

# isys ISO Series

ISO Air Control Valves

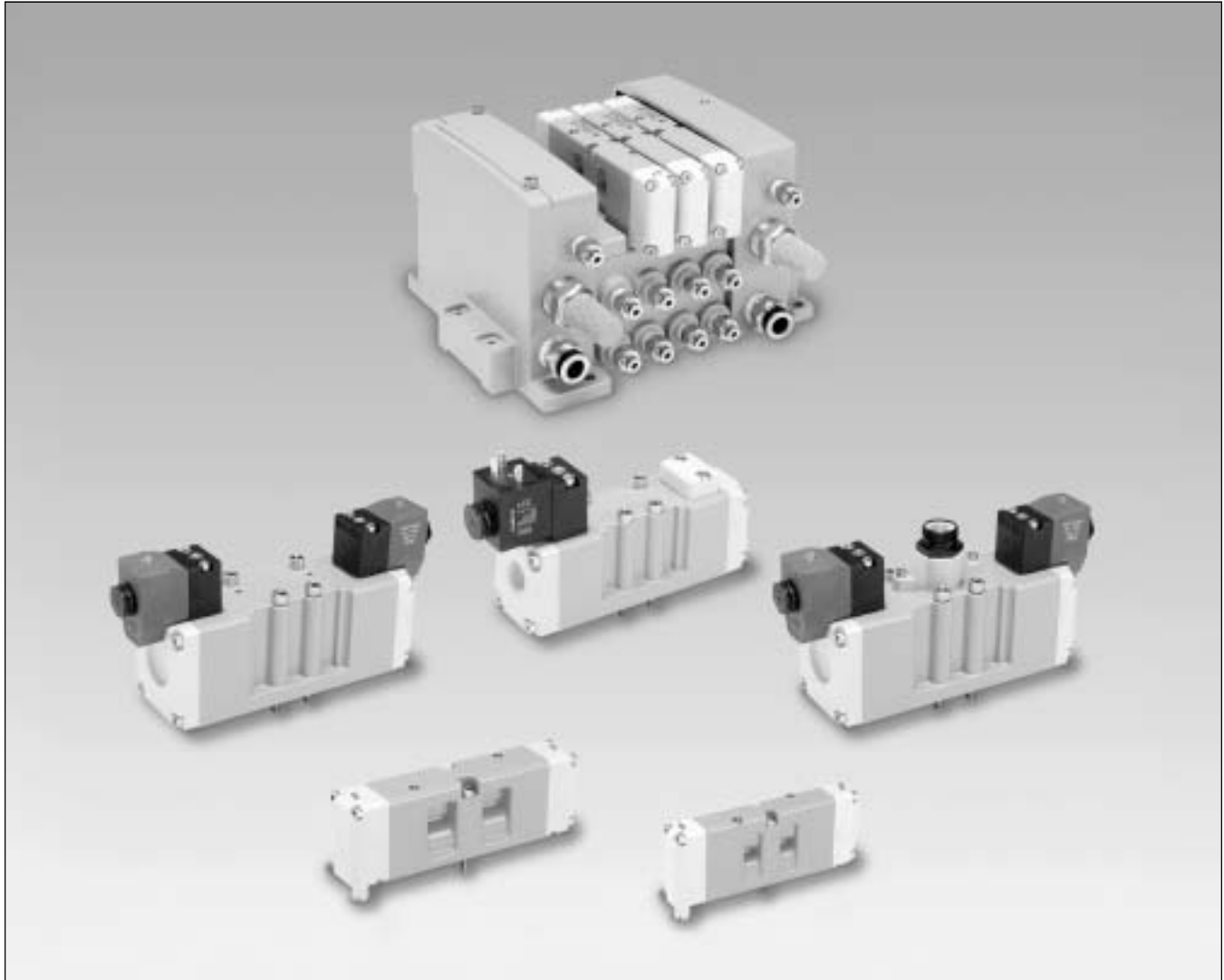
15407-2, 5599-2 & 5599-1

Sizes 18mm, 26mm, 1, 2, 3, & 4



Section L

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



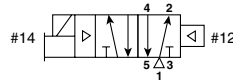
L

Basic Valve Functions .....	2	Electrical Connections .....	26-27
Features .....	3-4	Sandwich Flow Controls .....	28
Common Part Numbers .....	5-8	Sandwich Regulators .....	29-36
Model Number Indexes .....	9-13	Technical Information .....	37-38
Manifold, Subbase Ordering Information .....	14-18	Service & Repair Kits .....	39-41
Add-A-Fold Assemblies .....	19-21	Fittings .....	42
End Plate Kits .....	22	Dimensions .....	43-51
Accessories .....	23-24		
Collective Wiring System .....	25		

**Bold text part numbers are standard.**  
Standard text part numbers may have longer lead times.



## Single Solenoid



### Single Pressure At Inlet Port 1:

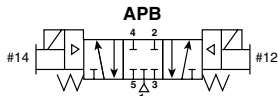
*De-energized position* – Solenoid operator #14 de-energized. Pressure at inlet port 1 connected to outlet port 2. Outlet port 4 connected to exhaust port 5.  
*Energized position* – Solenoid operator #14 energized. Pressure at inlet port 1 connected to outlet port 4. Outlet port 2 connected to exhaust port 3.

## Double Solenoid

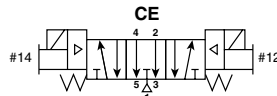


### Single Pressure At Inlet Port 1:

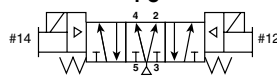
*Solenoid operator #14 energized last.* Pressure at inlet port 1 connected to outlet port 4. Outlet port 2 connected to exhaust port 3.  
*Solenoid operator #12 energized last.* Pressure at inlet port 1 connected to outlet port 2. Outlet port 4 connected to exhaust port 5.



Operator / Function 5

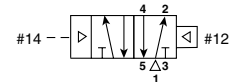


Operator / Function 6



Operator / Function 7

## Single Remote Pilot



### Single Pressure At Inlet Port 1:

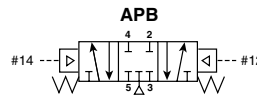
*Normal position* – Pressure at inlet port 1 connected to outlet port 2. Outlet port 4 connected to exhaust port 5.  
*Operated position* – Maintained air signal at port 14. Pressure at inlet port 1 connected to outlet port 4. Outlet port 2 connected to exhaust port 3.

## Double Remote Pilot

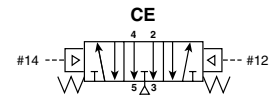


### Single Pressure At Inlet Port 1:

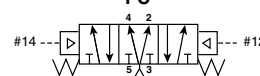
*Momentary air signal at port 14 last.* Pressure at inlet port 1 connected to outlet port 4. Outlet port 2 connected to exhaust port 3.  
*Momentary air signal at port 12 last.* Pressure at inlet port 1 connected to outlet port 2. Outlet port 4 connected to exhaust port 5.



Operator / Function 8



Operator / Function 9



Operator / Function 0

## Double Solenoid

### 3-Position

*With #12 operator energized* – inlet port 1 connected to cylinder port 2, cylinder port 4 connected to exhaust port 5.  
*With #14 operator energized* – inlet port 1 connected to cylinder port 4, cylinder port 2 connected to exhaust port 3.

#### Function 5: All Ports Blocked

All ports blocked in the center position.

#### Function 6: Center Exhaust

Cylinder ports 2 and 4 connected to exhaust ports 3 and 5 in center position. Port 1 is blocked.

#### Function 7: Pressure Center

Pressure port 1 connected to cylinder ports 2 and 4, and exhaust ports 3 and 5 blocked in center position.

## Double Remote Pilot

### 3-Position

*With #12 operator signaled* – inlet port 1 connected to cylinder port 2, cylinder port 4 connected to exhaust port 5.  
*With #14 operator signaled* – inlet port 1 connected to cylinder port 4, cylinder port 2 connected to exhaust port 3.

#### Function 8: All Ports Blocked

All ports blocked in the center position.

#### Function 9: Center Exhaust

Cylinder ports 2 and 4 connected to exhaust ports 3 and 5 in center position. Port 1 is blocked.

#### Function 0: Pressure Center

Pressure port 1 connected to cylinder ports 2 and 4, and exhaust ports 3 and 5 blocked in center position.

### Dual Pressure:

May be used for dual pressure service with pressure at ports 3 & 5. (Use either external pilot source option “L” or “P” or internal pilot source option “E”.) If pilot source “E” is selected, the high pressure must be at port #3. If pilot source “L” or “P” is selected, the external pilot must be plumbed to either port #14 or #12 respectively. In the 3-Position valve, the effect of dual pressure is extremely important when the valve is in the center position, as the CE and PC functions are reversed. Therefore care should be used when selecting a 3-Position valve.

## Wear Compensation System

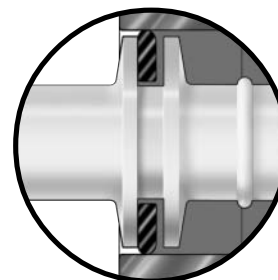
#### • Maximum Performance

- Low Friction
- Lower Operating Pressures
- Fast Response
- Less Wear

• **Long Cycle Life** - Under pressure, radial expansion of the seal occurs to maintain sealing contact with the valve bore..

• **Non-Lube Service** - No lubrication required for continuous valve shifting.

• **Bi-Directional Spool Seals** - Common spool used for any pressure, including vacuum.





# 15407-2

## Specifications

- HB** HB: 0.55 Cv (18mm)
- HA** HA: 1.1 Cv (26mm)

## Materials of Construction

- End Caps: PBT
- Fasteners: Zinc Plated Steel
- Valve Body: Die Cast Aluminum
- Coils: Thermoset Plastic

## Operating Pressure

- Vacuum to 145 PSIG
- Minimum Operating Pressure
  - 2-Position: 20 PSI
  - 3-Position: 30 PSI

## Ports

- NPT and BSPP “G” Standard

## Manifolds

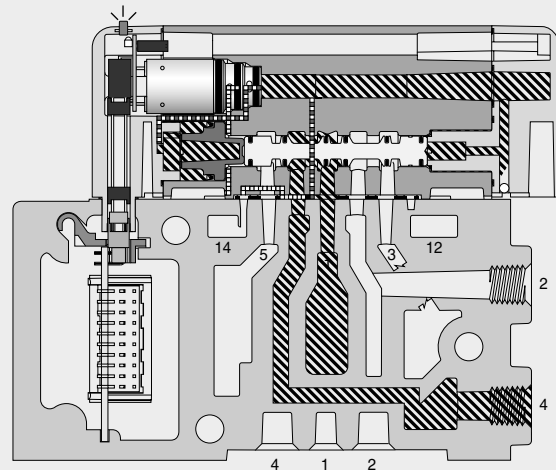
- Terminal Block Wiring (HA Only)
- Collective Wiring
  - 25-Pin, D-Sub
  - 19-Pin Round
  - 16 Point Terminal Strip
  - M23, 12-Pin
  - isysnet Field Bus

## Certification / Approval

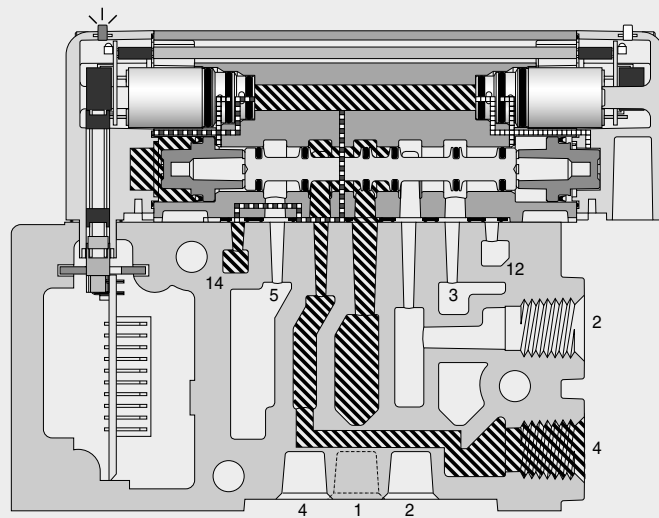
- Approved to be CE Marked
- CSA / C-US Approved
- NEMA 4
- IP65
- Manifold and Subbase Ports Meet ISO 1179 Specifications

## Solenoids

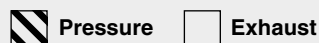
- Bi-Polar
- Surge Suppression (Standard)
- Low Watt – 1.0, 24VDC, 2.0VA, 120VAC
- Indicator Lights



**15407-2 18mm Single Solenoid Energized  
 Internal Pilot  
 Manifold Mounted**



**15407-2 26mm Double Solenoid 12 End Energized  
 External Pilot  
 Manifold Mounted**





**5599-2 5599-1**

**Specifications**

- H1 H1: 1.5 Cv
- H2 H2: 3.0 Cv
- H3 H3: 6.0 Cv

**Materials of Construction**

- End Caps: PBT
- Fasteners: Zinc Plated Steel
- Valve Body: Die Cast Aluminum
- Coils: Thermoset Plastic

**Operating Pressure**

- Vacuum to 145 PSIG
- Minimum Operating Pressure
  - 2-Position: 25 PSI
  - 3-Position: 30 PSI

**Ports**

- NPT and BSPP “G”

**Manifolds**

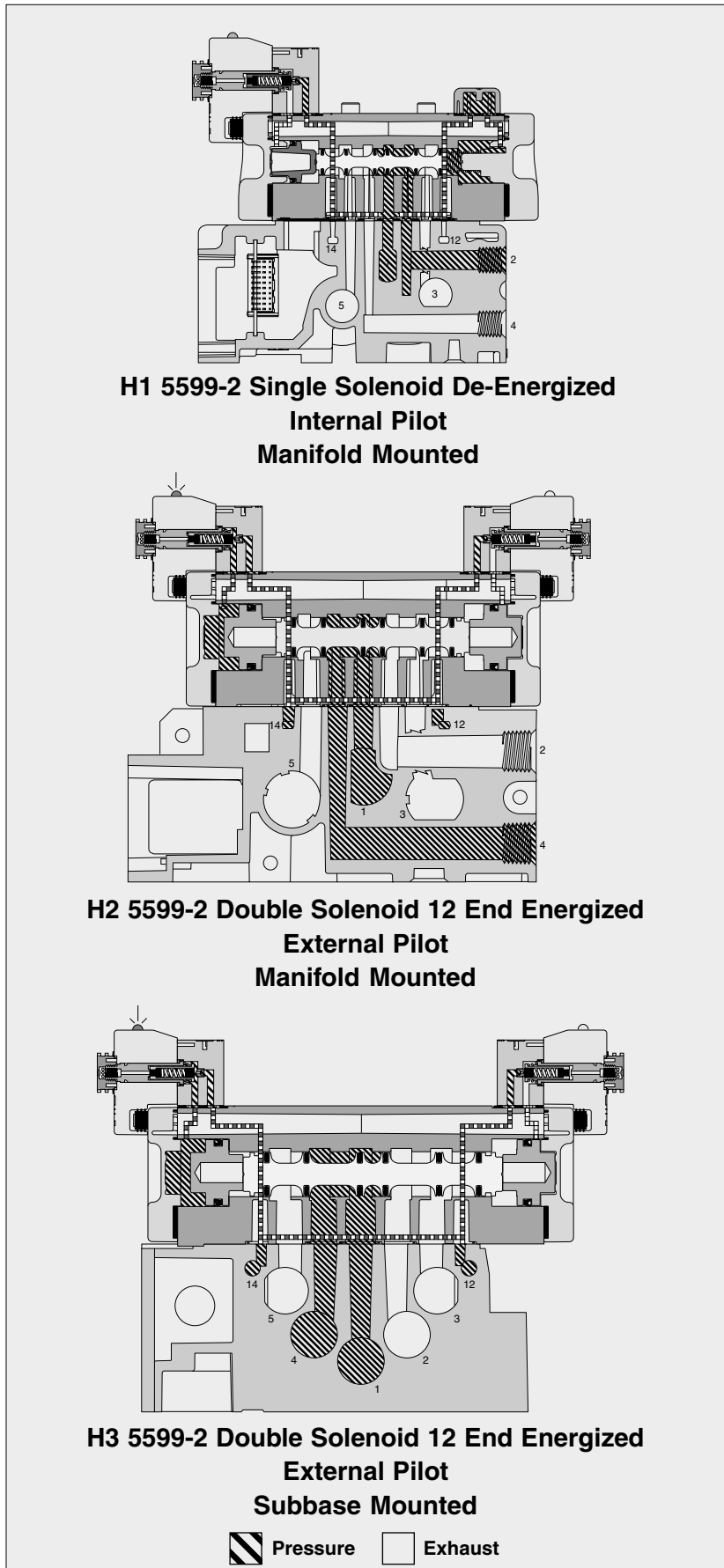
- Flying Leads
- Terminal Block Wiring
- Collective Wiring
  - 25-Pin, D-Sub
  - 19-Pin Round
  - M23, 12-Pin
  - isysnet Field Bus

**Certification / Approval**

- Approved to be CE Marked
- CSA / C-US Approved
- NEMA 4
- IP65
- Manifold and Subbase Ports Meet ISO 1179 Specifications

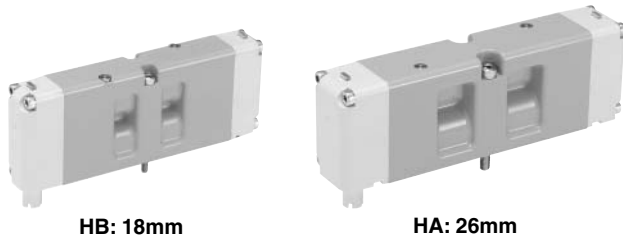
**Solenoids**

- Bi-Polar
- Surge Suppression (On Lighted Coils)
- Low Watt – 3.0, 24VDC, 4.5VA, 120VAC
- Indicator Lights, 24VDC & 120VAC

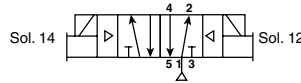
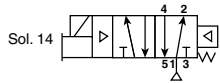
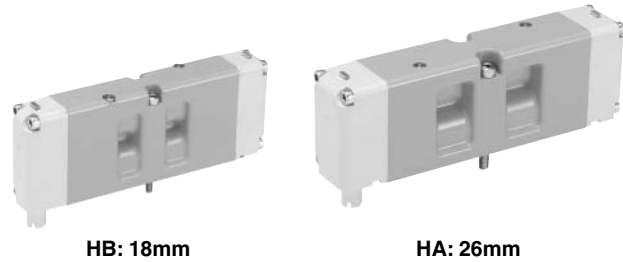




**Single Solenoid  
 2-Position**



**Double Solenoid  
 2-Position**

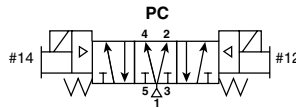
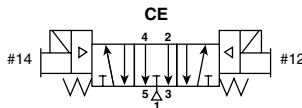
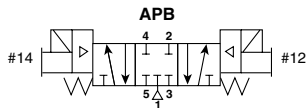


<b>HB</b>	<b>HBEVXBG023A</b>	120VAC	0.55 Cv
	<b>HBEVXBG0G9A</b>	24VDC	
<b>HA</b>	<b>HAEVXBG023A</b>	120VAC	1.1 Cv
	<b>HAEVXBG0G9A</b>	24VDC	

<b>HB</b>	<b>HB2VXBG023A</b>	120VAC	0.55 Cv
	<b>HB2VXBG0G9A</b>	24VDC	
<b>HA</b>	<b>HA2VXBG023A</b>	120VAC	1.1 Cv
	<b>HA2VXBG0G9A</b>	24VDC	



**Double Solenoid  
 3-Position APB  
 3-Position CE  
 3-Position PC**

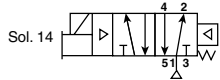
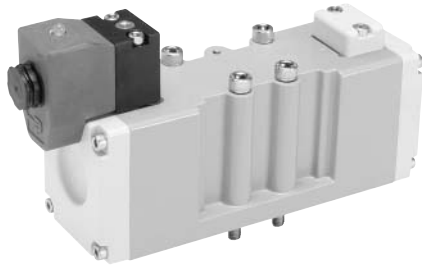


<b>APB</b>			
<b>HB</b>	<b>HB5VXBG023A</b>	120VAC	0.50 Cv
	<b>HB5VXBG0G9A</b>	24VDC	
<b>HA</b>	<b>HA5VXBG023A</b>	120VAC	1.0 Cv
	<b>HA5VXBG0G9A</b>	24VDC	
<b>CE</b>			
<b>HB</b>	<b>HB6VXBG023A</b>	120VAC	0.50 Cv
	<b>HB6VXBG0G9A</b>	24VDC	
<b>HA</b>	<b>HA6VXBG023A</b>	120VAC	1.0 Cv
	<b>HA6VXBG0G9A</b>	24VDC	

<b>PC</b>			
<b>HB</b>	<b>HB7VXBG023A</b>	120VAC	0.50 Cv
	<b>HB7VXBG0G9A</b>	24VDC	
<b>HA</b>	<b>HA7VXBG023A</b>	120VAC	1.0 Cv
	<b>HA7VXBG0G9A</b>	24VDC	

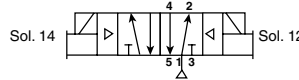
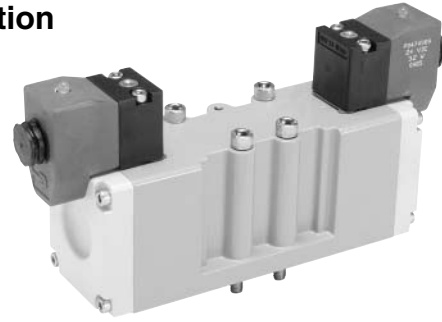


**Single Solenoid**  
**2-Position, Spring / Air Return**



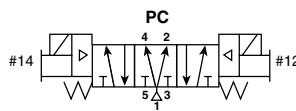
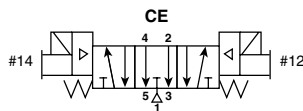
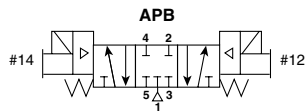
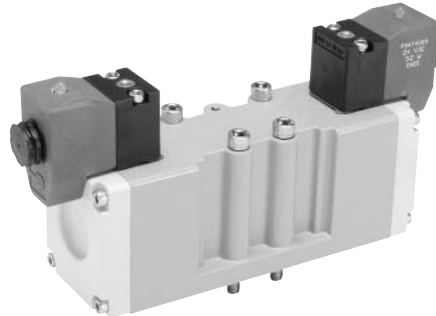
<b>H1</b>	<b>H1EVXBG023C</b>	120VAC	1.5 Cv
	<b>H1EVXBG0B9C</b>	24VDC	
<b>H2</b>	<b>H2EVXBG023C</b>	120VAC	3.0 Cv
	<b>H2EVXBG0B9C</b>	24VDC	
<b>H3</b>	<b>H3EVXBG023C</b>	120VAC	6.0 Cv
	<b>H3EVXBG0B9C</b>	24VDC	

**Double Solenoid**  
**2-Position**



<b>H1</b>	<b>H12VXBG023C</b>	120VAC	1.5 Cv
	<b>H12VXBG0B9C</b>	24VDC	
<b>H2</b>	<b>H22VXBG023C</b>	120VAC	3.0 Cv
	<b>H22VXBG0B9C</b>	24VDC	
<b>H3</b>	<b>H32VXBG023C</b>	120VAC	6.0 Cv
	<b>H32VXBG0B9C</b>	24VDC	

**Double Solenoid**  
**3-Position APB**  
**3-Position CE**  
**3-Position PC**

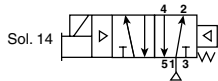


<b>APB</b>			
<b>H1</b>	<b>H15VXBG023C</b>	120VAC	1.2 Cv
	<b>H15VXBG0B9C</b>	24VDC	
<b>H2</b>	<b>H25VXBG023C</b>	120VAC	2.8 Cv
	<b>H25VXBG0B9C</b>	24VDC	
<b>H3</b>	<b>H35VXBG023C</b>	120VAC	5.0 Cv
	<b>H35VXBG0B9C</b>	24VDC	
<b>CE</b>			
<b>H1</b>	<b>H16VXBG023C</b>	120VAC	1.2 Cv
	<b>H16VXBG0B9C</b>	24VDC	
<b>H2</b>	<b>H26VXBG023C</b>	120VAC	2.8 Cv
	<b>H26VXBG0B9C</b>	24VDC	
<b>H3</b>	<b>H36VXBG023C</b>	120VAC	5.0 Cv
	<b>H36VXBG0B9C</b>	24VDC	

<b>PC</b>			
<b>H1</b>	<b>H17VXBG023C</b>	120VAC	1.2 Cv
	<b>H17VXBG0B9C</b>	24VDC	
<b>H2</b>	<b>H27VXBG023C</b>	120VAC	2.8 Cv
	<b>H27VXBG0B9C</b>	24VDC	
<b>H3</b>	<b>H37VXBG023C</b>	120VAC	5.0 Cv
	<b>H37VXBG0B9C</b>	24VDC	



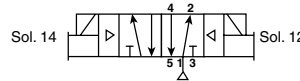
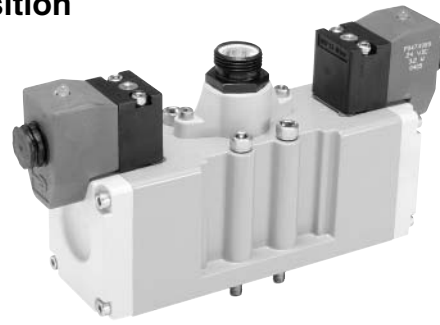
**Single Solenoid**  
**2-Position, Spring / Air Return**



<b>H1</b>	<b>H1EWXBG323000*C</b>	120VAC	1.5 Cv
	<b>H1EWXBG2B9000*C</b>	24VDC	
<b>H2</b>	<b>H2EWXBG323000*C</b>	120VAC	3.0 Cv
	<b>H2EWXBG2B9000*C</b>	24VDC	
<b>H3</b>	<b>H3EWXBG323000*C</b>	120VAC	6.0 Cv
	<b>H3EWXBG2B9000*C</b>	24VDC	

H##WXBG323000\*C = 5-Pin Automotive Mini Straight Connector  
H##WXBG2B9000\*C = 4-Pin M12 Micro Straight Connector

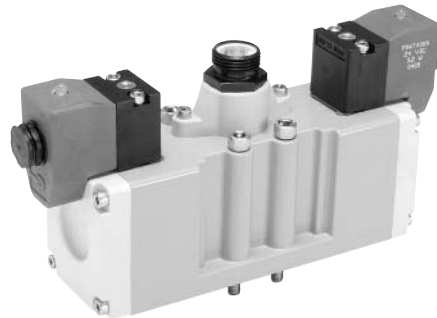
**Double Solenoid**  
**2-Position**



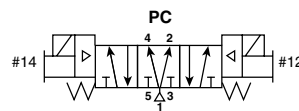
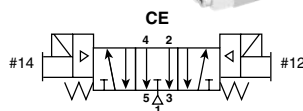
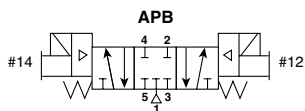
<b>H1</b>	<b>H12WXBG323000*C</b>	120VAC	1.5 Cv
	<b>H12WXBG2B9000*C</b>	24VDC	
<b>H2</b>	<b>H22WXBG323000*C</b>	120VAC	3.0 Cv
	<b>H22WXBG2B9000*C</b>	24VDC	
<b>H3</b>	<b>H32WXBG323000*C</b>	120VAC	6.0 Cv
	<b>H32WXBG2B9000*C</b>	24VDC	

H##WXBG323000\*C = 5-Pin Automotive Mini Straight Connector  
H##WXBG2B9000\*C = 4-Pin M12 Micro Straight Connector

**Double Solenoid**  
**3-Position APB**  
**3-Position CE**  
**3-Position PC**



\* Specify Automotive Wiring Code  
**C** - Chrysler  
**F** - SAE / Ford  
**G** - GM



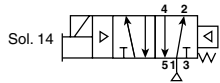
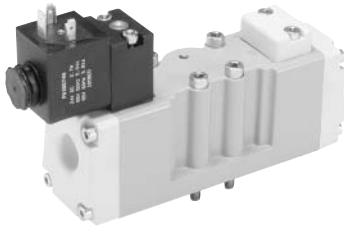
<b>APB</b>			
<b>H1</b>	<b>H15WXBG323000*C</b>	120VAC	1.2 Cv
	<b>H15WXBG2B9000*C</b>	24VDC	
<b>H2</b>	<b>H25WXBG323000*C</b>	120VAC	2.8 Cv
	<b>H25WXBG2B9000*C</b>	24VDC	
<b>H3</b>	<b>H35WXBG323000*C</b>	120VAC	5.0 Cv
	<b>H35WXBG2B9000*C</b>	24VDC	
<b>CE</b>			
<b>H1</b>	<b>H16WXBG323000*C</b>	120VAC	1.2 Cv
	<b>H16WXBG2B9000*C</b>	24VDC	
<b>H2</b>	<b>H26WXBG323000*C</b>	120VAC	2.8 Cv
	<b>H26WXBG2B9000*C</b>	24VDC	
<b>H3</b>	<b>H36WXBG323000*C</b>	120VAC	5.0 Cv
	<b>H36WXBG2B9000*C</b>	24VDC	

<b>PC</b>			
<b>H1</b>	<b>H17WXBG323000*C</b>	120VAC	1.2 Cv
	<b>H17WXBG2B9000*C</b>	24VDC	
<b>H2</b>	<b>H27WXBG323000*C</b>	120VAC	2.8 Cv
	<b>H27WXBG2B9000*C</b>	24VDC	
<b>H3</b>	<b>H37WXBG323000*C</b>	120VAC	5.0 Cv
	<b>H37WXBG2B9000*C</b>	24VDC	

H##WXBG323000\*C = 5-Pin Automotive Mini Straight Connector  
H##WXBG2B9000\*C = 4-Pin M12 Micro Straight Connector

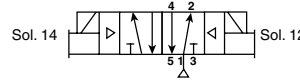
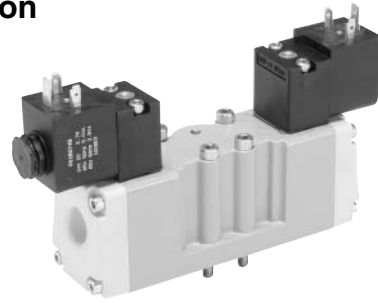


### Single Solenoid 2-Position, Spring / Air Return



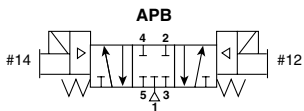
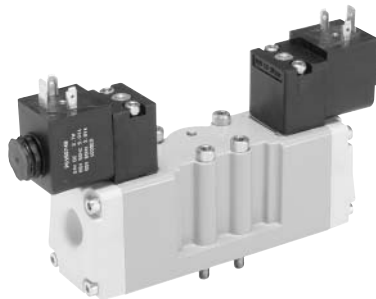
<b>H1</b>	H1EWXBBL53C H1EWXBBL49C	120VAC 24VDC	1.5 Cv
<b>H2</b>	H2EWXBBL53C H2EWXBBL49C	120VAC 24VDC	3.0 Cv
<b>H3</b>	H3EWXBBL53C H3EWXBBL49C	120VAC 24VDC	6.0 Cv

### Double Solenoid 2-Position

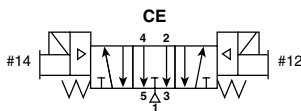


<b>H1</b>	H12WXBBL53C H12WXBBL49C	120VAC 24VDC	1.5 Cv
<b>H2</b>	H22WXBBL53C H22WXBBL49C	120VAC 24VDC	3.0 Cv
<b>H3</b>	H32WXBBL53C H32WXBBL49C	120VAC 24VDC	6.0 Cv

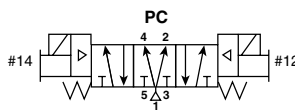
### Double Solenoid 3-Position APB 3-Position CE 3-Position PC



APB			
<b>H1</b>	H15WXBBL53C H15WXBBL49C	120VAC 24VDC	1.2 Cv
<b>H2</b>	H25WXBBL53C H25WXBBL49C	120VAC 24VDC	2.8 Cv
<b>H3</b>	H35WXBBL53C H35WXBBL49C	120VAC 24VDC	5.0 Cv



CE			
<b>H1</b>	H16WXBBL53C H16WXBBL49C	120VAC 24VDC	1.2 Cv
<b>H2</b>	H26WXBBL53C H26WXBBL49C	120VAC 24VDC	2.8 Cv
<b>H3</b>	H36WXBBL53C H36WXBBL49C	120VAC 24VDC	5.0 Cv

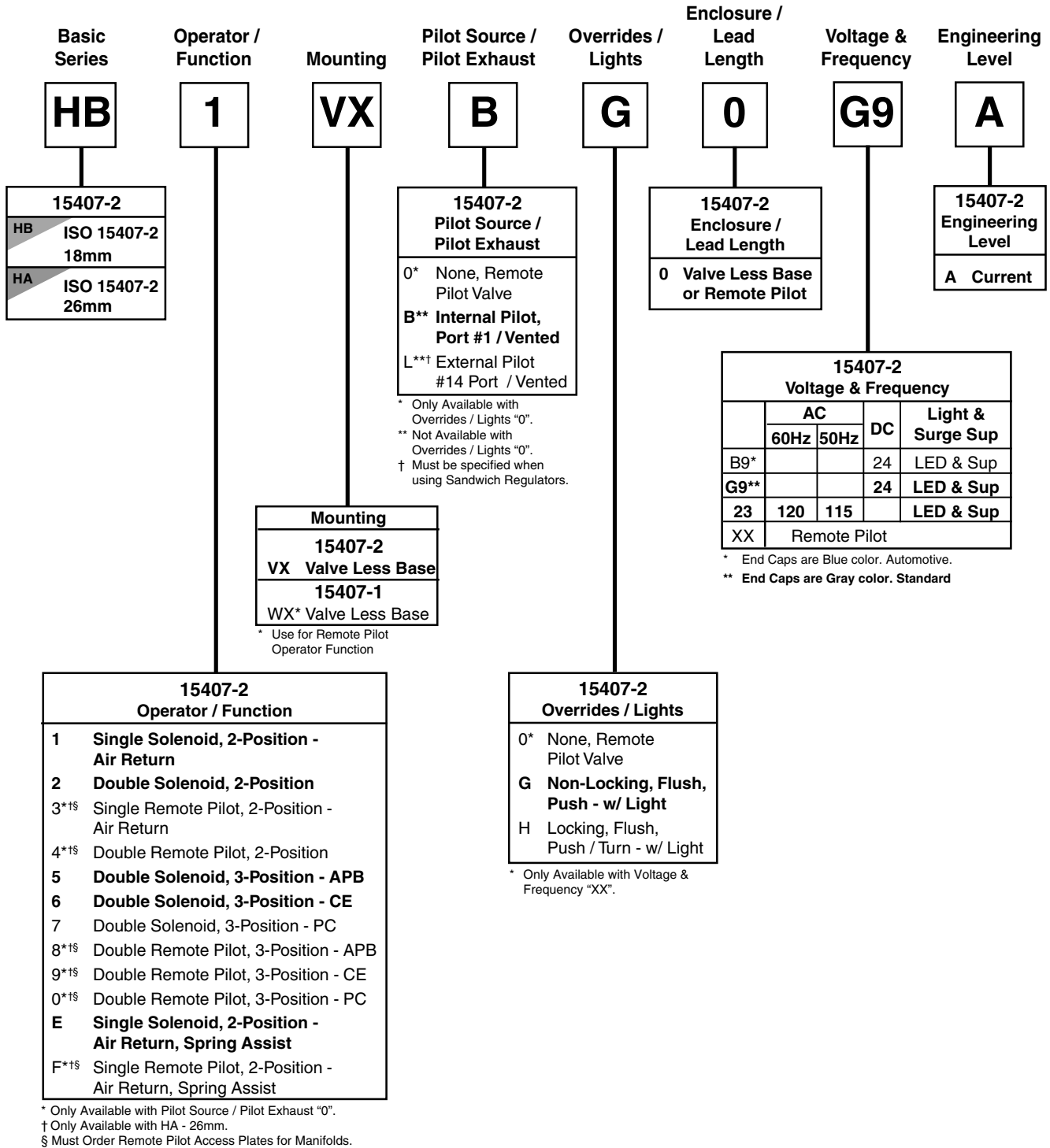


PC			
<b>H1</b>	H17WXBBL53C H17WXBBL49C	120VAC 24VDC	1.2 Cv
<b>H2</b>	H27WXBBL53C H27WXBBL49C	120VAC 24VDC	2.8 Cv
<b>H3</b>	H37WXBBL53C H37WXBBL49C	120VAC 24VDC	5.0 Cv



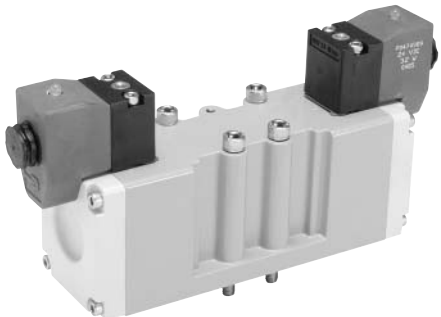
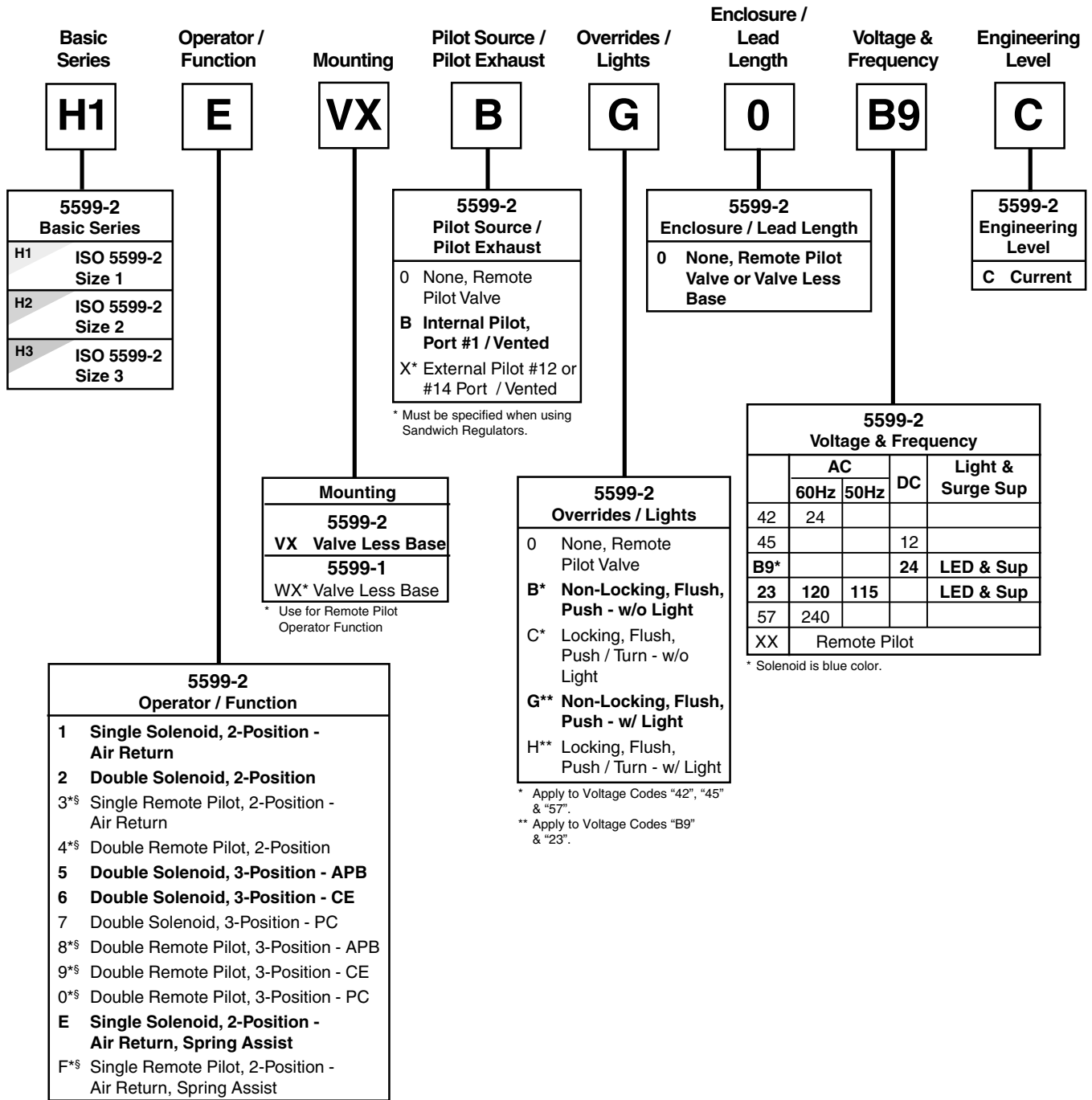


**BOLD OPTIONS ARE MOST POPULAR**

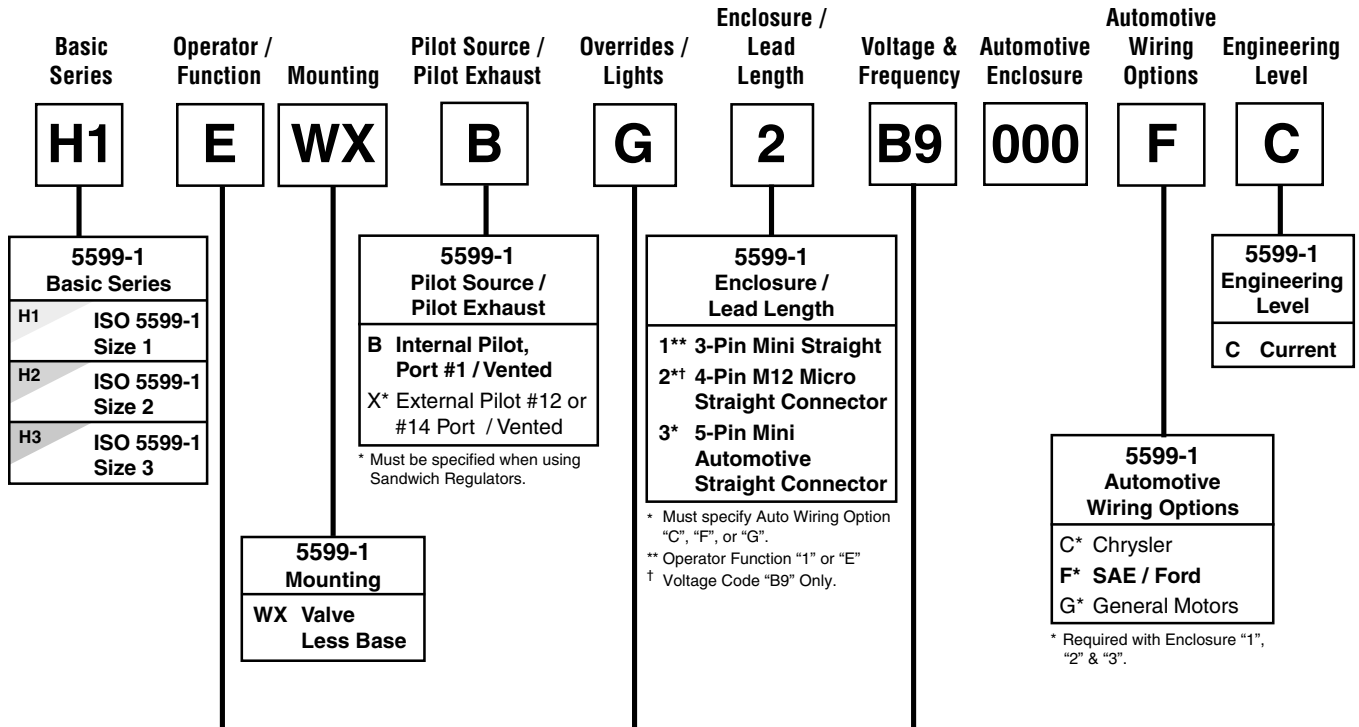




**BOLD OPTIONS ARE MOST POPULAR**



**BOLD OPTIONS ARE MOST POPULAR**



5599-1 Operator / Function
1 Single Solenoid, 2-Position - Air Return
2 Double Solenoid, 2-Position
5 Double Solenoid, 3-Position - APB
6 Double Solenoid, 3-Position - CE
7 Double Solenoid, 3-Position - PC
<b>E Single Solenoid, 2-Position - Air Return, Spring Assist</b>

5599-1 Overrides / Lights
<b>B* Non-Locking, Flush, Push - w/o Light</b>
C* Locking, Flush, Push / Turn - w/o Light
<b>G** Non-Locking, Flush, Push - w/ Light</b>
H** Locking, Flush, Push / Turn - w/ Light

5599-1 Voltage & Frequency				
	AC		DC	Light & Surge Sup
	60Hz	50Hz		
42	24			
45			12	
<b>B9*</b>			24	<b>LED &amp; Sup</b>
23	120	115		<b>LED &amp; Sup</b>
57	240			

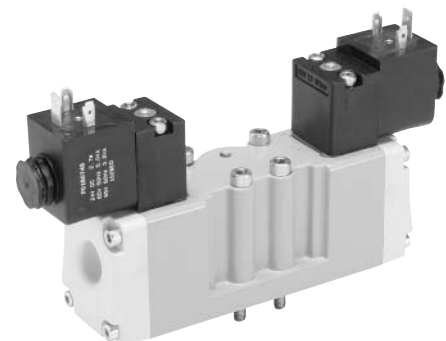
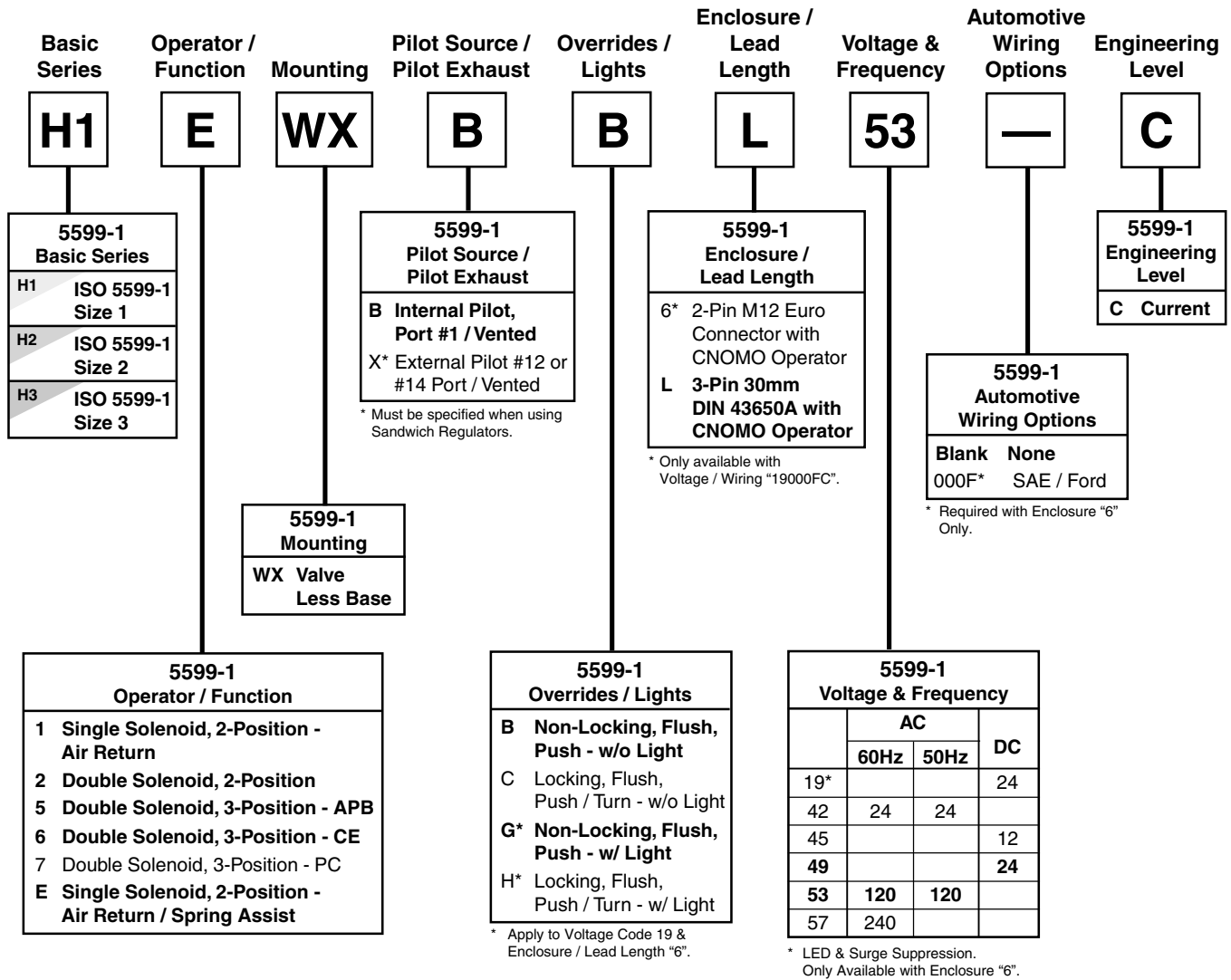
\* Apply to Voltage Codes "42", "45" & "57".  
 \*\* Apply to Voltage Codes "B9" & "23".

\* Solenoid is blue color.

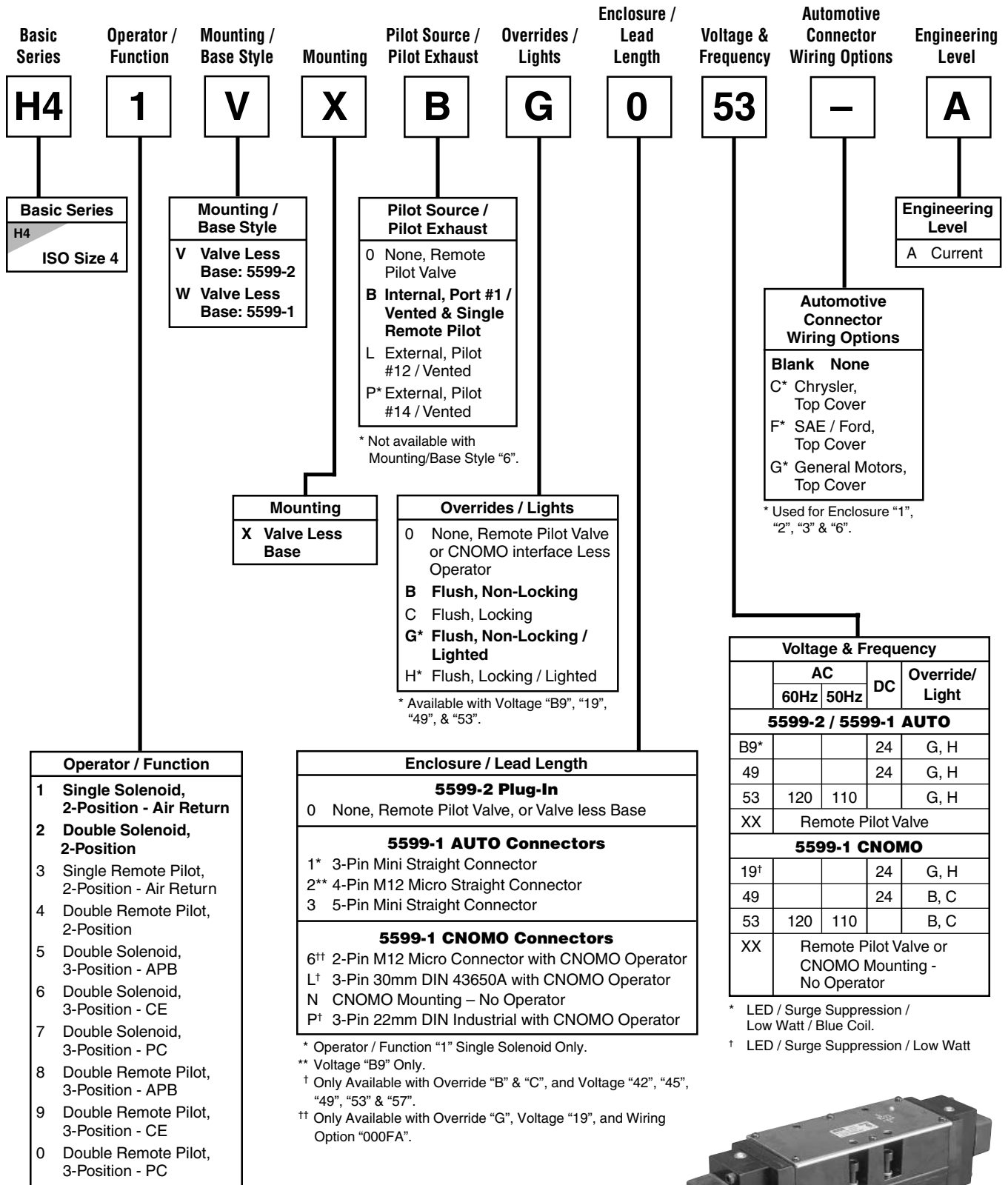




**BOLD OPTIONS ARE MOST POPULAR**

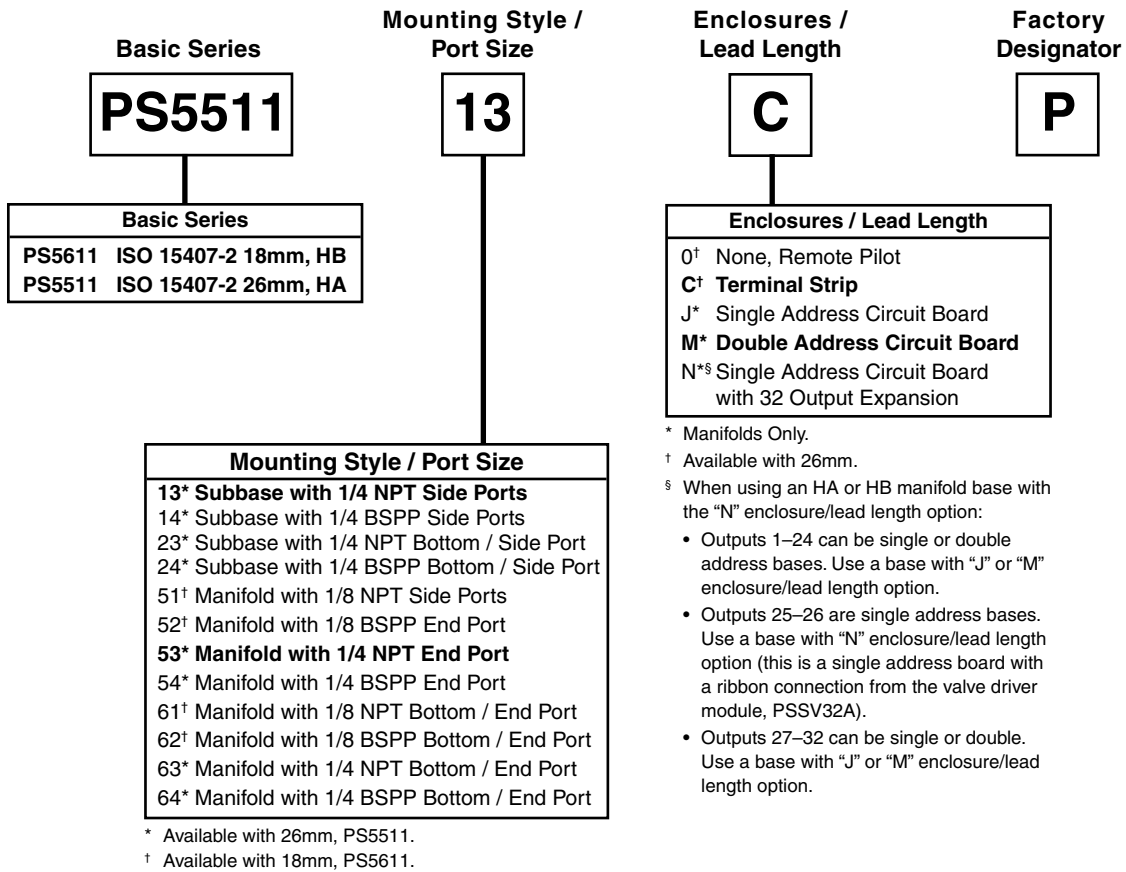


**BOLD OPTIONS ARE STOCKED**





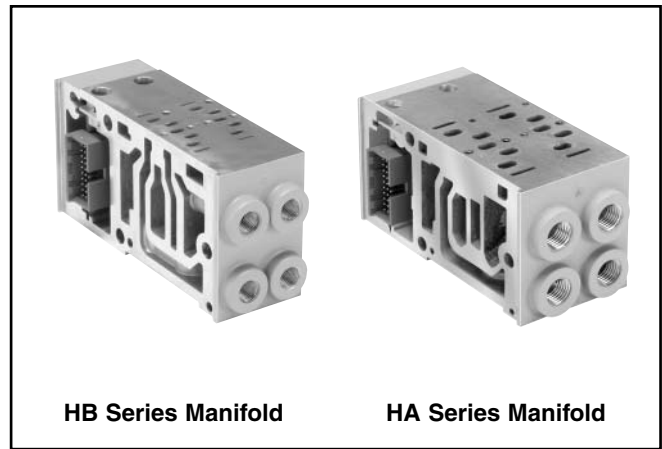
## Manifold and Subbase Kit Ordering Code



### Subbase Kits

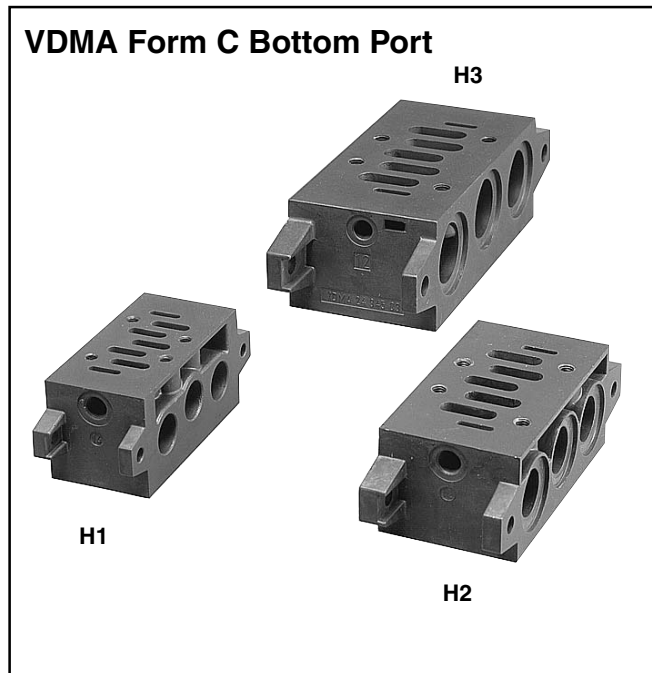


### Manifold Kits



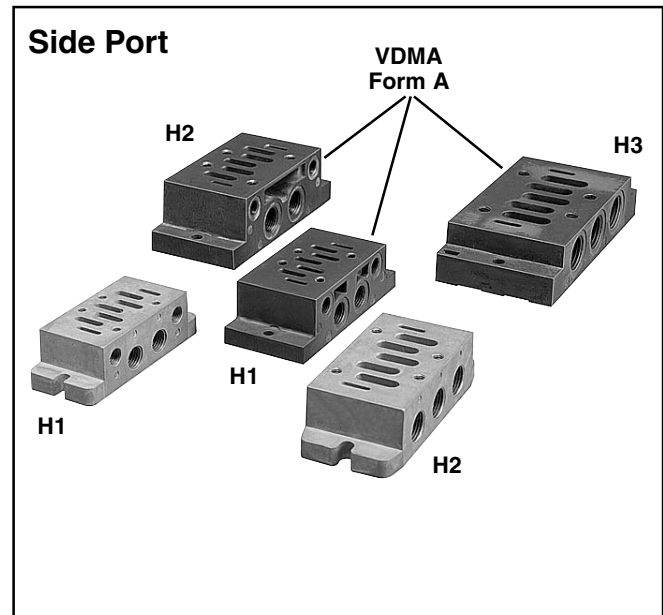


## VDMA Manifolds

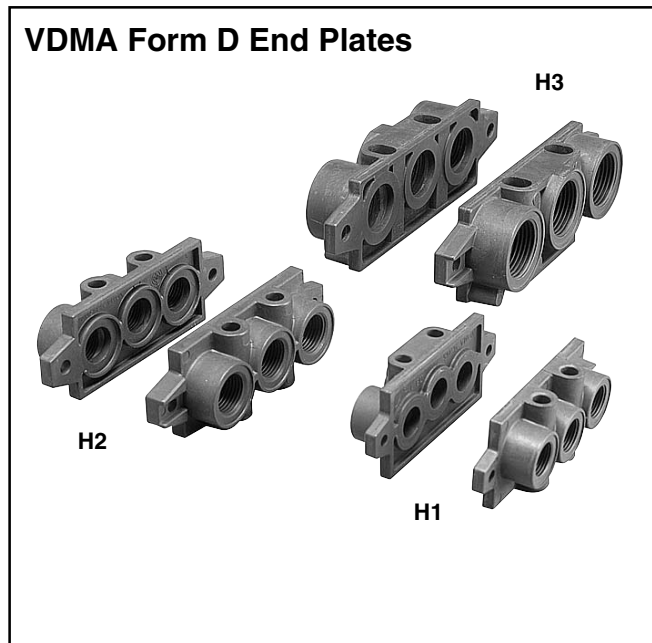


Series	Port Size	BSPP "G"
H1	1/4"	P2N-VM512MB
H2	3/8"	P2N-WM513MB
H3	1/2"	P2N-YM514MB

## Subbases



Series	Port Size	NPT	BSPP "G"
H1	VDMA 1/4"	P2N-GS592SD	P2N-GS512SD
	1/4"	—	P2N-VS512SD
H2	VDMA 3/8"	P2N-HS593SS	P2N-HS513SS
	3/8"	—	P2N-WS513S
H3	VDMA 1/2"	—	P2N-YS514SD



Series	Port Size	BSPP "G"
H1	3/8"	P2N-VM513E
H2	1/2"	P2N-WM514ES
H3	1"	P2N-YM518ES

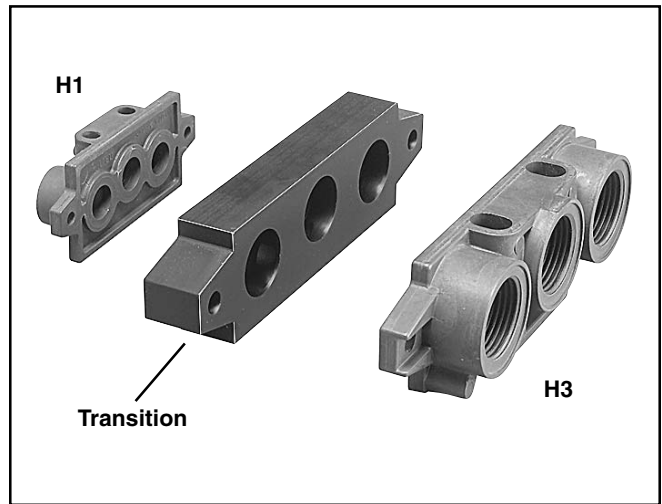


## VDMA Transition Plate

Size	Kit Number
H1 to H3	P2N-VM500AK

**Kit includes:** Transition Plate Only.

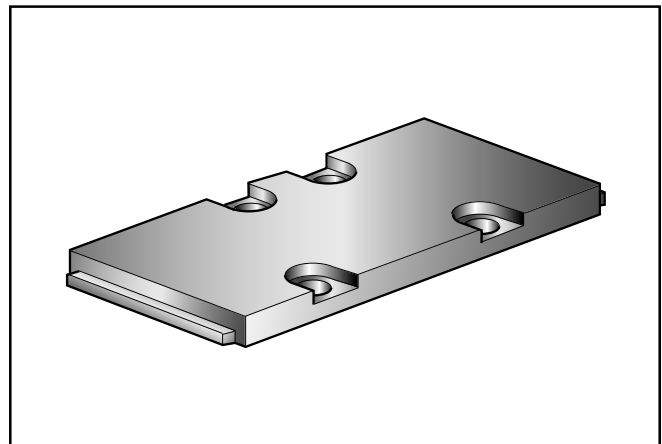
- Order P2N-VM513ES and P2N-YM518ES separately to assemble add-a-fold.



## VDMA Blanking Plate

Size	Kit Number
H1	P2N-AA5B
H2	P2N-BA5B
H3	P2N-CA5B

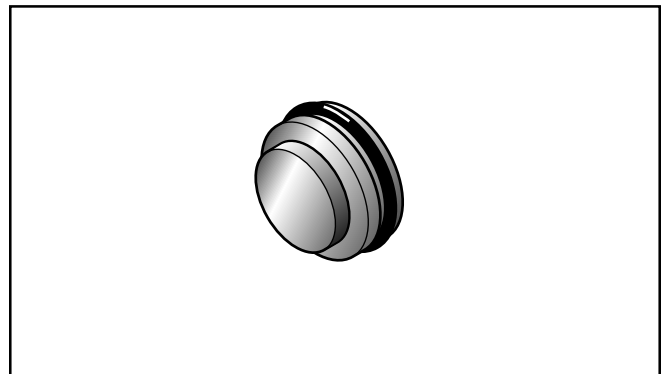
**Kit includes:** (1) Blanking Plate, (1) Gasket, and (4) Mounting Bolts.



## VDMA Isolation Plugs - Main Galley

Size	Kit Number
H1	P2N-VK0P
H2	P2N-WK0P
H3	P2N-YK0P

**Kit includes:** (1) Isolator Plug.







## Manifold and Subbase Kit Ordering Code

H1 Basic Series	Mounting Base Style / Port Size	Enclosures / Lead Length	Wiring Options	Engineering Level	Factory Designator
<b>PS4011</b>	<b>55</b>	<b>A</b>	<b>—</b>	<b>C</b>	<b>P</b>
H2 <b>PS4111</b>		<b>Enclosures / Lead Length</b> <b>0 None, No Electrical Plug - 5599-1</b> 7† 3-Pin Mini Connector in Base 8*† 4-Pin M12 Micro Connector in Base 9† 5-Pin Mini Connector in Base <b>A 6" Leads</b> C Terminal Block J† Circuit Board, Single Address <b>M† Circuit Board, Double Address</b> T* SAM Gen 3.0 Wiring	<b>Wiring Options</b> <b>Blank None</b> C Chrysler <b>F SAE / Ford</b> G General Motors	<b>Engineering Level</b> C Current	
H3 <b>PS4211</b>			<b>Note:</b> When using the Enclosure / Lead Length "J" or "M" option: 12VDC - maximum number of coils is 13 24VDC - maximum number of coils 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, 12-Pin M23 = 8) 240VAC - Must use "A" or "C" Option, Lead Wires or Terminal Blocks		

\* Valve Voltage Code "B9" Only.  
 † Must Specify Valve Auto Wiring Option "C", "F", or "G".  
 ‡ Not Available with Subbase Kits.

Mounting Base Style / Port Size		
H1	H2	H3
<b>15 Subbase: 3/8 NPT Side Ports</b> 16* Subbase: 3/8 BSPP Side Ports 53 Manifold: 1/4 NPT, End Ports 54 Manifold: 1/4 BSPP, End Ports <b>55 Manifold: 3/8 NPT, End Ports</b> 56* Manifold: 3/8 BSPP, End Ports 65† Manifold: 3/8 NPT Bottom / End Port 66*† Manifold: 3/8 BSPP Bottom / End Port	<b>17 Subbase: 1/2 NPT Side Ports</b> 18* Subbase: 1/2 BSPP Side Ports 55 Manifold: 3/8 NPT, End Ports 56* Manifold: 3/8 BSPP, End Ports <b>57 Manifold: 1/2 NPT End Port</b> 58* Manifold: 1/2 BSPP, End Ports 67 Manifold: 1/2 NPT Bottom / End Port 68* Manifold: 1/2 BSPP Bottom / End Port	<b>19 Subbase: 3/4 NPT Side Ports</b> 10* Subbase: 3/4 BSPP Side Port 29 Subbase: 3/4 NPT Bottom / Side Port 57 Manifold: 1/2 NPT End Port 58* Manifold: 1/2 BSPP, End Ports <b>59 Manifold: 3/4 NPT End Port</b> 50 Manifold: 3/4 BSPP End Port 69 Manifold: 3/4 NPT Bottom / End Port 60* Manifold: 3/4 BSPP Bottom / End Port

\* BSPP ISO 1179 Specifications.  
 † #1 Bottom Port - 1/4".

### Subbase Kits

**Automotive Connectors**  
 Mounted in 1/2" Conduit Port

- 3-Pin - Wired for Single Solenoid
- 4-Pin / 5-Pin - Wired for Double Solenoid

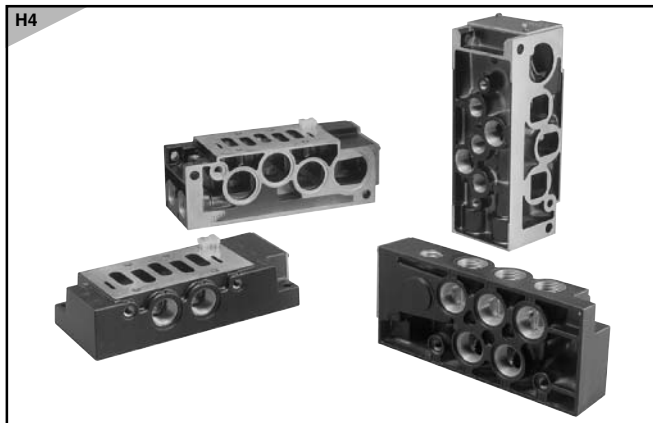
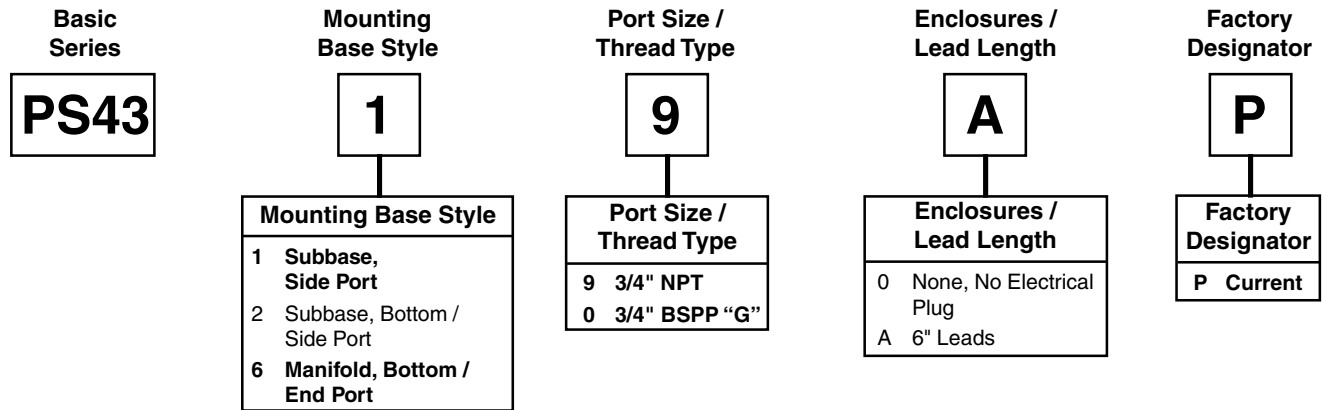
### Manifold Kits

**Automotive Connectors**  
 Mounted in Individual Manifold Conduit Cover

- 3-Pin - Wired for Single Solenoid
- 4-Pin / 5-Pin - Wired for Double Solenoid



## Manifold and Subbase Kit Ordering Code



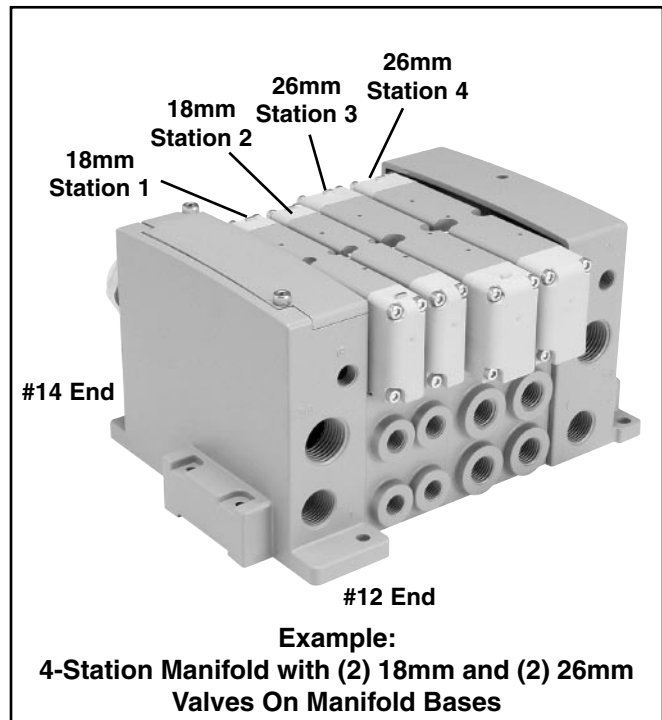
**Mounting / Base Style** H4

- 1 #1, #2, #3, #4, and #5 Side Ports Tapped 3/4"; #12 & #14 Side Pilot Ports Tapped 1/8"
- 2 #1, #2, #3, #4, and #5 Bottom Ports Tapped 3/4"; #1, #2, #3, #4, and #5 Side Ports Tapped 1/2"; #12 & #14 Bottom Pilot Ports Tapped 1/8"
- 6 #2 and #4 End Ports Tapped 3/4"; #2 and #4 Bottom Ports Tapped 3/4"; #1, #3 and #5 Bottom Ports Tapped 1/2"; #12 & #14 Bottom Pilot Ports Tapped 1/8"



## How To Order Add-A-Fold Assemblies

1. List Add-A-Fold Assembly call out. This automatically includes the end plate kit assembly.
2. List complete Valve, Regulator, Flow Control and Base model number. List left to right, LOOKING AT THE CYLINDER PORTS on the #12 end of the manifold. The left most station is station 1.  
 (If a blank station is needed, list the blanking plate part number and the individual manifold number in the station specified.)

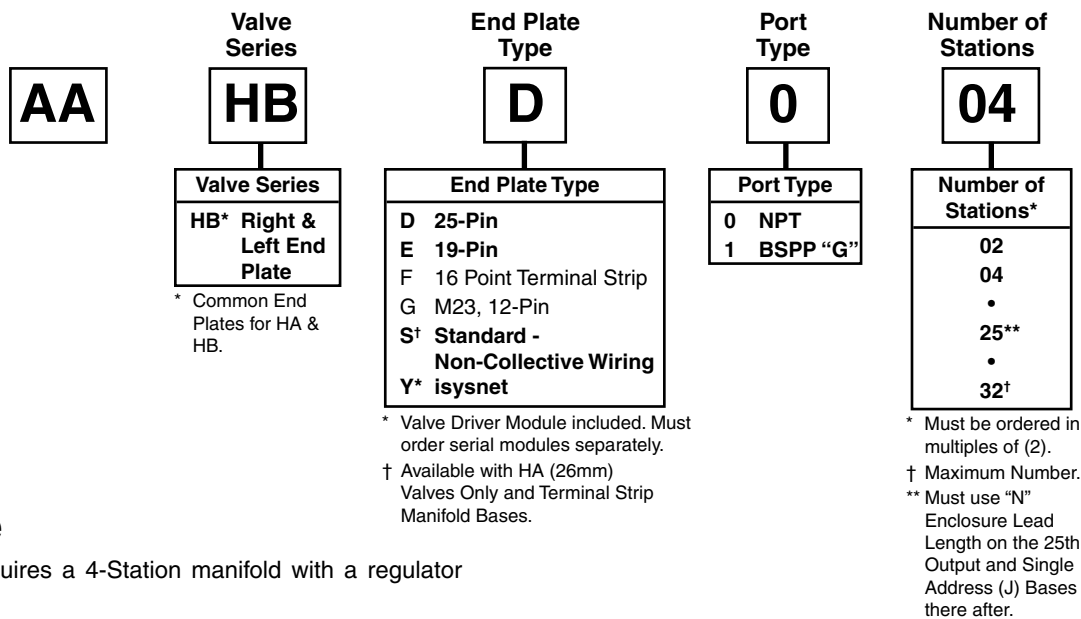


## Maximum Solenoids Energized Simultaneously (Interconnect Circuit Boards)

HA HB	Voltage Code	25-Pin D-Sub	19-Pin Round	Single 12-Pin M23	isysnet
24VDC	B9 / G9	24	16	8	32
120VAC*	23	24	16	8	32

\* Not CSA certified for 25-Pin, D-Sub option.

## Add-A-Fold Assembly Model Number



### Example

Application requires a 4-Station manifold with a regulator on Station 2.

(Two 18mm + Two 26mm Stations)

Item	Qty.	Part No.
01	1	AAHBD004
02	1	HB1VXBG0G9A .....Station 1
03	1	HB2VXLG0G9A .....Station 2
04	1	PS5638166P .....Station 2
05	1	PS561151MP .....Station 1 & 2
06	2	HA1VXBG0G9A .....Station 3 & 4
07	1	PS551151MP .....Station 3 & 4

**NOTE:** Construct manifold assemblies from left to right while looking at the ports. Valves must be ordered as External Pilot when using Sandwich Regulator.



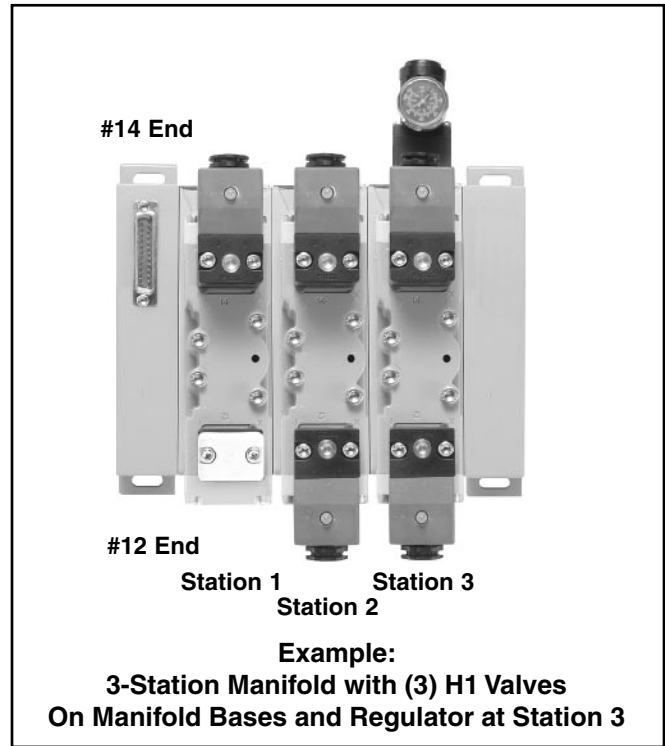
## How To Order Add-A-Fold Assemblies

1. List Add-A-Fold Assembly call out. This automatically includes the end plate kit assembly.
2. List complete Valve, Regulator, Flow Control and Base model number. List left to right, LOOKING AT THE CYLINDER PORTS on the #12 end of the manifold. The left most station is station 1.  
 (If a blank station is needed, list the blanking plate part number and the individual manifold number in the station specified.)

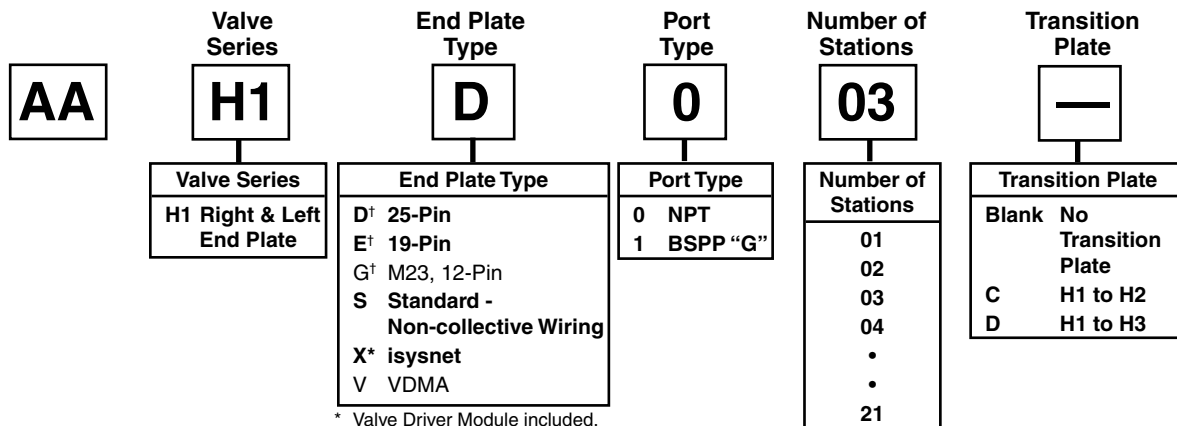
## Maximum Solenoids Energized Simultaneously (Interconnect Circuit Boards)

H1	Voltage Code	25-Pin D-Sub	19-Pin Round	Single 12-Pin M23	isysnet	SAM 3.0
12VDC	45	13	13	8	N/A	N/A
24VAC*	42	24	16	8	N/A	N/A
24VDC	B9	20	16	8	21	4
120VAC*	23	24	16	8	N/A	N/A

\* Not CSA certified for 25-Pin, D-Sub option.



## Add-A-Fold Assembly Model Number



\* Valve Driver Module included. Must order communication modules separately.

† Collective Wiring Module Included.

## Example

Application requires a 3-Station manifold with a valve, regulator and flow control on Station 3.

Item	Qty.	Part No.
01	1	AAH1E003
02	2	H12VXBG0B9C..... Station 1 & 2
03	2	PS401165MCP ..... Station 1 & 2
04	1	H11VXXG0B9C..... Station 3
05	1	PS4038166CP ..... Station 3
06	1	PS4035CP..... Station 3
07	1	PS401165MCP..... Station 3

**NOTE:** When using the Enclosure / Lead Length "J" or "M" option:  
 12VDC - maximum number of coils is 13.  
 24VDC - maximum number of coils is 20.  
 120VAC - Coils limited by the number of pins available in the connector.  
 (25-Pin D-Sub = 24 coils, 19-Pin Brad Harrison = 16,| 12-Pin M23 = 8).  
 240VAC - Must use "A" or "C" option, lead wires or terminal blocks.

**NOTE:** Construct manifold assemblies from left to right while looking at the cylinder ports.  
 Valves must be ordered as External Pilot when using Sandwich Regulator.



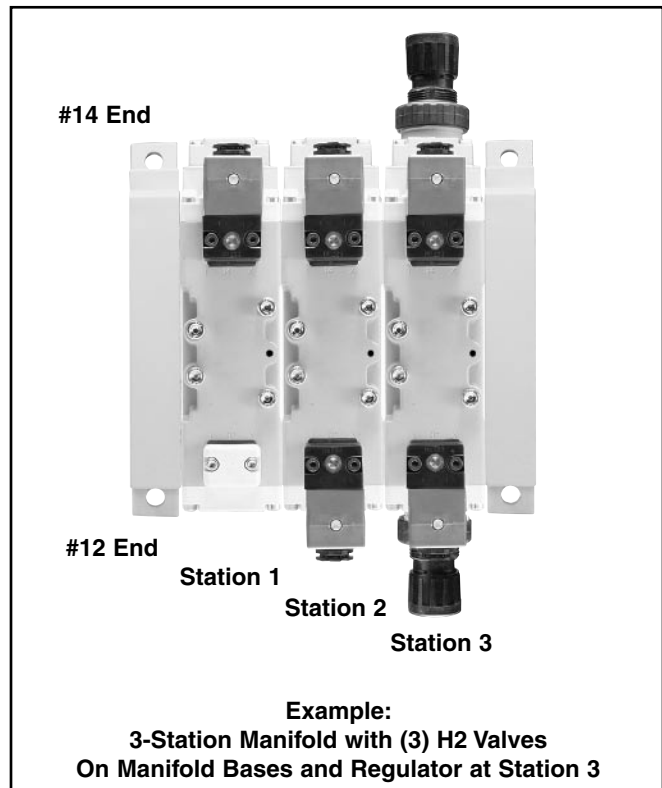
## How To Order Add-A-Fold Assemblies

1. List Add-A-Fold Assembly call out. This automatically includes the end plate kit assembly.
2. List complete Valve, Regulator, Flow Control and Base model number. List left to right, LOOKING AT THE CYLINDER PORTS on the #12 end of the manifold. The left most station is station 1.  
 (If a blank station is needed, list the blanking plate part number and the individual manifold number in the station specified.)

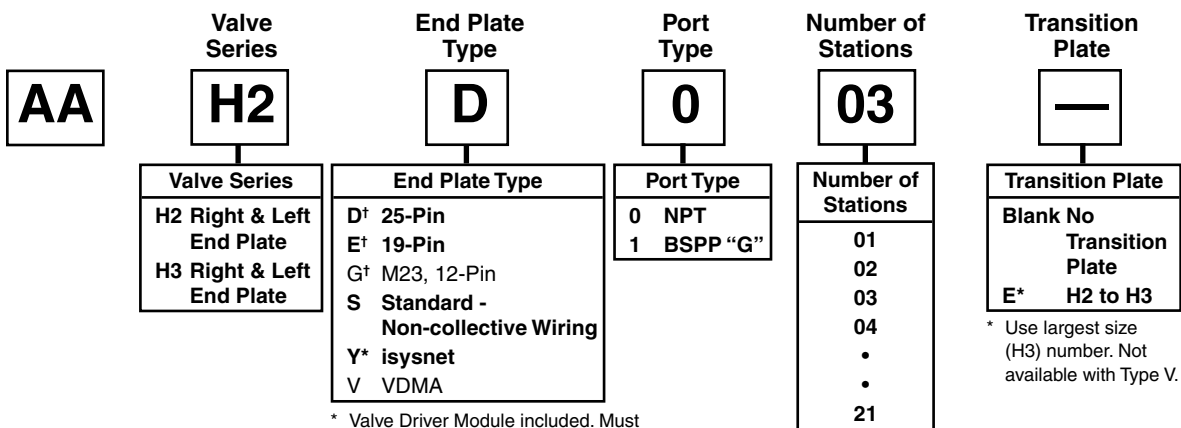
## Maximum Solenoids Energized Simultaneously (Interconnect Circuit Boards)

H2 H3	Voltage Code	25-Pin D-Sub	19-Pin Round	Single 12-Pin M23	isysnet	SAM 3.0
12VDC	45	13	13	8	N/A	N/A
24VAC*	42	24	16	8	N/A	N/A
24VDC	B9	20	16	8	21	4
120VAC*	23	24	16	8	N/A	N/A

\* Not CSA certified for 25-Pin, D-Sub option.



## Add-A-Fold Assembly Model Number



\* Valve Driver Module included. Must order communication modules separately.

† Collective Wiring Module Included.

\* Use largest size (H3) number. Not available with Type V.

## Example

Application requires a 3-Station manifold with a valve, regulator and flow control on Station 3.

Item	Qty.	Part No.
01	1	AAH2E003
02	2	H22VXBG0B9C.....Station 1 & 2
03	2	PS411157MCP .....Station 1 & 2
04	1	H21VXXG0B9C.....Station 3
05	1	PS4138166CP .....Station 3
06	1	PS4135CP .....Station 3
07	1	PS411157MCP .....Station 3

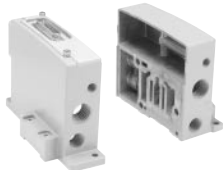

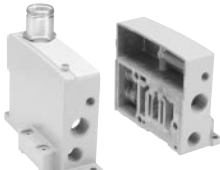
**NOTE:** When using the Enclosure / Lead Length "J" or "M" option:  
 12VDC - maximum number of coils is 13.  
 24VDC - maximum number of coils is 20.  
 120VAC - Coils limited by the number of pins available in the connector.  
 (25-Pin D-Sub = 24 coils, 19-Pin Brad Harrison = 16,| 12-Pin M23 = 8).  
 240VAC - Must use "A" or "C" option, lead wires or terminal blocks.

**NOTE:** Construct manifold assemblies from left to right while looking at the cylinder ports.  
 Valves must be ordered as External Pilot when using Sandwich Regulator.



## End Plate Kits

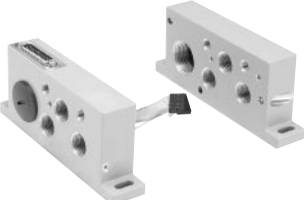

HB HA

<b>Basic Series</b> <b>PS56</b>	<b>End Plate Kit Type</b> <b>20</b>	<b>Option</b> <b>01</b>	<b>Thread Type</b> <b>0</b>	<b>Factory Designator</b> <b>P</b>	
	<b>End Plate Kit Type</b> 20 End Plate - Collective Wiring 31 End Plate - Non-Collective Wiring		<b>Thread Type</b> 0 NPT or No Ports 1 G (BSPP)		
<b>Basic Series</b> PS56 ISO 15407, Size HB, 18mm & HA, 26mm		<b>Option</b> 01* Non-Collective Wiring L2†‡ 25-Pin, D-Sub L3†‡ 19-Pin, Round, Brad Harrison L4†‡ 12-Pin, M23 L5†‡ 16-Point Terminal Strip L6†‡ isysnet			

\* Only Available with End Plate Kit Type "31" & HA Valves.  
† Only Available with End Plate Kit Type "20".  
‡ 120VAC is not CSA rated.  
‡ Valve Driver Module Installed. Must order communication modules separately.  
# Must Order Bases with Circuit Boards.

**HB - HA 25-Pin**  
**HB - HA 16-Point Terminal Strip**  
**HB - HA 19-Pin**  
**HB - HA Non-Collective Wiring End Plates**

H1 H2 H3





<b>Basic Series</b> <b>PS40</b>	<b>End Plate Kit Type</b> <b>20</b>	<b>Option</b> <b>L2</b>	<b>Thread Type</b> <b>0</b>	<b>Engineering Level</b> <b>C</b>	<b>Factory Designator</b> <b>P</b>
	<b>End Plate Kit Type</b> 20 End Plate - Collective Wiring 31 End Plate - Non-Collective Wiring		<b>Thread Type</b> 0 NPT or No Ports 1 G (BSPP)	<b>Engineering Level</b> C Current	
<b>Basic Series</b> PS40 ISO 5599, Size 1 PS41 ISO 5599, Size 2 PS42 ISO 5599, Size 3		<b>Option</b> 01* Non-Collective Wiring L1†** Collective Wiring End Plate, Top Ported L2†** 25-Pin, D-Sub L3†‡ 19-Pin, Round, Brad Harrison L4†‡ 12-Pin, M23 L6^+ isysnet			

\* Only Available with End Plate Kit Type "31".  
\*\* For PS41 and PS42 Kits Only.  
† Only Available with End Plate Kit Type "20".  
‡ Must Order Collective Wiring Module or Valve Driver Module Separately.  
# 120VAC is Not CSA Rated.  
^ Valve Driver Module Installed. Must order communication modules separately.  
+ Must Order Bases with Circuit Boards.

**H1 25-Pin D-Sub End Plates**  
**H1 Non-Collective Wiring End Plates**  
**H1 19-Pin Round End Plates**



## Transition Plate Kits

H1	H2	H3																						
<b>Basic Series</b>			<b>Transition Plate Type</b>	<b>Option</b>	<b>Thread Type</b>	<b>Engineering Level</b>	<b>Factory Designator</b>																	
<b>PS40</b>			<b>26</b>	<b>L2</b>	<b>0</b>	<b>C</b>	<b>P</b>																	
			<table border="1"> <tr><th>Transition Plate Type</th></tr> <tr><td>25 H1 to H2 to H3</td></tr> <tr><td>26 H1 to H3</td></tr> <tr><td>27 H1 to H2</td></tr> <tr><td>28 H2 to H3</td></tr> </table>	Transition Plate Type	25 H1 to H2 to H3	26 H1 to H3	27 H1 to H2	28 H2 to H3	<table border="1"> <tr><th>Option</th></tr> <tr><td>01 Non-Collective Wiring</td></tr> <tr><td>L1* Collective Wiring End Plate, Top Ported</td></tr> <tr><td>L2 25-Pin, D-Sub</td></tr> <tr><td>L3 19-Pin, Round, Brad Harrison</td></tr> <tr><td>L4 12-Pin, M23</td></tr> <tr><td>L6 isysnet</td></tr> </table>	Option	01 Non-Collective Wiring	L1* Collective Wiring End Plate, Top Ported	L2 25-Pin, D-Sub	L3 19-Pin, Round, Brad Harrison	L4 12-Pin, M23	L6 isysnet	<table border="1"> <tr><th>Thread Type</th></tr> <tr><td>0 NPT or No Ports</td></tr> <tr><td>1 G (BSPP)</td></tr> </table>	Thread Type	0 NPT or No Ports	1 G (BSPP)	<table border="1"> <tr><th>Engineering Level</th></tr> <tr><td>C Current</td></tr> </table>	Engineering Level	C Current	 <p><b>K21R01100P</b>  <b>1 Inch Plastic Conduit Plug</b></p>
Transition Plate Type																								
25 H1 to H2 to H3																								
26 H1 to H3																								
27 H1 to H2																								
28 H2 to H3																								
Option																								
01 Non-Collective Wiring																								
L1* Collective Wiring End Plate, Top Ported																								
L2 25-Pin, D-Sub																								
L3 19-Pin, Round, Brad Harrison																								
L4 12-Pin, M23																								
L6 isysnet																								
Thread Type																								
0 NPT or No Ports																								
1 G (BSPP)																								
Engineering Level																								
C Current																								
					 <p><b>Interface Plate</b></p>	 <p><b>Transition Plate</b></p>	 <p><b>Right Hand End Plate</b></p>																	
					<b>H1 to H2 Shown</b>																			

\* Used Only with Transition Plate Type "28". Must Order Collective Wiring Modules Separately.




## Collective Wiring Module Kits Size 2 & 3


Size	Kit Number
25-Pin, D-Sub Module*†	<b>SCD251MC</b>
M23, 12-Pin*†	<b>SCM231MC</b>
19-Pin Heavy Duty Round*†	<b>SCC191MC</b>
D-Sub Cable, Non-IP, 3 Meters	<b>P8LMH25M3A</b>
D-Sub Cable, IP65, 3-Meter	<b>SCD253W</b>

\* **Kit includes:** Wiring Module with Circuit Board Connection, Gasket, Tie Rods and Bolts.


† Available with "H" Series, ISO 5599-2, Sizes 2 & 3.



**25-Pin, D-Sub Collective Wiring Module**



**19-Pin Heavy Duty Wiring Module**



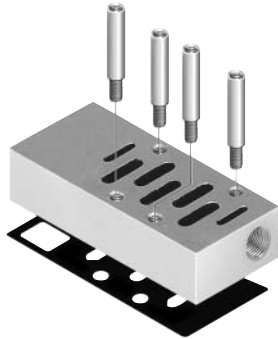
**HB, HA, H1, H2, H3 25-Pin, D-Sub Cable**

## Remote Pilot Access Plate Kits

Size	Port Size	Kit Number	
		NPT	BSPP "G"
HA	1/8"	PS551500P	PS551501P
H1	1/8"	PS401500CP	PS401501CP
H2	1/8"	PS411500CP	PS411501CP
H3	1/8"	PS421500CP	PS421501CP

**Kit includes:** Pilot Port Access Plate, Gasket and Mounting Studs.

- Provides access to #12 & #14 valve pilot galleys for an HA, H1, H2 & H3 manifold.
- Required for Single or Double Remote Pilot Valve on a manifold.
- Not required with Single Subbase mounting.
- Height: H1- 18mm (.71"); H2- 22mm (.85"); H3- 24mm (.94")



**H2, H3 5599-2 Shown**

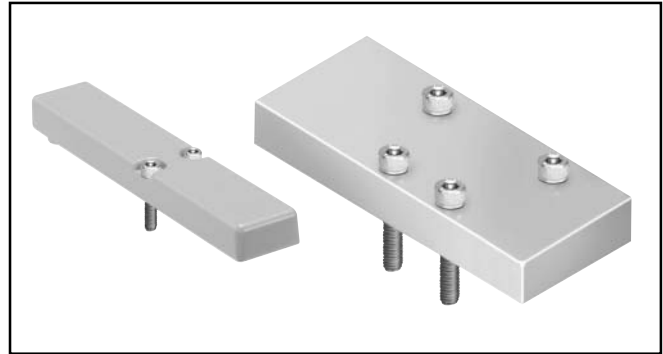




## Blanking Plate Kits

Size	Kit Number
HB	PS5634P
HA	PS5534P
H1	PS4034CP
H2	PS4134CP
H3	PS4234CP
H4	PS1479P

Kit includes: Blanking Plate, Gasket, and Mounting Bolts.



## Manifold Port Isolation Kits Main Galley (1, 3, 5)

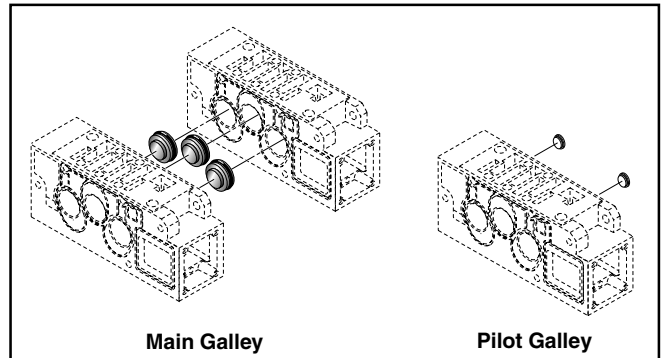
Size	Kit Number
H1	PS4032CP
H2	PS4132CP
H3	PS4232CP

Kit includes: Plugs with O-rings.

### Pilot Galley

Size	Kit Number
H1 H2 H3	PS4033CP

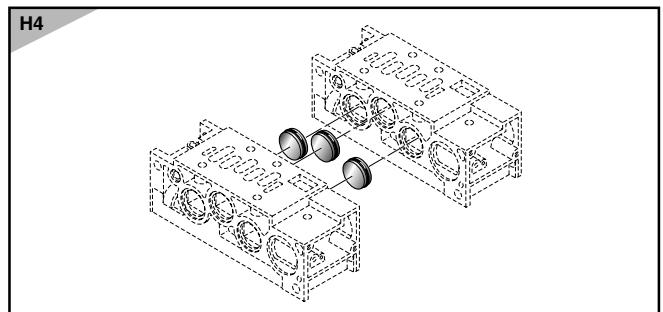
Kit includes: Plugs with O-rings.



### Main Galley (1, 3, 5)

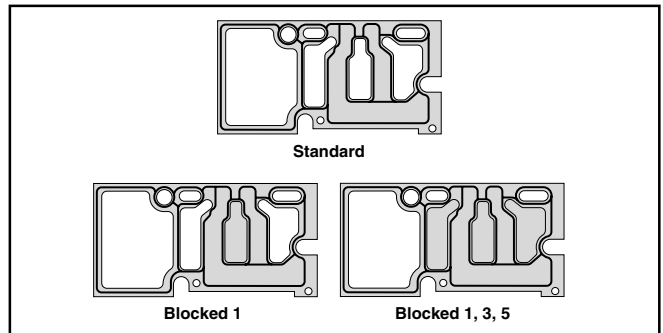
Size	Kit Number
H4	PS1419BP

Kit includes: Plugs with O-rings.



## Manifold to Manifold Gasket Kits

Size	Standard	Blocked #1 Port	Blocked #1, 3, 5 Ports
HB	PS561AP	PS561BP	PS561CP
HA			





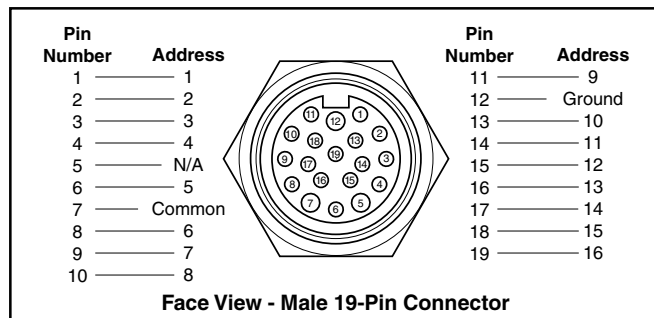


## Maximum Solenoids Energized Simultaneously (Interconnect Circuit Boards)

HA HB	Voltage Code	25-Pin D-Sub	19-Pin Round	Single 12-Pin M23	isysnet		
24VDC	B9 / G9	24	16	8	32		
120VAC*	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	
12VDC	45	13	13	8	N/A	N/A	
24VAC*	42	24	16	8	N/A	N/A	
24VDC	B9	20	16	8	21	4	
120VAC*	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.

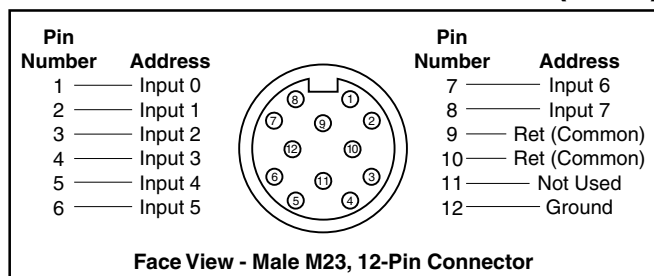
NEMA 4 rated with properly assembled NEMA 4 rated cable.

### Female Cable Assemblies:

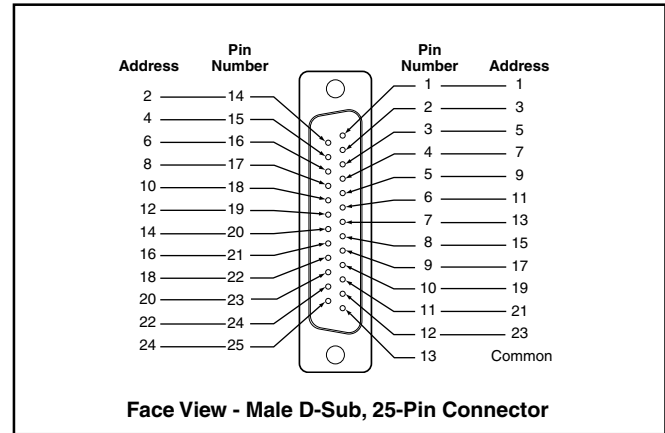
Refer to [www.connector.com](http://www.connector.com)

Brad Harrison #333030P80M050	16.40 ft. (Female to Male Cable)
Brad Harrison #333030P80M0100	32.80 ft. (Female to Male Cable)

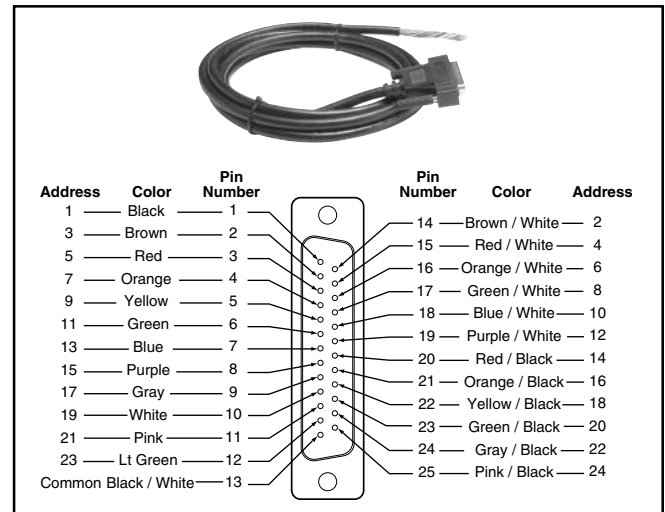
## M23, 12-Pin Round Connector (Male)



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



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

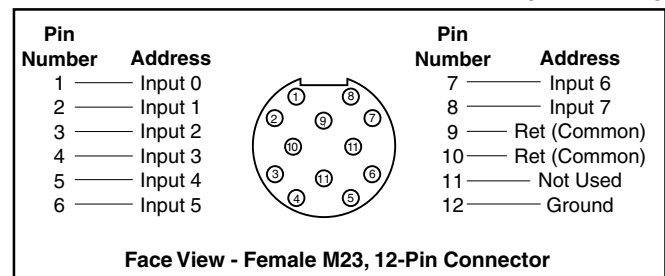


## 25-Pin, D-Sub Cable Specifications

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.

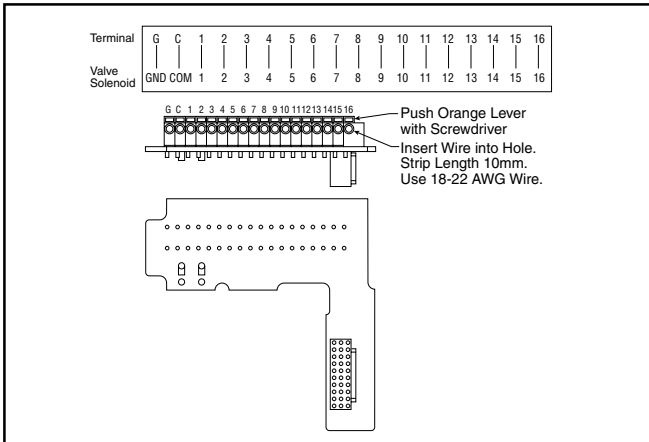
IP65 rated with properly assembled IP65 rated cable.

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

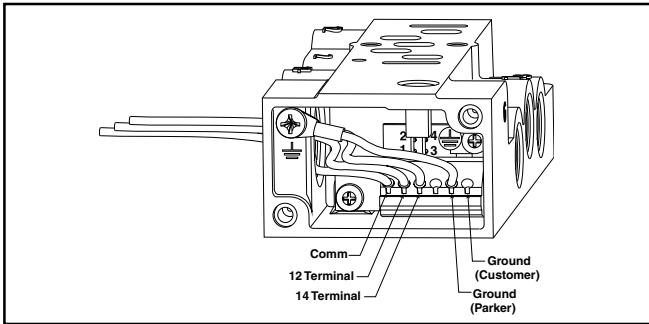




## 16-Point Terminal Strip



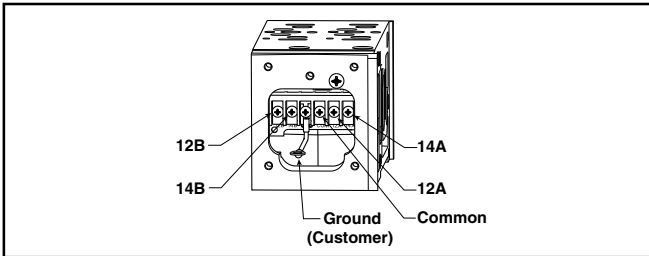
## Subbase Wiring



## Connections

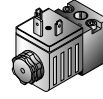
	14 Solenoid	12 Solenoid
Valves with Wires	Black Wires	Red Wires
Valves with Terminal Block (Will accept 18 to 24 Gauge Wires)	14 and Com Terminals	12 and Com Terminals

## Manifold Wiring

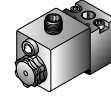


## Electrical Connectors – Size 1, 2 & 3

### 5599-1 CNOMO

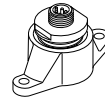


30mm 3-Pin ISO 4400  
(DIN 43650A)



2-Pin M12 Euro

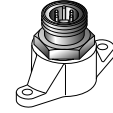
### 5599-1 AUTO



4-Pin Micro



3-Pin Mini

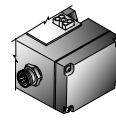


5-Pin Mini

### 5599-2



Manifold Auto Connector



Subbase Auto Connector

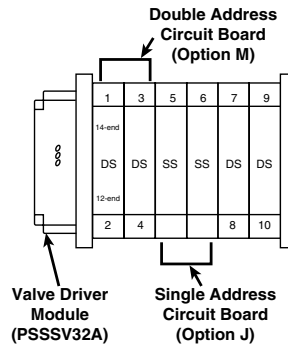
## 90° Cord Sets:

Refer to [www.connector.com](http://www.connector.com)

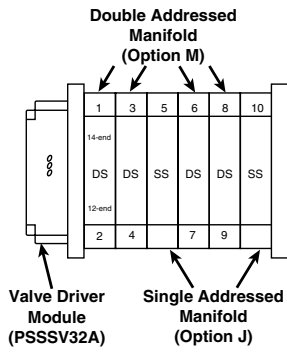
4-Pin (Micro): Brad Harrison 884031A09M030 (3 Meter)

5-Pin (Mini): Brad Harrison 115021A01F010 (1 Foot)

## I/O Addressing Examples



**HB & HA Example:**  
**Two Station Manifold Bases**



**H1, H2 & H3 Example:**  
**Single Station Manifold Bases**

### NOTES:

SS = Single Solenoid Valve

DS = Double Solenoid Valve

First output address the #14 end of the valve closest to the valve driver module

## Female Electrical Connectors (IP65 Rated)

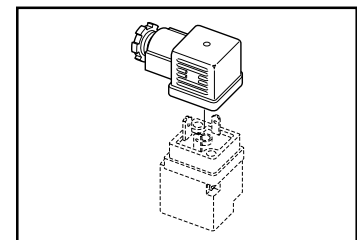
### 30mm 3-Pin ISO 4400 (DIN 43650A)

Connector	Connector with 6' (2m) Cord	Description
PS2028CP	PS2028JCP	Unlighted
PS203279CP	PS2032J79CP*	Light – 6-48V, 50/60Hz; 6-48VDC
PS203283CP	PS2032J83CP*	Light – 120V/60Hz
PS203283CP	N/A	Light – 240V/60Hz

\* With surge suppression.

### Engineering Data:

Conductors: 2 Poles Plus Ground; Cable Range (Connector Only): 8 to 10mm (0.31 to 0.39 Inch); Contact Spacing: 18mm

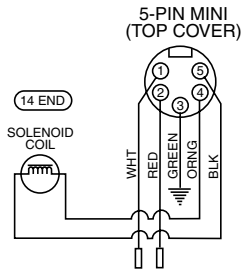




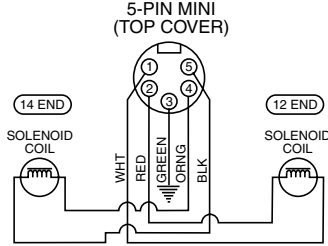
# Automotive Connection – Wiring Options

## 'C' Chrysler Connection

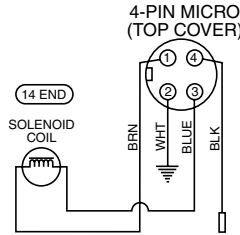
**5-Pin Male / Single Solenoid**  
 (Encl. Option 3, Auto Option C)



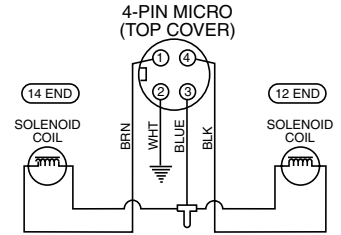
**5-Pin Male / Double Solenoid**  
 (Encl. Option 3, Auto Option C)



**4-Pin Male / Single Solenoid**  
 (Encl. Option 2, Auto Option C)

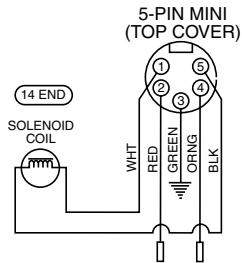


**4-Pin Male / Double Solenoid**  
 (Encl. Option 2, Auto Option C)

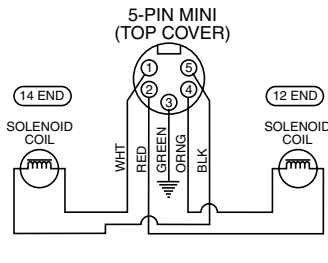


## 'F' SAE / Ford Wiring

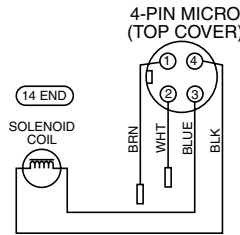
**5-Pin Male / Single Solenoid**  
 (Encl. Option 3, Auto Option F)



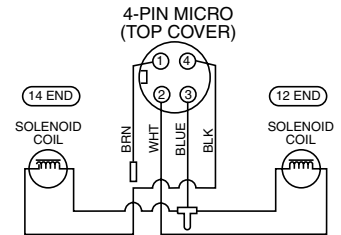
**5-Pin Male / Double Solenoid**  
 (Encl. Option 3, Auto Option F)



**4-Pin Male / Single Solenoid**  
 (Encl. Option 2, Auto Option F)

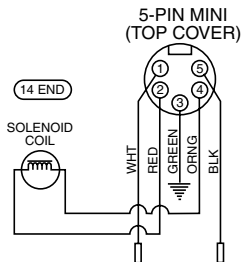


**4-Pin Male / Double Solenoid**  
 (Encl. Option 2, Auto Option F)

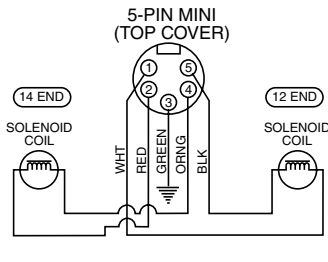


## 'G' GM Wiring

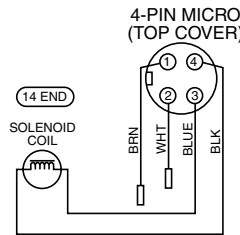
**5-Pin Male / Single Solenoid**  
 (Encl. Option 3, Auto Option G)



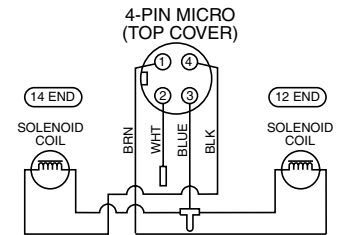
**5-Pin Male / Double Solenoid**  
 (Encl. Option 3, Auto Option G)



**4-Pin Male / Single Solenoid**  
 (Encl. Option 2, Auto Option G)

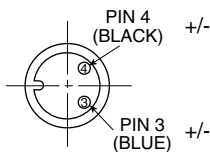


**4-Pin Male / Double Solenoid**  
 (Encl. Option 2, Auto Option G)

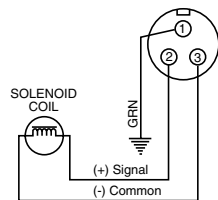


## CNOMO Connection - Wiring Options

**2-Pin Male / Single Solenoid**  
 (Encl. Option 6, Auto Option F)



**3-Pin Male / Single Solenoid**  
 (Encl. Option 1, Auto Options C, F & G)

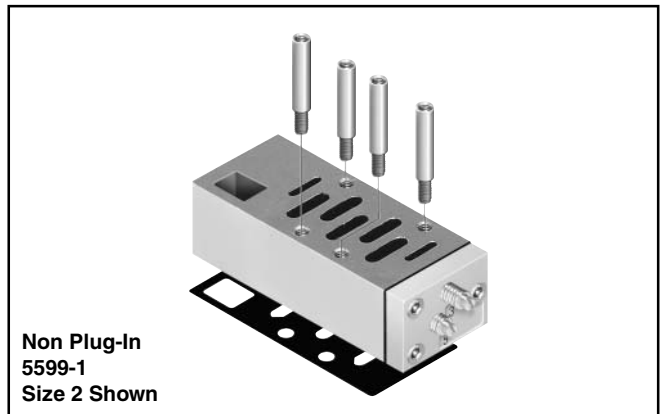
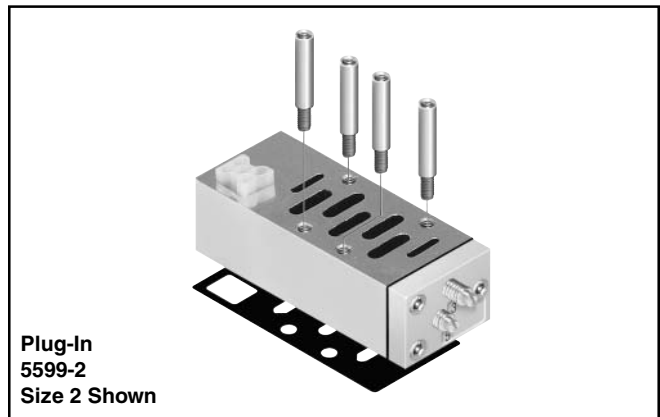
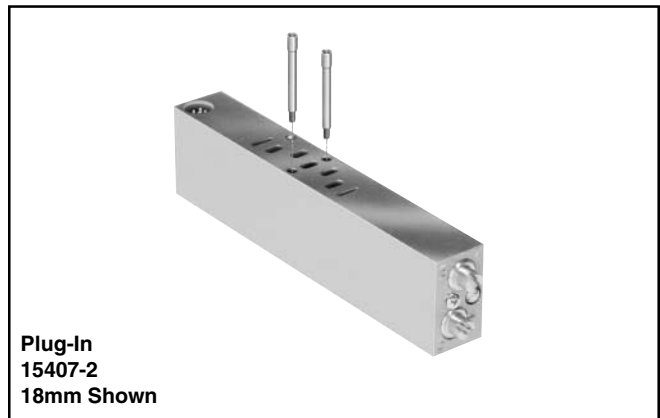




## Sandwich Flow Controls Features

- Both adjustment screws are located on the 12 end of the unit.
- Sandwich Flow Control mounts with its own studs, which means the valve uses standard bolts for mounting.
- Sandwich Flow Control is not to be used as a shut off device and is not bubble tight when needles are fully turned down.

Size	Plug-In 15407-2	Non Plug-In 15407-1
HB	PS5635P	PS5642P
HA	PS5535P	PS5542P
Size	Plug-In 5599-2	Non Plug-In 5599-1
H1	PS4035CP	PS4042CP
H2	PS4135CP	PS4142CP
H3	PS4235CP	PS4242CP



*A Sandwich Flow Control and Common Port Sandwich Regulator may be sandwiched together on a manifold or subbase. The Sandwich Flow Control MUST be located between the manifold / subbase and the Common Port Sandwich Regulator.*



## Features

- Remote Air Pilot Operated for hard-to-reach pressure control.
- Unregulated Pilot Pressure to valve for consistent valve shifting regardless of pressure adjustment.

## Gauge Adapter Kit

Included with all HB Regulators. Both Kits are required on all HA & HB Regulators when the Regulator is on the last Station on the Right (14) End.



Description	Part Number
Gauge Kit	PS5651160P
1/8" Female to 1/8" Female Coupling	207P-2*
1/8" Male to 1/8" Male Long Nipple	VS215PNL-2-15*

\* Included in Gauge Kit PS5651160P.



**H1**  
 (Independent Dual Port Regulator Shown)



**H2**  
 (Independent Dual Port Regulator Shown)



**HB**  
 (Independent Dual Port Regulator Shown)



**HA**  
 (Common Port Regulator Shown)



## Sandwich Regulator Kit Ordering Code

Series	Regulator Function	#4 Port Regulator / Gauge	#2 Port Regulator / Gauge	Factory Designator																				
<b>PS5637</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>P</b>																				
<table border="1"> <thead> <tr><th>Series</th></tr> </thead> <tbody> <tr><td><b>HB</b></td></tr> <tr><td>15407-1 18mm PS5637</td></tr> <tr><td>15407-2 18mm PS5638</td></tr> <tr><td><b>HA</b></td></tr> <tr><td>15407-1 26mm PS5537</td></tr> <tr><td>15407-2 26mm PS5538</td></tr> </tbody> </table>	Series	<b>HB</b>	15407-1 18mm PS5637	15407-2 18mm PS5638	<b>HA</b>	15407-1 26mm PS5537	15407-2 26mm PS5538	<table border="1"> <thead> <tr><th>Regulator Function</th></tr> </thead> <tbody> <tr><td><b>1 Common Pressure Regulator</b></td></tr> <tr><td><b>2 Independent Pressure Regulator</b></td></tr> </tbody> </table>	Regulator Function	<b>1 Common Pressure Regulator</b>	<b>2 Independent Pressure Regulator</b>	<table border="1"> <thead> <tr><th>#4 Port Regulator / Gauge*</th></tr> </thead> <tbody> <tr><td><b>2 2-60 PSIG w/o Gauge</b></td></tr> <tr><td><b>3 5-125 PSIG w/o Gauge</b></td></tr> <tr><td><b>5 2-60 PSIG w/Gauge</b></td></tr> <tr><td><b>6 5-125 PSIG w/Gauge</b></td></tr> </tbody> </table> <p>* For Common Pressure Regulator Option, Regulator Gauge callout must be the same number for both Port #4 and Port #2. (Example: 166)</p>	#4 Port Regulator / Gauge*	<b>2 2-60 PSIG w/o Gauge</b>	<b>3 5-125 PSIG w/o Gauge</b>	<b>5 2-60 PSIG w/Gauge</b>	<b>6 5-125 PSIG w/Gauge</b>	<table border="1"> <thead> <tr><th>#2 Port Regulator / Gauge*</th></tr> </thead> <tbody> <tr><td><b>2 2-60 PSIG w/o Gauge</b></td></tr> <tr><td><b>3 5-125 PSIG w/o Gauge</b></td></tr> <tr><td><b>5 2-60 PSIG w/Gauge</b></td></tr> <tr><td><b>6 5-125 PSIG w/Gauge</b></td></tr> </tbody> </table> <p>* For Common Pressure Regulator Option, Regulator Gauge callout must be the same number for both Port #4 and Port #2. (Example: 166)</p>	#2 Port Regulator / Gauge*	<b>2 2-60 PSIG w/o Gauge</b>	<b>3 5-125 PSIG w/o Gauge</b>	<b>5 2-60 PSIG w/Gauge</b>	<b>6 5-125 PSIG w/Gauge</b>	
Series																								
<b>HB</b>																								
15407-1 18mm PS5637																								
15407-2 18mm PS5638																								
<b>HA</b>																								
15407-1 26mm PS5537																								
15407-2 26mm PS5538																								
Regulator Function																								
<b>1 Common Pressure Regulator</b>																								
<b>2 Independent Pressure Regulator</b>																								
#4 Port Regulator / Gauge*																								
<b>2 2-60 PSIG w/o Gauge</b>																								
<b>3 5-125 PSIG w/o Gauge</b>																								
<b>5 2-60 PSIG w/Gauge</b>																								
<b>6 5-125 PSIG w/Gauge</b>																								
#2 Port Regulator / Gauge*																								
<b>2 2-60 PSIG w/o Gauge</b>																								
<b>3 5-125 PSIG w/o Gauge</b>																								
<b>5 2-60 PSIG w/Gauge</b>																								
<b>6 5-125 PSIG w/Gauge</b>																								

Series	Regulator Function	#4 Port Regulator / Gauge	#2 Port Regulator / Gauge	Engineering Level	Factory Designator																																	
<b>PS4037</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>C</b>	<b>P</b>																																	
<table border="1"> <thead> <tr><th>Series</th></tr> </thead> <tbody> <tr><td><b>H1</b></td></tr> <tr><td>5599-1 PS4037</td></tr> <tr><td>5599-2 PS4038</td></tr> <tr><td><b>H2</b></td></tr> <tr><td>5599-1 PS4137</td></tr> <tr><td>5599-2 PS4138</td></tr> <tr><td><b>H3</b></td></tr> <tr><td>5599-1 PS4237</td></tr> <tr><td>5599-2 PS4238</td></tr> </tbody> </table>	Series	<b>H1</b>	5599-1 PS4037	5599-2 PS4038	<b>H2</b>	5599-1 PS4137	5599-2 PS4138	<b>H3</b>	5599-1 PS4237	5599-2 PS4238	<table border="1"> <thead> <tr><th>Regulator Function</th></tr> </thead> <tbody> <tr><td><b>1 Common Pressure Regulator</b></td></tr> <tr><td><b>2 Independent Pressure Regulator</b></td></tr> <tr><td><b>3 Selector Regulator</b></td></tr> </tbody> </table>	Regulator Function	<b>1 Common Pressure Regulator</b>	<b>2 Independent Pressure Regulator</b>	<b>3 Selector Regulator</b>	<table border="1"> <thead> <tr><th>#4 Port Regulator / Gauge*</th></tr> </thead> <tbody> <tr><td><b>0 Line By-Pass Plate**</b></td></tr> <tr><td><b>1 1-30 PSIG w/o Gauge</b></td></tr> <tr><td><b>2 2-60 PSIG w/o Gauge</b></td></tr> <tr><td><b>3 5-125 PSIG w/o Gauge</b></td></tr> <tr><td><b>4 1-30 PSIG w/Gauge</b></td></tr> <tr><td><b>5 2-60 PSIG w/Gauge</b></td></tr> <tr><td><b>6 5-125 PSIG w/Gauge</b></td></tr> <tr><td><b>C Air Pilot w/60 PSIG Gauge</b></td></tr> <tr><td><b>D Air Pilot w/160 PSIG Gauge</b></td></tr> </tbody> </table> <p>* For Common Pressure Regulator Option, Regulator Gauge callout must be the same number for both Port #4 and Port #2. (Example: 166)</p> <p>** Pressure Line By-Pass Option can only be used with Independent and Selector Regulators (Option 2 &amp; 3 in Sandwich Block Function).</p>	#4 Port Regulator / Gauge*	<b>0 Line By-Pass Plate**</b>	<b>1 1-30 PSIG w/o Gauge</b>	<b>2 2-60 PSIG w/o Gauge</b>	<b>3 5-125 PSIG w/o Gauge</b>	<b>4 1-30 PSIG w/Gauge</b>	<b>5 2-60 PSIG w/Gauge</b>	<b>6 5-125 PSIG w/Gauge</b>	<b>C Air Pilot w/60 PSIG Gauge</b>	<b>D Air Pilot w/160 PSIG Gauge</b>	<table border="1"> <thead> <tr><th>#2 Port Regulator / Gauge*</th></tr> </thead> <tbody> <tr><td><b>0 Line By-Pass Plate**</b></td></tr> <tr><td><b>1 1-30 PSIG w/o Gauge</b></td></tr> <tr><td><b>2 2-60 PSIG w/o Gauge</b></td></tr> <tr><td><b>3 5-125 PSIG w/o Gauge</b></td></tr> <tr><td><b>4 1-30 PSIG w/Gauge</b></td></tr> <tr><td><b>5 2-60 PSIG w/Gauge</b></td></tr> <tr><td><b>6 5-125 PSIG w/Gauge</b></td></tr> <tr><td><b>C Air Pilot w/60 PSIG Gauge</b></td></tr> <tr><td><b>D Air Pilot w/160 PSIG Gauge</b></td></tr> </tbody> </table> <p>* For Common Pressure Regulator Option, Regulator Gauge callout must be the same number for both Port #4 and Port #2. (Example: 166)</p> <p>** Pressure Line By-Pass Option can only be used with Independent and Selector Regulators (Option 2 &amp; 3 in Sandwich Block Function).</p>	#2 Port Regulator / Gauge*	<b>0 Line By-Pass Plate**</b>	<b>1 1-30 PSIG w/o Gauge</b>	<b>2 2-60 PSIG w/o Gauge</b>	<b>3 5-125 PSIG w/o Gauge</b>	<b>4 1-30 PSIG w/Gauge</b>	<b>5 2-60 PSIG w/Gauge</b>	<b>6 5-125 PSIG w/Gauge</b>	<b>C Air Pilot w/60 PSIG Gauge</b>	<b>D Air Pilot w/160 PSIG Gauge</b>	
Series																																						
<b>H1</b>																																						
5599-1 PS4037																																						
5599-2 PS4038																																						
<b>H2</b>																																						
5599-1 PS4137																																						
5599-2 PS4138																																						
<b>H3</b>																																						
5599-1 PS4237																																						
5599-2 PS4238																																						
Regulator Function																																						
<b>1 Common Pressure Regulator</b>																																						
<b>2 Independent Pressure Regulator</b>																																						
<b>3 Selector Regulator</b>																																						
#4 Port Regulator / Gauge*																																						
<b>0 Line By-Pass Plate**</b>																																						
<b>1 1-30 PSIG w/o Gauge</b>																																						
<b>2 2-60 PSIG w/o Gauge</b>																																						
<b>3 5-125 PSIG w/o Gauge</b>																																						
<b>4 1-30 PSIG w/Gauge</b>																																						
<b>5 2-60 PSIG w/Gauge</b>																																						
<b>6 5-125 PSIG w/Gauge</b>																																						
<b>C Air Pilot w/60 PSIG Gauge</b>																																						
<b>D Air Pilot w/160 PSIG Gauge</b>																																						
#2 Port Regulator / Gauge*																																						
<b>0 Line By-Pass Plate**</b>																																						
<b>1 1-30 PSIG w/o Gauge</b>																																						
<b>2 2-60 PSIG w/o Gauge</b>																																						
<b>3 5-125 PSIG w/o Gauge</b>																																						
<b>4 1-30 PSIG w/Gauge</b>																																						
<b>5 2-60 PSIG w/Gauge</b>																																						
<b>6 5-125 PSIG w/Gauge</b>																																						
<b>C Air Pilot w/60 PSIG Gauge</b>																																						
<b>D Air Pilot w/160 PSIG Gauge</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.

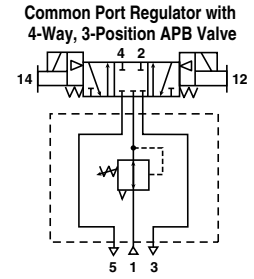
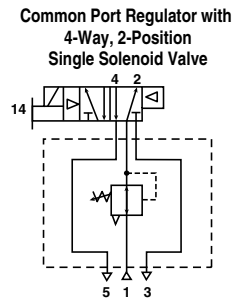
### External Pilot Configuration - H1, H2, H3

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

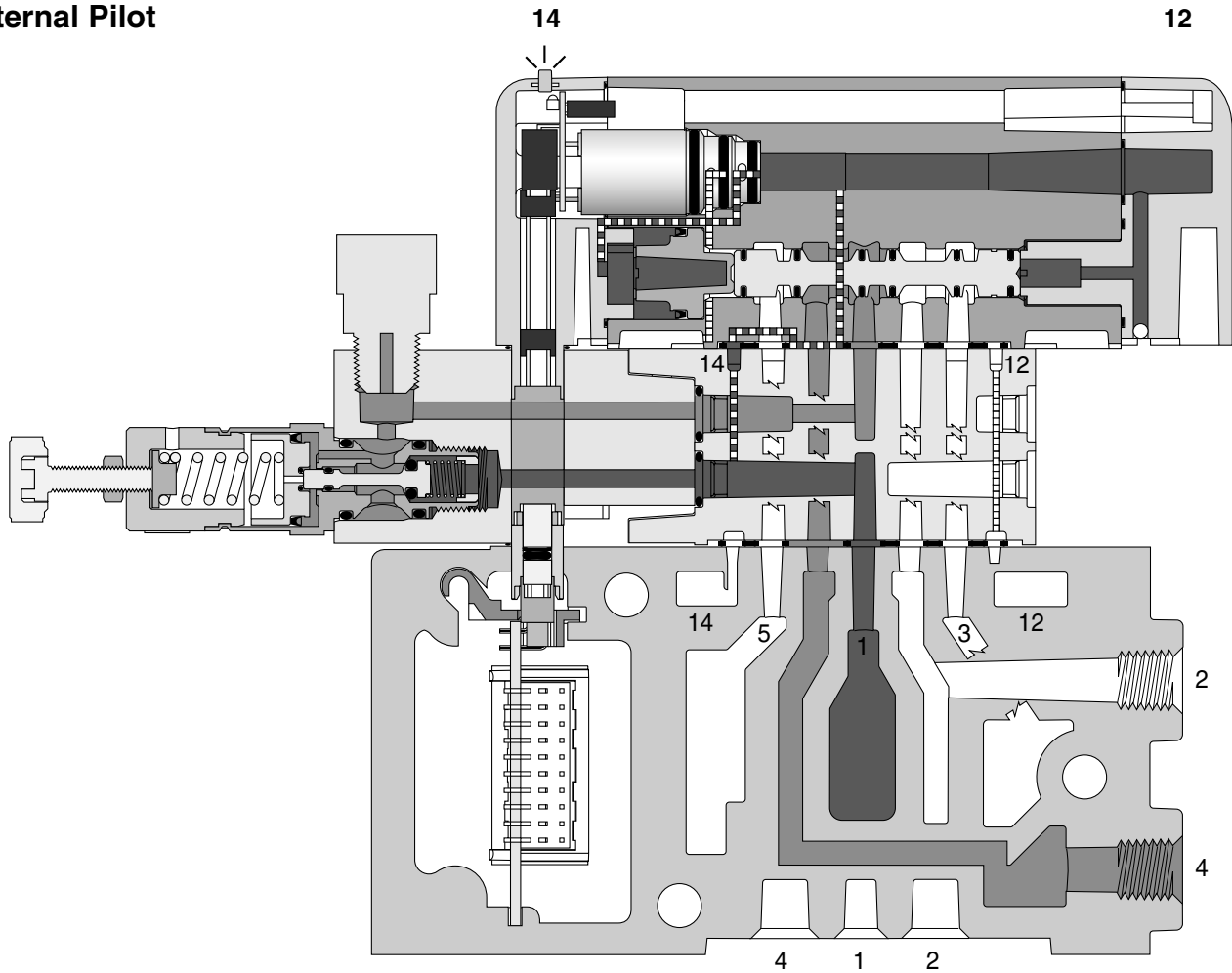


## HB & HA Common Port Regulation

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



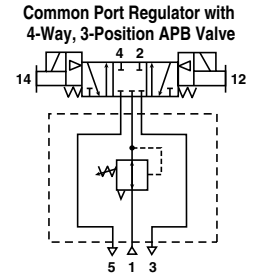
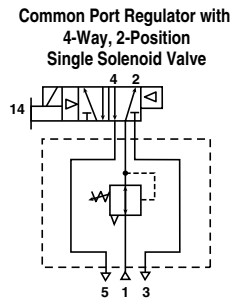
### HB Common Port Regulator Shown - Single Solenoid, 14 Energized, Internal Pilot



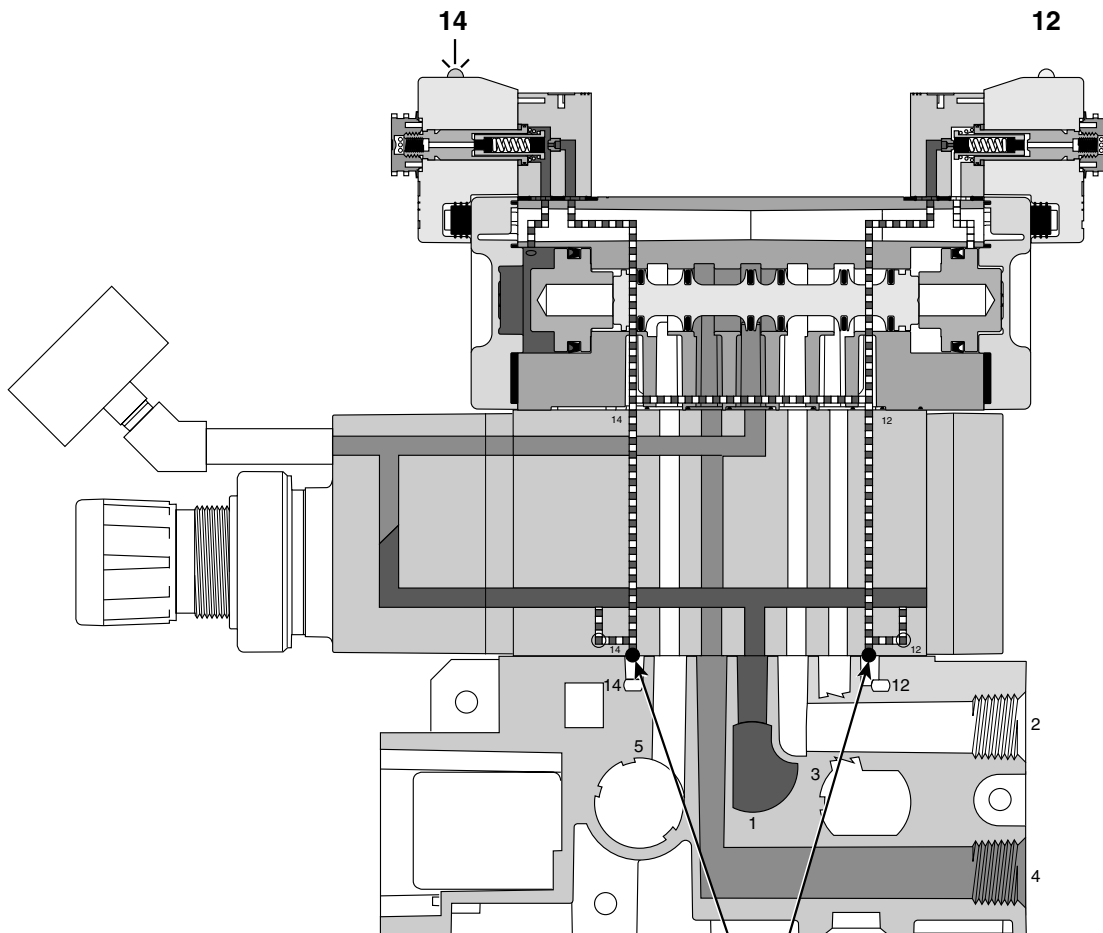


## H1, H2, H3 Common Port Regulation

Provides adjustable regulated air pressure to the valve's #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.



### H2 Common Port Regulator Shown - Double Solenoid, 14 Energized, Internal Pilot



Sandwich Regulator has standard configuration of Internal Pilot with the Pilot Plug in the bottom of the I & E Pilot Holes which prevents line pressure from escaping through the manifold.





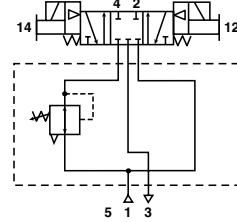
# H1, H2, H3 Independent Port Regulation

## Single Port Regulator

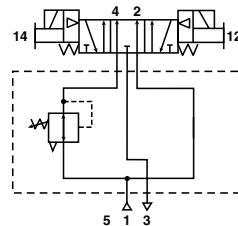
Provides regulated pressure to one of the ports and full line pressure to the other by use of the Line Pressure By-Pass Plate. Pressure regulation can occur out of the #4 port of the valve.

*When using an Independent Pressure Sandwich Regulator, the cylinder outlet ports are reversed. The 12 end energizes the #4 port and the 14 end energizes the #2 port. The 3-Position CE and PC functions are also reversed. (See schematics on right.)*

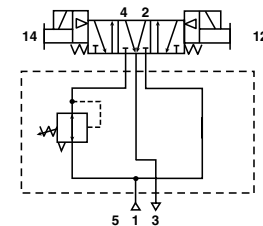
Independent Port Regulator with 4-Way, 3-Position All Ports Blocked Valve



Independent Port Regulator with 4-Way, 3-Position, Inlet to Cylinder Function



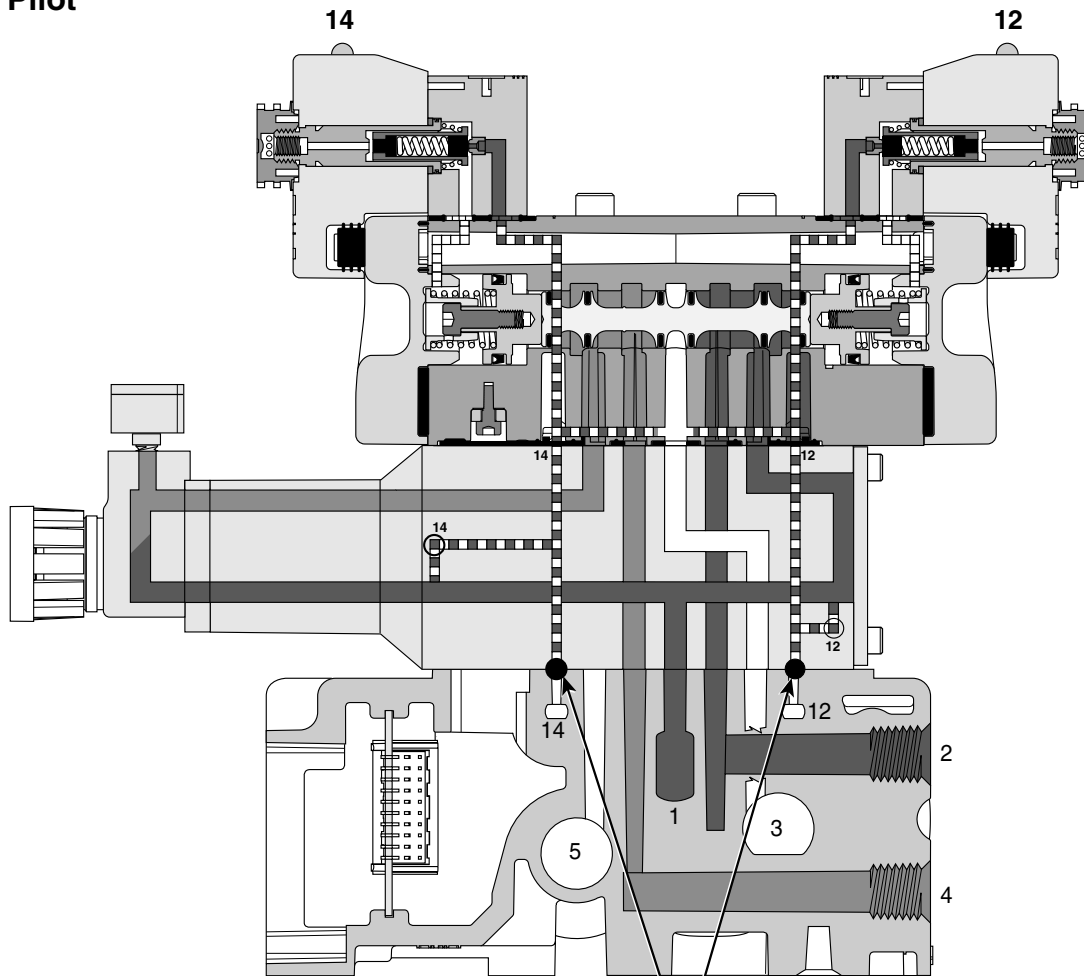
Independent Port Regulator with 4-Way, 3-Position, Cylinder to Exhaust Function



⚠ CAUTION: Requires 4-Way, 3-Position, Cylinder to Exhaust Valve

⚠ CAUTION: Requires 4-Way, 3-Position, Inlet to Cylinder Valve

## H1 Independent Port Regulator Shown - Double Solenoid, De-energized, Internal Pilot



Sandwich Regulator has standard configuration of Internal Pilot with the Pilot Plug in the bottom #12 and #14 Pilot Hole which prevents line pressure from escaping through the manifold.



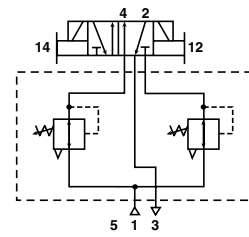


# HB & HA Independent Port Regulation

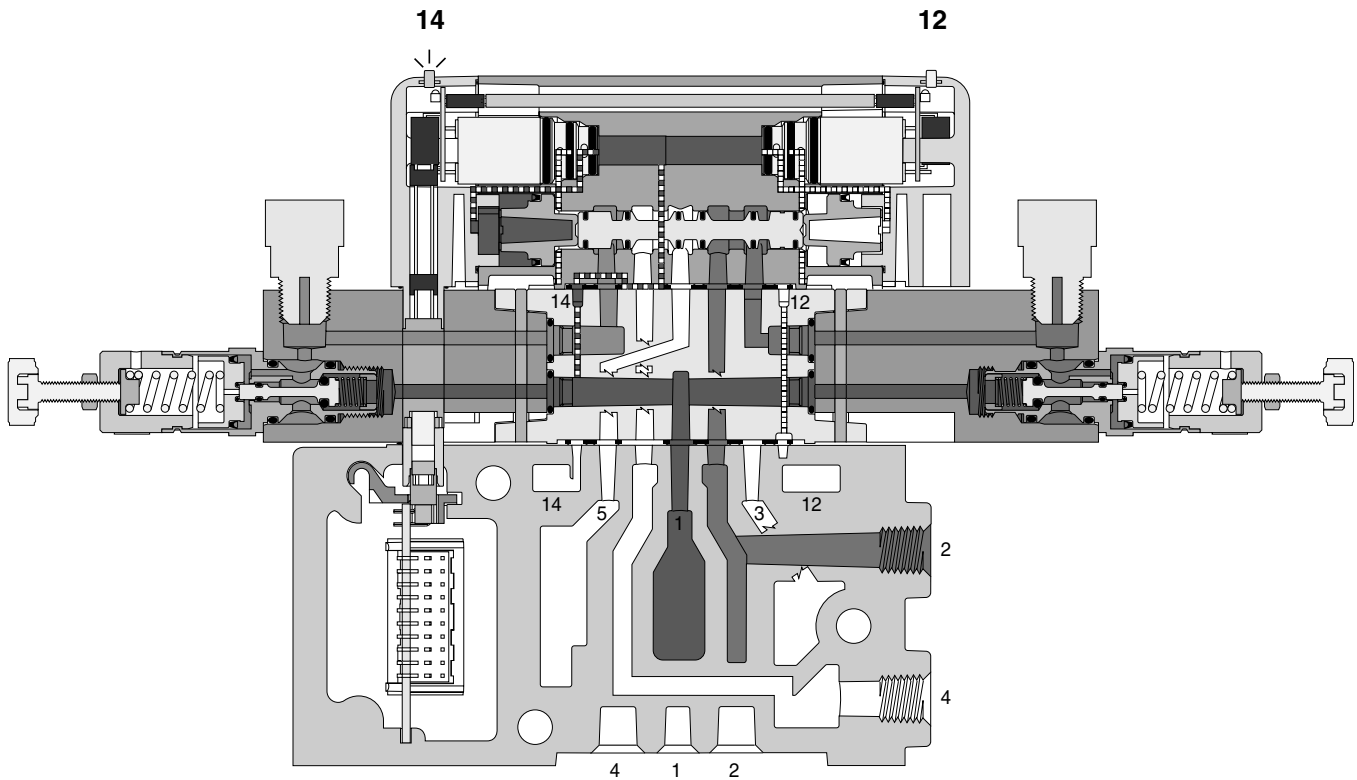
## Dual Port Regulator

Provides regulated pressure to both ports. Pressure regulation can occur out of the #2 or #4 port of the valve.

Independent Dual Port Regulator with  
4-Way, 2-Position  
Double Solenoid Valve



## HB Independent Dual Port Regulator Shown - Double Solenoid, 14 Energized, Internal Pilot



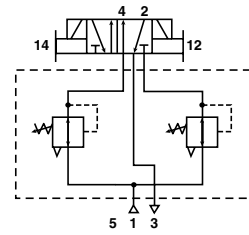


# H1, H2, H3 Independent Port Regulation

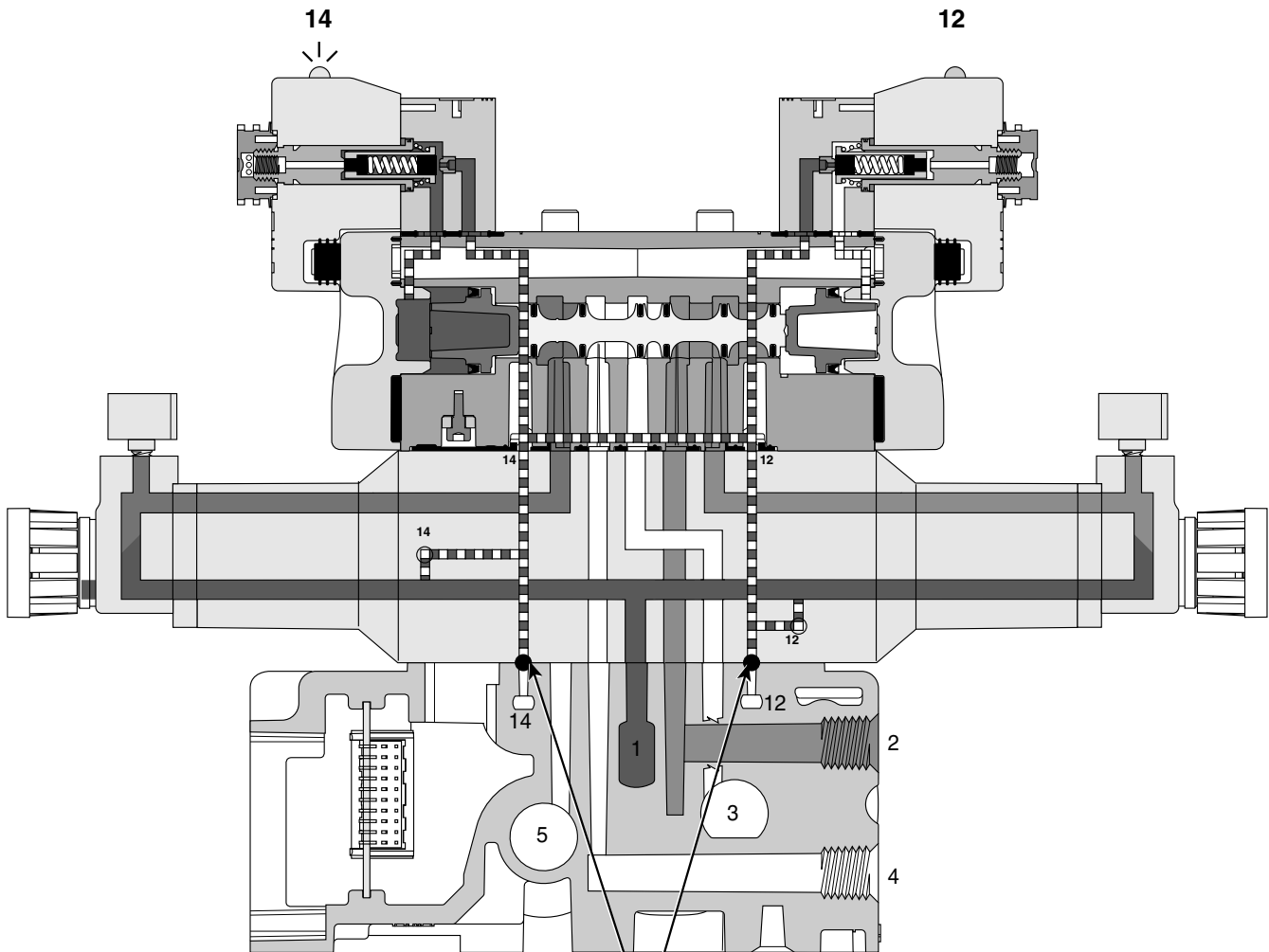
## Dual Port Regulator

Provides regulated pressure to both ports. Pressure regulation can occur out of the #2 or #4 port of the valve.

Independent Dual Port Regulator with 4-Way, 2-Position Double Solenoid Valve



## H1 Independent Dual Port Regulator Shown - Double Solenoid, 14 Energized, Internal Pilot



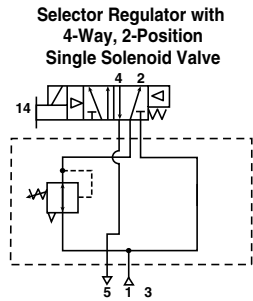
Sandwich Regulator has standard configuration of Internal Pilot with the Pilot Plug in the bottom #12 and #14 Pilot Hole which prevents line pressure from escaping through the manifold.





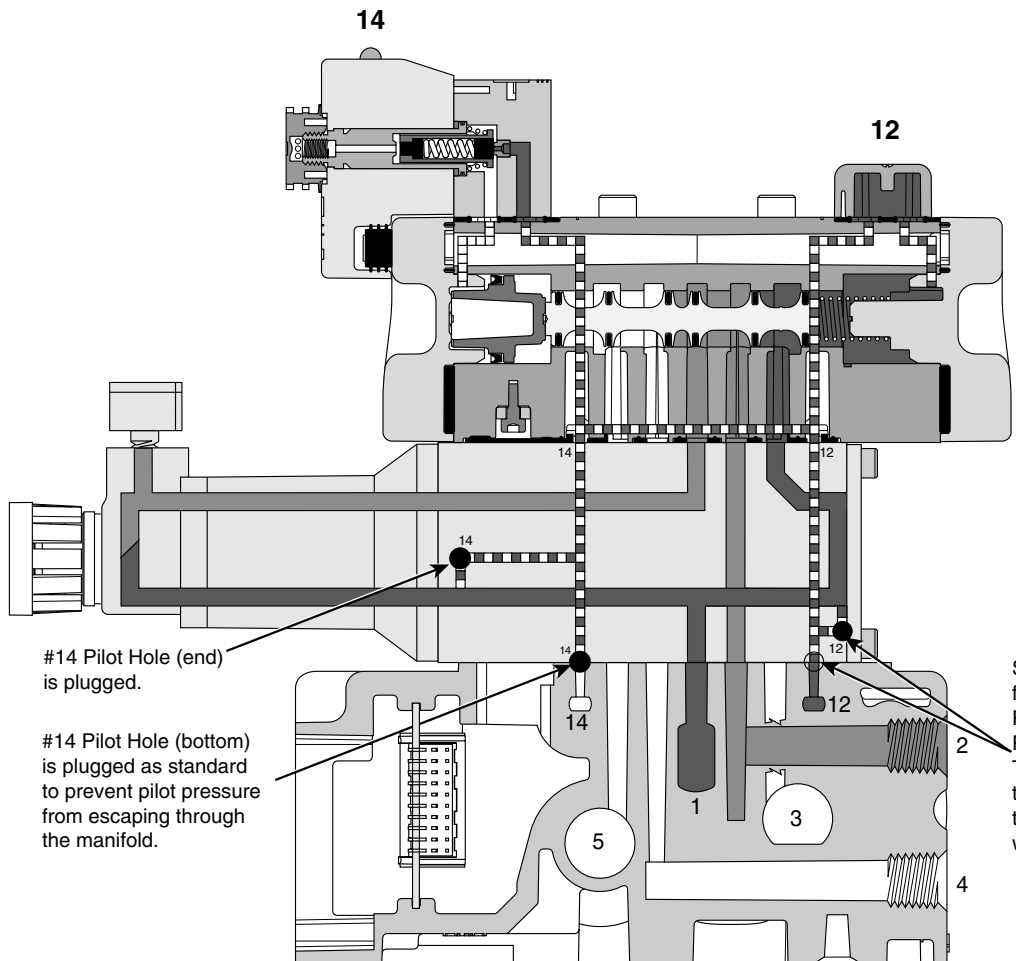
# H1, H2, H3 Selector Regulator

Supplies two different pressures to the valve's #1 and #3 flow paths. Shifting the valve "selects" one or the other of these two pressures to flow out port #2. A Selector Regulator can: 1) Provide regulated pressure to one flow path and full line pressure to the other by use of the Line Pressure By-Pass Plate or 2) Provide regulated pressure to each of the flow paths. (Note: Port #4 is pressurized with air from #1 flow path when 14 end is energized. In many applications, port #4 in the manifold or subbase needs to be plugged.)



H1 H2 H3 *H1, H2 & H3 with Selector Regulator utilizes Bottom / End Port Manifolds and requires external plumbing to accomplish the same function as the H1.*

## H1 Selector Regulator Shown - Single Solenoid, 14 De-energized, External Pilot



#14 Pilot Hole (end) is plugged.

#14 Pilot Hole (bottom) is plugged as standard to prevent pilot pressure from escaping through the manifold.

Sandwich Regulator configured for External Pilot with the Pilot Plug moved from the bottom #12 Pilot Hole to end #12 Pilot Hole. This allows External Pilot pressure to feed through the regulator to the valve without communicating with Main Line Pressure.



## Flow Rating (Cv)

Size	Port Size	2-Position	3-Position
HB	1/8"	0.55	0.50
HA	1/4"	1.1	1.0
H1	3/8"	1.5	1.2
H2	1/2"	3.0	2.8
H3	3/4"	6.0	5.0
H4	3/4"	7.4	5.2

Cv tested per ANSI / (NFPA) T3.21.3

## Sandwich Regulator Cv Flow Chart\*

	Common Pressure Code 166				Single Pressure 2 Code 266				Single Pressure 4 Code 260				Dual Pressure Code 266			
	1-2	1-4	2-3	4-5	1-2	1-4	2-3	4-5*	1-2	1-4	2-3	4-5*	1-2	1-4	2-3	4-5*
HB	0.20	0.20	0.41	0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.23	0.19	0.28	0.27
HA	0.41	0.43	0.87	0.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.42	0.45	0.68	0.66
H1	0.62	0.61	1.28	1.18	0.73	0.96	0.96	0.93	0.34	0.70	0.94	0.98	0.52	0.48	0.86	0.88
H2	1.47	1.60	2.41	2.33	1.71	1.90	1.52	1.75	1.74	1.67	1.73	1.79	1.61	1.62	1.50	1.67
H3	2.37	2.39	4.30	4.47	2.37	2.81	2.75	3.01	2.65	2.59	2.68	2.74	2.43	2.41	3.16	3.04

\* Regulator Port exhaust through Base Port 3.

Note: All Cv's calculated with regulator adjust ed full open.

## Operating Pressure

HB HA H1 H2 H3

**Maximum:** 145 PSIG (1000 kPa)

**Minimum:**

Operator/ Function	Internal Pilot	PSIG (Min. kPa) HB	PSIG (Min. kPa) HA	PSIG (Min. kPa) H1	PSIG (Min. kPa) H2	PSIG (Min. kPa) H3
1	Single Solenoid - 2-Pos	25 (173)	25 (173)	25 (173)	25 (173)	35 (241)
2	Double Solenoid- 2-Pos					
3	Single Remote Pilot - 2-Pos **	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum
4	Double Remote Pilot - 2-Pos**	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum
5, 6, 7	Double Solenoid - 3-Pos APB, CE, PC	35 (241)	35 (241)	35 (241)	50 (345)	50 (345)
8, 9, 0	Double Remote Pilot - 3-Pos** APB, CE, PC	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum
E	Single Solenoid Pilot - 2-Pos Air Return / Spring Assist	30 (207)	30 (207)	35 (241)	45 (310)	45 (310)
F	Single Remote Pilot - 2-Pos** Air Return / Spring Assist					
	<b>External Pilot *</b>	*	*	*	*	*
All	isys	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum

\* External Pilot Pressure / Remote Pilot Supply - 45-145 PSIG (310-1000 kPa).

\*\* Must be equal to or greater than operating pressure.



## Temperature Rating

HB	HA	H1	H2	H3	H4
-15°C to 49°C (5°F to 120°F) Ambient.					

## Response Time\*\*

Valve Size	Port Size	0 Cu. In. Chamber		## Cu. In. Chamber	
		Fill	Exhaust	Fill	Exhaust
<b>Single Solenoid 2-Position - Air Return / Spring Assist</b>					
HB	1/8"	28	30	141	154
HA	1/4"	24	26	77	124
H1	3/8"	39	41	159	210
H2	1/2"	78	81	219	310
H3	3/4"	90	93	244	320

## HB (12), HA (25), H1 (50), H2 (100), H3 (200)  
 \*\* With 100 PSIG supply, time required to fill from 0 to 90 PSIG and Exhaust from 100 PSIG to 10 PSIG measured from the instant of energizing or de-energizing 24VDC solenoid.  
 Tested per ANSI / (NFPA) T3.21.8

## CSA / C-US

H1	H1 Valve - Standard at - 1000kPa (145 PSIG)
H2	H2 Valve - Standard at - 1000kPa (145 PSIG)
H3	H3 Valve - Standard at - 1000kPa (145 PSIG)
H4	H4 Valve - Standard at - 1000kPa (145 PSIG)
H4	H4 Valve - Maximum at - 793kPa (115 PSIG) - Insert an "L" at the end of the valve part number.

## Minimum Operating Voltage

	HB	HA	H1	H2	H3
MOV (24VDC)	20.4	20.4	20.4	20.4	20.4
MOV (120VAC)	102	102	102	102	102

## 5599-2 & 5599-1 AUTO Solenoid Information

Code	Voltage			Power (VA 60Hz/W)	Holding (mA)
	AC		DC		
	60Hz	50Hz			
42	24	24	—	4.0VA	165
45	—	—	12	2.4W	197
B9*	—	—	24	3.2W	136
23*	120	110	—	4.6VA	40
57	240	230	—	5.0VA	21

\* Data tested with LED and Surge Suppression.  
 Voltage rated +10 / -15%.

## 5599-1 CNOMO Solenoid Information

Code	Voltage			3-Pin 30mm "L"	
	AC		DC	Power (VA 60Hz/W)	Holding Amp (mA)
	60Hz	50Hz			
19	—	—	24	2.8 W	117
42	24	24	—	3.8 VA	157
45	—	—	12	2.4 W	211
49	—	—	24	2.7 W	111
53	120	120	—	3.7 VA	32
57	230	230	—	3.6 VA	15

\* Enclosure '6' - 2-Pin M12 Euro with LED & Surge Suppression

## Solenoid Information

Voltage Range +10% / -15% of Nominal

Code	Voltage			Power Consumption (Watts)	AC		DC Hold (Amps)
	60Hz	50Hz	DC		Inrush (Amps)	Hold (Amps)	
B9*	—	—	24	3.1	—	—	0.105
42**	24	—	—	6.0	.60	.41	—
43	—	24	—	6.0	.57	.40	—
45**	—	—	12	6.0	—	—	.47
49	—	—	24	6.0	—	—	.23
51	—	—	48	6.0	—	—	.14
53	120	110	—	6.0	.12	.10	—
57**	240	—	—	6.0	.07	.045	—
59**	—	240	—	6.0	.07	.033	—
23/83**†	120	110	—	6.0	.12	.10	—

\* Low watt with surge suppression (Blue).

\*\* Voltages available as kits only.

† This coil contains an MOV as standard for surge suppression.



## Plug-In Solenoid Kits

Voltage Range +10% / -15% of Nominal

Voltage Code	Coil Kit Number	
	With Indicator Light	Unlighted
42**	—	K252 031
43	—	K252 032
45**	—	K252 032
<b>49</b>	<b>K252 033</b>	—
51	—	K252 035
<b>53</b>	<b>K252 040† ‡</b>	—
57**	—	K252 038
59**	—	K252 039
<b>23 / 83** †</b>	<b>K252 040‡</b>	—

\* Low watt with surge suppression (Blue).

\*\* Voltages available as kits only.

† Replacement coil when Automotive Option “C”, “F”, & “G” are specified in the valve model number.

‡ This coil contains an MOV as standard for surge suppression.

## 5599-2 & 5599-1 AUTO Solenoid Kits

Voltage Code	Override ‘G’ & ‘M’ Non-Locking
42 (24VAC)	PS404142P
45 (12VDC)	PS404145P
B9 (24VDC)	PS4041B9P
23 (120VAC)	PS404123P
57 (240VAC)	PS404157P

## 5599-1 CNOMO Solenoid Kits

Voltage Code	3-Pin 30mm ‘L’ Coil Kit	2-Pin M12 Euro ‘G’ Coil Kit
19	—	PS2828619P*
42	PS2828A42P	—
45	PS2828A45P	—
49	PS2828A49P	—
53	PS2828A53P	—
57	PS2828A57P	—

## Body Service Kits

Size	2-Position	3-Position			Kit Includes:
		APB	CE	PC	
HB	PS5601P	PS5602P	PS5603P	PS5604P	Spool assembly with seals, all piston seals, return & operator Adapter seals, solenoid seals, valve to base gasket, grease packet.
HA	PS5501P	PS5502P	PS5503P	PS5504P	
H1	PS4001CP	PS4002CP	PS4003CP	PS4004CP	
H2	PS4101CP	PS4102CP	PS4103CP	PS4104CP	
H3	PS4201CP	PS4202CP	PS4203CP	PS4204CP	Spool Kit
H4	P00186	P00187	P00249	P00359	
	PS1401 * PS1402 †	PS1438	PS1438	PS1438	Valve body o-rings, piston seals and lubricant.

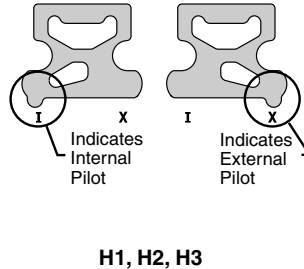
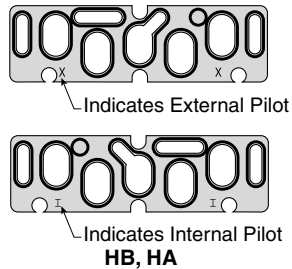
\* Used with Single Solenoid or Single Remote Pilot Valve. †Used with Double Solenoid or Double Remote Pilot Valve.



## Pilot Select Gasket

Size	Kit Number
HB	PS5605P
HA	PS5505P
H1	PS4007P
H2	PS4007P
H3	PS4007P

Quantity 10



## Valve to Base Gasket Kits

Series	Standard	Remote Pilot	Dual Pressure #3	Dual Pressure #5
HB	PS5605P	—	—	—
HA	PS5505P	—	—	—
H1	PS4005CP	PS4006CP	PS40D3CP	PS40D5CP
H2	PS4105CP	PS4106CP	PS41D3CP	PS41D5CP
H3	PS4205CP	PS4206CP	PS42D3CP	PS42D5CP

Quantity 12

## Valve to Base Gaskets

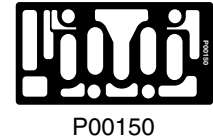
### H4

1. Remove valve from base.
2. Remove existing gasket and replace with appropriate gasket shown to fit application.
3. When ordering an "H4" Valve, correct gasket is included with corresponding valve callouts.

#### Internal Pilot Port #1



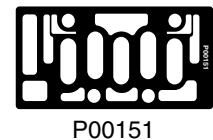
#### Single Remote Air Pilot



#### External Pilot



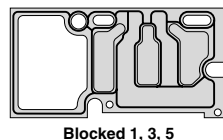
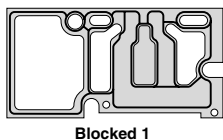
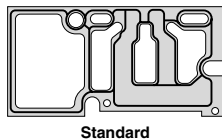
#### Double Remote Air Pilot



**Note:** For single remote pilot valve with common external pilot, use P00151.

## Manifold to Manifold Gasket Kits

Size	Std	Blocked 1	Blocked 1, 3, 5
HB	PS561AP	PS561BP	PS561CP
HA			
H1	PS4013P	—	—
H2	PS4113P	—	—
H3	PS4213P	—	—



HB, HA





### Valve Bolt Kits

Size	Kit Number
HB	PS5687P
HA	PS5587P
H1	PS4087CP
H2	PS4187CP
H3	PS4287CP

Quantity 12

### Manifold Hardware Kits

Size	Kit Number
HA	PS5512P
HB	PS5612P
H1	PS4012P
H2	PS4112P
H3	PS4212P

Quantity 12

### Sandwich Supply & Exhaust Modules

Series	NPT	BSPP	
HB	Supply	PS561600P	PS561601P
	Exhaust	PS561700P	PS561701P
HA	Supply	PS551600P	PS551601P
	Exhaust	PS551700P	PS551701P

Quantity 1

### Pilot Operator CNOMO - LMOR

Series	Kit Number
H1 H2 H3	PS4052CP

### Pilot Operator CNOMO - NLMOR

Series	Kit Number
H1 H2 H3	PS4053CP

### Pilot By-Pass Plate

Series	Kit Number
H1 H2 H3	PS4051CP

Quantity 10

### Regulator Spring Range Kits

Spring Range	H1	H2	H3
0 to 30 PSIG	PS4050030P	PS4150030BP	
2 to 60 PSIG	PS4050060P	PS4150060BP	
5 to 125 PSIG	PS4050125P	PS4150125BP	

Quantity 1

### Regulator & Flow Control Mounting Studs

Type	HA	HB
Flow Control	PS5636P	PS5536P
Regulator	PS5636P	PS5536P

Type	H1	H2	H3
Flow Control	PS4036P	PS4136P	PS4236P
Regulator	PS4040P	PS4140P	PS4240P

Quantity 12



### Regulator Gauge Kits, Size 1, 2, 3

Gauge Type	Kit Number
3/4" Face Air - Standard 0-60 PSIG 0-160 PSIG	PS4051060BP PS4051160BP
1-1/2" Face Air - Large* 0-60 PSIG 0-160 PSIG	PS4053060BP PS4053160BP
1-1/2" Face Liquid* 0-160 PSIG	PS4052160BP

\* Includes brass pipe fitting extensions

Quantity 1

### Regulator Conversion Kits

Size	Manual Bonnet Assembly (w/o Spring)	Air Pilot Bonnet Assembly	Independent By-Pass Plate
H1	PS4045BP	PS4047BP	PS4048BP
H2	PS4145BP	PS4147BP	PS4148BP
H3			

Quantity 1

### Regulator Kits

Size	Kit Number
H1	PS4039P
H2 H3	PS4139P



### Subbases

Size	Port Numbers	Port Size	Acceptable Fittings	Note
H1	#1 to #3 or #5	1/4" BSPP	EO Fittings; Prestolok; P6M Mufflers; EO Plugs	
		3/8" BSPP	Prestolok; EO Plugs	
	#2 to #4	1/4" BSPP	EO Fittings; Prestolok; EO Plugs	
		3/8" BSPP	Prestolok; EO Plugs; EO Fittings	6
	#12 to #2 and #14 to #4	1/8" & 1/4" BSPP	EO Fittings; EO Plugs; Prestolok	
		1/8" & 3/8" BSPP	Prestolok; EO Plugs	5
H2	#1 to #3 or #5	1/4" BSPP	EO Fittings; EO Plugs; Prestolok; P6M Mufflers	
		3/8" BSPP	EO Fittings; Prestolok; ES, ASN, P6M Mufflers	
	#2 to #4	1/2" BSPP	EO Fittings; Prestolok; EO Plugs; ASN, P6M Mufflers	
		3/8" BSPP	EO Fittings; Prestolok; EO Plugs	
	#12 to #2 and #14 to #4	1/2" BSPP	EO Fittings; Prestolok; EO Plugs	
		1/8" & 3/8" BSPP	EO Fittings; EO Plugs; Prestolok	
	#1 to #2 to #3 to #4 to #5 All Inclusive Bottom Ports Also Includes #12 & #14	1/8" & 1/2" BSPP	EO Fittings; EO Plugs; Prestolok	
		3/8" & 1/2" BSPP	EO Fittings; Prestolok; EO Plugs	
H3	#1 to #3 or #5	1/2" BSPP	EO Fittings; EO Plugs; Prestolok; ES, ASN, P6M Mufflers	
		3/4" BSPP	EO Fittings; EO Plugs; ES & P6M Mufflers	
	#2 to #4	1/2" BSPP	EO Fittings; EO Plugs; Prestolok	
		3/4" BSPP	EO Fittings; EO Plugs	
	#12 to #2 and #14 to #4	1/8" & 1/2" BSPP	EO Fittings; EO Plugs; Prestolok	
		1/8" & 3/4" BSPP	EO Fittings; EO Plugs	
	#1 to #2 to #3 to #4 to #5 All Inclusive Bottom Ports Also Includes #12 & #14	1/2" & 3/4" BSPP	EO Fittings; EO Plugs; P6M Mufflers; Prestolok	7

### Manifold Bases

Size	Port Numbers	Port Size	Acceptable Fittings	Note
H1	End Ports #2 & #4	1/4" BSPP	EO Fittings; Prestolok	
	Bottom Ports #2 & #4	1/4" BSPP	EO Fittings; Prestolok	
	End Ports #2 & #4	3/8" BSPP	EO Fittings; Prestolok	
	Bottom Ports #2 & #4	3/8" BSPP	EO Fittings; Prestolok	
H2	End Ports #2 & #4	3/8" BSPP	EO Fittings; Prestolok	
	Bottom Ports #1, #2, & #4	3/8" BSPP	EO Fittings; Prestolok	
	End Ports #2 & #4	1/2" BSPP	EO Fittings; Prestolok	
	Bottom Ports #1, #2, & #4	1/2" BSPP	EO Fittings; Prestolok	
H3	End Ports #2 & #4	1/2" BSPP	EO Fittings; Prestolok	
	Bottom Ports #2 & #4	1/2" BSPP	EO Fittings; Prestolok	
	End Ports #2 & #4	3/4" BSPP	EO Fittings	
	Bottom Ports #2 & #4	3/4" BSPP	EO Fittings	

### End Plates

Size	Port Numbers	Port Size	Acceptable Fittings	Note
H1	#1 to #3 & #5	1/2" BSPP	EO Fittings; Prestolok	
	#12 to #3	1/8" to 1/2" BSPP	EO Fittings; Prestolok; P6M Muffler	
	#14 to #5	1/8" to 1/2" BSPP	EO Fittings; Prestolok; P6M Muffler	
H2	#1 to #3 & #5	3/4" BSPP	EO Fittings	
	#12 to #3	1/8" to 3/4" BSPP	EO Fittings; EO Plugs; P6M Muffler	
	#14 to #5	1/8" to 3/4" BSPP	EO Fittings; EO Plugs; P6M Muffler	
H3	#1 to #3 & #5	1" BSPP	EO Fittings	
	#12 to #3	1/8" to 1" BSPP	EO Fittings; EO Plugs; P6M & ES Muffler	
	#14 to #5	1/8" to 1" BSPP	EO Fittings; EO Plugs; P6M & ES Muffler	

### Collective Wiring Interface Plates

Size	Port Numbers	Port Size	Acceptable Fittings	Note
H1	TOP #1 to #3 & #5	1/2" BSPP	Prestolok; P6M Muffler; EO Fittings	5
H2	TOP #1 to #3 & #5	3/4" BSPP	EO Fittings; P6M & ES Mufflers	
H3	TOP #1 to #3 & #5	1" BSPP	EO Fittings; P6M & ES Mufflers	

### General Notes Applicable to Applications

- EO and EO2 Fittings are metric tube ends and male BSPP threads to valve components – Light Duty Series – spot faces for B & E and G & H types of flat face sealing. Straights are the BE-R-ED Series and elbows are WEE-R Adjustable Lock Nut Series.
- Prestolok Fittings are metric push-in fittings with tube ends and BSPP threads to valve components. Straights are the F4PB Series and elbows are C64PB Adjustable Series.
- In most applications, there is not enough swing clearance to install elbows in adjacent ports.
- In a few applications, it may be necessary to remove the tube nut during installation.
- In specifically identified installations, assembly with specific fittings is made provided that the hex points are not aligned along the port center to center line.
- 3/8" EO fittings with 12 mm tubing only.
- Prestolok available in 1/2" size only.

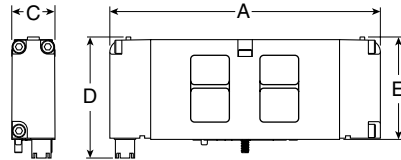
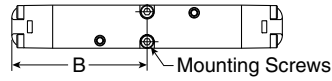
**Dimensions**

**HB**

**15407-2**

**18mm Dimensions**

A	B	C	D
4.43 (113)	2.22 (56)	.72 (18)	1.98 (50)
<b>E</b>			
1.68 (43)			



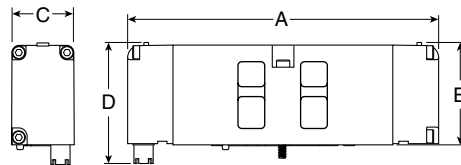
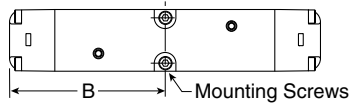
Inches (mm)

**HA**

**15407-2**

**26mm Dimensions**

A	B	C	D
5.10 (130)	2.55 (65)	1.02 (26)	1.98 (50)
<b>E</b>			
1.66 (42)			

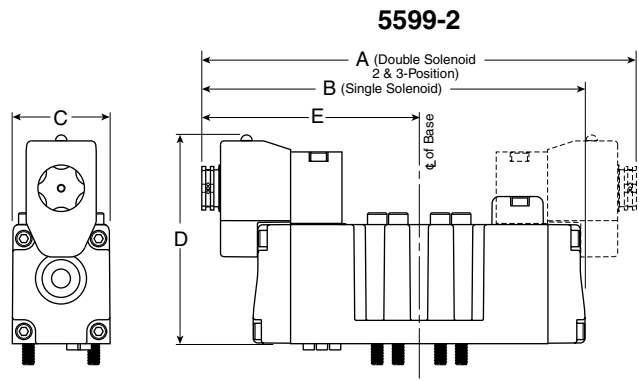


Inches (mm)

**L**



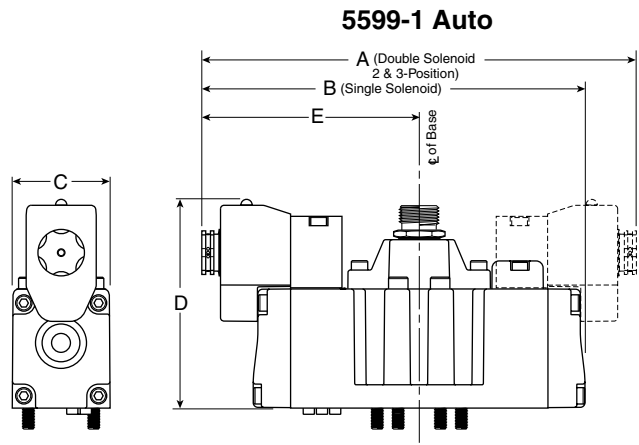
**H1**  
**H2**  
**H3**



**H1 Dimensions**

<b>A</b> 7.32 (186)	<b>A<sub>1</sub></b> 5.59 (142)	<b>B</b> 6.46 (164)	<b>C</b> 1.65 (42)
<b>D</b> 3.54 (90)	<b>D<sub>1</sub></b> 4.29 (109)	<b>D<sub>2</sub></b> 4.29 (109)	<b>D<sub>3</sub></b> 2.50 (63.5)
<b>D<sub>4</sub></b> 2.48 (63)	<b>E</b> 3.66 (93)	<b>E<sub>1</sub></b> 2.80 (71)	

Inches (mm)

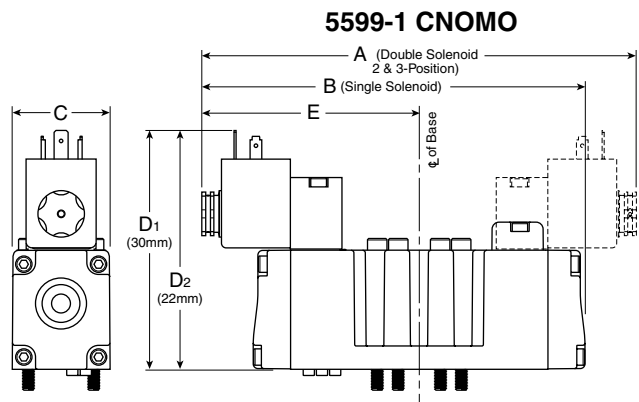


**H2 Dimensions**

<b>A</b> 8.35 (212)	<b>A<sub>1</sub></b> 6.62 (168)	<b>B</b> 7.48 (190)	<b>C</b> 2.17 (55)
<b>D</b> 4.05 (103)	<b>D<sub>1</sub></b> 4.80 (122)	<b>D<sub>2</sub></b> 4.57 (116)	<b>D<sub>3</sub></b> 2.99 (76)
<b>E</b> 4.17 (106)	<b>E<sub>1</sub></b> 3.31 (84)		

Inches (mm)

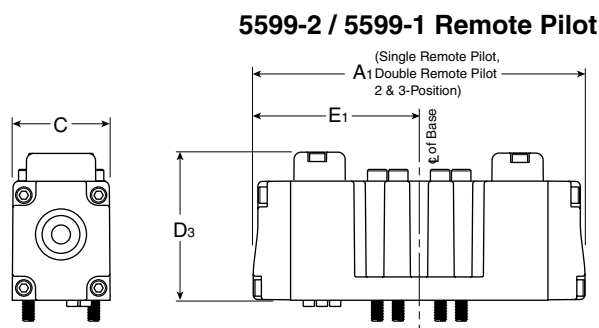
**H1 Valve Dimensions Shown**



**H3 Dimensions**

<b>A</b> 9.49 (241)	<b>A<sub>1</sub></b> 6.98 (177)	<b>B</b> 8.23 (209)	<b>C</b> 2.17 (55)
<b>D</b> 4.05 (103)	<b>D<sub>1</sub></b> 4.80 (122)	<b>D<sub>2</sub></b> 4.57 (116)	<b>D<sub>3</sub></b> 2.99 (76)
<b>E</b> 4.74 (121)	<b>E<sub>1</sub></b> 3.49 (89)		

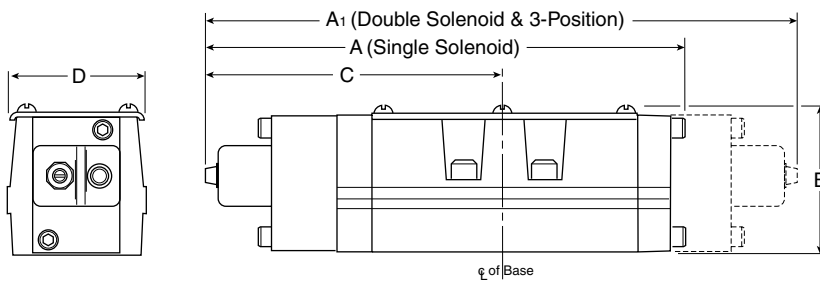
Inches (mm)





**H4**

**5599-2**

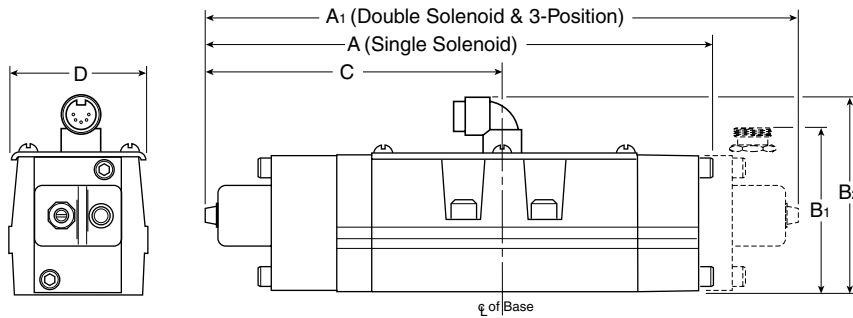


**Dimensions**

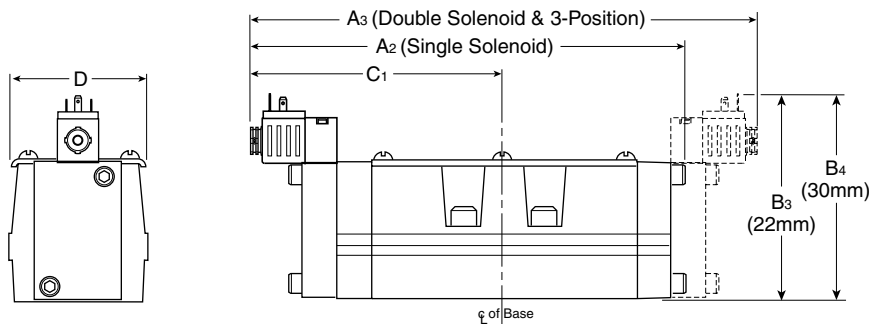
<b>A</b> 11.37 (289)	<b>A<sub>1</sub></b> 13.83 (351)	<b>A<sub>2</sub></b> 11.00 (279)	<b>A<sub>3</sub></b> 13.08 (332)	<b>A<sub>4</sub></b> 8.92 (267)
<b>A<sub>5</sub></b> 9.30 (236)	<b>B</b> 3.49 (89)	<b>B<sub>1</sub></b> 4.00 (102)	<b>B<sub>2</sub></b> 4.81 (122)	<b>B<sub>3</sub></b> 4.82 (122)
<b>B<sub>4</sub></b> 5.13 (130)	<b>C</b> 6.92 (176)	<b>C<sub>1</sub></b> 6.54 (166)	<b>C<sub>2</sub></b> 4.46 (113)	<b>D</b> 3.21 (82)

Inches (mm)

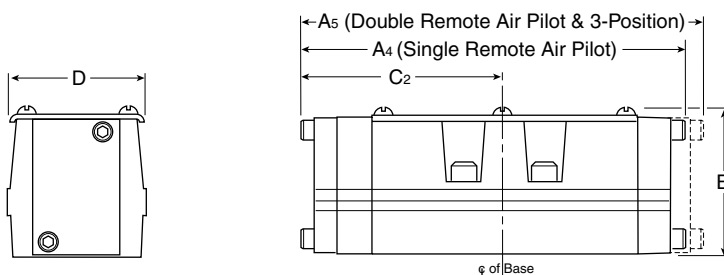
**5599-1 Auto**



**5599-1 DIN**



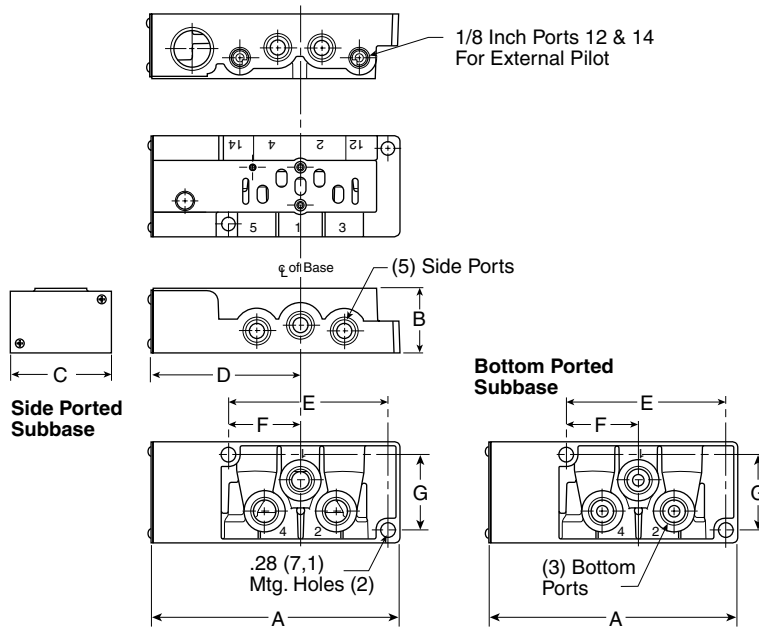
**5599-2 / 5599-1 Remote Pilot**





**HA**

**HA 15407-2 Subbase**



**26mm Dimensions**

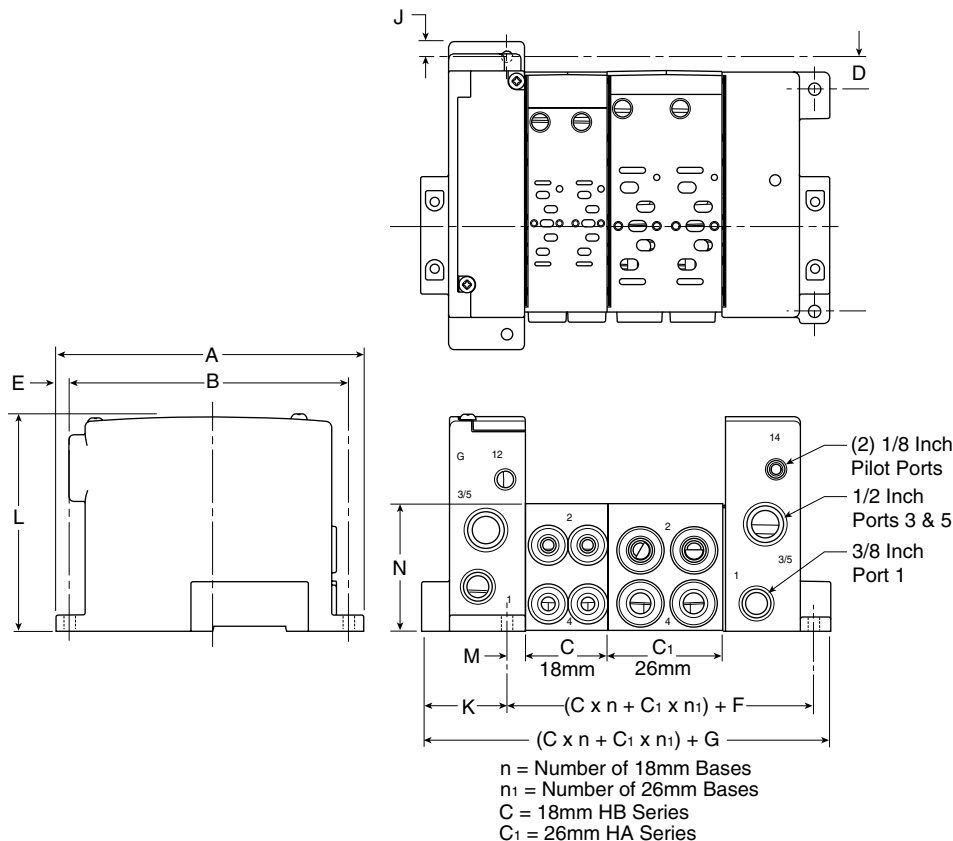
<b>A</b> 4.88 (124)	<b>B</b> 1.28 (32.5)	<b>C</b> 2.00 (50.8)	<b>D</b> 2.91 (74)
<b>E</b> 1.43 (36.2)	<b>F</b> 3.16 (80.2)	<b>G</b> 1.49 (37.9)	

Inches (mm)

**HB**

**HA**

**HB & HA 15407-2 Manifolds**



**18mm & 26mm Dimensions**

<b>A</b> 5.98 (152)	<b>B</b> 5.39 (137)	<b>C</b> 1.61 (40.8)	<b>C<sub>1</sub></b> 2.24 (56.8)
<b>D</b> .63 (16)	<b>E</b> .30 (7.5)	<b>F</b> 2.14 (54.4)	<b>G</b> 4.12 (104.6)
<b>H</b> 4.32 (109.8)	<b>J</b> .15 (4)	<b>K</b> 1.68 (42.7)	<b>L</b> 4.17 (106)
<b>M</b> .33 (8.4)	<b>N</b> 2.48 (63)		

Inches (mm)



**H1, H2 & H3 5599-2 / 5599-1 Subbases**

1/8 Inch Ports 12 & 14 For External Pilot

1/2 Inch Conduit

Side Ported Subbase

Bottom Ported Subbase

(5) Side Ports

(5) Bottom Ports

7.1 (.28) Mtg. Holes (2)

**H1 Dimensions**

A	B	C	D	E
5.83 (148)	1.48 (38)	2.50 (64)	3.86 (98)	3.29 (84)
F	G			
1.57 (40)	2.00 (51)			

**H2 Dimensions**

A	B	C	D	E
6.69 (170)	2.33 (59)	3.15 (80)	4.25 (108)	4.21 (107)
F	G			
2.07 (53)	2.56 (65)			

**H3 Dimensions**

A	B	C	D	E
7.90 (201)	2.96 (75)	3.90 (99)	4.92 (125)	5.14 (131)
F	G			
2.50 (64)	3.24 (82)			

Inches (mm)

**H1 & H2 5599-1 Side & Bottom Ported Subbases**

1/8 Inch Ports 12 & 14 For External Pilot

Side Ported Subbase

Bottom Ported Subbase

(5) 3/8 Inch Bottom Ports

(5) 3/8 Inch Side Ports

**H1 Dimensions**

A	A <sub>1</sub>	B	C	C <sub>1</sub>
3.94 (100)	3.54 (90)	1.14 (29)	1.58 (40)	.79 (20)
D	E			
.21 (5,4)	.39 (10)			

**H2 Dimensions**

A	A <sub>1</sub>	B	C	C <sub>1</sub>
4.57 (116)	4.09 (104)	1.26 (32)	1.97 (50)	.98 (25)
D	E			
.25 (6,4)	.39 (10)			

Inches (mm)

**H1, H2 & H3 VDMA Subbases**

1/8 Inch Ports 12 & 14 For External Pilot

Side Ported Subbase

Bottom Ported Subbase

(5) 3/8 Inch Side Ports

5.5 (.22) Mtg. Holes (2)

**H1 Dimensions**

A	A <sub>1</sub>	B	C	C <sub>1</sub>	D
4.33 (110)	3.86 (98)	1.26 (32)	1.89 (48)	.94 (24)	.39 (10)

**H2 Dimensions**

A	A <sub>1</sub>	B	C	C <sub>1</sub>	D
4.88 (124)	4.41 (112)	1.57 (40)	2.20 (56)	1.10 (28)	.51 (130)

**H3 Dimensions**

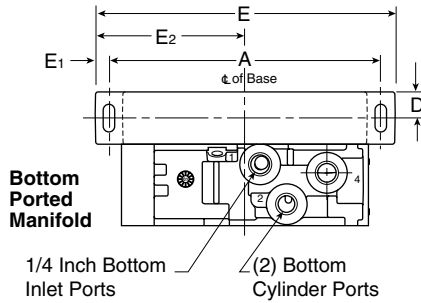
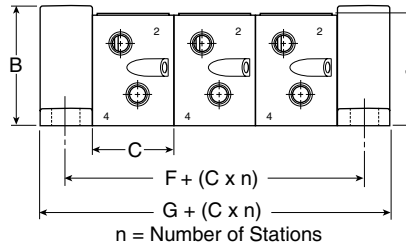
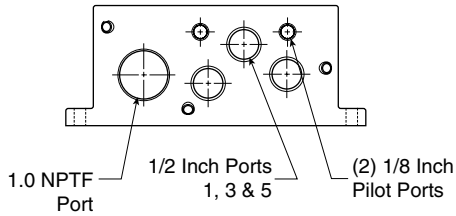
A	A <sub>1</sub>	B	C	C <sub>1</sub>	D
5.87 (149)	5.35 (136)	1.26 (32)	2.80 (71)	1.40 (36)	.71 (18)

Inches (mm)

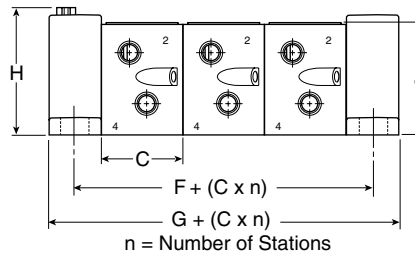


**H1**

**H1 5599-2 / 5599-1 Manifold**



**Manifold with Optional Collective Wiring System**



**Dimensions**

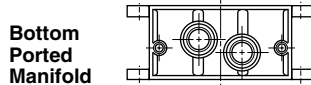
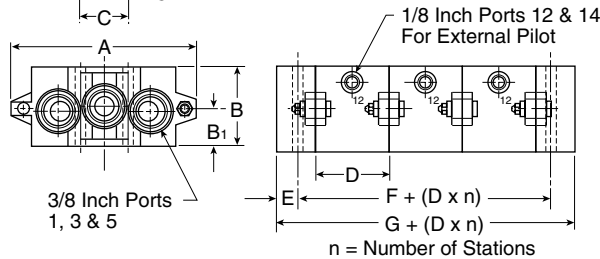
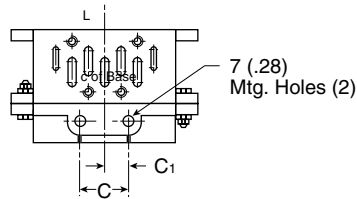
<b>A</b> 6.50 (165)	<b>B</b> 2.87 (73)	<b>C</b> 1.93 (49)	<b>D</b> .63 (15.9)
<b>E</b> 7.17 (182)	<b>E<sub>1</sub></b> .33 (.84)	<b>E<sub>2</sub></b> 3.58 (91)	<b>F</b> 1.25 (31.8)
<b>G*</b> 2.50 (63.5)	<b>H</b> 2.99 (76)	<b>J</b> 2.65 (67.4)	

Inches (mm)

\* For 19-Pin Round Connector Module, add 1.08" (27.5mm) to the G dimensions.

**H1**

**H1 VDMA Manifold**



**Dimensions**

<b>A</b> 4.33 (110)	<b>B</b> 1.81 (46)	<b>B<sub>1</sub></b> .94 (24)	<b>C</b> 1.10 (28)
<b>C<sub>1</sub></b> .55 (14)	<b>D</b> 1.69 (.44)	<b>E</b> .43 (11)	<b>F</b> .87 (22)
<b>G</b> 1.74 (44)			

Inches (mm)

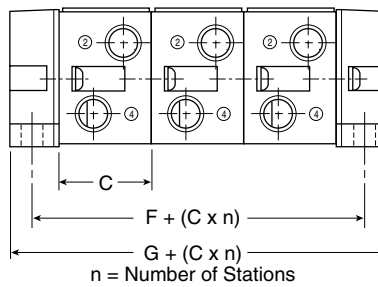
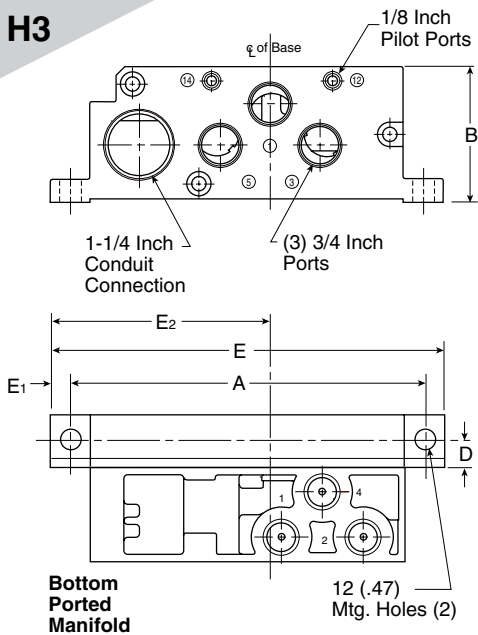




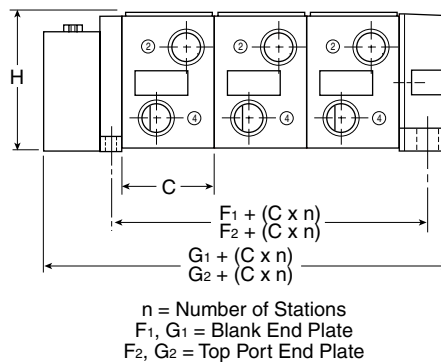
**H2**

**H2 & H3 5599-2 / 5599-1 Manifold**

**H3**



**Manifold with Optional Collective Wiring System**



**H2 Dimensions**

<b>A</b> 8.46 (215)	<b>B</b> 3.35 (85)	<b>C</b> 2.20 (56)	<b>D</b> .59 (15)	<b>E</b> 9.41 (239)
<b>E<sub>1</sub></b> .47 (12)	<b>E<sub>2</sub></b> 5.28 (134)	<b>F</b> 1.18 (30)	<b>F<sub>1</sub></b> 1.06 (27)	<b>F<sub>2</sub></b> 1.30 (33)
<b>G</b> 2.36 (60)	<b>G<sub>1</sub>*</b> 3.41 (87)	<b>G<sub>2</sub>*</b> 3.88 (99)	<b>H</b> 3.27 (83.1)	

**H3 Dimensions**

<b>A</b> 10.43 (265)	<b>B</b> 4.13 (105)	<b>C</b> 2.80 (71)	<b>D</b> .65 (17)	<b>E</b> 11.61 (295)
<b>E<sub>1</sub></b> .59 (.15)	<b>E<sub>2</sub></b> 6.26 (159)	<b>F</b> 1.30 (33)	<b>F<sub>1</sub></b> 1.12 (29)	<b>F<sub>2</sub></b> 1.59 (41)
<b>G</b> 2.60 (63)	<b>G<sub>1</sub>*</b> 3.54 (90)	<b>G<sub>2</sub>*</b> 4.49 (114)	<b>H</b> 4.05 (102.9)	

Inches (mm)

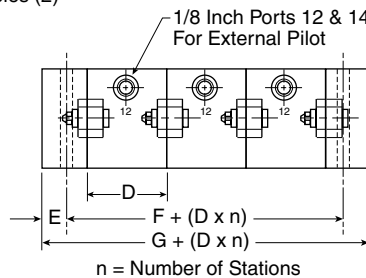
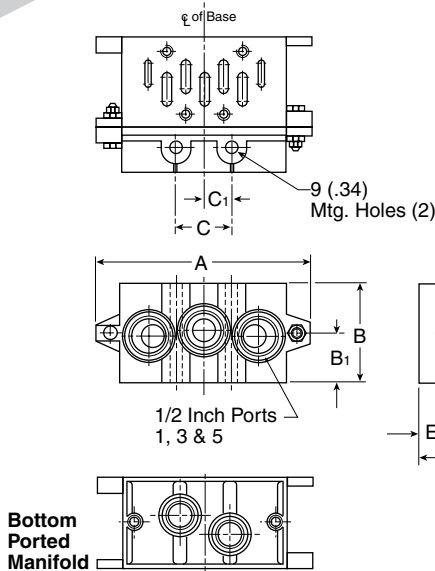
\* For 19-Pin Round Connector Module, add 1.08" (27.5mm) to the G & G<sub>2</sub> dimensions.



**H2**

**H2 VDMA Manifold**

**H3**



**H2 Dimensions**

<b>A</b> 5.31 (135)	<b>B</b> 1.85 (47)	<b>B<sub>1</sub></b> .94 (24)	<b>C</b> 1.38 (35)
<b>C<sub>1</sub></b> .69 (18)	<b>D</b> 2.20 (56)	<b>E</b> .51 (13)	<b>F</b> 1.02 (26)
<b>G</b> 2.05 (52)			

**H2 Dimensions**

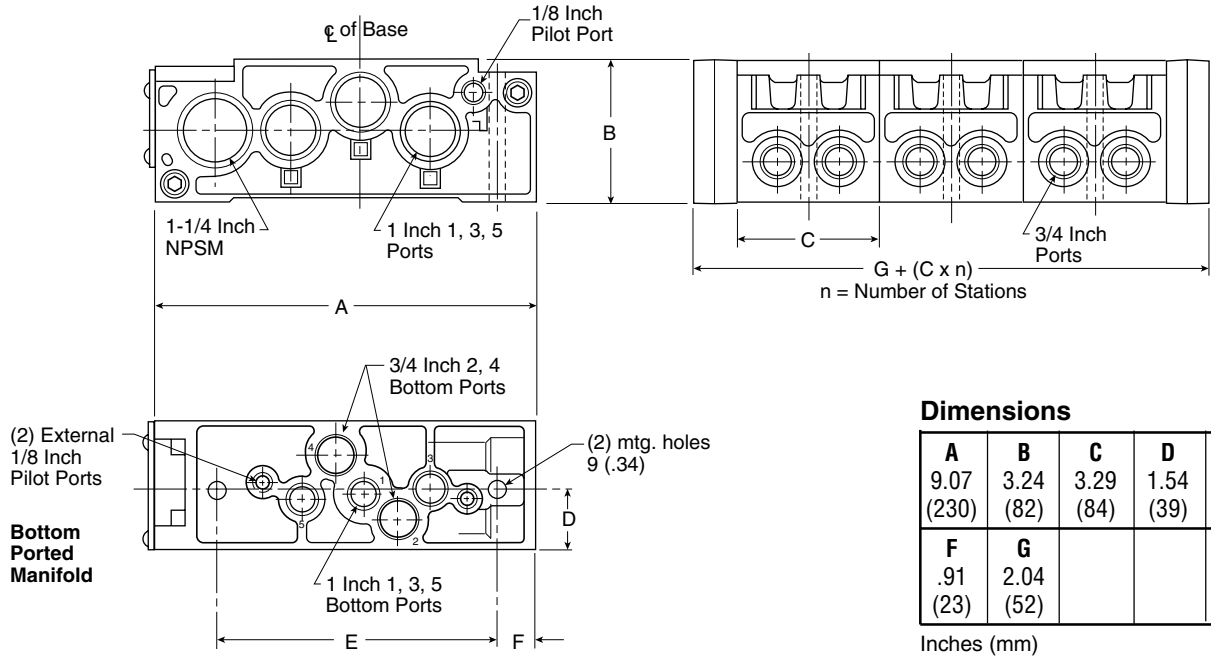
<b>A</b> 7.48 (190)	<b>B</b> 2.20 (56)	<b>B<sub>1</sub></b> 1.34 (34)	<b>C</b> 2.05 (52)
<b>C<sub>1</sub></b> 1.02 (26)	<b>D</b> 2.80 (71)	<b>E</b> 1.18 (30)	<b>F</b> 1.18 (30)
<b>G</b> 2.36 (60)			

Inches (mm)



**H4**

**H4 5599-2 / 5599-1 Manifold**

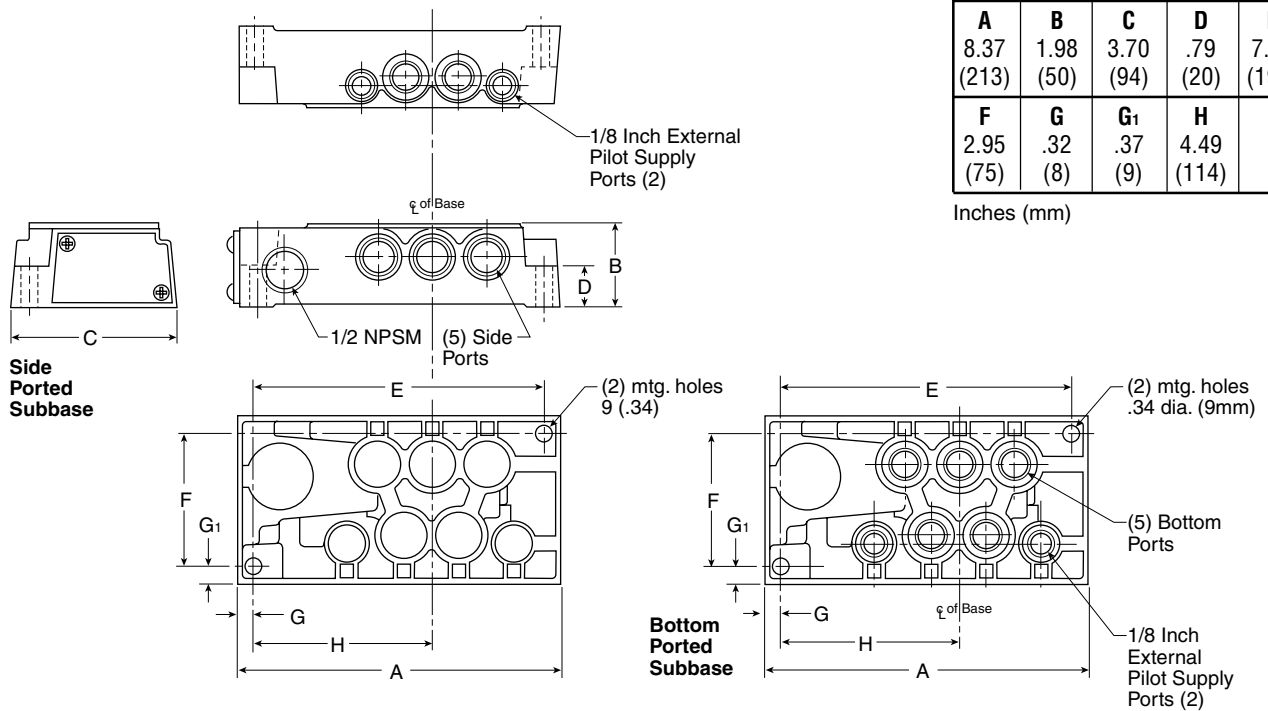


**Dimensions**

<b>A</b> 9.07 (230)	<b>B</b> 3.24 (82)	<b>C</b> 3.29 (84)	<b>D</b> 1.54 (39)	<b>E</b> 6.89 (175)
<b>F</b> .91 (23)	<b>G</b> 2.04 (52)			

Inches (mm)

**H4 5599-2 / 5599-1 Subbase**



**Dimensions**

<b>A</b> 8.37 (213)	<b>B</b> 1.98 (50)	<b>C</b> 3.70 (94)	<b>D</b> .79 (20)	<b>E</b> 7.69 (195)
<b>F</b> 2.95 (75)	<b>G</b> .32 (8)	<b>G<sub>1</sub></b> .37 (9)	<b>H</b> 4.49 (114)	

Inches (mm)



**Dimensions**

**HB**

**HA**

**HB Dimensions**

A	B	B <sub>1</sub>	C
10.28 (261)	6.14 (156)	1.02 (26)	5.13 (130)
D	E		
2.60 (66)	1.18 (30)		

Inches (mm)

**HA Dimensions**

A	B	B <sub>1</sub>	C
10.02 (255)	6.43 (163)	1.41 (36)	5.01 (127)
D	E		
2.00 (51)	1.18 (30)		

Inches (mm)

**H1**

**H1 Dimensions**

A	B	C	D
11.84 (301)	8.13 (207)	6.40 (163)	5.45 (138)
E	F	G	H
4.25 (108)	2.85 (107)	2.09 (53)	2.05 (52)
J			
1.63 (41)			

Inches (mm)

Liquid Gauge & Large Air Gauge Dimensions

**H2**

**H2 Dimensions**

A	A <sub>1</sub>	B	B <sub>1</sub>
14.65 (372)	16.18 (411)	10.56 (268)	9.84 (250)
C	D	E	J
7.71 (196)	4.20 (107)	2.80 (71)	2.15 (55)
J <sub>1</sub>	K		
1.07 (27)	8.50 (216)		

Inches (mm)

B<sub>1</sub> Common Port  
B Single Port

**H3**

**H3 Dimensions**

A	A <sub>1</sub>	B	B <sub>1</sub>
15.67 (398)	17.15 (436)	11.53 (293)	10.67 (271)
C	D	E	J
8.37 (213)	4.20 (107)	2.93 (75)	2.50 (64)
J <sub>1</sub>	K		
1.25 (32)	9.10 (231)		

Inches (mm)

B<sub>1</sub> Common Port  
B Single Port



**Notes**

---

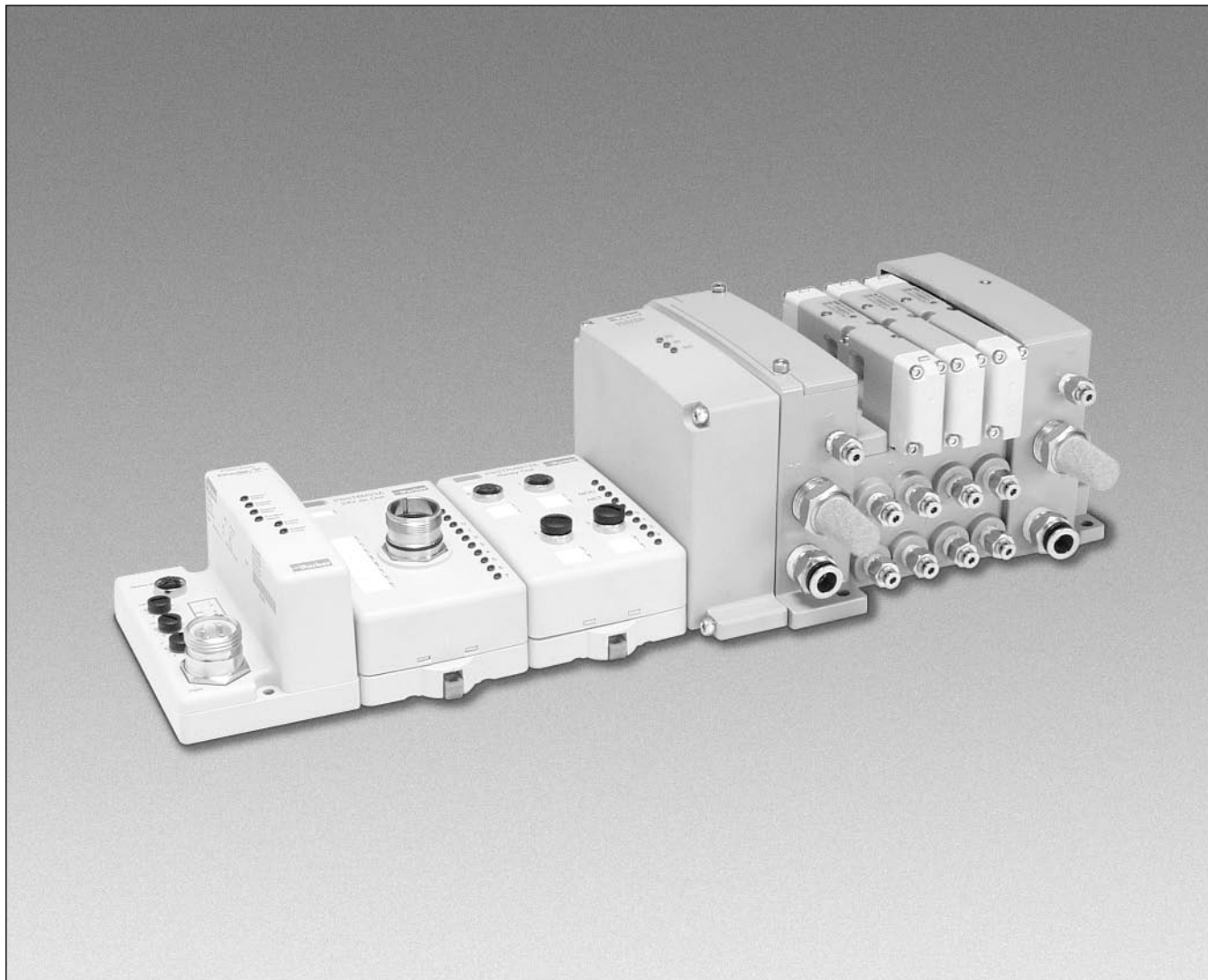


# Field Bus System



Section M

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



**M**

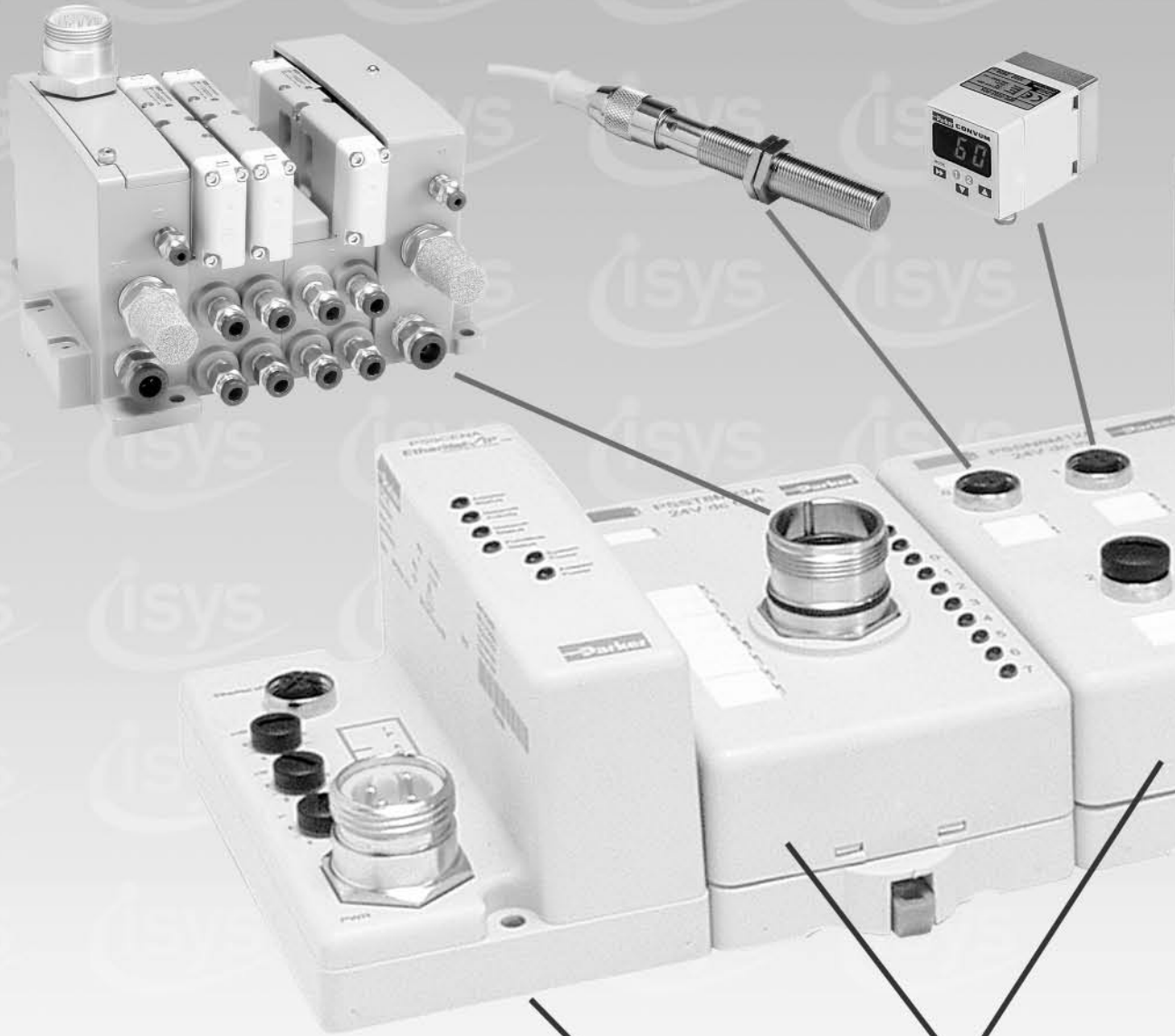
isysnet Features ..... 2-3  
 Field Bus Modules..... 4-5  
 Recommended Cables..... 6-7  
 Dimensions..... 8





### 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).



### Communication Modules

- A Communication Module supports up to a maximum of 62 I/O modules and up to 264 Inputs and 264 Outputs.

### I/O Modules

ControlNet™

EtherNet/IP™

DeviceNet™

PROFIBUS  
PROCESS FIELD BUS



## I/O Modules

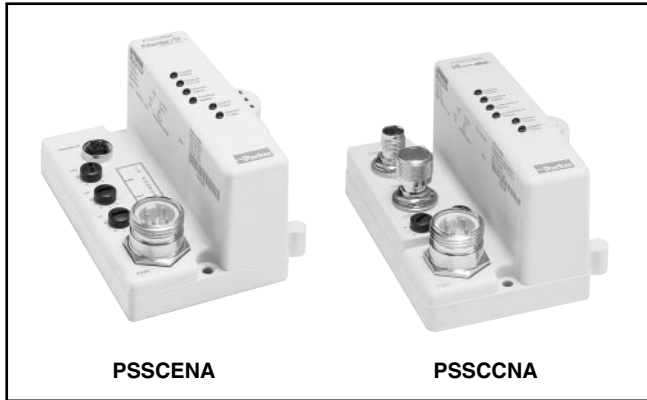
- Accepts signals from sensors, photo eyes, limits and other field input devices.
- Provides signals to remotely operating solenoid valves and other field operating output devices.
- Choice of digital, analog, high watt I/O Modules.
- Choose from a broad range of color coded I/O types with connector choices of 8mm, 12mm or M23.
- Built-in miswiring, short circuit, open circuit detection with electronic feedback.



## Modularity

- Ease of module replacement with unique latching mechanisms eliminating the need for screws.
- Auto Device Replacement allows OEMs to add I/O modules without making changes to the control software.
- Built-in panel grounding.
- Electronic and mechanical keying prevents users from placing I/O modules in the wrong sequence.

**M**



**PSSCENA**

**PSSCCNA**

### Communications Module\*

Protocol	Kit Number
DeviceNet™	<b>PSSCDM18PA (M8) or PSSCDM12A (M12)</b>
ControlNet™	<b>PSSCCNA</b>
EtherNet I/P™	<b>PSSCENA</b>
Profibus-DP®	<b>PSSCPBA</b>

\* IP67 Certified  
 Reference the following Documents for Installation Instructions.  
 DeviceNet - E101P, PSS-UM001A  
 Control Net - E103P  
 Ethernet I/P - E104P  
 Profibus-DP - E102P  
 See [www.parker.com/pneu/isysnet](http://www.parker.com/pneu/isysnet)



**PSSN8M8A**

**PSSP8M23A**

### Digital Input Module\*

Input Module	Kit Number
8 Digital Inputs M12 (NPN)	<b>PSSN8M12A</b>
8 Digital Inputs M12 (PNP)	<b>PSSP8M12A</b>
8 Digital Inputs M8 (NPN)	<b>PSSN8M8A</b>
8 Digital Inputs M8 (PNP)	<b>PSSP8M8A</b>
8 Digital Inputs M23 12-Pin (PNP)	<b>PSSP8M23A</b>
8 Digital Inputs M23 12-Pin (NPN)	<b>PSSN8M23A</b>

\* IP67 Certified  
 Reference E106P for Installation Instructions.  
 See [www.parker.com/pneu/isysnet](http://www.parker.com/pneu/isysnet)



**PSST8M12A**

### Digital Output Module\*

Output Module	Kit Number
† 8 Digital Outputs M12 (PNP)	<b>PSST8M12A</b>
† 8 Digital Outputs M8 (PNP)	<b>PSST8M8A</b>
§ 4 Digital Output, High Watt Relay M12 (PNP) (2 Amp)	<b>PSSTR4M12A</b>
†† 8 Digital Outputs M23 (PNP)	<b>PSST8M23A</b>

\* IP67 Certified  
 Reference the following Documents for Installation Instructions.  
 † E107P  
 § E109P  
 † Can be used with PSSTERM (See Photo on Page 1)  
 See [www.parker.com/pneu/isysnet](http://www.parker.com/pneu/isysnet)



**PSSNACM12A**

### Analog Input Module\*

Input Module	Kit Number
2 Analog Inputs Voltage (M12) 0 to 10V ± 10V	<b>PSSNAVM12A</b>
2 Analog Inputs Current (M12) 4 to 20mA or 0 to 20mA	<b>PSSNACM12A</b>

\* IP67 Certified  
 Reference E110P for Installation Instructions.  
 See [www.parker.com/pneu/isysnet](http://www.parker.com/pneu/isysnet)

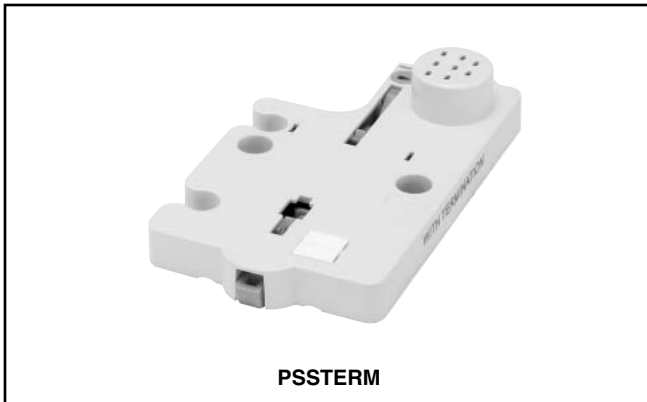




### Analog Input Module\*

Output Module	Kit Number
2 Analog Outputs Voltage (M12) 0 to 10V ± 10V	<b>PSSTAVM12A</b>
2 Analog Outputs Current (M12) 4 to 20mA or 0 to 20mA* IP67 Certified	<b>PSSTACM12A</b>

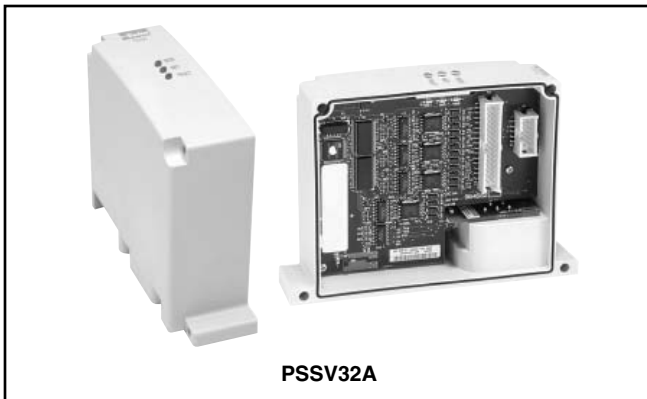
\* IP67 Certified  
 Reference E111P for Installation Instructions.  
 See [www.parker.com/pneu/isysnet](http://www.parker.com/pneu/isysnet)



### Terminating Base Module

Extender Module	Kit Number
Termination Base for Stand Alone Units	<b>PSSTERM</b>

Used as the last Terminating Module for a Stand Alone isysnet Assembly.  
 Must use with PSST8M23A. (See photo on page 1)



### Valve Driver Module\*

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

\* Included in the Add-A-Fold Assembly part number for factory assembled valve manifolds.

<sup>†</sup> Reference Document E100P for Installation Instructions.  
 See [www.parker.com/pneu/isysnet](http://www.parker.com/pneu/isysnet)



### Power Extender Module

Extender Module	Kit Number
24VDC Field Power Module	<b>PSSE24A</b>

A Power Extender Module must be used on every 12th Module in an isysnet Assembly. See [www.parker.com/pneu/isysnet](http://www.parker.com/pneu/isysnet)

**M**



## Communication Modules Recommended Cables

isysnet Module Part Number	Module Function / Description	Module Connector Quantity & Style	Recommended Cable*†	Auxiliary Power Connector	Recommended Standard Allen Bradley Auxiliary Power Cable*†
<b>PSSCDM12A</b>	DeviceNet Communication Module	1 Macro (M12) 5-Pin Male (DNet In) & 1 Micro (M12) Female (DNet Out)	KwikLink Flat Media System Standard Drop Cable: 1485K-PzF5-R5  Thick Round System Standard Drop Cable: 1485R-PzM5-R5  Thin Round System Standard Drop or Trunk: 1485R-PzM5-N5	4-Pin Mini	Standard Allen Bradley Cordset (Single Ended) 889N-F4AFC-xF  Standard Allen Bradley Patchcord (Double Ended) 889N-F4AFNM-y
<b>PSSCDM18PA</b>	DeviceNet Communication Module	1 Mini 5-Pin Male (DNet In) & 1 Mini 5-Pin Female (DNet Out)	KwikLink Flat Media System Standard Drop Cable: 1485K-PzF5-N5  Thick Round System Standard Drop Cable: 1485R-PzM5-N5  Thin Round System Standard Drop or Trunk: 1485R-PzN5-M5		
<b>PSSCPBA</b>	Profibus Communication Module	1 Profibus M12 Male (Pbus In) & 1 Profibus M12 Female (Pbus Out)	—	5-Pin Mini	Standard Allen Bradley Cordset (Single Ended) 889N-F5AFC-xF
<b>PSSCENA</b>	EtherNet I/P Communication Module	1 4-Pin D-Keyed M12 EtherNet Male Connector	—	4-Pin Mini	Standard Allen Bradley Patchcord (Double Ended) 889N-F4AFNM-y

x = Length in feet (6, 12, and 20 standard)

y = Length in meters (1, 2, 3, 4, 5, 6, and 10 standard)

z = Length in meters (1, 2, 3, 4, 5, 6 standard)

\* Reference [www.connector.com](http://www.connector.com) (Brad Harrison 804 Series) for Cordset Listings

† Rockwell Automation (Allen Bradley) Cordsets are available at [www.rockwellautomation.com](http://www.rockwellautomation.com) or through your local Rockwell Automation Distributor.

## Digital Inputs

isysnet Module Part Number	Module Function / Description	Module Connector Quantity & Style	Recommended Standard Allen Bradley Patchcord or Y-Cable (Double Ended)*†	Recommended Standard Allen Bradley Auxiliary Power Cable*†
<b>PSSN8M12A or PSSP8M12A</b>	24VDC 8-Sinking / Sourcing Inputs	4 Female DC Micro (M12) Single Keyway, 4-Pin	For Using Both Inputs On Each Connector: 879D-F4ACDM-x  For Using One Input Per Connector: 889D-F4ACDM-x	For Using Both Inputs On Each Connector 879-C3AEDM4-5  For Using One Input Per Connector: 889D-M4AC-x
<b>PSSN8M8A or PSSP8M8A</b>	24VDC 8-Sinking / Sourcing Inputs	8 Female Pico (M8) 3-Pin	For 3-Pin Pico Product 889P-F3ABPM-x	889P-M3AB-y
<b>PSSN8M23A or PSSP8M23A</b>	24VDC 8-Sinking / Sourcing Inputs	1 M23 Connector	—	889M-M12AH-T

x = Length in meters (1, 2, 3, 4, 5 and 10 standard)

y = Length in meters (2, 5 and 10 standard)

\* Reference [www.connector.com](http://www.connector.com) (Brad Harrison 804 Series) for Cordset Listings

† Rockwell Automation (Allen Bradley) Cordsets are available at [www.rockwellautomation.com](http://www.rockwellautomation.com) or through your local Rockwell Automation Distributor.



## Digital Outputs

isysnet Module Part Number	Module Function / Description	Module Connector Quantity & Style	Recommended Standard Allen Bradley Patchcord or Y-Cable (Double Ended)**	Recommended Standard Allen Bradley Auxiliary Power Cable**
<b>PSST8M12A</b>	24VDC 8-Sourcing Outputs	4 Female DC Micro (M12) Single Keyway, 4-Pin	For Using Both Inputs On Each Connector: 879D-F4ACDM-x  For Using One Input Per Connector: 889D-F4ACDM-x	For Using Both Inputs On Each Connector: 879-C3AEDM4-5  For Using One Input Per Connector: 889D-M4AC-x
<b>PSSP8M8A</b>	24VDC 8-Sourcing Inputs	8 Female Pico (M8) 3-Pin	For 3-Pin Pico Product 889P-F3ABPM-x	889P-M3AB-y
<b>PSSTR4M12A</b>	24VDC Coil N.O. DPST Relay	4 Female DC Micro (M12) Single Keyway, 4-Pin	889D-F4ACDM-x	889D-M4AC-y

x = Length in meters (1, 2, 3, 4, 5 and 10 standard)

y = Length in meters (2, 5 and 10 standard)

\* Reference [www.connector.com](http://www.connector.com) (Brad Harrison 804 Series) for Cordset Listings

† Rockwell Automation (Allen Bradley) Cordsets are available at [www.rockwellautomation.com](http://www.rockwellautomation.com) or through your local Rockwell Automation Distributor.



## Analog

isysnet Module Part Number	Module Function / Description	Module Connector Quantity & Style	Recommended Standard Allen Bradley Patchcord or Y-Cable (Double Ended)**	Recommended Standard Allen Bradley Auxiliary Power Cable**
<b>PSSNACM12A</b>	24VDC 2-Analog Current Input	2 Female DC Micro (M12) Single Keyway, 4-Pin	Analog Modules have earth grounded metal rings. Consideration should be given when choosing shielded cabled and grounding techniques.	
<b>PSSNAVM12A</b>	24VDC 2-Analog Voltage Input	2 Female DC Micro (M12) Single Keyway, 4-Pin		
<b>PSSTACM12A</b>	24VDC 2-Analog Current Input	2 Female DC Micro (M12) Single Keyway, 4-Pin		
<b>PSSTAVM12A</b>	24VDC 2-Analog Voltage Input	2 Female DC Micro (M12) Single Keyway, 4-Pin		

\* Reference [www.connector.com](http://www.connector.com) (Brad Harrison 804 Series) for Cordset Listings

† Rockwell Automation (Allen Bradley) Cordsets are available at [www.rockwellautomation.com](http://www.rockwellautomation.com) or through your local Rockwell Automation Distributor.

# Dimensions

