</b>	<b>P2FCA549</b>	93	<b>P2FCB349</b>
	110 Vac 50 Hz / 120 Vac 60 Hz	105	<b>P2FCA453</b>	<b>P2FCA553</b>	93	<b>P2FCB353</b>
	230 Vac 50 Hz / 240 Vac 60 Hz	105	<b>P2FCA457</b>	<b>P2FCA557</b>	93	<b>P2FCB357</b>

### Spare Solenoid Nuts

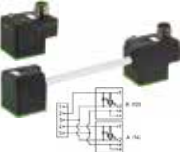
Description	Usage	W (g)	Order code	
	Plastic knurled nut	For valve requiring Captured exhaust	5	<b>P2FNPA</b>
	Diffuser plastic nut	For valve requiring Vented exhaust	5	<b>P2FNDA</b>

### 30 x 30 DIN Form A and 22 x 30 DIN Form B Solenoid Connectors

Description	Characteristic	Visualisation	Cable length	W (g)	Order code	
	30 x 30 DIN Form A connector With standard screw	Standard IP65	No LED	No cable	15	<b>3EV290V10</b>
			24 Vdc/Vac LED	No cable	30	<b>3EV290V20-24</b>
				5 meters	355	<b>3EV290V20-24L5</b>
			110 Vac LED	No cable	30	<b>3EV290V20-110</b>
				5 meters	470	<b>3EV290V20-110L5</b>
			230 Vac LED	No cable	30	<b>3EV290V20-230</b>
	22 x 30 DIN Form B connector With standard screw	Standard IP65	No LED	No cable	15	<b>3EV10V10</b>
				24 Vdc/Vac LED	No cable	20
			5 meters		350	<b>3EV10V20-24L5</b>
			110 Vac LED	No cable	25	<b>3EV10V20-110</b>
				5 meters	355	<b>3EV10V20-110L5</b>
			230 Vac LED	No cable	25	<b>3EV10V20-230</b>
				5 meters	360	<b>3EV10V20-230L5</b>



### M12 Adaptor for 30 x 30 DIN Form A Coil

Description	Characteristics	Visualisation	Cable	W (g)	Order code	
	M12 Connector for one coil	24 V AC/DC - 4A	LED	No cable	30	<b>P8C-A626C</b>
	M12 Connector for two coils	24 V AC/DC - 4A	LED	No cable	70	<b>P8C-AM26C</b>

**Note:** Solenoid pilot operators are fitted to the ISO 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.**

## Isys ISO - Heavy Duty Applications

### Market Applications

- Automotive
- Machine tools
- Mobile



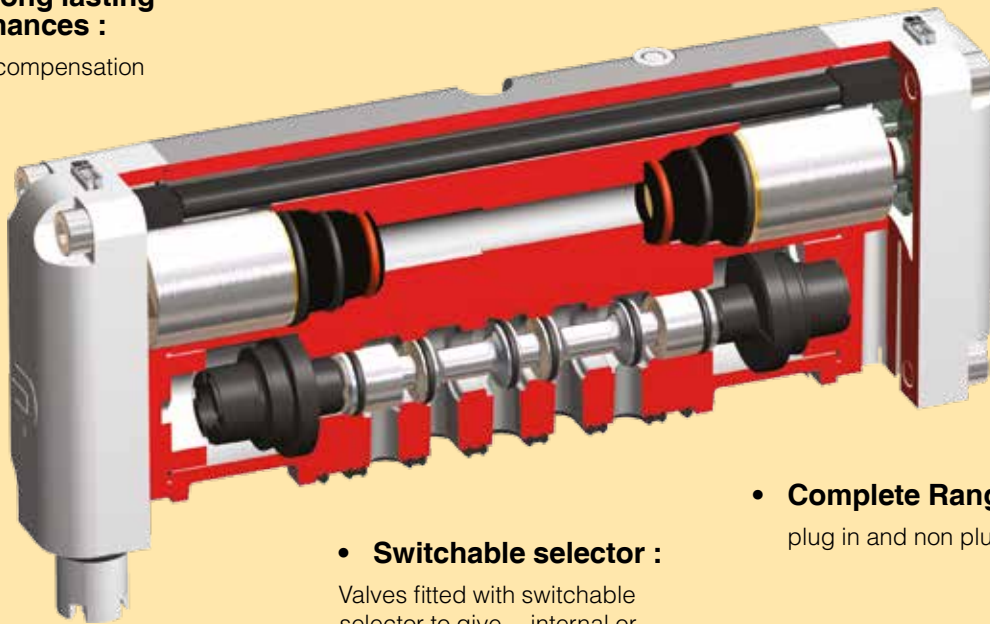
- **Excellent reliability :**

Long life in excess of 30 million operations.

- **Heavy Duty Metal Body**

- **Stable long lasting performances :**

due to wear compensation



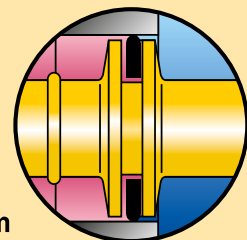
- **Complete Range :**  
plug in and non plug in

- **Switchable selector :**

Valves fitted with switchable selector to give internal or external pilot supply

- **WCS Spool Technology**

**WCS**  
Wear Compensating System



## Isys ISO Features

### Complete ISO valve range

ISO 15407-1, ISO 15407-2, ISO 5599-1, ISO 5599-2, ISO 4400 DIN A, 12mm, 23 mm, multipole and centralized fieldbus are all feature of Isys ISO valve.

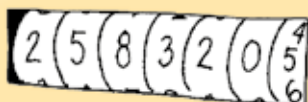
### Heavy duty and corrosion resistant body

with a valve body made of painted die casted aluminium and polyamide reinforced glassfiber caps, Isys Iso are suitable for heavy duty environment

### External supply selection

In order to use actuator with low pressure, it is possible to connect an external pressure on port 14 to supply both solenoids. Selection is easily made by reversing the gasket under the operator.

### High reliability



Valves comply with the requirements for the component reliability in accordance with EU Machinery Directive standards EN292-2 and EN983.

### Mobile applications

Isys ISO range could be fit with a metal mobile CNOMO solenoid. Available with different coil voltages, allowing +/- 30% voltage tolerance, operating from -15°C to 50°C, under demanding vibration and shock condition, Isys ISO is suitable for mobile and railway applications.

### Solenoid valves, CNOMO interface, integrated solenoid



The standard valve is fitted with a 30mm solenoid having DIN 43650 Industrial form A connector for sizes 1, 2 and 3. For sizes 01 and 02, the solenoid is integrated in the valve body.

### Central M12 & M23 connection or M12 coil

Sizes 01 & 02 are available with a central M12 connection  
 Sizes 1, 2 & 3 are available with a central M12 or M23 connector, compatible with different automotive standard, but also with 30x30 coil having the M12 connection.

### Internal or external led & rectifier

Sizes 01 & 02 have integrated Led and rectifier, for all connections. Sizes 1,2, 3 are available with integrated Led and rectifier in the coil or basic Din A coil.

### High electrical encapsulation class



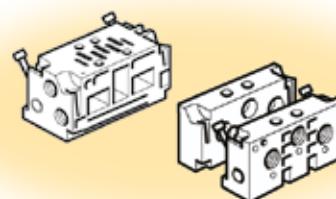
The solenoid valves are protected to IP65 with the standard cable plug. Available with DIN A or M12 connection.

### Wide range of solenoid connectors / cable plugs for ISO 5599-1



Solenoid connectors are available with or without LED and rectifier and may be selected fitted pre-wired with flying leads.

### Bottom or side ported manifolds and subbases



Manifolds are common for ISO 15407-1 & ISO 5599-1. A dedicated range of manifold is available for Isys ISO with integrated electrical connection in the base (plug in)

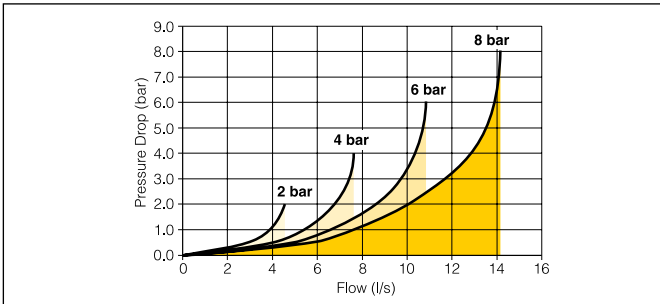
### Insensitive to dirty air

Thanks to large flow passage areas and the large flow diameter of 1.3 in the pilot valves, the ISO valve can be used in normal industrial or mobile environments without any problems of blocking. However the service life of the valve depends on the cleanliness of the air. Please refer to ISO 8573.

**Isys ISO Flow Characteristics**

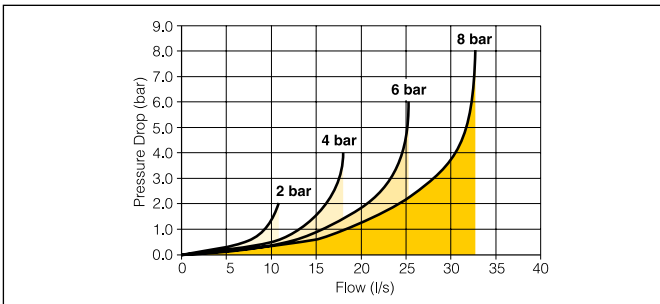
Flow capacities in accordance with ISO6358, for 5/2 function. 5/3 function are around 10 to 20% less

**Technical Data Isys ISO Size 02**



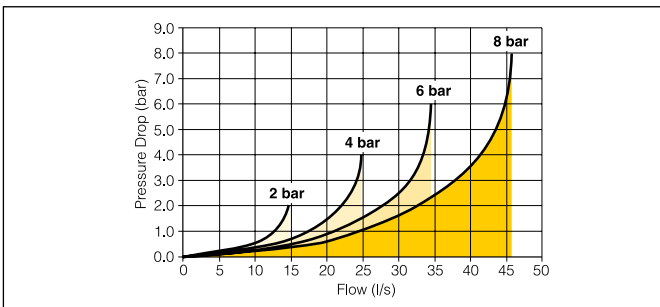
Operating pressure.	
5/2 Spring return	2,0 - 10 bar
5/2 Differential	2,0 - 10 bar
5/2 Double solenoid	2,0 - 10 bar
5/3 Double solenoid	2,5 - 10 bar
Working temperature.	
-15°C to + 50°C	
Flow (acc. to ISO 6358)	
c = 1,5 NI/s x bar	
b = 0,25	
Qn = 6,5 l/s	
Qmax = 10,8 l/s	

**Technical Data Isys ISO Size 01**



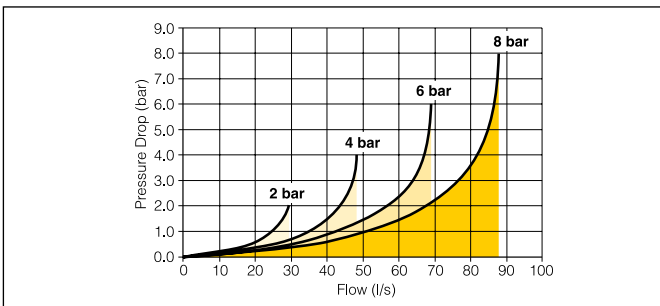
Operating pressure.	
5/2 Spring return	2,0 - 10 bar
5/2 Differential	1,7 - 10 bar
5/2 Double solenoid	1,7 - 10 bar
5/3 Double solenoid	2,5 - 10 bar
Working temperature.	
-15°C to + 50°C	
Flow (acc. to ISO 6358)	
c = 3,6 NI/s x bar	
b = 0,30	
Qn = 15,3 l/s	
Qmax = 25,3 l/s	

**Technical Data Isys ISO Size 1**



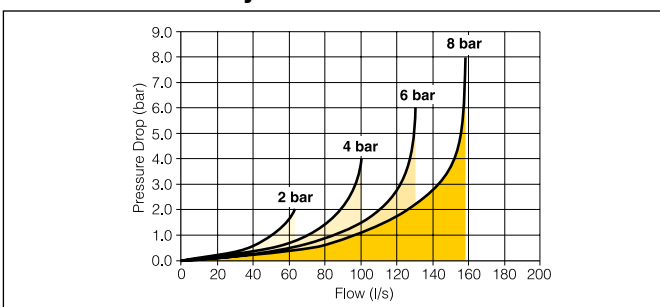
Operating pressure.	
5/2 Spring return	2,4 - 10 bar
5/2 Differential	1,7 - 10 bar
5/2 Double solenoid	1,7 - 10 bar
5/3 Double solenoid	2,5 - 10 bar
Working temperature.	
-15°C to + 50°C	
Flow (acc. to ISO 6358)	
c = 5,0 NI/s x bar	
b = 0,30	
Qn = 20,8 l/s	
Qmax = 34,5 l/s	

**Technical Data Isys ISO Size 2**



Operating pressure.	
5/2 Spring return	3,1 - 10 bar
5/2 Differential	1,7 - 10 bar
5/2 Double solenoid	1,7 - 10 bar
5/3 Double solenoid	3,5 - 10 bar
Working temperature.	
-15°C to + 50°C	
Flow (acc. to ISO 6358)	
c = 9,7 NI/s x bar	
b = 0,35	
Qn = 42,0 l/s	
Qmax = 69,0 l/s	

**Technical Data Isys ISO Size 3**



Operating pressure.	
5/2 Spring return	3,1 - 10 bar
5/2 Differential	2,5 - 10 bar
5/2 Double solenoid	2,5 - 10 bar
5/3 Double solenoid	3,5 - 10 bar
Working temperature.	
-15°C to + 50°C	
Flow (acc. to ISO 6358)	
c = 18,7 NI/s x bar	
b = 0,35	
Qn = 83,7 l/s	
Qmax = 130,8 l/s	



## Isys ISO Material Specification and Characteristics

### Material specification

Valve body:	Die cast aluminium
End cover:	PBT
Spool:	Aluminium + nitrile rubber
Piston:	Acetal plastic
End cover sealing:	Nitrile rubber
Fasteners:	Zinc plated steel

### HA & HB Solenoids

Minimum operating voltage:	DC 20,4 V, AC 102 V
Power:	DC 1W, AC 2VA
Bi polar:	
Surge suppressor:	Standard
Light indicator:	Standard

### Characteristics

Fluid:	Air, inert gas filtered 40u class 5 according to ISO 8573-1 dry class 4 according to ISO 8573-1 non-lubricated, or lubricated -20° to + 70°
Storage temperature	
Vibration, according to IEC 68-2-6	2G 2 to 150Hz
Shock, according to IEC 68-2-7	15G 11ms
Manual override	Non-locking, other type on request

### Plug-in Solenoids

Minimum operating voltage:	DC 20,4 V, AC 102 V
Power:	DC 3W, AC 4,5VA
Bi polar:	
Surge suppressor:	On lighted coils
Light indicator:	Standard

### Certification


CSA / C-US approved	
EMC / CE mark.	According to EN 61 000-6-2
Dust & water protection	IP65 according to EN 60529

### Changeover time (ms) at 6 bar - Actua. / Return

Valve Function	Solenoid Operated Valves						Pneumatic Operated Valves						
	15407-1-M12 15407-2 - Plug-in		5599-1 - CNOMO operator			5599-1-M12 5599-2 - Plug-in			15407-1		5599-1		
	02	01	1	2	3	1	2	3	02	01	1	2	3
	20/40	20/45	25/35	40/70	70/80	30/40	45/70	75/80	15/30	15/40	20/30	35/70	65/75
	15/40	15/50	25/45	35/80	55/85	30/50	40/80	60/85	10/30	15/35	20/40	30/80	50/85
	10/10	10/10	15/15	20/20	25/25	20/20	25/25	30/30	8/8	10/10	12/12	16/16	20/20
	15/60	15/50	15/60	30/75	23/80	20/65	35/80	40/85	15/35	15/40	15/55	20/70	30/80
	15/60	15/50	15/60	30/75	23/80	20/65	35/80	40/85	15/35	15/40	15/55	20/70	30/80
	15/60	15/50	15/60	30/75	23/80	20/65	35/80	40/85	15/35	15/40	15/55	20/70	30/80

**Isys ISO - 15407-1 - Pneumatic remote pilot operated**

**Order chart**



**H B 3 WX 000 XX A**


Size	
<b>B</b>	ISO 15407 - 18mm
<b>A</b>	ISO 15407 - 26mm

Valve type function	
<b>3</b>	Single remote pilot, 2 position - Differential
<b>4</b>	Double remote pilot, 2 position
<b>8</b>	Double remote pilot, 3 position - APB
<b>9</b>	Double remote pilot, 3 position - CE
<b>0</b>	Double remote pilot, 3 position - PC
<b>F</b>	Single solenoid, 2 position, Differential, spring assist

Shaded part numbers are standard

**Isys ISO - 15407-1 - Integrated M12 connector**

**Order chart**



**H B 1 WX B G 2 G9 000F A**

Size	
<b>B</b>	ISO 15407 - 18mm
<b>A</b>	ISO 15407 - 26mm

Pilot source / Pilot exhaust	
<b>B</b>	Internal pilot
<b>L</b>	External pilot

Voltage	
<b>G9</b>	24 Vdc

M12 connector	
<b>2</b>	1 connector

Valve type function	
<b>1</b>	Single solenoid, 2 position - Differential
<b>2</b>	Double solenoid, 2 position
<b>5</b>	Double solenoid, 3 position - APB
<b>6</b>	Double solenoid, 3 position - CE
<b>7</b>	Double solenoid, 3 position - PC
<b>E</b>	Single solenoid, 2 position, Differential, spring assist

Overrides	
<b>G</b>	Non-locking, flush, push - w/ light
<b>H</b>	Locking, flush, push / turn - w/ light


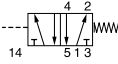
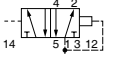
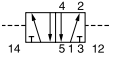

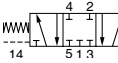
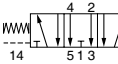
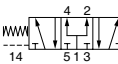
Shaded voltage part numbers are available from stock. Unshaded part numbers are available on request but will be subject to minimum order quantities. Otherwise order coil/solenoid and valve separately.

Shaded part numbers are standard

## Isys ISO 15407-1 - Sizes 02 & 01

### Pneumatic remote pilot operated


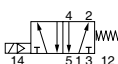
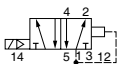


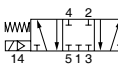

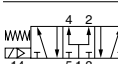
Oriented side 14, LED & Surge suppressor

	Symbol	Description	Size	Weight (g)	Order code	
		5/2 Air pilot - Spring return	02 - 18 mm	150	<b>HBFWX000XXA</b>	
			01 - 26 mm	250	<b>HAFWX000XXA</b>	
		5/2 Air pilot - Differential	02 - 18 mm	150	<b>HB3WX000XXA</b>	
			01 - 26 mm	250	<b>HA3WX000XXA</b>	
HB 18 mm		5/2 Double air pilot	02 - 18 mm	165	<b>HB4WX000XXA</b>	
			01 - 26 mm	265	<b>HA4WX000XXA</b>	
		5/3 Closed Center	02 - 18 mm	165	<b>HB8WX000XXA</b>	
			01 - 26 mm	265	<b>HA8WX000XXA</b>	
		5/3 Vented Center	02 - 18 mm	165	<b>HB9WX000XXA</b>	
			01 - 26 mm	265	<b>HA9WX000XXA</b>	
	HA 26 mm		5/3 Pressurised Center	02 - 18 mm	165	<b>HB0WX000XXA</b>
				01 - 26 mm	265	<b>HA0WX000XXA</b>

## Isys ISO 15407-1 - Sizes 02 & 01

### With 24 Vdc / 1 W built-in coil - Integrated M12 connector

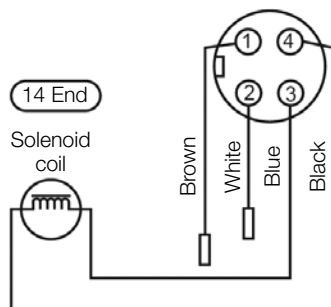
Oriented side 14, LED & Surge suppressor

	Symbol	Description	Size	Weight (g)	Order code	
		5/2 Single solenoid - Spring return	02 - 18 mm	150	<b>HBEXWBG2G9000FA</b>	
			01 - 26 mm	250	<b>HAEXWBG2G9000FA</b>	
		5/2 Single solenoid - Differential	02 - 18 mm	150	<b>HB1WXBG2G9000FA</b>	
			01 - 26 mm	250	<b>HA1WXBG2G9000FA</b>	
HB 18 mm		5/2 Double solenoid	02 - 18 mm	165	<b>HB2WXBG2G9000FA</b>	
			01 - 26 mm	265	<b>HA2WXBG2G9000FA</b>	
		5/3 Closed Center	02 - 18 mm	165	<b>HB5WXBG2G9000FA</b>	
			01 - 26 mm	265	<b>HA5WXBG2G9000FA</b>	
		5/3 Vented Center	02 - 18 mm	165	<b>HB6WXBG2G9000FA</b>	
			01 - 26 mm	265	<b>HA6WXBG2G9000FA</b>	
	HA 26 mm		5/3 Pressurised Center	02 - 18 mm	165	<b>HB7WXBG2G9000FA</b>
				01 - 26 mm	265	<b>HA7WXBG2G9000FA</b>

### ISO 20401

#### 4-Pin Male / Single Solenoid

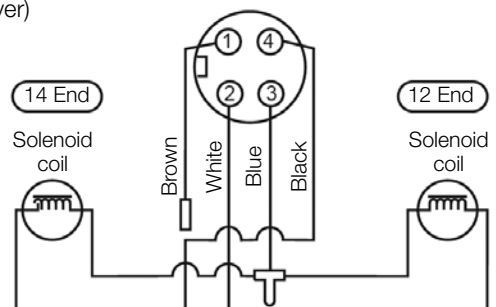
4-PIN Micro  
 (Top Cover)



### ISO 20401

#### 4-Pin Male / Double Solenoid

4-PIN Micro  
 (Top Cover)



**Isys ISO - ISO 5599-1 - CNOMO - Operator - Sizes 1, 2 & 3**

**Order chart**

Size	
1	ISO 5599-1 - Size 1
2	ISO 5599-1 - Size 2
3	ISO 5599-1 - Size 3

Pilot source / Pilot exhaust	
B	Internal pilot
X*	External pilot

\* Must be specified when using Sandwich regulators

Voltage	
42	24 VAC
49	24 VDC
53	120 VAC
57	230 VAC
XX	CNOMO operator only without coil

Shaded voltage part numbers are available from stock.  
 Unshaded part numbers are available on request but will be subject to minimum order quantities.  
 Otherwise order coil/solenoid and valve separately.

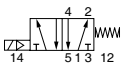
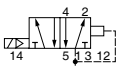
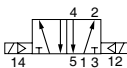
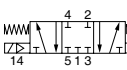
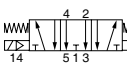
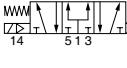
Valve type function	
1	Single solenoid, 2 position - Differential
2	Double solenoid, 2 position
5	Double solenoid, 3 position - APB
6	Double solenoid, 3 position - CE
7	Double solenoid, 3 position - PC
E	Single solenoid, 2 position, Differential, spring assist

DIN connector	
L	30 x 30 DIN form A
N	CNOMO operator only without coil

Overrides	
B	Non-locking, flush, push
C	Locking, flush, push / turn

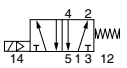
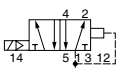
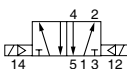
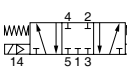
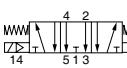
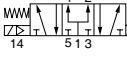
Shaded part numbers are standard

## Isys ISO 5599-1 - Sizes 1, 2 & 3 CNOMO operator with 30 x 30 DIN Form A / 24 Vdc / 2,7 W solenoid

Symbol	Description	Size	Weight (g)	Order code
	5/2 Single solenoid - Spring return	1 - 43 mm	770	<b>H1EWXBBL49D</b>
		2 - 56 mm	1190	<b>H2EWXBBL49D</b>
		3 - 71 mm	1470	<b>H3EWXBBL49D</b>
	5/2 Single solenoid - Differential	1 - 43 mm	770	<b>H11WXBBL49D</b>
		2 - 56 mm	1190	<b>H21WXBBL49D</b>
		3 - 71 mm	1470	<b>H31WXBBL49D</b>
	5/2 Double solenoid	1 - 43 mm	940	<b>H12WXBBL49D</b>
		2 - 56 mm	1360	<b>H22WXBBL49D</b>
		3 - 71 mm	1640	<b>H32WXBBL49D</b>
	5/3 Closed Center	1 - 43 mm	940	<b>H15WXBBL49D</b>
		2 - 56 mm	1360	<b>H25WXBBL49D</b>
		3 - 71 mm	1640	<b>H35WXBBL49D</b>
	5/3 Vented Center	1 - 43 mm	940	<b>H16WXBBL49D</b>
		2 - 56 mm	1360	<b>H26WXBBL49D</b>
		3 - 71 mm	1640	<b>H36WXBBL49D</b>
	5/3 Pressurised Center	1 - 43 mm	940	<b>H17WXBBL49D</b>
		2 - 56 mm	1360	<b>H27WXBBL49D</b>
		3 - 71 mm	1640	<b>H37WXBBL49D</b>

Solenoid connectors & cable plug to be ordered separately. See solenoid section


## Isys ISO 5599-1 - Sizes 1, 2 & 3 CNOMO operator without coil

Symbol	Description	Size	Weight (g)	Order code
	5/2 Single solenoid - Spring return	1 - 43 mm	650	<b>H1EWXBBL49D</b>
		2 - 56 mm	1070	<b>H2EWXBBL49D</b>
		3 - 71 mm	1350	<b>H3EWXBBL49D</b>
	5/2 Single solenoid - Differential	1 - 43 mm	650	<b>H11WXBBL49D</b>
		2 - 56 mm	1070	<b>H21WXBBL49D</b>
		3 - 71 mm	1350	<b>H31WXBBL49D</b>
	5/2 Double solenoid	1 - 43 mm	700	<b>H12WXBBL49D</b>
		2 - 56 mm	1120	<b>H22WXBBL49D</b>
		3 - 71 mm	1400	<b>H32WXBBL49D</b>
	5/3 Closed Center	1 - 43 mm	700	<b>H15WXBBL49D</b>
		2 - 56 mm	1120	<b>H25WXBBL49D</b>
		3 - 71 mm	1400	<b>H35WXBBL49D</b>
	5/3 Vented Center	1 - 43 mm	700	<b>H16WXBBL49D</b>
		2 - 56 mm	1120	<b>H26WXBBL49D</b>
		3 - 71 mm	1400	<b>H36WXBBL49D</b>
	5/3 Pressurised Center	1 - 43 mm	700	<b>H17WXBBL49D</b>
		2 - 56 mm	1120	<b>H27WXBBL49D</b>
		3 - 71 mm	1400	<b>H37WXBBL49D</b>

30 x 30 DIN Form A or 22 x 30 DIN Form B solenoid & solenoid connectors to be ordered separately. See solenoid section

**Isys ISO 5599-1 Sizes 1, 2 & 3 - Integrated M12 connection**

**Order chart**



**H 1 E WX B G 2B 9 000 F D**

Size	
1	ISO 5599-1 - Size 1
2	ISO 5599-1 - Size 2
3	ISO 5599-1 - Size 3

Pilot source / Pilot exhaust	
B	Internal pilot
X*	External pilot

\* Must be specified when using Sandwich regulators

Voltage	
9	24 VDC

Wiring options	
F	Standard

Valve type function	
1	Single solenoid, 2 position - Differential
2	Double solenoid, 2 position
5	Double solenoid, 3 position - APB
6	Double solenoid, 3 position - CE
7	Double solenoid, 3 position - PC
E	Single solenoid, 2 position, Differential, spring assist


Enclosure	
2B	One central connector per distributor
61	One built-in connector per coil

Overrides / Lights	
G	Non-locking, flush, push - w/ light
H	Locking, flush, push / turn - w/ light

Shaded part numbers are standard

**Isys ISO 5599-1 Size 1 / 2 / 3 Remote Pilot**

**Order chart**




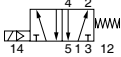
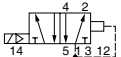
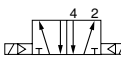
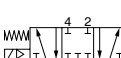
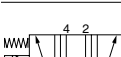
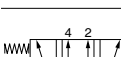
**H 1 F WX 000 XX D**

Size	
1	ISO 5599-1 - Size 1
2	ISO 5599-1 - Size 2
3	ISO 5599-1 - Size 3

Valve type function	
3	Single remote pilot, 2 position - Differential
4	Double remote pilot, 2 position
8	Double remote pilot, 3 position - APB
9	Double remote pilot, 3 position - CE
0	Double remote pilot, 3 position - PC
F	Single remote pilot, 2 position, Differential, spring assist

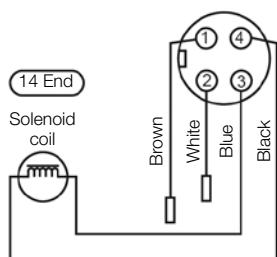
Shaded part numbers are standard

## Isys ISO 5599-1 - Sizes 1, 2 & 3 CNOMO operator with Central M12 connector / 24 Vdc / 2,7 W solenoid

Symbol	Description	Size	Weight (g)	Order code	
		5/2 Single solenoid - Spring return	1 - 43 mm	770	<b>H1EWXBG2B9000FD</b>
		2 - 56 mm	1290	<b>H2EWXBG2B9000FD</b>	
		3 - 71 mm	1570	<b>H3EWXBG2B9000FD</b>	
	5/2 Single solenoid - Differential	1 - 43 mm	770	<b>H11WXBG2B9000FD</b>	
		2 - 56 mm	1290	<b>H21WXBG2B9000FD</b>	
		3 - 71 mm	1570	<b>H31WXBG2B9000FD</b>	
	5/2 Double solenoid	1 - 43 mm	1040	<b>H12WXBG2B9000FD</b>	
		2 - 56 mm	1460	<b>H22WXBG2B9000FD</b>	
		3 - 71 mm	1740	<b>H32WXBG2B9000FD</b>	
	5/3 Closed Center	1 - 43 mm	1040	<b>H15WXBG2B9000FD</b>	
		2 - 56 mm	1460	<b>H25WXBG2B9000FD</b>	
		3 - 71 mm	1740	<b>H35WXBG2B9000FD</b>	
	5/3 Vented Center	1 - 43 mm	1040	<b>H16WXBG2B9000FD</b>	
		2 - 56 mm	1460	<b>H26WXBG2B9000FD</b>	
		3 - 71 mm	1740	<b>H36WXBG2B9000FD</b>	
	5/3 Pressurised Center	1 - 43 mm	1040	<b>H17WXBG2B9000FD</b>	
		2 - 56 mm	1460	<b>H27WXBG2B9000FD</b>	
		3 - 71 mm	1740	<b>H37WXBG2B9000FD</b>	

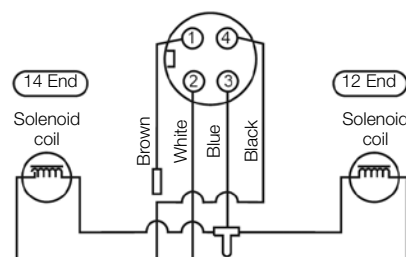
### ISO 20401 4-Pin Male / Single Solenoid

4-PIN Micro  
(Top Cover)


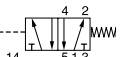
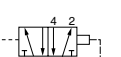
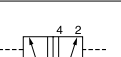
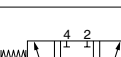
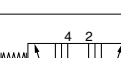
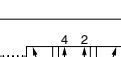


### ISO 20401 4-Pin Male / Double Solenoid

4-PIN Micro  
(Top Cover)




## Isys ISO 5599-1 - Sizes 1, 2 & 3 Pneumatic Remote Pilot operated valve

Symbol	Description	Size	Weight (g)	Order code	
		5/2 Air pilot - Spring return	1 - 43 mm	600	<b>H1FWX000XXD</b>
		2 - 56 mm	1020	<b>H2FWX000XXD</b>	
		3 - 71 mm	1300	<b>H3FWX000XXD</b>	
	5/2 Air pilot - Differential	1 - 43 mm	600	<b>H13WX000XXD</b>	
		2 - 56 mm	1020	<b>H23WX000XXD</b>	
		3 - 71 mm	1300	<b>H33WX000XXD</b>	
	5/2 Double Air pilot	1 - 43 mm	600	<b>H14WX000XXD</b>	
		2 - 56 mm	1020	<b>H24WX000XXD</b>	
		3 - 71 mm	1300	<b>H34WX000XXD</b>	
	5/3 Closed Center	1 - 43 mm	600	<b>H18WX000XXD</b>	
		2 - 56 mm	1020	<b>H28WX000XXD</b>	
		3 - 71 mm	1300	<b>H38WX000XXD</b>	
	5/3 Vented Center	1 - 43 mm	600	<b>H19WX000XXD</b>	
		2 - 56 mm	1020	<b>H29WX000XXD</b>	
		3 - 71 mm	1300	<b>H39WX000XXD</b>	
	5/3 Pressurised Center	1 - 43 mm	600	<b>H10WX000XXD</b>	
		2 - 56 mm	1020	<b>H20WX000XXD</b>	
		3 - 71 mm	1300	<b>H30WX000XXD</b>	


30 x 30 DIN Form A or 22 x 30 DIN Form B solenoid & solenoid connectors to be ordered separately. See solenoid section

## ISO 15407-1 Subbases & Manifolds


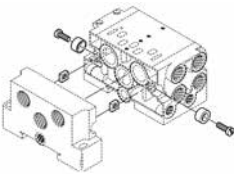
### Side ported individual subbase - ISO 15407-1 - Sizes 02 & 01

Description	Size	Port Size	Weight (g)	Order code
 <p><b>Individual Subbase</b> Can be used for External pilot supply or Single or Double pneumatic remote pilot</p>	02 - 18 mm	1/8 BSPP	70	<b>PL02-01-70</b>
		1/8 NPT	70	<b>PL02-01-80</b>
	01 - 26 mm	1/4 BSPP	120	<b>PL01-02-70</b>
		1/4 NPT	120	<b>PL01-02-80</b>

### Front ported manifold & End plate - ISO 15407-1 - Sizes 02 & 01

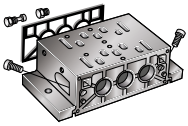
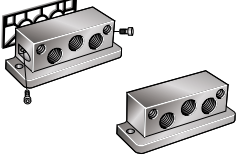

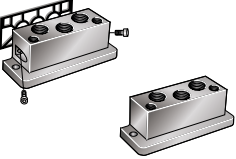

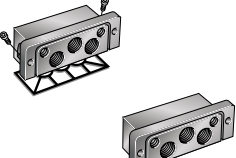

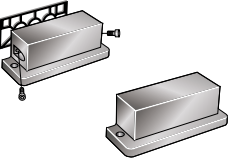

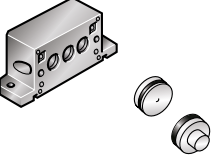
Description	Size	Port Size	Weight (g)	Order code
 <p><b>Two position manifold base</b> Can be used for External pilot supply Cannot be used for remote pilot</p>	02 - 18 mm	1/8 BSPP	140	<b>PJLP02-201-70</b>
		1/8 NPT	140	<b>PJLP02-201-80</b>
	01 - 26 mm	1/4 BSPP	700	<b>PJLP01-202-70</b>
		1/4 NPT	700	<b>PJLP01-202-80</b>
<p><b>Two position manifold base</b> Can be used for External pilot supply using #14 or Single or Double pneumatic remote pilot</p>	01 - 26 mm	1/4 BSPP	730	<b>PJL01-202-70</b>
		1/4 NPT	730	<b>PJL01-202-80</b>
<p><b>End plate kit</b></p>	02 - 18 mm	1/4 BSPP	150	<b>PEJ02-02-70</b>
		1/4 NPT	150	<b>PEJ02-02-80</b>
	01 - 26 mm	3/8 BSPP	520	<b>PEJ01-03-70</b>
		3/8 NPT	520	<b>PEJ01-03-80</b>

## Accessories

Description	Size	Weight (g)	Order code
 <p><b>Blanking plate</b></p>	02 - 18 mm	40	<b>DX02BLK</b>
	01 - 26 mm	50	<b>DX01BLK</b>
<p><b>Blanking plug</b></p>	02 - 18 mm	10	<b>D02BD0</b>
	01 - 26 mm	20	<b>D01BD0</b>
 <p><b>Front Ported Manifold Assembling Kit</b> Including 10 Bolts, 10 Washers &amp; 10 Nuts</p>	02 - 18 mm & 01 - 26 mm	120	<b>DX02M2MB</b>

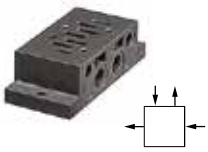


## Bottom ported manifold & End plate - ISO 15407-1 - Sizes 02 & 01




Description		Size	Port Size	Weight (g)	Order code	
	<b>Two valve position manifold</b>	Int. pilot supply	02 - 18 mm	1/8 BSPP	200	<b>P2V-AM511PB</b>
			01 - 26 mm	1/4 BSPP	400	<b>P2V-BM512PB</b>
	Including seal, fitting screws and plugs.	Ext. pilot supply	02 - 18 mm	1/8 BSPP	200	<b>P2V-AM511NB</b>
			01 - 26 mm	1/4 BSPP	400	<b>P2V-BM512NB</b>
	<b>Side ported</b>	Left end plate	02 - 18 mm	1/4 BSPP	180	<b>P2V-AM512GS</b>
		Including seal and fitting screws	01 - 26 mm	3/8 BSPP	210	<b>P2V-BM513GS</b>
		Right end plate	02 - 18 mm	1/4 BSPP	180	<b>P2V-AM512HS</b>
			01 - 26 mm	3/8 BSPP	210	<b>P2V-BM513HS</b>
	<b>Top ported</b>	Left end plate	02 - 18 mm	1/4 BSPP	180	<b>P2V-AM512GT</b>
		Including seal and fitting screws	01 - 26 mm	3/8 BSPP	210	<b>P2V-BM513GT</b>
		Right end plate	02 - 18 mm	1/4 BSPP	180	<b>P2V-AM512HT</b>
			01 - 26 mm	3/8 BSPP	210	<b>P2V-BM513HT</b>
	<b>Bottom ported</b>	Left end plate	02 - 18 mm	1/4 BSPP	180	<b>P2V-AM512GB</b>
		Including seal and fitting screws	01 - 26 mm	3/8 BSPP	220	<b>P2V-BM513GB</b>
		Right end plate	02 - 18 mm	1/4 BSPP	180	<b>P2V-AM512HB</b>
			01 - 26 mm	3/8 BSPP	220	<b>P2V-BM513HB</b>
	<b>End cover</b>	Left end plate	02 - 18 mm		190	<b>P2V-AM500G0</b>
		Including seal and fitting screws	01 - 26 mm		240	<b>P2V-BM500G0</b>
		Right end plate	02 - 18 mm		190	<b>P2V-AM500H0</b>
			01 - 26 mm		240	<b>P2V-BM500H0</b>
<b>Size manifolds adaptor plate</b>		01 to 02		330	<b>P2V-AM500BE</b>	
	<b>Plug</b>	Left end plate	02 - 18 mm		4	<b>P2V-AK0P</b>
			01 - 26 mm		10	<b>P2V-BK0P</b>

## ISO 5599-1 Subbase & Manifolds


### VDMA Side Ported Subbases

Description	Size	Port size	Weight (g)	Order code
 <p><b>Subbases VDMA</b> Side port according to VDMA</p>	1 - 43mm	G1/4	160	<b>P2N-VS512SD</b>
	2 - 56mm	G3/8	280	<b>P2N-WS513SD</b>
	3 - 71mm	G1/2	350	<b>P2N-YS514SD</b>


### VDMA Bottom Ported Manifold

Description	Size	Port size	Weight (g)	Order code
 <p><b>VDMA Form C</b> Bottom port according to VDMA</p>	1 - 43mm	G1/4	240	<b>P2N-VM512MB</b>
	2 - 56mm	G3/8	360	<b>P2N-WM513MB</b>
	3 - 71mm	G1/2	700	<b>P2N-YM514MB</b>
 <p><b>VDMA Transition plate</b> Size 1 to Size 3 <b>Kit includes:</b> Transition plate only</p>	1 to 3	G1/4		<b>P2N-VM500AK</b>
 <p><b>VDMA Form D - End plate</b> According to VDMA</p>	1 - 43mm	G3/8	210	<b>P2N-VM513ES</b>
	2 - 56mm	G1/2	360	<b>P2N-WM514ES</b>
	3 - 71mm	G1	680	<b>P2N-YM518ES</b>
<p><b>VDMA Isolation - Main galley</b> According to VDMA</p> <p><b>Kit includes:</b> (1) Isolator plug.</p>	1 - 43mm			<b>P2N-VK0P</b>
	2 - 56mm			<b>P2N-WK0P</b>
	3 - 71mm			<b>P2N-YK0P</b>


### Accessories

Description	Size	Port size	Weight (g)	Order code
 <p><b>Blanking plate</b></p> <p><b>Kit includes:</b> (1) Blanking plate, (1) Gasket and (4) Mounting bolts</p>	1 - 43mm	G1/4	100	<b>P2N-AA5B</b>
	2 - 56mm	G3/8	150	<b>P2N-BA5B</b>
	3 - 71mm	G1/2	200	<b>P2N-CA5B</b>






## Side ported subbases

Description	Size	Port size	Weight (g)	Order code BSP	Order code NPT
 <b>Single subbase</b> 1 3 5 2 4 ports & 12 14	1 - 43mm	G1/4	160	<b>PL1-1/4-70</b>	<b>PL1-1/4-80</b>
		G3/8	160	<b>PL1-3/8-70</b>	
	2 - 56mm	G3/8	280	<b>PL2-3/8-70</b>	<b>PL2-3/8-80</b>
		G1/2		<b>P2N-HS514SS</b>	
	3 - 71mm	G1/2		<b>PL3-1/2-70</b>	<b>PL3-1/2-80</b>
		G3/4		<b>P2N-JS516SD</b>	



## Bottom ported subbases

Description	Size	Port size	Weight (g)	Order code BSP	Order code NPT
 <b>Single subbase</b> 1 3 5 2 4 ports & 12 14	1 - 43mm	G1/4	370	<b>PD1-1/4-70</b>	<b>PD1-1/4-80</b>
	2 - 56mm	G3/8	590	<b>PD2-3/8-70</b>	<b>PD2-3/8-80</b>
	3 - 71mm	G1/2	590	<b>PD3-1/2-70</b>	

## Size 1 bottom ported manifold

Description	Size	Port size	Weight (g)	Order code
 <b>Manifold</b> with bottom ports low profile	1 - 43mm	G1/4	20	<b>P2N-AM512MB</b>
 <b>Connecting block</b> Top or bottom ported connecting block for above manifold "low profile"	1 - 43mm	G3/8	150	<b>P2N-AM513GT</b>
 <b>End</b> End piece for above manifold "low profile"	1 - 43mm	no	6	<b>P2N-AM500J</b>
 <b>Intermediate supply</b> Top or bottom ported intermediate supply for above manifold "low profile"	1 - 43mm	G3/8	140	<b>P2N-AM513BT</b>
 <b>Isolation plugs</b> isolating seal for above manifold "low profile"	1 - 43mm		070	<b>P2N-AK0P</b>

## Sizes 1 & 2 side ported manifold

Description	Size	Port size	Weight (g)	Order code
 <b>Manifold</b> Manifold with side port	1 - 43mm	G1/4	240	<b>P2N-EM512MD</b>
	2 - 56mm	G3/8	210	<b>P2N-FM513MD</b>
 <b>End</b> Side ported connecting kit for above manifold with side ports	1 - 43mm	G3/8	360	<b>P2N-EM513ES</b>
	2 - 56mm	G1/2	290	<b>P2N-FM514ES</b>

**Plug-in 15407-2, Size 02 (18mm - HB) & 01 (26mm - HA) End Plate Kits**

**Order chart**

<b>Size</b>		<b>Thread type</b>	
<b>PS56</b>	ISO 15407-2 - Sizes 02 & 01	<b>0</b>	NPT
		<b>1</b>	BSPP 'G'

<b>End Plate Type</b>	
<b>Individual connection</b>	
<b>3101</b>	No connector - Use with individually wired base
<b>Multiwiring connection</b>	
<b>20L5</b>	16 Points Terminal Strip
<b>20L2</b>	25-Pin - D-Sub
<b>20L4</b>	12-Pin - M23
<b>20M2</b>	19-Pin - M23
<b>20L3</b>	19-Pin - Round, Brad Harrison
<b>Industrial Communication</b>	
<b>20T0</b>	Turck BL67 Valve driver module - without output
<b>20T1</b>	Turck BL67 Valve driver module - For 16 solenoids
<b>20T2</b>	Turck BL67 Valve driver module - For 32 solenoids
<b>20L6</b>	Isysnet Valve driver module
<b>20M4</b>	Moduflex Fieldbus adaptor

Gateways and I/O modules for Turck BL67, Isysnet and Moduflex Bus must be ordered separately  
 (see respective sections)

**Individual connection**

No connector



**Multiwiring connection**

Terminal strip



25 Pin's - D-Sub



12 or 19 Pin's



**With adaptor for Industrial Communication**

TURCK BL67



Isysnet




Moduflex Bus








**Plug-in 15407-2, Size 02 (18mm - HB) & 01 (26mm - HA) End Plate Kits**  
 Left and Right end plates, with pressure exhaust and auxilliary ports


**Individual connection**

	Description	ISO Size	Port size	Weight (g)	Order code
	No connector To be used with individually wired base	02 & 01	G3/8"	1500	<b>PS5631011P</b>




**Multiwiring connection**

	Description	ISO Size	Port size	Weight (g)	Order code
	16-Points Terminal Strip	02 & 01	G3/8"	1500	<b>PS5620L51P</b>
	25-Pin, D-Sub	02 & 01	G3/8"	1500	<b>PS5620L21P</b>
	19-Pin, Round, Brad Harrison	02 & 01	G3/8"	1500	<b>PS5620L31P</b>
	M23, 12-Pin	02 & 01	G3/8"	1500	<b>PS5620L41P</b>
	M23, 19-Pin	02 & 01	G3/8"	1500	<b>PS5620M21P</b>

**Accessories**

	Description	Protection	Length	Weight (g)	Order code
	25-Pin - D-Sub cable	IP40	3 meters	380	<b>P8LMH25M3A</b>
			9 meters	780	<b>P8LMH25M9A</b>
		IP65	9 meters	790	<b>P8LMH25B9A</b>

**Adaptors for Industrial Communication**

	Description	ISO Size	Port size	Weight (g)	Order code
	Turck BL76 Valve Driver Module Without 16 DO module 16 outputs and blank module to be ordered seaparely (See Turck BL67 section)	02 & 01	G3/8"	1500	<b>PS5620T01P</b>
	Turck BL76 Valve Driver Module For configuration up to 16 solenoids Including 1 x 16 DO & 1 blank module	02 & 01	G3/8"	1500	<b>PS5620T11P</b>
	Turck BL76 Valve Driver Module For configuration up to 32 solenoids Including 2 x 16 DO modules	02 & 01	G3/8"	1500	<b>PS5620T21P</b>
	Isysnet Valve Driver Module For configuration up to 32 solenoids	02 & 01	G3/8"	1500	<b>PS5620L61P</b>
	Moduflex Fieldbus module adaptor	02 & 01	G3/8"	1500	<b>PS5620M41P</b>

For Turck BL67, Isysnet, Moduflex communication gateways and I/O modules, refer to respective sections in following pages.

**Plug-in 15407-2, Sizes 02 (18mm - HB) & 01 (26mm - HA) Manifold / Subbase Kits**

**Order chart**

**PS55 11 5 4 M P**

<b>ISO 15407-2 Size</b>	
<b>PS56</b>	Size 02 (HB - 18mm)
<b>PS55</b>	Size 01 (HA - 26mm)


<b>Mounting Style</b>	
<b>1</b>	Subbase - Side ported
<b>2</b>	Subbase - Side & Bottom ported
<b>5</b>	Manifold - Front ported
<b>6</b>	Manifold - Front & Bottom ported

<b>Port Size</b>	
<b>Size 02 (HB - 18mm)</b>	
<b>1</b>	1/8" NPT
<b>2</b>	1/8" BSPP
<b>Size 01 (HA - 26mm)</b>	
<b>3</b>	1/4" NPT
<b>4</b>	1/4" BSPP

<b>Enclosure</b>		
<b>Individually wired subbase</b>		
<b>C</b>	Size 01 (HA - 26mm) Terminal Strip	
<b>Collective Wiring Manifold Circuit Board</b>		
<b>J</b>	Single address	For general usage
<b>N*</b>	address	For address 25 - 26 on expended conf.
<b>M</b>	Double address	For general usage
<b>P*</b>	address	For address 25 - 28 on expended conf.


\* Including ribbon cable for extension on configurations between 25 to 32 solenoid valves

**Subbase Kits**




**HA Series**

**2 stations manifold kits**



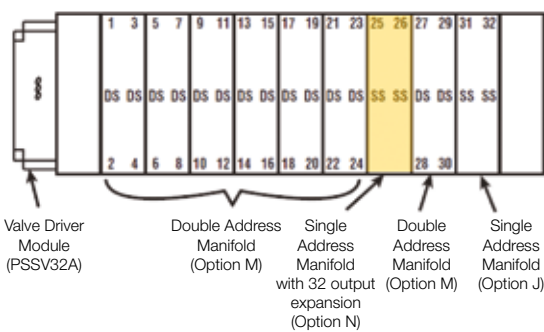
**HB Series**



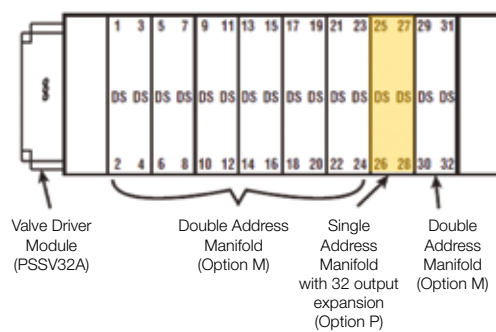
**HA Series**

**Plug-in 15407-2 Manifold expended configuration up to 32 solenoid valves**

**Option 'N'**



**Option 'P'**



When using an HA or HB manifold base with the "N" Enclosure option:


- **Outputs 1 – 24** can be single or double address bases. Use a base with "J" or "M" Enclosure option.
- **Outputs 25 – 26** are a single address base. Use a base with "N" Enclosure option (this is a single address board with a ribbon connection from the valve driver module).
- **Outputs 27 – 32** can be single or double. Use a base with "J" or "M" Enclosure option.

When using an HA or HB manifold base with the "P" Enclosure option:


- **Outputs 1 – 24** can be single or double address bases. Use a base with "J" or "M" Enclosure option.
- **Outputs 25 – 28** are a double address base. Use a base with "P" Enclosure option (this is a double address board with a ribbon connection from the valve driver module).
- **Outputs 29 – 32** can be single or double. Use a base with "J" or "M" Enclosure option.

## Plug-in 15407-2, Size 02 (18mm - HB) & 01 (26mm - HA) Manifold Kits



### 2 Position Front Ported Manifold

Description		ISO Size	Port size	Weight (g)	Order code	
	Non collective wiring	Terminal strip For single or double solenoid valves	01	G1/4"	520	<b>PS551154CP</b>
	Collective wiring	Single address board For single solenoid valves	02	G1/8"	450	<b>PS561152JP</b>
			01	G1/4"	520	<b>PS551154JP</b>
		Double address board For double solenoid valves	02	G1/8"	450	<b>PS561152MP</b>
			01	G1/4"	520	<b>PS551154MP</b>
	Extension Manifold Including ribbon cable	Single address board For single solenoid valves	02	G1/8"	450	<b>PS561152NP</b>
			01	G1/4"	520	<b>PS551154NP</b>
		Double address board For double solenoid valves	02	G1/8"	450	<b>PS561152PP</b>
			01	G1/4"	520	<b>PS551154PP</b>


### 2 Position Front and Bottom Ported Manifold

Description		ISO Size	Port size	Weight (g)	Order code	
	Non collective wiring	Terminal strip For single or double solenoid valves	01	G1/4"	520	<b>PS551164CP</b>
	Collective wiring	Single address board For single solenoid valves	02	G1/8"	450	<b>PS561162JP</b>
			01	G1/4"	520	<b>PS551164JP</b>
		Double address board For double solenoid valves	02	G1/8"	450	<b>PS561162MP</b>
			01	G1/4"	520	<b>PS551164MP</b>
	Extension Manifold Including ribbon cable	Single address board For single solenoid valves	02	G1/8"	450	<b>PS561162NP</b>
			01	G1/4"	520	<b>PS551164NP</b>
		Double address board For double solenoid valves	02	G1/8"	450	<b>PS561162PP</b>
			01	G1/4"	520	<b>PS551164PP</b>

### Accessories

Description		Blocked ports	ISO Size	Port size	Weight (g)	Order code
	Blanking Plate		02	G1/8"	150	<b>PS5634P</b>
			01	G1/4"	160	<b>PS5534P</b>
	Manifold to Manifold gasket kit	No port plugged	02 & 01		40	<b>PS561AP</b>
		#1	02 & 01		60	<b>PS561BP</b>
		#1, 3 & 5	02 & 01		50	<b>PS561CP</b>
		#3 & 5	02 & 01		50	<b>PS561DP</b>

**Isys ISO Plug in**  
**Order chart**



H B 1 VX B G 0 G9 A

Size	
B	ISO 15407 - 18mm
A	ISO 15407 - 26mm

Pilot source / Pilot exhaust	
B	Internal pilot, port#1 / vented
L	External pilot#14 port / vented

Voltage	
G9	24 VDC
23	115 VAC

Valve type function	
1	Single solenoid, 2 position - Differential
2	Double solenoid, 2 position
5	Double solenoid, 3 position - APB
6	Double solenoid, 3 position - CE
7	Double solenoid, 3 position - PC
E	Single solenoid, 2 position, Air return, spring assist

\* Only available with pilot source / pilot exhaust 'O'.  
 Available on HA only, must use DX01 manifold or HA subbase

Shaded part numbers are standard


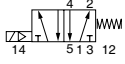
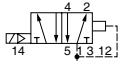

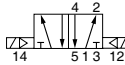
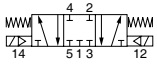
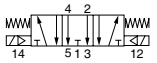
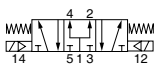
Shaded voltage part numbers are available from stock.  
 Unshaded part numbers are available on request but will be subject to minimum order quantities.  
 Otherwise order coil/solenoid and valve separately.

Overrides	
G	Non-locking, flush, push - w/ light
H	Locking, flush, push / turn - w/ light



## Isys ISO Plug-in 15407-2 - Sizes 02 & 01 With 24 Vdc / 1 W built-in coil

Manual override non locking, LED & surge suppressor

	Symbol	Description	Size	Weight (g)	Order code
 HB 18 mm		5/2 single solenoid - Spring return	02 - 18mm	130	<b>HB5VXBG0G9A</b>
			01 - 26mm	230	<b>HA5VXBG0G9A</b>
		5/2 single solenoid - Differential	02 - 18mm	130	<b>HB1VXBG0G9A</b>
			01 - 26mm	230	<b>HA1VXBG0G9A</b>
 HA 26 mm		5/2 double solenoid	02 - 18mm	145	<b>HB2VXBG0G9A</b>
			01 - 26mm	245	<b>HA2VXBG0G9A</b>
		5/3 Closed center	02 - 18mm	145	<b>HB5VXBG0G9A</b>
			01 - 26mm	245	<b>HA5VXBG0G9A</b>
		5/3 Vented center	02 - 18mm	145	<b>HB6VXBG0G9A</b>
			01 - 26mm	245	<b>HA6VXBG0G9A</b>
	5/3 Pressurised center	02 - 18mm	145	<b>HB7VXBG0G9A</b>	
		01 - 26mm	245	<b>HA7VXBG0G9A</b>	

**Plug-in ISO 5599-2, Sizes 1, 2 & 3 End Plate Kits**

**Order chart**

**PS40 20L2 1 CP**

Size	
PS40	ISO 5599-2 - Size 1
PS41	ISO 5599-2 - Size 2
PS42	ISO 5599-2 - Size 3

Thread type	
0	NPT
1	BSPP 'G'

End Plate Type	
<b>Individual connection</b>	
3101	No connector - Use with individually wired base
<b>Multiwiring connection</b>	
20L2	25-Pin - D-Sub
20L4	12-Pin - M23
20M2	19-Pin - M23
20L3	19-Pin - Round, Brad Harrison
<b>Industrial Communication</b>	
20T0	Turck BL67 Valve driver module - without output
20T1	Turck BL67 Valve driver module - For 16 solenoids
20T2	Turck BL67 Valve driver module - For 32 solenoids
20L6	Isysnet Valve driver module
20M4	Moduflex Fieldbus adaptor

- Moduflex Fieldbus Gateways must be ordered separately (See Moduflex Valve System Technical Catalogue)
- Turck BL67, Isysnet Gateways and I/O modules must be ordered separately (See Turck BL67 or Isysnet section)

**Individual connection**

No connector



**Multiwiring connection**

25 Pin's - D-Sub



12 or 19 Pin's



**With adaptor for Industrial Communication**

TURCK BL67



Isysnet




Moduflex Bus






## Plug-in 5599-2, Sizes 1, 2 & 3 End Plate Kits

Left and Right end plates, with pressure exhaust and auxilliary ports


### Individual connection

	Description	ISO Size	Port size	Weight (g)	Order code
	No connector	Size 1	G1/2"	1360	<b>PS4031011CP</b>
	To be used with individually wired base	Size 2	G3/4"	1600	<b>PS4131011CP</b>
		Size 3	G3/4"	2800	<b>PS4231011CP</b>






### Multiwiring connection

	Description	ISO Size	Port size	Weight (g)	Order code
	25-Pin, D-Sub	Size 1	G1/2"	1360	<b>PS4020L21CP</b>
		Size 2	G3/4"	1600	<b>PS4120L21CP</b>
		Size 3	G3/4"	2800	<b>PS4220L21CP</b>
	19-Pin, Round, Brad Harrison	Size 1	G1/2"	1360	<b>PS4020L31CP</b>
		Size 2	G3/4"	1600	<b>PS4120L31CP</b>
		Size 3	G3/4"	2800	<b>PS4220L31CP</b>
	19-Pin, M23	Size 1	G1/2"	1360	<b>PS4020M21CP</b>
		Size 2	G3/4"	1600	<b>PS4120M21CP</b>
		Size 3	G3/4"	2800	<b>PS4220M21CP</b>
	12-Pin, M23	Size 1	G1/2"	1360	<b>PS4020L41CP</b>
		Size 2	G3/4"	1600	<b>PS4120L41CP</b>
		Size 3	G3/4"	2800	<b>PS4220L41CP</b>

### Accessories

	Description	Protection	Length	Weight (g)	Order code
	25-Pin - D-Sub cable	IP40	3 meters	380	<b>P8LMH25M3A</b>
			9 meters	780	<b>P8LMH25M9A</b>
		IP65	9 meters	790	<b>P8LMH25B9A</b>

### Adaptors for Industrial Communication

	Description	ISO Size	Port size	Weight (g)	Order code
	Turck BL76 Valve Driver Module Without 16 DO module 16 outputs and blank module to be ordered seaparely (See Turck BL67 section)	Size 1	G1/2"	1400	<b>PS4020T01CP</b>
		Size 2	G3/4"	1600	<b>PS4120T01CP</b>
		Size 3	G3/4"	2800	<b>PS4220T01CP</b>
	Turck BL76 Valve Driver Module For configuration up to 16 solenoids Including 1 x 16 DO & 1 blank module	Size 1	G1/2"	1520	<b>PS4020T11CP</b>
		Size 2	G3/4"	1720	<b>PS4120T11CP</b>
		Size 3	G3/4"	2920	<b>PS4220T11CP</b>
	Turck BL76 Valve Driver Module For configuration up to 32 solenoids Including 2 x 16 DO modules	Size 1	G1/2"	1520	<b>PS4020T21CP</b>
		Size 2	G3/4"	1720	<b>PS4120T21CP</b>
		Size 3	G3/4"	2920	<b>PS4220T21CP</b>
	Isysnet Valve Driver Module For configuration up to 32 solenoids	Size 1	G1/2"	1580	<b>PS4020L61CP</b>
		Size 2	G3/4"	1800	<b>PS4120L61CP</b>
		Size 3	G3/4"	3000	<b>PS4220L61CP</b>
	Moduflex Fieldbus module adaptor	Size 1	G1/2"	1300	<b>PS4020M41CP</b>
		Size 2	G3/4"	1500	<b>PS4120M41CP</b>
		Size 3	G3/4"	2700	<b>PS4220M41CP</b>

For Turck BL67, Isysnet, Moduflex communication gateways and I/O modules, refer to respective sections in following pages.

**Plug-in 5599-2, Sizes 1, 2 & 3 Manifold / Subbase Kits**

**Order chart**

<b>PS40</b>	<b>11</b>	<b>5</b>	<b>6</b>	<b>J</b>	<b>CP</b>
-------------	-----------	----------	----------	----------	-----------

<b>ISO 5599-2 Size</b>	
<b>PS40</b>	Size 1 (H1 - 43 mm)
<b>PS41</b>	Size 2 (H2 - 56 mm)
<b>PS42</b>	Size 3 (H3 - 71 mm)

<b>Mounting Style</b>	
<b>1</b>	Subbase - Side ported
<b>5</b>	Manifold - Front ported *
<b>6</b>	Manifold - Front & Bottom ported

\* For sizes 2 & 3 only

<b>Port Size</b>	
<b>Size 1 (H1 - 43mm)</b>	
<b>5</b>	3/8" NPT
<b>6</b>	3/8" BSPP
<b>Size 2 (H2 - 56mm)</b>	
<b>7</b>	1/2" NPT
<b>8</b>	1/2" BSPP
<b>Size 3 (H3 - 71mm)</b>	
<b>9</b>	3/4" NPT
<b>0</b>	3/4" BSPP

**Note:**  
 When using the Enclosure 'J' or 'M' option:

**12VDC** Maximum number of coils energised simultaneously is 13

**24VDC** Maximum number of coils energised simultaneously is 21

**120VAC** Coils limited by the number of pins available in the connector:

- 25-Pin D-Sub : 24 coils
- 19-Pin Brad Harrison : 16 coils
- 12-Pin M23 : 8 coils

**240VAC** Must use 'C' option : Terminal strip

<b>Enclosure</b>	
<b>Individually wired subbase</b>	
<b>C</b>	Terminal Strip
<b>Collective Wiring Manifold Circuit Board</b>	
<b>J</b>	Single address
<b>M</b>	Double address

**Subbase kits**




**Manifold kits**




## Plug-in 5599-2, Sizes 1, 2 & 3 Manifold Kits




### Single Position Front Ported Manifold

Description		ISO Size	Port size	Weight (g)	Order code
 Non collective wiring Terminal strip For single or double solenoid valves		2 - 56 mm	G1/2"	1260	<b>PS411158CCP</b>
		3 - 71 mm	G3/4"	2140	<b>PS421150CCP</b>
Collective wiring Single address board For single solenoid valves		2 - 56 mm	G1/2"	1260	<b>PS411158JCP</b>
		3 - 71 mm	G3/4"	2140	<b>PS421150JCP</b>
	Double address board For double solenoid valves	2 - 56 mm	G1/2"	1260	<b>PS411158MCP</b>
		3 - 71 mm	G3/4"	2140	<b>PS421150MCP</b>

### Single Position Front & Bottom Ported Manifold

Description		ISO Size	Port size	Weight (g)	Order code
 Non collective wiring Terminal strip For single or double solenoid valves		1 - 43 mm	G3/8"	1000	<b>PS401166CCP</b>
		2 - 56 mm	G1/2"	1260	<b>PS411168CCP</b>
		3 - 71 mm	G3/4"	2140	<b>PS421160CCP</b>
Collective wiring Single address board For single solenoid valves		1 - 43 mm	G3/8"	1000	<b>PS401166JCP</b>
		2 - 56 mm	G1/2"	1260	<b>PS411168JCP</b>
		3 - 71 mm	G3/4"	2140	<b>PS421160JCP</b>
	Double address board For double solenoid valves	1 - 43 mm	G3/8"	1000	<b>PS401166MCP</b>
		2 - 56 mm	G1/2"	1260	<b>PS411168MCP</b>
		3 - 71 mm	G3/4"	2140	<b>PS421160MCP</b>

### Accessories

Description		ISO Size	Port size	Weight (g)	Order code
 Blanking Plate		1 - 43 mm	G3/8"	150	<b>PS4034CP</b>
		2 - 56 mm	G1/2"	620	<b>PS4134CP</b>
		3 - 71 mm	G3/4"	1500	<b>PS4234CP</b>
 Insulating Plugs		1 - 43 mm	G3/8"	20	<b>PS4032CP</b>
		2 - 56 mm	G1/2"	40	<b>PS4132CP</b>
		3 - 71 mm	G3/4"	100	<b>PS4232CP</b>
 Manifold to Manifold Gasket Kit		1 - 43 mm	G3/8"	20	<b>PS4013P</b>
		2 - 56 mm	G1/2"	40	<b>PS4113P</b>
		3 - 71 mm	G3/4"	100	<b>PS4213P</b>

**Isys ISO - 5599-2 - Size 1 / 2 / 3 - Plug in**  
**Order chart**

Size	
1	ISO 5599-2 - Size 1
2	ISO 5599-2 - Size 2
3	ISO 5599-2 - Size 3

Pilot source / Pilot exhaust	
B	Internal pilot
X*	External pilot

\* Must be specified when using Sandwich regulators

Voltage & Frequency **				
	AC		DC	Light & surge sup
	60Hz	50Hz		
42				
45			12	
B9*			24	LED & Sup
23	120	115		LED & Sup
57	240			
XX	Valve less coil			

\* Solenoid is blue

Valve type function	
1	Single solenoid, 2 position - Differential
2	Double solenoid, 2 position
5	Double solenoid, 3 position - APB
6	Double solenoid, 3 position - CE
7	Double solenoid, 3 position - PC
E	Single solenoid, 2 position, Differential, spring assist

\* Only available with pilot source / pilot exhaust 'O'.


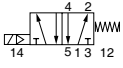
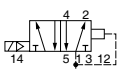
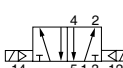



Enclosure	
0	Non, Valve with coil
N	Non, Valve less coil

Overrides / Lights	
B	Non-locking, flush, push - w/o light
C	Locking, flush, push / turn - w/o light
G	Non-locking, flush, push - with light
H	Locking, flush, push / turn - with light



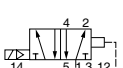

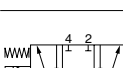

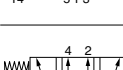
Shaded part numbers are standard

Shaded voltage part numbers are available from stock.  
 Unshaded part numbers are available on request but will be subject to minimum order quantities.  
 Otherwise order coil/solenoid and valve separately.


## Isys ISO 5599-2 - Sizes 1, 2 & 3 Solenoid operated ISO valve with operator and 24 Vdc / 2,7 W Plug-in coil

Symbol	Description	Size	Weight (g)	Order code
	5/2 single solenoid - Spring return 	1 - 43 mmmm	770	<b>H1EVXBG0B9D</b>
		2 - 56 mm	1190	<b>H2EVXBG0B9D</b>
		3 - 71 mm	1470	<b>H3EVXBG0B9D</b>
	5/2 single solenoid - Differential 	1 - 43 mmmm	770	<b>H11VXBG0B9D</b>
		2 - 56 mm	1190	<b>H21VXBG0B9D</b>
		3 - 71 mm	1470	<b>H31VXBG0B9D</b>
	5/2 double solenoid 	1 - 43 mmmm	940	<b>H12VXBG0B9D</b>
		2 - 56 mm	1360	<b>H22VXBG0B9D</b>
		3 - 71 mm	1640	<b>H32VXBG0B9D</b>
5/3 Closed center 	1 - 43 mmmm	940	<b>H15VXBG0B9D</b>	
	2 - 56 mm	1360	<b>H25VXBG0B9D</b>	
	3 - 71 mm	1640	<b>H35VXBG0B9D</b>	
5/3 Vented center 	1 - 43 mmmm	940	<b>H16VXBG0B9D</b>	
	2 - 56 mm	1360	<b>H26VXBG0B9D</b>	
	3 - 71 mm	1640	<b>H36VXBG0B9D</b>	
5/3 Pressurised center 	1 - 43 mmmm	940	<b>H17VXBG0B9D</b>	
	2 - 56 mm	1360	<b>H27VXBG0B9D</b>	
	3 - 71 mm	1640	<b>H37VXBG0B9D</b>	

## Isys ISO 5599-2 - Sizes 1, 2 & 3 Solenoid operated ISO valve with operator without Plug-in coil

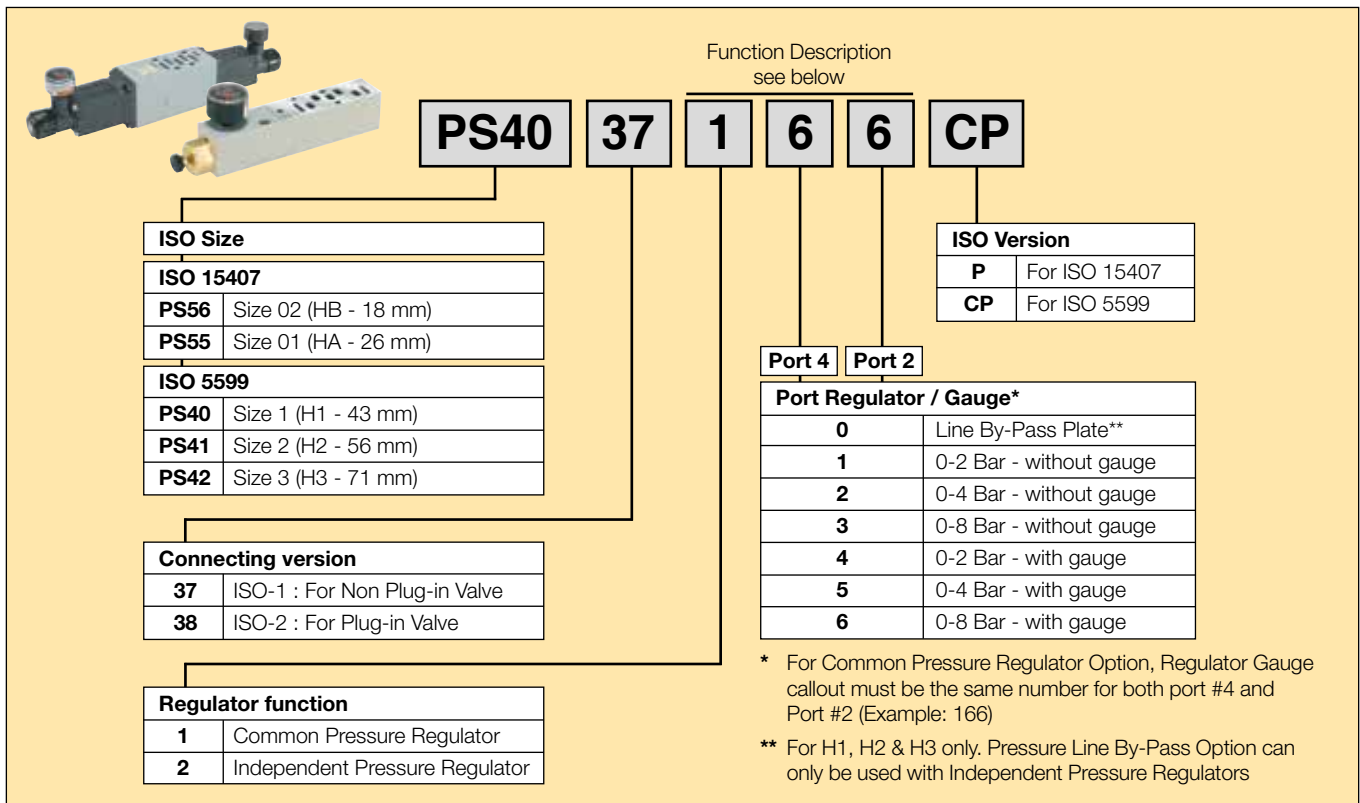
Symbol	Description	Size	Weight (g)	Order code
	5/2 single solenoid - Spring return 	1 - 43 mmmm	650	<b>H1EVXBG0NXXD</b>
		2 - 56 mm	1070	<b>H2EVXBG0NXXD</b>
		3 - 71 mm	1350	<b>H3EVXBG0NXXD</b>
	5/2 single solenoid - Differential 	1 - 43 mmmm	650	<b>H11VXBG0NXXD</b>
		2 - 56 mm	1070	<b>H21VXBG0NXXD</b>
		3 - 71 mm	1350	<b>H31VXBG0NXXD</b>
	5/2 double solenoid 	1 - 43 mmmm	700	<b>H12VXBG0NXXD</b>
		2 - 56 mm	1120	<b>H22VXBG0NXXD</b>
		3 - 71 mm	1400	<b>H32VXBG0NXXD</b>
5/3 Closed center 	1 - 43 mmmm	700	<b>H15VXBG0NXXD</b>	
	2 - 56 mm	1120	<b>H25VXBG0NXXD</b>	
	3 - 71 mm	1400	<b>H35VXBG0NXXD</b>	
5/3 Vented center 	1 - 43 mmmm	700	<b>H16VXBG0NXXD</b>	
	2 - 56 mm	1120	<b>H26VXBG0NXXD</b>	
	3 - 71 mm	1400	<b>H36VXBG0NXXD</b>	
5/3 Pressurised center 	1 - 43 mmmm	700	<b>H17VXBG0NXXD</b>	
	2 - 56 mm	1120	<b>H27VXBG0NXXD</b>	
	3 - 71 mm	1400	<b>H37VXBG0NXXD</b>	

## Plug-in Coil for 5599-2 ISO Valve - Sizes 1, 2 & 3

Description	Voltage	Weight (g)	Order code
	12 Vdc	120	<b>PS404145P</b>
	24 Vdc	120	<b>PS4041B9P</b>
	24 Vac	120	<b>PS404142P</b>
	120 Vac	120	<b>PS404123P</b>
	240 Vac	120	<b>PS404157P</b>

**Sandwich regulator for Plug-in or not Plug-in ISO 15407 (Sizes 02 & 01) and 5599 (Sizes 1, 2 & 3)**

**Order chart**



Function Description see below

**PS40** **37** **1** **6** **6** **CP**

ISO Size	
<b>ISO 15407</b>	
<b>PS56</b>	Size 02 (HB - 18 mm)
<b>PS55</b>	Size 01 (HA - 26 mm)
<b>ISO 5599</b>	
<b>PS40</b>	Size 1 (H1 - 43 mm)
<b>PS41</b>	Size 2 (H2 - 56 mm)
<b>PS42</b>	Size 3 (H3 - 71 mm)

ISO Version	
<b>P</b>	For ISO 15407
<b>CP</b>	For ISO 5599

Connecting version	
<b>37</b>	ISO-1 : For Non Plug-in Valve
<b>38</b>	ISO-2 : For Plug-in Valve

Regulator function	
<b>1</b>	Common Pressure Regulator
<b>2</b>	Independent Pressure Regulator

Port 4	Port 2
<b>Port Regulator / Gauge*</b>	
<b>0</b>	Line By-Pass Plate**
<b>1</b>	0-2 Bar - without gauge
<b>2</b>	0-4 Bar - without gauge
<b>3</b>	0-8 Bar - without gauge
<b>4</b>	0-2 Bar - with gauge
<b>5</b>	0-4 Bar - with gauge
<b>6</b>	0-8 Bar - with gauge

\* For Common Pressure Regulator Option, Regulator Gauge callout must be the same number for both port #4 and Port #2 (Example: 166)

\*\* For H1, H2 & H3 only. Pressure Line By-Pass Option can only be used with Independent Pressure Regulators

**Pressure Regulators functions**

**Common port regulation**

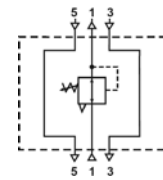
Provides adjustable regulated air pressure to the valves #1 port which gives the same regulated pressure to both the #2 and #4 port of the manifold or subbase. The regulator is always on the 14 end of the valve.



For HB & HA



For H1, H2 & H3



Part number code 1 X X

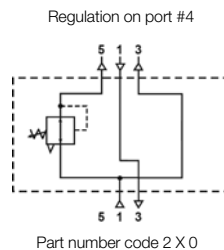
**Independent port regulation**

**Single Port Regulator**

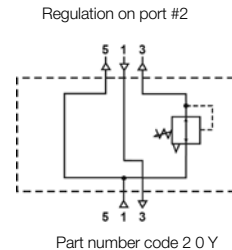
Provides regulated pressure to both ports. Pressure regulation can occur out of the #2 or #4 port of the valve. Full line pressure would be provided with a pass plate.



For H1, H2 & H3



Part number code 2 X 0



Part number code 2 0 Y

**Dual Port Regulator**

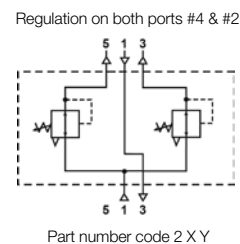
When using an independent Pressure Sandwich Regulator, the cylinder outlet ports are reversed. The 12 end energizes the #2 port. The 3-position CE and PC functions are also reversed.



For HB & HA








For H1, H2 & H3



Part number code 2 X Y



## Sandwich regulator with Gauge

	ISO Size	Regulator function	Pressure On port 4 and / or port 2	w (g)	Order code			
					ISO-1 Non Plug-in	ISO-2 Plug-in		
	02 - 18 mm	Common	0 to 4 bar	180	<b>PS5637155P</b>	<b>PS5638155P</b>		
			0 to 8 bar		<b>PS5637166P</b>	<b>PS5638166P</b>		
		Independent	0 to 4 bar	240	<b>PS5637255P</b>	<b>PS5638255P</b>		
			0 to 8 bar		<b>PS5637266P</b>	<b>PS5638266P</b>		
	01 - 26 mm	Common	0 to 4 bar	240	<b>PS5537155P</b>	<b>PS5538155P</b>		
			0 to 8 bar		<b>PS5537166P</b>	<b>PS5538166P</b>		
		Independent	0 to 4 bar	340	<b>PS5537255P</b>	<b>PS5538255P</b>		
			0 to 8 bar		<b>PS5537266P</b>	<b>PS5538266P</b>		
			1 - 43 mm	Common	0 to 4 bar	340	<b>PS4037155CP</b>	<b>PS4038155CP</b>
					0 to 8 bar		<b>PS4037166CP</b>	<b>PS4038166CP</b>
Independent	0 to 4 bar			520	<b>PS4037255CP</b>	<b>PS4038255CP</b>		
	0 to 8 bar				<b>PS4037266CP</b>	<b>PS4038266CP</b>		
	2 - 56 mm	Common	0 to 4 bar	520	<b>PS4137155CP</b>	<b>PS4138155CP</b>		
			0 to 8 bar		<b>PS4137166CP</b>	<b>PS4138166CP</b>		
		Independent	0 to 4 bar	1180	<b>PS4137255CP</b>	<b>PS4138255CP</b>		
			0 to 8 bar		<b>PS4137266CP</b>	<b>PS4138266CP</b>		
			3 - 71 mm	Common	0 to 4 bar	1180	<b>PS4237155CP</b>	<b>PS4238155CP</b>
					0 to 8 bar		<b>PS4237166CP</b>	<b>PS4238166CP</b>
Independent	0 to 4 bar			1180	<b>PS4237255CP</b>	<b>PS4238255CP</b>		
	0 to 8 bar				<b>PS4237266CP</b>	<b>PS4238266CP</b>		

## 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 through 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 through the regulator to feed the 12 galley of the valve.

## Sandwich Regulator Accessories

	Description	Pressure range	w (g)	Order code
	Gauge kit Including: Gauge 1/8" female to 1/8" female coupling 1/8" male to 1/8" male long nipple	0 to 8 bar	80	<b>PS5651160P</b>

## Sandwich Flow Control

	ISO Size	w (g)	Order code	
			ISO-1 Non Plug-in	ISO-2 Plug-in
	02 - 18 mm	180	<b>PS5635P</b>	<b>PS5642P</b>
	01 - 26 mm	240	<b>PS5535P</b>	<b>PS5542P</b>
	1 - 43 mm	340	<b>PS4035CP</b>	<b>PS4042CP</b>
	2 - 56 mm	520	<b>PS4135CP</b>	<b>PS4142CP</b>
	3 - 71 mm	1180	<b>PS4235CP</b>	<b>PS4242CP</b>

### Note:

- Both adjustment screws are located on the same 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



## TURCK BL67 Remote I/O System



## Isysnet Fieldbus System





## Moduflex Bus System



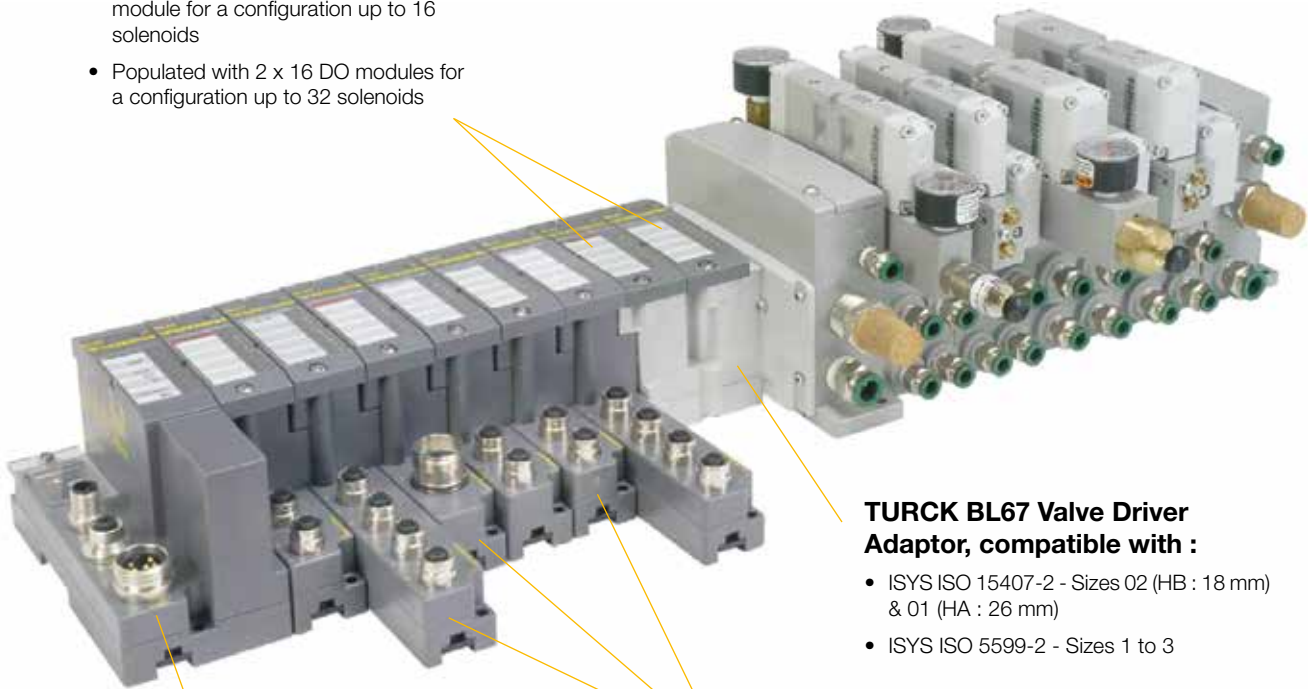
**TURCK BL67 Remote I/O System**

The device has four major components :

- Communication Gateway provide the network interface.
- I/O modules provide the field & system interface
- Power feeding modules provide additional power inputs to the TURCK BL67 System
- Valve Driver Adaptor provides control for either 16 or 32 solenoids on a manifold.

**2 slots for modularity**

- Populated with 1 x 16 DO & 1 blank module for a configuration up to 16 solenoids
- Populated with 2 x 16 DO modules for a configuration up to 32 solenoids



**TURCK BL67 Valve Driver Adaptor, compatible with :**

- ISYS ISO 15407-2 - Sizes 02 (HB : 18 mm) & 01 (HA : 26 mm)
- ISYS ISO 5599-2 - Sizes 1 to 3

**Simple or Programmable CODESYS Gateway**

- Offering a choice between the most popular industrial fieldbus and industrial ethernet protocols

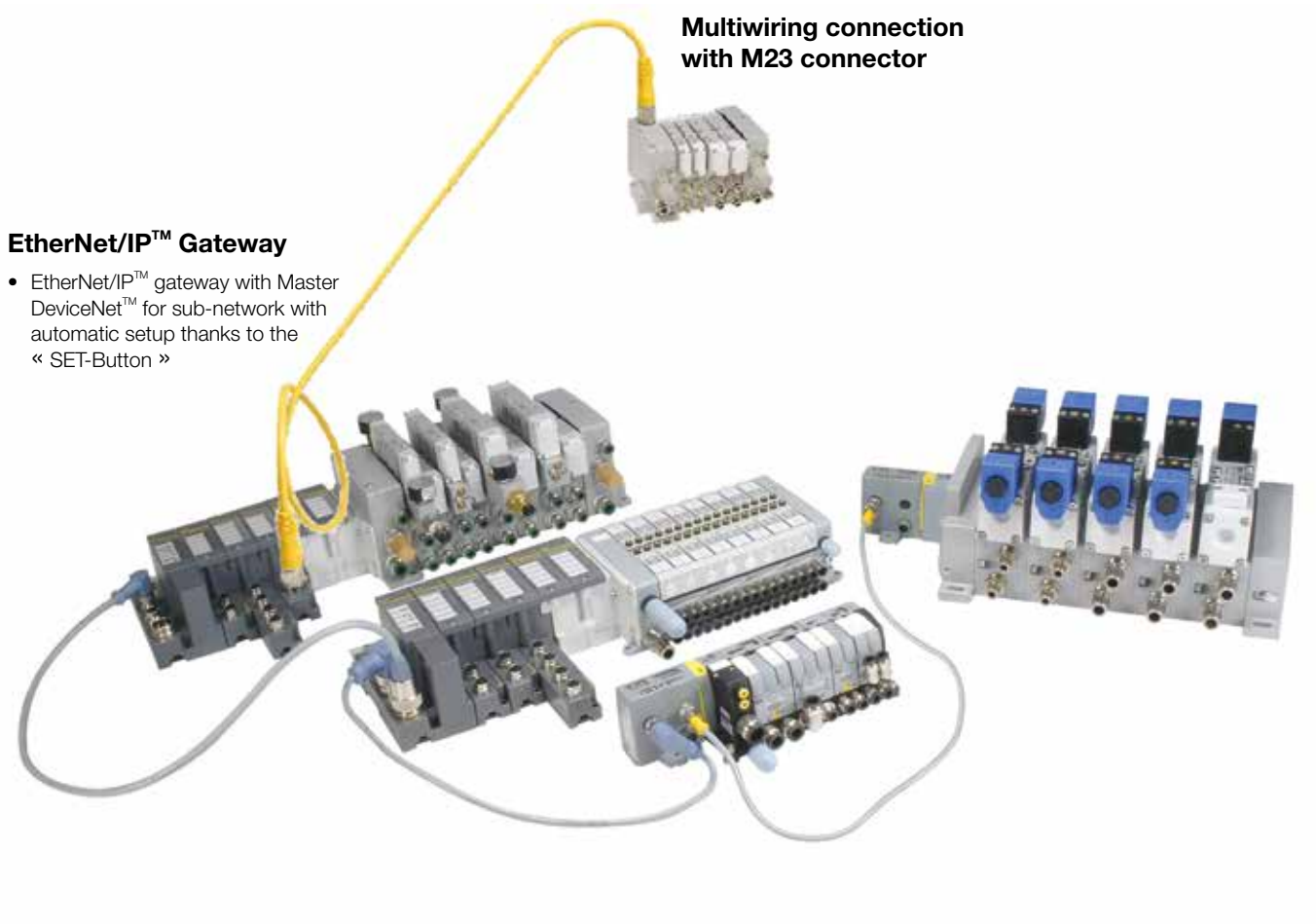


**A configurable connection**

- M8, M12, M23 with passive sub-base

## TURCK BL67 Remote I/O System

- With specific modules, the TURCK BL67 Remote I/O System allows decentralised configurations.
- Completed by a programmable gateway, the device can offer a decentralised management topology.



**Multiwiring connection with M23 connector**

### EtherNet/IP™ Gateway

- EtherNet/IP™ gateway with Master DeviceNet™ for sub-network with automatic setup thanks to the « SET-Button »

### Programmable Gateway

- Configure / Program any module with RS232, or directly through Ethernet for any module with an Ethernet physical layer.

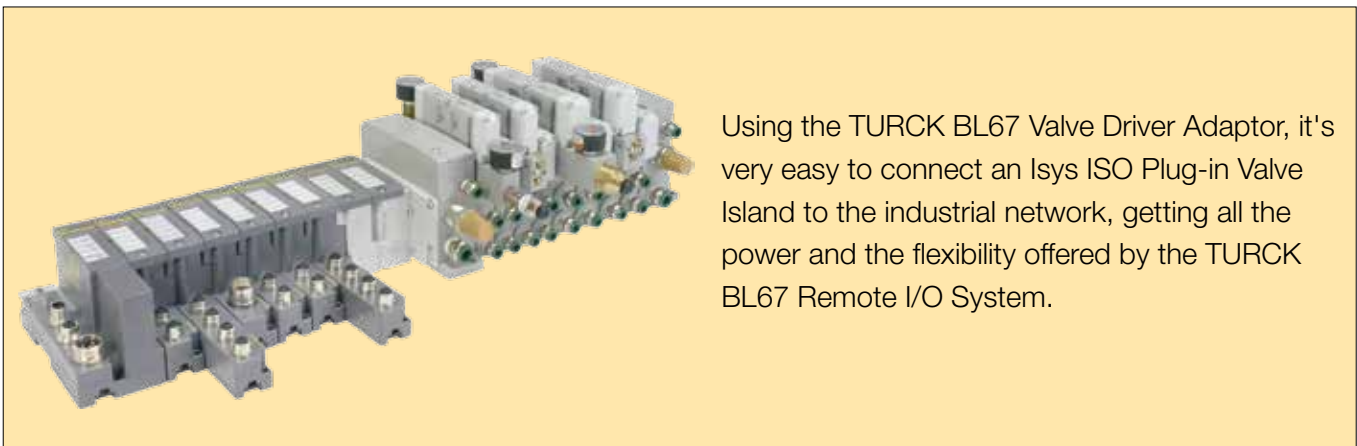


### BL67-1CVI electronic module with BL67-B-1M12

- Offering a CANopen Sub-Network connectivity



**TURCK BL67 Remote I/O System**



Using the TURCK BL67 Valve Driver Adaptor, it's very easy to connect an Isys ISO Plug-in Valve Island to the industrial network, getting all the power and the flexibility offered by the TURCK BL67 Remote I/O System.

**Valve driver Module for 16 or 32 Outputs**

**Modularity up to 16 or 32 Outputs :**

- Populated with 1 or 2 standard TURCK 16 Output modules BL67-16DO-0.1A-P, the Valve Driver Module can handle up to 16 or 32 solenoid valves.
- For a 16 Outputs configuration, the second slot has to be populated with 1 standard TURCK blank module BL67-E.



**TURCK BL67 communication gateway**

**Industrial Communication :**

- Linked to a TURCK BL67 communication module (programmable or not programmable), the device can be connected to a wide choice of Fieldbus or Industrial Ethernet protocols.

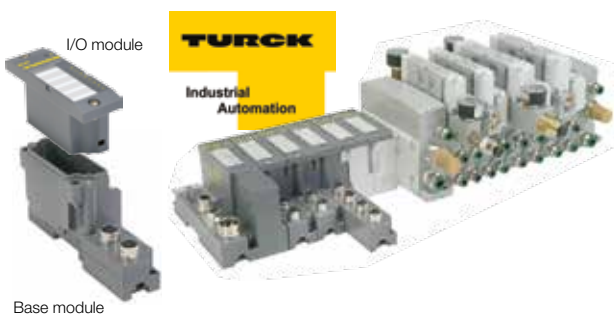


**TURCK BL67 I/O and Base modules**

The separation between electronic and base module for connectivity allows to complete the device with a choice through a full digital or analogue **I/O modules** range populating the **base module** existing with a multiple choice of electrical connection (M8, M12, M23)


The complete resulting configuration can handle :

- Up to 32 electrical modules (up to 2 in the Valve Driver Module)
- Up to 512 digital I/O (up to 32 outputs in the Valve Driver Module)
- Up to 128 analog I/O



Full description of TURCK BL67 Series on <http://www.turck.com>


## TURCK BL67 Communication Gateway



Protocol	Network connection	Power Sup. Connection	Weight (g)	Order code
CANopen (Bus IN & OUT)	M12 - A coding	7/8" - 5 Pin's	375	<b>BL67-GW-CO</b>
DeviceNet™	7/8" - 5 Pin's	7/8" - 5 Pin's	360	<b>BL67-GW-DN</b>
Profibus-DP (DPV0/DPV1)	M12 - B coding	7/8" - 5 Pin's	370	<b>BL67-GW-DPV1</b>
Multiprotocol Ethernet: Modbus TCP, EtherNet/IP™ and PROFINET	M12 - D coding	7/8" - 5 Pin's	375	<b>BL67-GW-EN</b>

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number


## TURCK BL67 Programmable Communication Gateway



Protocol	Network connection	Power Sup. Connection	Weight (g)	Order code
Profibus-DP	M12 - B coding	7/8" - 5 Pin's	380	<b>BL67-PG-DP</b>
EtherNet/IP™	M12 - D coding	7/8" - 5 Pin's	375	<b>BL67-PG-EN-IP</b>
Modbus TCP	M12 - D coding	7/8" - 5 Pin's	375	<b>BL67-PG-EN</b>

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number

## TURCK BL67 Electronic Modules



Description	Characteristic	Polarity	Weight (g)	Order code
Blank module			15	<b>BL67-E</b>
4 Digital Inputs		PNP	55	<b>BL67-4DI-P</b>
		NPN	55	<b>BL67-4DI-N</b>
	Channel diagnostics	PNP	55	<b>BL67-4DI-PD</b>
8 Digital Inputs		PNP	55	<b>BL67-8DI-P</b>
		NPN	55	<b>BL67-8DI-N</b>
	Channel diagnostics	PNP	55	<b>BL67-8DI-PD</b>
16 Digital Inputs		PNP	55	<b>BL67-16DI-P</b>
4 Digital Outputs	0.5 A	PNP	55	<b>BL67-4DO-0.5A-P</b>
	2.0 A	PNP	55	<b>BL67-4DO-2A-P</b>
		NPN	55	<b>BL67-4DO-2A-N</b>
8 Digital Outputs	4.0 A	PNP	55	<b>BL67-4DO-4A-P</b>
	0.5 A	PNP	55	<b>BL67-8DO-0.5A-P</b>
		NPN	55	<b>BL67-8DO-0.5A-N</b>
16 Digital Outputs	0.1 A	PNP	55	<b>BL67-16DO-0.1A-P</b>
4 Digital Inputs & Outputs	0.5 A - Channel Diagnostic	PNP	55	<b>BL67-4DI4DO-PD</b>
8 Configurable Digital Channels	0.5 A	PNP	55	<b>BL67-8XSG-P</b>
	0.5 A - Channel Diagnostics	PNP	55	<b>BL67-8XSG-PD</b>
8 Isolated Relay Outputs	Normally open		55	<b>BL67-8DO-R-NO</b>
2 analogue Inputs	16 bit resolution	Current	55	<b>BL67-2AI-I</b>
		Voltage	55	<b>BL67-2AI-V</b>
	For Pt and Ni sensors		55	<b>BL67-2AI-PT</b>
	For thermoelements		55	<b>BL67-2AI-TC</b>
	4 analogue Inputs	16 bit resolution	Current / Voltage	55
4 analogue Outputs	16 bit resolution	Current	55	<b>BL67-4AI-TC</b>
		Voltage	55	<b>BL67-4AI-I</b>
	2 analogue Outputs	16 bit resolution	Voltage	55
4 analogue Outputs	16 bit resolution	Voltage	55	<b>BL67-4AO-V</b>

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number

The complete TURCK BL67 Remote I/O System range on <http://www.turck.com> and <http://www.parker.com/pneu/fieldbus>

## TURCK BL67 Base modules for Digital and Analog I/O Modules



Description	Connector Type	Con. Number	Weight (g)	Order code
Base Modules	M8, 3-pole, female	4	160	<b>BL67-B-4M8</b>
		8	215	<b>BL67-B-8M8</b>
	M8, 4-pole, female	8	215	<b>BL67-B-8M8-4</b>
	M12, 5-pole, female, A-coded	2	185	<b>BL67-B-2M12</b>
	M12, 5-pole, female, A-coded, paired	2	185	<b>BL67-B-2M12-P</b>
	M12, 5-pole, female, A-coded	4	245	<b>BL67-B-4M12</b>
	M12, 5-pole, female, A-coded, paired	4	245	<b>BL67-B-4M12-P</b>
	M23, 12-pole, female	1	190	<b>BL67-B-1M23</b>
	M23, 19-pole, female	1	190	<b>BL67-B-1M23-19</b>

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number

## Electronic and Base Module Combinations

	BL67-B-4M8	BL67-B-8M8	BL67-B-2M12	BL67-B-2M12-P	BL67-B-4M12	BL67-B-4M12-P	BL67-B-1M23	BL67-B-1M23-19	BL67-B-8M8-4
<b>Digital Input Modules</b>									
BL67-4DI-P	✓		✓	✓	✓		✓		
BL67-4DI-N	✓		✓	✓	✓		✓		
BL67-4DI-PD	✓		✓	✓	✓				
BL67-8DI-P		✓			✓	✓	✓		
BL67-8DI-N		✓			✓	✓	✓		
BL67-8DI-PD		✓			✓	✓			
BL67-16DI-P							✓	✓	
<b>Digital Output Modules</b>									
BL67-4DO-0.5A-P	✓		✓	✓	✓		✓		
BL67-4DO-2A-P	✓		✓	✓	✓		✓		
BL67-4DO-2A-N	✓		✓	✓	✓		✓		
BL67-4DO-4A-P	✓		✓	✓	✓		✓		
BL67-8DO-0.5A-P		✓			✓	✓	✓		
BL67-8DO-0.5A-N		✓			✓	✓	✓		
BL67-16DO-0.1A-P							✓	✓	
BL67-4DI4DO-PD		✓			✓	✓			
<b>Configurable Digital Input/Output Modules</b>									
BL67-8XSG-P		✓			✓	✓			
BL67-8XSG-PD		✓			✓	✓			
<b>Relay Output Module</b>									
BL67-8DO-R-NO					✓				
<b>Analogue Input Module</b>									
BL67-2AI-I			✓						
BL67-2AI-V			✓						
BL67-2AI-PT			✓						
BL67-2AI-TC			✓						
BL67-4AI-V/I					✓				
BL67-4AI-TC					✓				
<b>Analogue Output Module</b>									
BL67-2AO-I			✓						
BL67-2AO-V			✓						
BL67-4AO-V					✓				

The complete TURCK BL67 Remote I/O System range on <http://www.turck.com>



## TURCK BL67 Power Feeding and Base Modules

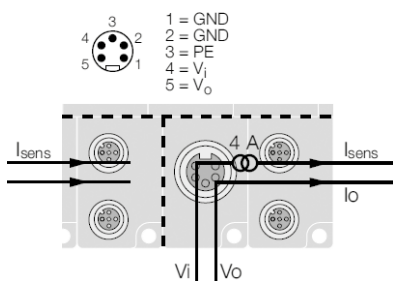
Description	Connector Type	Weight (g)	Order code
Power Feeding Module for 24 VDC additional sourcing		55	<b>BL67-PF-24VDC</b>
Base Modules	1 x 7/8", 5-pole, male	VI / VO Sourcing	<b>BL67-B-1RSM</b>
		VO Sourcing	<b>BL67-B-1RSM-VO</b>
	1 x 7/8", 4-pole, male	55	<b>BL67-B-1RSM-4</b>

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number

## Power Feeding Base Modules Connection

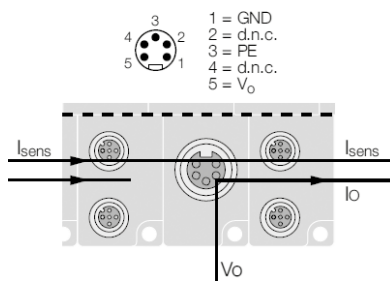
### Standard version

#### BL67-B-1RSM

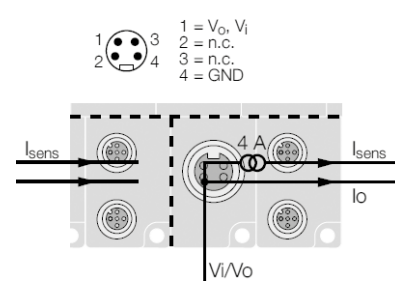


### Other possible versions

#### BL67-B-1RSM-VO



#### BL67-B-1RSM-4



## TURCK BL67 CANopen Gateway and Base Module

Description	Connector Type	Weight (g)	Order code
CANopen Gateway Module for CANopen Valve Island Interface		55	<b>BL67-1CVI</b>
Base Modules	1 x M12, 5-pole, female, A-coded	170	<b>BL67-B-1M12</b>

All TURCK BL67 System Modules can be ordered directly from TURCK under the same part number

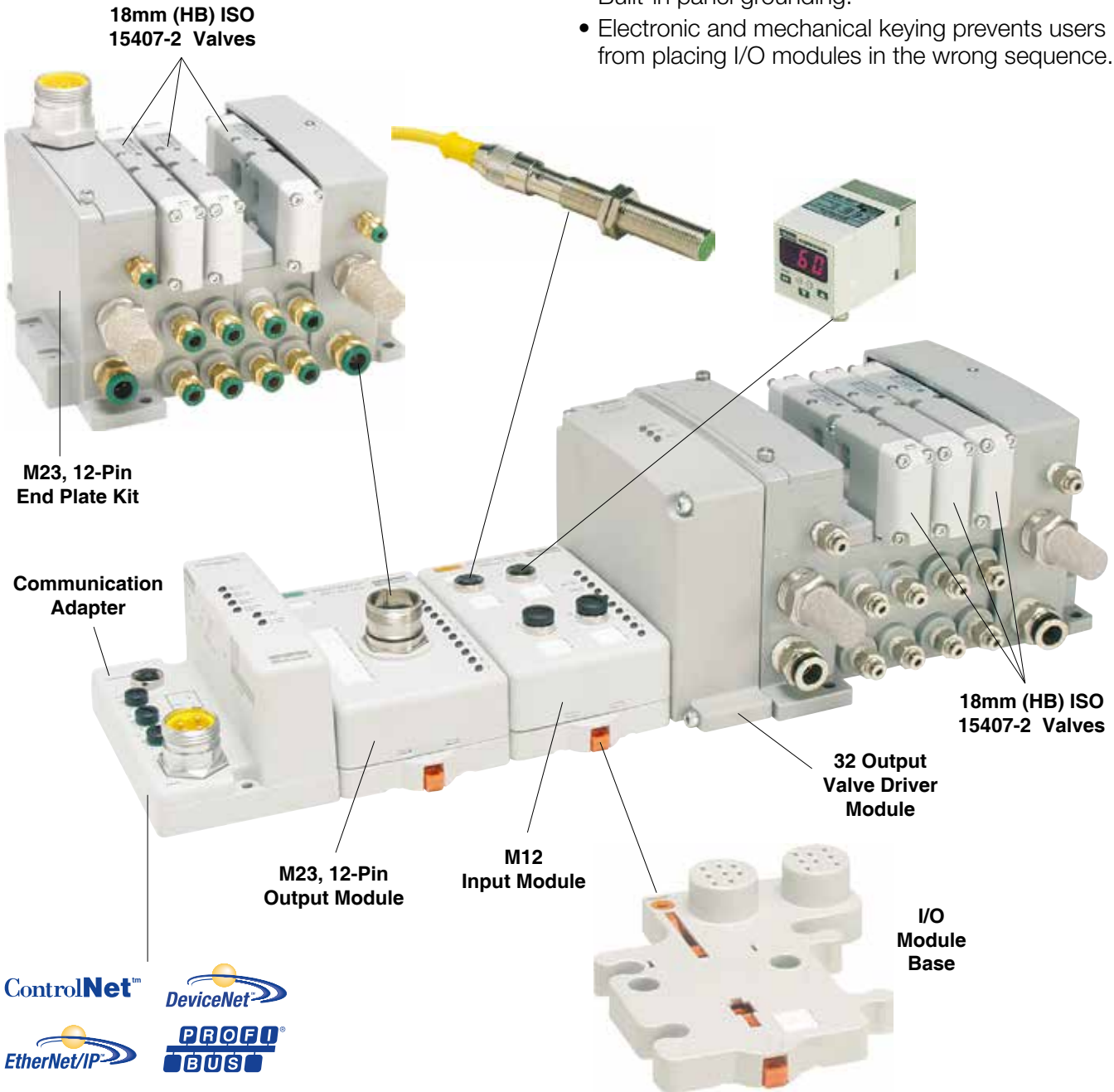


The complete TURCK BL67 Remote I/O System range on <http://www.turck.com>

**Isysnet Fieldbus System**

**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.



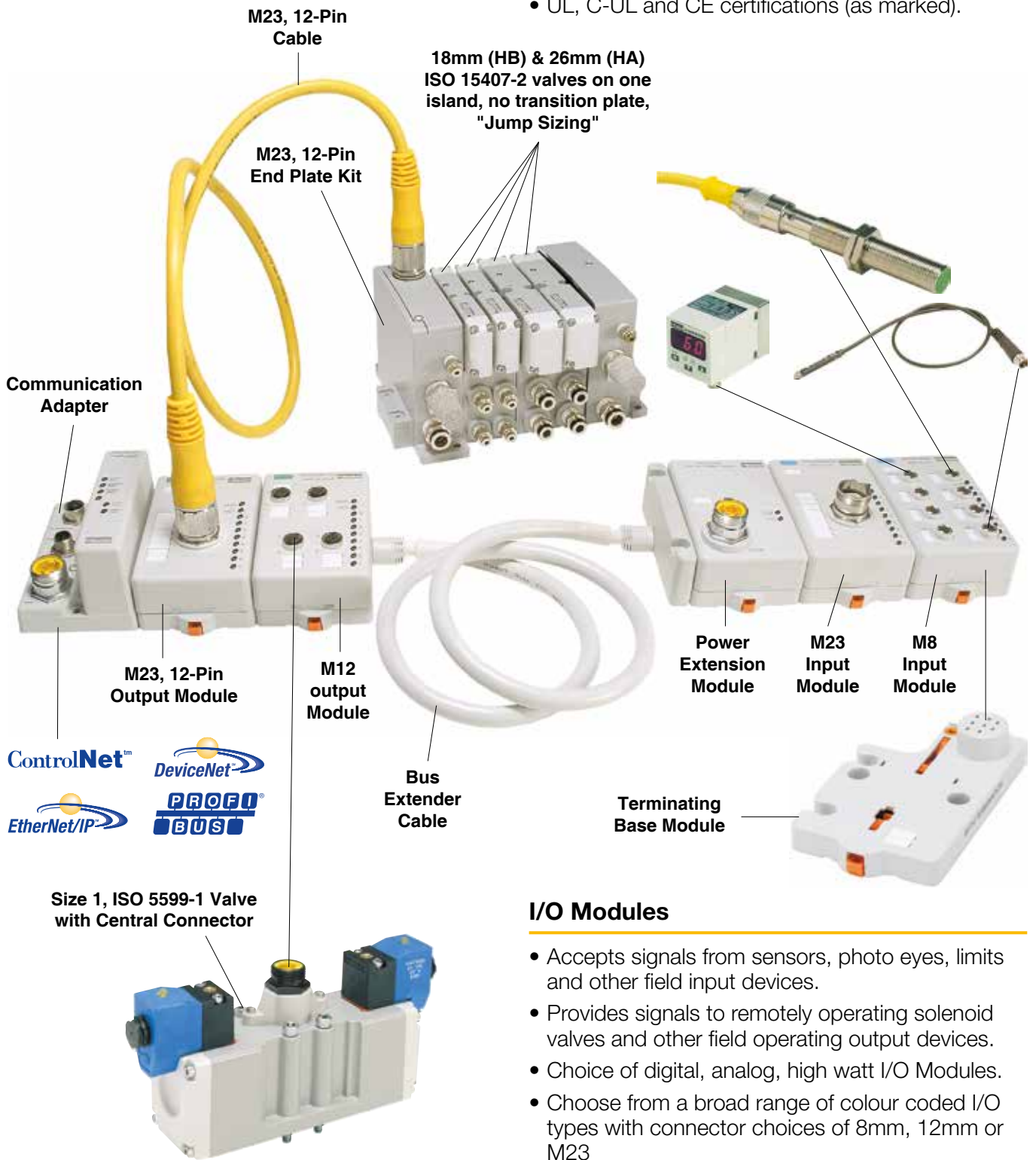
**Communication Modules**

- A Communication Module supports up to a maximum of 63 I/O modules and up to 264 Inputs and 264 Outputs.

**Isysnet Fieldbus System**

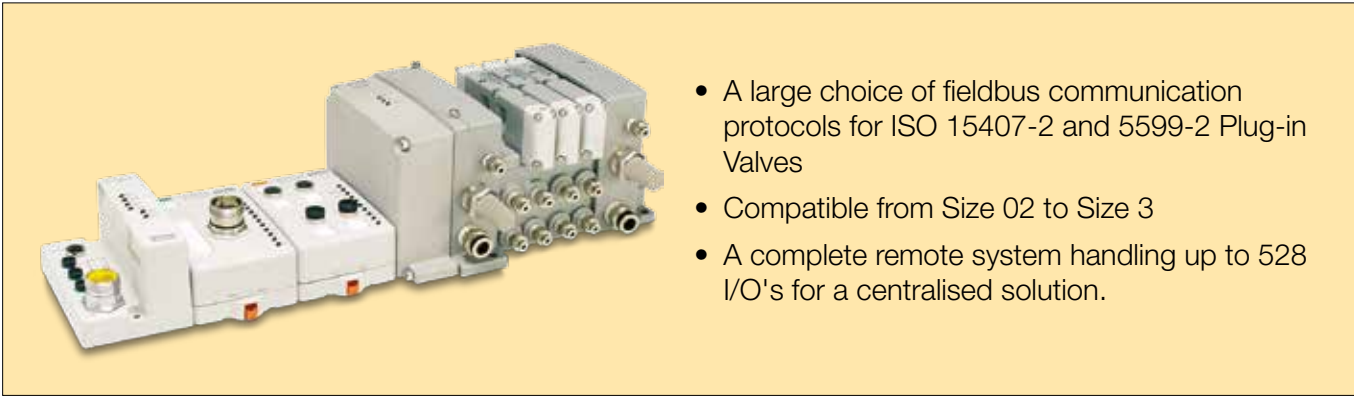
**Integrated Solution**

- 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 colour coded I/O types with connector choices of 8mm, 12mm or M23
- Built-in miswiring, short circuit, open circuit detection with electronic feedback.



- A large choice of fieldbus communication protocols for ISO 15407-2 and 5599-2 Plug-in Valves
- Compatible from Size 02 to Size 3
- A complete remote system handling up to 528 I/O's for a centralised solution.

**Isysnet Communication and I/O modules**

**Isysnet Communication modules**

Isysnet communication modules are available in :

- DeviceNet™
- Profibus DP
- EtherNet/IP™
- ControlNet



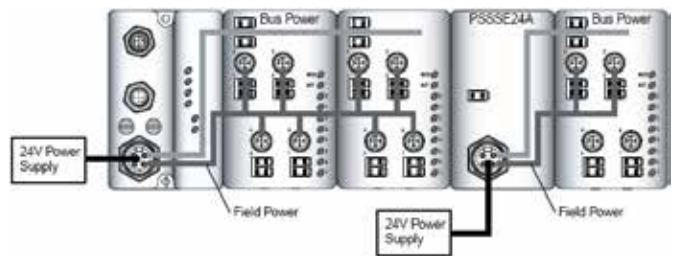
**Digital or Analogical electrical I/O modules**

Some modules have diagnostic features, electronic fusing, or individually isolated inputs/ outputs. The Isysnet family provides a wide range of input and output modules to span many applications, from highspeed discrete to process control. Isysnet supports producer/consumer technology, which allows input information and output status to be shared among multiple Logix controllers.



**Isysnet Extension Power Unit**

The auxiliary power supports up to 10 I/O modules and 32 output driver with a maximum of 10 A field power. The 24 VDC extension power unit (PSSSE24A) extends the backplane bus power to support up to 10 more I/O modules. Connect additional extension power units to expand the I/O assembly up to 63 I/O modules



**Technical data**

**Isysnet Communication modules & Extension power unit**

Bus power supply : 24 VDC at 400 mA  
 Power supply input voltage : 24 VDC  
 Operative voltage range : 10 to 28.8 VDC  
 Input overvoltage protection : Reverse polarity protected

**Isysnet Analogue Input modules**

Number of Outputs : 2  
 Input signal Range : 4 to 20 mA / 0 to 10 VDC  
 Pointbus current : 75 mA

**Isysnet Analogue Output modules**

Number of Outputs : 2  
 Input signal Range : 4 to 20 mA / 0 to 10 VDC  
 Pointbus current : 75 mA

**Isysnet Digital Input modules**

Number of Outputs : 8 – PNP or NPN  
 Operating Voltage Range : 10 to 28.8 VDC  
 Input current on-state : 2 to 5 mA  
 Input current off-state : 1,5 mA  
 Pointbus current : 75 mA


**Isysnet Digital Output modules**

Number of Outputs : 8  
 Operating Voltage Range : 10 to 28.8 VDC  
 Output current rating Max. : 1 A per channel  
 3 A per module  
 Pointbus current : 75 mA

**Isysnet Relay Output modules**






Number of Outputs : 4 – NO contacts  
 Operating Voltage Range : 5 to 28.8 VDC  
 Output current rating Max. : 2 A per channel  
 8 A per module  
 Pointbus current : 90 mA

## Isysnet communication modules

	Description	Fieldbus connection	Power supply connector	Weight (g)	Order code
	DeviceNet™	M18	7/8" - 4 pins	400	<b>PSSCDM18PA</b>
		M12 - A coding	7/8" - 4 pins	400	<b>PSSCDM12A</b>
	Profibus-DP	M12 - B coding	7/8" - 5 pins	380	<b>PSSCPBA</b>
	EtherNet/IP™	M12 - D coding	7/8" - 4 pins	380	<b>PSSCENA</b>
	ControlNet	M12 - D coding	7/8" - 4 pins	380	<b>PSSCCNA</b>

For EDS and GSD files, go to <http://www.parker.com/pneu/isysnet>



## Isysnet electrical I/O modules

	Description	Polarity	Connector type	Weight (g)	Order code
	8 Digital Inputs	PNP	8 x M8	400	<b>PSSN8M8A</b>
			4 x M12	380	<b>PSSN8M12A</b>
		NPN	4 x M12	380	<b>PSSP8M12A</b>
	8 Digital Outputs	PNP	8 x M8	400	<b>PSST8M8A</b>
			4 x M12	380	<b>PSST8M12A</b>
			1 x M23	400	<b>PSST8M23A</b>
	4 Digital Outputs	Relay	4 x M12	410	<b>PSSTR4M12A</b>
			2 Analogue Inputs	0 - 10 V	2 x M12
	2 Analogue Inputs	4 - 20 mA	2 x M12	400	<b>PSSNACM12A</b>
		2 Analogue Outputs	0 - 10 V	2x M12	400
	PSSTACM12A	4 - 20 mA	2 x M12	400	<b>PSSTACM12A</b>




## Isysnet auxiliary electrical modules

	Description	Connector type	Weight (g)	Order code
	PSSSE24A 24 VDC expansion power unit	7/8" - 4 pins	420	<b>PSSSE24A</b>

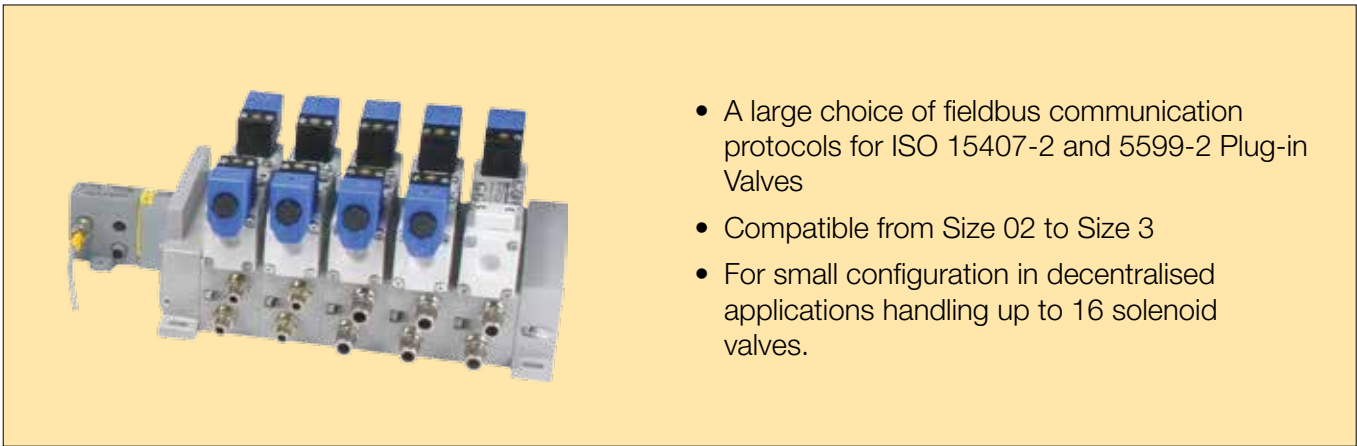
## Isysnet bus extender

	Description	Length	Weight (g)	Order code
	PSSEXT1 Bus extender cable for Isysnet module interconnection	1 meter	380	<b>PSSEXT1</b>
		3 meters	760	<b>PSSEXT3</b>
	PSSTERM Isysnet termination module		200	<b>PSSTERM</b>

## Isysnet accessories

	Description	Bus protocol	Connector type	Weight (g)	Order code
	P8CS0803J Power supply connector	DeviceNet™, ControlNet™ & EtherNet/IP™	7/8" - 4 pins	40	<b>P8CS7804AA</b>
		Profibus-DP	7/8" - 5 pins	40	<b>P8CS7805AA</b>
	Line termination	DeviceNet™	M12 - A coding	25	<b>P8BPA00MA</b>
		Profibus-DP	M12 - B coding	25	<b>P8BPA00MB</b>
		DeviceNet™	M12 - A coding	25	<b>P8CS1205AA</b>
		Profibus-DP	M12 - B coding	25	<b>P8CS1205AB</b>
	P8CSY1212A Bus IN female connector	DeviceNet™	M12 - A coding	25	<b>P8CS1205BA</b>
		Profibus-DP	M12 - B coding	25	<b>P8CS1205BB</b>
	Cable quick connect connector		M8	25	<b>P8CS0803J</b>
			M12 - A coding	25	<b>P8CS1204J</b>
	"Y" shape, thread to thread		M12 - 2 x M12	25	<b>P8CSY1212A</b>

**Moduflex Bus System**



- A large choice of fieldbus communication protocols for ISO 15407-2 and 5599-2 Plug-in Valves
- Compatible from Size 02 to Size 3
- For small configuration in decentralised applications handling up to 16 solenoid valves.

**Moduflex Bus 16 Outputs**

Communication module handling up to 16 solenoids and available in Profibus DP, DeviceNet™, CANopen, InterBus-S and AS-interface protocols



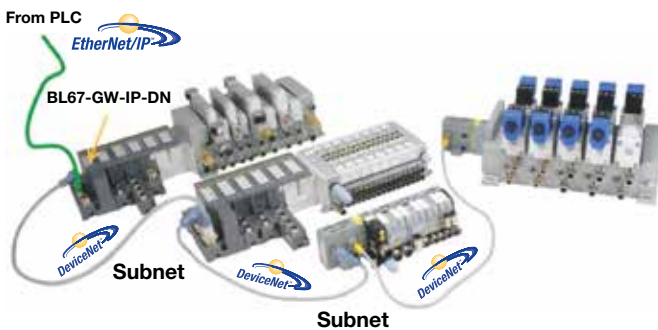
**Closer to the cylinder**

Decentralised application when solenoid valves have to be closer to the pneumatic actuators.



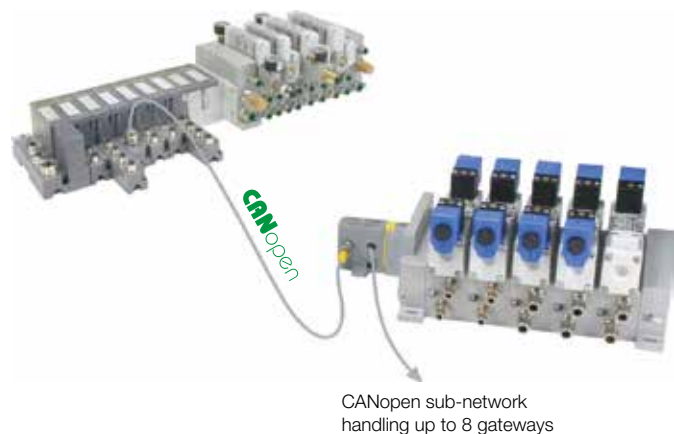
**DeviceNet gateway**

Compatible with the TURCK BL67 EtherNet/IP™ gateway with Master DeviceNet™ **BL67-GW-IP-DN**




**CANopen gateway**

Compatible with the TURCK BL67 CANopen sub-network module **BL67-1CVI** connected to the base module **BL67-B-1M12**




## Moduflex Bus Communication Gateway for device bus protocols

### Communication module for configuration up to 16 solenoid valves


	Protocol	Network connection	Power Sup. Connection	Weight (g)	Order code
	Profibus-DP	M12 - B coding	M12 - A coding	250	<b>P2M2HBVP21600</b>
	DeviceNet™	M12 - A coding	M12 - A coding	250	<b>P2M2HBVD21600</b>
			M12 - B coding	250	<b>P2M2HBVD11600</b>
	CANOpen	M12 - A coding	M12 - A coding	250	<b>P2M2HBVC21600</b>
			M12 - B coding	250	<b>P2M2HBVC11600</b>
	InterBus-S	M23 - 9 Pin's	M12 - A coding	300	<b>P2M2HBVS11600</b>

For EDS and GSD files, go to <http://www.parker.com/pneu/moduflex>


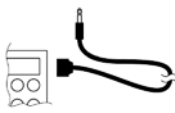
### Device Bus connection accessories

	Description	Bus Protocol	Connector type	Weight (g)	Order code
	Power supply female straight connector	All	M12 - A coding	25	<b>P8CS1205AA</b>
			M12 - B coding	25	<b>P8CS1205AB</b>
	Bus IN female connector	DeviceNet™ CANopen	M12 - A coding	25	<b>P8CS1205AA</b>
			Profibus-DP	M12 - B coding	25
	Bus OUT male connector	DeviceNet™ CANopen	M12 - A coding	25	<b>P8CS1205BA</b>
			Profibus-DP	M12 - B coding	25
	Line termination	DeviceNet™ CANopen	M12 - A coding	25	<b>P8BPA00MA</b>
			Profibus-DP	M12 - B coding	25

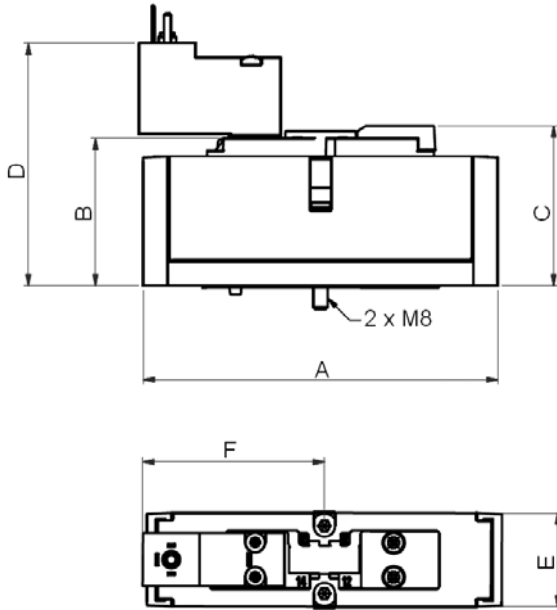
## Moduflex Bus Communication Gateway for AS-interface protocol

	Description	No outputs / node add.	Input connections Connection	Weight (g)	Order code
	<b>Standard AS-i protocol</b> (Up to 31 nodes)	8 Outputs / 2 addresses	No. input	150	<b>P2M2HBVA10800</b>
			8 M8 inputs	200	<b>P2M2HBVA10808A</b>
			8 inputs on 4 M12	200	<b>P2M2HBVA10808B</b>
	<b>Extended AS-i protocol</b> (Up to 62 nodes - A/B coding)	6 Outputs / 2 addresses	No. input	150	<b>P2M2HBVA10400</b>
			4 inputs on 4 M12	200	<b>P2M2HBVA10404B</b>
			8 M8 inputs	200	<b>P2M2HBVA20808A</b>
			8 inputs on 4 M12	200	<b>P2M2HBVA20808B</b>

### AS-i head module accessories

	Description	Connector type	Weight (g)	Order code
	Cable quick connect connector	M8 Male	25	<b>P8CS0803J</b>
		M12 Male - A coding	25	<b>P8CS1204J</b>
	« Y » shape	M12 Male - 2 x M12 Female	25	<b>P8CSY1212A</b>
	Addressing cable 1 meter	M12 Male - Jack	100	<b>P8LS12JACK</b>

ISOMAX - ISO 15407-1 - Sizes 02 & 01



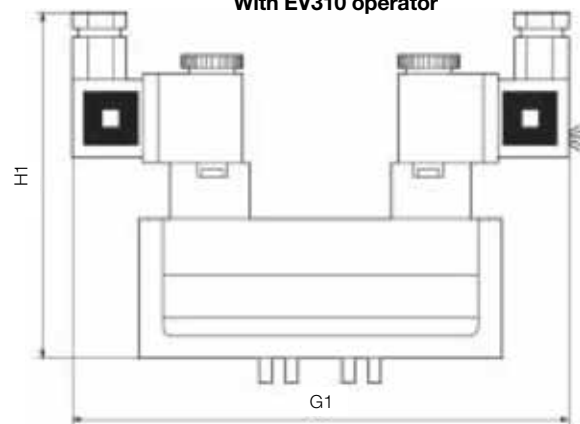
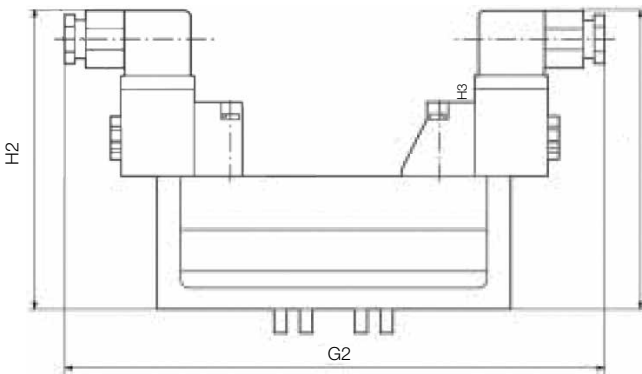
	A	B	C	D	E	F
<b>ISOMAX 02</b>	80	41	44,5	67,8	18	51,2
<b>ISOMAX 01</b>	100	42	45,5	68,8	26	51,2

ISOMAX - ISO 5599-1 - Sizes 1, 2 & 3

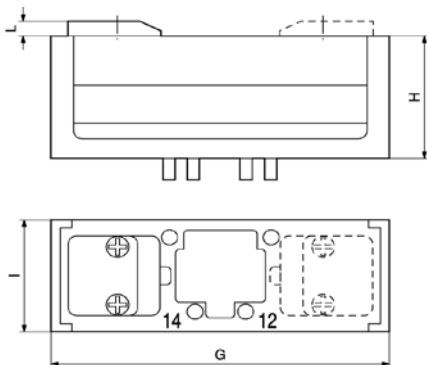
With P2F operator

With EV30 operator

With EV310 operator



Pneumatically actuated

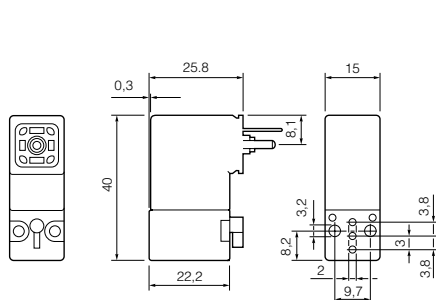


	G	G1	G2	H	H1	H2	I	L
<b>Size 1</b>	120	164	202,5	47	115	119	42	5
<b>Size 2</b>	140	179,5	218	58,5	126,5	130	54	5
<b>Size 3</b>	170	198	235,5	71	139	142,5	68	5

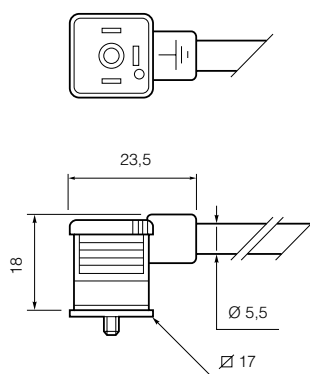


**15 mm DIN Form C solenoid operators and connectors**

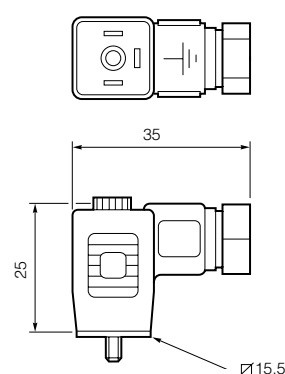
**P2E Operator**



**Connector with standard screw**

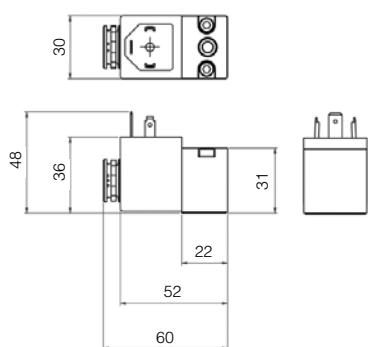


**Connector with large headed screw**

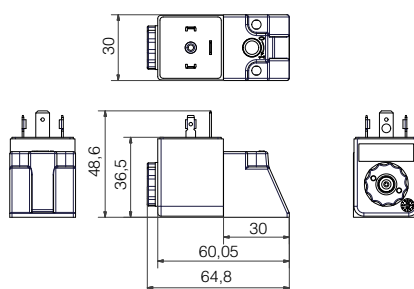


**CNOMO 22 x 30 solenoid operators and connectors**

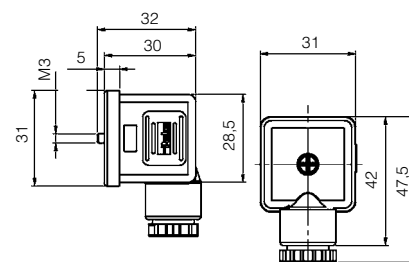
**P2F Operator with 30 x 30 DIN form A coil**



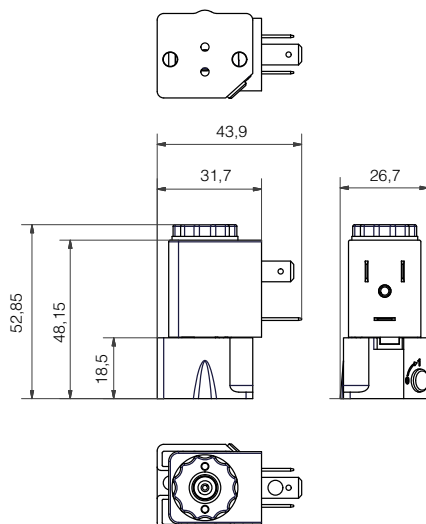
**EV30 Operator with 30 x 30 DIN form A coil**



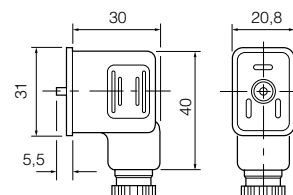
**30 x 30 DIN form A connector**



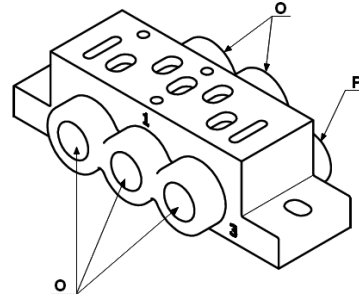
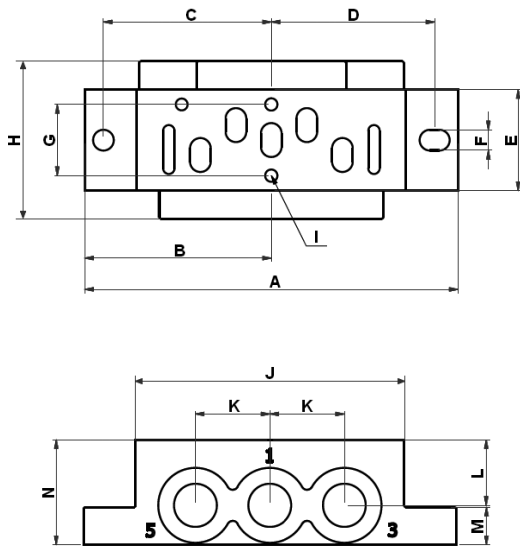
**EV310 Operator with 22 x 30 DIN form B coil**



**22 x 30 DIN form B connector**

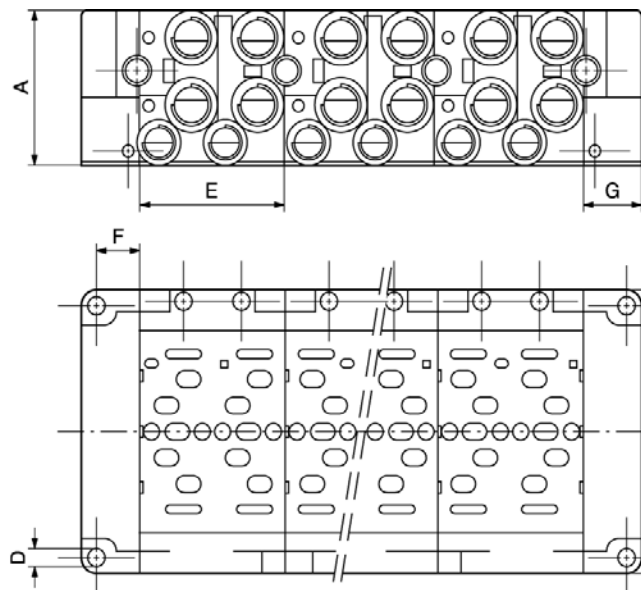


Side ported individual subbase - ISO 15407-1 - Sizes 02 & 01



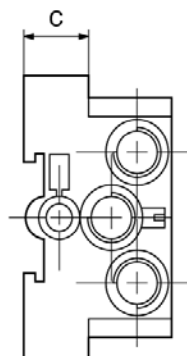
		Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
PL02-01-70	BSPP	02	80	40	35	33.75	19	5.5	12.5	27	M8	50	16	14	8	22.5	1/8	1/8
PL02-01-80	NPT	02	80	40	35	33.75	19	5.5	12.5	27	M8	50	16	14	8	22.5	1/8	1/8
PL01-02-70	BSPP	01	100	50	45	43.75	27	5.5	19	42,5	M8	72	20	17,5	10	28	1/4	1/8
PL01-02-80	NPT	01	100	50	45	43.75	27	5.5	19	42,5	M8	72	20	17,5	10	28	1/4	1/8

Front ported manifold & End plate - ISO 15407-1 - Sizes 02 & 01

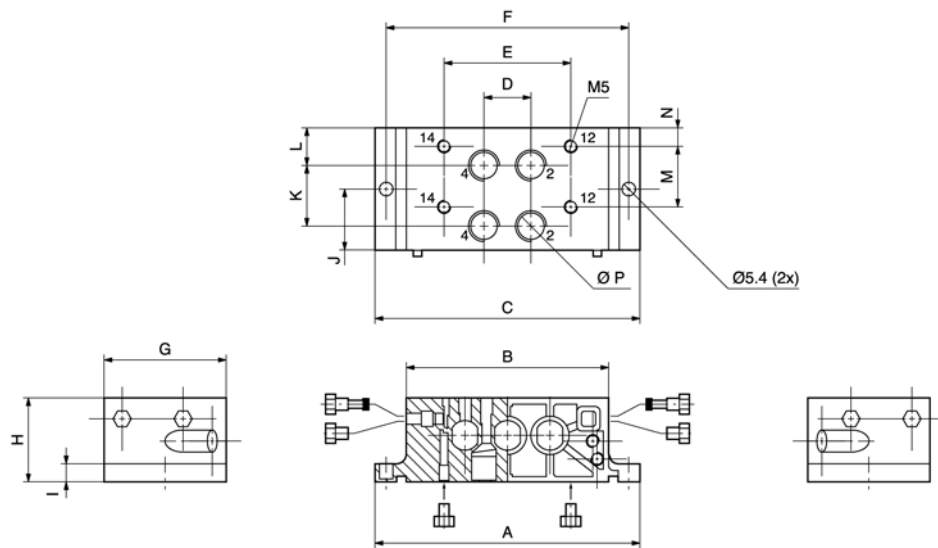


		Size	A	B	C	D	E	F	G	H
PJLP02-201-70	BSPP	02	38,5	80	-	-	38	-	-	-
PJLP02-201-80	NPT	02	38,5	80	-	-	38	-	-	-
PJLP01-202-70	BSPP	01	55	100	-	-	54	-	-	-
PJLP01-202-80	NPT	01	55	100	-	-	54	-	-	-
PJL01-202-70	BSPP	01	55	100	-	-	54	-	-	-
PJL01-202-80	NPT	01	55	100	-	-	54	-	-	-
PEJ02-02-70	BSPP	02	38,5	80	12	Ø4,2	-	14	18	70
PEJ02-02-80	NPT	02	38,5	80	12	Ø4,2	-	14	18	70
PEJ01-03-70	BSPP	01	55	100	24	Ø5,5	-	17	22	90
PEJ01-03-80	NPT	01	55	100	24	Ø5,5	-	17	22	90

PJLP01-201-70  
PJLP01-202-70

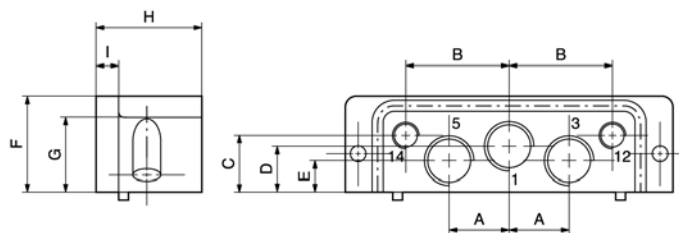


**Bottom ported manifold - ISO 15407-1 - Sizes 02 & 01**



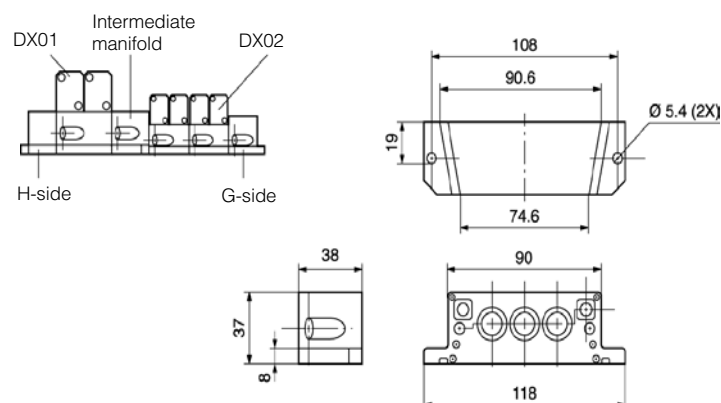
	Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
<b>P2V-AM511PB</b>	02	102	74	74,6	16	43	92	38	26	7	19	19	11	19	5	G1/8
<b>P2V-BM512PB</b>	01	118	90	90,6	21	56,5	108	54	37	8	27	27	16,5	27	8	G1/4

**Bottom ported End plate - ISO 15407-1 - Sizes 02 & 01**



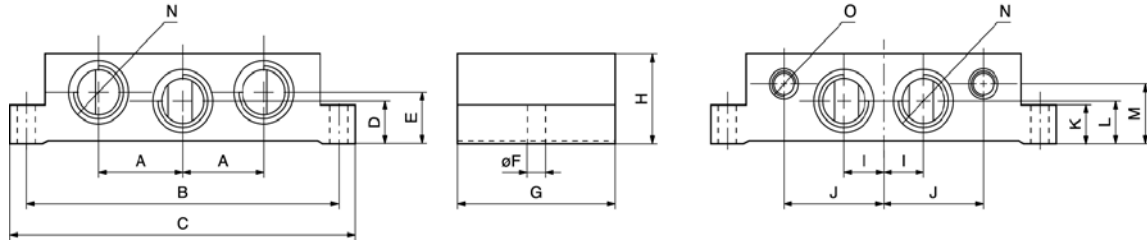
	Size	Port size 1,2,3	Port size 12, 14	A	B	C	D	E	F	G	H	I
<b>P2V-AM512XX and P2V-AM512XX</b>	02	G1/4	G1/8	17	29	21	18,5	9,5	35,5	28	33	7
<b>P2V-BM513XX and P2V-BM513XX</b>	01	G3/8	G1/8	21,5	37	20	16	11	34,5	28	38	8

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



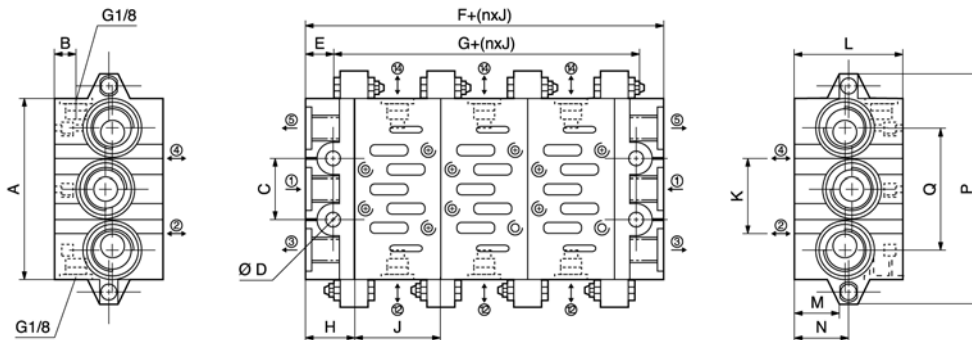
## ISO 5599-1 Subbase & Manifolds

### VDMA Side Ported Subbases



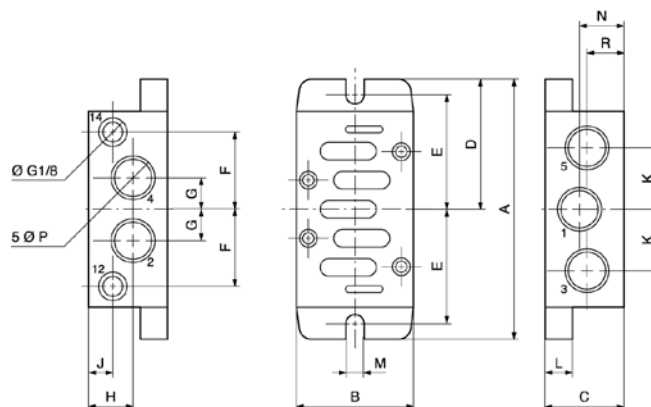
Order code	ISO Size	Port Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P2N-VS512SD	1	G1/4	21,5	98	110	11	20	5,5	48	32	12	29	10	11	23	G1/4	G1/8
P2N-WS513SD	2	G3/8	28	112	124	14	26	6,6	56	40	15	37	13	14	30	G3/8	G1/8
P2N-YS514SD	3	G1/2	34	136	149	17	17	6,6	71	32	16	45	18	17	22	G1/2	G1/8

### VDMA Bottom Ported Manifold



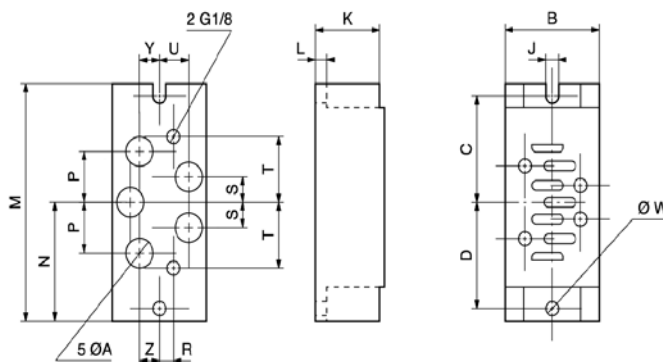
Order code	ISO Size	Port 1, 3, 5	Port 2, 4	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
P2N-VM512MB	1	G3/8	G1/4	85	8,5	28	7	11	44	22	22	43	26	46	21	24	56	110
P2N-WM513MB	2	G1/2	G3/8	100	9	35	9	13	52	26	26	56	30	47	22	24	68	135
P2N-YM514MB	3	G1	G1/2	140	10	52	12	15	60	30	30	71	38	56	31	34	104	190

### Side ported subbases



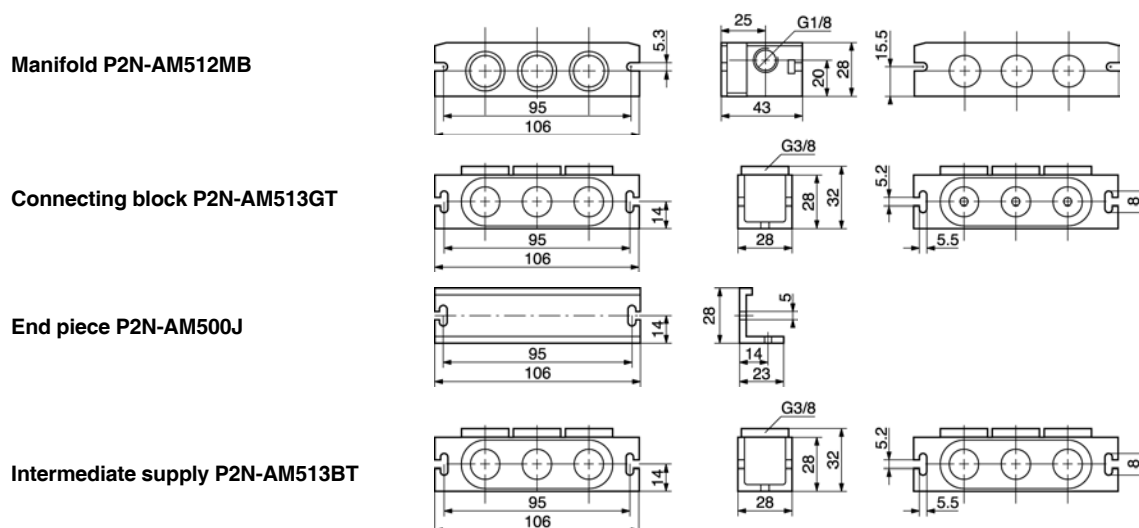
Order code	ISO Size	ØP	A	B	C	D	E	F	G	H	J	K	L	M	N	R
PL1-1/4-70	1	G1/4	110	46	29	55	49	30	11	17,75	17,75	22	6	5,5	17,75	17,75
PL2-3/8-70	2	G3/8	124	56	37	62	55	37	14,5	22,5	14	28	6	5,5	22,5	14,5
P2N-JS516SD	3	G3/4	149	71	60	74,5	68	45	21	33	10	40	18	6,6	37,5	22,5

**Bottom ported subbases**

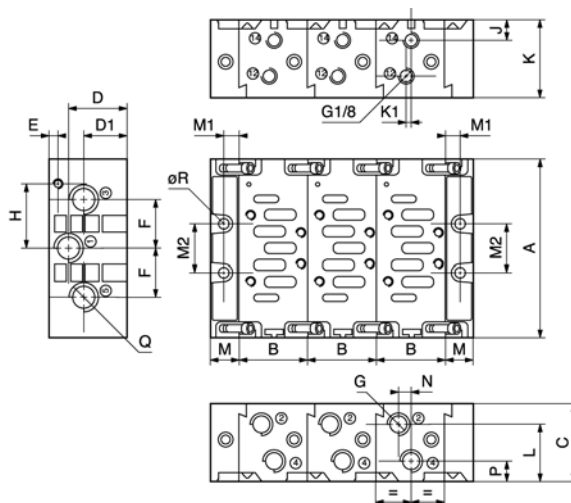


Order code	ISO Size	A	B	C	D	J	K	L	M	N	P	R	S	T	U	W	Y	Z
PD1-1/4-70	1	G1/4	46	49	49	5,5	29	6	110	55	22	10	11	30	10	5,5	10	10
PD2-3/8-70	2	G3/8	56	55	55	5,5	37	6	124	62	29	10	14,5	37	12,5	5,5	12,5	12,5
PD3-1/2-70	3	G1/2	77	68	68	6,6	32	18	149	74,5	34	10	17	45	17	6,5	17	17

**Size 1 bottom ported manifold**



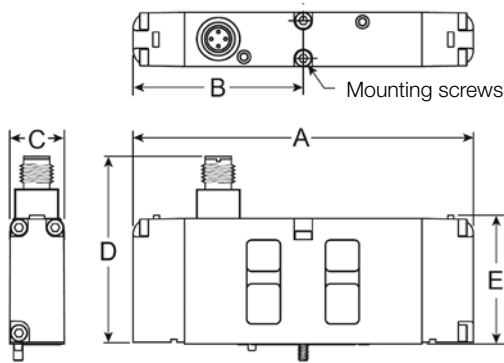
**Sizes 1 & 2 side ported manifold**



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

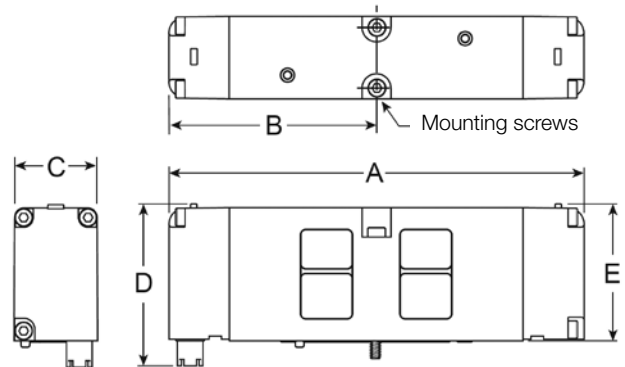
**Isys ISO Valves**

**HA / HB Series - ISO 15407-1**



	A	B	C	D	E
<b>HB</b>	113	56	18	61	43
<b>HA</b>	130	65	26	61	42

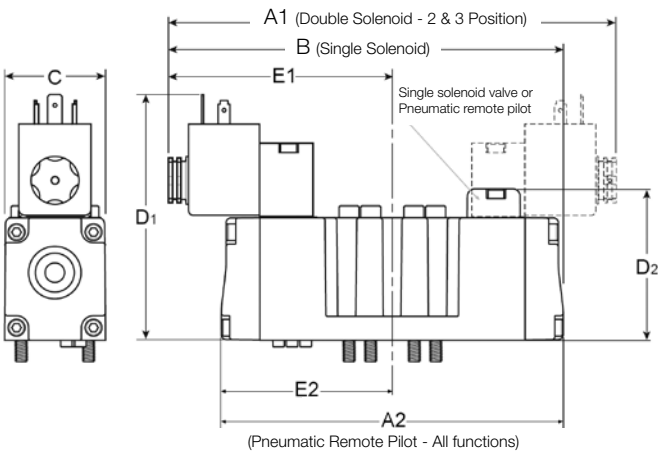
**HA / HB Series - ISO 15407-2**



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

**H1 / H2 / H3 Series - ISO 5599-1**

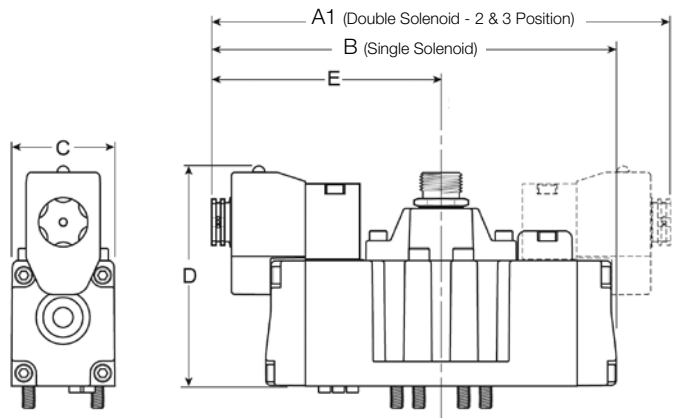
CNOMO Operator or Remote Pilot



	A1	A2	B	C	D1	D2	E1	E2
<b>H1</b>	186	142	164	42	109	63,5	93	71
<b>H2</b>	212	168	190	55	122	76	106	84
<b>H3</b>	241	177	209	55	122	76	121	89

**H1 / H2 / H3 Series - ISO 5599-2**

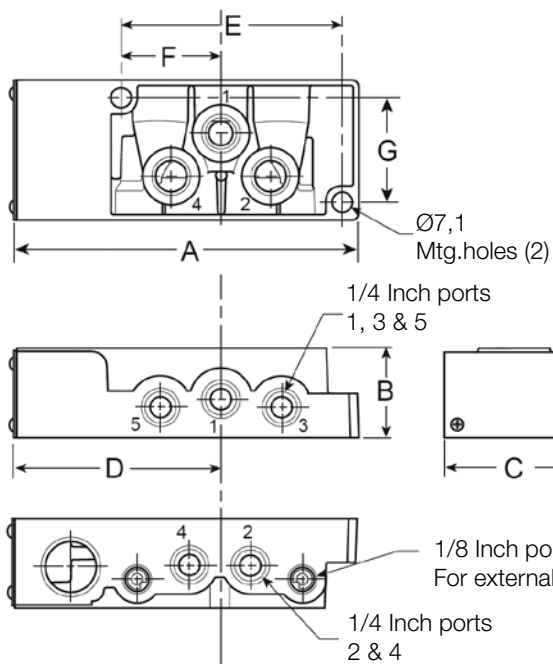
Plug-in and M12 Connector Versions



	A	B	C	D	E
<b>H1</b>	186	164	42	90	93
<b>H2</b>	212	190	55	103	106
<b>H3</b>	241	209	55	103	121

**Isys ISO Subbases**

**HA Series - ISO 15407-1 & -2**

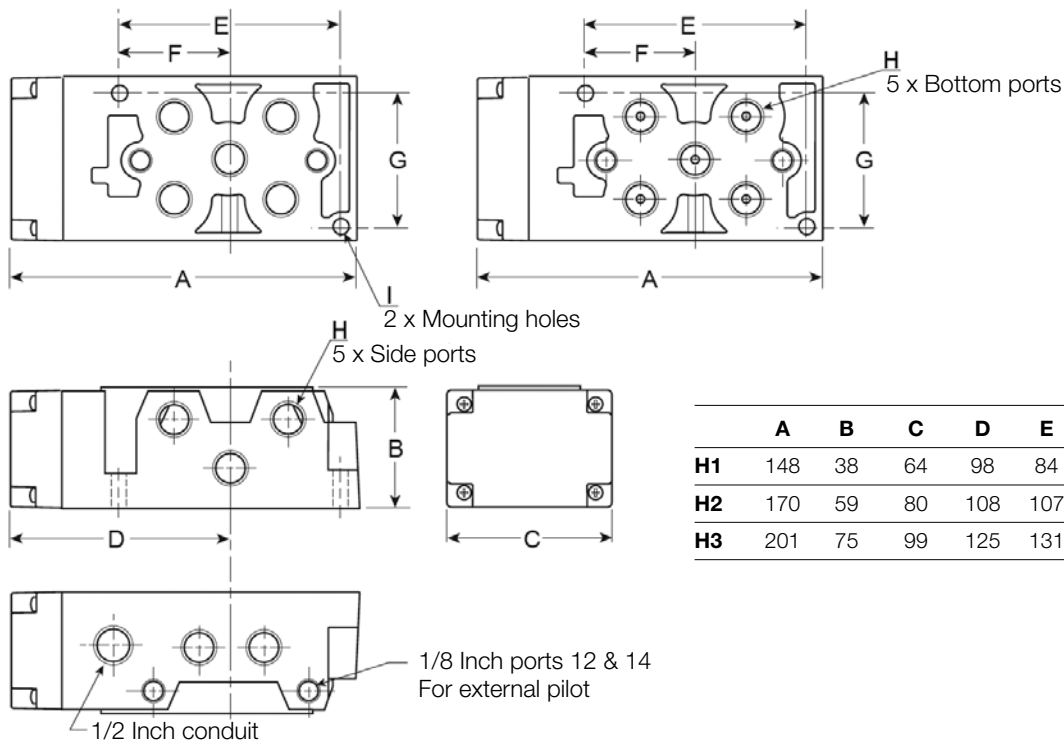


	A	B	C	D	E	F	G
<b>HA</b>	124	32,5	50,8	74	36,2	80,2	37,9

**H1 / H2 / H3 Series - ISO 5599-1 & -2**

**Side Ported Subbase**

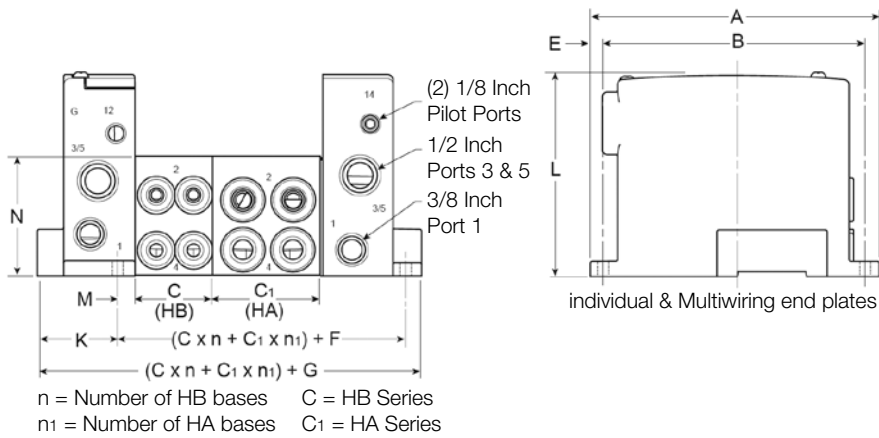
**Bottom Ported Subbase**



	A	B	C	D	E	F	G	H	I
<b>H1</b>	148	38	64	98	84	40	51	3/8"	5,5
<b>H2</b>	170	59	80	108	107	52	65	1/2"	7,1
<b>H3</b>	201	75	99	125	131	64	82	3/4"	9

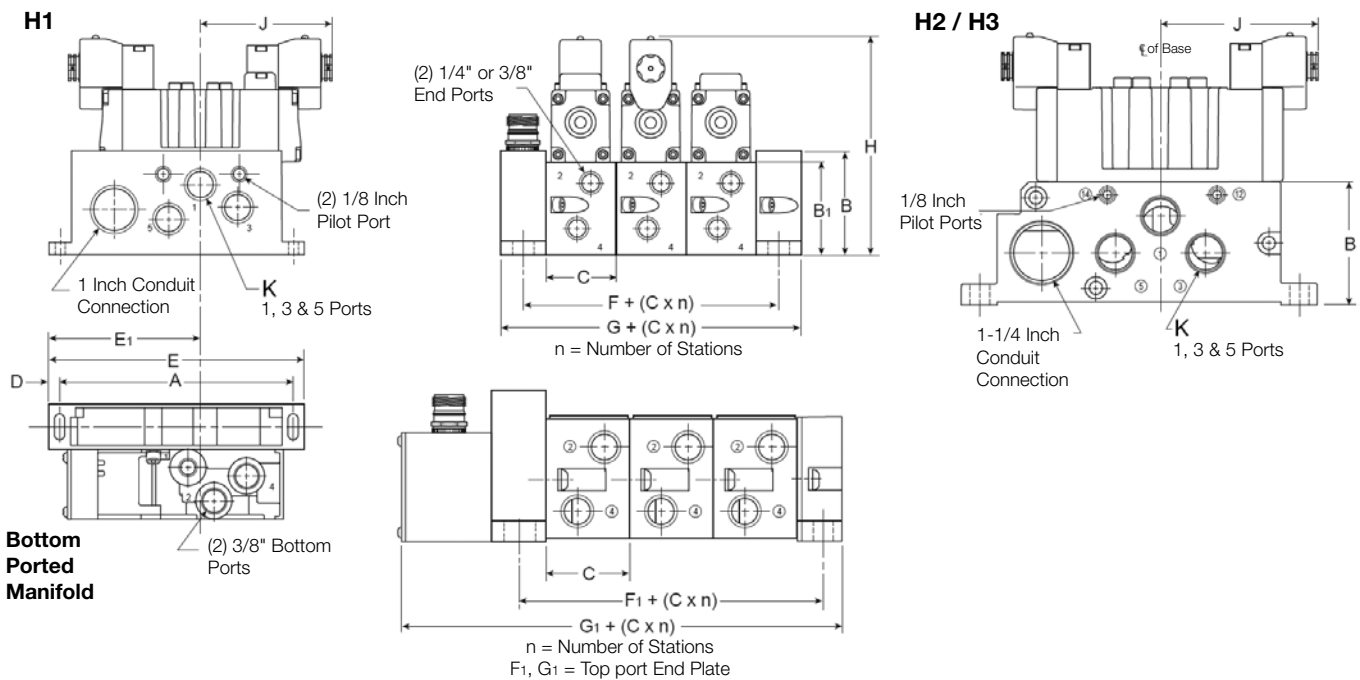
**Isys ISO Manifolds**

**HA/HB Series - ISO 15407-2**



	A	B	C	C1	D	E	F
<b>HA/HB</b>	152	137	40,8	56,8	16	7,5	54,4
	G	H	J	K	L	M	N
<b>HA/HB</b>	104,6	109,8	4	42,7	106	8,4	63

**H1 / H2 / H3 Series - ISO 5599-2**

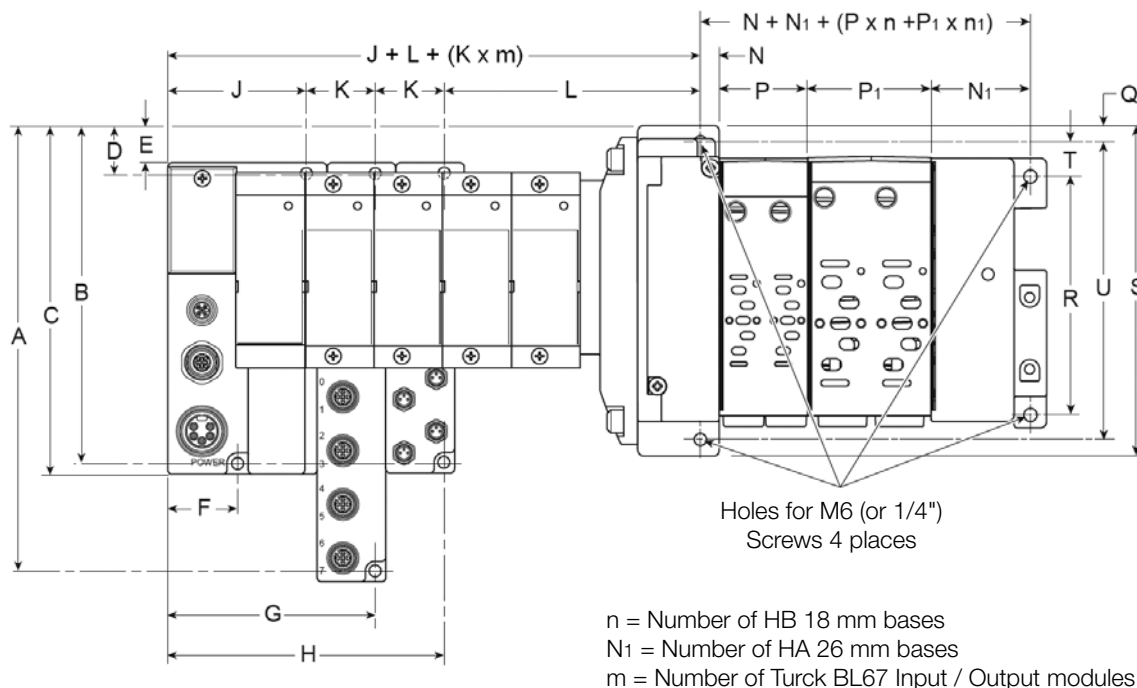


	A	B	B1	C	D	E	E1	F	F1	G	G1	H	J	K
<b>H1</b>	165	73	67	50	8	182	108	32	-	63,5	86	157	93	1/2"
<b>H2</b>	215	85	-	56	12	239	134	30	33	60	96	188	106	3/4"
<b>H2</b>	265	105	-	71	15	295	159	33	41	63	111	208	-	1"

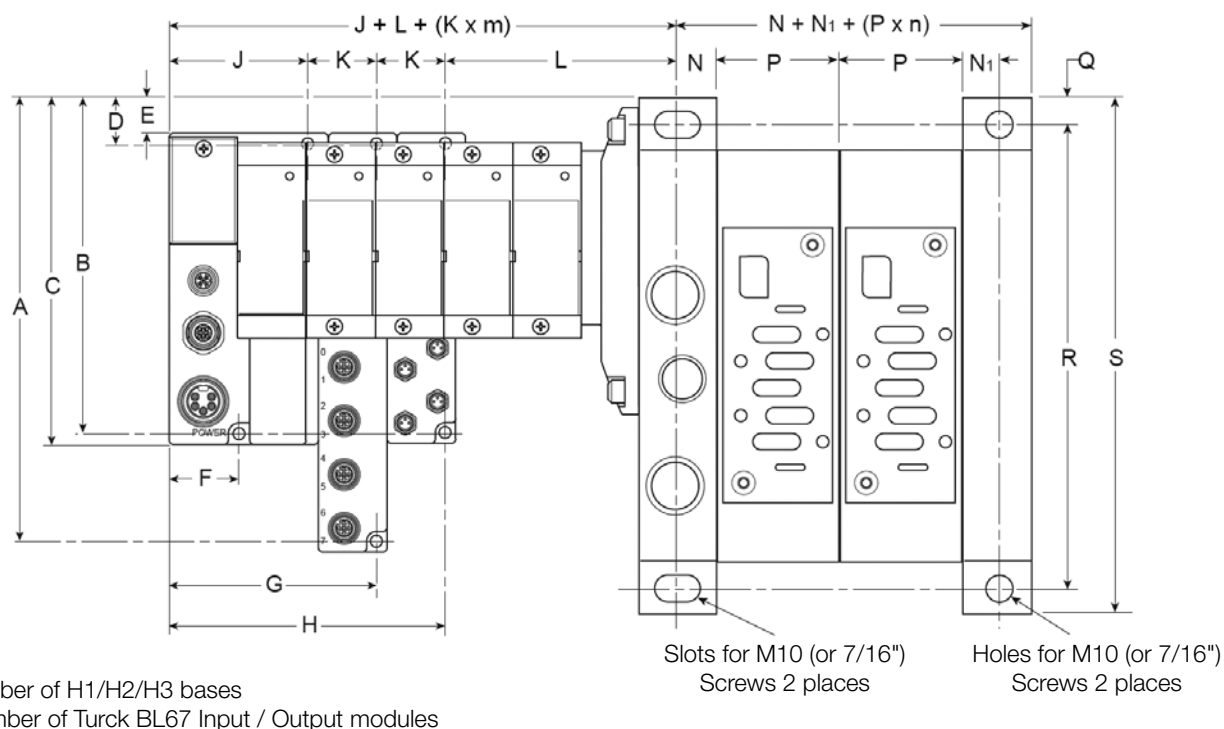


**Isys ISO 15407-2 & 5599-2 Sizes 02 to 3 with Turck BL67 Remote IO System**

**HA/HB Series**

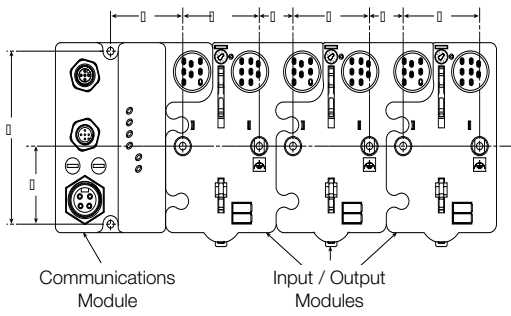


**H1/H2/H3 Series**



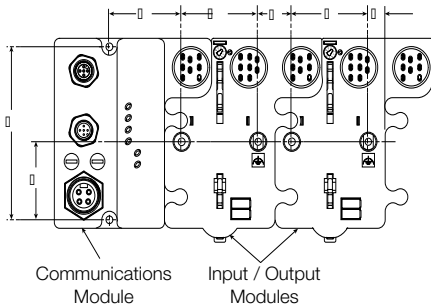
	A	B	C	D	E	F	G	H	J	K	L	N	N <sub>1</sub>	P	P <sub>1</sub>	Q	R	S	T	U
<b>HA/HB</b>	204,5	154,5	159,5	19,5	14,5	32,5	96,5	128,5	64,5	32	120,8	8,4	45,8	40,8	56,8	4	110	152	16	137
<b>H1</b>	216,7	166,7	171,7	31,7	26,7	32,5	96,5	128,5	64,5	32	108,5	15,9	15,9	49	-	8,5	165	182	-	-
<b>H2</b>	212,9	162,9	167,9	27,9	22,9	32,5	96,5	128,5	64,5	32	108,6	18	15	56	-	12	215	239	-	-
<b>H3</b>	218,9	168,9	173,9	33,9	28,9	32,5	96,5	128,5	64,5	32	116,6	24	16,5	71	-	15	265	295	-	-

**Isys ISO 15407-2 & 5599-2 Sizes 02 to 3 with Isysnet Fieldbus System**

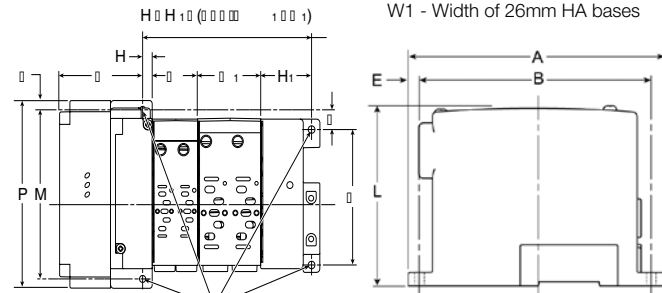


**HA / HB Dimensions**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
<b>HA/HB</b>	102	46	48	51	22	11

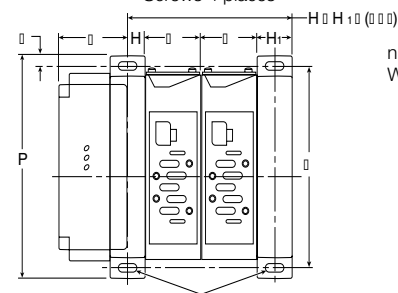


n = Number of 18mm HB bases  
 N1 = Number of 26mm HA bases  
 W = Width of 18mm HB bases  
 W1 = Width of 26mm HA bases



Holes for M6 (or 1/4")  
 Screws 4 places

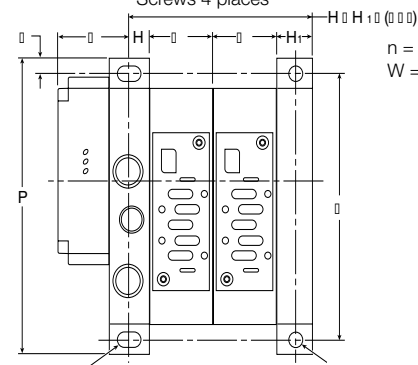
	<b>A</b>	<b>B</b>	<b>E</b>	<b>L</b>	<b>G</b>	<b>H</b>	<b>H<sub>1</sub></b>
<b>HA/HB</b>	152	137	7,5	106	68	8,4	45,8
	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>	<b>P</b>	<b>W</b>	<b>W<sub>1</sub></b>
<b>HA/HB</b>	4	110	16	137	152	40,8	56,8



Slots for M6 (or 1/4")  
 Screws 4 places

n = Number of H1 bases  
 W = Width of H1 bases

	<b>G</b>	<b>H</b>	<b>H<sub>1</sub></b>	<b>J</b>	<b>K</b>	<b>P</b>	<b>W</b>
<b>H1</b>	56	15,9	15,9	8,5	165	182	49
<b>H2</b>	58	18	15	12	215	239	56
<b>H3</b>	64	24	16,5	15	265	295	71



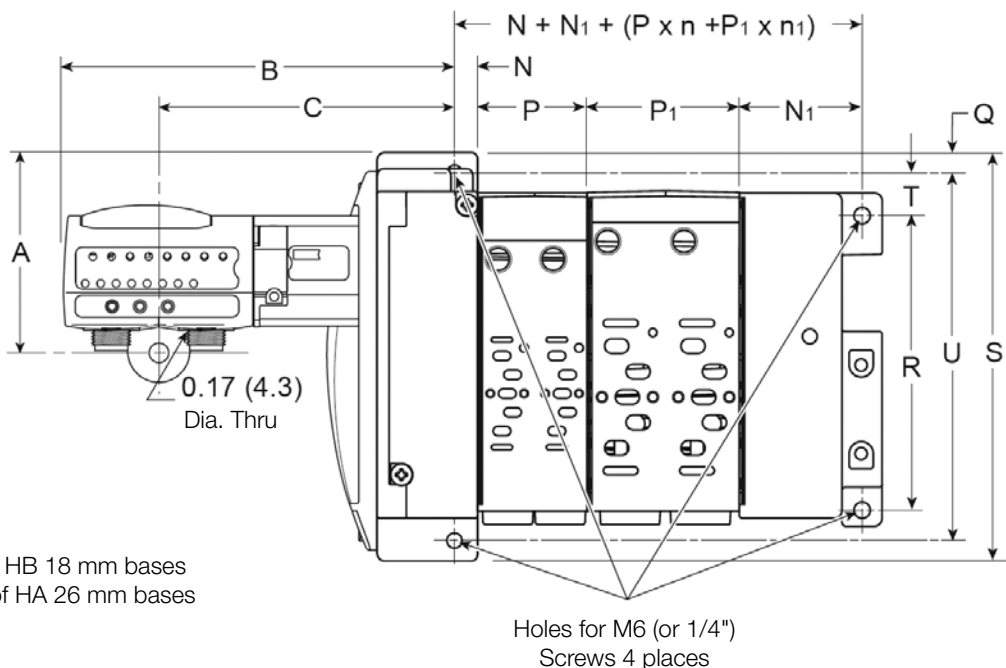
n = Number of H2 / H3 bases  
 W = Width of H2 / H3 bases

Slots for M10 (or 7/16")  
 Screws 2 places

Holes for M10 (or 7/16")  
 Screws 2 places

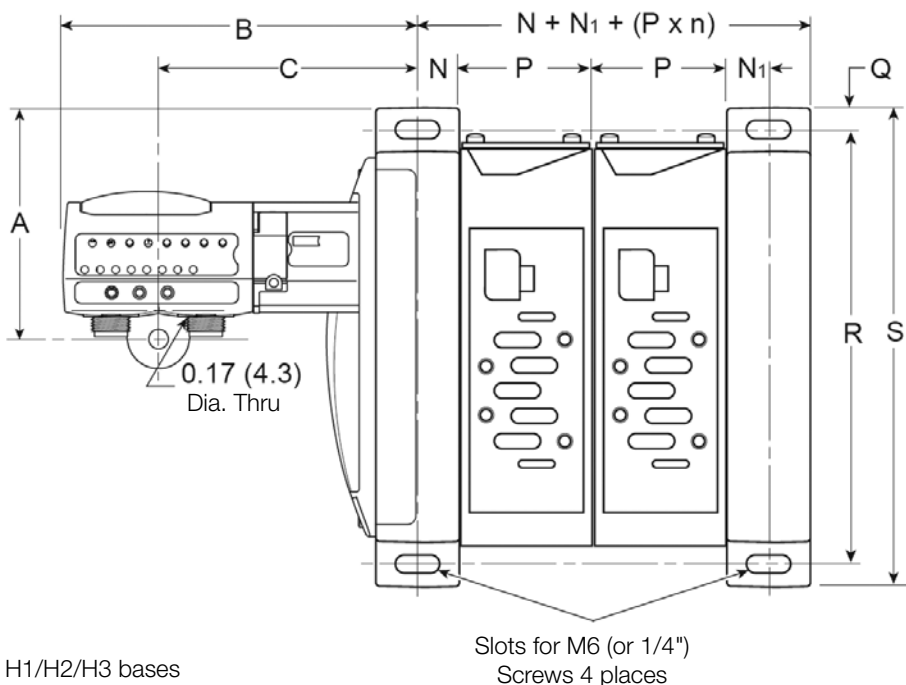
**Isys ISO 15407-2 & 5599-2 Sizes 02 to 3 with Moduflex Bus**

**HA/HB Series**



n = Number of HB 18 mm bases  
 n<sub>1</sub> = Number of HA 26 mm bases

**H1/H2/H3 Series**

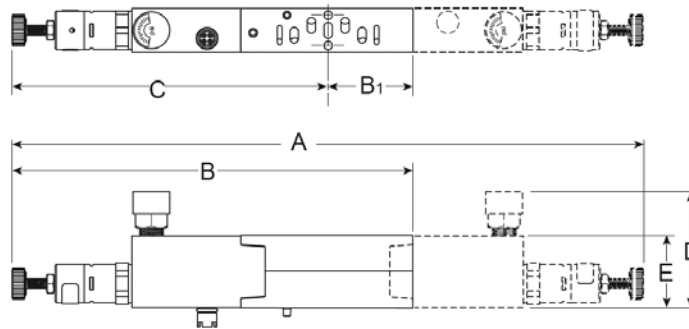


n = Number of H1/H2/H3 bases

	A	B	C	N	N <sub>1</sub>	P	P <sub>1</sub>	Q	R	S	T	U
<b>HA/HB</b>	69,8	142,5	111,8	8,4	45,8	40,8	56,8	4	110	152	16	137
<b>H1</b>	82	130,2	160,9	15,9	15,9	49	-	8,5	165	182	-	-
<b>H2</b>	78,2	130,3	161	18	15	56	-	12	215	239	-	-
<b>H3</b>	84,2	138,2	168,9	24	16,5	71	-	15	265	295	-	-

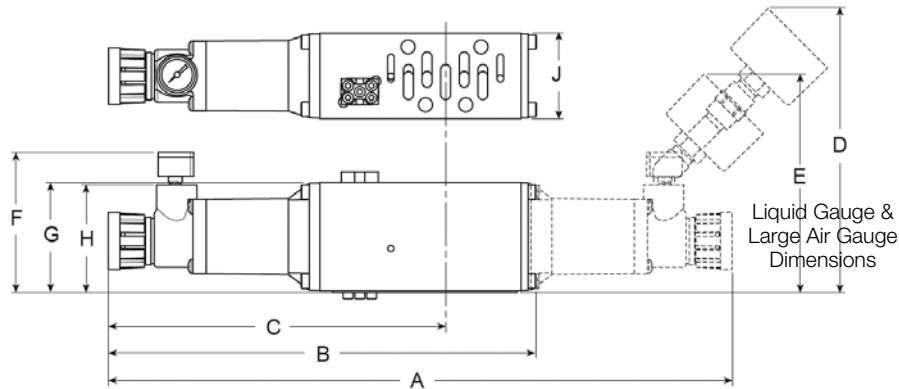
**Sandwich Regulator with Gauge**

**HA / HB Series**



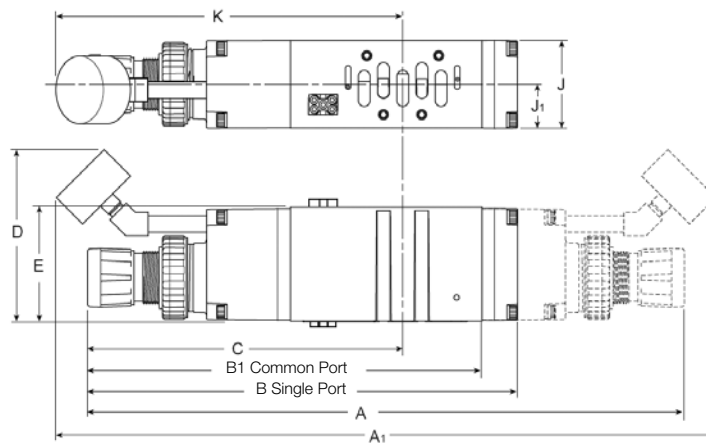
	<b>A</b>	<b>B</b>	<b>B1</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>HB</b>	261	156	26	130	66	30
<b>HA</b>	254	163	36	127	69	30

**H1 Series**



	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>J</b>
<b>H1</b>	301	207	163	138	108	72	53	52	41

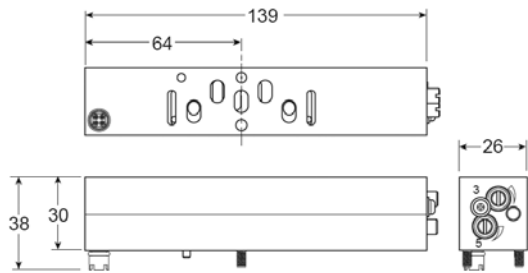
**H2 / H3 Series**



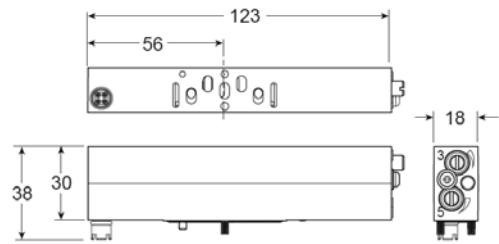
	<b>A</b>	<b>A1</b>	<b>B</b>	<b>B1</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>J</b>	<b>J1</b>	<b>K</b>
<b>H2</b>	372	411	268	250	196	107	71	55	27	216
<b>H3</b>	398	436	293	271	213	107	75	64	32	231

## Sandwich Flow Control

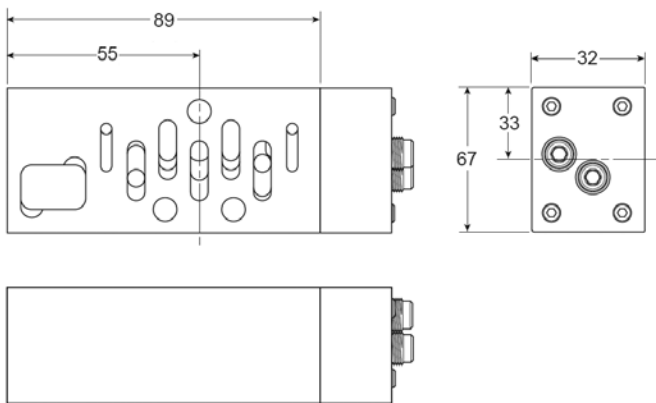
### HA Series



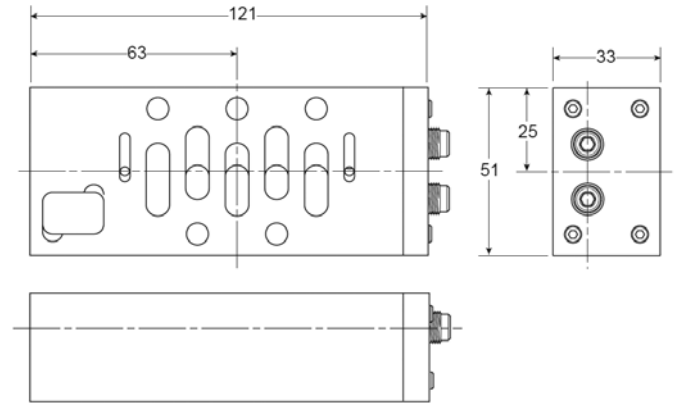
### HB Series



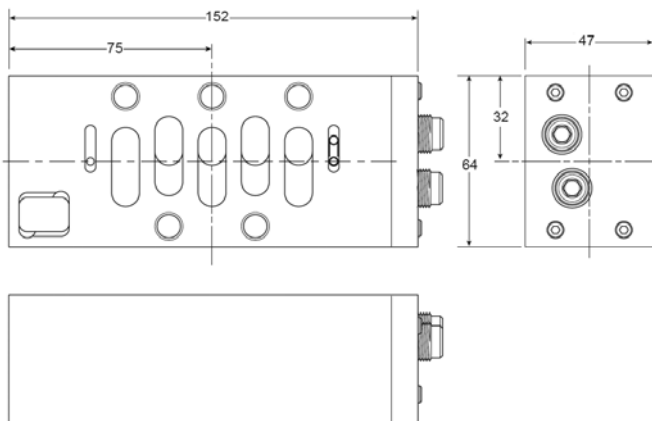
### H1 Series



### H2 Series



### H3 Series



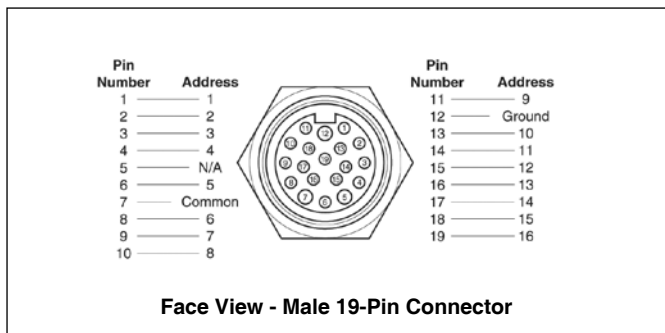
Interconnect Circuit Boards

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

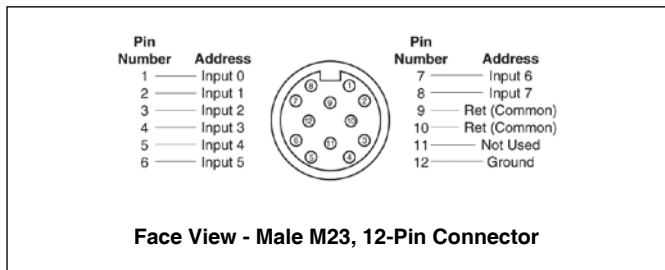
Common Pin "7" is rated for 8 amps. Cable common wire must be greater than total amperage of solenoids on Add-A-Fold assembly.

**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.

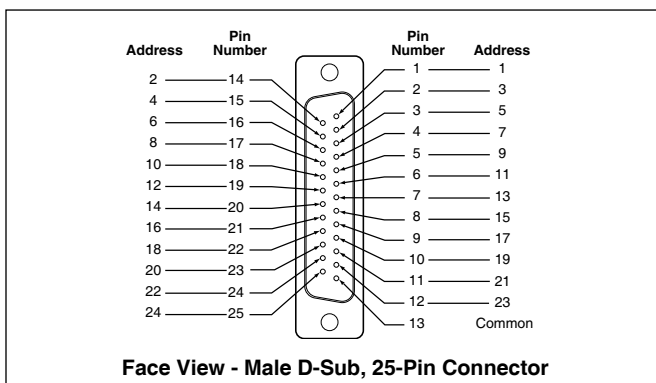
Brad Harrison #333030P80M050 16.40 ft. (Female to Male Cable)

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

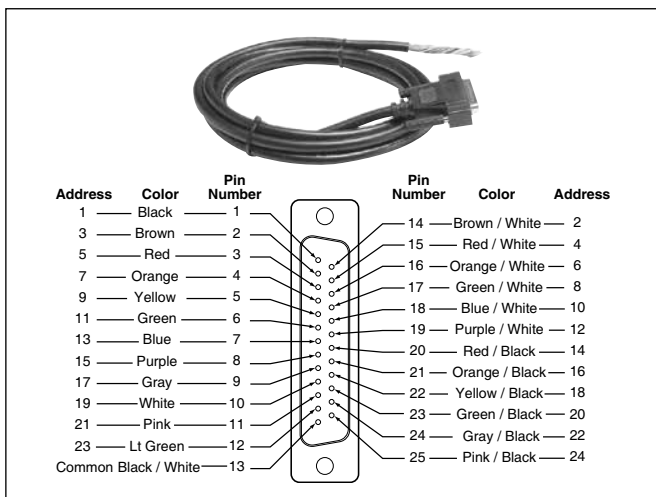
M23, 12-Pin Round Connector (Male)



25-Pin, D-Sub Connector (Male)



25-Pin, D-Sub Cable (Female)

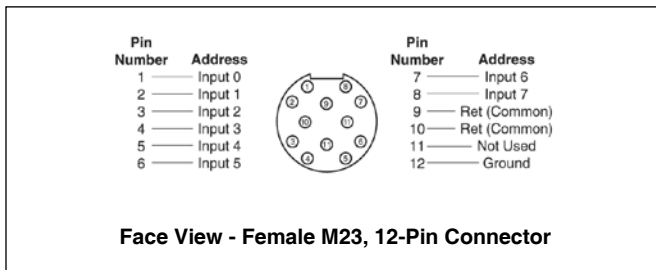


25-Pin, D-Sub Cable Specifications

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)





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