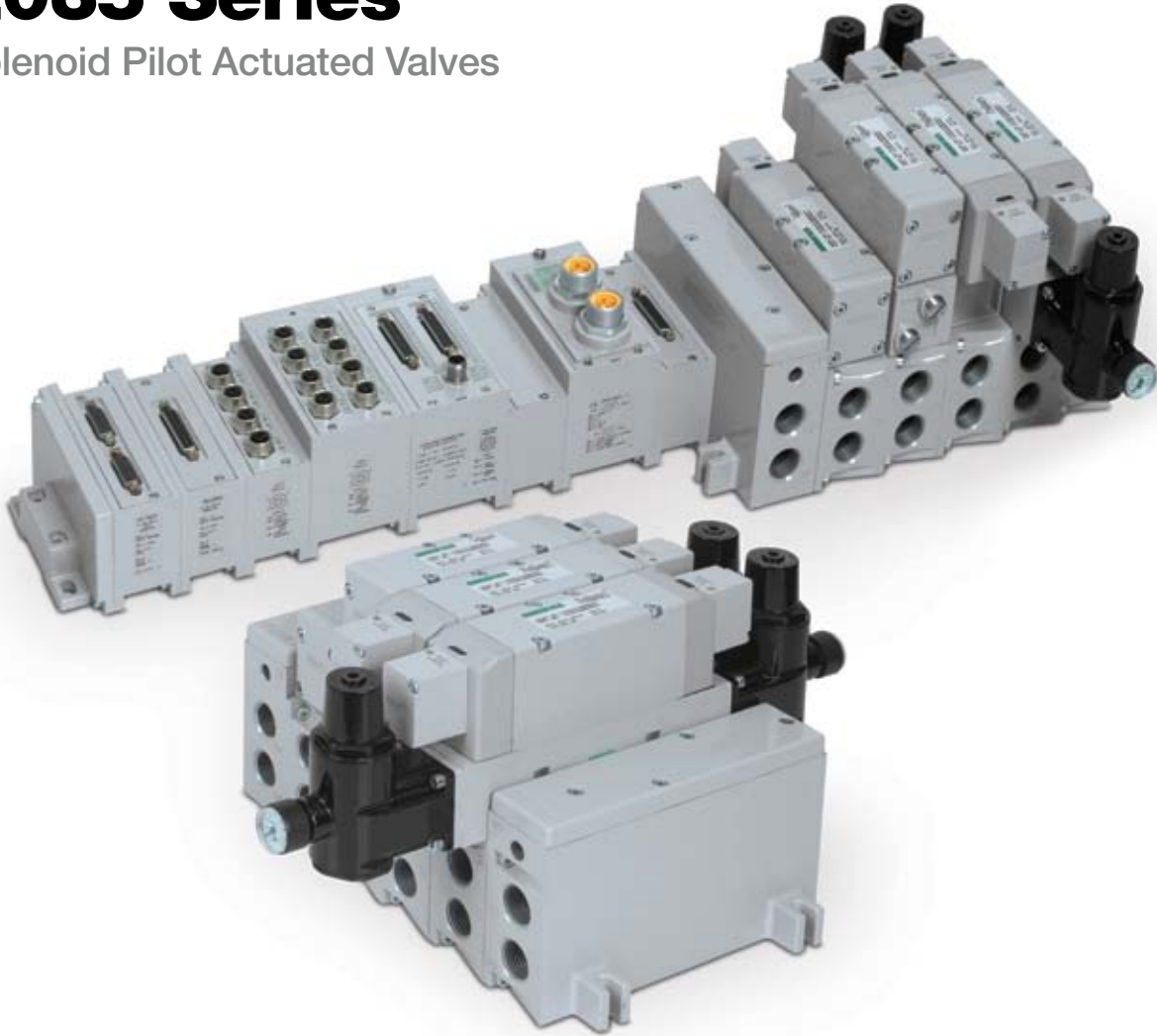


# numatics®

## 2035 Series

Solenoid Pilot Actuated Valves



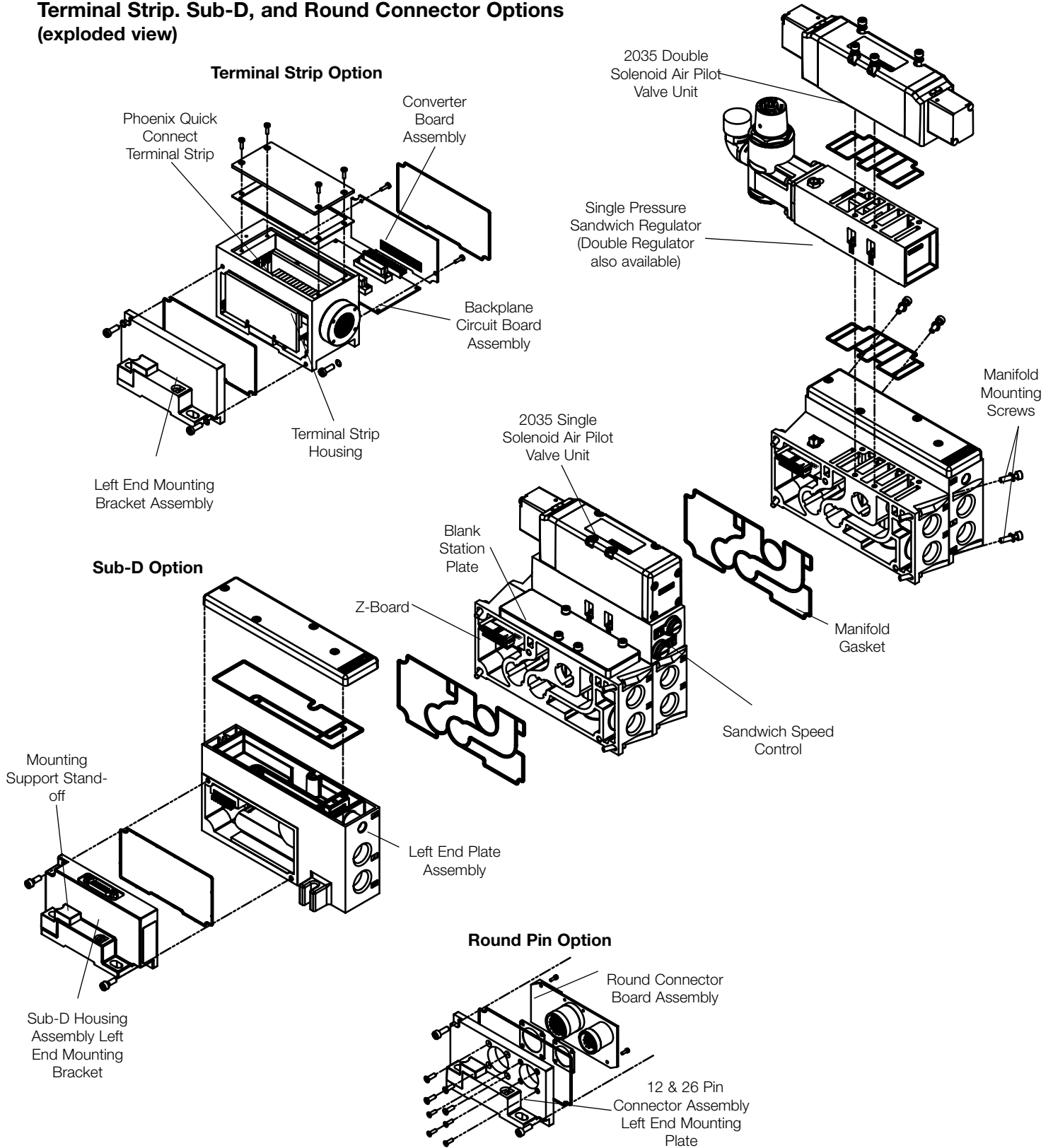
[www.numatics.com](http://www.numatics.com)

## 2035 Series

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## Manifold and Wiring Architecture

### Terminal Strip, Sub-D, and Round Connector Options (exploded view)



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

Cv: 3.5

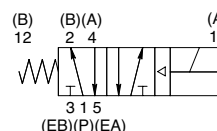
- Solenoid air pilot actuated
- Low wattage plug-in - 2.5 watt for DC application
- DC solenoids polarity insensitive with surge suppression
- Plug together circuit boards eliminate internal wiring
- Integral recessed gaskets
- Simple conversion from internal to external pilot supply
- Modular plug-together fieldbus electronics
- Designed to meet NEMA4/IP65
- Manifold connection allows disassembly at any station



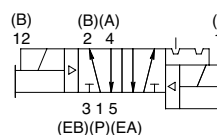
**Technical Data**

Valve Data	English	Metric
Cv*	3.5*	3.5
Flow Capacity	161 SCFM @ 80 PSIG upstream pressure to atmosphere	3500 NI/m @ 6 bar upstream pressure to 5 bar atmosphere
Operating Pressure Range	28"Hg Vacuum to 145 PSIG	Vacuum to 10 bar
Pilot Pressure Range	26.1 to 120 PSIG	1.8 to 8.2 bar
Temperature Range (Ambient)	-10°F to + 115°F	-23°C to +46° C

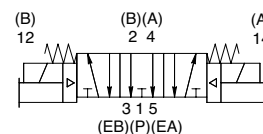
single solenoid air pilot  
2 position 4-way



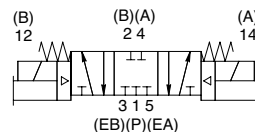
double solenoid air pilot  
2 position 4-way



double solenoid air pilot  
3 position 4-way  
open center



double solenoid air pilot  
3 position 4-way  
closed center



**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	0.03

Response Time in Seconds**	Energize	De-Energize	Energize	De-Energize
2-Position, Single, Spring Return	0.021	0.067	0.015	0.070
2-Position, Double, Detented	0.017	N/A	0.015	N/A
3-Position, Spring Centered	0.021	0.072	0.015	.080

\* Valve on 1/2 NPTF Sub-Plate

\*\* Per ISO12238 Standard

## How to Order

### Valves

**353 BB 4 Z6 M N 000 61**

**Valve Series & Port Size**  
 353\* = 3/8  
 354 = 1/2  
 \*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 Plate

**Function**  
 4 = 2 Position, 4-way  
 5 = 3 Position, 4-way Open Center  
 6 = 3 Position, 4-way Closed Center  
 P = Blank Station Plate

**Mounting**  
 00 = Valve Unit only  
 3A = Individual Base, Side Ports, Individual Exhaust  
 3B = Individual Base, Side & Bottom Ports, Individual Exhaust  
 3C = 3A w/ Speed Control  
 3D = 3B 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

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

**Special Options**  
 11B = Flush Locking Override  
 11M = No Override  
 56Y = 12 mm Electrical Connector in Conduit  
 Port of Base Mounting Only

**Port Type**  
 N = NPTF  
 G = G Tap  
 0 = Valve Unit only

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

### Regulators

**353 RS 3 Z1 J N 000 00**

**Valve Series & Port Size**  
 353\* = 3/8  
 354 = 1/2  
 \*Use for regulator unit only (Mounting = 00).

**Regulator Type**  
 RS = Single Pressure to Port 1 (P)  
 RD = Dual Pressure to Ports 3 (EB) & 5 (EA)  
 RC = Dual Pressure w/Non-relieving Checks  
 RQ = Dual Pressure w/Relieving Checks  
 RE = Dual Pressure to Ports 4 (A) & 2 (B)  
 RT = 2 Pressure Selector  
 Note: For metric gauge, replace R with E in 4th digit.

**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)

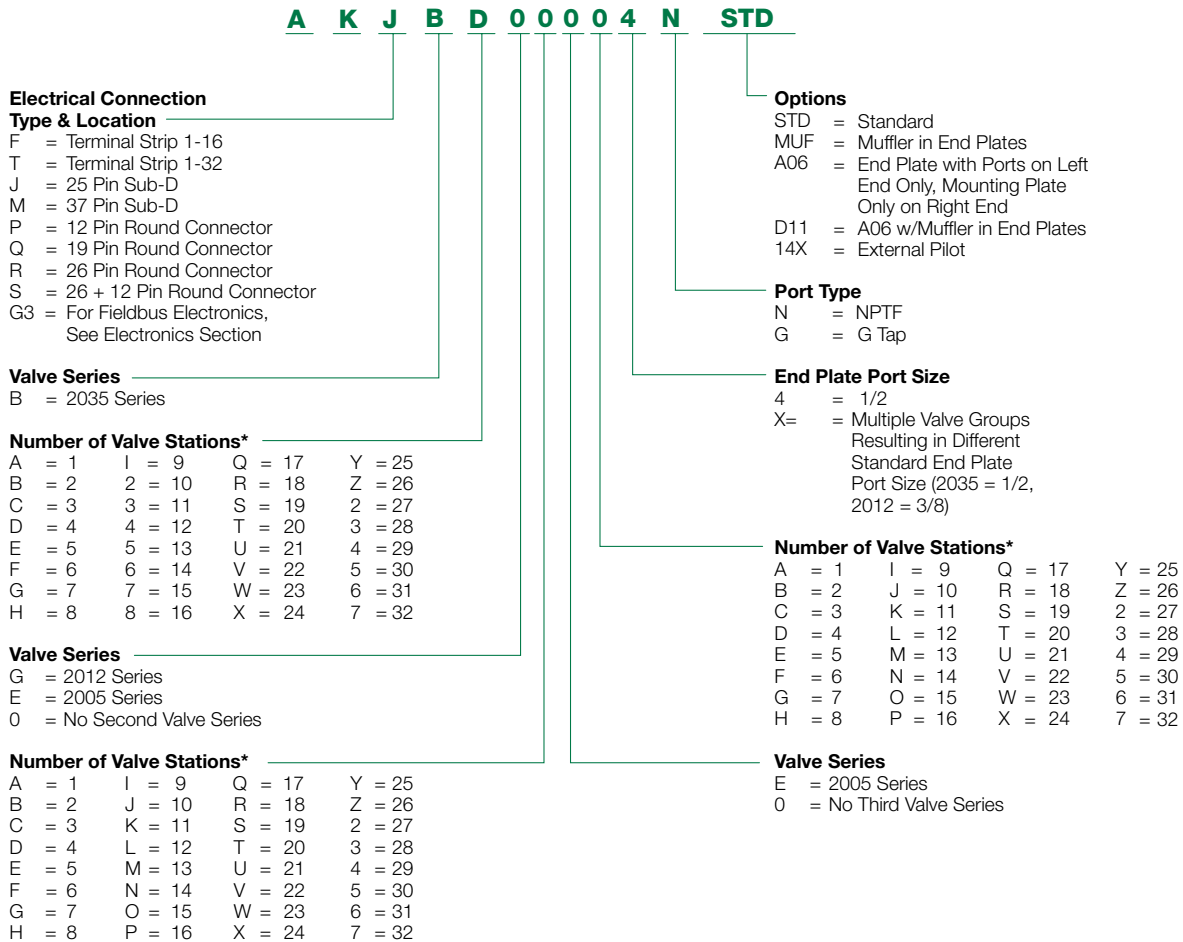
**Special Options**  
 12H = Less gauge  
 16N = Jumper on 14 (A) End  
 16P = Jumper on 12 (B) End  
 16W = Top Facing Gauge  
 000 = No Option

**Port Type**  
 N = NPTF  
 G = G Tap  
 0 = Regulator Unit Only

**Wiring Option**  
 J = Plug-In Receptacle Assembly  
 O = Non-Plug-In (Type RE only)

**Mounting**  
 00 = Regulator Unit Only  
 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

**Manifold Assembly**



**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.
- Combination of all stations cannot exceed 32.

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

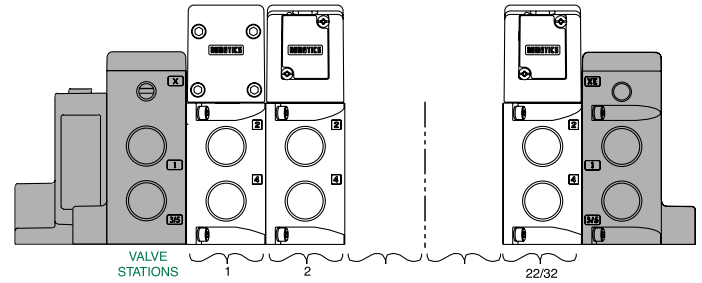
- Shaded components described by Assembly Kit (AK) model number designation.
- Each valve manifold station is listed in sequential order from left to right when facing the port side of the manifold as indicated.

**Example order:**

25 Pin Sub-D	AKJBD00004NSTD
valve station 1	353BA4Z1MN00061
valve station 2	353BA4Z1MN00061
valve station 3	353BB4Z2MN00061
valve station 4	353BB5Z2MN00061
	ASSEMBLED

**Example order:**

37 Pin Sub-D	AKMBD00004GMUF
valve station 1	353BA4Z1MG00061
valve station 2	353BA4Z1MG00061
valve station 3	353BB5Z2MG00061
valve station 4	353BB6Z2MG00061
	ASSEMBLED

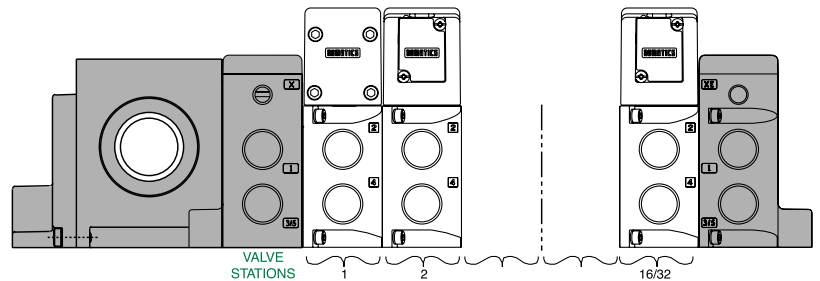


### AKF or AKT 1-16 or 1-32 Terminal Strip

- Ordered using the same method as Sub-D:

**Example order:**

valve station 1	AKFBF00004NSTD
valve station 2	354BA4Z1MN00061
valve station 3	354BA4Z1MN00061
valve station 4	354BB4Z2MN00061
valve station 5	354BB4Z2MN00061
valve station 6	354BB5Z2MN00061
	354BB6Z2MN00061
	ASSEMBLED

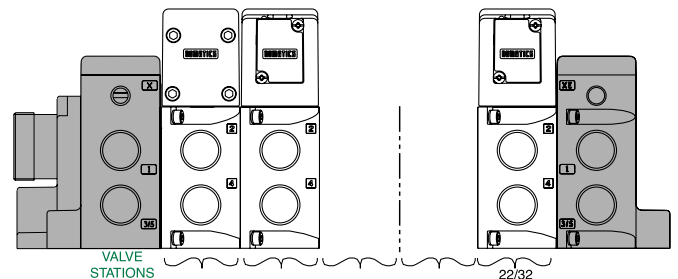


### AKP, AKR or AKS 12, 26 or 26+12 Pin Round Connector

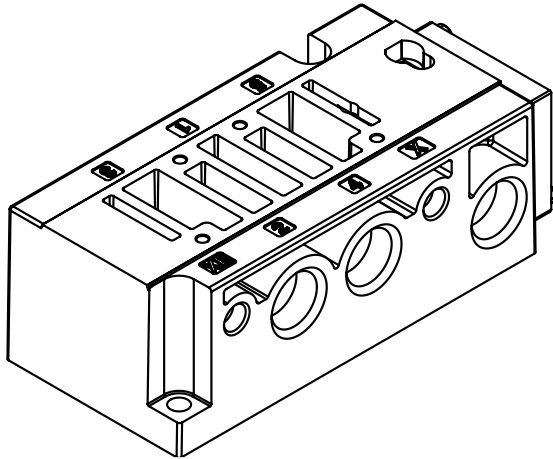
- Ordered using the same method as Sub-D:

**Example order:**

valve station 1	AKRBH00004NMUF
valve station 2	354BA4Z1MN00061
valve station 3	354BA4Z1MN00061
valve station 4	354BA4Z1MN00061
valve station 5	354BB4Z6MN00061
valve station 6	354BB4Z6MN00061
valve station 7	354BB5Z6MN00061
valve station 8	354BB5Z6MN00061
	ASSEMBLED

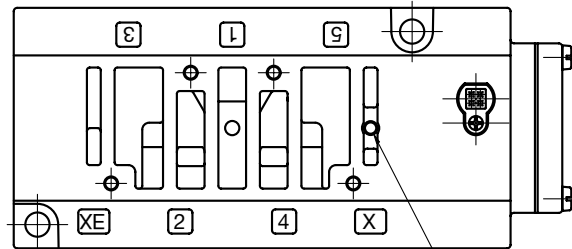


Individual Base Assembly Kit



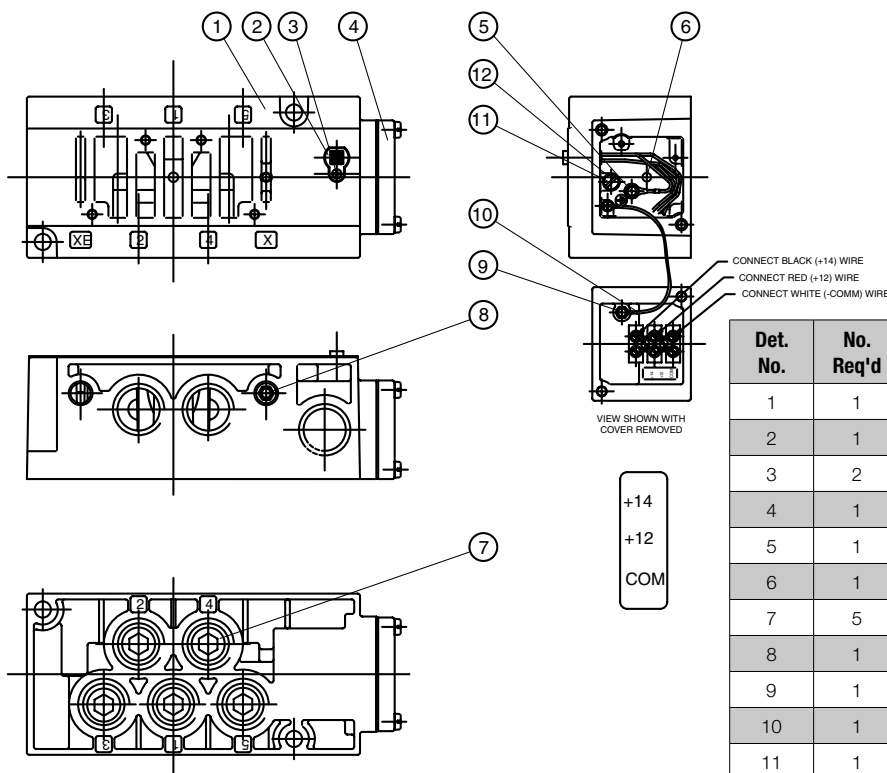
Port Size	Part No.
1/2 NPTF Side Ports	203-1283
1/2 NPTF Side & Bottom	203-1284
3/8 NPTF Side Ports	203-1287
3/8 NPTF Side & Bottom	203-1288
1/2 G Side Ports	203-1285
1/2 G Side & Bottom	203-1286
3/8 G Side Ports	203-1289
3/8 G Side & Bottom	203-1290

Internal/External Pilot Selection



M4 PILOT PORT LOCATION  
(PLUG #127-691 ORDER SEPARATELY)

Note: Base assemblies are supplied set up for internal pilot supply. To convert to external pilot supply install plug P.N. 129-216 (sold separately) in the "X" gallery as indicated above. Remove the 1/8 NPTF pipe plug from the "X" port to supply pilot pressure.

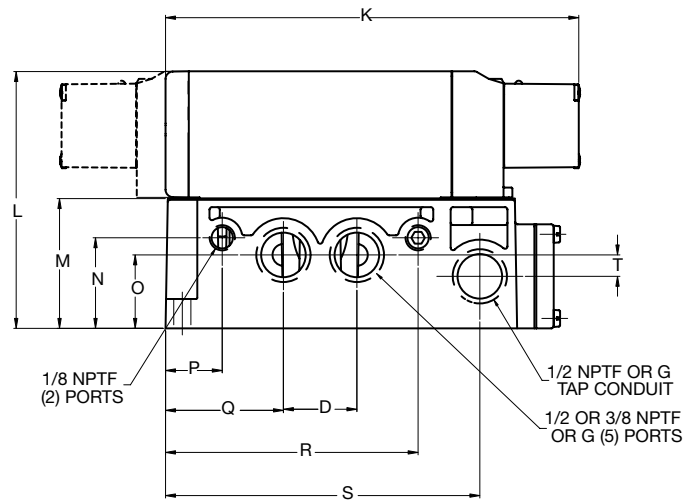
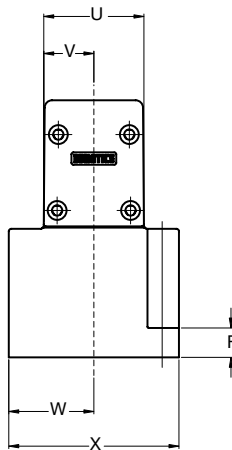
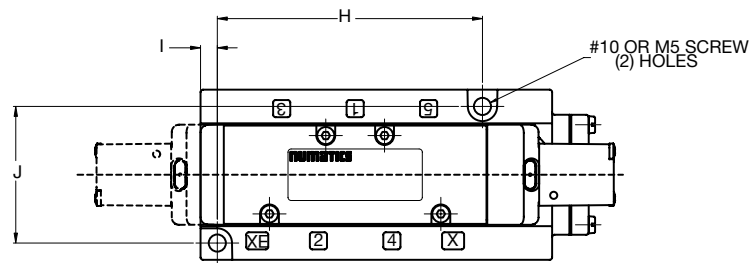
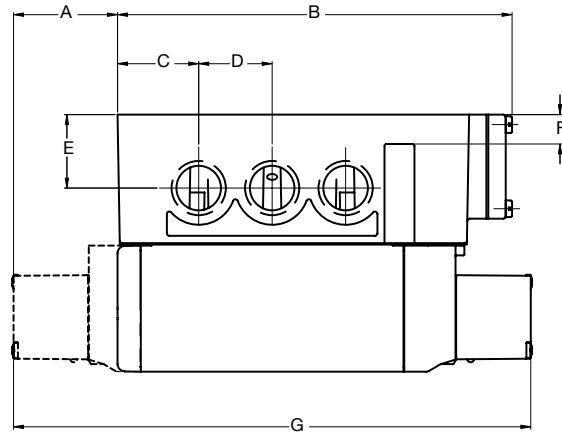


Det. No.	No. Req'd	Part Name	Part No.
1	1	Base	103-893
2	1	Connector Assembly	230-1147
3	2	Screw	127-318
4	1	Cover Assembly	205-389
5	1	Screw	127-310
6	1	5/32 in. Ball	121-101
7	5	1/2 Pipe Plug	129-103
8	1	1/8 Pipe Plug	129-100
9	1	Screw	127-172
10	1	Strap	125-772
11	1	Screw	127-176
12	1	Washer	128-162



### Valve on Individual Base

Dimensions: Inches (mm)



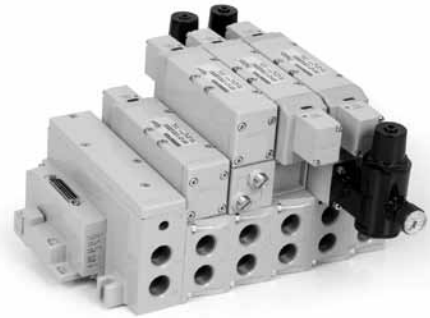
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1.67 (42.5)	6.35 (161.2)	1.31 (33.2)	1.18 (30.0)	1.18 (30.0)	0.47 (12.0)	8.32 (211.3)	4.26 (108.3)	0.27 (6.9)	2.20 (55.8)	6.64 (168.8)	4.13 (104.9)	2.09 (53.0)	1.46 (37.0)	1.18 (30.0)

P	Q	R	S	T	U	V	W	X
0.91 (23.2)	1.90 (48.2)	4.06 (103.2)	5.06 (128.4)	0.35 (8.8)	1.61 (40.9)	0.81 (20.5)	1.37 (34.8)	2.74 (69.5)

## Sandwich Pressure Regulators

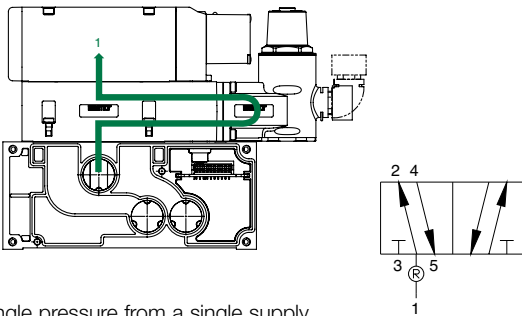
Types: RS / RD / RE / RT / RC / RQ

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."



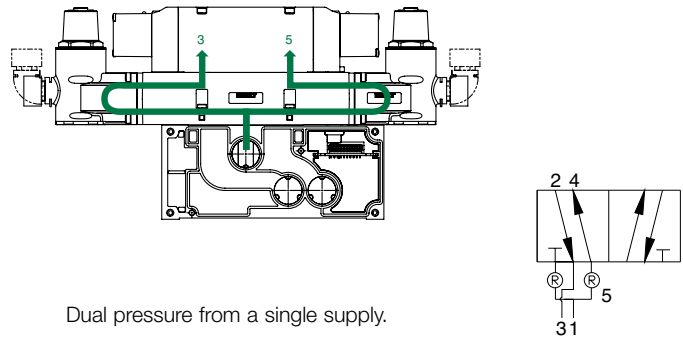
Example orders:	Type RS	Type RD
Valve unit only:	353BA400K000030	353BB400M0000061
Regulator	353RS1Z1JN00000	353RD1Z2JN00000
+mounting	ASSEMBLED	ASSEMBLED

### Type RS



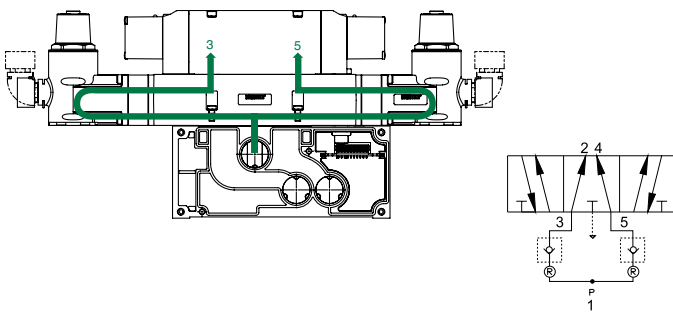
Single pressure from a single supply.

### Type RD



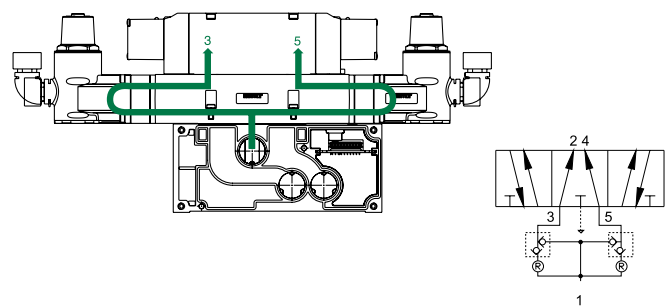
Dual pressure from a single supply.

### Type RC



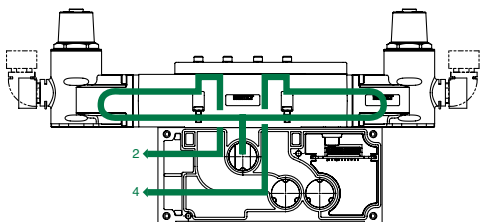
Type RC is non-relieving:  
Traps downstream pressure if upstream pressure is exhausted.

### Type RQ



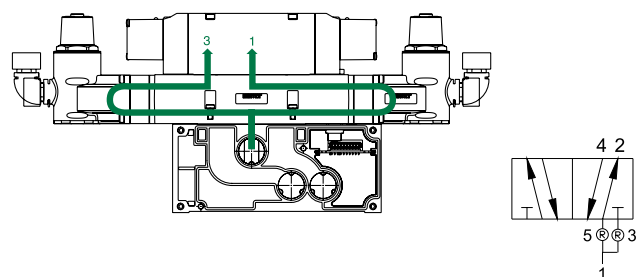
Type RQ is relieving:  
Exhausts pressure in cylinder if upstream pressure is exhausted.

### Type RE



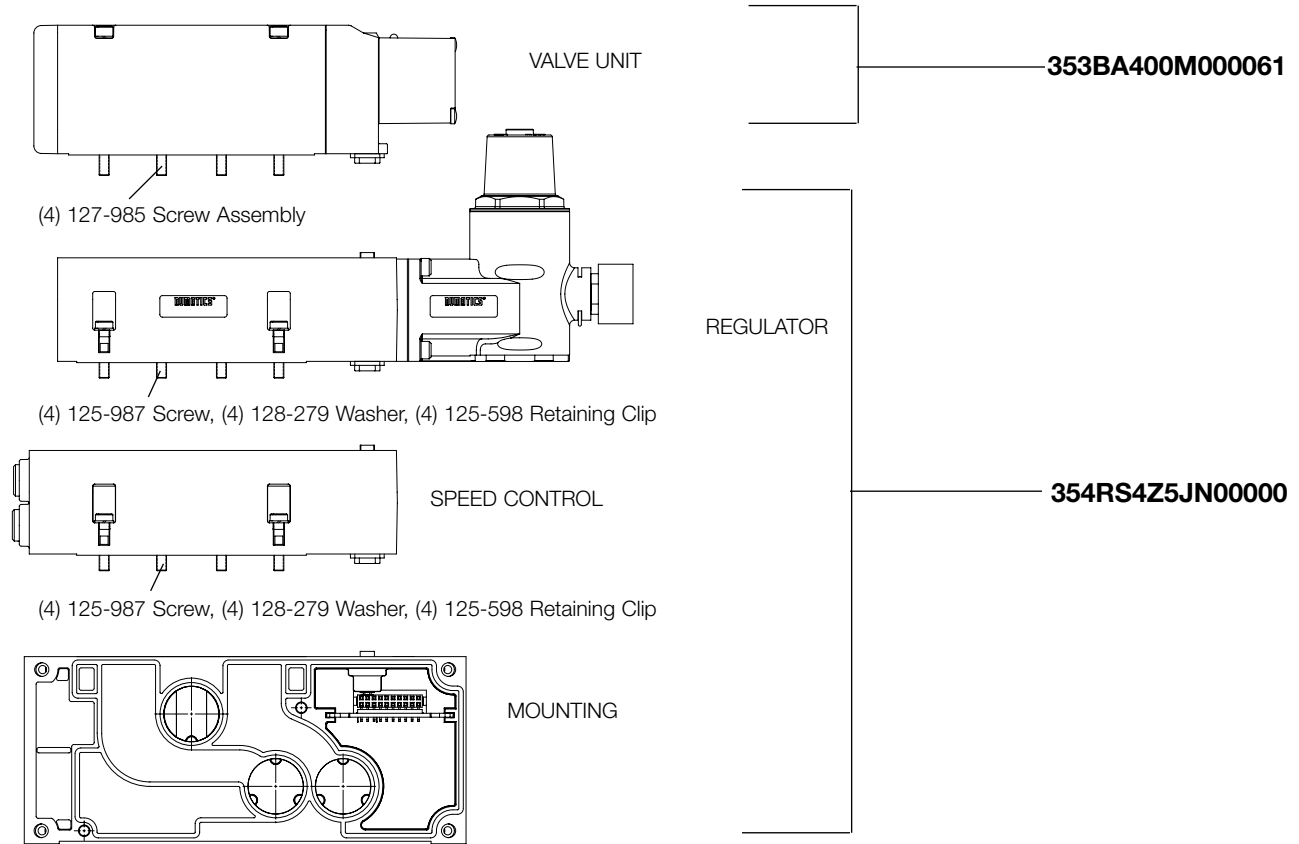
External regulator - separate pressures to ports 2 and 4.

### Type RT



Two-pressure selector used for multi-pressure applications.

### Valve Regulator / Speed Control Plug-in Assembly



### Regulator Kits & Service Parts

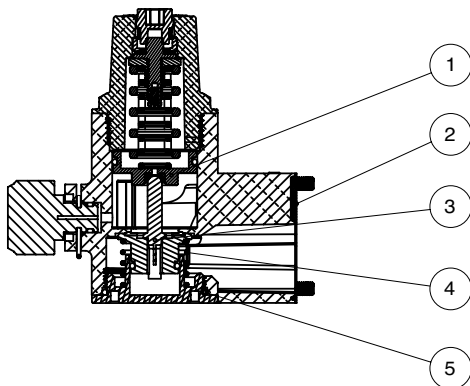
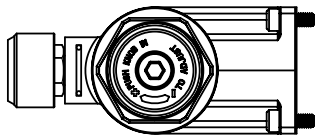
#### Regulator Service Kit

239-2256

#### Check Assembly Kits

RC: 239-2254

RQ: 239-2253



#### Regulator Unit Kits

(includes regulator assembly, gaskets, screws)

PSIG	Part No.
3-30 PSIG	239-2220
5-60 PSIG	239-2221
10-130 PSIG	239-2222

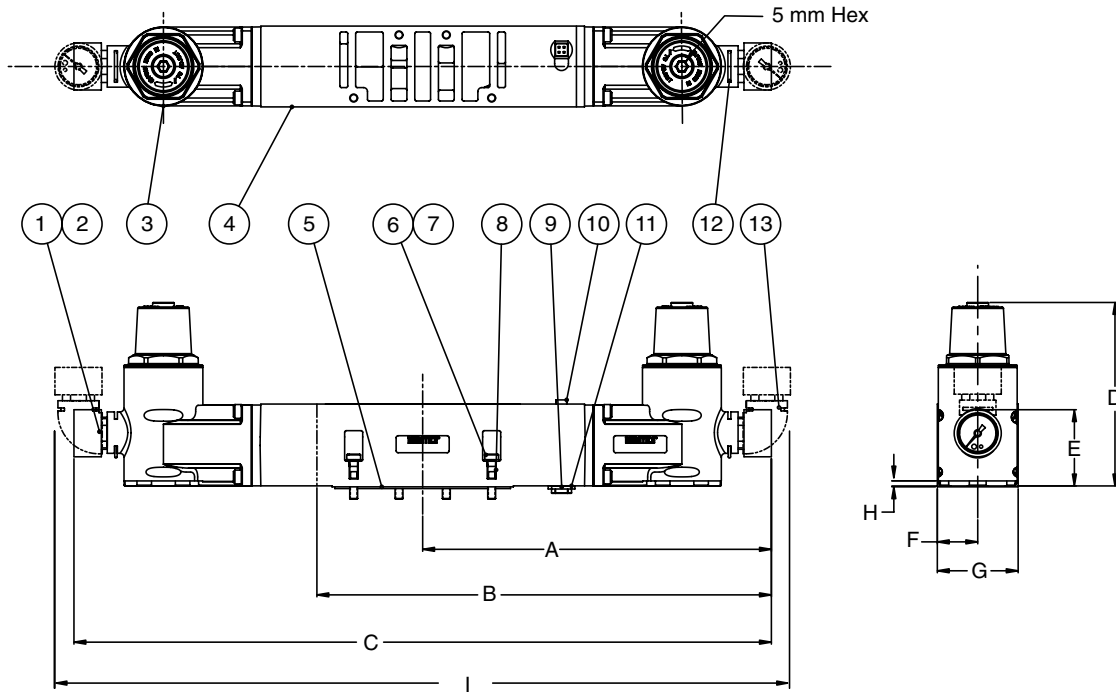
#### Bonnet Springs

PSIG	Part No.
3-30 PSIG	115-428
5-60 PSIG	115-429
10-130 PSIG	115-426
*Both springs required	115-427

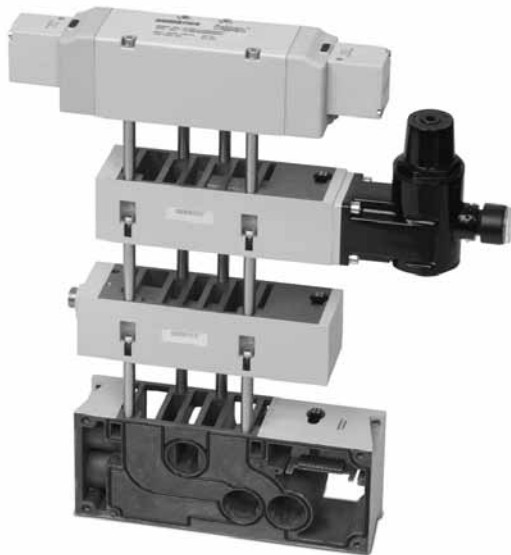
Det. No.	No. Req'd	Part Name
1	1	Piston Assembly
2	1	Gasket
3	1	Poppet Valve Assembly
4	1	Spring
5	1	O-Ring

**Sandwich Pressure Regulator**

Dimensions: Inches (mm)



A	B	C	D	E	F	G	H	I
6.97 (177.1)	9.07 (230.7)	13.94 (354.1)	3.67 (93.1)	1.52 (38.6)	0.79 (20.5)	1.57 (41.0)	0.02 (0.46)	14.69 (373.1)



**Gauge Kit**

160 PSI	11 bar max.	60 PSI	4 bar max.
214-214	214-215	214-219	214-220

**Gauge Adaptor Kit 1/8 NPTF 239-1561**  
**Elbow Kit 239-1217**

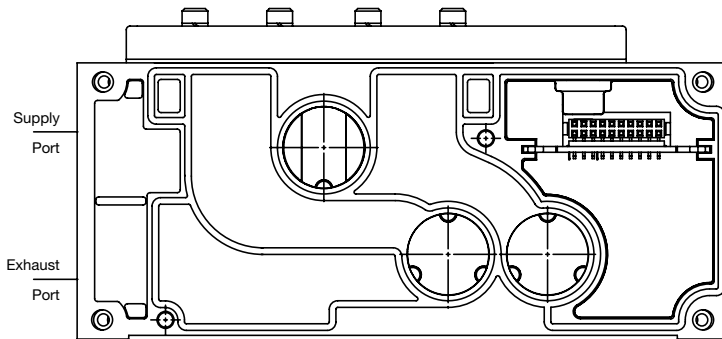
**Parts List**

Det. No.	No. Req'd	Part Name	Part No.
1	1*	Gauge 160 PSI max.	214-212
1	1*	Gauge 11 Bar max.	214-213
1	1*	Gauge 60 PSI max.	214-217
1	1*	Gauge 4 Bar max.	214-218
2	1*	O-Ring	126-105
3	1*	Regulator	See pg 11
4	1	Regulator Block	RS 125-1102 RD, RC, RQ 125-1103 RT 125-1104 RE 125-1105
5	1	Gasket	113-623
6	4	Screw	127-987
7	4	Lockwasher	128-279
8	4	Screw Retaining Clip	125-598
9	1	Screw	127-318
10	1	Plug Assembly	230-1123
11	1	Gasket	113-618
12	1*	Pin	131-236
13	1*	Elbow	134-505

\* (2) Required for RD

Note: RC and RQ require Check Ass'y Kits p. 8

### Mid-Station Supply and Exhaust Block

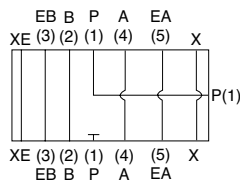
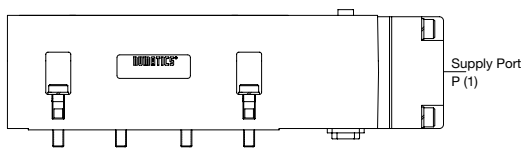


- Add additional supply and exhaust capacity to large manifold assemblies
- Add different pressure to manifold section with use of blocking disks
- Same size as standard manifold block with blank station plate

#### Mid-Station Supply & Exhaust Block Kit

Port Type	Part. No.
NPTF 1/2	239-2224
G 1/2	239-2225

### Sandwich Pressure Block

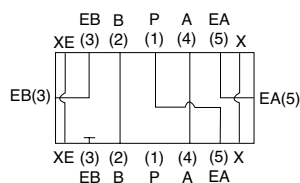
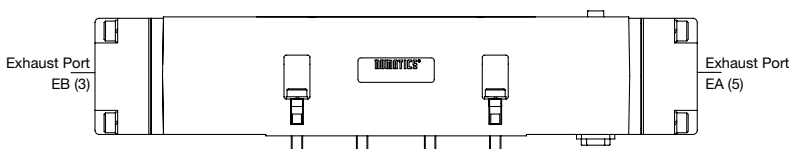


- Used to supply a separate pressure to a single valve station without needing blocking disks.

#### Sandwich Pressure Block Kit

Port Type	Part. No.
NPTF 3/8	239-2227
G 3/8	239-2228

### Sandwich Exhaust Block



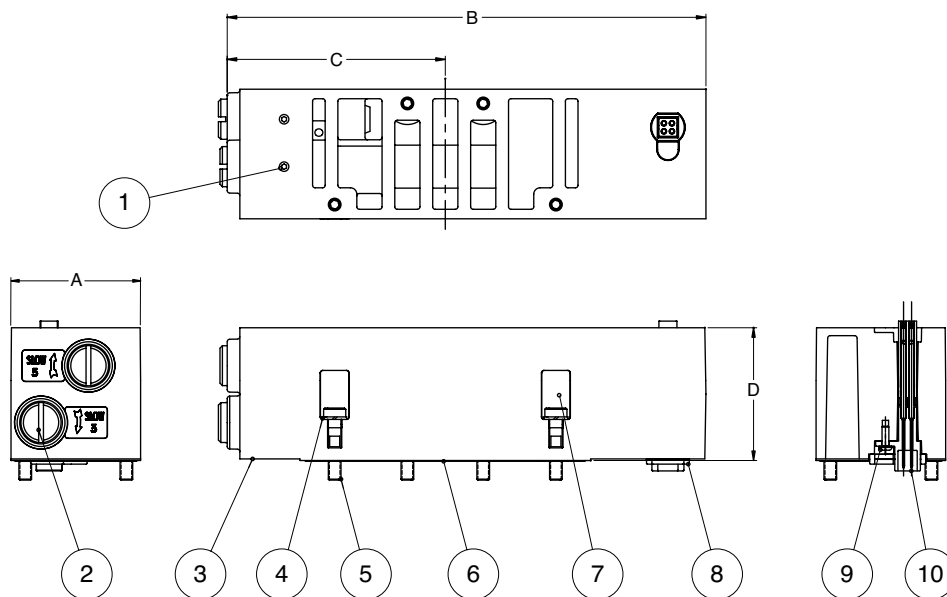
- Used to isolate the exhaust of a single valve station from the manifold.
- Allows faster exhaust response by re-routing.
- Exhaust externally to the manifold.

#### Sandwich Exhaust Block Kit

Port Type	Part. No.
NPTF 3/8	239-2229
G 3/8	239-2230

### Speed Control Kit

239-2223



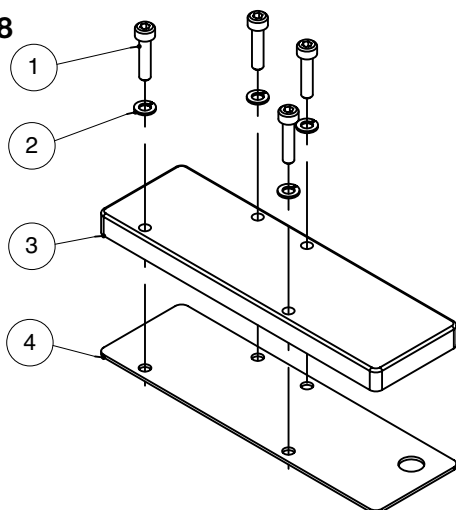
#### Dimensions: Inches (mm)

A	B	C	D
1.61 (41.0)	5.96 (151.5)	2.72 (69.0)	1.65 (42.0)

Det. No.	No. Req'd	Part Name	Part No.
1	2	Retaining Screw	127-686
2	2	Metering Screw	118-179
3	1	Speed Control Body	125-1099
Not Shown	2	Nylon Rod	125-602
4	4	Washer	128-279
5	4	Screw	127-987
6	1	Gasket	113-623
7	4	Retaining Clip	125-598
8	1	Gasket	113-618
9	1	Screw	127-318
10	1	Plug Assembly	230-1123

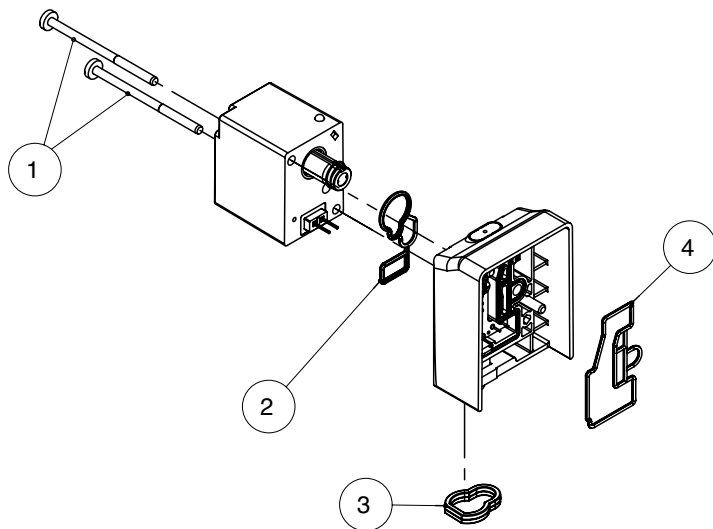
### Blank Station Plate Kit

239-2218

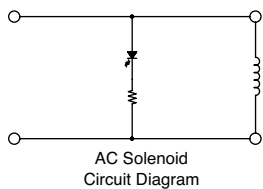
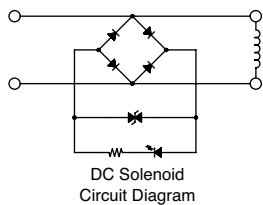


Det. No.	No. Req'd	Part Name	Part No.
1	4	Screw	127-398
2	4	Washer	128-279
3	1	Blank Station Plate	104-809
4	1	Gasket	113-624

### Solenoid Pilot Assembly



Det. No.	No. Req'd	Part Name	Part No.
1	2	Screw	127-823
2	1	Gasket	113-617
3	1	Gasket	113-618
4	1	Gasket	113-619

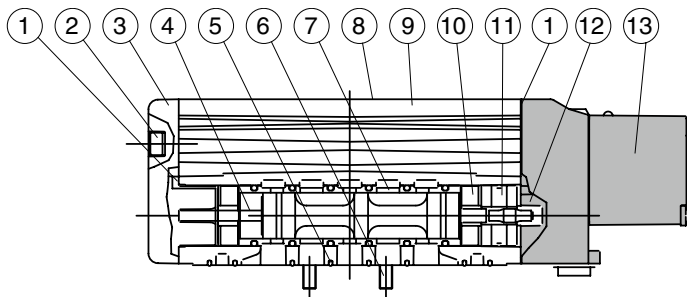


Det. No.	12 VDC	24 VDC	24 VAC	120 VAC
14 end, push non-locking override	236-561	236-562	237-1169	237-1168
12 end, push non-locking override	236-557	236-558	237-1163	237-1162
14 end, turn & lock override	236-563	236-564	237-1171	237-1170
12 end, turn & lock override	236-555	236-556	237-1165	237-1164
14 end, no override	236-559	236-560	237-1167	237-1166
12 end, no override	236-553	236-554	237-1161	237-1160

**Valve Service Kits and Parts**

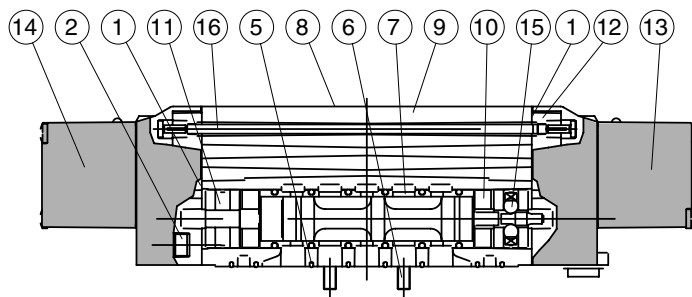
**Kit No. 2035-K1\***

**(For Models BA4)**



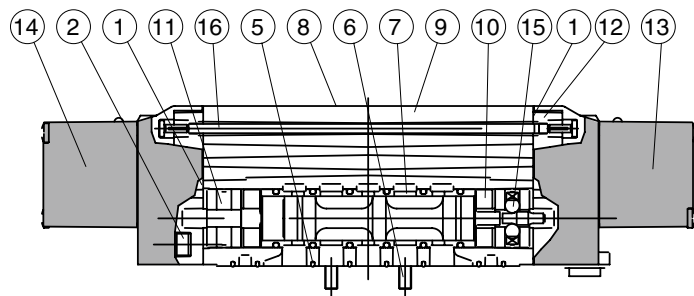
**Kit No. 2035-K2\***

**(For Models BB4)**



**Kit No. 2035-K3\***

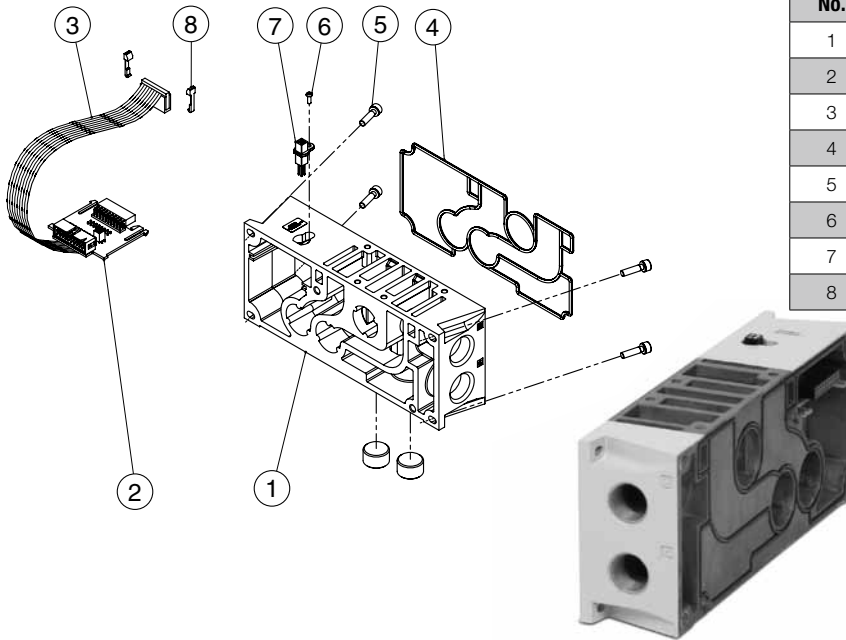
**(For Models BB5)**



Det. No.	No. Req'd				Part Name	Part No.
	BA4	BB4	BB5	BB6		
1*	2	2	2	2	Gasket	113-620
2	8	8	8	8	Screw Assembly	127-396
3	1	N/A	N/A	N/A	Spring Cover	104-808
4*	1	N/A	N/A	N/A	Spring	115-248
5*	1	1	1	1	Gasket	113-623
6	4	4	4	4	Screw Assembly	127-985
7	1	1	N/A	N/A	Spool & Sleeve Ass'y	209-571
7	N/A	N/A	1	N/A	Spool & Sleeve Ass'y	209-481
7	N/A	N/A	N/A	1	Spool & Sleeve Ass'y	209-482
8	1	1	1	1	Nameplate	122-1186
9	1	1	1	1	Body	101-852
10*	2	2	N/A	N/A	Bumper	114-170
11*	1	1	N/A	N/A	Detent Body	110-113
12	1	2	2	2	Pilot Plate	119-761
13	1	1	1	1	Solenoid Pilot Ass'y-14 End	See pg 15
14	N/A	1	1	1	Solenoid Pilot Ass'y-12 End	See pg 15
15*	N/A	1	N/A	N/A	Detent Assembly	210-116
16	N/A	1	1	1	12 to 14 Connector	230-1100
17*	N/A	N/A	2	2	Spring Retainer	116-488
18*	N/A	N/A	2	2	Spring	115-364
19*	N/A	N/A	2	2	Spacer	116-534
20*	N/A	N/A	2	2	Bumper	114-146



## Manifold Assemblies

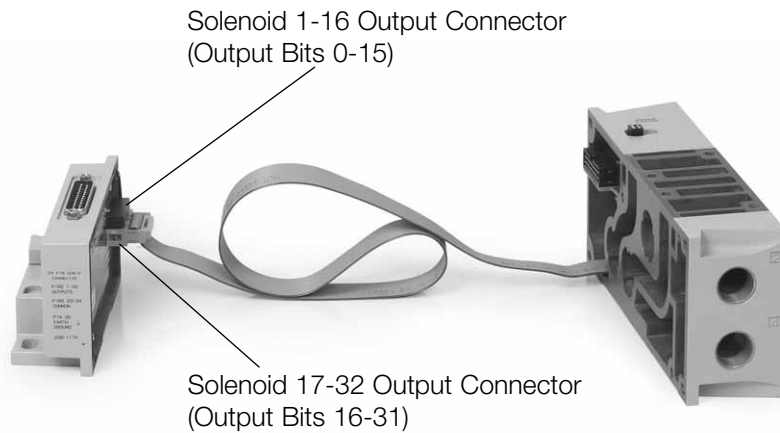


Det. No.	No. Req'd	Part Name	Part No.
1	1	Manifold Block	Not sold separately
2	1	"Z-Board"™	Not sold separately
3	1	Ribbon Cable Ass'y	230-1127
4	1	Gasket	113-622
5	4	Screw	127-986
6	1	Screw	127-318
7	1	Electrical Plug Ass'y	230-1124
8	2	Snap in Latch	140-721

	Manifold Assembly Kits			
<b>Side Cylinder Ports/Bottom Cylinder Ports</b>	1/2 NPTF/3/8 NPTF	G 1/2/G 3/8	3/8 NPTF/3/8 NPTF	G 3/8/G 3/8
<b>Single, "Z-Board"™</b>	206-1608	206-1610	206-1609	206-1611
<b>Double "Z-Board"™</b>	206-1612	206-1614	206-1613	206-1615
<b>Single, "Z-Board"™ w/ Ribbon Cable</b>	206-1620	206-1622	206-1621	206-1623
<b>Double, "Z-Board"™ w/ Ribbon Cable</b>	206-1616	206-1618	206-1617	206-1619

## Ribbon Cable Assembly Kit

239-2226



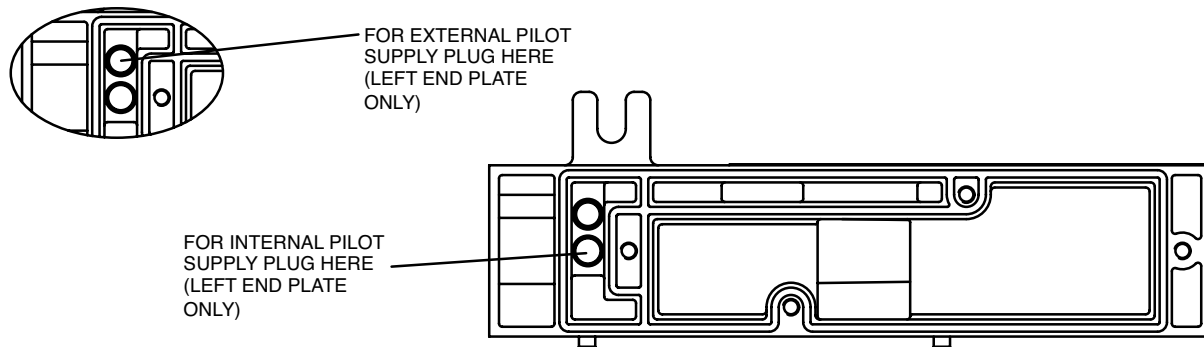
Det. No.	Part Name	Part No.
1	Ribbon Cable Assembly	230-1127
2	Snap In Latch	140-721

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



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

**Internal/External Pilot Selection**

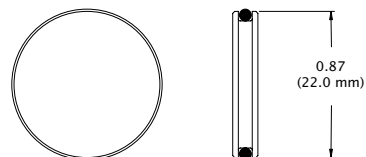
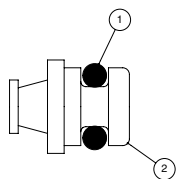


**Internal Pilot Plug**

**213-590**

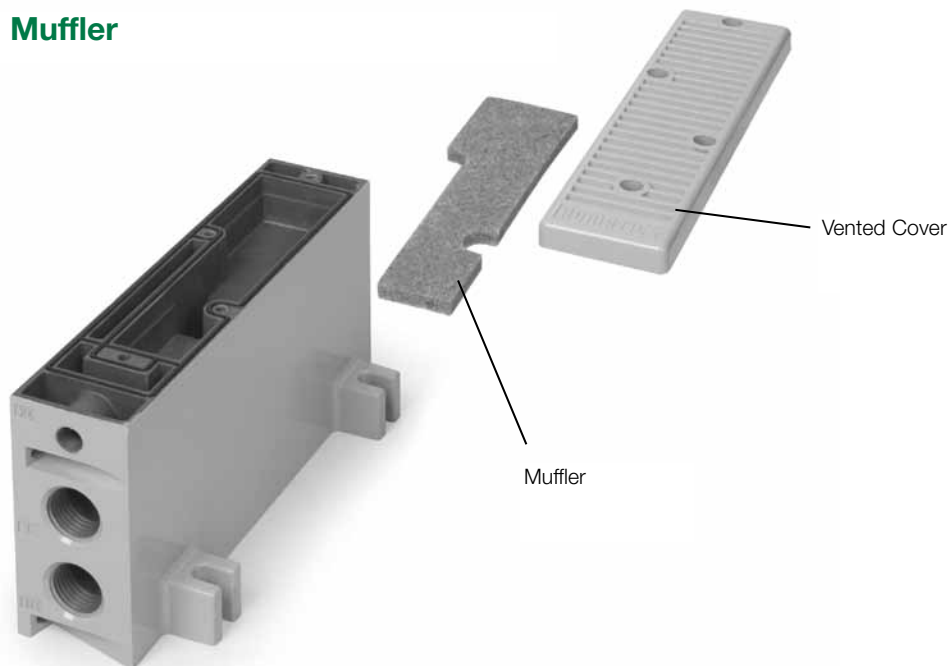
**Blocking Disc**

**239-2219**

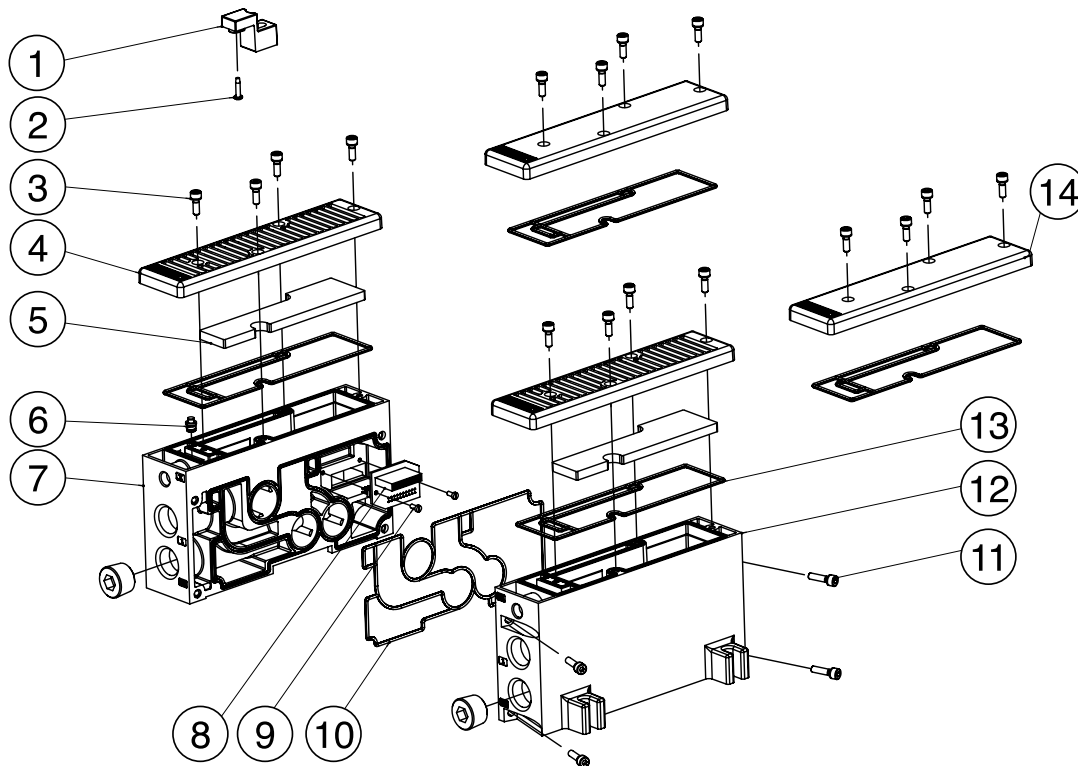


Det. No.	No. Req'd	Part Name	Part No.
1	1	O-Ring	125-1107
2	1	Plug	126-101

**Optional Internal Muffler**



### End Plate Kit

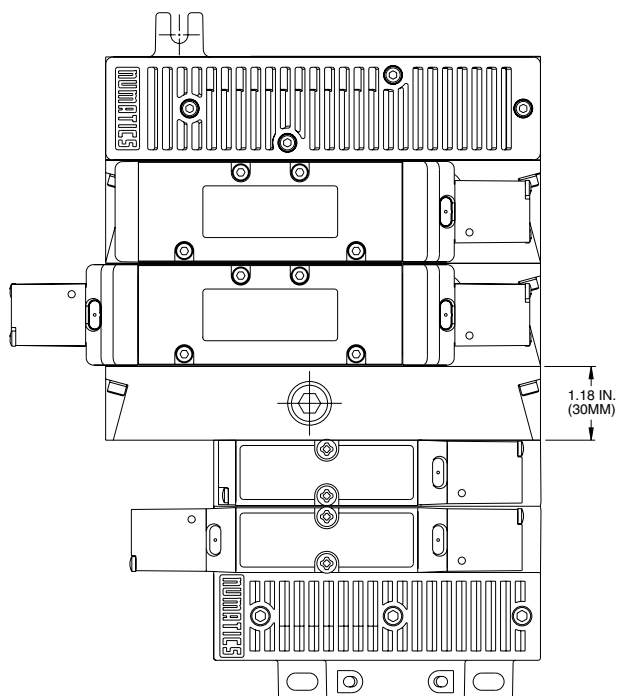


Det. No.	No. Req'd	Part Name	Part No.
1	1	Mounting Support Stand-Off	125-1106
2	1	Screw	127-137
3	8	Screw	127-396
4	2	Muffer Cover Plate	105-457
5	2	Muffer	125-1098
6	1	Pilot Plug Assembly	213-590
7	1	L.H. End Plate	Not sold separately
8	1	Trans Conn. Board Assembly	256-879
9	2	Screw	127-794
10	1	Gasket	113-622
11	4	Screw	127-986
12	1	R.H. End Plate	Not sold separately
13	2	Cover Gasket	113-621
14	2	End Plate Cover	105-456

Port Type	NPTF			G		
PORT	1	3/5	X, XE	1	3/5	X, XE
PORT SIZE	1/2	1/2	1/8	1/2	1/2	1/8
Kit with muffer	239-2205			239-2207		
Kit w/o muffer	239-2206			239-2208		

**Adaptor Plate Kit 239-2278**

This kit includes the adaptor plate, transfer board, gasket, screws, and studs. Individual end plates for the 2035 and 2012 are not included. This adaptor allows the transition from the 2035 to the 2012 series.



**Example order\***

- Adaptor Plate Kit AKJBBGB00XNMUF
- 354BA4Z2MN00061
- 354BB4Z2MN00061
- 122BA4Z1MN00061
- 122BB4Z2MN00061
- ASSEMBLED

\*Valve series identifier for 2012 Series = G.

**Adaptor Plate Kits with End Plates**

**Adaptor Plate Kit with Standard End Plates (“STD” Option)**

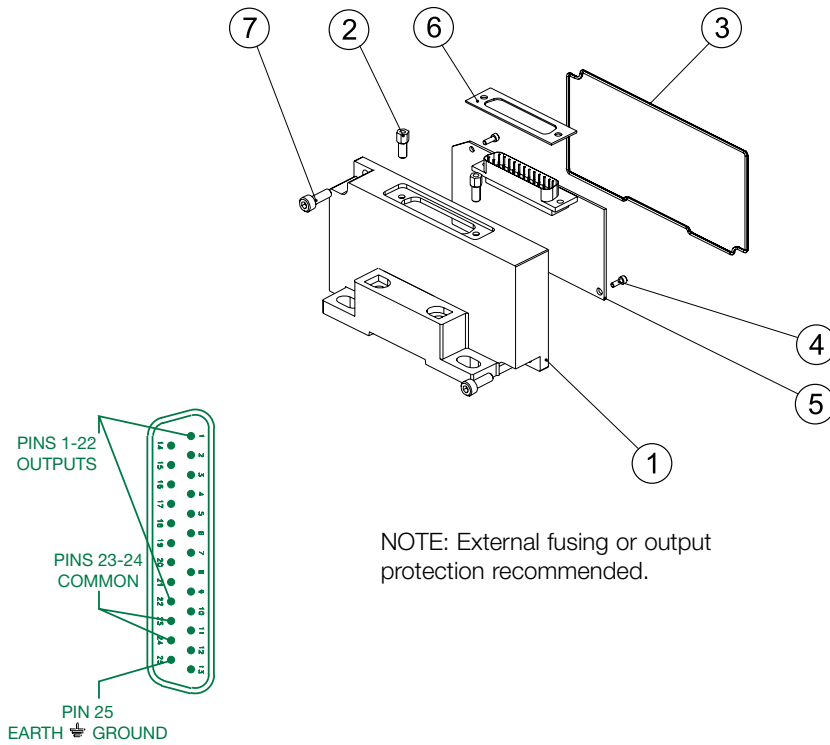
Description	Part No.
2035 with 1/2 NPTF - 2012 with 3/8 and 1/2 NPTF	239-2279
2035 with 1/2 G-Tap - 2012 with 3/8 and 1/2 G-Tap	239-2280
2035 with 1/2 NPTF - 2012 with 3/8 and 1/2 NPTF w/o L.H. Cover	239-2283
2035 with 1/2 G-Tap - 2012 with 3/8 and 1/2 G-Tap w/o L.H. Cover	239-2284

**Adaptor Plate Kit with Standard End Plates and Muffler (“MUF” Option)**

Description	Part No.
2035 with 1/2 NPTF - 2012 with 3/8 and 1/2 NPTF	239-2281
2035 with 1/2 G-Tap - 2012 with 3/8 and 1/2 G-Tap	239-2282
2035 with 1/2 NPTF - 2012 with 3/8 and 1/2 NPTF w/o L.H. Cover	239-2285
2035 with 1/2 G-Tap - 2012 with 3/8 and 1/2 G-Tap w/o L.H. Cover	239-2286

### 25 Pin Sub-D Connector Kit

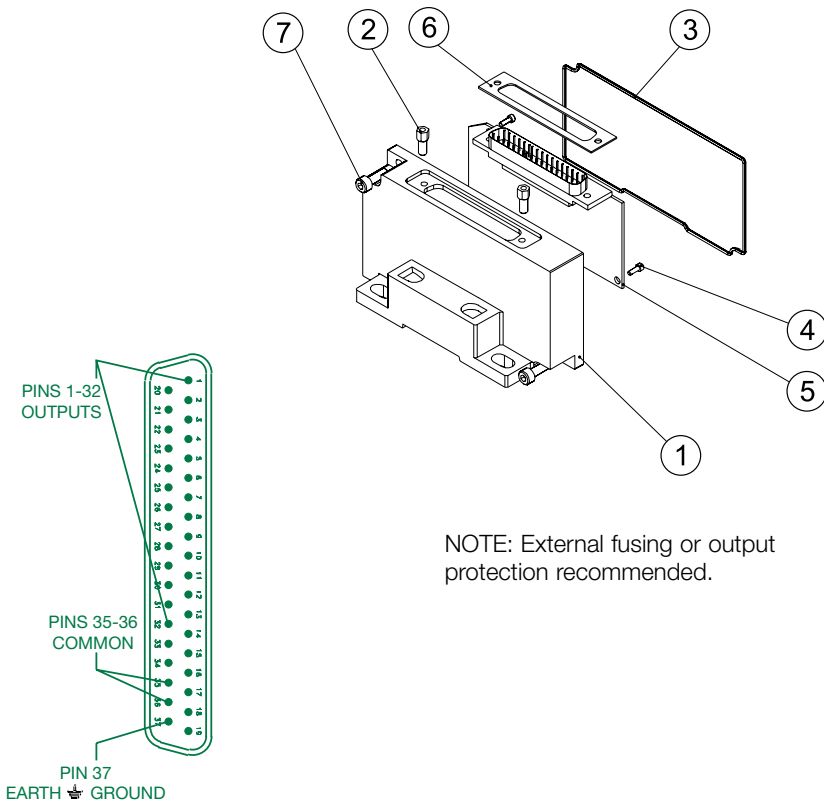
239-1174



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

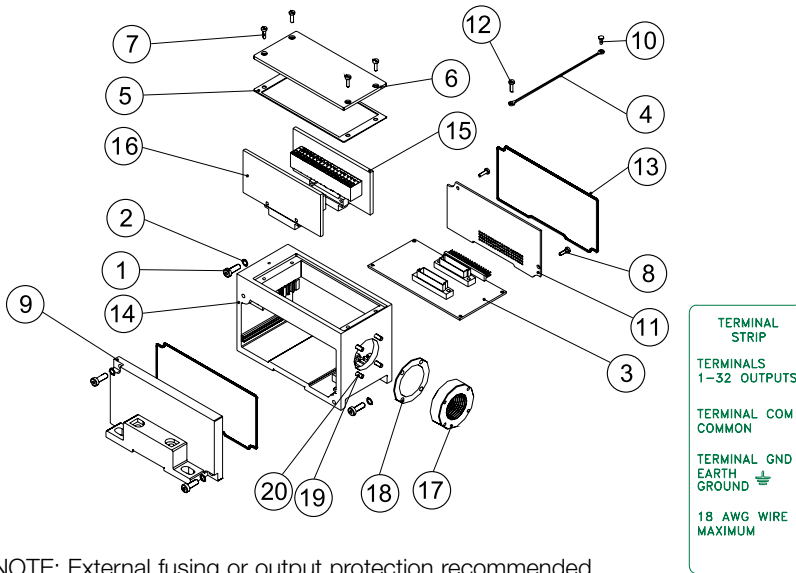
### 37 Pin Sub-D Connector Kit

239-1180



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

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

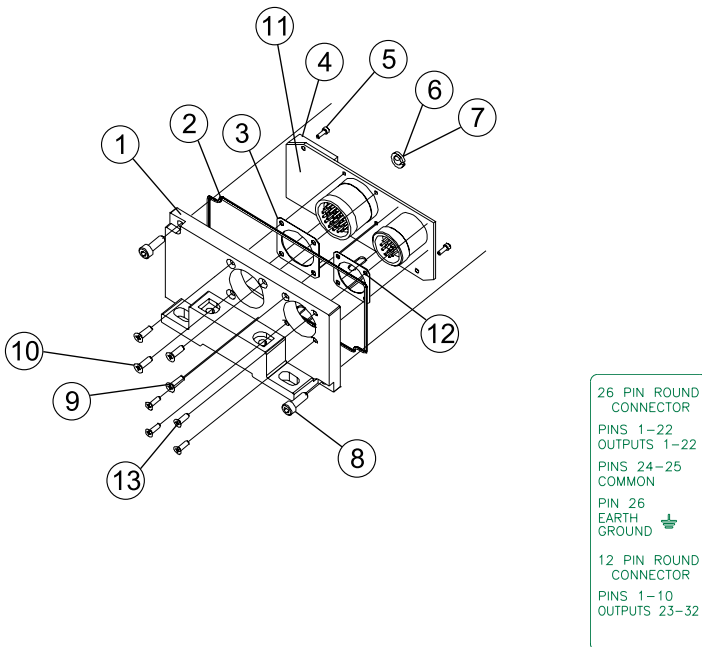


NOTE: External fusing or output protection recommended.

Terminal Strip Housing Kits	Part No.
1-16 Sol.	239-1229
1-32 Sol.	239-1231

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	Cover Plate	105-403
10	1	Screw	127-180
11	1	Converter Board	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	Adapter	119-659
18	1	Gasket	113-542
19	4	Screw	127-879
20	4	Lockwasher	128-192

### 26 Pin, & 26 Round Connector Kits



26 Pin      26 Pin + 12 Pin

NOTE: External fusing or output protection recommended.

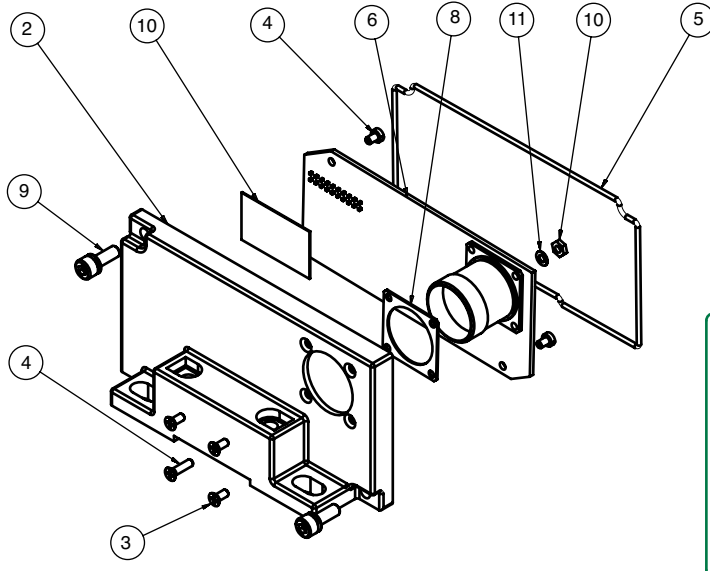
26 PIN Round Kit	Part No.
	239-1184

26 + 12 PIN Round Kits	Part No.
	239-1376

Det. No.	No. Req'd			Part Name	Part No.
	12	26	12+26		
1	1	1	1	Cover	Not sold separately
2	1	1	1	Gasket	113-531
3	N/A	1	1	Gasket	113-353
4	N/A	1	N/A	26 PCB Ass'y	256-624
4	N/A	N/A	1	26+12 PCB Ass'y	256-688
5	2	2	2	Screw	127-875
6	1	N/A	N/A	Lockwasher	128-352
6	N/A	1	1	Lockwasher	128-294
7	1	N/A	N/A	Hex Nut	128-288
7	N/A	1	1	Hex Nut	128-293
8	2	2	2	Screw Ass'y	127-396
9	1	N/A	N/A	Screw	127-982
9	N/A	3	3	Screw	127-810
10	N/A	1	1	Screw	127-770
11	1	N/A	1	Shield	140-759
12	1	N/A	1	Gasket	113-354
13	3	N/A	4	Screw	127-811

### 12 Pin Round Connector Kit

239-2115



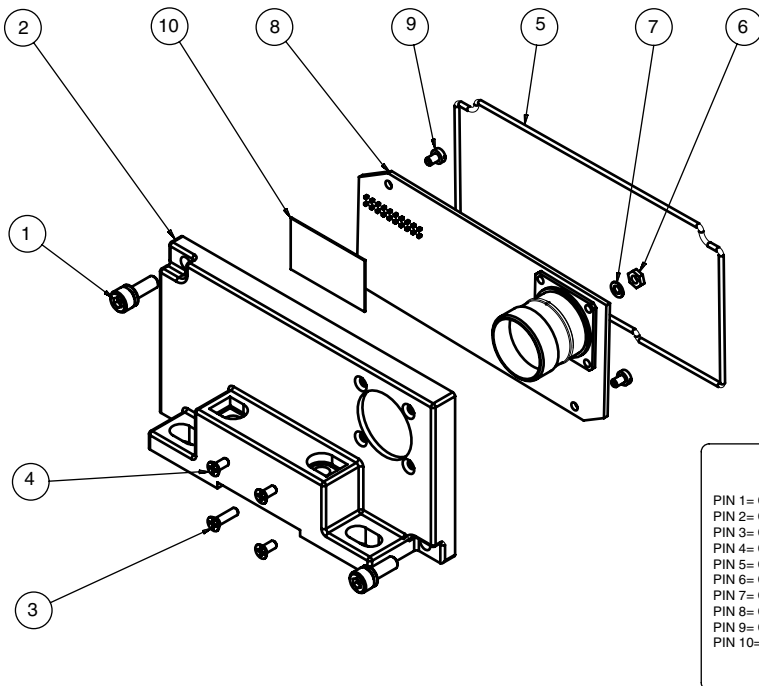
#### Parts List

Det. No.	No. Req'd	Part Name	Part No.
1	1	Cover	105-451
2	1	Screw	127-982
3	1	Shield	140-759
4	2	Screw	127-875
5	1	Gasket	113-531
6	1	P.C. Brd. Assy	256-856
7	3	Screw	127-811
8	1	Gasket	113-354
9	2	Screw Assy	127-396
10	1	Nut	128-288
11	1	Lockwasher	128-352

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	2	Screw	127-396
2	1	Endplate	105-451
3	1	Nameplate	122-1058
4	1	Screw	127-982
5	3	Screw	127-811
6	1	Gasket	113-531
7	1	Nut	128-288
8	1	Lockwasher	128-352
9	1	PG Board Assy	256-905
10	2	Screw	128-875
11	1	Shield	140-759
12	1	Label	122-770

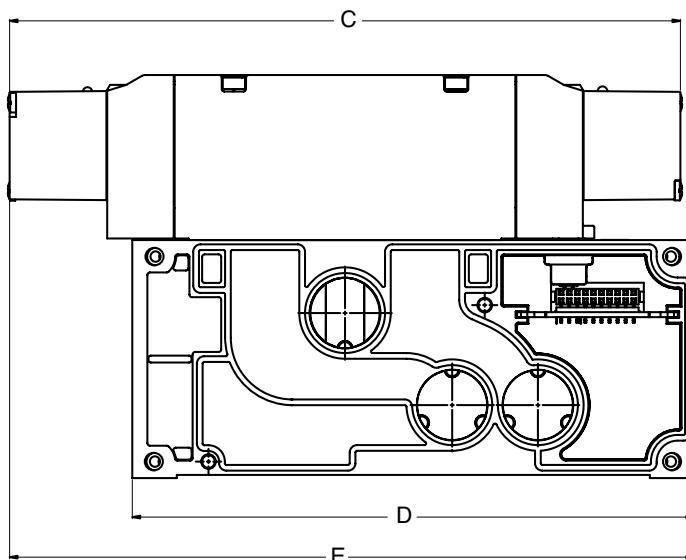
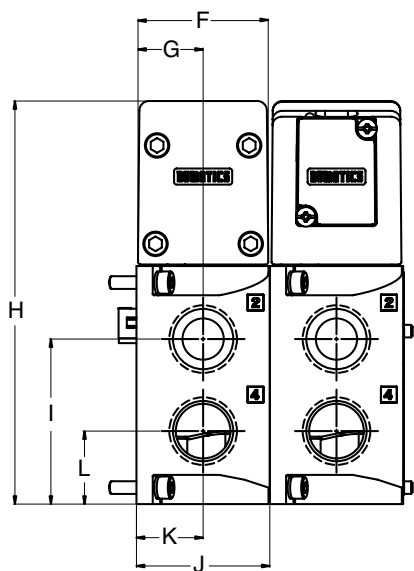
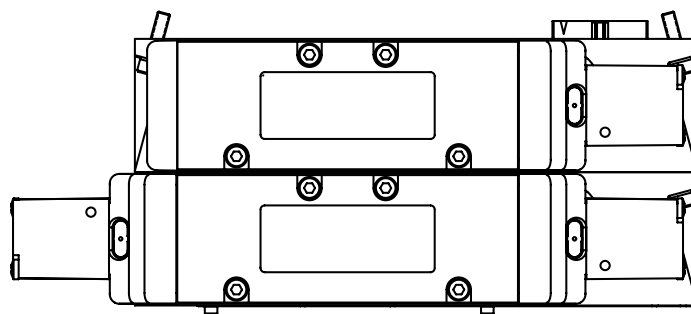
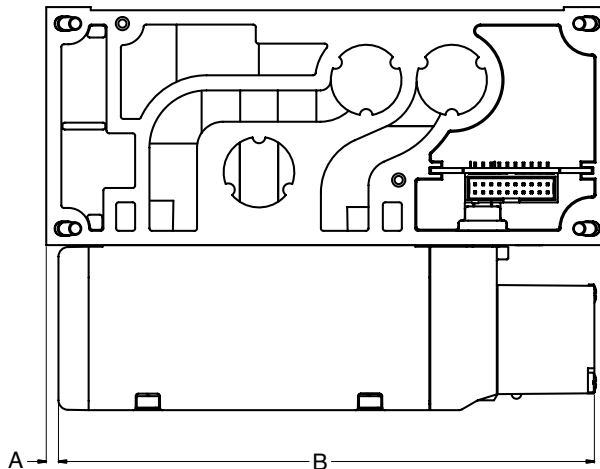
#### 19 PIN CONNECTOR

PIN 1= COIL 15      PIN 11= COIL 13  
 PIN 2= COIL 11      PIN 12= P.E.  
 PIN 3= COIL 7      PIN 13= COIL 12  
 PIN 4= COIL 4      PIN 14= COIL 8  
 PIN 5= COIL 3      PIN 15= COIL 1  
 PIN 6= COMMON      PIN 16= COIL 5  
 PIN 7= COIL 2      PIN 17= COIL 9  
 PIN 8= COIL 6      PIN 18= COIL 16  
 PIN 9= COIL 10      PIN 19= N.C.  
 PIN 10= COIL 14

NOTE: External fusing or output protection recommended.

Valve on Manifold Block

Dimensions: Inches (mm)

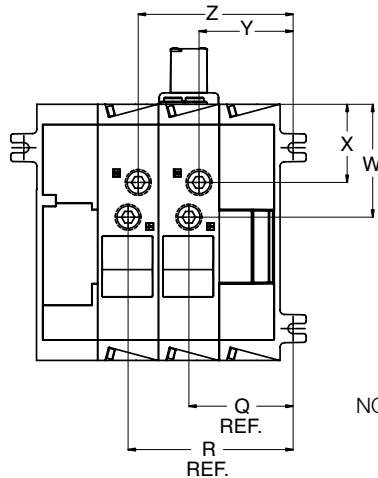
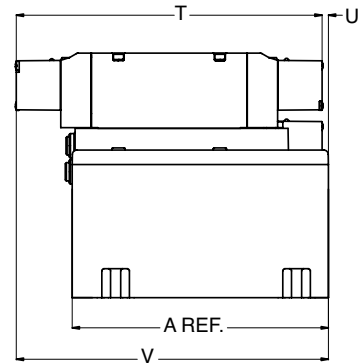
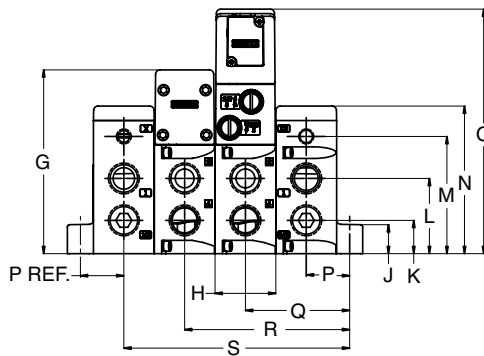
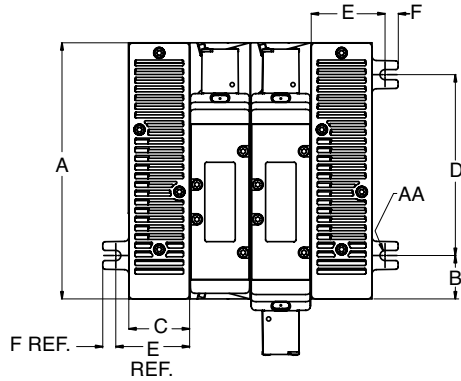


A	B	C	D	E	F	G	H	I	J	K	L
0.15 (3.9)	6.65 (168.8)	8.32 (211.3)	6.97 (177.0)	8.49 (215.6)	1.61 (41.0)	0.81 (20.5)	5.00 (127.0)	2.05 (52.0)	1.65 (42.0)	0.83 (21.0)	0.91 (23.0)



### Manifold Assembly

Dimensions: Inches (mm)



NOTE:

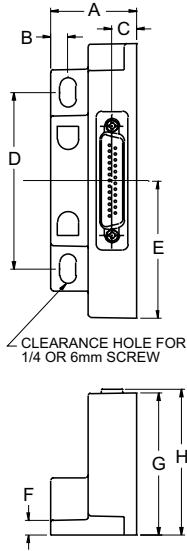
- For Electrical Interface option dimensions see pg. 26.
- For Fieldbus Electronics dimensions see Electronics Section.

A	B	C	D	E	F	G	H	J	K	L	M	N
6.97 (177.0)	1.18 (30.0)	1.65 (42.0)	4.92 (125.0)	2.01 (51.0)	0.35 (9.0)	5.00 (127.0)	1.65 (42.0)	0.79 (20.0)	0.91 (23.0)	2.05 (52.0)	3.19 (81.0)	4.02 (102.0)

O	P	Q	R	S	T	U	V	W	X	Y	Z	AA
6.65 (169.0)	1.18 (30.0)	2.83 (72.0)	4.49 (114.0)	6.14 (156.0)	8.32 (211.3)	0.17 (4.4)	8.49 (215.6)	3.07 (78.0)	2.13 (54.0)	2.56 (65.0)	2.83 (72.0)	0.14 (3.5)

Electrical Interface

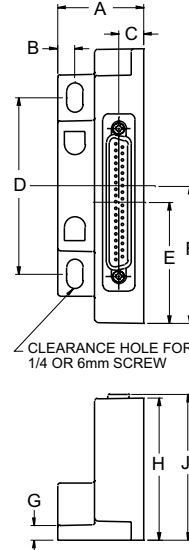
25 Pin Sub-D



Dimensions: Inches (mm)

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)

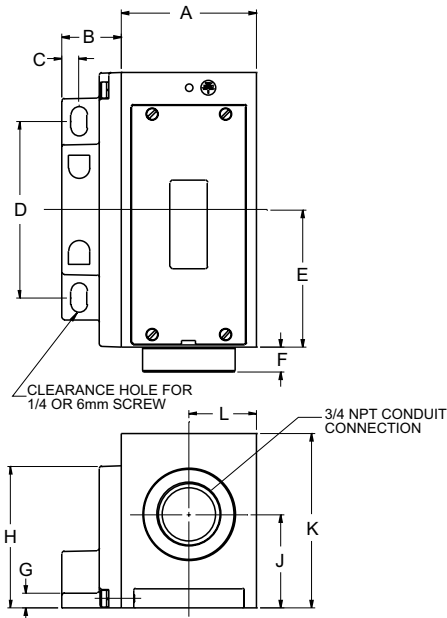
37 Pin Sub-D



Dimensions: Inches (mm)

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

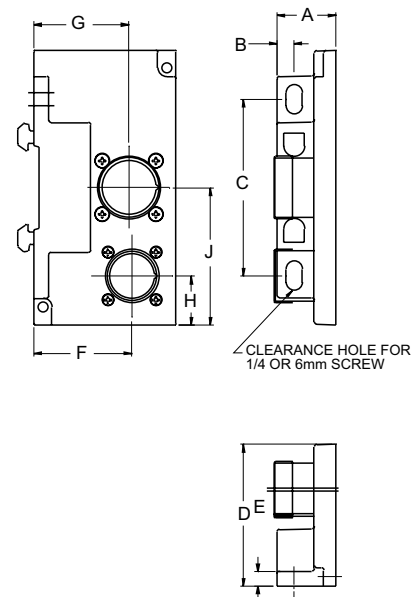
Terminal Strip 1-16 & 1-32



Dimensions: Inches (mm)

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 Pin, 26 Pin & 26 + 12 Pin Round Connector



Dimensions: Inches (mm)

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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