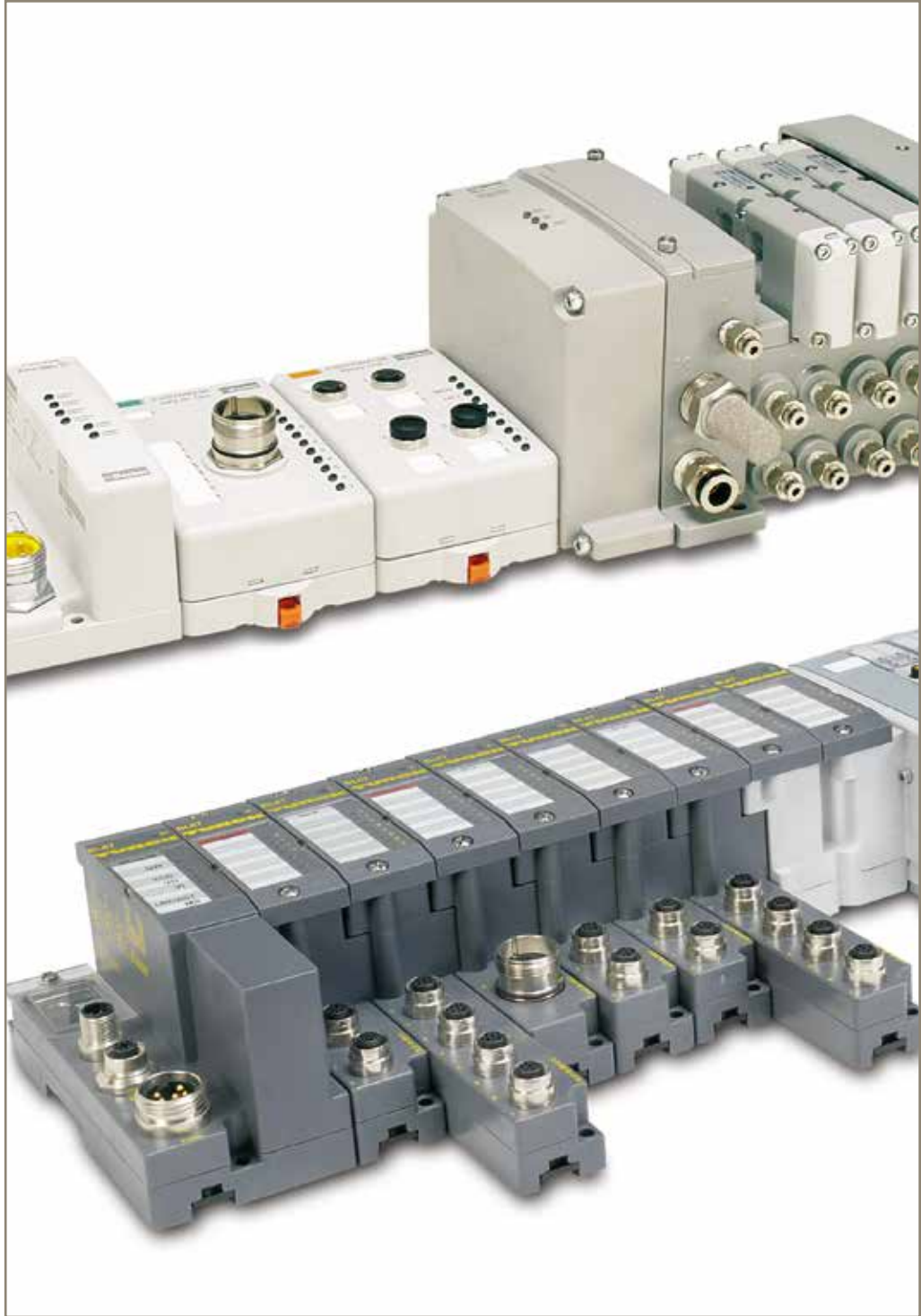




aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
hydraulics  
**pneumatics**  
process control  
sealing & shielding



## H Series ISO Valves

A complete range of pneumatic ISO valves

### Industrial Communication

Catalogue PDE2589TCUK May 2016



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.

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

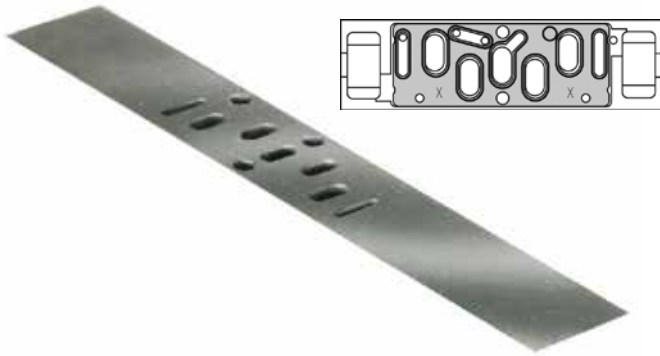
**SALE CONDITIONS**

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

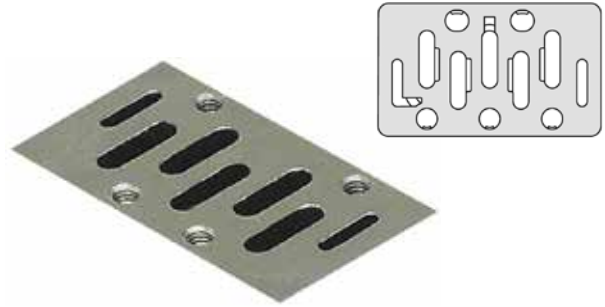
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**ISO Specifications**

**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**

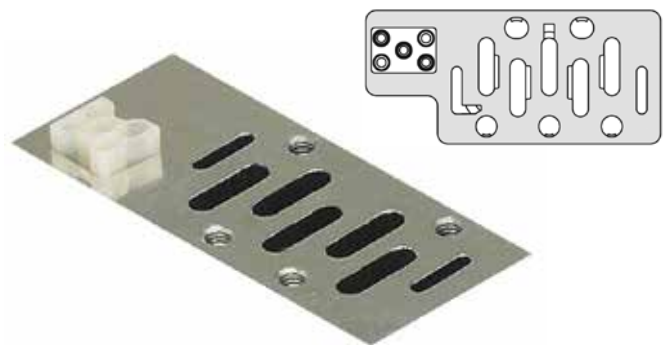
The ISO Standard 5599-1 specifies an interface pattern for a common subbase valve consisting of pressure passages 1, 3, 5, 2 & 4 and pilot passages 12 & 14. The width of the pattern and location of the 4 bolt holes are also specified. There are no specifications for the type of external electrical connection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

**Size :** 1 2 3

**Plug-in connection**



**15407-2**  ISO 15407-2



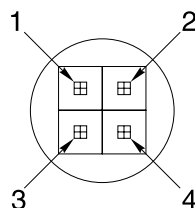
**5599-2**  ISO 5599-2

**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 -

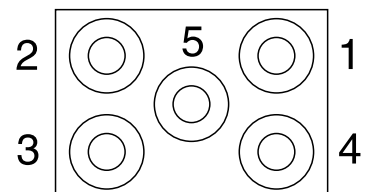


**Body-to-base plug-in subbase valves**

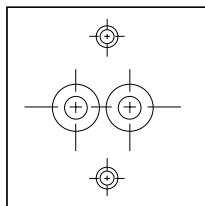
Same as 5599-1 for pneumatic pressure passages, 5599-2 standard also specifies a plug-in electrical connection.

**Sizes :** 1 2 3

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

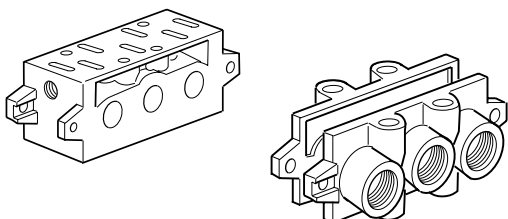


**CNOMO and VDMA Standards**



**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.



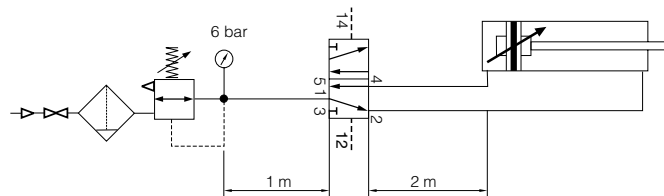
**VDMA 24345**

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	G1/8	G1/8	G1/8	G1/8	G1/8				
Size 01	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4			
Size 1	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4			
			G3/8	G3/8	G3/8	G3/8	G3/8		
Size 2			G3/8	G3/8	G3/8	G3/8	G3/8		
				G1/2	G1/2	G1/2	G1/2	G1/2	G1/2
Size 3				G1/2	G1/2	G1/2	G1/2	G1/2	G1/2
						G3/4	G3/4	G3/4	G3/4

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

## H Series ISO - Heavy Duty Applications

### Market Applications

- Automotive
- Machine tools
- Mobile



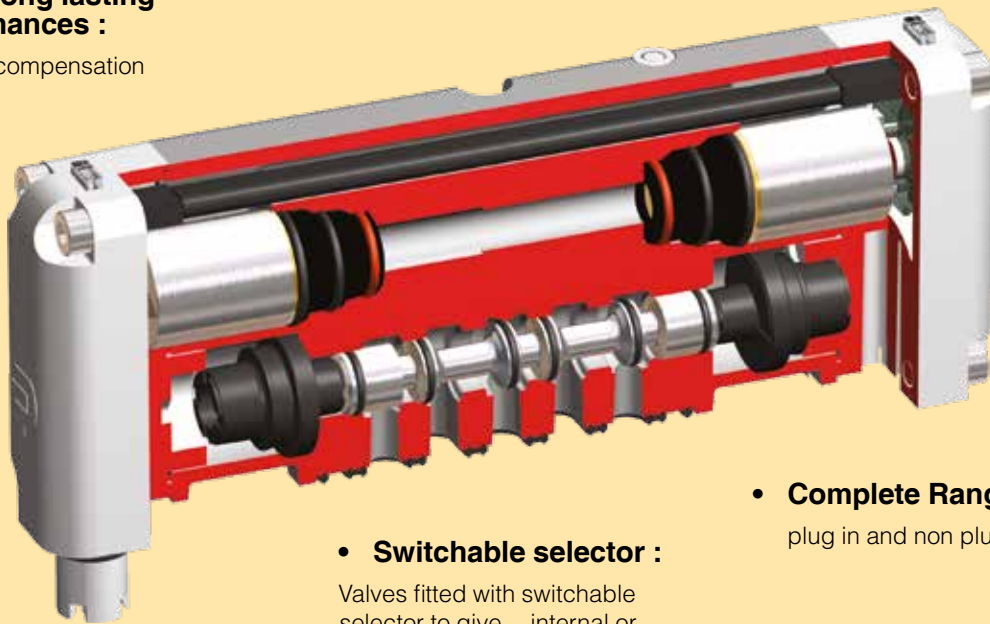
- **Excellent reliability :**

Long life in excess of 30 million operations.

- **Heavy Duty Metal Body**

- **Stable long lasting performances :**

due to wear compensation



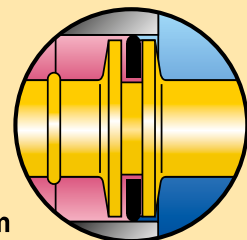
- **Complete Range :**  
plug in and non plug in

- **Switchable selector :**

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

- **WCS Spool Technology**

**WCS**  
Wear Compensating System



## H Series 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 H Series ISO valve.

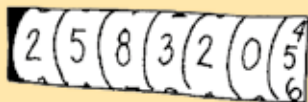
### Heavy duty and corrosion resistant body

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

H Series 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, H Series 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



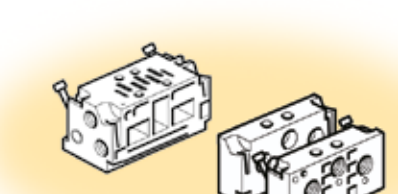
The solenoid valves are protected to IP65 with the standard cable plug. Available with DIN A or M12 connection.

### 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 H Series ISO with integrated electrical connection in the base (plug in)

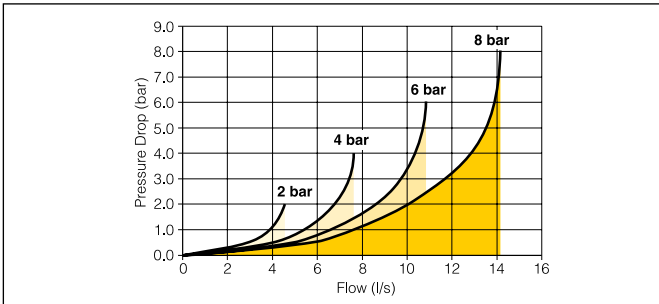
### Insensitive to dirty air

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.

### H Series ISO Flow Characteristics

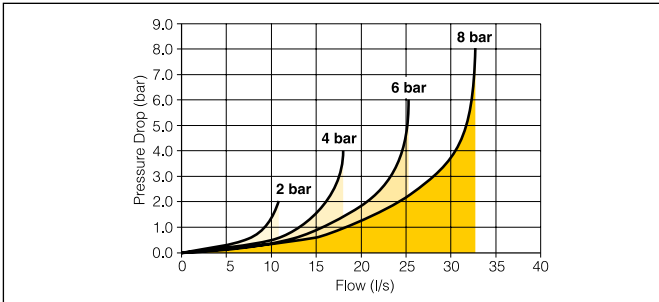
Flow capacities in accordance with ISO6358, for 5/2 function. 5/3 function are around 10 to 20% less

#### Technical Data H Series ISO Size 02



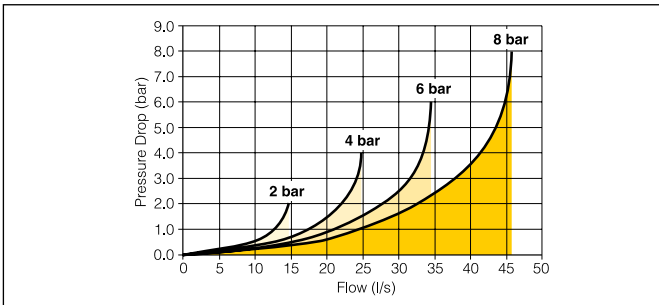
Operating pressure.	
5/2 Spring return	2,0 - 10 bar
5/2 Differential	2,0 - 10 bar
5/2 Double solenoid	2,0 - 10 bar
5/3 Double solenoid	2,5 - 10 bar
Working temperature.	
-15°C to + 50°C	
Flow (acc. to ISO 6358)	
c = 1,5 NI/s x bar	
b = 0,25	
Qn = 6,5 l/s	
Qmax = 10,8 l/s	

#### Technical Data H Series ISO Size 01



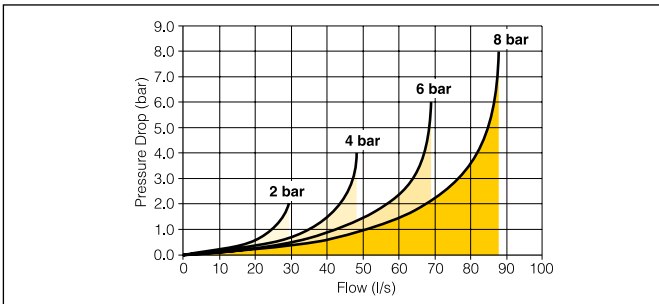
Operating pressure.	
5/2 Spring return	2,0 - 10 bar
5/2 Differential	1,7 - 10 bar
5/2 Double solenoid	1,7 - 10 bar
5/3 Double solenoid	2,5 - 10 bar
Working temperature.	
-15°C to + 50°C	
Flow (acc. to ISO 6358)	
c = 3,6 NI/s x bar	
b = 0,30	
Qn = 15,3 l/s	
Qmax = 25,3 l/s	

#### Technical Data H Series ISO Size 1



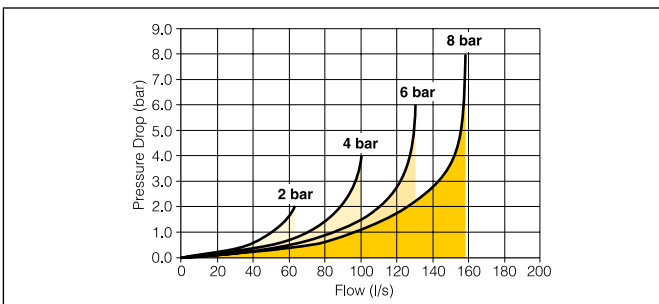
Operating pressure.	
5/2 Spring return	2,4 - 10 bar
5/2 Differential	1,7 - 10 bar
5/2 Double solenoid	1,7 - 10 bar
5/3 Double solenoid	2,5 - 10 bar
Working temperature.	
-15°C to + 50°C	
Flow (acc. to ISO 6358)	
c = 5,0 NI/s x bar	
b = 0,30	
Qn = 20,8 l/s	
Qmax = 34,5 l/s	

#### Technical Data H Series 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 H Series 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	



## H Series 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

**H Series 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

**H Series 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


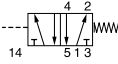
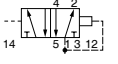
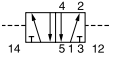

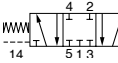
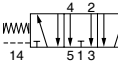
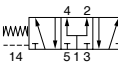
Shaded voltage part numbers are available from stock. Unshaded part numbers are available on request but will be subject to minimum order quantities. Otherwise order coil/solenoid and valve separately.

Shaded part numbers are standard

## H Series ISO 15407-1 - Sizes 02 & 01

### Pneumatic remote pilot operated


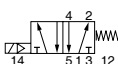
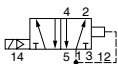


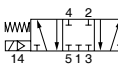

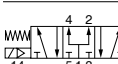
Oriented side 14, LED & Surge suppressor

	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>

## H Series ISO 15407-1 - Sizes 02 & 01

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

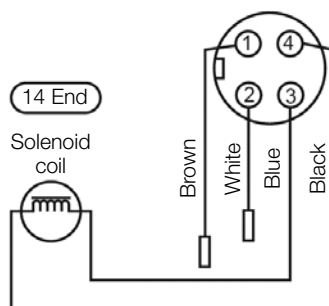
Oriented side 14, LED & Surge suppressor

	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

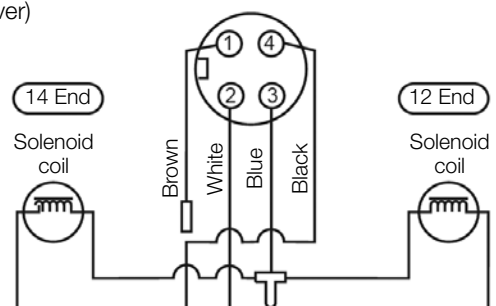
4-PIN Micro  
 (Top Cover)



### ISO 20401

#### 4-Pin Male / Double Solenoid

4-PIN Micro  
 (Top Cover)



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

**Order chart**

**H 1 E WX B B L 49 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	
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.


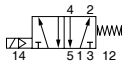
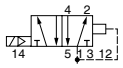
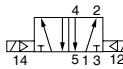

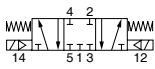
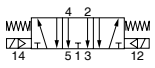
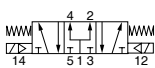
Valve type function	
1	Single solenoid, 2 position - Differential
2	Double solenoid, 2 position
5	Double solenoid, 3 position - APB
6	Double solenoid, 3 position - CE
7	Double solenoid, 3 position - PC
E	Single solenoid, 2 position, Differential, spring assist

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


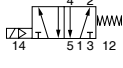
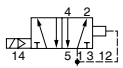
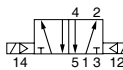
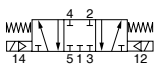
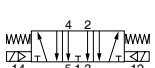
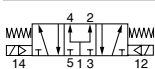
Shaded part numbers are standard

**H Series 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


**H Series 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>H1EWXBBNXXD</b>
		2 - 56 mm	1070	<b>H2EWXBBNXXD</b>
		3 - 71 mm	1350	<b>H3EWXBBNXXD</b>
	5/2 Single solenoid - Differential	1 - 43 mm	650	<b>H11WXBBNXXD</b>
		2 - 56 mm	1070	<b>H21WXBBNXXD</b>
		3 - 71 mm	1350	<b>H31WXBBNXXD</b>
	5/2 Double solenoid	1 - 43 mm	700	<b>H12WXBBNXXD</b>
		2 - 56 mm	1120	<b>H22WXBBNXXD</b>
		3 - 71 mm	1400	<b>H32WXBBNXXD</b>
	5/3 Closed Center	1 - 43 mm	700	<b>H15WXBBNXXD</b>
		2 - 56 mm	1120	<b>H25WXBBNXXD</b>
		3 - 71 mm	1400	<b>H35WXBBNXXD</b>
	5/3 Vented Center	1 - 43 mm	700	<b>H16WXBBNXXD</b>
		2 - 56 mm	1120	<b>H26WXBBNXXD</b>
		3 - 71 mm	1400	<b>H36WXBBNXXD</b>
	5/3 Pressurised Center	1 - 43 mm	700	<b>H17WXBBNXXD</b>
		2 - 56 mm	1120	<b>H27WXBBNXXD</b>
		3 - 71 mm	1400	<b>H37WXBBNXXD</b>

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

**H Series 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

**H Series ISO 5599-1 Size 1 / 2 / 3 Remote Pilot**

**Order chart**




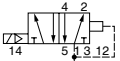
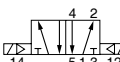
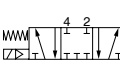

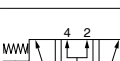
**H 1 F WX 000 XX D**

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

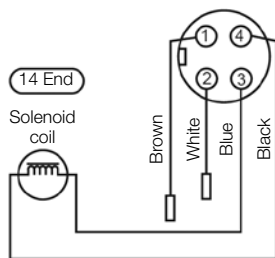
Shaded part numbers are standard

**H Series 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>

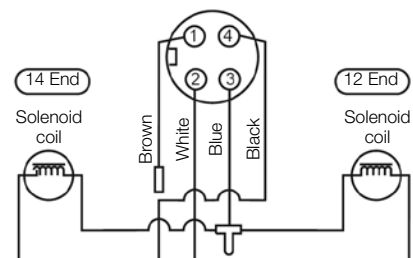
**ISO 20401  
 4-Pin Male / Single Solenoid**

4-PIN Micro  
 (Top Cover)


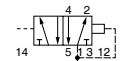
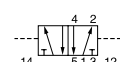
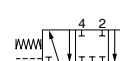
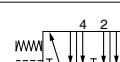
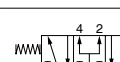


**ISO 20401  
 4-Pin Male / Double Solenoid**

4-PIN Micro  
 (Top Cover)




**H Series 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


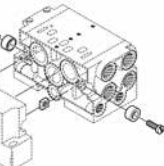
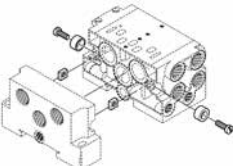
### Side ported individual subbase - ISO 15407-1 - Sizes 02 & 01

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

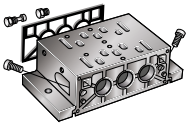
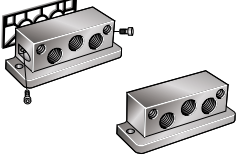
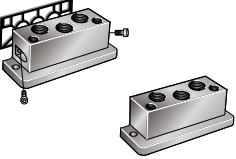
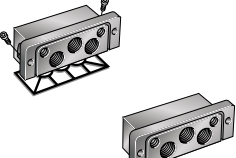
Description	Size	Port Size	Weight (g)	Order code
 <p><b>Two position manifold base</b>                      Can be used for External pilot supply                      Cannot be used for remote pilot</p>	02 - 18 mm	1/8 BSPP	140	<b>PJLP02-201-70</b>
		1/8 NPT	140	<b>PJLP02-201-80</b>
	01 - 26 mm	1/4 BSPP	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>

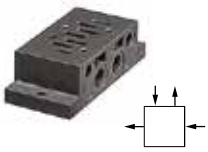


**Bottom ported manifold & End plate - ISO 15407-1 - Sizes 02 & 01**




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>	
				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>		
			01 - 26 mm	3/8 BSPP	210	<b>P2V-BM513GT</b>		
	Including seal and fitting screws	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>
					01 - 26 mm	3/8 BSPP	220	<b>P2V-BM513GB</b>
Including seal and fitting screws	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>
					01 - 26 mm		240	<b>P2V-BM500G0</b>
Including seal and fitting screws		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**

Size	
PS56	ISO 15407-2 - Sizes 02 & 01

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>	
20L5	16 Points Terminal Strip
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	H Series Fieldbus Valve driver module
20M4	Moduflex Fieldbus adaptor

Gateways and I/O modules for Turck BL67, H Series Fieldbus 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



H Series Fieldbus




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>
	H Series Fieldbus 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, H Series Fieldbus, 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**



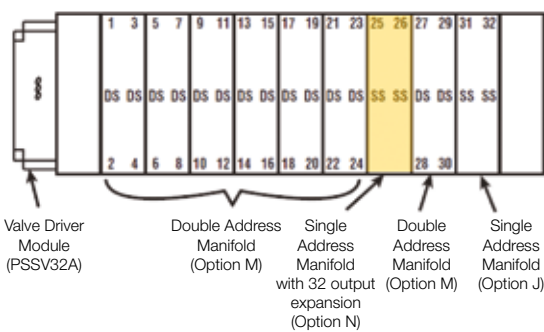
**HB Series**



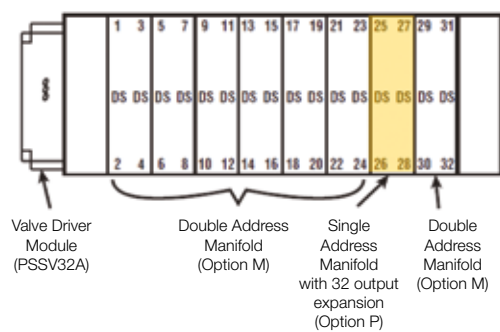
**HA Series**

**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**


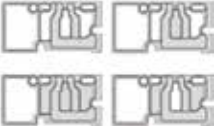
**2 Position Front Ported Manifold**

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>

**H Series ISO Plug in**

**Order chart**



**H B 1 VX B G 0 G9 A**

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

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

Voltage	
<b>G9</b>	24 VDC
<b>23</b>	115 VAC

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, 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


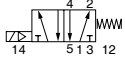
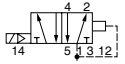

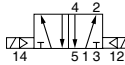
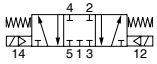
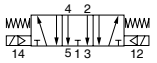
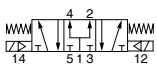
Shaded voltage part numbers are available from stock.  
 Unshaded part numbers are available on request but will be subject to minimum order quantities.  
 Otherwise order coil/solenoid and valve separately.

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



**H Series 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** **DP**

Size	
<b>PS40</b>	ISO 5599-2 - Size 1
<b>PS41</b>	ISO 5599-2 - Size 2
<b>PS42</b>	ISO 5599-2 - Size 3

Thread type	
<b>0</b>	NPT
<b>1</b>	BSPP 'G'

End Plate Type	
<b>Individual connection</b>	
<b>3101</b>	No connector - Use with individually wired base
<b>Multiwiring connection</b>	
<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>	H Series Fieldbus Valve driver module
<b>20M4</b>	Moduflex Fieldbus adaptor

- Moduflex Fieldbus Gateways must be ordered separately (See Moduflex Valve System Technical Catalogue)
- Turck BL67, H Series Fieldbus 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



H Series Fieldbus




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>PS4031011DP</b>
	To be used with individually wired base	Size 2	G3/4"	1600	<b>PS4131011DP</b>
		Size 3	G3/4"	2800	<b>PS4231011DP</b>






**Multiwiring connection**

	Description	ISO Size	Port size	Weight (g)	Order code
	25-Pin, D-Sub	Size 1	G1/2"	1360	<b>PS4020L21DP</b>
		Size 2	G3/4"	1600	<b>PS4120L21DP</b>
		Size 3	G3/4"	2800	<b>PS4220L21DP</b>
	19-Pin, Round, Brad Harrison	Size 1	G1/2"	1360	<b>PS4020L31DP</b>
		Size 2	G3/4"	1600	<b>PS4120L31DP</b>
		Size 3	G3/4"	2800	<b>PS4220L31DP</b>
	19-Pin, M23	Size 1	G1/2"	1360	<b>PS4020M21DP</b>
		Size 2	G3/4"	1600	<b>PS4120M21DP</b>
		Size 3	G3/4"	2800	<b>PS4220M21DP</b>
	12-Pin, M23	Size 1	G1/2"	1360	<b>PS4020L41DP</b>
		Size 2	G3/4"	1600	<b>PS4120L41DP</b>
		Size 3	G3/4"	2800	<b>PS4220L41DP</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>PS4020T01DP</b>
		Size 2	G3/4"	1600	<b>PS4120T01DP</b>
		Size 3	G3/4"	2800	<b>PS4220T01DP</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>PS4020T11DP</b>
		Size 2	G3/4"	1720	<b>PS4120T11DP</b>
		Size 3	G3/4"	2920	<b>PS4220T11DP</b>
	Turck BL76 Valve Driver Module For configuration up to 32 solenoids Including 2 x 16 DO modules	Size 1	G1/2"	1520	<b>PS4020T21DP</b>
		Size 2	G3/4"	1720	<b>PS4120T21DP</b>
		Size 3	G3/4"	2920	<b>PS4220T21DP</b>
	H Series Fieldbus Valve Driver Module For configuration up to 32 solenoids	Size 1	G1/2"	1580	<b>PS4020L61DP</b>
		Size 2	G3/4"	1800	<b>PS4120L61DP</b>
		Size 3	G3/4"	3000	<b>PS4220L61DP</b>
	Moduflex Fieldbus module adaptor	Size 1	G1/2"	1300	<b>PS4020M41DP</b>
		Size 2	G3/4"	1500	<b>PS4120M41DP</b>
		Size 3	G3/4"	2700	<b>PS4220M41DP</b>

For Turck BL67, H Series Fieldbus, 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

<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

<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

**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

**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		1 - 43 mm	G3/8"	1000	<b>PS401156CCP</b>	
		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		1 - 43 mm	G3/8"	1000	<b>PS401156JCP</b>	
		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	1 - 43 mm	G3/8"	1000	<b>PS401156MCP</b>
			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>

**H Series 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


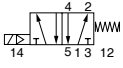
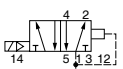
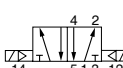



Overrides / Lights	
B	Non-locking, flush, push - w/o light
C	Locking, flush, push / turn - w/o light
G	Non-locking, flush, push - with light
H	Locking, flush, push / turn - with light

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.



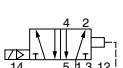

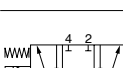

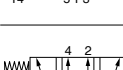
**H Series ISO 5599-2 - Sizes 1, 2 & 3**

**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>		

**H Series 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

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)

37

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

1

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

6

Port 4	
<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

6

Port 2	
<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

CP

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

\* 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**

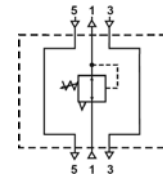
Provides adjustable regulated air pressure to the valves #1 port which gives the same regulated pressure to both the #2 and #4 port of the manifold or subbase. The regulator is always on the 14 end of the valve.



For HB & HA



For H1, H2 & H3



Part number code 1 X X

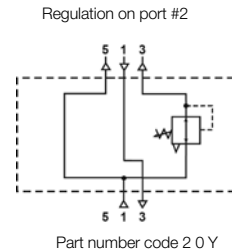
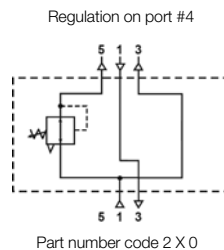
**Independent port regulation**

**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



**Dual Port Regulator**

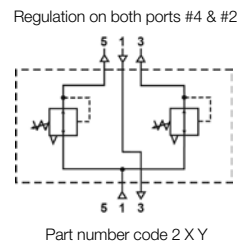
When using an independent Pressure Sandwich Regulator, the cylinder outlet ports are reversed. The 12 end energizes the #2 port. The 3-position CE and PC functions are also reversed.



For HB & HA






For H1, H2 & H3





**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>
		Independent	0 to 8 bar		<b>PS5637166P</b>	<b>PS5638166P</b>
	01 - 26 mm	Common	0 to 4 bar	240	<b>PS5637255P</b>	<b>PS5638255P</b>
		Independent	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>
		Independent	0 to 8 bar		<b>PS5537166P</b>	<b>PS5538166P</b>
	1 - 43 mm	Common	0 to 4 bar	340	<b>PS4037155CP</b>	<b>PS4038155CP</b>
		Independent	0 to 8 bar		<b>PS4037166CP</b>	<b>PS4038166CP</b>
	2 - 56 mm	Common	0 to 4 bar	520	<b>PS4037255CP</b>	<b>PS4038255CP</b>
		Independent	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>
		Independent	0 to 8 bar		<b>PS4137166CP</b>	<b>PS4138166CP</b>
	3 - 71 mm	Common	0 to 4 bar	1180	<b>PS4137255CP</b>	<b>PS4138255CP</b>
		Independent	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>
		Independent	0 to 8 bar		<b>PS4237166CP</b>	<b>PS4238166CP</b>
3 - 71 mm	Common	0 to 4 bar	1180	<b>PS4237255CP</b>	<b>PS4238255CP</b>	
	Independent	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



## H Series Fieldbus System





## Moduflex Bus System



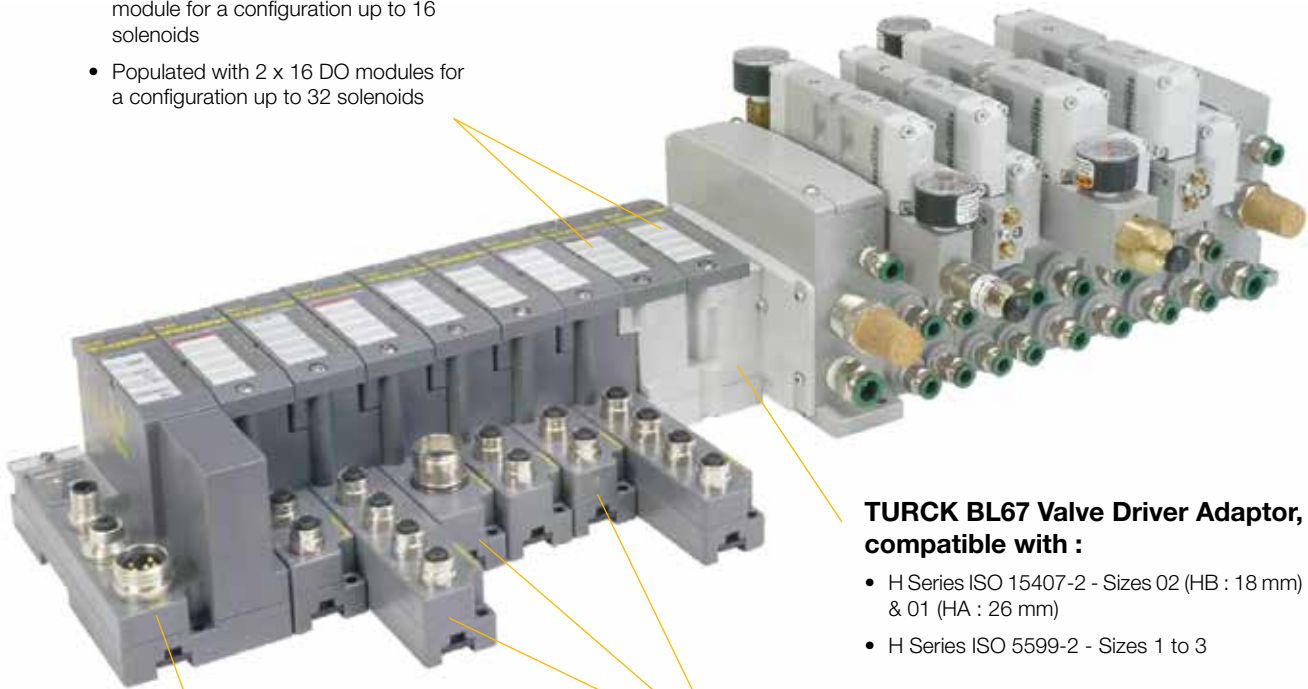
## TURCK BL67 Remote I/O System

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 :

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

### Simple or Programmable Gateway

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

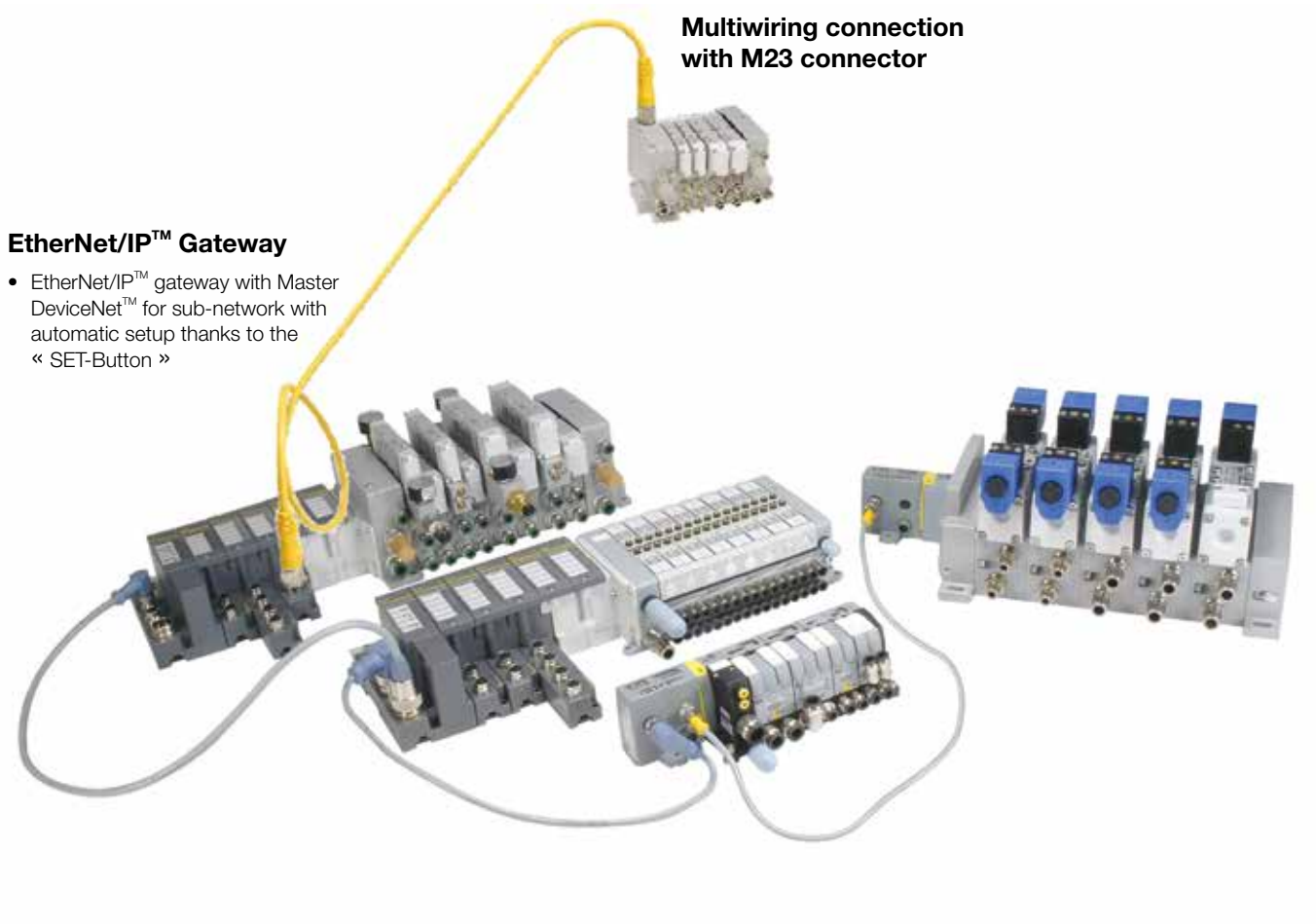


### A configurable connection

- 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.

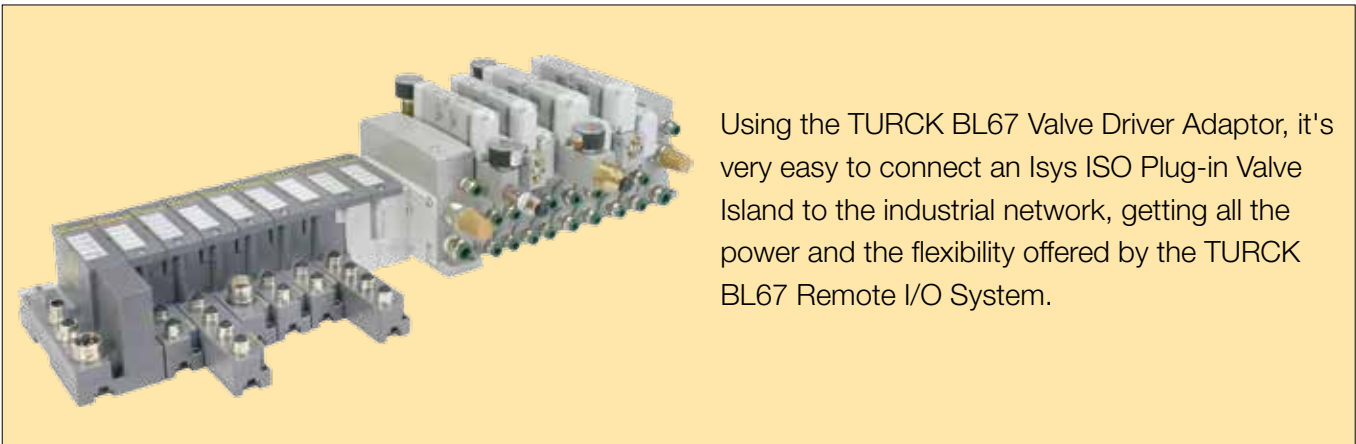


### BL67-1CVI electronic module with BL67-B-1M12

- 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.

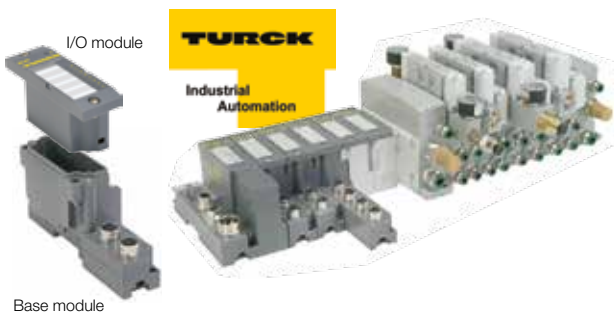


**TURCK BL67 I/O and Base modules**

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>
	8 Digital Inputs		Channel diagnostics	PNP	55	<b>BL67-4DI-PD</b>
				PNP	55	<b>BL67-8DI-P</b>
				NPN	55	<b>BL67-8DI-N</b>
				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>
				PNP	55	<b>BL67-4DO-2A-P</b>
				NPN	55	<b>BL67-4DO-2A-N</b>
	8 Digital Outputs	0.5 A		PNP	55	<b>BL67-4DO-4A-P</b>
				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>
				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>
					55	<b>BL67-2AI-PT</b>
					55	<b>BL67-2AI-TC</b>
	4 analogue Inputs	16 bit resolution		Current / Voltage	55	<b>BL67-4AI-V/I</b>
					55	<b>BL67-4AI-TC</b>
	2 analogue Outputs	16 bit resolution		Current	55	<b>BL67-2AO-I</b>
				Voltage	55	<b>BL67-2AO-V</b>
	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



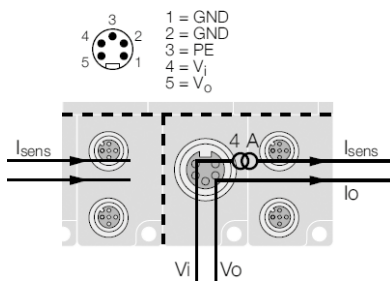
Description	Connector Type	Weight (g)	Order code
Power Feeding Module for 24 VDC additional sourcing		55	<b>BL67-PF-24VDC</b>
Base Modules	1 x 7/8", 5-pole, male	VI / VO Sourcing	<b>BL67-B-1RSM</b>
		VO Sourcing	<b>BL67-B-1RSM-VO</b>
	1 x 7/8", 4-pole, male	55	<b>BL67-B-1RSM-4</b>

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

## Power Feeding Base Modules Connection

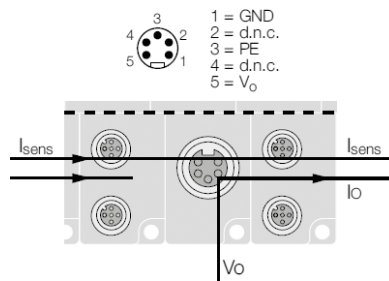
### Standard version

#### BL67-B-1RSM

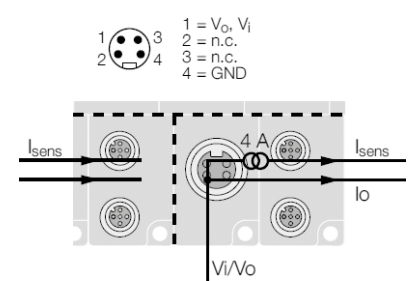


### Other possible versions

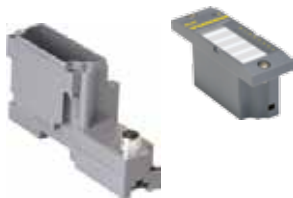
#### BL67-B-1RSM-VO



#### 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



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

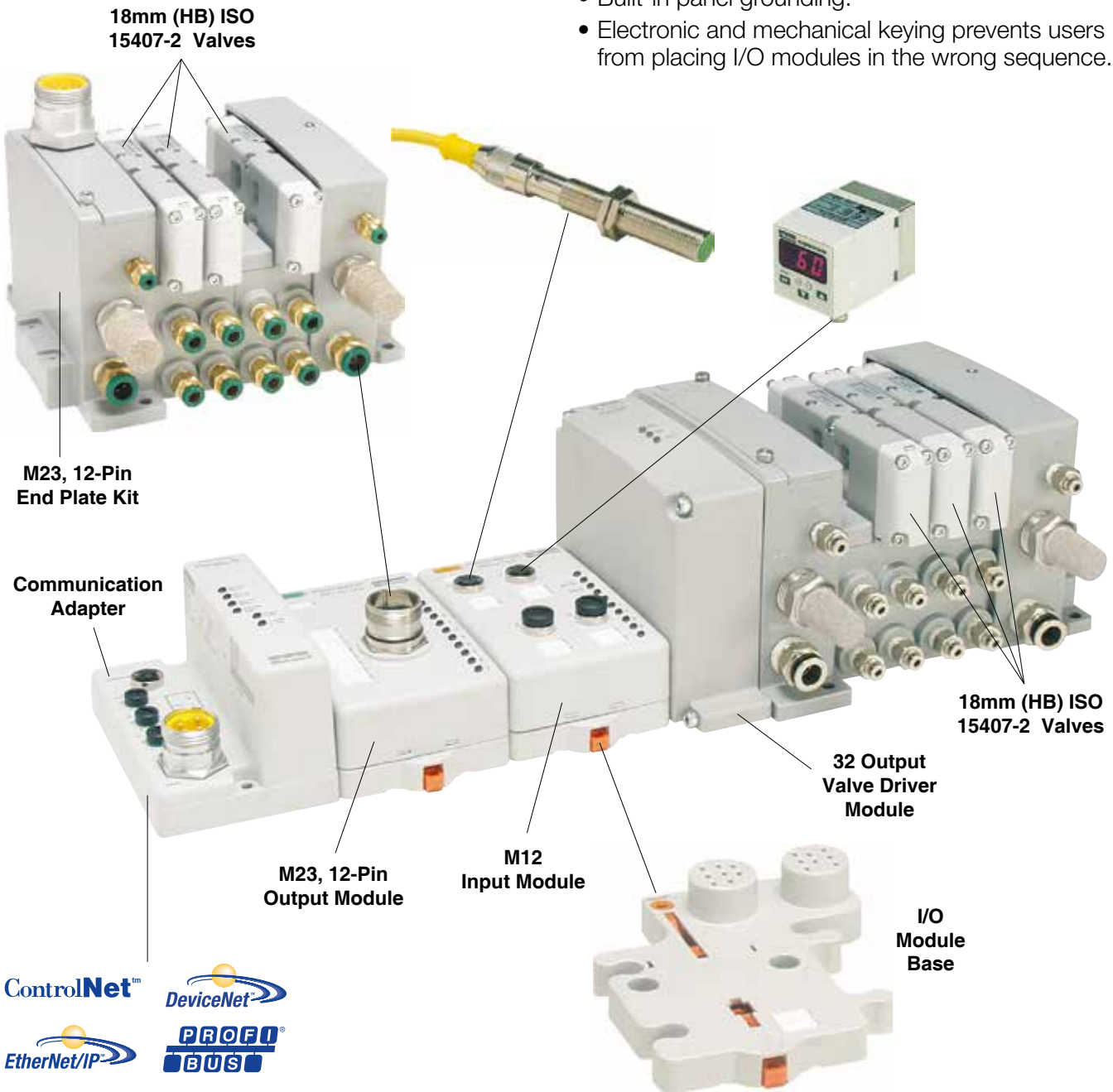
- Offering a CANopen Sub-Network connectivity up to 8 CANopen slaves

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

## H Series 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.



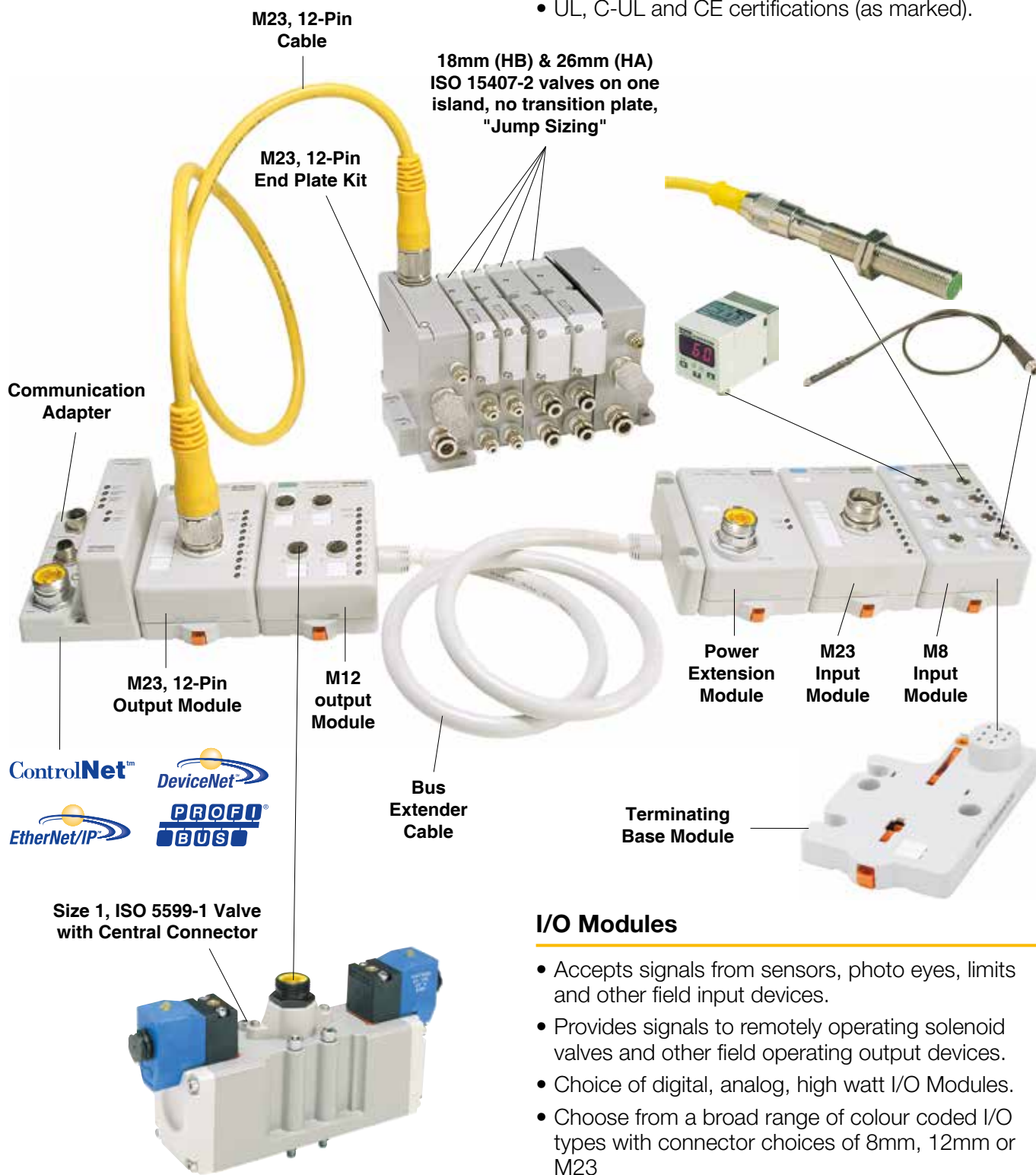
### Communication Modules

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

**H Series Fieldbus System**

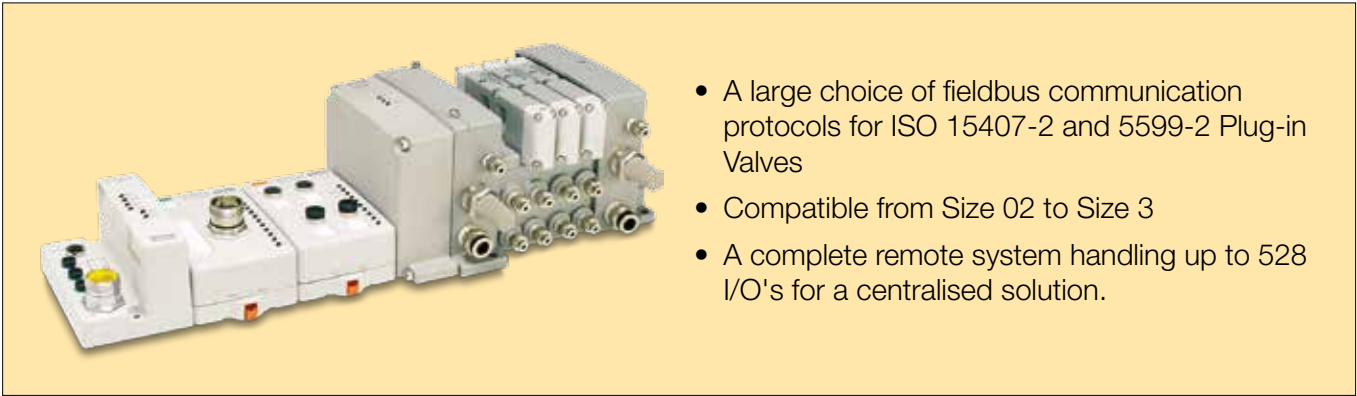
**Integrated Solution**

- 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.

## H Series Fieldbus Communication and I/O modules

### H Series Fieldbus Communication modules

H Series Fieldbus communication modules are available in :

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



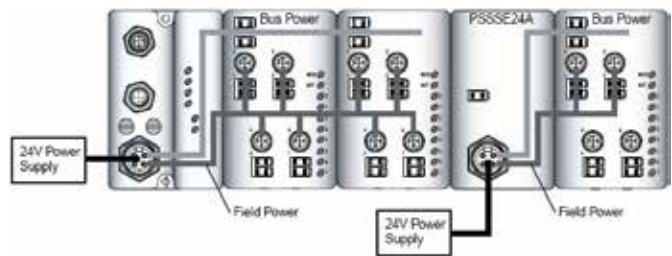
### Digital or Analogical electrical I/O modules

Some modules have diagnostic features, electronic fusing, or individually isolated inputs/ outputs. The H Series Fieldbus 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.



### H Series Fieldbus 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

### H Series Fieldbus 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

### H Series Fieldbus Analogue Input modules

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

### H Series Fieldbus Analogue Output modules

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

### H Series Fieldbus 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


### H Series Fieldbus 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

### H Series Fieldbus 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

**H Series Fieldbus 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>

**H Series Fieldbus Electrical I/O Modules**



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

	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>




**H Series Fieldbus Auxiliary Electrical Modules**

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

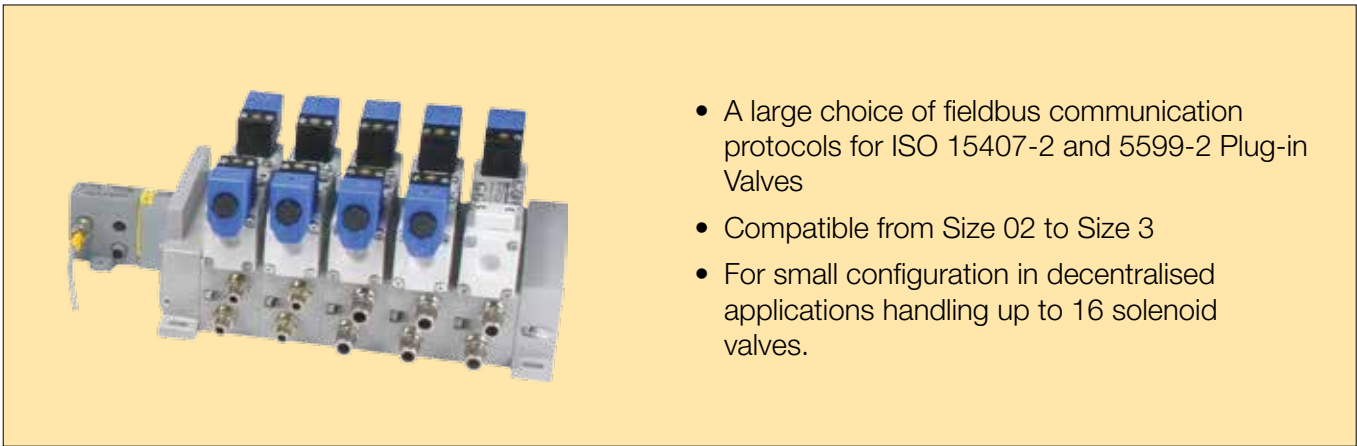
**H Series Fieldbus Bus Extender**

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

**H Series Fieldbus 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>
		"Y" shape, thread to thread		M12 - A coding	25
			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



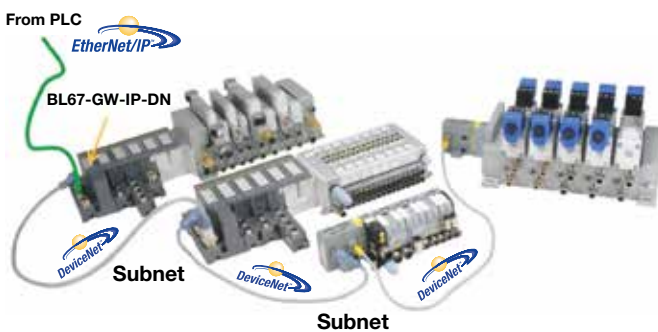
**Closer to the cylinder**

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



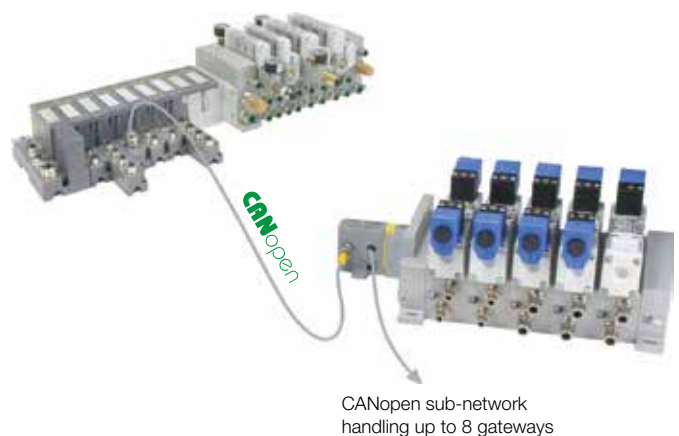
**DeviceNet gateway**

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>


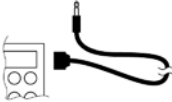
### Device Bus connection accessories

	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

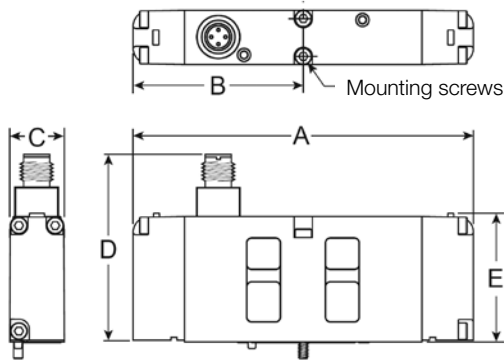
	Description	No outputs / node add.	Input connections Connection	Weight (g)	Order code
	<b>Standard AS-i protocol</b> (Up to 31 nodes)	8 Outputs / 2 addresses	No. input	150	<b>P2M2HBVA10800</b>
			8 M8 inputs	200	<b>P2M2HBVA10808A</b>
			8 inputs on 4 M12	200	<b>P2M2HBVA10808B</b>
	<b>Extended AS-i protocol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

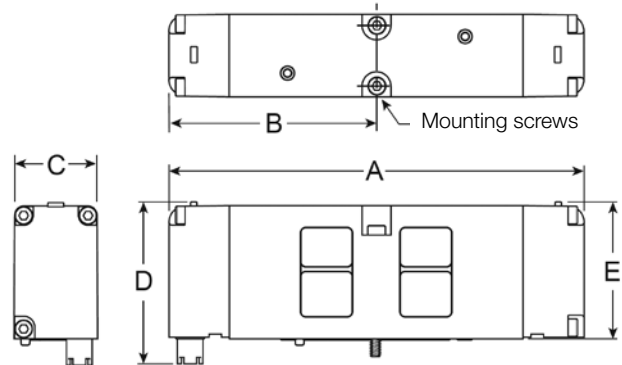
**H Series ISO Valves**

**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

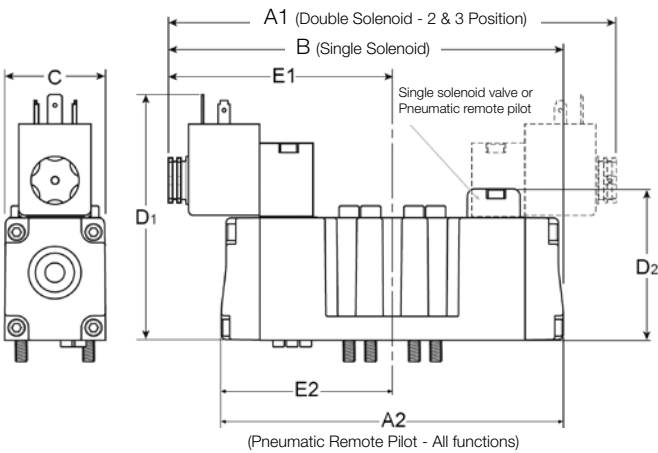
**HA / HB Series - ISO 15407-2**



	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**

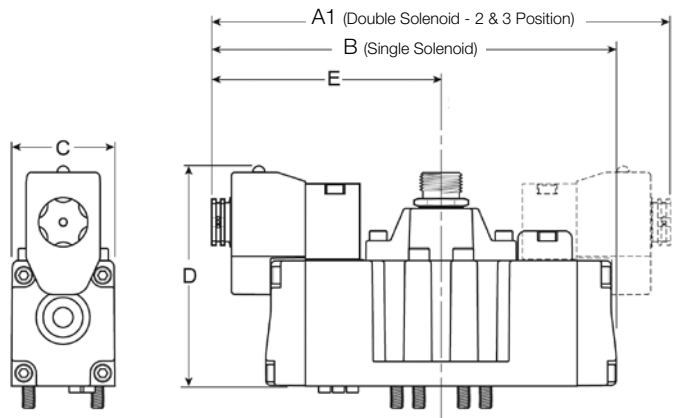
CNOMO Operator or Remote Pilot



	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

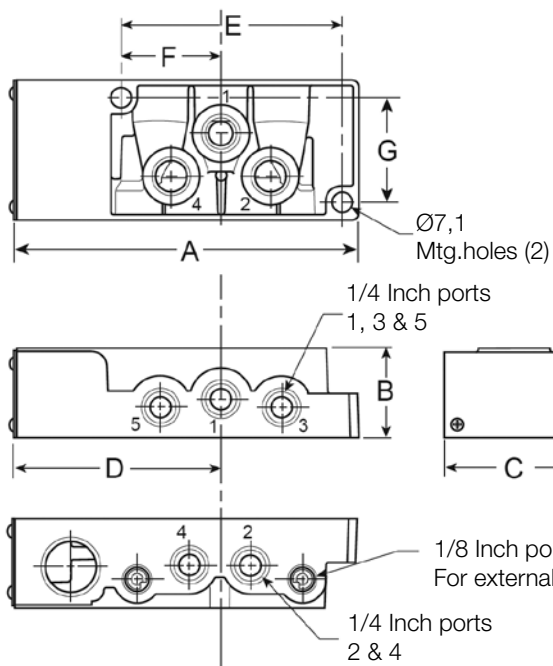


	A	B	C	D	E
<b>H1</b>	186	164	42	90	93
<b>H2</b>	212	190	55	103	106
<b>H3</b>	241	209	55	103	121



**H Series ISO Subbases**

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

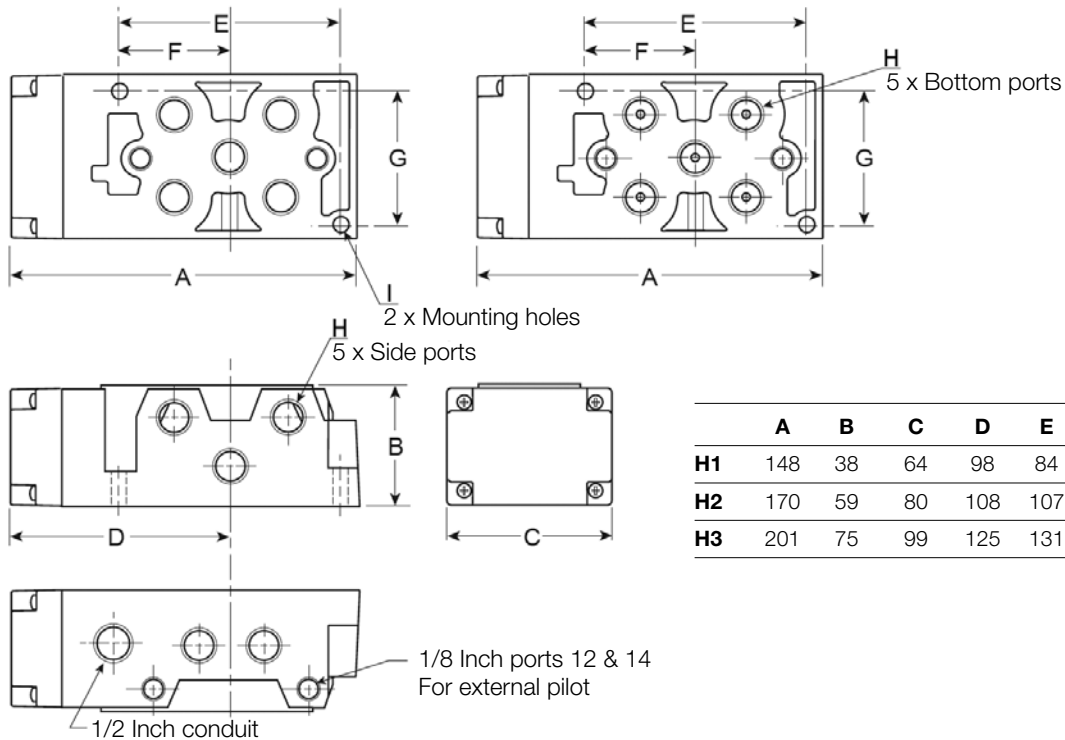


	A	B	C	D	E	F	G
<b>HA</b>	124	32,5	50,8	74	36,2	80,2	37,9

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

**Side Ported Subbase**

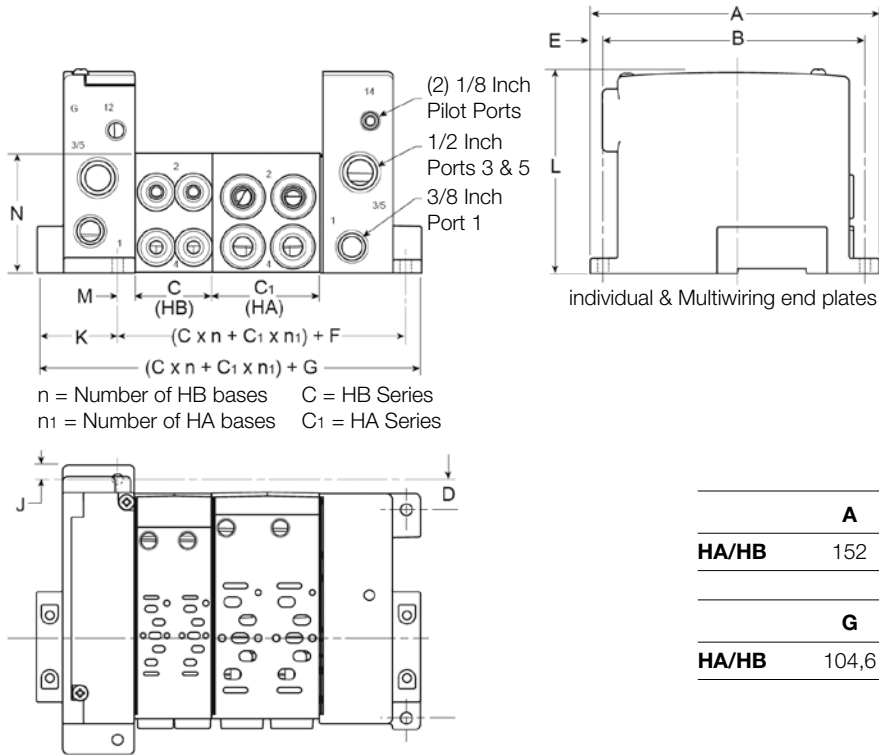
**Bottom Ported Subbase**



	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

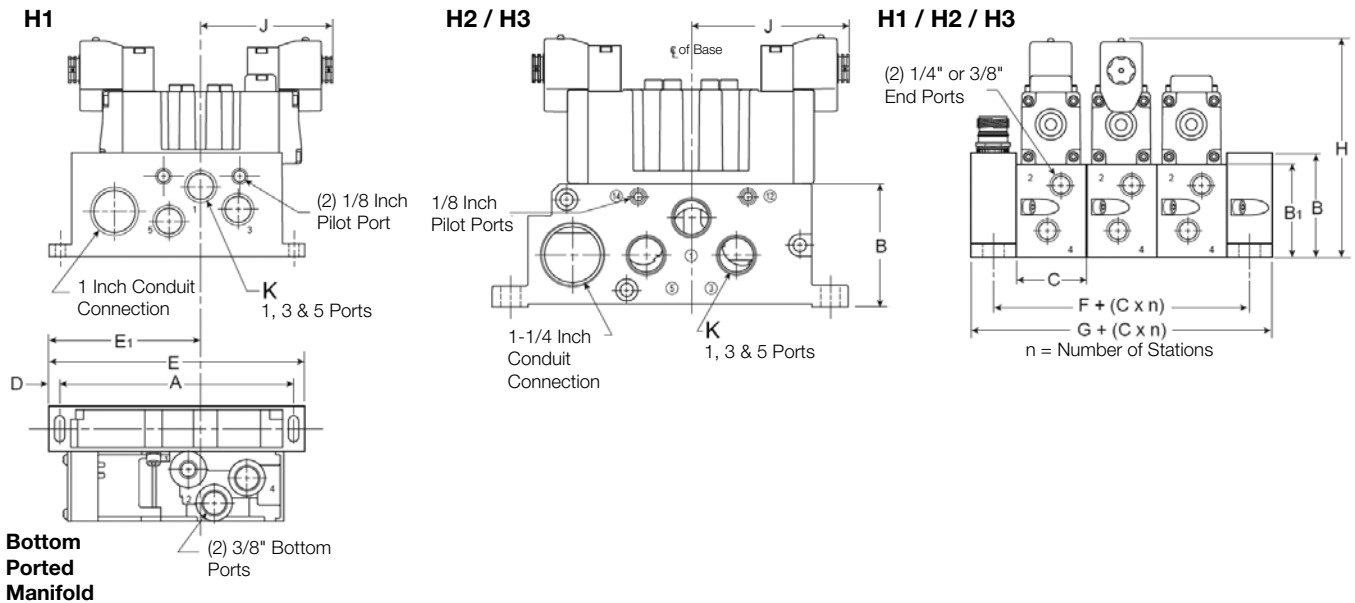
**H Series ISO Manifolds**

**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

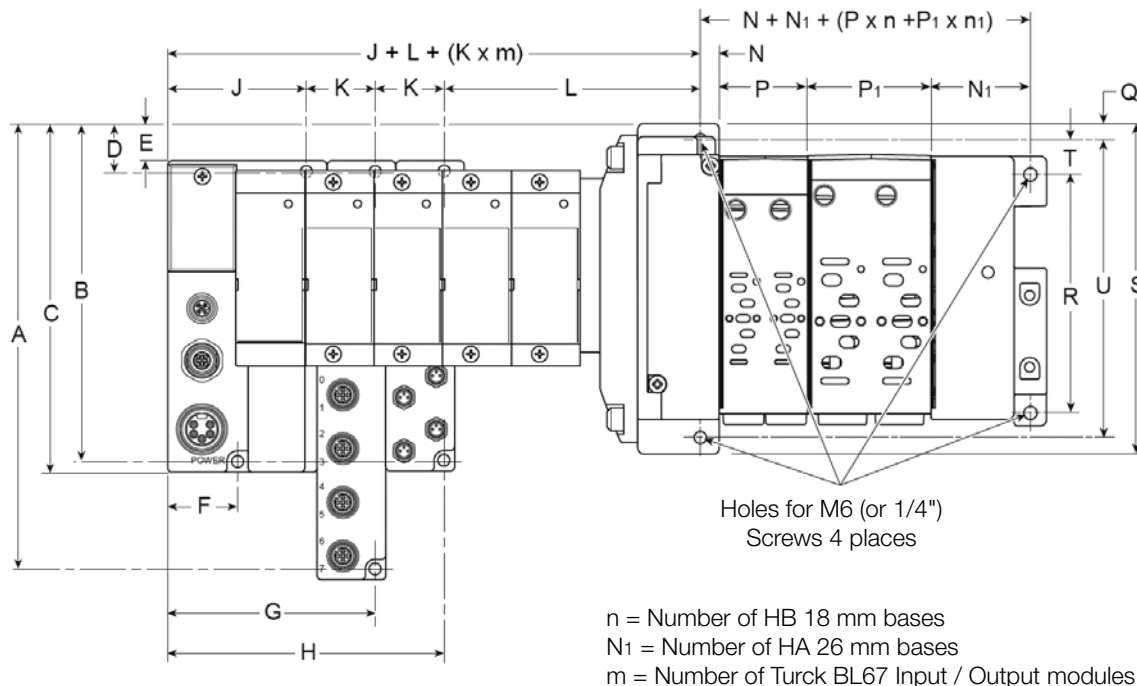
**H1 / H2 / H3 Series - ISO 5599-2**



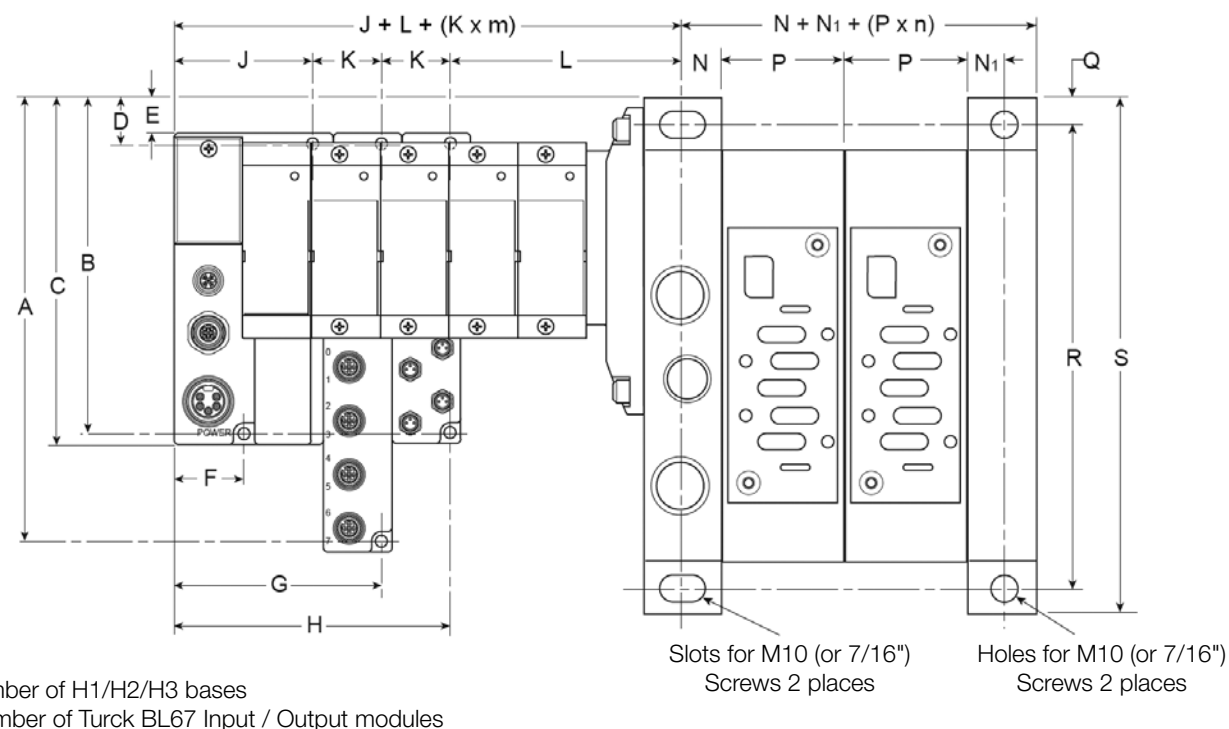
	A	B	B1	C	D	E	E1	F	G	H	J	K
<b>H1</b>	165	73	67	50	8	182	108	32	63,5	157	93	1/2"
<b>H2</b>	215	85	-	56	12	239	134	32	63	188	106	3/4"
<b>H2</b>	265	105	-	71	15	295	159	33	63	208	-	1"

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

**HA/HB Series**

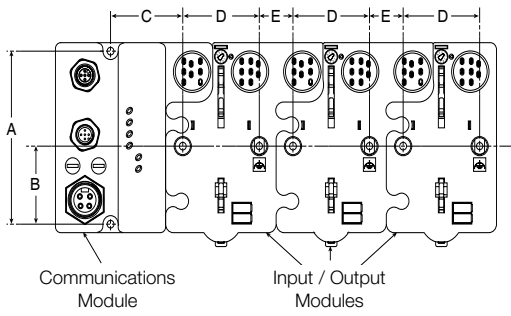


**H1/H2/H3 Series**



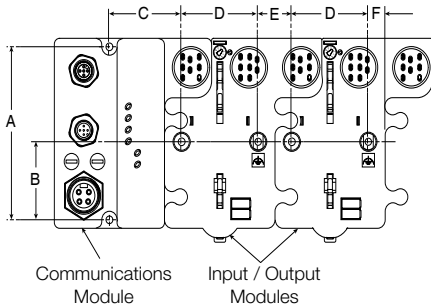
	A	B	C	D	E	F	G	H	J	K	L	N	N <sub>1</sub>	P	P <sub>1</sub>	Q	R	S	T	U
<b>HA/HB</b>	204,5	154,5	159,5	19,5	14,5	32,5	96,5	128,5	64,5	32	120,8	8,4	45,8	40,8	56,8	4	110	152	16	137
<b>H1</b>	216,7	166,7	171,7	31,7	26,7	32,5	96,5	128,5	64,5	32	108,5	15,9	15,9	49	-	8,5	165	182	-	-
<b>H2</b>	212,9	162,9	167,9	27,9	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	-	-

**H Series ISO 15407-2 & 5599-2 Sizes 02 to 3 with H Series Fieldbus System**

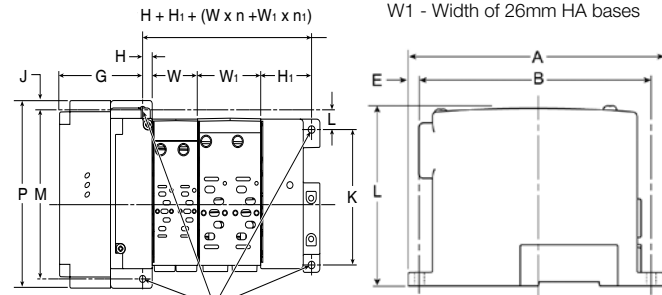


**HA / HB Dimensions**

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

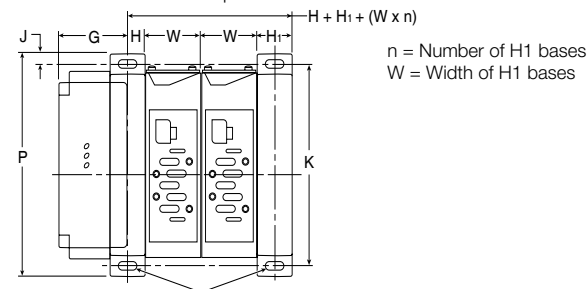


n = Number of 18mm HB bases  
 N1 = Number of 26mm HA bases  
 W = Width of 18mm HB bases  
 W1 = Width of 26mm HA bases



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

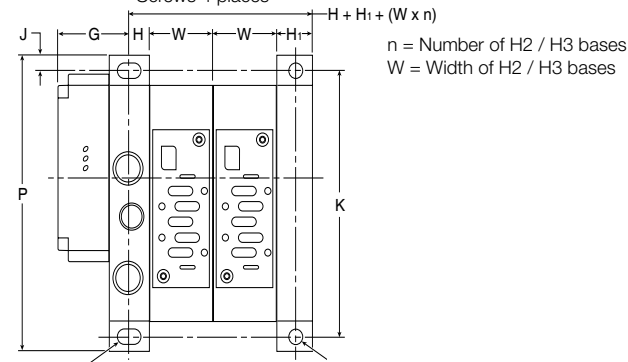
Holes for M6 (or 1/4")  
 Screws 4 places



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

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

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



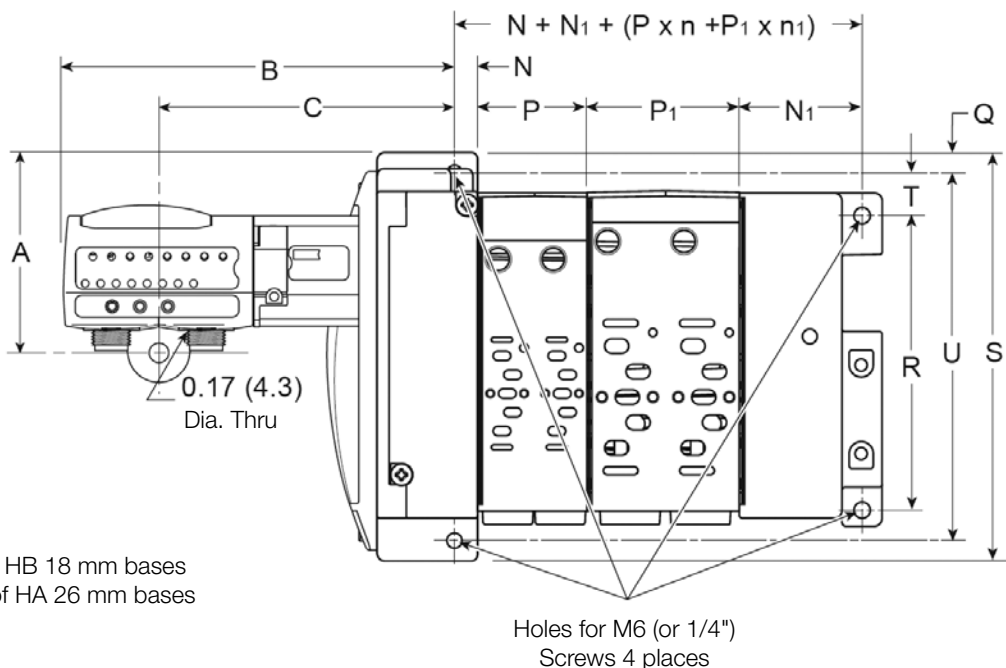
n = Number of H2 / H3 bases  
 W = Width of H2 / H3 bases

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

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

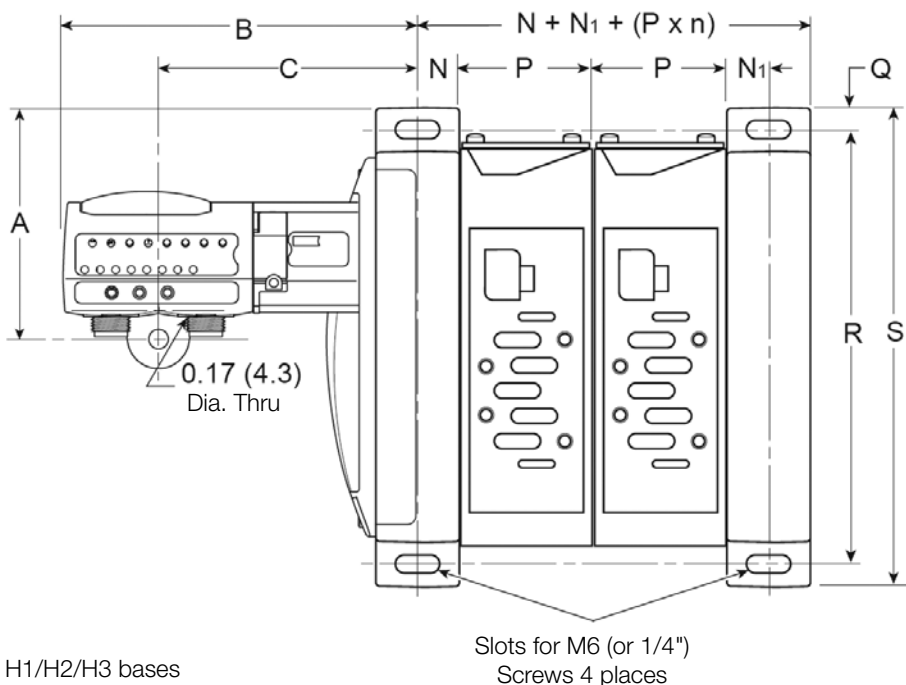
**H Series ISO 15407-2 & 5599-2 Sizes 02 to 3 with Moduflex Bus**

**HA/HB Series**



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

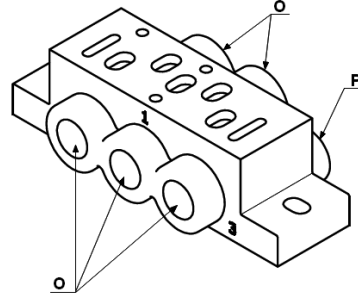
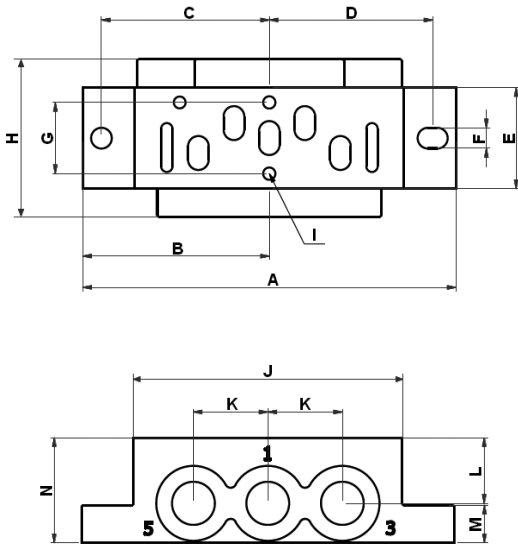
**H1/H2/H3 Series**



n = Number of H1/H2/H3 bases

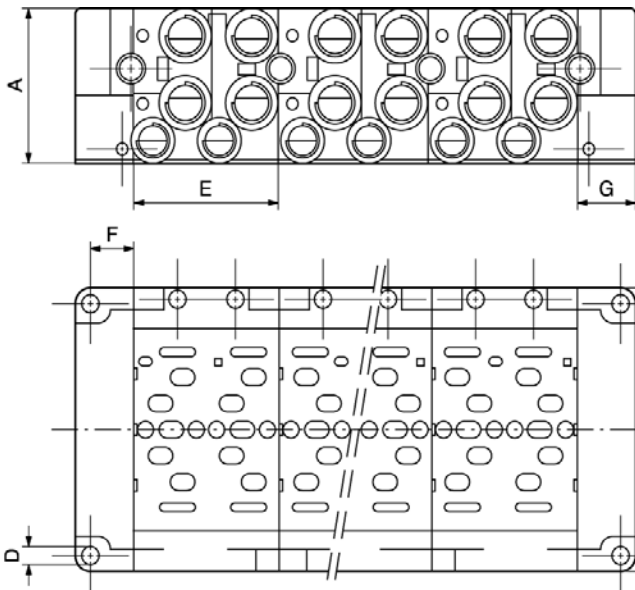
	A	B	C	N	N <sub>1</sub>	P	P <sub>1</sub>	Q	R	S	T	U
<b>HA/HB</b>	69,8	142,5	111,8	8,4	45,8	40,8	56,8	4	110	152	16	137
<b>H1</b>	82	130,2	160,9	15,9	15,9	49	-	8,5	165	182	-	-
<b>H2</b>	78,2	130,3	161	18	15	56	-	12	215	239	-	-
<b>H3</b>	84,2	138,2	168,9	24	16,5	71	-	15	265	295	-	-

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



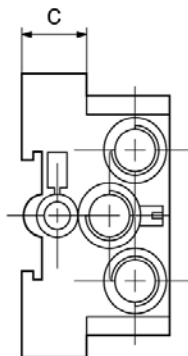
		Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
PL02-01-70	BSPP	02	80	40	35	33.75	19	5.5	12.5	27	M8	50	16	14	8	22.5	1/8	1/8
PL02-01-80	NPT	02	80	40	35	33.75	19	5.5	12.5	27	M8	50	16	14	8	22.5	1/8	1/8
PL01-02-70	BSPP	01	100	50	45	43.75	27	5.5	19	42,5	M8	72	20	17,5	10	28	1/4	1/8
PL01-02-80	NPT	01	100	50	45	43.75	27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

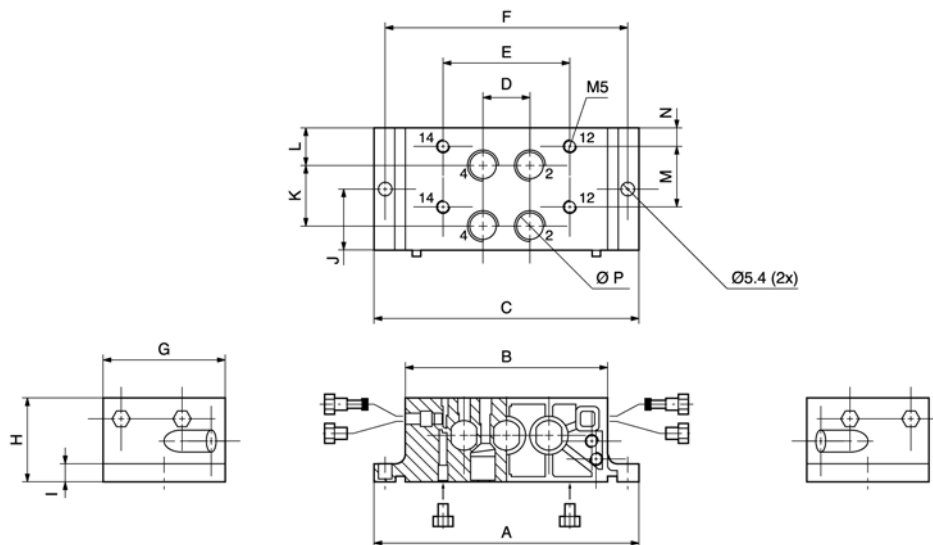


		Size	A	B	C	D	E	F	G	H
PJLP02-201-70	BSPP	02	38,5	80	-	-	38	-	-	-
PJLP02-201-80	NPT	02	38,5	80	-	-	38	-	-	-
PJLP01-202-70	BSPP	01	55	100	-	-	54	-	-	-
PJLP01-202-80	NPT	01	55	100	-	-	54	-	-	-
PJL01-202-70	BSPP	01	55	100	-	-	54	-	-	-
PJL01-202-80	NPT	01	55	100	-	-	54	-	-	-
PEJ02-02-70	BSPP	02	38,5	80	12	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

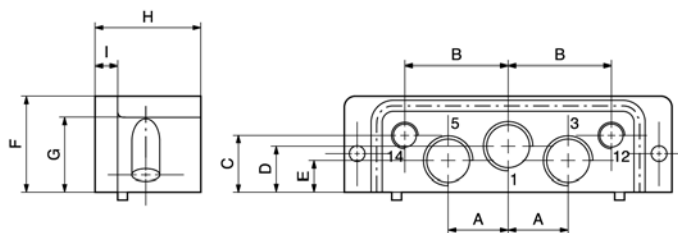


**Bottom ported manifold - ISO 15407-1 - Sizes 02 & 01**



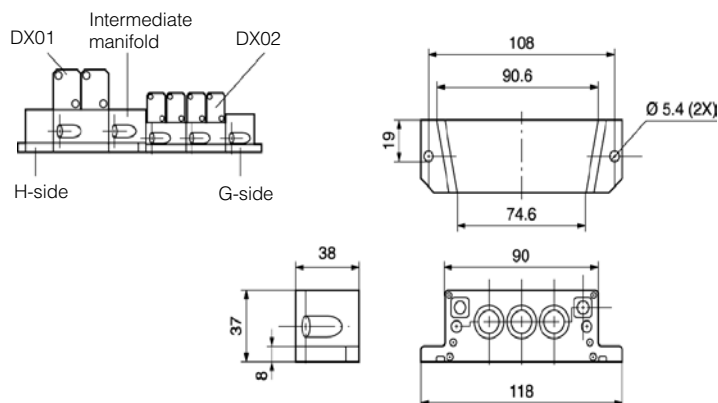
	Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
<b>P2V-AM511PB</b>	02	102	74	74,6	16	43	92	38	26	7	19	19	11	19	5	G1/8
<b>P2V-BM512PB</b>	01	118	90	90,6	21	56,5	108	54	37	8	27	27	16,5	27	8	G1/4

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



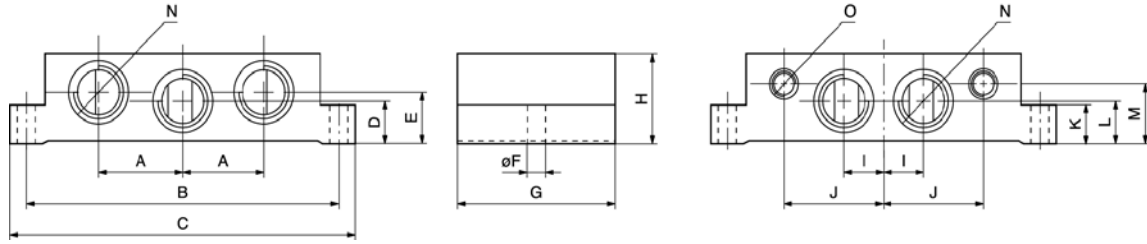
	Size	Port size 1,2,3	Port size 12, 14	A	B	C	D	E	F	G	H	I
<b>P2V-AM512XX and P2V-AM512XX</b>	02	G1/4	G1/8	17	29	21	18,5	9,5	35,5	28	33	7
<b>P2V-BM513XX and P2V-BM513XX</b>	01	G3/8	G1/8	21,5	37	20	16	11	34,5	28	38	8

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



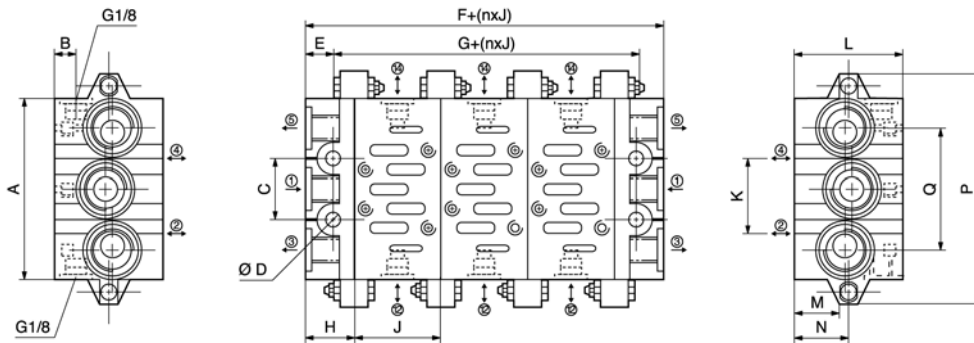
**ISO 5599-1 Subbase & Manifolds**

**VDMA Side Ported Subbases**



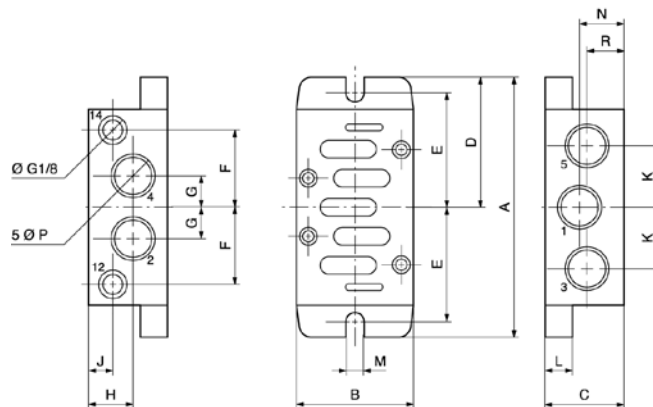
Order code	ISO Size	Port Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P2N-VS512SD	1	G1/4	21,5	98	110	11	20	5,5	48	32	12	29	10	11	23	G1/4	G1/8
P2N-WS513SD	2	G3/8	28	112	124	14	26	6,6	56	40	15	37	13	14	30	G3/8	G1/8
P2N-YS514SD	3	G1/2	34	136	149	17	17	6,6	71	32	16	45	18	17	22	G1/2	G1/8

**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

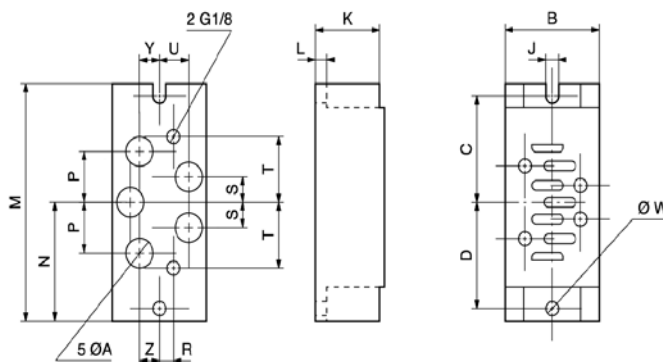
**Side ported subbases**



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

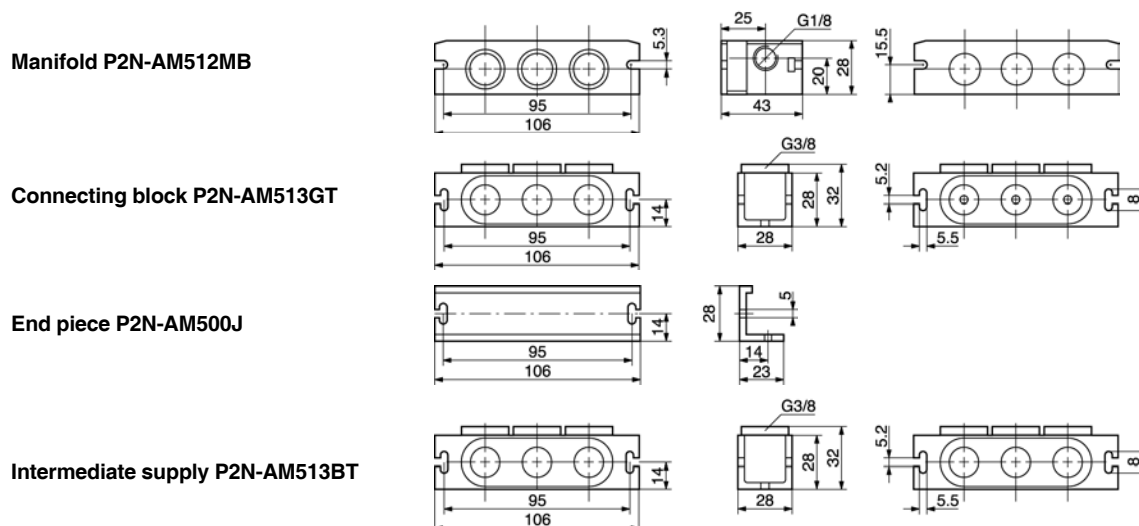


**Bottom ported subbases**

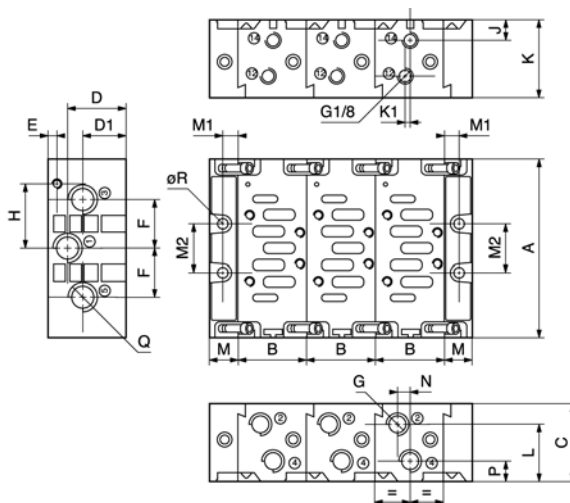


Order code	ISO Size	A	B	C	D	J	K	L	M	N	P	R	S	T	U	W	Y	Z
PD1-1/4-70	1	G1/4	46	49	49	5,5	29	6	110	55	22	10	11	30	10	5,5	10	10
PD2-3/8-70	2	G3/8	56	55	55	5,5	37	6	124	62	29	10	14,5	37	12,5	5,5	12,5	12,5
PD3-1/2-70	3	G1/2	77	68	68	6,6	32	18	149	74,5	34	10	17	45	17	6,5	17	17

**Size 1 bottom ported manifold**



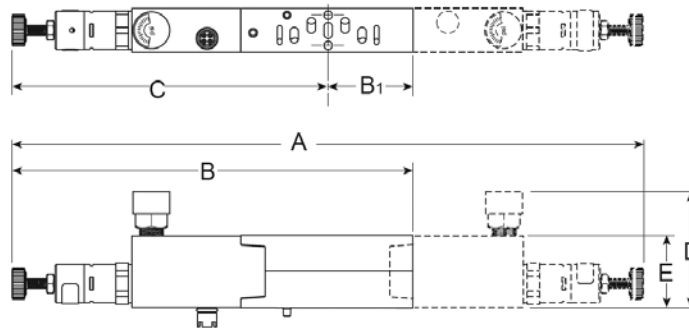
**Sizes 1 & 2 side ported manifold**



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

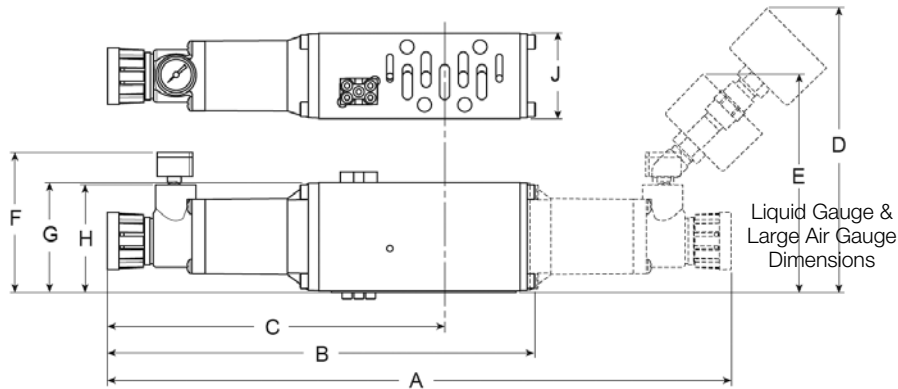
**Sandwich Regulator with Gauge**

**HA / HB Series**



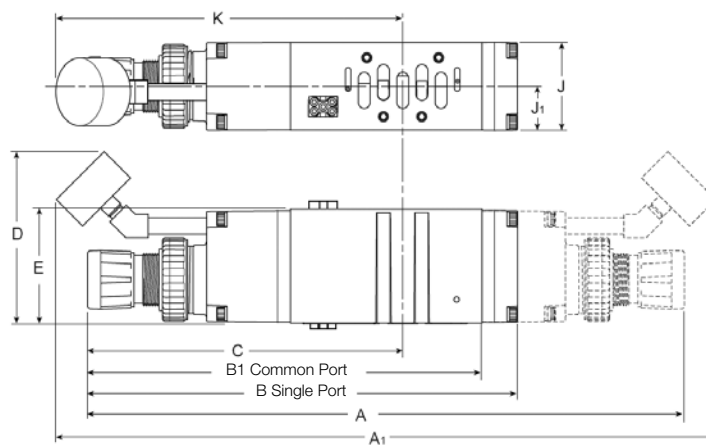
	<b>A</b>	<b>B</b>	<b>B1</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>HB</b>	261	156	26	130	66	30
<b>HA</b>	254	163	36	127	69	30

**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

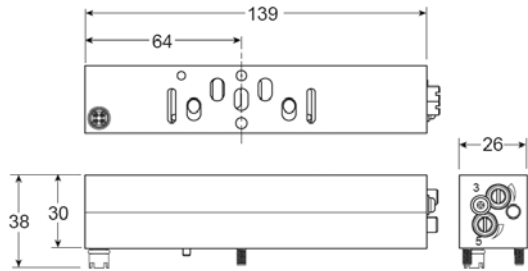
**H2 / H3 Series**



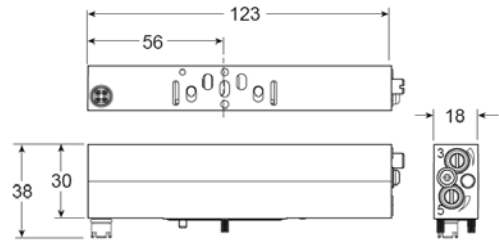
	<b>A</b>	<b>A1</b>	<b>B</b>	<b>B1</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>J</b>	<b>J1</b>	<b>K</b>
<b>H2</b>	372	411	268	250	196	107	71	55	27	216
<b>H3</b>	398	436	293	271	213	107	75	64	32	231

**Sandwich Flow Control**

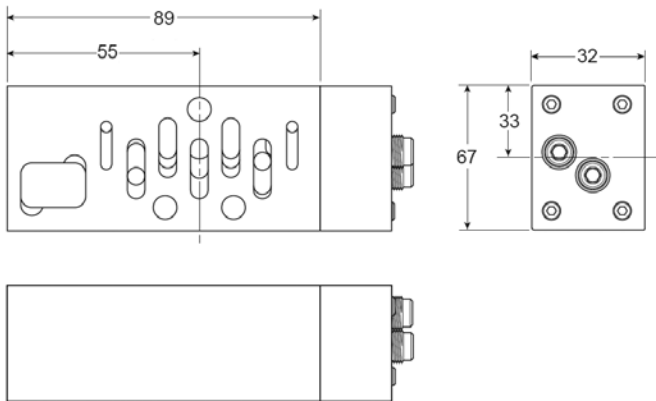
**HA Series**



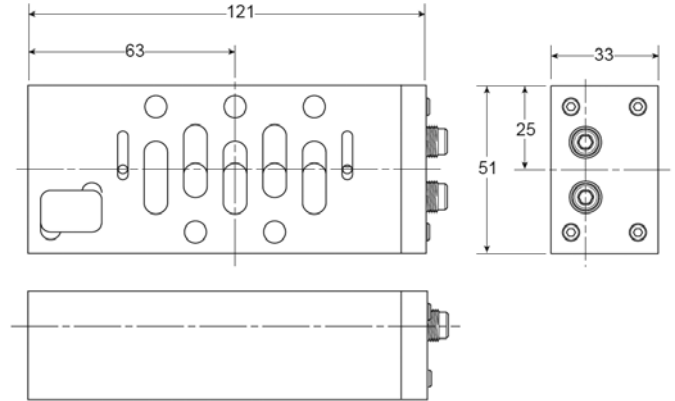
**HB Series**



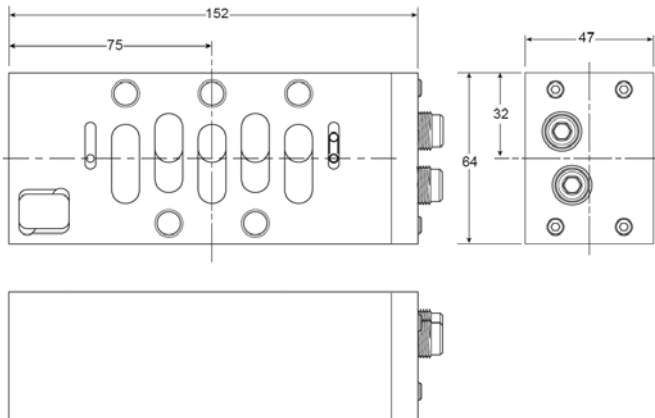
**H1 Series**



**H2 Series**



**H3 Series**



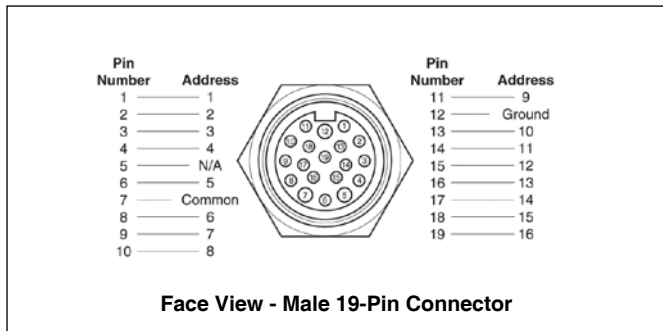
**Interconnect Circuit Boards**

**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**

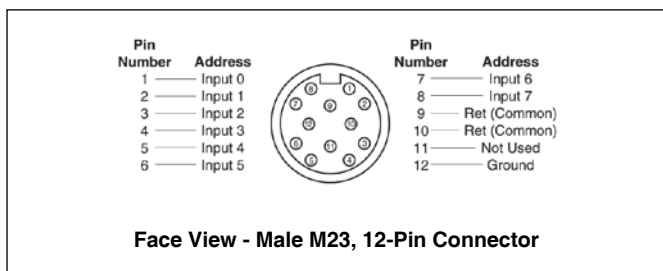
Common Pin "7" is rated for 8 amps. Cable common wire must be greater than total amperage of solenoids on Add-A-Fold assembly.

**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.

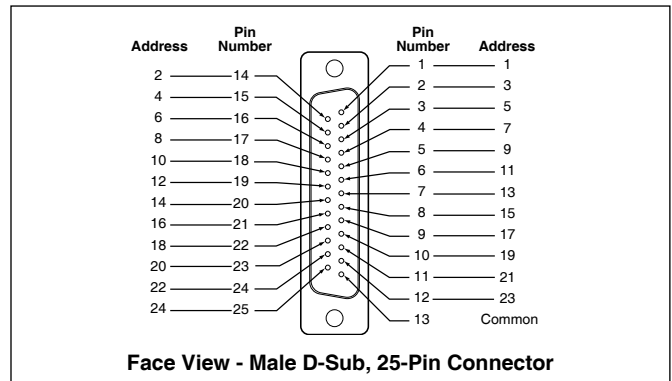
Brad Harrison #333030P80M050 16.40 ft. (Female to Male Cable)

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

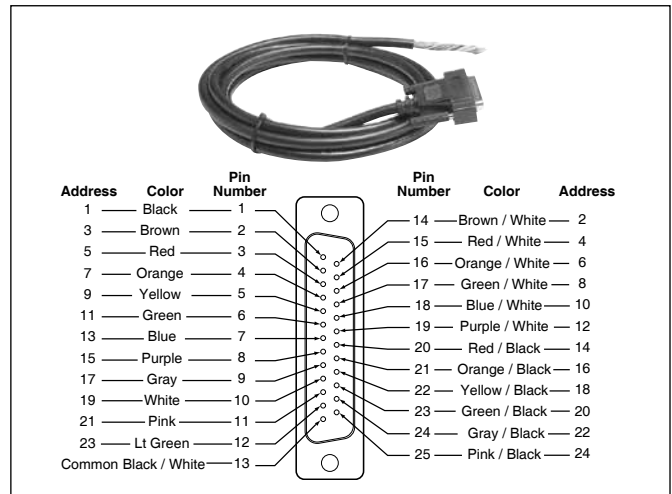
**M23, 12-Pin Round Connector (Male)**



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



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

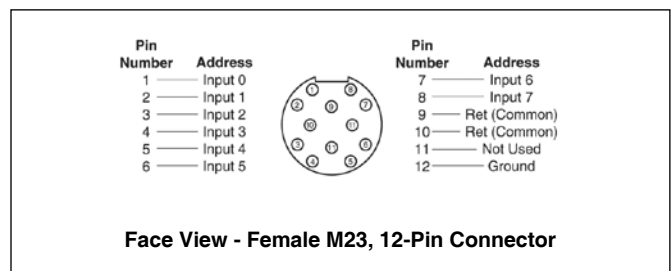


**25-Pin, D-Sub Cable Specifications**

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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