

# NUMATICS®

## ISO Series

ISO 15407-2



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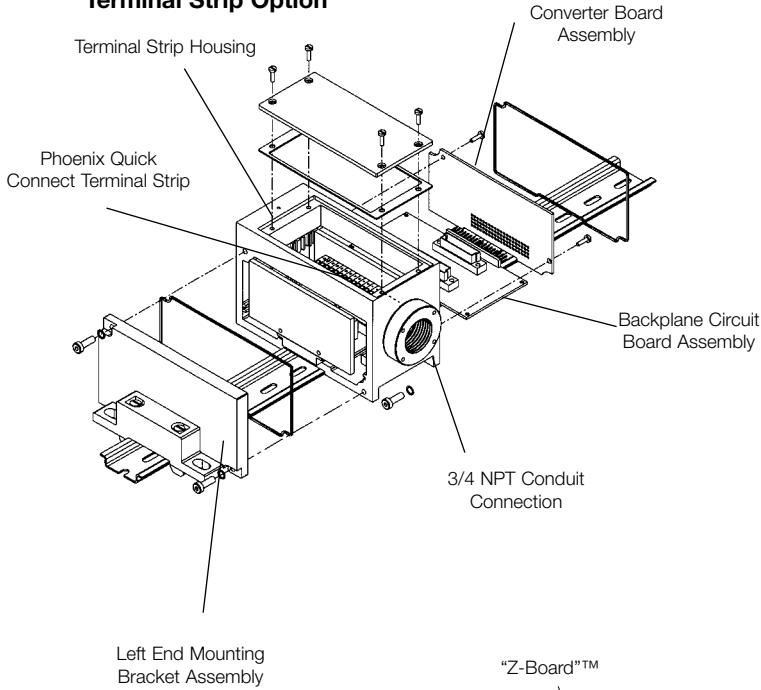
## ISO 15407-2 Series

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**Terminal Strip, Sub-D, and 26 & 12 Round Pin Options  
(exploded view)**

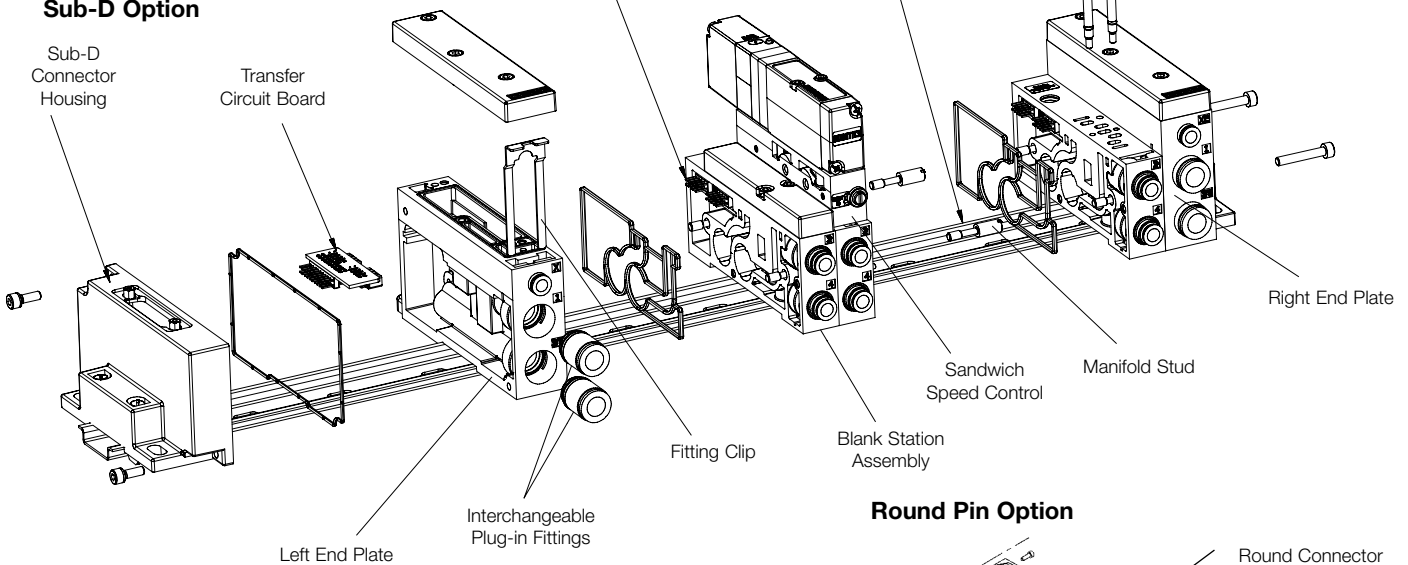
**Terminal Strip Option**



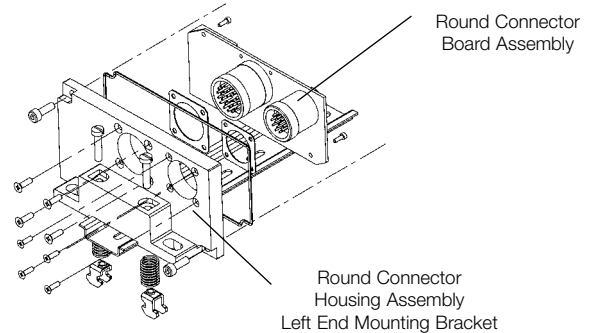
15407-2 18mm Double Solenoid Air Pilot Unit Valve

15407-2 18mm Single Pressure Sandwich Regulator (Double Regulator Also Available)

**Sub-D Option**



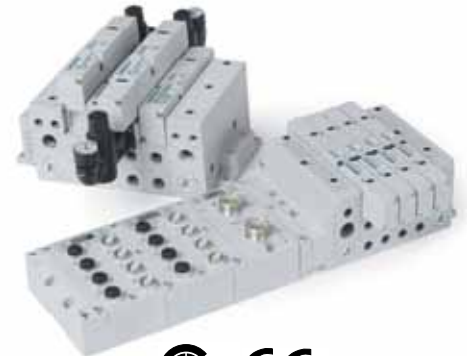
**Round Pin Option**



5 Ported, 2 and 3 position, 4-way, Spool & Sleeve

Cv: 0.56

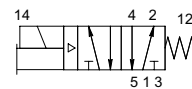
- Solenoid air pilot actuated
- Low wattage plug-in
- DC solenoids polarity insensitive with surge suppression
- Plug together circuit boards eliminate internal wiring
- Integral recessed gaskets
- Interchangeable push-in fittings to accommodate various tube sizes
- Simple conversion from internal to external pilot
- Modular plug-together Fieldbus electronics
- NEMA 4/IP65



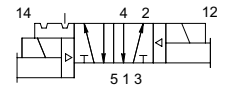
### Technical Data: 18mm Spool and Sleeve

Valve Data	English	Metric
Cv	0.56	0.56
Flow Capacity	26 SCFM	552 NI/m
	Upstream pressure to atmosphere @80 PSIG	@ 6 bar upstream/5 bar downstream
Operating Pressure Range	28" HG Vacuum to 150 PSIG	Vacuum to 10 bar
Pilot Pressure Range	26 to 120 PSIG	1.8 to 8.2 Bar
Temperature Range (Ambient)	-10° F to +115° F	-23° C to +46° C

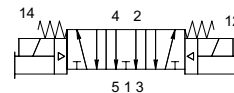
single solenoid air pilot  
2 position 4-way



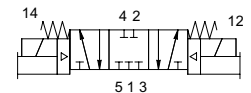
double solenoid air pilot  
2 position 4-way



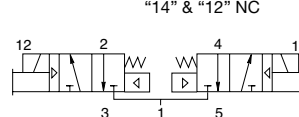
double solenoid air pilot 3 position  
4-way open center



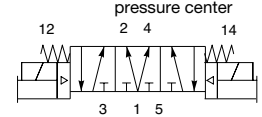
double solenoid air pilot 3 position  
4-way closed center



double solenoid air pilot  
2 position 3-way  
"14" & "12" NC



double solenoid air pilot  
3 position 4-way,  
pressure center



### Operating Data

All Solenoids Are Continuous Duty Rated	24 VDC	110 - 120 VAC 50/60 Hz
Power (Watts)	1.35	3.7
Holding Current (Amps.)	0.04	0.04

Response Time in Seconds	Energize	De-Energize	Energize	De-Energize
2-Position, Single, Spring Return	0.014	0.016	0.014	0.016
2-Position, Double, Detented	0.013	N/A	0.013	N/A
3-Position, Spring Centered	0.014	0.016	0.014	0.016
Dual 3 Way	0.014	0.016	0.014	0.016

How to Order 15407-2 18 mm

Valves

**I5 1 BB 4 Z6 M N 000 61**

**Valve Series**  
 I5 = 18mm (Spool / Sleeve)  
 R5 = 18mm (Rubber Packed D & E Function Only)

**Port Size**  
 1 \* = 1/8 (Threaded only)  
 2 = 1/4 (Push-in only)  
 F = 6mm  
 H = 8mm  
 \*Use for valve unit only (Mounting = 00).

**Valve Type**  
 BA = Single Solenoid Pilot, (Spring Return) w/flush Non-Locking Override  
 BB = Double Solenoid Pilot w/Flush Non-Locking Override  
 00 = Blank Station

**Function**  
 4 = 2 position, 4-way  
 5 = 3 position, 4-way open center  
 6 = 3 position, 4-way closed center  
 7 = 3 position, 4-way, pressure center  
 D = Dual 3-way, 4 Normally Closed - 2 Normally Closed (R5 Only)  
 E = Dual 3-way, Vacuum Service, 4 Normally Closed - 2 Normally Closed (R5 Only)  
 P = Blank Station Plate

**Voltage**  
 20 = 24/50-60 VAC  
 30 = 110-120/50-60 VAC  
 60 = 12 VDC  
 61 = 24 VDC  
 00 = Blank Station

**Options**  
 000 = Standard  
 11M = No Override  
 11B = Flush Locking Override

**Port Type**  
 L = Push-in Fitting  
 N = NPTF (1/8 only)  
 G = G Tap (1/8 only) ISO228/1-G  
 0 = Valve Unit Only

**Wiring Option**  
 K = Plug-in AC w/Light  
 M = Plug-in DC w/Light  
 O = Blank Station

**Mounting**  
 00 = Valve unit only  
 01 = 00 w/Speed Control  
 Z1 = Manifold Block w/Side and Bottom Ports, Single Solenoid Internal Circuit Board  
 Z2 = Manifold Block w/Side and Bottom Ports, Double Solenoid Internal Circuit Board  
 Z5 = Z1 w/Speed Control  
 Z6 = Z2 w/Speed Control  
 R1 = Z1 w/Ribbon Cable Connector  
 R2 = Z2 w/Ribbon Cable Connector  
 R5 = Z5 w/Ribbon Cable Connector  
 R6 = Z6 w/Ribbon Cable Connector

Regulators

**I51 RS 1 Z1 J N 000 00**

**Valve Series & Port Size**  
 I51\* = 1/8  
 I52 = 1/4 (Push-in only)  
 I5F = 6mm  
 I5H = 8mm  
 \*Use for regulator unit only (Mounting = 00).

**Regulator Type**  
 RS = Single Pressure to Port 1  
 RD = Dual Pressure to Ports 3 & 5  
 RT = 2 Pressure Selector  
 RE = Dual Pressure to Ports 4 & 2

**Pressure Range**  
 1 = 10-130 PSIG (0.7-9 bar)  
 3 = 3-30 PSIG (0.2-2 bar)  
 4 = 5-60 PSIG (0.5-4 bar)

**Mounting**  
 00 = Regulator Unit Only  
 Z1 = Manifold Block w/Side and Bottom Ports, Single Solenoid Internal Circuit Board  
 Z2 = Manifold Block w/Size and Bottom Ports, Double Solenoid Internal Circuit Board  
 Z5 = Z1 w/Speed Control  
 Z6 = Z2 w/Speed Control  
 R1 = Z1 w/Ribbon Cable Connector  
 R2 = Z2 w/Ribbon Cable Connector  
 R5 = Z5 w/Ribbon Cable Connector  
 R6 = Z6 w/Ribbon Cable Connector

**Special Options**  
 12H = Less Gauge  
 16N = Jumper on 14 End  
 16P = Jumper on 12 End  
 16W = Top Facing Gauge  
 61Y = Extended Gauge  
 63D = 16W + 61Y Extended Top Facing Gauge

**Port Type**  
 L = Push-in  
 N = NPTF (1/8 only)  
 G = G Tap (1/8 only) ISO228/1-G  
 0 = Regulator Unit Only

**Wiring Option**  
 J = Plug-in Receptacle Ass'y  
 O = Non Plug-In (Type RE Only)

See Note Below

NOTE:

- \* Regulator gauges must be offset on alternating stations to prevent interference (see photo)
- \* Odd numbered stations will use either standard (no option) or top facing ("16W" option) gauges.
- \* Even numbered stations will use either extended standard ("61Y" option) or extended top facing ("63D" option) gauges.



### Sandwich Pressure Regulators

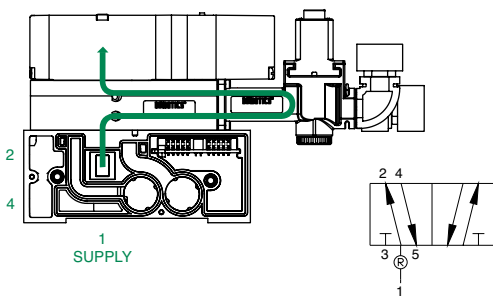
Types: RS / RD / RE / RT

When ordering a valve with a regulator mounted on a manifold, list the valve unit model number only and include the mounting requirements with the regulator.

Specify "Assembled."

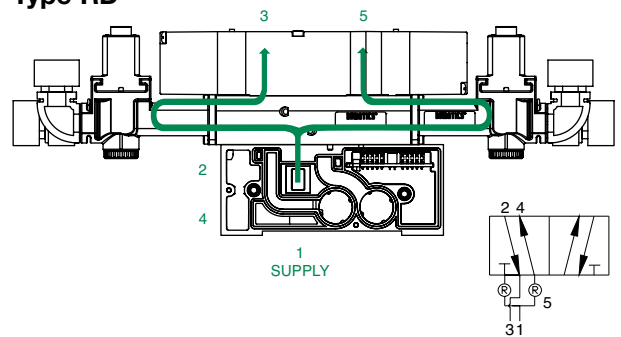
EXAMPLE ORDERS:	TYPE RS	TYPE RD
Valve unit only:	I51BA400K000030	I51BB400M000061
Regulator + mounting:	I52RS1Z1JL00000 ASSEMBLED	I52RD1Z2JL00000 ASSEMBLED

#### Type RS



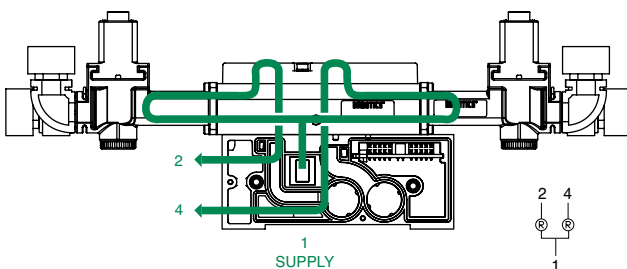
Single pressure from a single supply.

#### Type RD



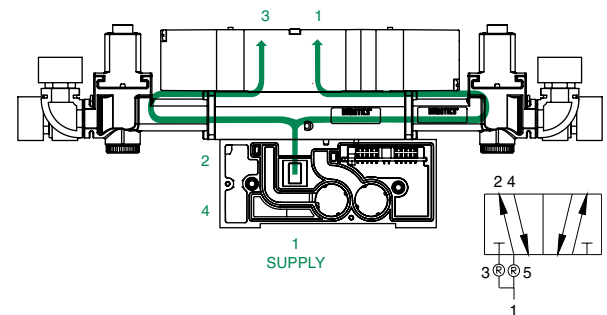
Dual pressure from a single supply.

#### Type RE



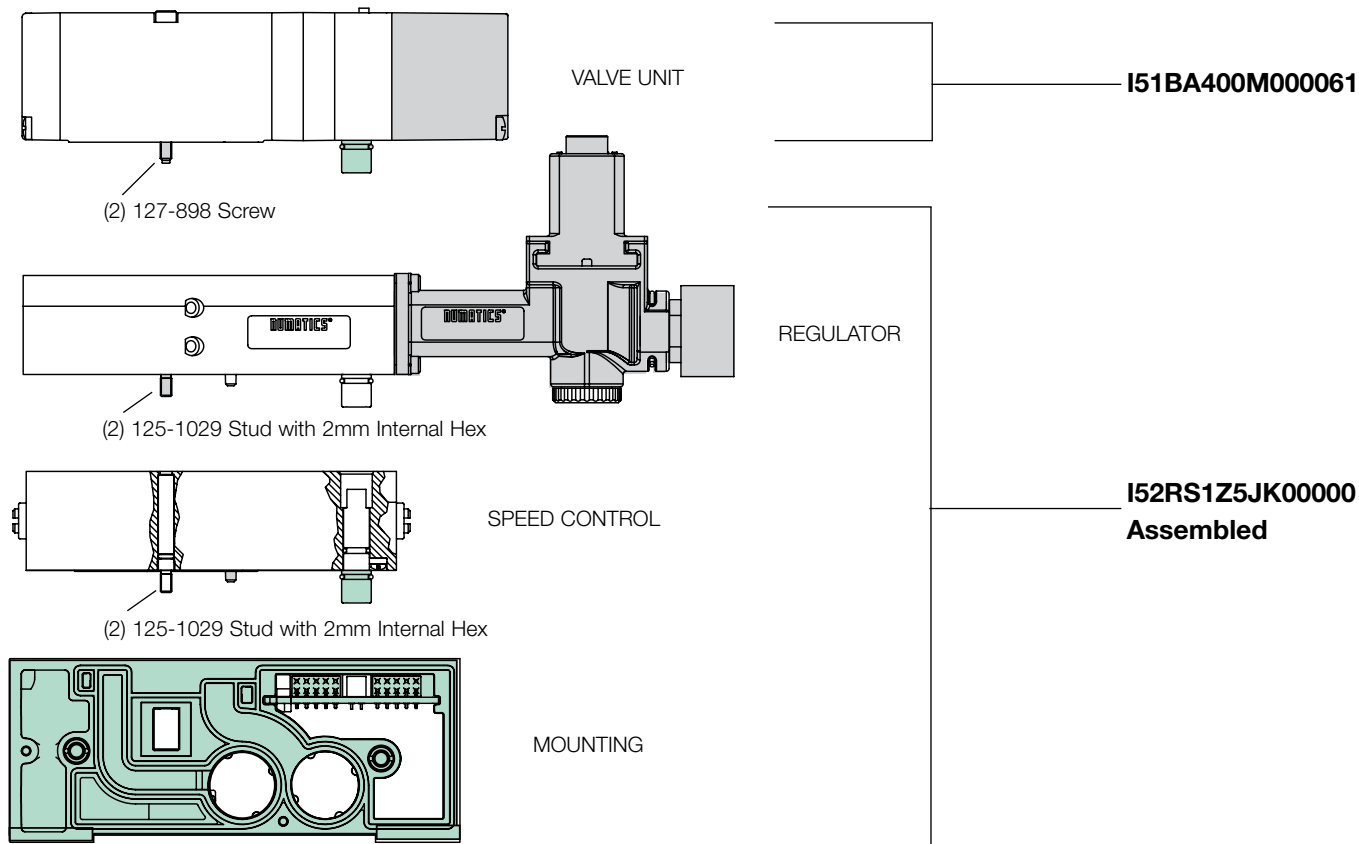
External outlet regulator used with jumper plate for single or dual pressure.

#### Type RT



Two-pressure selector used for multi-pressure applications.

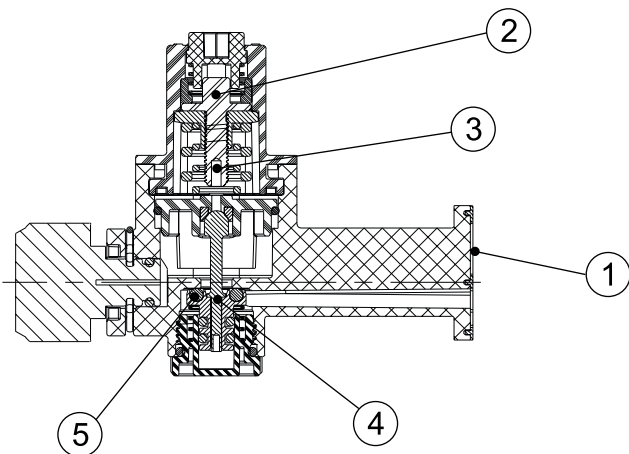
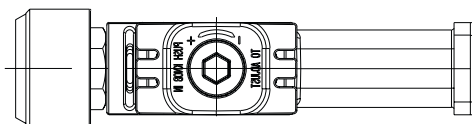
Valve Regulator / Speed Control Plug-in Assembly



Regulator Kits & Service Parts

Regulator Service Kit

239-1839



Regulator Unit Kits

(includes regulator assembly, gaskets, screws)

PSIG	Part No.
3-30 PSIG	239-1824
5-60 PSIG	239-1825
10-130 PSIG	239-1826

Bonnet Springs

PSIG	Part No.
3-30 PSIG	115-421
5-60 PSIG	115-422
10-130 PSIG*	115-419
	115-420

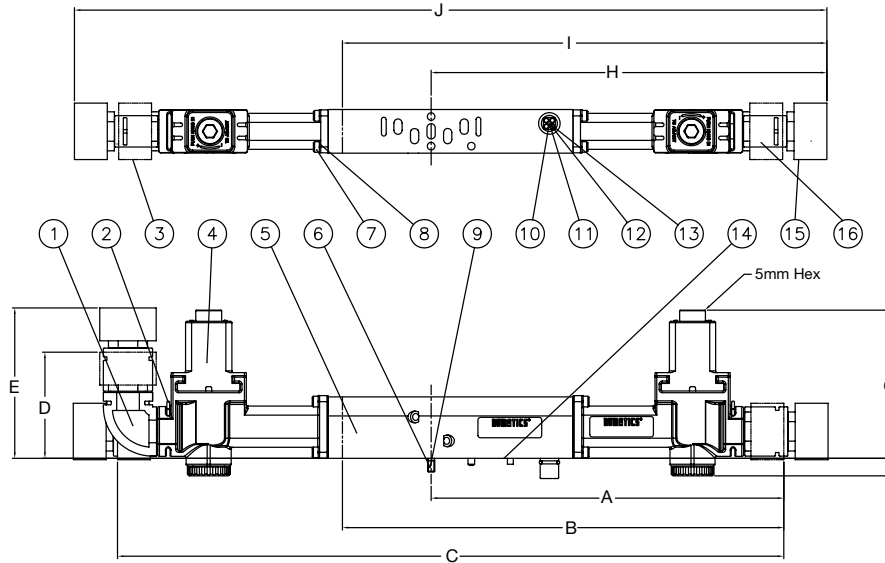
\* Both springs required

Det. No.	No. Req'd	Part Name
1	1	Gasket
2	1	Regulator Cap Assembly
3	1	Regulator Stem Assembly
4	1	Piston Assembly
5	1	O-Ring



Dimensions: Inches (mm)

### Sandwich Pressure Regulator - 18mm



A	B	C	D	E	F	G	H	I	J	K	L	M
5.85 (148.6)	7.32 (185.9)	11.04 (280.4)	1.77 (44.9)	2.50 (63.6)	.29 (7.4)	2.37 (60.3)	6.59 (167.4)	8.06 (204.8)	12.52 (318.1)	.36 (9.3)	.73 (18.5)	.94 (23.9)



#### Gauge Kit

160 PSI	11 Bar Max.	60 PSI	4 Bar Max.
214-214	214-215	214-219	214-220

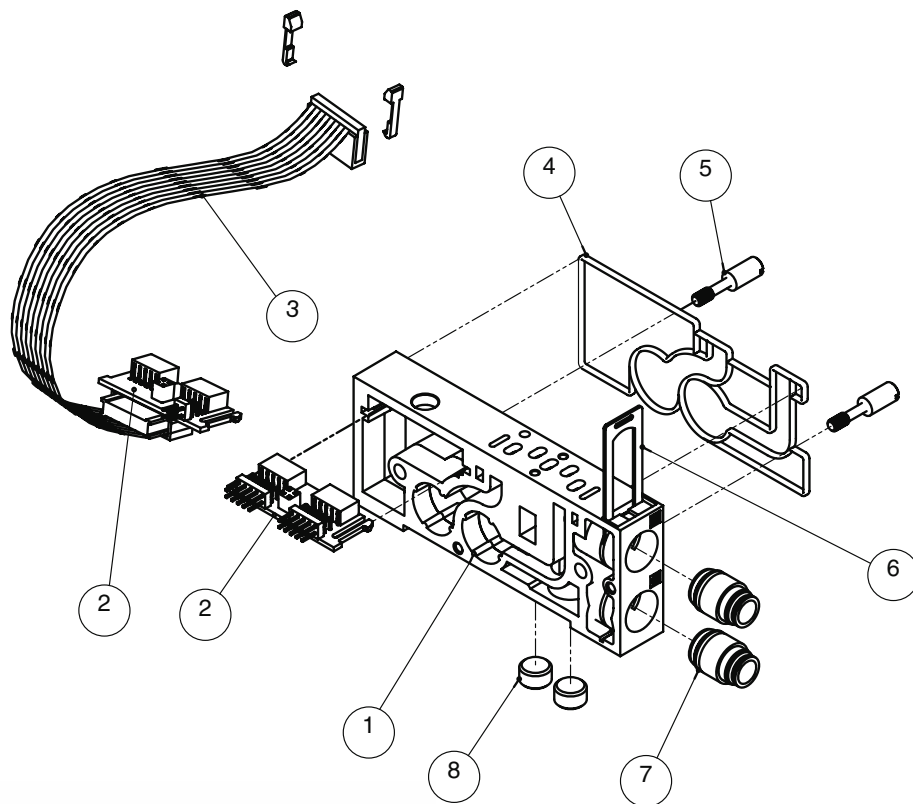
Elbow Kit 239-1217  
 Gauge Extension Kit 239-1790  
 Gauge Adapter Kit 239-1561

#### Parts List

Det. No.	No. Req'd.	Part Name	Part No.
1	1*	Elbow	134-505
2	1*	Pin	131-236
3	1*	Extender	134-536
4	1*	Regulator	See p. 6
5	1	Single Riser Block	Not sold separately
5	1	Double Riser Block	Not sold separately
6	2	Stud with 2mm Internal Hex	125-991
7	4**	Screw	127-957
8	4**	Lockwasher	128-352
9	2	O-Ring	126-187
10	1	Plug Assembly	230-1006
11	1	O-Ring	126-144
12	1	O-Ring	126-419
13	1	Screw	127-318
14	1	Gasket	113-212
15	1*	Gauge 160 PSI max.	214-212
15	1*	Gauge 11 bar max.	214-213
15	1*	Gauge 60 PSI max.	214-217
15	1*	Gauge 4 bar max.	214-218
16	1*	O-Ring	126-105

\* (2) Required for RD  
 \*\* (8) Required for RD

Manifold Assembly Kits



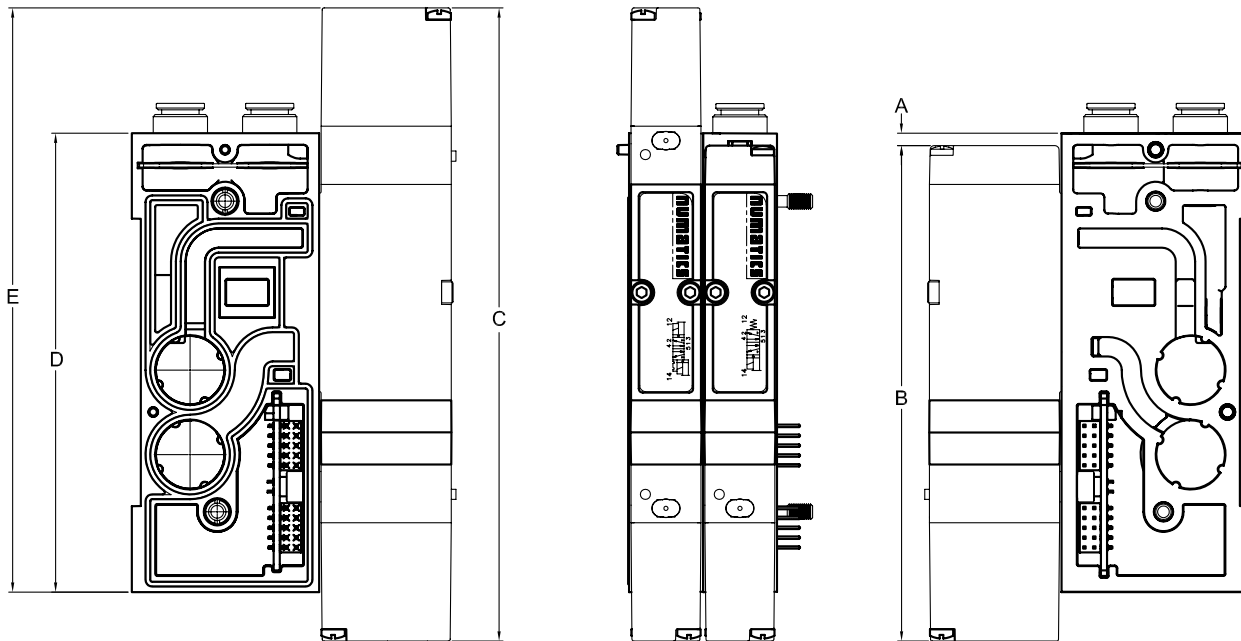
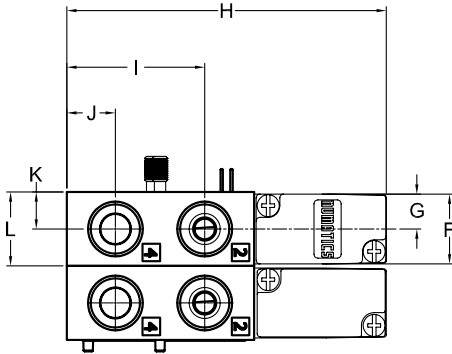
Component List

Det. No.	No. Req'd.	Part Name	Part No.
1	1	Manifold Block	<i>Not sold separately</i>
2	1	"Z-Board" <sup>™</sup>	<i>Not sold separately</i>
3	1	Ribbon Cable Assembly	230-1053
4	1	Gasket Manifold	113-571
5	2	Stud	125-1011
6	1	Retaining Clip	125-1013
7	2	Push-in Fittings	<i>See online PDF Push-in Fitting section</i>
8	2	Pipe Plug 1/8 NPTF	129-100
8	2	Pipe Plug G 1/8	129-160

Manifold Assembly Kits - 18 mm					
Side Port	1/8 NPTF	ISO228-G 1/8	1/4 Push-in	6 mm Push-in	5/16 (8 mm) Push-in
Bottom Prot	1/8 NPTF	ISO228-G 1/8	1/8 NPTF	ISO228-G 1/8	ISO228-G 1/8
Single "Z-Board" <sup>™</sup>	206-1719	206-1717	206-1723	206-1725	206-1721
Double "Z-Board" <sup>™</sup>	206-1720	206-1718	206-1724	206-1726	206-1722
Single "Z-Board" <sup>™</sup> w/Ribbon Cable	206-1729	206-1727	206-1733	206-1735	206-1731
Double "Z-Board" <sup>™</sup> w/Ribbon Cable	206-1730	206-1728	206-1734	206-1736	206-1732
Passive	206-1738	206-1737	206-1740	206-1741	206-1739

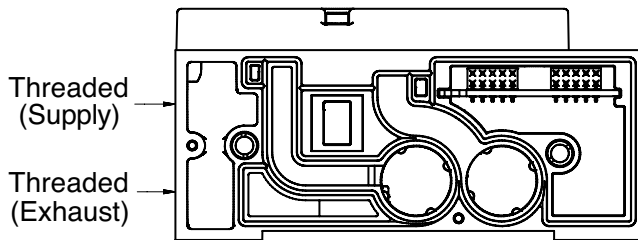
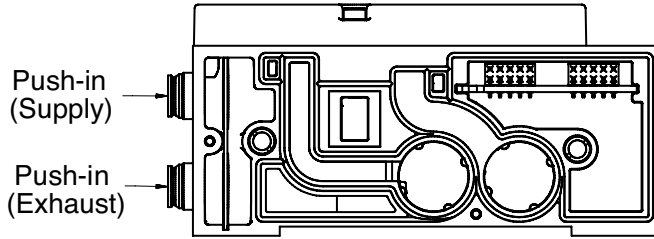
#### Dimensions: Inches (mm)

#### Valve on Manifold Block — 18 mm



A	B	C	D	E	F	G	H	I	J	K	L
0.13 (3.2)	5.02 (127.6)	6.42 (163.1)	4.65 (118.0)	5.93 (150.5)	0.71 (18.0)	0.35 (9.0)	3.24 (82.3)	1.40 (35.5)	0.49 (12.5)	0.37 (9.5)	0.75 (19.1)

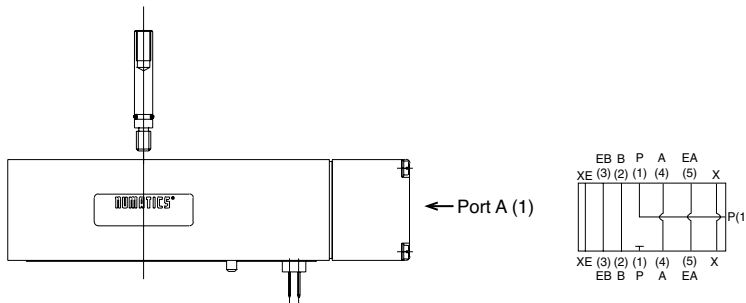
### Mid-Station Supply and Exhaust Block



### Mid-Station Supply & Exhaust Block Kits

	Part No.
1/4 Push-in	245-130
6mm Push-in	245-161
8mm Push-in	245-131
NPTF 1/8	245-128
G 1/8	245-129

### Sandwich Pressure Block

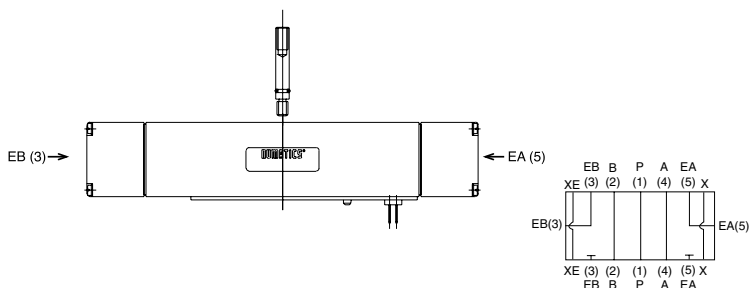


- Used to supply a separate pressure to a single valve station without needing blocking disks

### Sandwich Pressure Block Kit

Port Type	Part No.
NPTF 1/8	245-165
G 1/8	245-164

### Sandwich Exhaust Block

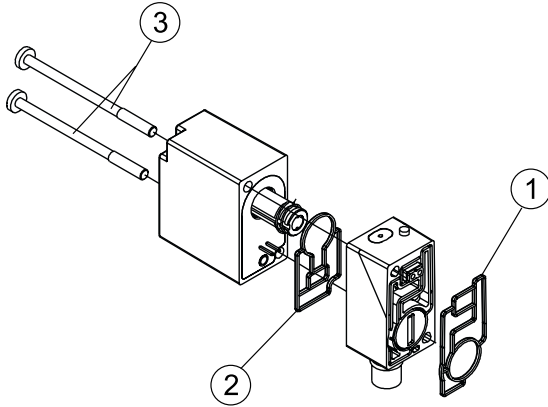


- Used to isolate the exhaust of a single valve station from the manifold.
- Allows faster exhaust response by re-routing.
- Exhaust externally to the manifold.

### Sandwich Exhaust Block Kit

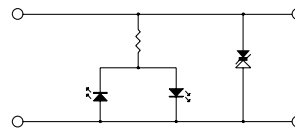
Port Type	Part No.
NPTF 1/8	245-166
G 1/8	245-163

### Solenoid Pilot Assembly

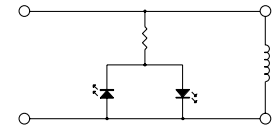


Description	12 VDC	24 VDC	24 VAC	120 VAC
14 end, push non-locking override	236-599	236-600	237-1209	237-1208
12 end, push non-locking override	236-501	236-502	237-1121	237-1118
14 end, turn & lock override	236-597	236-598	237-1207	237-1206
12 end, turn & lock override	236-500	236-503	237-1120	237-1117
14 end, no override	236-595	236-596	237-1205	237-1204
12 end, no override	236-499	236-504	237-1119	237-1116

Port Type	Part No.	Part Name	Part No.
1	1	Gasket	113-573
2	1	Gasket	113-572
3	2	Screw ('12' End)	127-658
3	2	Screw ('14' End)	127-1024



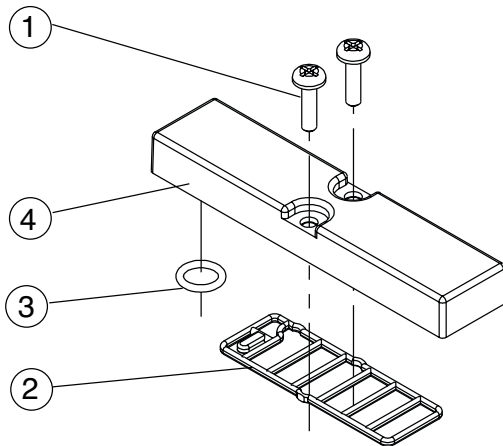
DC Solenoid  
Circuit Diagram



AC Solenoid  
Circuit Diagram

### Blank Station Plate Kit

245-123

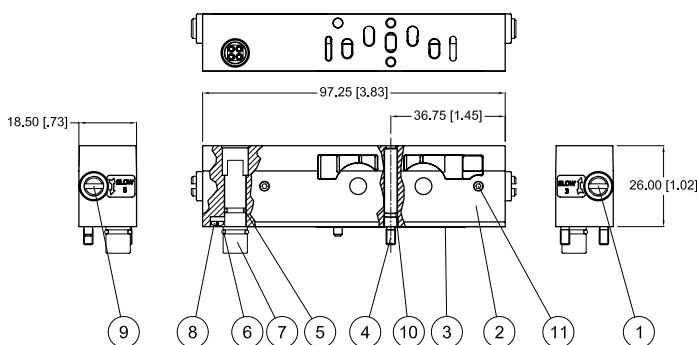


#### Parts List

Det. No.	No. Req'd.	Part Name	Part No.
1	2	Screw	127-570
2	1	Gasket	113-661
3	1	O-Ring	126-191
4	1	Blank Station Plate	104-844

### Speed Control Kit

245-122



Det. No.	No. Req'd.	Part Name	Part No.
1	1	Metering Screw	118-184
Not Shown	2	Nylon Rod	125-131
2	1	Speed Control Body	119-802
3	1	Gasket	113-661
4	2	Stud	125-1180
5	1	O-Ring	126-419
6	1	O-Ring	126-144
7	1	Plug Assembly	230-1006
8	1	Screw	127-318
9	1	Metering Screw	118-205
10	2	O-Ring	126-345
11	2	Set Screw	127-686

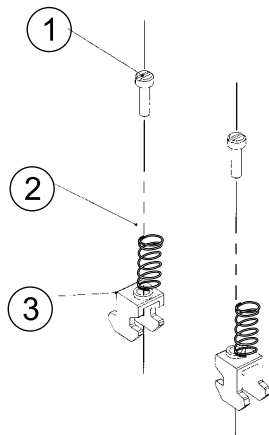
Interchangeable Push-in Cartridge Fittings



Ports	Size	Type	Part No.
1, 3, 5	10mm	Push-in	134-509
1, 3, 5	3/8"	Push-in	134-508
X, XE	1/4"	Push-in	134-518
X, XE	6mm	Push-in	134-499
2, 4	6mm	Push-in	134-534
2, 4	1/4"	Push-in	134-502
2, 4	5/16 (8mm)	Push-in	134-501
1, 3, 5	N/A	Plug Assy.	239-1190
X, XE	N/A	Plug Assy.	239-1086
2, 4	N/A	Plug Assy.	239-1085

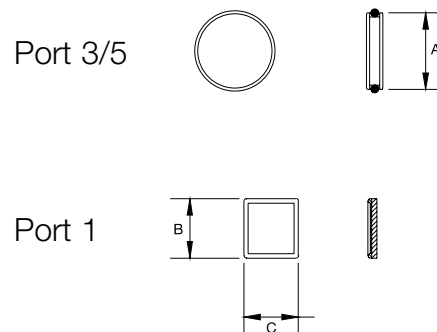
DIN Rail Clamp Kit

239-980



Det. No.	No. Req'd	Part Name	Part No.
1	4	Screw	127-472
2	4	Spring	115-355
3	4	Clamp	125-720

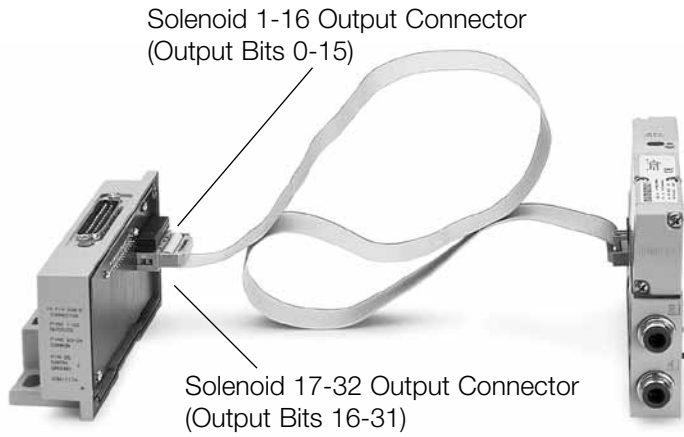
Blocking Discs



Port	Port No.	A	B	C
1	124-341	N/A	0.54 (13.7)	0.50 (12.6)
3/5	239-907	0.70 (17.8)	N/A	N/A

### Ribbon Cable Assembly Kit

239-1840



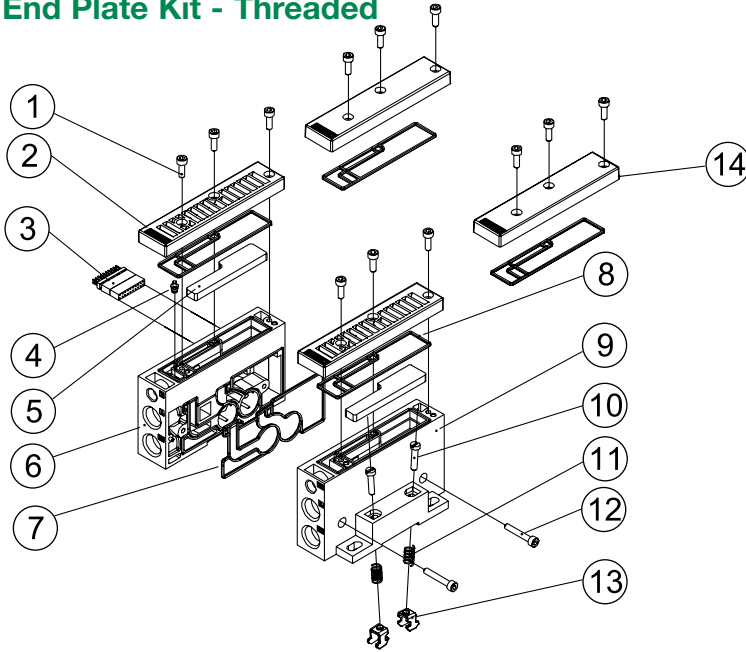
No. Req'd	Part Name	Part No.
1	Ribbon Cable Assembly	230-1053
2	Snap In Latch	140-721

Ribbon cable option used for manifold assemblies that exceed 16 solenoids.



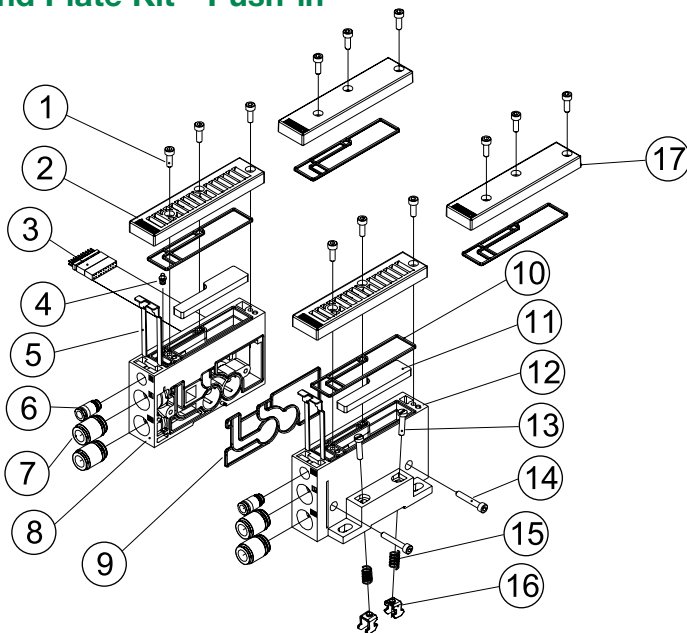
Label on manifold block indicates installed-  
“Z-Board”™ type.

End Plate Kit - Threaded



Det. No.	No. Req'd	Part Name	Part No.
1	6	Cover Screw	127-368
2	2	Vented Cover	105-435
3	1	Transfer Conn.	256-698
4	1	Pilot Plug Ass'y	213-497
5	2	Muffler	125-1012
6	1	LH Endplate	104-849
7	1	Gasket	113-571
8	2	Cover Gasket	113-570
9	1	RH Endplate	104-761
10	2	Screw (DIN Rail Only)	127-472
11	2	Spring (DIN Rail Only)	115-355
12	2	Screw	127-400
13	2	Clamp (DIN Rail Only)	125-720
14	2	Cover	105-436

End Plate Kit - Push-in

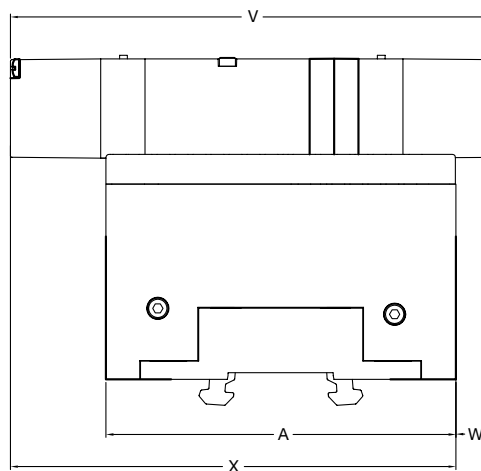
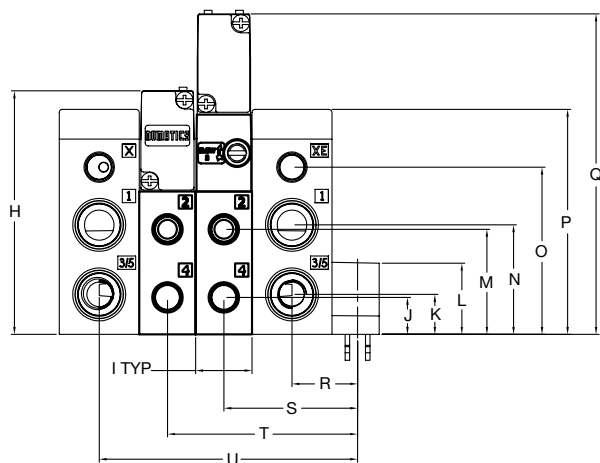
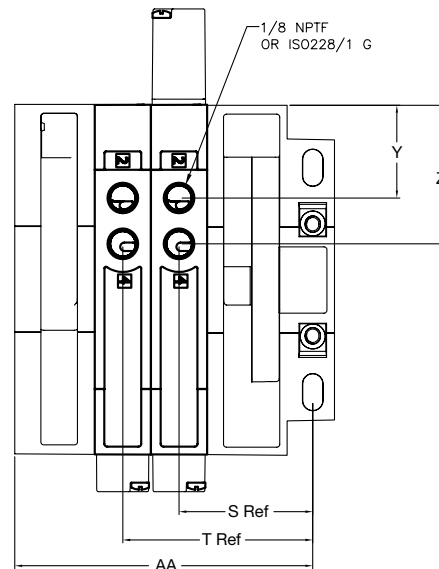
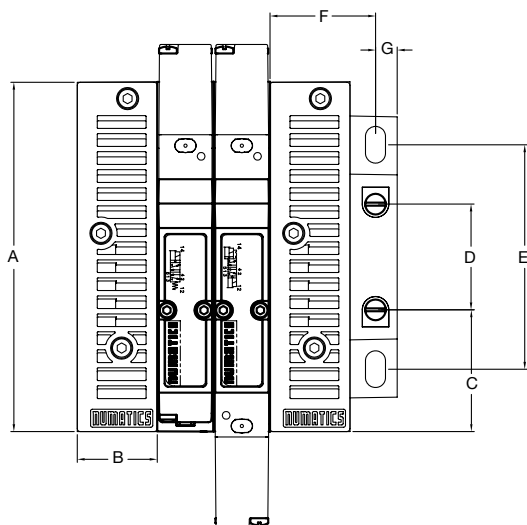


Det. No.	No. Req'd	Part Name	Part No.
1	6	Cover Screw	127-368
2	2	Vented Cover	105-435
3	1	Transfer Conn.	256-968
4	1	Pilot Plug Ass'y	213-497
5	2	Retaining Clip	125-1014
6	2	Pilot Push-in Fitting	See p. 12
7	4	Supply/Exhaust Push-in Fitting	See p. 12
8	1	LH Endplate	104-851
9	1	Gasket	113-571
10	2	Cover Gasket	113-570
11	2	Muffler	125-1012
12	1	RH Endplate	104-762
13	2	Screw (DIN Rail Only)	127-472
14	2	Screw	127-400
15	2	Spring (DIN Rail Only)	115-355
16	2	Clamp (DIN Rail Only)	125-720
17	2	Cover	105-436

Port Type	NPTF			ISO228/1-G			Push-In			Push-In		
	Port	3/5	X, XE	1	3/5	X, XE	1	3/5	X, XE	1	3/5	X, XE
Port Size	3/8	3/8	1/8	3/8	3/8	1/8	3/8	3/8	1/4	10mm	10mm	6mm
Kit w/o muffler, w/o DIN Rail	242-124			242-128			242-132			242-136		
Kit w/o muffler, w/ DIN Rail	242-123			242-127			242-131			242-135		
Kit w/ muffler, w/o DIN Rail	242-122			242-126			242-130			242-134		
Kit w/ muffler, w/ DIN Rail	242-121			242-125			242-129			242-133		



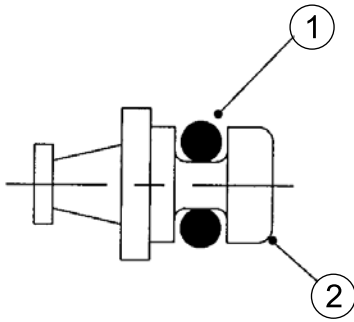
### Manifold Assembly – 18 mm



A	B	C	D	E	F	G	H	I	J	K	L	M	N
4.65 (118.2)	1.06 (27.0)	1.57 (40.0)	1.40 (35.7)	2.98 (75.8)	1.34 (34.1)	0.35 (8.8)	3.24 (82.3)	0.75 (19.5)	0.49 (12.5)	0.53 (13.5)	0.96 (24.4)	1.40 (35.5)	1.46 (37.0)
O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
2.22 (56.5)	2.99 (76.0)	4.26 (108.3)	0.81 (20.6)	1.72 (43.6)	2.47 (62.7)	3.38 (85.8)	6.42 (163.1)	0.50 (12.6)	5.93 (150.5)	1.24 (31.5)	1.85 (47.0)	3.91 (99.2)	

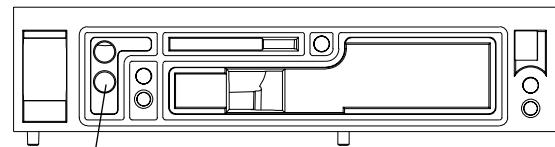
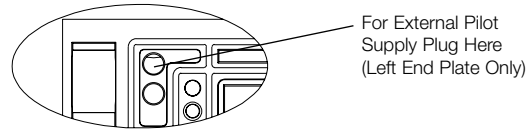
Internal Pilot Plug

213-497



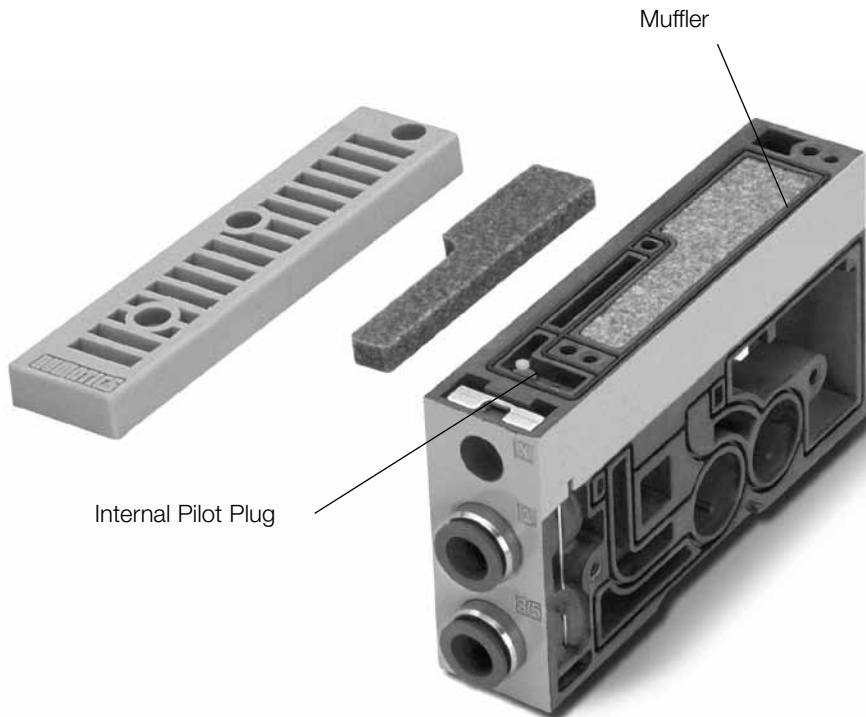
Det. No.	No. Req'd	Part Name	Part No.
1	1	O-Ring	126-412
2	1	Plug	125-820

Internal/External Pilot Selection



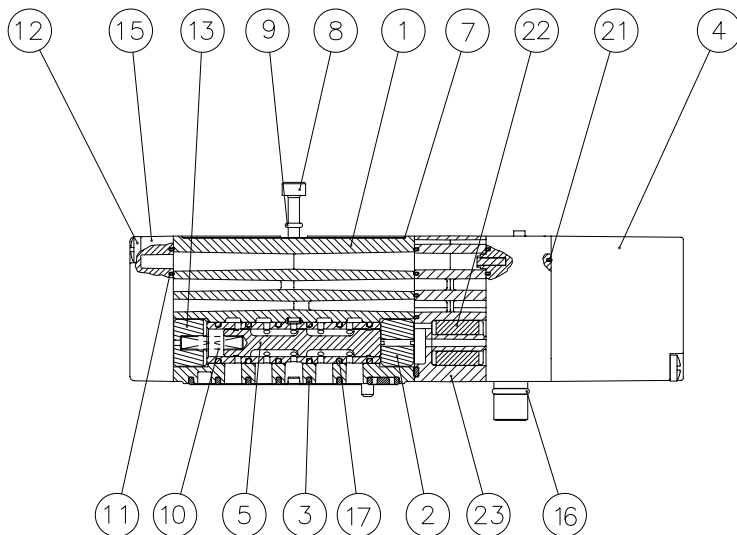
Internal Muffler

125-1012



### Valve Service Kits and Parts

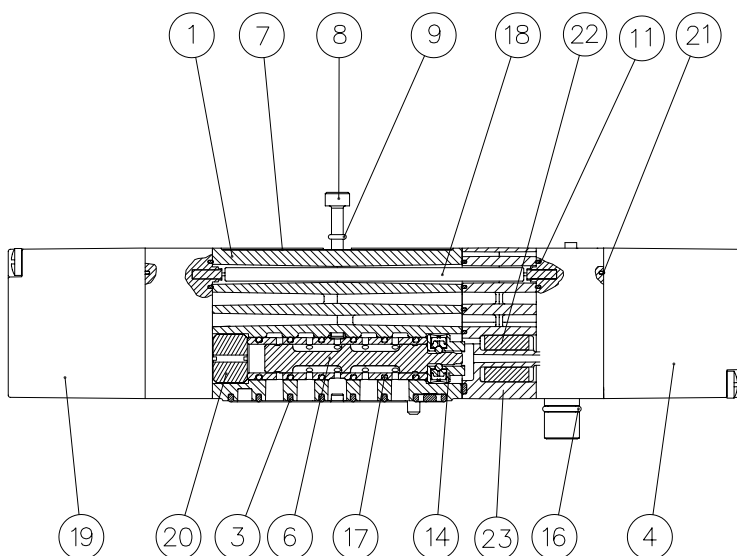
Kit No. I51-K1  
(For Models I51BA4, I52BA4)



Det. No.	BA4	BB4	Part Name	Part No.
1	1	1	Body (not sold separately)	
2*	1	N/A	Detent Spacer	116-516
3*	1	1	Gasket Body/Manifold	113-574
4	1	1	Solenoid Pilot - 14 End	See p. 11
5	1	N/A	Spool & Sleeve Assembly	209-512
6	N/A	1	Spool & Sleeve Assembly	209-634
7	1	1	Nameplate	122-1121
8	2	2	Screw	127-1027
9*	2	2	O-Ring	126-345
10*	1	N/A	Spring	115-273
11*	3	3	Gasket Adaptor/Body	113-573
12	2	N/A	Screw	127-650
13*	1	N/A	Spring Retainer	116-517
14*	N/A	1	Detent Assembly	218-157
15	1	N/A	Spring Cover	104-768
16*	1	1	O-Ring	126-144
17*	6	6	O-Ring	126-133
18	N/A	1	14 to 12 Conn.	230-1139
19	N/A	1	Solenoid Pilot - 12 End	See p. 11
20*	N/A	1	Spacer	116-516
21	1	2	Gasket Adapter	113-572
22	1	1	Spacer	116-553
23	1	1	Pilot Adapter Spacer	119-798

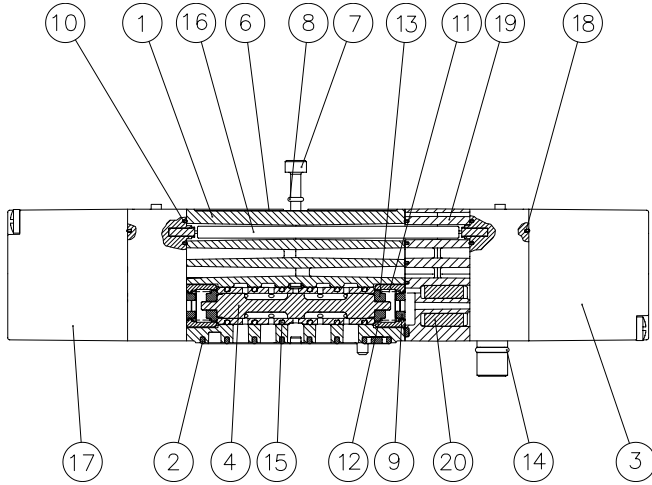
\*Indicates parts included in service kit.

Kit No. I51-K2  
(For Models I51BB4, I52BB4)



Valve Service Kits and Parts

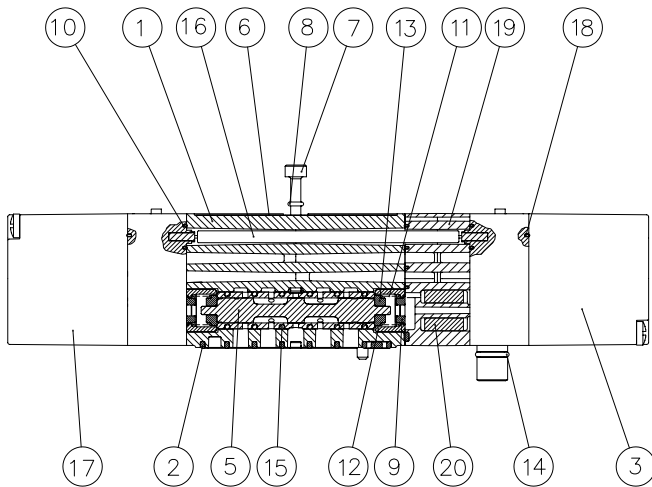
Kit No. I51-K3  
(For Models I51BB5, I52BB5)



Det. No.	BB5	BB6	Part Name	Part No.
1*	1	1	Body (not sold separately)	
2	1	1	Gasket Body/Manifold	113-574
3	1	1	Solenoid Pilot - 14 End	See p. 11
4	1	N/A	Spool & Sleeve Assembly	209-514
5	N/A	1	Spool & Sleeve Assembly	209-515
6	1	1	Nameplate	122-1121
7	2	2	Screw	127-1027
8*	2	2	O-Ring	126-345
9*	2	2	Bumper	114-204
10*	3	3	Gasket Adaptor/Body	113-573
11*	2	2	Spring	115-266
12*	2	2	Spacer	116-519
13*	2	2	Spring Retainer	116-386
14*	1	1	O-Ring	126-144
15*	6	6	O-Ring	126-133
16	1	1	14 to 12 Conn.	230-1139
17	1	1	Solenoid Pilot - 12 End	See p. 11
18	2	2	Gasket Adapter	113-572
19	1	1	Pilot Adapter Spacer	119-798
20	1	1	Spacer	116-553

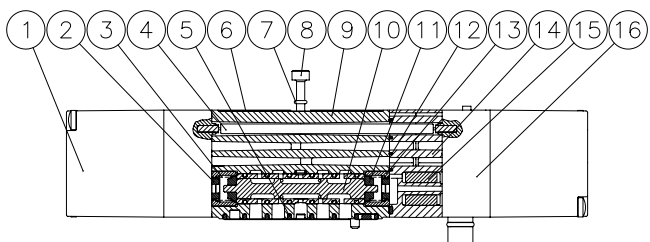
\* Indicates parts included in service kit.

Kit No. I51-K3  
(For Models I51BB6, I52BB6)



### Valve Service Kits and Parts

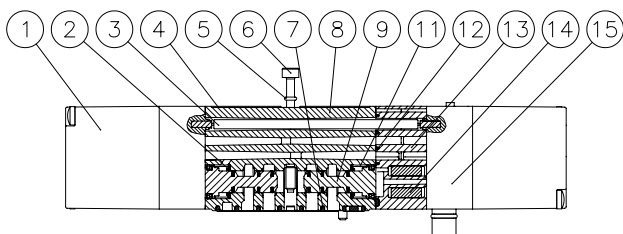
Kit No. I51-K3  
(For Models I51BB7, I52BB7)



Det. No.	No. Req'd	Part Name	Part No.
1	1	Solenoid Pilot - 12 End	See p. 11
2*	2	Bumper	114-204
3*	2	Spring	115-266
4	1	14 to 12 Connector	230-1139
5*	1	Gasket Body / Manifold	113-574
6	1	Nameplate	122-1121
7*	2	O-Ring	126-345
8	2	Screw	127-1027
9	1	Body (not sold separately)	
10	1	Spool & Sleeve Assembly	209-516
11	2	Spring Retainer	116-386
12*	1	Gasket	113-573
13*	2	Spacer	116-519
14	1	Pilot Adapter Spacer	119-798
15*	1	Spacer	116-553
16	1	Solenoid Pilot - 14 End	See p. 11

\* Indicates parts included in service kit.

Kit No. I51-K4  
(For Models I51BBD, I52BBD)

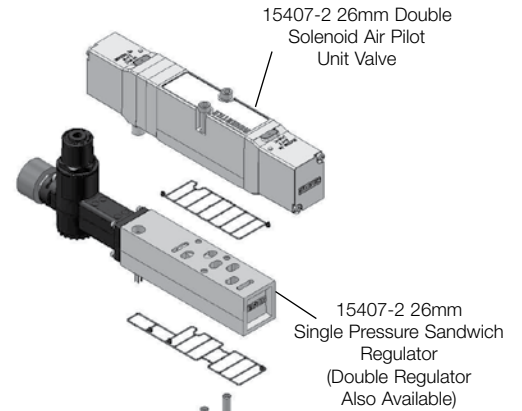
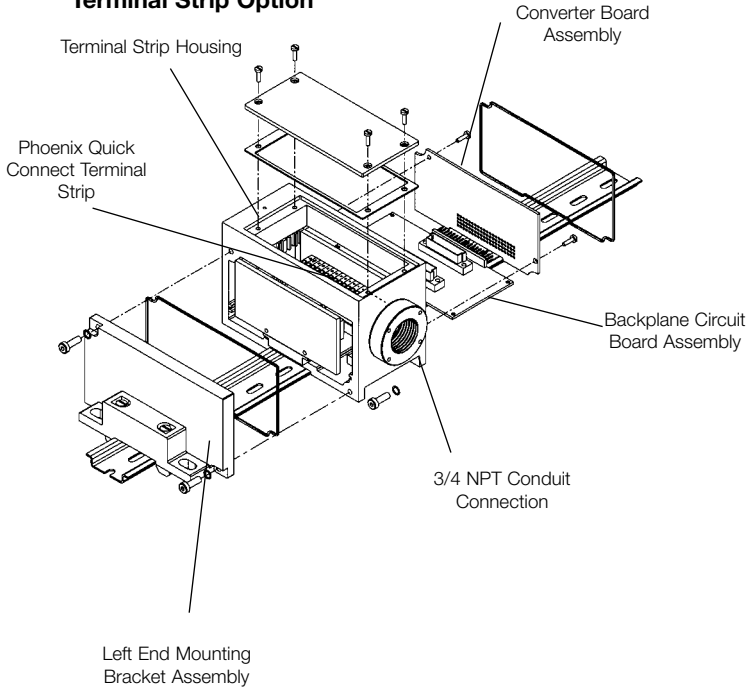


Det. No.	BBD	Part Name	Part No.
1	1	Solenoid Pilot - 12 End	See p. 11
2*	2	Bumper	114-205
3	1	14 to 12 Connector	230-1139
4	1	Nameplate	122-1121
5*	2	O-Ring	126-345
6	2	Screw	127-1027
7*	1	Gasket Body / Manifold	113-574
8	1	Body (not sold separately)	
10	2	Spool Assembly with Seals	221-186
11*	2	Spring	115-395
12*	1	Gasket	113-573
13	1	Pilot Adapter Spacer	119-798
14*	1	Spacer	116-553
15	1	Solenoid Pilot - 14 End	See p. 11

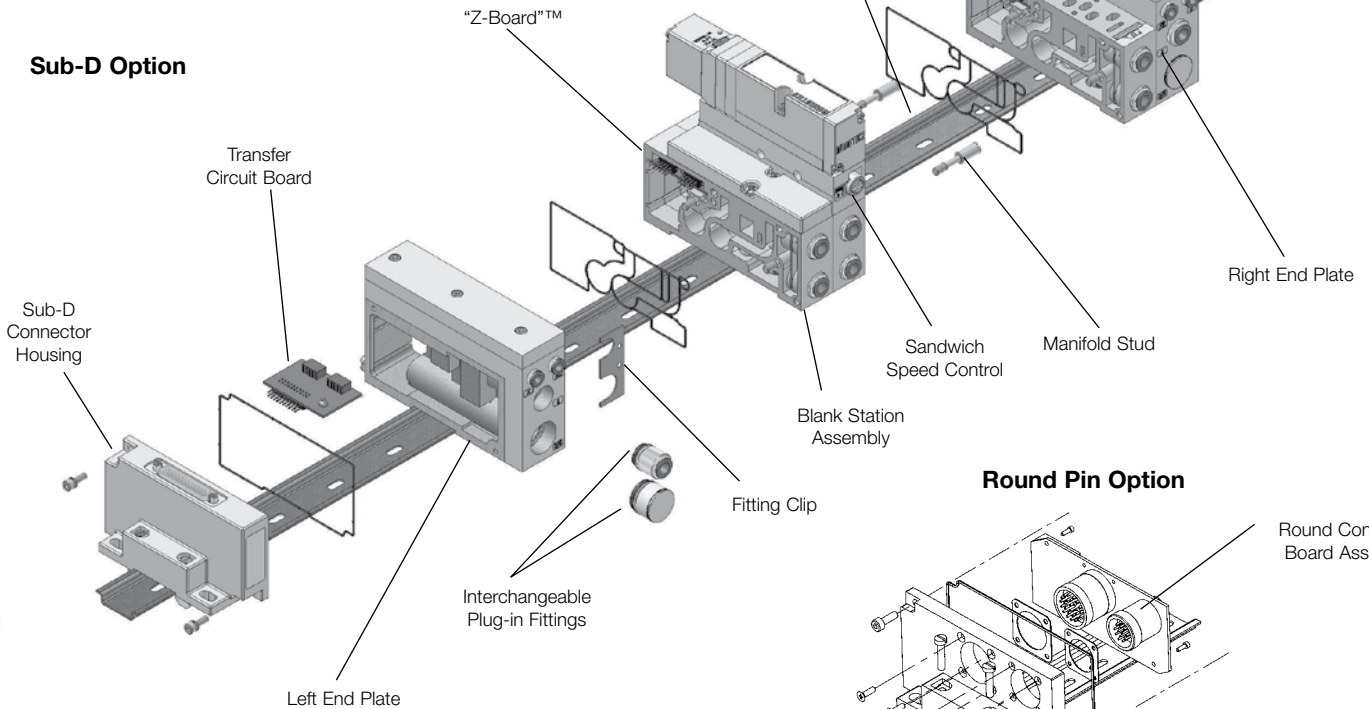
\* Indicates parts included in service kit.

**Terminal Strip, Sub-D, and 26 & 12 Round Pin Options  
(exploded view)**

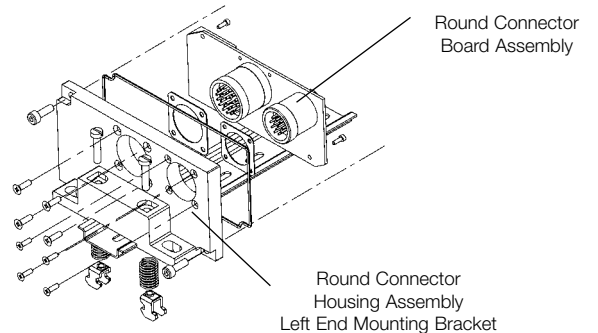
**Terminal Strip Option**



**Sub-D Option**



**Round Pin Option**



5 Ported, 2 and 3 position, 4-way, Spool & Sleeve

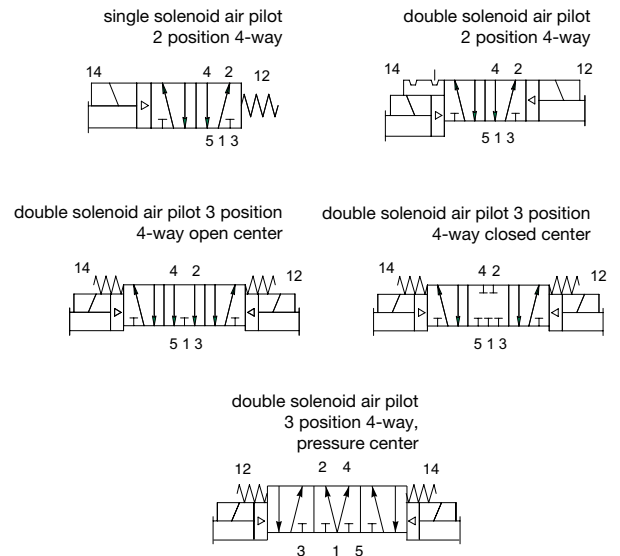
Cv: 1.2

- Solenoid air pilot actuated
- Low wattage plug-in
- DC solenoids polarity insensitive with surge suppression
- Plug together circuit boards eliminate internal wiring
- Integral recessed gaskets
- Interchangeable push-in fittings to accommodate various tube sizes
- Simple conversion from internal to external pilot
- Modular plug-together Fieldbus electronics
- NEMA 4/IP65



### Technical Data: 26mm

Valve Data	English	Metric
Cv	1.2	1.2
Flow Capacity	56 SCFM	1180 NI/m
	Upstream pressure to atmosphere @80 PSIG	@ 6 bar upstream/5 bar downstream
Operating Pressure Range	28" HG vacuum to 150 PSIG	Vacuum to 10 bar
Pilot Pressure Range	26 to 120 PSIG	1.8 to 8.2 Bar
Temperature Range (Ambient)	-10° F to +115° F	-23° C to +46° C



### Operating Data

All Solenoids Are Continuous Duty Rated	24 VDC	110 - 120 VAC 50/60 Hz
Power (Watts)	2.5	4.2
Holding Current (Amps.)	0.10	0.05

Response Time in Seconds	Energize	De-Energize	Energize	De-Energize
2-Position, Single, Spring Return	0.010	0.020	0.010	0.020
2-Position, Double, Detented	0.010	N/A	0.010	N/A
3-Position, Spring Centered	0.010	0.020	0.010	0.020

How to Order 15407-2 26 mm

Valves

**I62 BB 4 Z6 M L 000 61**

**Valve Series and Port Size**

- I62\* = 1/4
- I63 = 3/8
- I6H = 8mm
- I6K = 10mm
- \*Use for valve unit only (Mounting = 00)

**Valve Type**

- BA = Single Solenoid Air Pilot, (Spring Return) w/Flush Non-Locking Override
- BB = Double Solenoid Air Pilot w/Flush Non-Locking Override
- 00 = Blank Station

**Function**

- 4 = 2 Position, 4-Way
- 5 = 3 Position, 4-Way Open Center
- 6 = 3 Position, 4-Way Closed Center
- 7 = 3 Position, 4-Way, Pressure Center
- P = Blank Station Plate

**Mounting**

- 00 = Valve Unit only
- 01 = 00 w/Speed Control
- Z1 = Manifold Block w/Side and Bottom Ports, Single Solenoid Internal Circuit Board
- Z2 = Manifold Block w/Side and Bottom Ports, Double Solenoid Internal Circuit Board
- Z5 = Z1 w/Speed Control
- Z6 = Z2 w/Speed Control
- R1 = Z1 w/Ribbon Cable Connector
- R2 = Z2 w/Ribbon Cable Connector
- R5 = Z5 w/Ribbon Cable Connector
- R6 = Z6 w/Ribbon Cable Connector
- 3A = Individual Base, Side Ports, Individual Exhaust

**Voltage**

- 20 = 24/50-60 VAC
- 30 = 110-120/50-60 VAC
- 60 = 12 VDC
- 61 = 24 VDC
- 00 = Blank Station

**Options**

- 000 = Standard
- 11M = No Override
- 11B = Flush Locking Override
- 56Y = 12 mm Electrical Connector in Conduit Port of Base Mounting Only (See Below)

**Port Type**

- L = Push-in Fitting
- N = NPTF
- G = G tap ISO228/I-G
- 0 = Valve Unit Only

**Wiring Option**

- K = Plug-in AC w/Light
- M = Plug-in DC w/Light
- O = Blank Station

**4 Pin 12mm (Micro) Connector**  
56Y (Mounting)

Regulators

**I62 RS 3 Z1 J L 000 00**

**Valve Series & Port Size**

- I62\* = 1/4
- I63 = 3/8
- I6H = 8mm
- I6K = 10mm
- \*Use for regulator unit only (Mounting = 00).

**Regulator Type**

- RS = Single Pressure to Port 1
- RD = Dual Pressure to Ports 3 & 5
- RC = Dual Pressure w/Non-Relieving Checks
- RQ = Dual Pressure w/Relieving Checks
- RE = Dual Pressure to Ports 4 & 2
- RT = 2 Pressure Selector

**Pressure Range**

- 1 = 10-130 PSIG (0.7-9 bar)
- 3 = 3-30 PSIG (0.2-2 bar)
- 4 = 5-60 PSIG (0.5 - 4 bar)

**Mounting**

- 00 = Regulator Unit only
- Z0 = Manifold Block w/Side and Bottom Ports, Transfer Board w/ISO 15407-2 Interface, Used w/RE Regulators
- Z1 = Manifold Block w/Side and Bottom Ports, Single Solenoid Internal Circuit Board
- Z2 = Manifold Block w/Side and Bottom Ports, Double Solenoid Internal Circuit Board
- Z5 = Z1 w/Speed Control
- Z6 = Z2 w/Speed Control
- R1 = Z1 w/Ribbon Cable Connector
- R2 = Z2 w/Ribbon Cable Connector
- R5 = Z5 w/Ribbon Cable Connector
- R6 = Z6 w/Ribbon Cable Connector

**Options**

- 12H = Less Gauge
- 16N = Jumper on 14 End
- 16P = Jumper on 12 End
- 16W = Top Facing Gauge

**Port Type**

- L = Push-in
- N = NPTF
- G = G Tap ISO228/1-G
- 0 = Regulator Unit Only

**Wiring Option**

- J = Plug-in Receptacle Ass'y
- O = Non-Plug-in (Type RE only)



### Sandwich Pressure Regulators

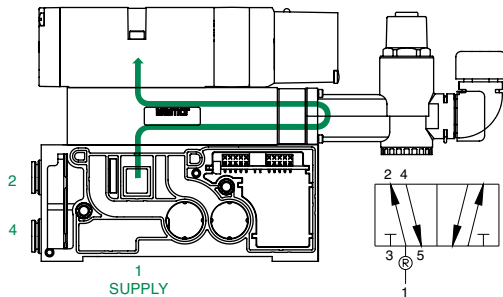
**Types: RS / RD / RC / RQ / RE / RT**

When ordering a valve plus regulator mounted on a base or manifold, list the valve unit only model number and include the mounting requirements with the regulator.

Specify "Assembled."

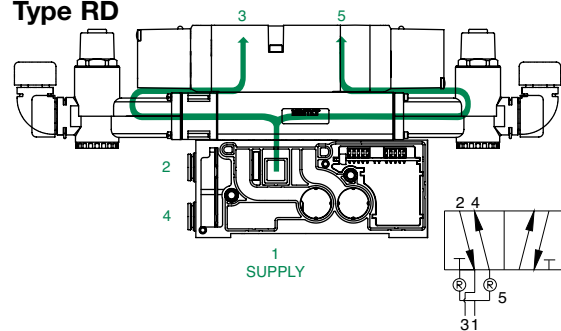
Example orders:	Type RS	Type RD
Valve unit only:	I62BA400M000061	I62BB500M000061
Regulator	I62RS1Z1JN00000	I62RD1Z2JN00000
+mounting	ASSEMBLED	ASSEMBLED

#### Type RS



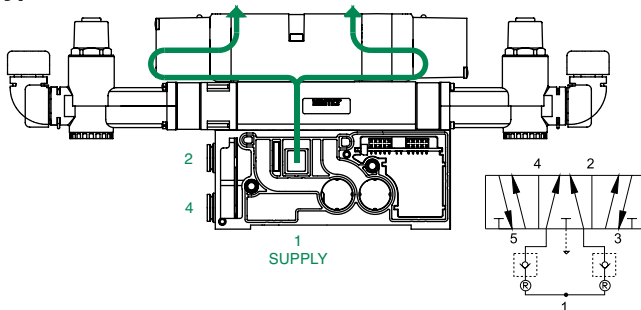
Single pressure from a single supply.

#### Type RD



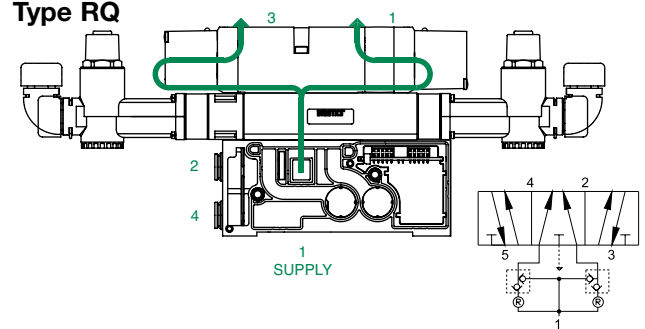
Dual pressure from a single supply.

#### Type RC



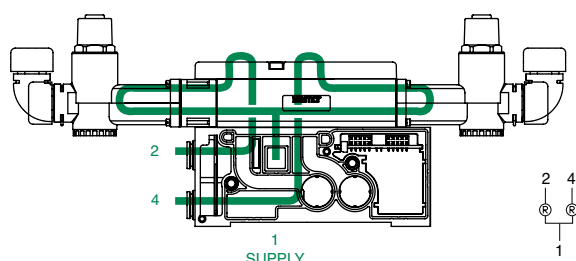
Type RC is Non-Relieving:  
traps downstream pressure if upstream pressure is exhausted.

#### Type RQ



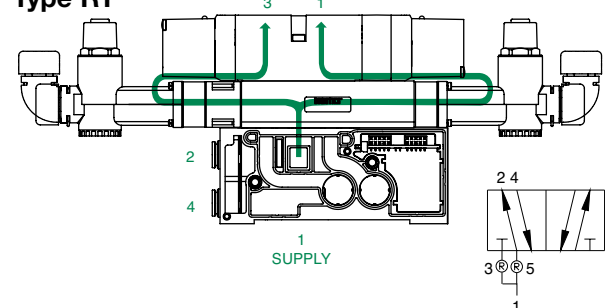
Type RQ is Relieving:  
exhausts pressure in cylinder if upstream pressure is exhausted.

#### Type RE



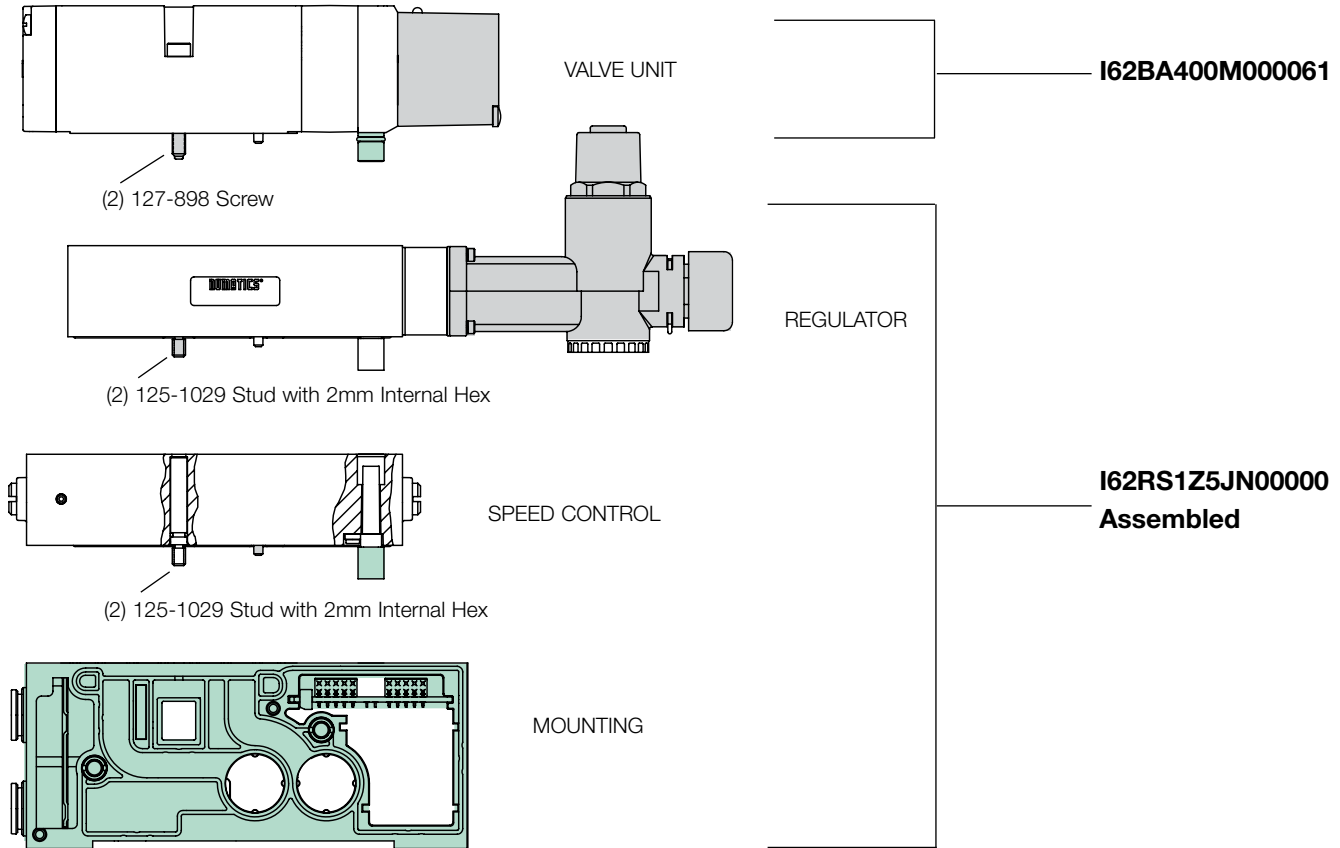
External outlet regulator used with jumper plate for single or dual pressure.

#### Type RT



Two-pressure selector used for multi-pressure applications.

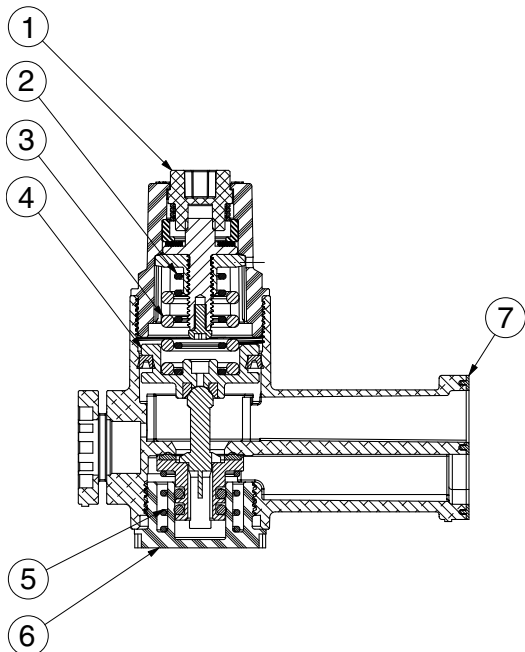
Valve Regulator / Speed Control Plug-in Assembly



Regulator Kits and Service Parts

Regulator Service Kit

239-1393



Regulator Unit Kits

(includes regulator assembly, gaskets, screws)

PSIG	Part No.
3-30 PSIG	239-1909
5-60 PSIG	239-1910
10-130 PSIG	239-1911

Bonnet Springs

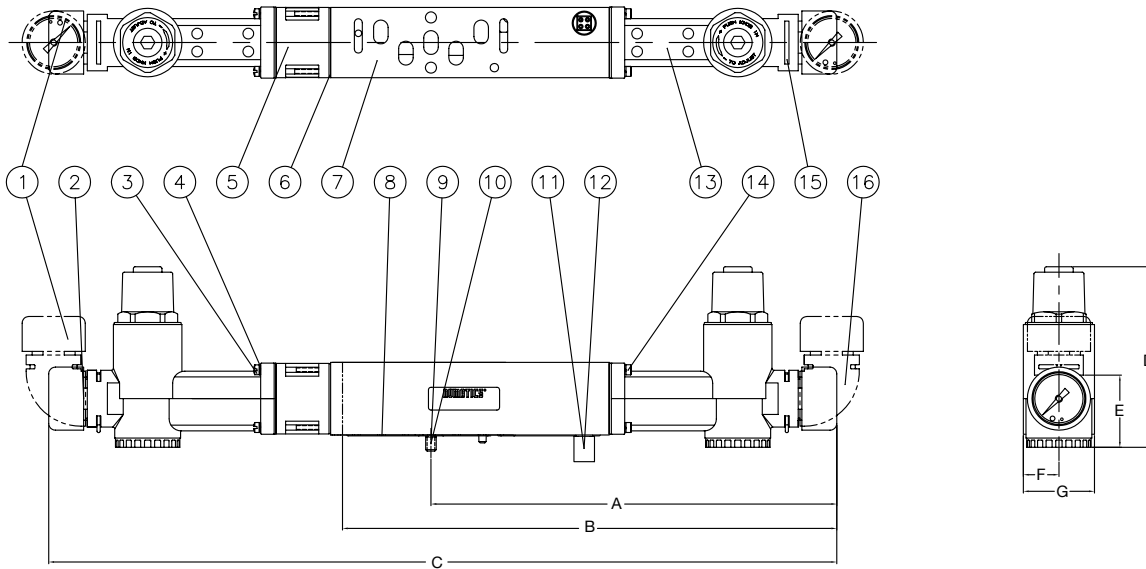
PSIG	Part No.
3-30 PSIG	115-423
5-60 PSIG	115-425
10-130 PSIG*	115-423
	115-424

\* = Both Springs Required

Det. No.	No. Req'd	Part Name
1	1	Bonnet
2	1	Spring
3	1	Spring
4	1	Piston Assembly
5	1	Spring
6	1	Cap
7	1	Gasket

### Dimensions: Inches (mm)

### Sandwich Pressure Regulator



A	B	C	D	E	F	G
6.15 (156.1)	7.60 (193.1)	11.13 (282.8)	2.73 (69.3)	1.20 (30.4)	.52 (13.3)	1.05 (26.6)



Shown with  
"16W" option  
(90° elbow)

### Gauge Kit

160 PSI	11 Bar Max.	60 PSI	4 Bar Max.
214-214	214-215	214-219	214-220

### Elbow Kit

**239-1217**

### Gauge Adaptor Kit 1/8 NPTF

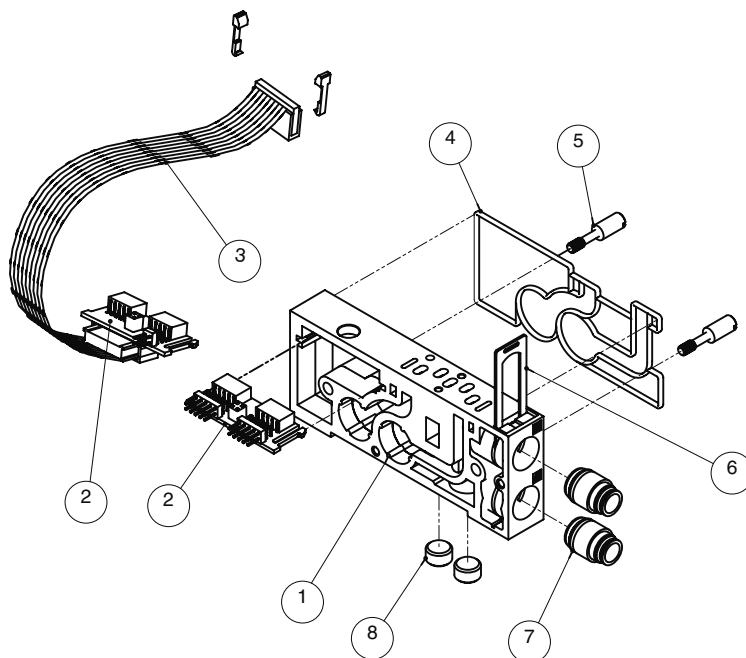
**239-1561**

### Parts List

Det. No.	No. Req'd	Part Name	Part No.
1	2**	Gauge 160 PSI max.	214-212
1	2**	Gauge 11 bar max.	214-213
1	2**	Gauge 60 PSI max.	214-217
1	2**	Gauge 4 bar max.	214-218
2	2**	O-Ring	126-105
3	4*	Screw	127-280
4	8****	Lockwasher	128-172
5	1*	"12" End Adapter	119-796
6	3***	Gasket	113-535
7	1	Single Riser Block	125-1146
7	1	Double Riser Block	125-1169
8	1	Gasket	113-640
9	2	Stud	125-812
10	2	O-Ring	126-528
11	1	J-Plug Assembly	230-904
12	1	Screw	127-318
13	2**	Regulator	See p. 24
14	4	Screw	127-959
15	2**	Pin	131-236
16	2**	Elbow	134-505

\* (0) Required for RS  
 \*\* (1) Required for RS  
 \*\*\* (2) Required for RS  
 \*\*\*\* (4) Required for RS

Manifold Assembly



Component List

Det. No.	No. Req'd.	Part Name	Part No.
1	1	Manifold Block	<i>Not sold separately</i>
2	1	"Z-Board" <sup>™</sup>	<i>Not sold separately</i>
3	1	Ribbon Cable Assembly	230-905
4	1	Gasket	113-537
5	2	Stud	125-813
6	1	Retaining Clip	125-751
7	2	Push-in Fitting	<i>See online PDF Push-in Fitting section</i>
8	2	Pipe Plug 1/4 NPTF	129-101
8	2	Pipe Plug 1/4 G	129-161

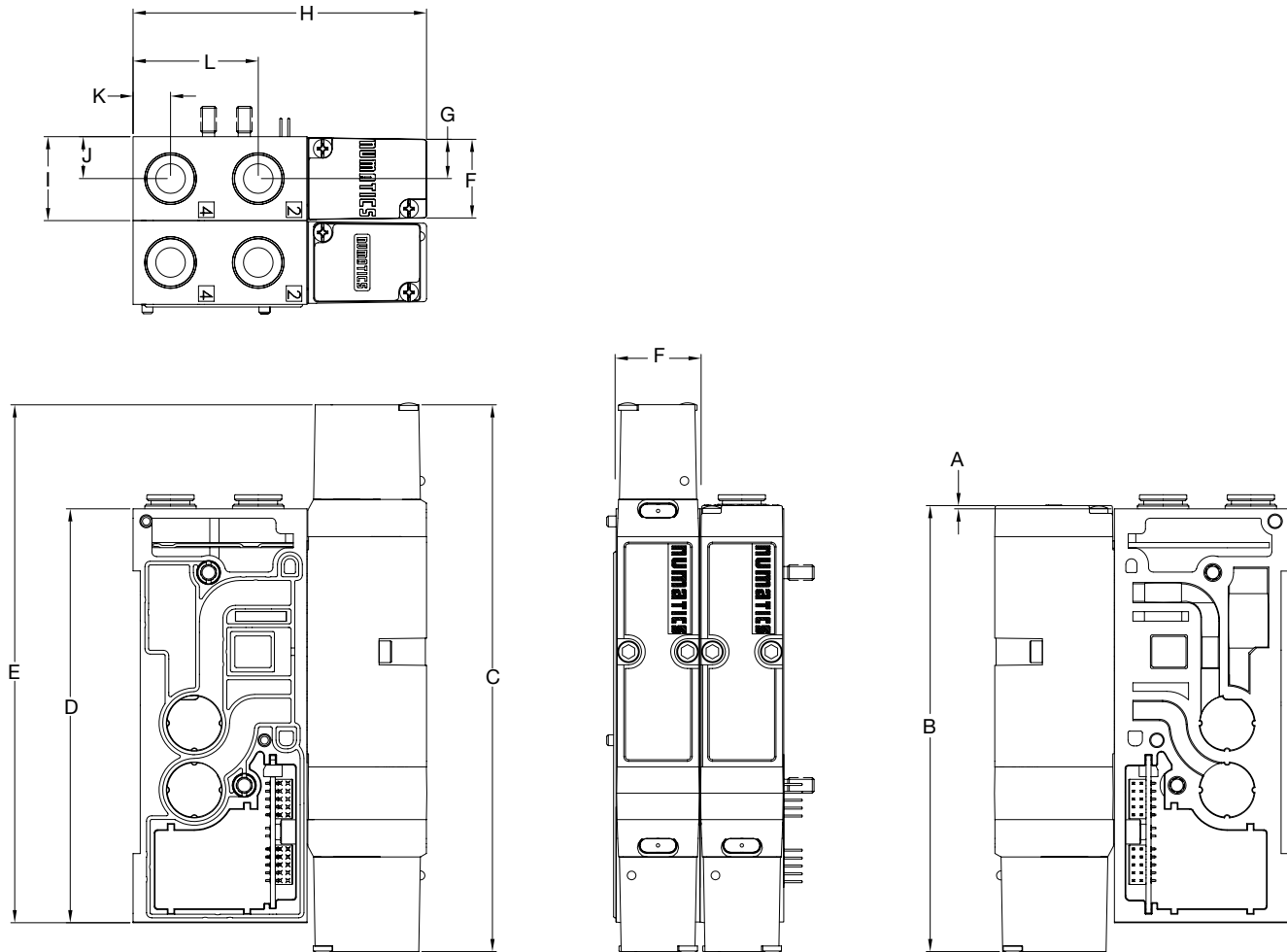


Manifold Assembly Kits - 26 mm					
Side Port	1/4 NPTF	3/8 NPTF	ISO228-G 1/4	ISO228-G 3/8	1/4 Push-in
Bottom Prot	1/4 NPTF	1/4 NPTF	ISO228-G 1/4	ISO228-G 1/4	1/4 NPTF
Single "Z-Board" <sup>™</sup>	206-1665	206-1668	206-1669	206-1672	206-1679
Double "Z-Board" <sup>™</sup>	206-1666	206-1667	206-1670	206-1671	206-1680
Single "Z-Board" <sup>™</sup> w/Ribbon Cable	206-1687	206-1686	206-1683	206-1681	206-1695
Double "Z-Board" <sup>™</sup> w/Ribbon Cable	206-1688	206-1685	206-1684	206-1682	206-1696
Passive	206-1700	206-1699	206-1698	206-1697	206-1704

Manifold Assembly Kits - 26 mm continued			
Side Port	3/8 Push-in	8 mm Push-in	10 mm Push-in
Bottom Prot	1/4 NPTF	ISO228-G 1/4	ISO228-G 1/4
Single "Z-Board" <sup>™</sup>	206-1677	206-1673	206-1675
Double "Z-Board" <sup>™</sup>	206-1678	206-1674	206-1676
Single "Z-Board" <sup>™</sup> w/Ribbon Cable	206-1693	206-1689	206-1691
Double "Z-Board" <sup>™</sup> w/Ribbon Cable	206-1694	206-1690	206-1692
Passive	206-1703	206-1701	206-1702

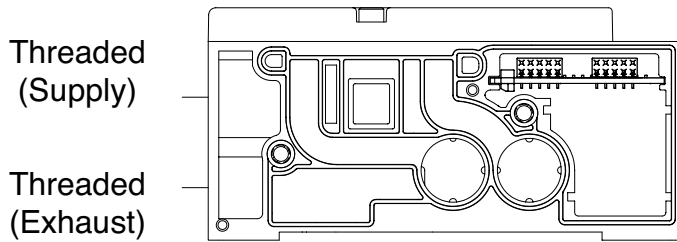
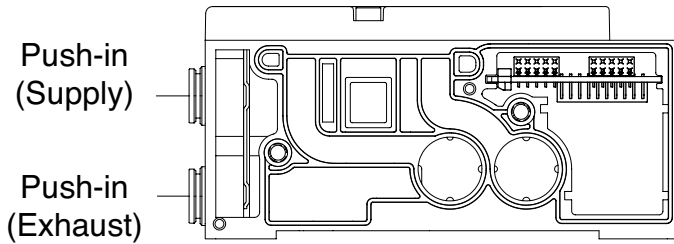
#### Dimensions: Inches (mm)

#### Valve on Manifold Block



A	B	C	D	E	F	G	H	I	J	K	L
0.04 (1.1)	5.65 (143.6)	6.93 (176.1)	5.24 (133.0)	6.56 (166.5)	1.04 (26.3)	0.52 (13.2)	3.72 (94.5)	1.07 (27.1)	0.54 (13.6)	0.48 (12.1)	1.59 (40.3)

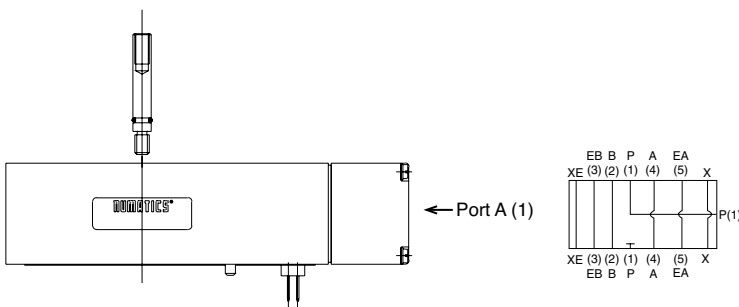
### Mid-Station Supply and Exhaust Block



### Mid-Station Supply & Exhaust Block Kits

	Part No.
NPTF 1/4	245-135
NPTF 3/8	245-134
G 1/4	245-137
G 3/8	245-136
3/8 Push-in	245-138
10mm Push-in	245-139

### Sandwich Pressure Block

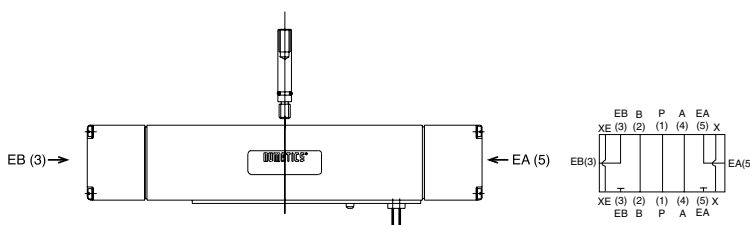


- Used to supply a separate pressure to a single valve station without needing blocking disks.

### Sandwich Pressure Block Kit

Port Type	Part No.
NPTF 1/4	245-141

### Sandwich Exhaust Block

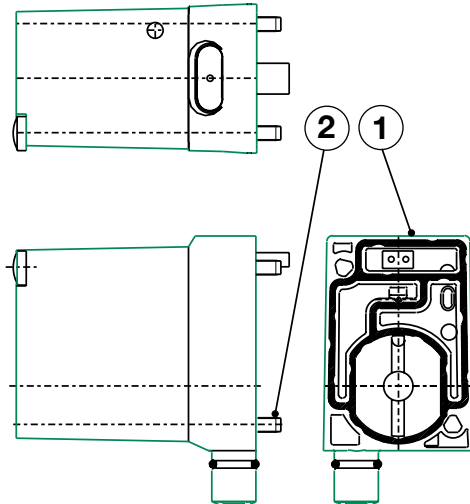


- Used to isolate the exhaust of a single valve station from the manifold.
- Allows faster exhaust response by re-routing.
- Exhaust externally to the manifold.

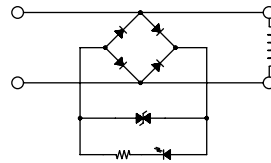
### Sandwich Exhaust Block Kit

Port Type	Part No.
NPTF 1/4	245-140

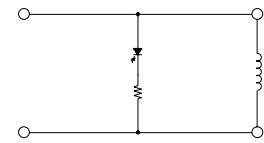
### Solenoid Pilot Assembly



Description	12 VDC	24 VDC	24 VAC	120 VAC
14 end, push non-locking override	236-579	236-576	237-1189	237-1186
12 end, push non-locking override	236-418	236-357	237-1071	237-1080
14 end, turn & lock override	236-580	236-577	237-1190	237-1187
12 end, turn & lock override	236-421	236-360	237-1074	237-1083
14 end, no override	236-581	236-578	237-1191	237-1188
12 end, no override	236-424	236-363	237-1077	237-1086



DC Solenoid  
Circuit Diagram

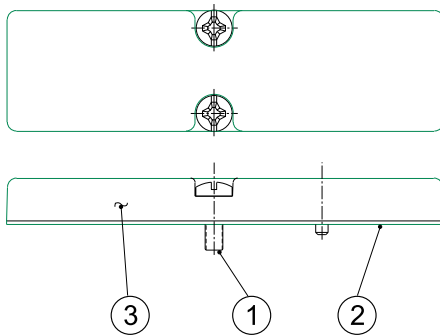


AC Solenoid  
Circuit Diagram

Det. No.	No. Req'd	Part Name	Part No.
1	1	Gasket	113-373
2	2	Screw ('12' End)	127-823
2	2	Screw ('14' End)	127-1024

### Blank Station Plate Kit

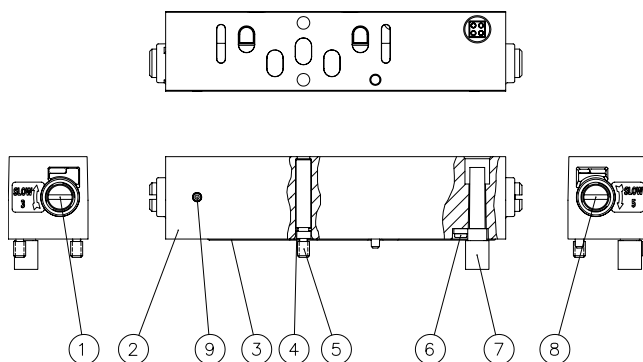
239-2497



Det. No.	No. Req'd.	Part Name	Part No.
1	2	Screw	127-876
2	1	Gasket	113-640
3	1	Blank Station Plate	104-841

### Speed Control Kit

239-2521



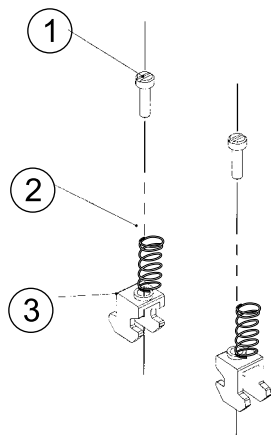
Det. No.	No. Req'd.	Part Name	Part No.
1	1	Metering Screw	118-178
Not Shown	2	Nylon Rod	125-131
2	1	Speed Control Body	119-795
3	1	Gasket	113-640
4	2	O-Ring	126-528
5	2	Stud	125-812
6	1	Screw	127-318
7	1	Plug Assembly	230-904
8	1	Metering Screw	118-204
9	2	Set Screw	127-686

Interchangeable Push-in Cartridge Fittings



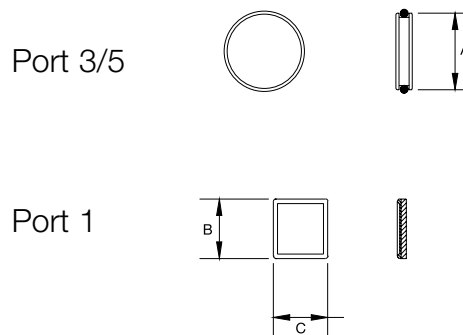
Ports	Size	Type	Part No.
1, 2, 4	1/4"	Push-in	134-506
1, 2, 4	3/8"	Push-in	134-508
1, 2, 4	8mm	Push-in	134-507
1, 2, 4	10mm	Push-in	134-509
1, 2, 4	N/A	Plug Ass'y	239-1190
3/5	3/8"	Push-in	134-510
3/5	1/2"	Push-in	134-512
3/5	12mm	Push-in	134-511
3/5	14mm	Push-in	134-513
3/5	N/A	Plug Ass'y	239-1191
X, XE	4mm	Push-in	134-498
X, XE	6mm	Push-in	134-499
X, XE	1/4"	Push-in	134-518
X, XE	N/A	Plug Ass'y	239-1086

DIN Rail Clamp Kit 239-980



Det. No.	No. Req'd	Part Name	Part No.
1	4	Screw	127-472
2	4	Spring	115-355
3	4	Clamp	125-720

Blocking Discs

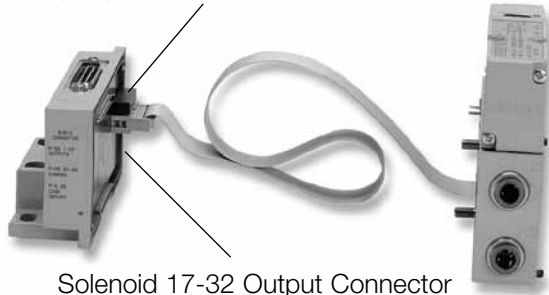


Ports	Part No.	A	B	C
1	124-341	N/A	0.54 (13.7)	0.50 (12.6)
3/5	239-907	0.70 (17.8)	N/A	N/A



### Ribbon Cable Assembly Kit 239-1336

Solenoid 1-16 Output Connector  
(Output Bits 0-15)



Solenoid 17-32 Output Connector  
(Output Bits 16-31)

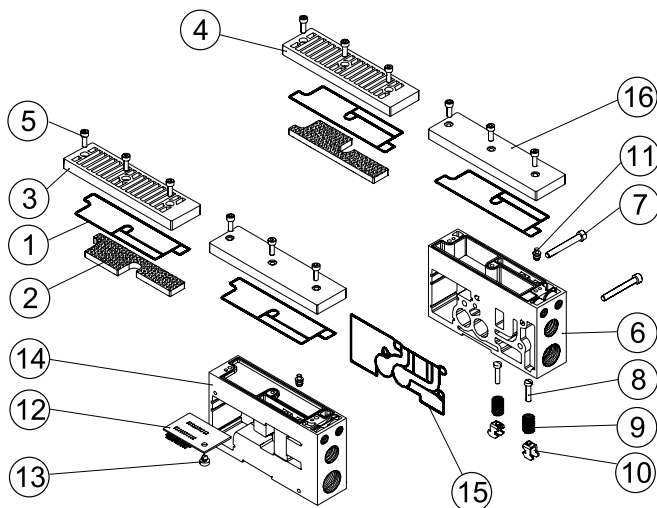
No. Req'd.	Part Name	Part No.
1	Replacement Ribbon Cable Assembly	230-905
2	Replacement Snap In Latch	140-721

Ribbon cable option used for manifold assemblies that exceed 16 solenoid outputs.



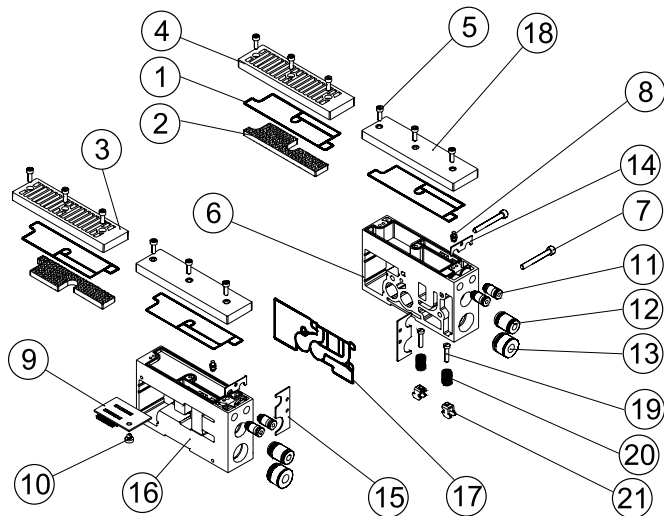
Label on manifold block indicates Installed "Z-Board"™ type.

End Plate Kit - Threaded



Det. No.	No. Req'd	Part Name	Part No.
1	2	Cover Gasket	113-536
2	2	Muffler (Optional)	125-851
3	1	LH Endplate Cover Vented (Optional)	005-193
4	1	RH Endplate Cover Vented (Optional)	005-194
5	6	Screw	127-368
6	1	RH Endplate	104-713
7	2	Screw	127-413
8	2	Screw (DIN Rail Only)	127-472
9	2	Spring (DIN Rail Only)	115-355
10	2	Clamp (DIN Rail Only)	125-720
11	2	Pilot Plug Ass'y	213-497
12	1	Transfer Conn. Board Ass'y	256-938
13	1	Retention Pin	125-845
14	1	LH Endplate	104-710
15	1	Gasket	113-537
16	2	End Plate Cover	105-400

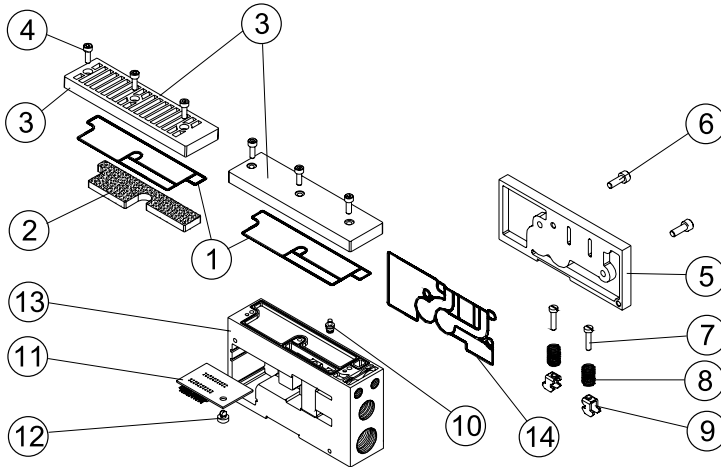
End Plate Kit - Push-in



Det. No.	No. Req'd	Part Name	Part No.
1	2	Cover Gasket	113-536
2	2	Muffler (Optional)	125-851
3	1	LH Endplate Cover Vented (Optional)	005-193
4	1	RH Endplate Cover Vented)	005-194
5	6	Screw	127-368
6	1	RH Endplate	104-712
7	2	Screw	127-413
8	2	Pilot Plug Ass'y	213-497
9	1	Transfer Conn. Board Ass'y	256-938
10	1	Retention Pin	125-845
11	4	Push-in Fittings	See p. 32
12	2	Push-in Fittings	See p. 32
13	2	Push-in Fittings	See p. 32
14	2	Retaining Clip (Small)	125-814
15	2	Retaining Clip (Large)	125-815
16	1	LH Endplate (NPTF)	104-709
17	1	Gasket	113-537
18	2	End Plate Cover	105-400
19	2	Screw (DIN Rail Only)	127-472
20	2	Spring (DIN Rail Only)	115-355
21	2	Clamp (DIN Rail Only)	125-720

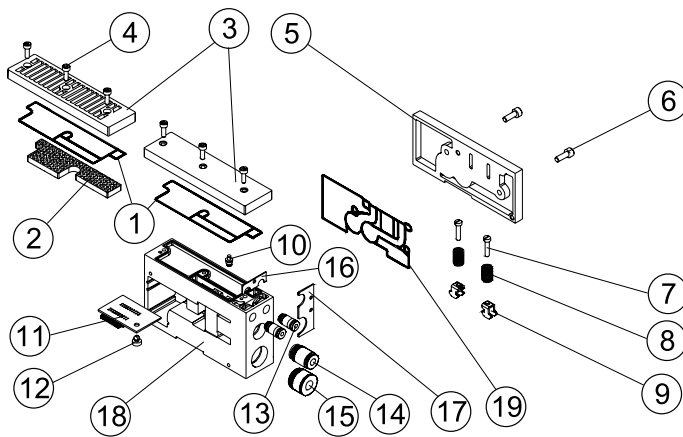
Port Type	NPTF			ISO228/1-G			Push-In			Push-In			Push-In			Push-In				
	Port	3/8	1/2	X, XE	1	3/8	1/2	1/8	1	3/8	1/4	3/8	1/2	1/4	1	3/8	X, XE	1	3/8	X, XE
Port Size	3/8	1/2	1/8	3/8	1/2	1/8	1/4	3/8	1/4	3/8	1/2	1/4	8mm	12mm	6mm	10mm	14mm	6mm		
Kit w/o muffler, w/o DIN Rail	239-2398			239-2402			239-2409			239-2410			239-2417			239-2418				
Kit w/o muffler, w/ DIN Rail	239-2397			239-2401			239-2407			239-2408			239-2415			239-2416				
Kit w/ muffler, w/o DIN Rail	239-2396			239-2400			239-2405			239-2406			239-2413			239-2414				
Kit w/ muffler, w/ DIN Rail	239-2395			239-2399			239-2403			239-2404			239-2411			239-2412				

### End Plate Kit with LH Ports Only - Threaded



Det. No.	No. Req'd	Part Name	Part No.
1	1	Gasket	113-536
2	1	Muffer (Optional)	125-851
3	1	LH Endplate Cover (Muffer Option)	005-193
3	1	LH Endplate Cover	105-400
4	3	Screw	127-368
5	1	RH Portless Endplate	105-423
6	2	Screw	127-407
7	2	Screw (DIN Rail Only)	127-472
8	4	Spring (DIN Rail Only)	115-355
9	4	Clamp (DIN Rail Only)	125-720
10	1	Pilot Plug Ass'y	213-497
11	1	Transfer Conn. Board Ass'y	256-938
12	1	Retention Pin	125-845
13	1	LH Endplate (NPTF)	104-710
13	1	LH Endplate (G)	104-711
14	1	Gasket	113-537

### End Plate Kit with LH Ports Only - Push-in

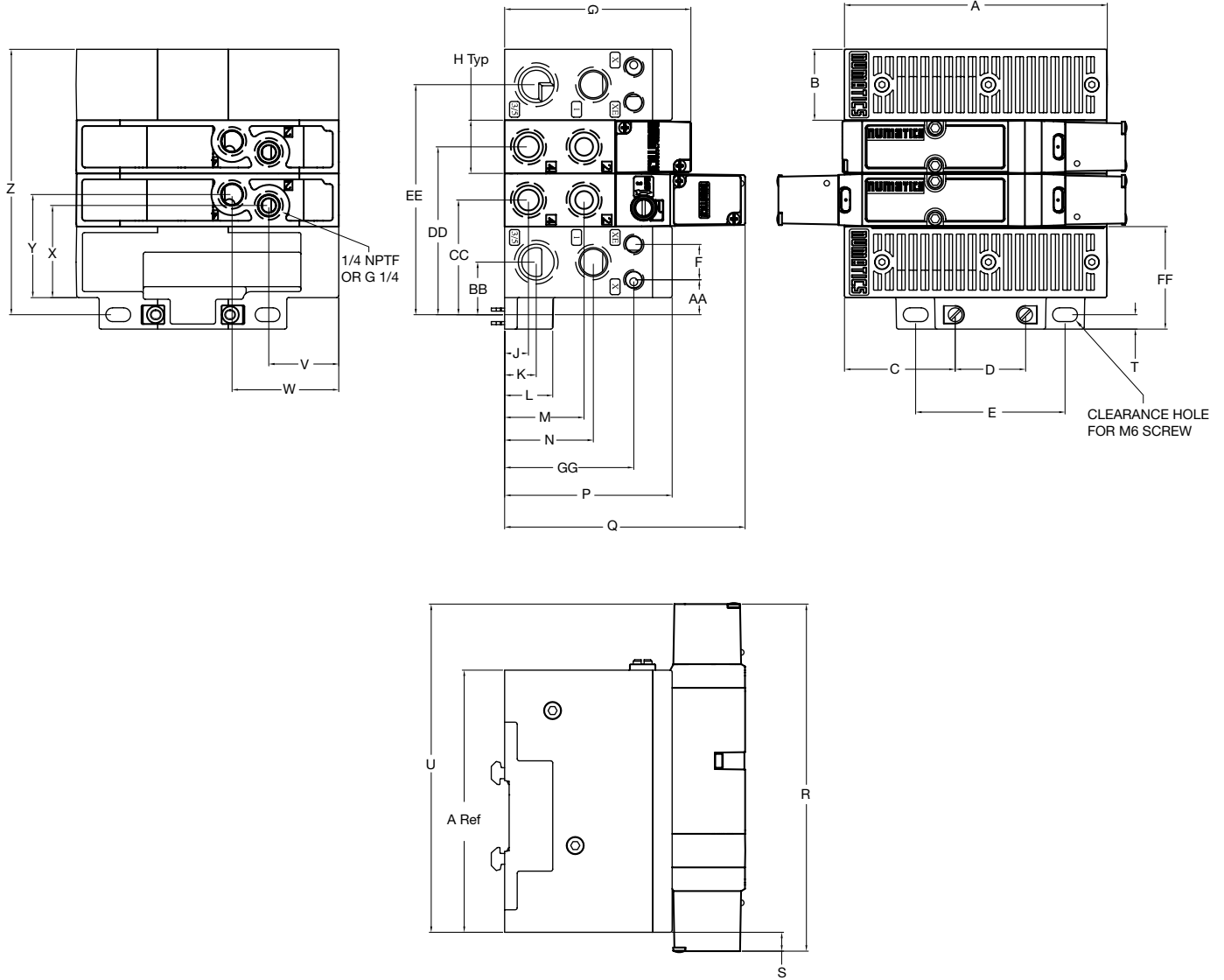


Det. No.	No. Req'd	Part Name	Part No.
1	1	Gasket	113-536
2	1	Muffer (Optional)	125-851
3	1	LH Endplate Cover (Muffer Option)	005-193
3	1	LH Endplate Cover	105-400
4	3	Screw	127-368
5	1	RH Portless Endplate	105-423
6	2	Screw	127-407
7	2	Screw (DIN Rail Only)	127-472
8	4	Spring (DIN Rail Only)	115-355
9	4	Clamp (DIN Rail Only)	125-720
10	1	Pilot Plug Ass'y	213-497
11	1	Transfer Conn. Board Ass'y	256-938
12	1	Retention Pin	125-845
13	2	Push-in Fittings	See p. 32
14	1	Push-in Fittings	See p. 32
15	1	Push-in Fittings	See p. 32
16	1	Retaining Clip (Small)	125-814
17	1	Retaining Clip (Large)	125-815
18	1	LH Endplate (NPTF)	104-709
19	1	Gasket	113-537

Port Type	NPTF			ISO228/1-G			Push-In			Push-In			Push-In			Push-In		
	Port	1	3/5	X, XE	1	3/5	X, XE	1	3/5	X, XE	1	3/5	X, XE	1	3/5	X, XE	1	3/5
Port Size	3/8	1/2	1/8	3/8	1/2	1/8	1/4	3/8	1/4	3/8	1/2	1/4	8mm	12mm	6mm	10mm	14mm	6mm
LH Ports Only Kit w/o muffer, w/o DIN Rail	239-2474			239-2478			239-2485			239-2486			239-2493			239-2394		
LH Ports Only Kit w/o muffer, w/ DIN Rail	239-2473			239-2477			239-2483			239-2484			239-2491			239-2492		
LH Ports Only Kit w/ muffer, w/o DIN Rail	239-2472			239-2476			239-2481			239-2482			239-2489			239-2490		
LH Ports Only Kit w/ muffer, w/ DIN Rail	239-2471			239-2475			239-2479			239-2480			239-2487			239-2488		

Dimensions: Inches (mm)

Manifold Assembly



NOTE:

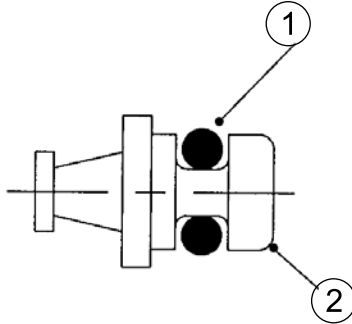
- For Electrical Interface option dimensions see pg.46

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
5.25 (133.3)	1.42 (36.0)	2.16 (55.0)	1.50 (38.1)	2.98 (75.8)	0.71 (18.0)	3.72 (94.5)	1.07 (27.1)	0.47 (12.1)	0.63 (16.0)	0.96 (24.4)	1.59 (40.3)	1.77 (45.0)	3.35 (85.0)	4.80 (122.0)	6.93 (176.1)

S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG
0.37 (9.5)	0.29 (7.3)	6.56 (166.5)	1.40 (35.5)	2.13 (54.2)	1.84 (46.7)	2.06 (52.3)	5.31 (134.8)	0.70 (17.7)	1.05 (26.7)	2.29 (58.2)	3.36 (85.3)	4.60 (116.9)	2.05 (52.0)	2.58 (65.5)

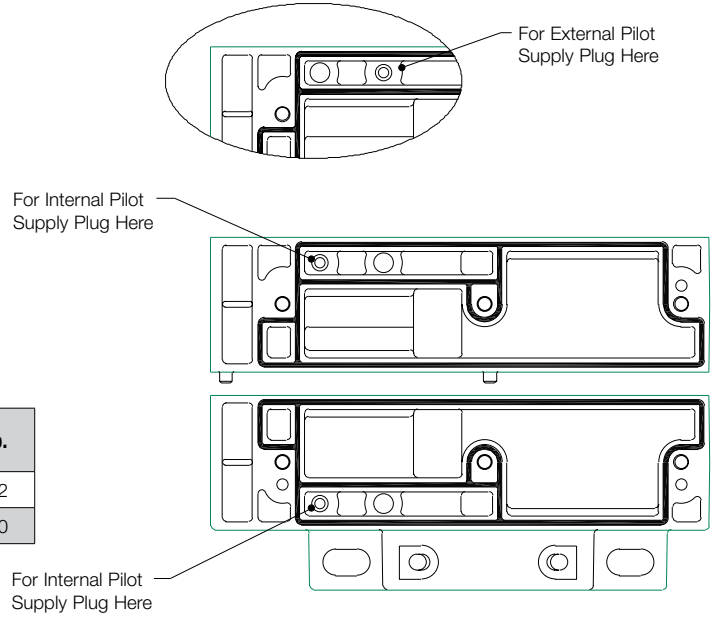
### Internal Pilot Plug

213-497



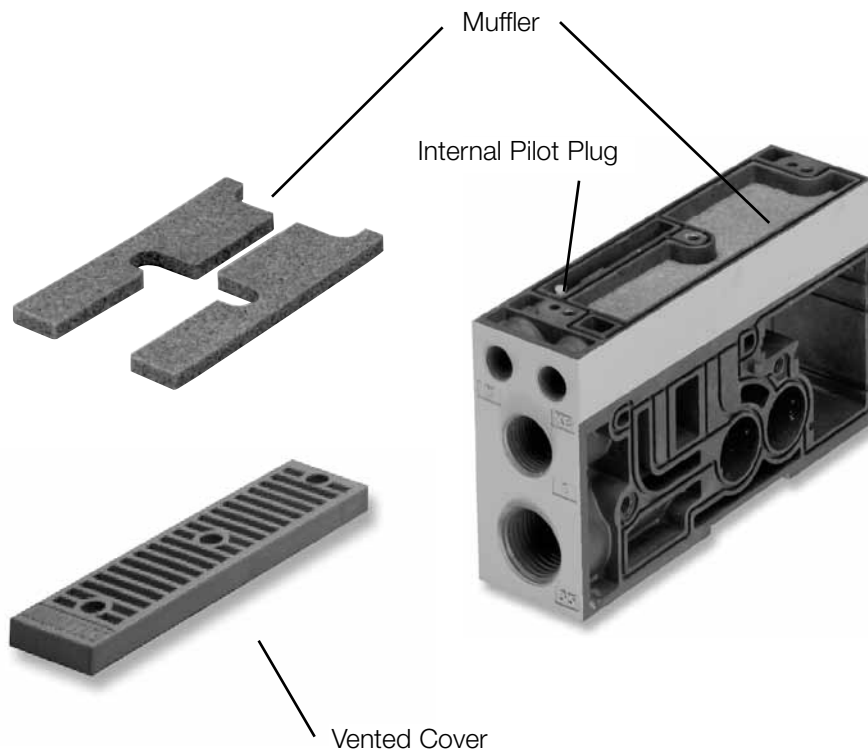
Det. No.	No. Req'd.	Part Name	Part No.
1	1	O-Ring	126-412
2	1	Plug	125-820

### Internal/External Pilot Selection



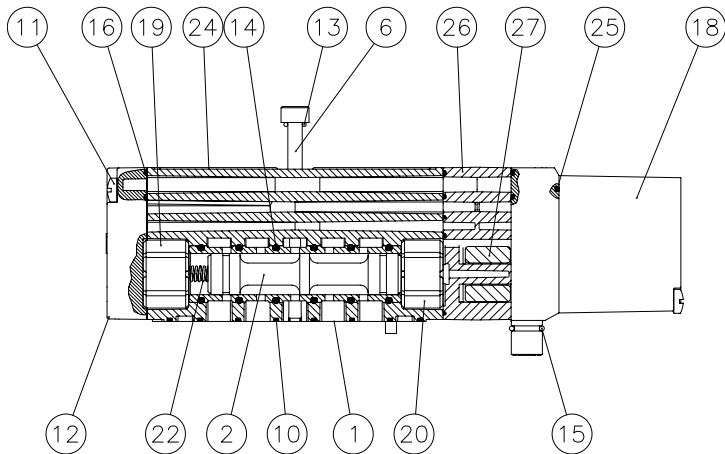
### Internal Muffler

125-851



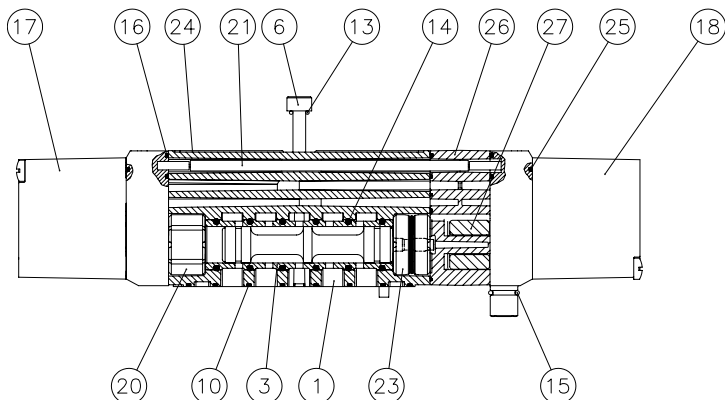
Valve Service Kits and Parts

Kit No. I62-K1  
(For Models I62BA4, I63BA4, I6HBA4, I6KBA4)



Det. No.	BA4	BB4	Part Name	Part No.
1	1	1	Body (not sold separately)	
2	1	N/A	Spool & Sleeve Assembly	209-517
3	N/A	1	Spool & Sleeve Assembly	209-518
6	2	2	Screw	127-1036
10*	1	1	Gasket Body/Manifold	113-370
11	2	N/A	Screw	127-650
12	1	N/A	Spring Cap	104-673
13*	2	2	O-Ring	126-163
14*	6	6	O-Ring	126-395
15*	1	1	O-Ring	126-144
16*	3	3	Gasket Adaptor/Body	113-373
17	N/A	1	Solenoid Pilot - 12 End	See p. 31
18	1	1	Solenoid Pilot - 14 End	See p. 31
19*	1	N/A	Bumper 12 End	114-154
20*	1	N/A	Bumper 14 End	114-153
21	N/A	1	14-12 Recepticle	230-1138
22*	1	N/A	Spring	115-271
23*	N/A	1	Detent Assembly	210-128
24	1	1	Nameplate	122-1074
25	1	2	Gasket Adapter	113-376
26	1	1	Pilot Adapter Spacer	119-792
27	1	1	Spacer	116-144

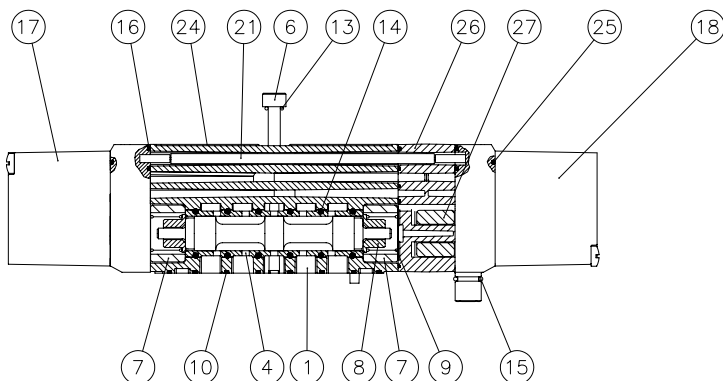
Kit No. I62-K2  
(For Models I62BB4, I63BB4, I6HBB4, I6KBB4)



\*Indicates parts included in service kit.

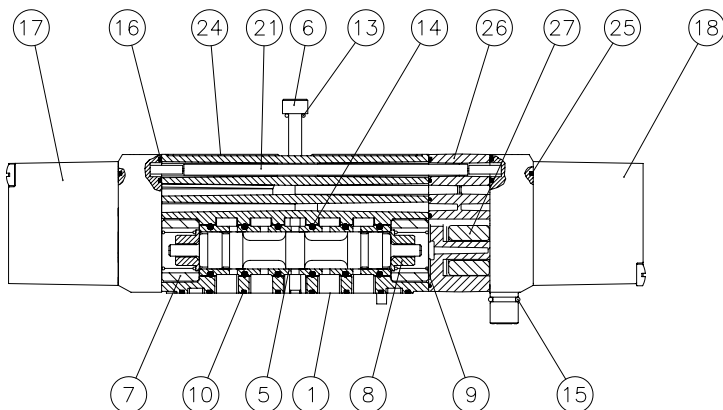
### Valve Service Kits and Parts

Kit No. I62-K3  
(For Models I62BB5, I63BB5)



Det. No.	BA5	BB6	Part Name	Part No.
1	1		Body (not sold separately)	
4	1	N/A	Spool & Sleeve Assembly	209-519
5	N/A		Spool & Sleeve Assembly	209-520
6	2		Screw	127-1036
7*	2		Bushing	117-174
8*	2		Spring Retainer	116-464
9*	2		Return Spring	115-284
10*	1		Gasket Body/Manifold	113-370
13*	2		O-Ring	126-163
14*	6		O-Ring	126-395
15*	1		O-Ring	126-144
16*	3		Gasket Adaptor/Body	113-373
17*	1		Solenoid Pilot - 12 End	See p. 31
18	1		Solenoid Pilot - 14 End	See p. 31
21	1		14-12 Recepticle	230-1138
24	1		Nameplate	122-1074
25	2		Gasket Adapter	113-376
26	1		Pilot Adapter Spacer	119-792
27	1		Spacer	116-144

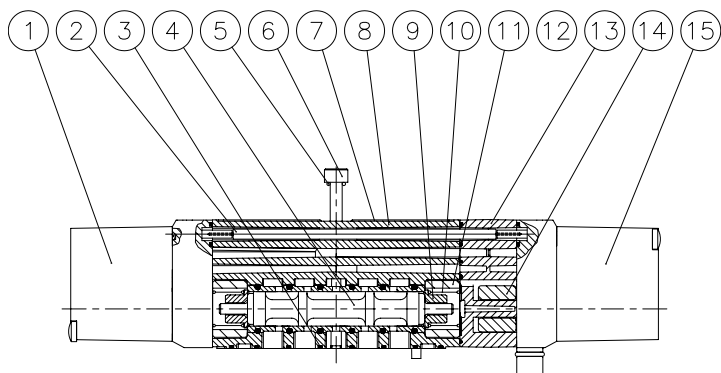
Kit No. I62-K3  
(For Models I62BB6, I63BB6)



\*Indicates parts included in service kit.

## Valve Service Kits and Parts

Kit No. I62-K3  
(For Models I62BB7, I63BB7)



Det. No.	No. Req'd	Part Name	Part No.
1	1	Solenoid Pilot - 12 End	See p. 30
2	1	14 to 12 Connector	230-1138
3*	1	Gasket	113-370
4	1	Spool & Sleeve Assembly	209-521
5*	2	O-Ring	126-163
6	2	Screw	127-1036
7	1	Nameplate	122-1074
8	1	Body	101-423
9*	2	Spring Retainer	116-465
10*	2	Spring	115-284
11*	2	Spacer	117-174
12*	1	Gasket	113-373
13	1	Pilot Adapter Spacer	119-792
14	1	Spacer	116-144
15	1	Solenoid Pilot - 14 End	See p. 30

\*Indicates parts included in service kit.



### How to Order Manifold Assembly

#### 15407-2 18 mm

**AK J W J 0000 3 L STD**

**Electrical/Electronics Type & Location**

F = Terminal Strip 1-16  
T = Terminal Strip 1-32  
J = 25 Pin Sub-D  
M = 37 Pin Sub-D  
P = 12 Pin Round Connector  
Q = 19 Pin Round Connector  
R = 26 Pin Round Connector  
S = 26 + 12 Pin Round Connector  
3 = G3 Electronics

**Valve Series**

W = 15407-2 18 mm

**Number of Valve Stations**

A = 1	I = 9	Q = 17Y	Y = 25
B = 2	J = 10	R = 18Z	Z = 26
C = 3	K = 11S	S = 19	2 = 27
D = 4	L = 12T	T = 20	3 = 28
E = 5	M = 13U	U = 21	4 = 29
F = 6	N = 14V	V = 22	5 = 30
G = 7	O = 15W	W = 23	6 = 31
H = 8	P = 16X	X = 24	7 = 32

**Options**

STD = Standard  
DRM = DIN Rail Mounting  
MUF = Muffler in End Plates  
DWM = DIN Rail with MUF  
14X = External Pilot

**Port Type**

L = Push-in  
N = NPTF  
G = G tap ISO228/1-G

**End Plate Port Size 2005**

3 = Port type L, N or G  
Port 1 = 3/8 Port 3/5 = 3/8  
K = Port type L only  
Port 1 = 10mm Port 3/5 = 10mm

#### 15407-2 26 mm

**A K J X D 0000 3 L STD**

**Electrical Connection Type & Location**

F = Terminal Strip 1-16  
T = Terminal Strip 1-32  
J = 25 Pin Sub-D  
M = 37 Pin Sub-D  
P = 12 Pin Round Connector  
Q = 19 Pin Round Connector  
R = 26 Pin Round Connector  
S = 26 + 12 Pin Round Connector  
3 = G3 Electronics

**Valve Series**

X = 15407-2 26 mm

**Number of Valve Stations\***

A = 1	I = 9	Q = 17Y	Y = 25
B = 2	J = 10	R = 18Z	Z = 26
C = 3	K = 11	S = 192	2 = 27
D = 4	L = 12	T = 203	3 = 28
E = 5	M = 13	U = 214	4 = 29
F = 6	N = 14	V = 225	5 = 30
G = 7	O = 15	W = 236	6 = 31
H = 8	P = 16	X = 247	7 = 32

**Options**

STD = Standard  
DRM = DIN Rail Mounting  
MUF = Muffler in End Plates  
DWM = DIN Rail with MUF  
A06 = End Plate with Ports on Left End only, Mounting Plate only on Right End  
D10 = A06 w/DIN Rail Mounting  
D11 = A06 w/Muffler in End Plates  
F05 = A06 w/DIN Rail with MUF  
14X = External Pilot

**Port Type**

L = Push-in  
N = NPTF  
G = G Tap

**End Plate Port Size**

3 = Port type L, N or G  
Port 1 = 3/8 Port 3/5 = 1/2  
2 = Port type L only  
Port 1 = 1/4 Port 3/5 = 3/8  
H = Port type L only  
Port 1 = 8mm Port 3/5 = 12mm  
K = Port type L only  
Port 1 = 10mm Port 3/5 = 14mm

#### Maximum Solenoid Outputs

Terminal Strip		25 Pin Sub-D	37 Pin Sub-D	26 Pin Round	26 + 12 Pin Round	12 Pin Round	19 Pin Round
AK "F"	AK "T"	AK "J"	AK "M"	AK "R"	AK "S"	AK "P"	AK "Q"
16	32	22	32	22	32	8	16

\* NOTE: Maximum number of valve stations

is determined by:

- The electrical connection type.
- The valve type - single solenoid valves up to the maximum solenoid outputs allowed by the electrical connection type (see chart above) or a combination of single and/or double solenoid valves not to exceed the maximum number of solenoid outputs allowed.

## Manifold Assembly Example

### AKJ or AKM 25 or 37 Pin Sub-D

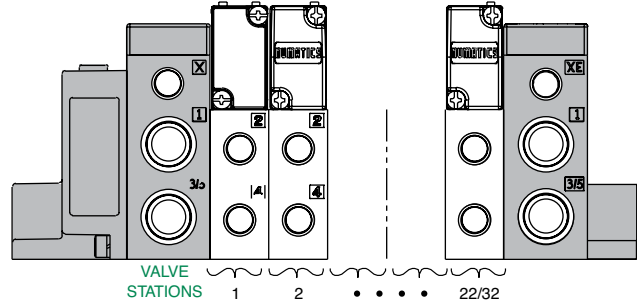
- Shaded components described by Assembly Kit (AK) model number designation.
- Each valve manifold station is listed in sequential order from left to right when facing the port side of the manifold as indicated.

#### Example order: (18mm)

25 Pin Sub-D	AKJWD00003NSTD
valve station 1	I51BA4Z1MN00061
valve station 2	I51BA4Z1MN00061
valve station 3	I51BB4Z2MN00061
valve station 4	I51BB5Z2MN00061
	ASSEMBLED

#### Example order: (26mm)

37 Pin Sub-D	AKMXD00003GMUF
valve station 1	I63BA4Z1ML00061
valve station 2	I63BA4Z1ML00061
valve station 3	I63BB5Z2ML00061
valve station 4	I63BB6Z2ML00061
	ASSEMBLED

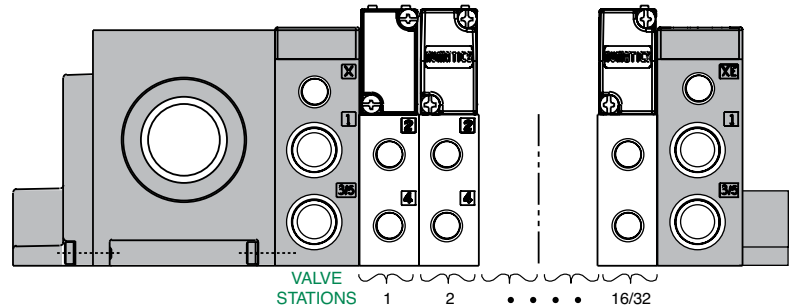


### AKF or AKT 1-16 or 1-32 Terminal Strip

- Ordered using the same method as Sub-D:

#### Example order: (18mm)

valve station 1	AKFWF00003LDRM
valve station 2	I5HBA4Z1ML00061
valve station 3	I5HBA4Z1ML00061
valve station 4	I5HBB4Z2ML00061
valve station 5	I5HBB4Z2ML00061
valve station 6	I5HBB5Z2ML00061
	I5HBB6Z2ML00061
	ASSEMBLED

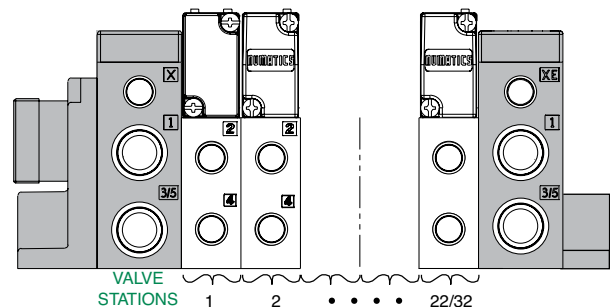


### AKP, AKQ, AKR or AKS 12, 19, 26 or 26+12 Pin Round Connector

- Ordered using the same method as Sub-D:

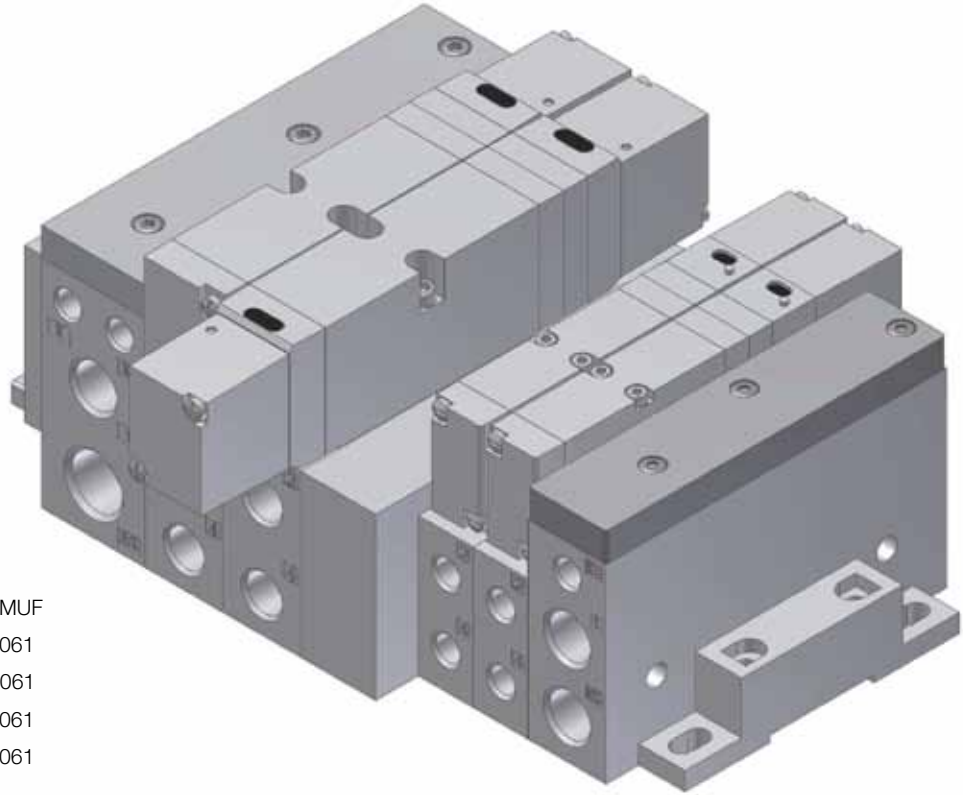
#### Example order: (26mm)

valve station 1	AKRXH00003LDWM
valve station 2	I63BA4Z1ML00061
valve station 3	I63BA4Z1ML00061
valve station 4	I63BA4Z1ML00061
valve station 5	I63BB4Z6ML00061
valve station 6	I63BB4Z6ML00061
valve station 7	I63BB5Z6ML00061
valve station 8	I63BB5Z6ML00061
	ASSEMBLED



## Adaptor Plate Kits **245-156**

This kit includes the adaptor plate, transfer board, gasket, screws, and studs. Individual end plates for the 18mm and 26mm are not included. This adaptor allows the transition from the 26mm to the 18mm series.



### Example order

Adaptor Plate Kit    AKJXBWB003LMUF  
                                  I62BA4Z1ML00061  
                                  I62BB4Z2ML00061  
                                  I52BA4Z1ML00061  
                                  I52BA4Z1ML00061  
                                  ASSEMBLED

### Adaptor Plate Kit with Standard End Plates ("STD" Option)

Description	Part No.
18mm with 3/8 NPTF - 26mm with 3/8 and 1/2 NPTF	244-136
18mm with 3/8 G-Tap - 26mm with 3/8 and 1/2 G-Tap	244-140
18mm with 3/8 Push-in - 26mm with 3/8 and 1/2 Push-in	244-148
18mm with 10 mm Push-in - 26mm with 10 & 14 mm Push-in	244-156

### Adaptor Plate Kit with Standard End Plates and Muffler ("MUF" Option)

Description	Part No.
18mm with 3/8 NPTF - 26mm with 3/8 and 1/2 NPTF	244-134
18mm with 3/8 G-Tap - 26mm with 3/8 and 1/2 G-Tap	244-138
18mm with 3/8 Push-in - 26mm with 3/8 and 1/2 Push-in	244-144
18mm with 10 mm Push-in - 26mm with 10 & 14 mm Push-in	244-152

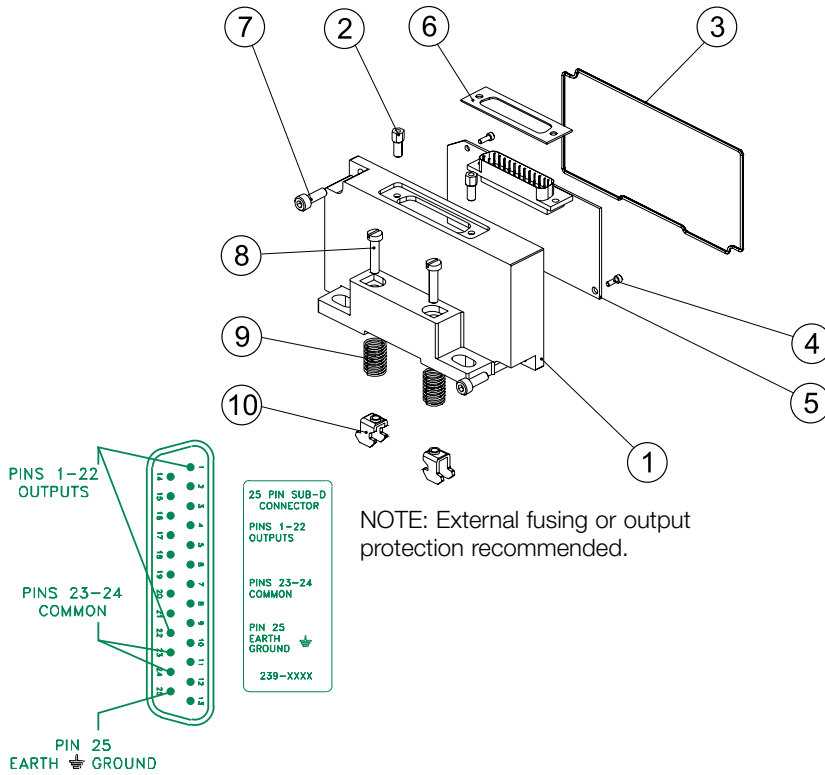
### Adaptor Plate Kit with Standard End Plates and DIN Rail Mount ("DRM" Option)

Description	Part No.
18mm with 3/8 NPTF - 26mm with 3/8 and 1/2 NPTF	244-135
18mm with 3/8 G-Tap - 26mm with 3/8 and 1/2 G-Tap	244-139
18mm with 3/8 Push-in - 26mm with 3/8 and 1/2 Push-in	244-146
18mm with 10 mm Push-in - 26mm with 10 & 14 mm Push-in	244-154

### Adaptor Plate Kit with Standard End Plates, Muffler and DIN Rail Mount ("DWM" Option)

Description	Part No.
18mm with 3/8 NPTF - 26mm with 3/8 and 1/2 NPTF	244-133
18mm with 3/8 G-Tap - 26mm with 3/8 and 1/2 G-Tap	244-137
18mm with 3/8 Push-in - 26mm with 3/8 and 1/2 Push-in	244-142
18mm with 10 mm Push-in - 26mm with 10 & 14 mm Push-in	244-150

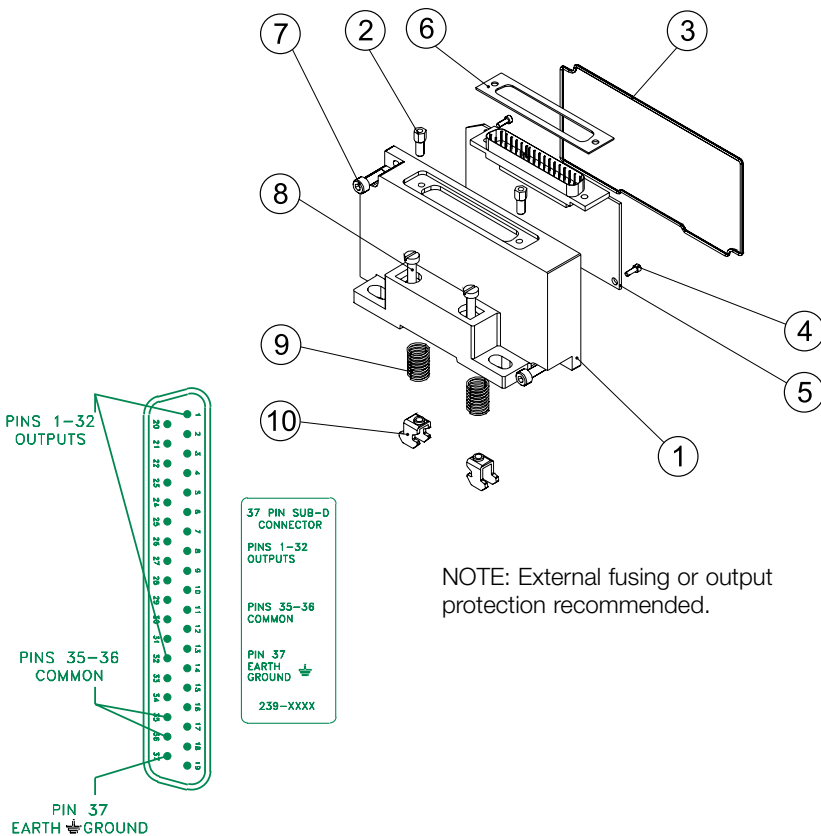
25 Pin Sub-D Connector Kit



25 PIN Sub-D Housing Kits	Part No.
Without DIN Rail	239-1174
With DIN Rail	239-1175

Det. No.	No. Req'd	Part Name	Part No.
1	1	Housing	105-401
2	2	Hex Screw	127-825
3	1	Gasket	113-531
4	2	Screw	127-318
5	1	PCB Ass'y	256-607
6	1	Gasket	113-507
7	2	Screw Ass'y	127-396
8	2	Screw (DIN Rail Only)	127-472
9	2	Spring (DIN Rail Only)	115-355
10	2	Clamp (DIN Rail Only)	125-720

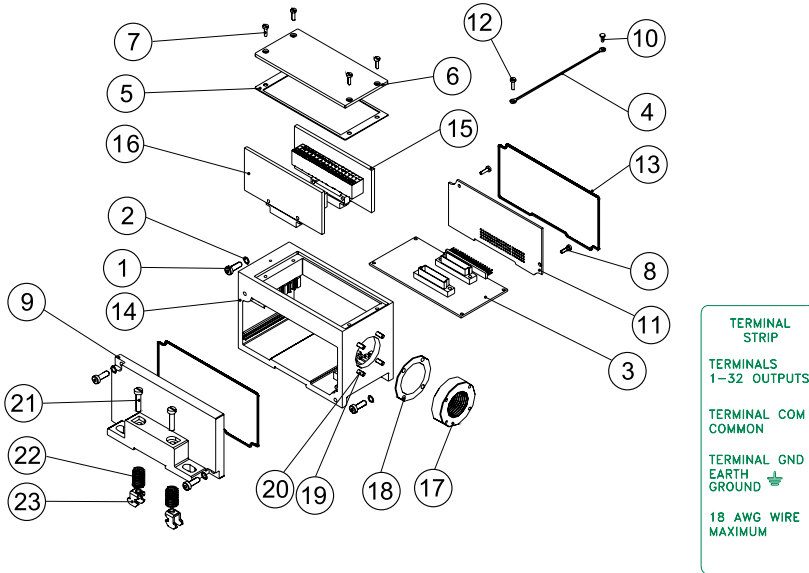
37 Pin Sub-D Connector Kit



37 PIN Sub-D Housing Kits	Part No.
Without DIN Rail	239-1180
With DIN Rail	239-1181

Det. No.	No. Req'd	Part Name	Part No.
1	1	Housing	105-402
2	2	Hex Screw	127-825
3	1	Gasket	113-531
4	2	Screw	127-318
5	1	PCB Ass'y	256-608
6	1	Gasket	113-530
7	2	Screw Ass'y	127-396
8	2	Screw (DIN Rail Only)	127-472
9	2	Spring (DIN Rail Only)	115-355
10	2	Clamp (DIN Rail Only)	125-720

### 1-16 & 1-32 Terminal Strip Kit

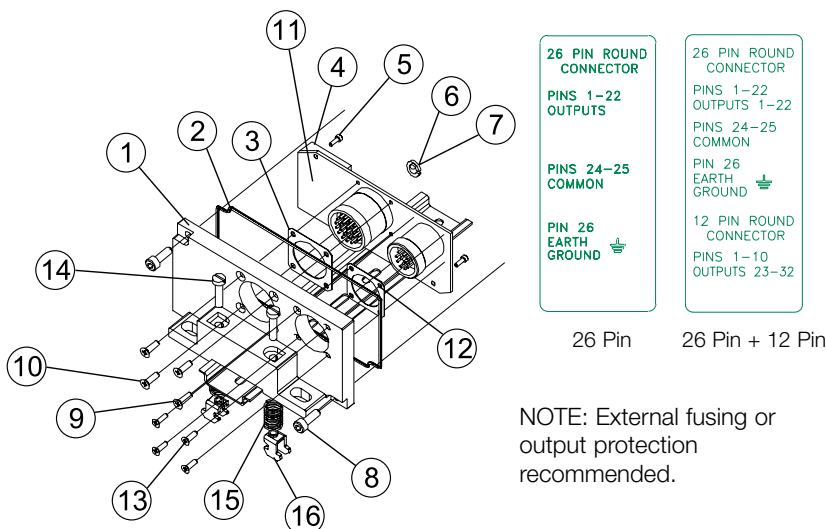


NOTE: External fusing or output protection recommended.  
 NOTE: Min. Wire AWG 26  
 Max. Wire AWG 18

Terminal Strip Housing Kits	Part No.
Without DIN Rail, 1-16 Sol.	239-1229
With DIN Rail, 1-16 Sol.	239-1230
Without DIN Rail, 1-32 Sol.	239-1231
With DIN Rail, 1-32 Sol.	239-1232

Det. No.	No. Req'd	Part Name	Part No.
1	4	Screw	127-697
2	4	Lockwasher	128-188
3	1	Backplane board	256-618
4	1	Cover Strap	125-772
5	1	Gasket	113-533
6	1	Cover	105-405
7	4	Screw	127-852
8	1	Screw	127-318
9	1	DIN Rail Cover PT	105-403
10	1	Screw	127-180
11	1	Converter BRD	256-645
12	2	Screw	127-794
13	2	Gasket	113-531
14	1	Housing	125-844
15	1	Terminal Strip (1-16)	256-617
16	1	Terminal Strip (17-32)	256-619
17	1	Adaptor	119-659
18	1	Gasket	113-542
19	4	Screw	127-879
20	4	Lockwasher	128-192
21	2	Screw (DIN Rail Only)	127-472
22	2	Spring (DIN Rail Only)	115-355
23	2	Clamp (DIN Rail Only)	125-720

### 26 Pin & 26 + 12 Pin Round Connector Kit



NOTE: External fusing or output protection recommended.

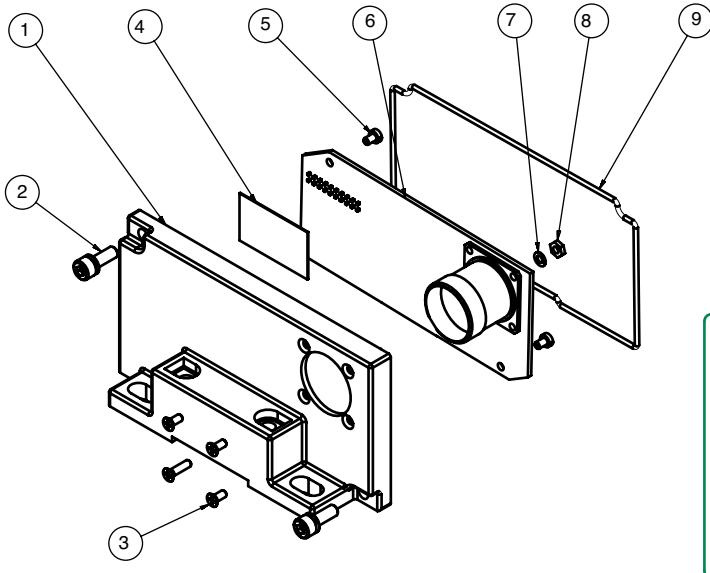
26 PIN Round Kit	Part No.
Without DIN	239-1184
With DIN	239-1185

26 + 12 PIN Round Kits	Part No.
Without DIN	239-1376
With DIN	239-1377

Det. No.	No. Req'd	Part Name	Part No.
1	1	Cover (26 Pin Only)	105-408
1	1	Cover (26 + 12 Pin Only)	105-421
2	1	Gasket	113-531
3	1	Gasket	113-353
4	1	26 PCB Ass'y	256-624
4	1	26 + 12 PCB Ass'y	256-688
5	2	Screw	127-875
6	1	Lockwasher	128-294
7	1	Hex Nut	128-293
8	2	Screw Ass'y	127-396
9	3	Screw	127-810
10	1	Screw	127-770
11	1	Shield (26 + 12 Pin Only)	140-759
12	1	Gasket (26 + 12 Pin Only)	113-354
13	4	Screw (26 + 12 Pin Only)	127-811
14	2	Screw (DIN Rail Only)	127-742
15	2	Spring (DIN Rail Only)	115-355
16	2	Clamp (DIN Rail Only)	125-720

12 Pin Round Connector Kit

239-2115



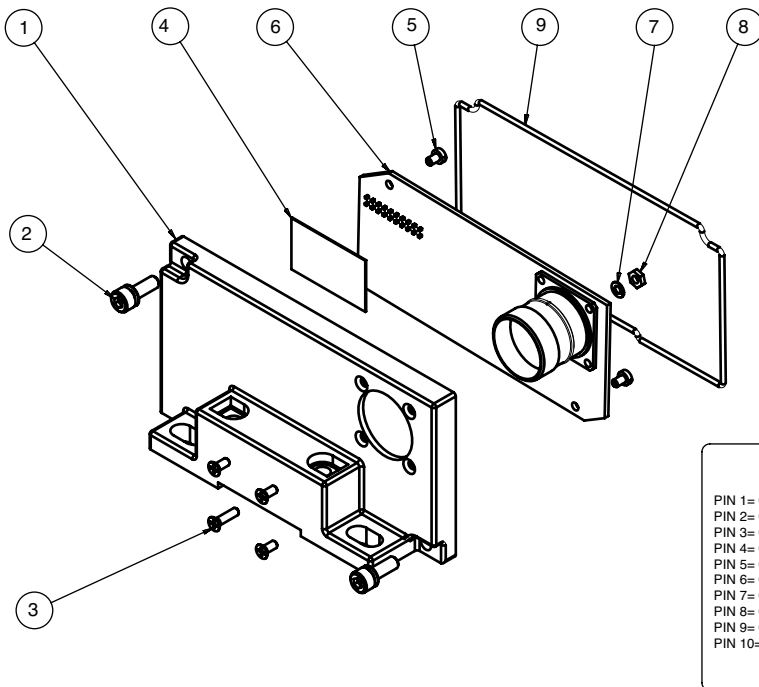
Parts List

Det. No.	No. Req'd	Part Name	Part No.
1	1	Cover	105-451
2	2	Screw	127-391
3	4	Screw	127-982
4	1	Shield	140-759
5	2	Screw	127-875
6	1	PC Board	256-856
7	4	Lockwasher	128-352
8	4	Nut	128-288
9	1	Gasket	113-531

NOTE: External fusing or output protection recommended.

19 Pin Round Connector Kit

239-2307



Parts List

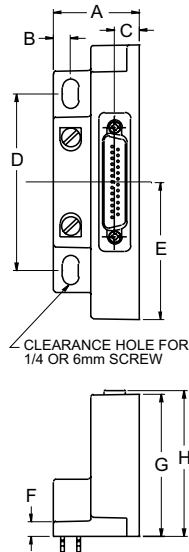
Det. No.	No. Req'd	Part Name	Part No.
1	1	Cover	105-451
2	2	Screw	127-391
3	4	Screw	127-982
4	1	Shield	140-759
5	2	Screw	127-875
6	1	PC Board	256-905
7	4	Lockwasher	128-352
8	4	Nut	128-288
9	1	Gasket	113-531

NOTE: External fusing or output protection recommended.

### Dimensions: Inches (mm)

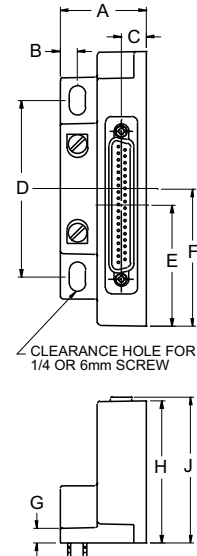
### Electrical Interface

#### 25 Pin Sub-D



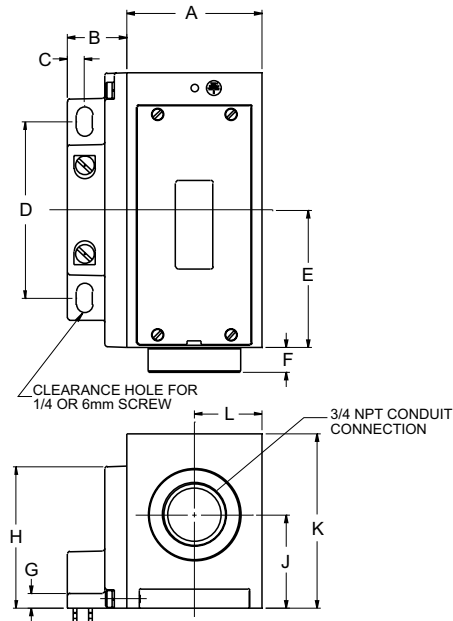
A	B	C	D	E	F	G	H
1.45 (36.8)	0.29 (7.4)	0.42 (10.7)	2.98 (75.7)	2.32 (58.9)	0.25 (6.3)	2.40 (61.0)	2.47 (62.7)

#### 37 Pin Sub-D



A	B	C	D	E	F	G	H	J
1.45 (36.8)	0.29 (7.4)	0.42 (10.7)	2.98 (75.7)	2.04 (51.8)	2.32 (58.9)	0.25 (6.3)	2.40 (61.0)	2.47 (62.7)

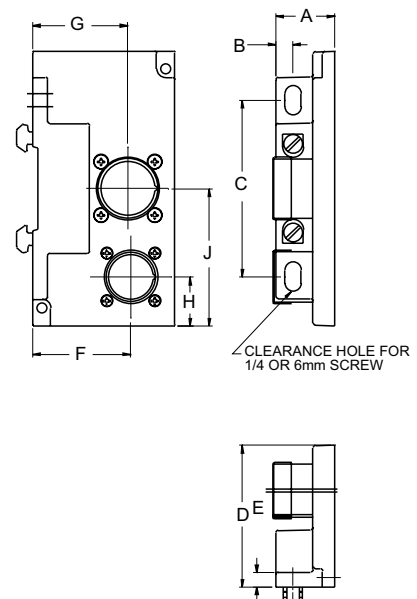
#### Terminal Strip 1-16 & 1-32



A	B	C	D	E	F	G	H	J	K	L
2.28 (57.9)	1.00 (25.4)	0.29 (7.4)	2.98 (75.7)	2.32 (58.9)	0.43 (10.9)	0.25 (6.3)	2.40 (61.0)	1.58 (40.1)	2.95 (74.9)	1.14 (29.0)

#### 12, 19, 26 & 26 + 12 Pin Round

#### Connector



A	B	C	D	E	F	G	H	J
1.00 (25.4)	0.29 (7.4)	2.98 (75.7)	2.40 (61.0)	0.25 (6.3)	1.66 (42.2)	1.61 (40.9)	0.82 (20.8)	2.32 (58.9)



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