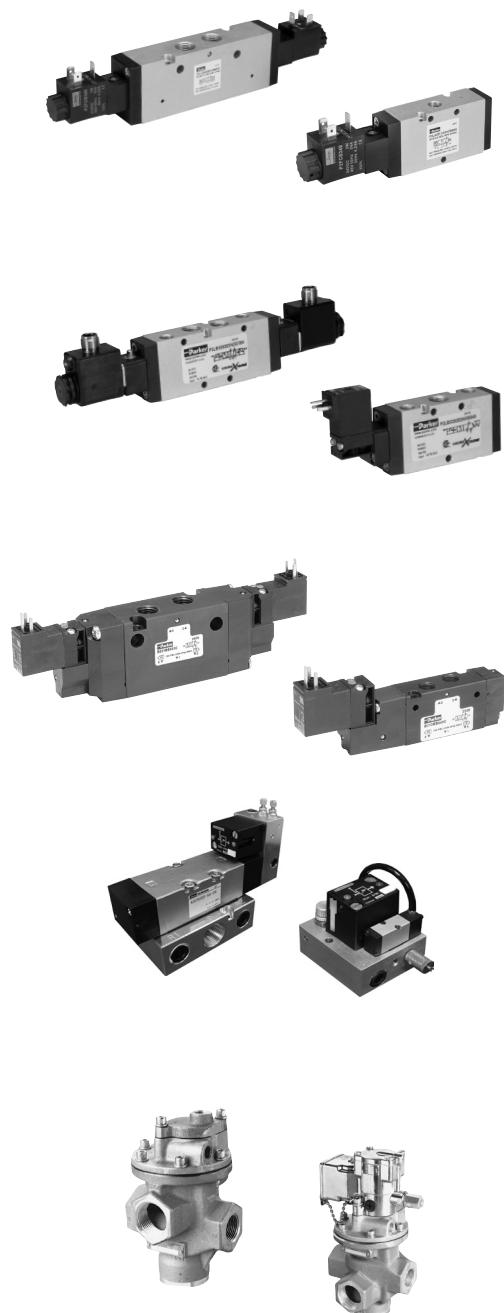




Pneumatic Valve Products Inline Valve Series

Viking Lite Series

Features	C2
Common Part Numbers / Ordering Information	C3-C5
Accessories	C6
Dimensional Data	C7-C10

Viking Xtreme Series

Features	C11
Common Part Numbers / Ordering Information	C12-C19
Accessories	C20-C23, C28-C30
Technical Data	C24-C27, C29
Dimensional Data	C30-C38

B3, B5 & B6 Series

Features	C39
Common Part Numbers / Ordering Information	C40-C45
Accessories	C46-C48
Technical Data	C49-C54
Dimensional Data	C55-C58

B7 & B8 Series

Features	C59
Common Part Numbers / Ordering Information	C60-C63
Accessories	C64-C66
Technical Data	C67-C69
Dimensional Data	C70-C73

Air Saver Series

Features	C72-C73
Specifications	C74
Ordering Information / Dimensional Data	C75-C80

N Series

Features	C81
Common Part Numbers / Ordering Information	C82-C85
Technical Data	C86-C91
Dimensional Data	C92-C99

Viking Lite Series

The Viking Lite valve range is robust, versatile and combines a large flow capacity with short change-over times, designer may choose 1/8, 1/4 or 3/8 port sizes along with 24VDC and 120VAC voltage options. Viking Lite valves are fitted with dynamic bi-directional spool seals suitable for pressures up to 10 bar and ambient temperatures between -10°C to + 50°C. When in service, radial expansion of the spool seal occurs to maintain sealing contact with the valve bore. This sealing method reduces friction and produces a lower required pilot pressure. Valves do not require lubrication in operation but they can also be installed in systems that are lubricated.

Ports

- P2LAZ: 1/8 inch NPT & BSPP, Cv = 0.6
- P2LBZ: 1/4 inch NPT & BSPP, Cv = 1.5
- P2LCZ: 3/8 inch NPT & BSPP, Cv = 2.5

Mounting

- Inline
- IEM aluminum bar

Solenoids

2.5 watts
 – 22mm, 3-pin (DIN 43650)
 24VDC and 120VAC

• Certification / approval

- IP65 Rated, RoHS, CE

Materials

Valve body	Anodized aluminium
End covers	Anodized aluminium
Spool	Aluminium
Piston	Acetal plastic / Anodized aluminium
End cover seals	Nitrile rubber
End cover screws	Zinc plated steel
Springs	Stainless steel
Mounting screws for solenoid	Stainless steel
Spool seals	Nitrile

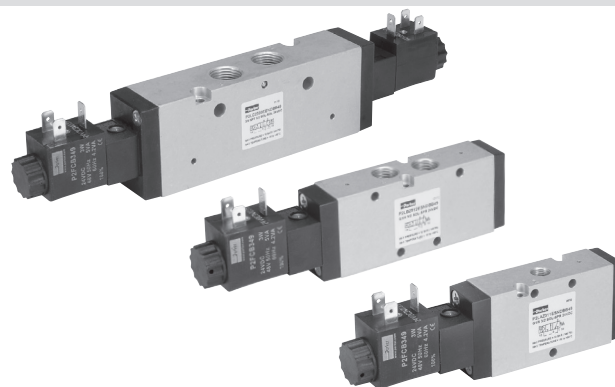
Features

WCS

- Maximum Performance
 - Low friction - fast response - less wear
- Long Cycle Life
 - Under pressure, radial expansion of the seal occurs to maintain sealing contact with the valve bore
- Non-Lube Service
 - No lubrication required for continuous valve shifting
- Bi-Directional Spool Seals
 - Common spool used for any pressure

- Solenoid operated, IP65, RoHS, CE
- 90° rotation

The bore is polished to a very high surface finish for maximum flow capacity and long life.



Operating information

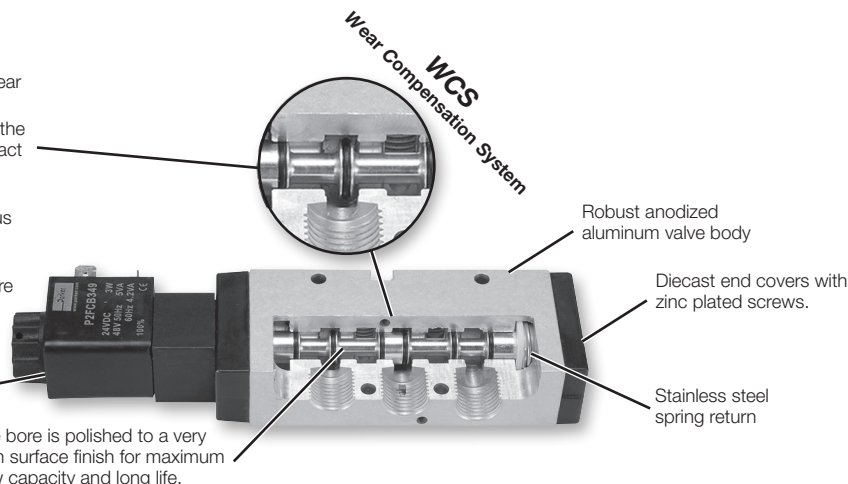
Operating pressure:	145 PSIG (10 bar)
Minimum:	See chart
Operating temperature:	14°F to 122°F (-10°C to 50°C)

Minimum operating pressure, PSIG (bar)

Valve type - Internal pilot	P2LAZ	P2LBZ	P2LCZ
Single solenoid - spring return	43.5 (3.0)	43.5 (3.0)	43.5 (3.0)
Single remote pilot - spring return	43.5 (3.0)	43.5 (3.0)	43.5 (3.0)
Double solenoid - 2-position	22 (1.5)	22 (1.5)	22 (1.5)
Double remote pilot - 2-position	22 (1.5)	22 (1.5)	22 (1.5)
Double solenoid - 3-position (APB, PC, CE)	43.5 (3.0)	43.5 (3.0)	43.5 (3.0)
Double remote pilot - 3-position (APB, PC, CE)	43.5 (3.0)	43.5 (3.0)	43.5 (3.0)

Recommended air quality for valves

For best possible service life and trouble free operation, ISO 8573-1 quality class 3.4.3 should be used. This means 5µm filter (standard filter) dew point +3°C for indoor operation (a lower dew point should be selected for outdoor operation) and oil concentration 1.0 mg oil/m³, which is what a standard compressor with a standard filter gives.

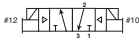


3/2 - 2-Position Single Solenoid, Non-locking Manual Override

	Port size	Cv	Response Time (msec)	Weight lb (kg)	Voltage	Part Number (NPT)	Part Number (BSPP)
	1/8	0.6	15 / 35	0.35 (0.16)	24VDC	P2LAZ391ESNDBB49	P2LAZ311ESNDBB49
					120VAC	P2LAZ391ESNDBB53	P2LAZ311ESNDBB53
	1/4	1.5	18 / 45	0.35 (0.16)	24VDC	P2LBZ392ESNDBB49	P2LBZ312ESNDBB49
					120VAC	P2LBZ392ESNDBB53	P2LBZ312ESNDBB53
	3/8	2.5	27 / 45	0.77 (0.35)	24VDC	P2LCZ393ESNDBB49	P2LCZ313ESNDBB49
					120VAC	P2LCZ393ESNDBB53	P2LCZ313ESNDBB53

P2LAZ Shown

3/2 - 2-Position Double Solenoid, Non-locking Manual Override

	Port Size	Cv	Response Time (msec)	Weight lb (kg)	Voltage	Part Number (NPT)	Part Number (BSPP)
	1/8	0.6	10 / 10	0.40 (0.18)	24VDC	P2LAZ391EENDBB49	P2LAZ311EENDBB49
					120VAC	P2LAZ391EENDBB53	P2LAZ311EENDBB53
	1/4	1.5	12 / 12	0.40 (0.18)	24VDC	P2LBZ392EENDBB49	P2LBZ312EENDBB49
					120VAC	P2LBZ392EENDBB53	P2LBZ312EENDBB53
	3/8	2.5	17 / 17	0.80 (0.36)	24VDC	P2LCZ393EENDBB49	P2LCZ313EENDBB49
					120VAC	P2LCZ393EENDBB53	P2LCZ313EENDBB53

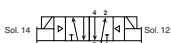
P2LAZ Shown

5/2 - 2-Position Single Solenoid, Non-locking Manual Override

	Port Size	Cv	Response Time (msec)	Weight lb (kg)	Voltage	Part Number (NPT)	Part Number (BSPP)
	1/8	0.6	15 / 35	.037 (0.17)	24VDC	P2LAZ591ESNDBB49	P2LAZ511ESNDBB49
					120VAC	P2LAZ591ESNDBB53	P2LAZ511ESNDBB53
	1/4	1.5	18 / 45	0.44 (0.20)	24VDC	P2LBZ592ESNDBB49	P2LBZ512ESNDBB49
					120VAC	P2LBZ592ESNDBB53	P2LBZ512ESNDBB53
	3/8	2.5	27 / 45	0.95 (0.43)	24VDC	P2LCZ593ESNDBB49	P2LCZ513ESNDBB49
					120VAC	P2LCZ593ESNDBB53	P2LCZ513ESNDBB53

P2LAZ Shown

5/2 - 2-Position Double Solenoid, Non-locking Manual Override

	Port Size	Cv	Response Time (msec)	Weight lb (kg)	Voltage	Part Number (NPT)	Part Number (BSPP)
	1/8	0.6	10 / 10	.042 (0.19)	24VDC	P2LAZ591EENDBB49	P2LAZ511EENDBB49
					120VAC	P2LAZ591EENDBB53	P2LAZ511EENDBB53
	1/4	1.5	12 / 12	0.46 (0.21)	24VDC	P2LBZ592EENDBB49	P2LBZ512EENDBB49
					120VAC	P2LBZ592EENDBB53	P2LBZ512EENDBB53
	3/8	2.5	17 / 17	0.97 (0.44)	24VDC	P2LCZ593EENDBB49	P2LCZ513EENDBB49
					120VAC	P2LCZ593EENDBB53	P2LCZ513EENDBB53

P2LAZ Shown

5/3 - 3-Position, All Ports Blocked, Non-locking Manual Override

	Port Size	Cv	Response Time (msec)	Weight lb (kg)	Voltage	Part Number (NPT)	Part Number (BSPP)
	1/8	0.6	18 / 40	0.57 (0.26)	24VDC	P2LAZ691EENDBB49	P2LAZ611EENDBB49
					120VAC	P2LAZ691EENDBB53	P2LAZ611EENDBB53
	1/4	1.5	22 / 55	0.62 (0.28)	24VDC	P2LBZ692EENDBB49	P2LBZ612EENDBB49
					120VAC	P2LBZ692EENDBB53	P2LBZ612EENDBB53
	3/8	2.5	30 / 90	1.32 (0.60)	24VDC	P2LCZ693EENDBB49	P2LCZ613EENDBB49
					120VAC	P2LCZ693EENDBB53	P2LCZ613EENDBB53

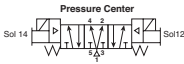
P2LAZ Shown

 Most popular. Notes: Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C)



For inventory, lead times, and kit lookup, visit www.pdnplu.com

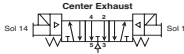
5/3 - 3-Position, Pressure Center, Non-locking Manual Override



P2LAZ Shown

Port Size	Cv	Response Time (msec)	Weight lb (kg)	Voltage	Part Number (NPT)	Part Number (BSPP)
1/8	0.6	18 / 40	0.57 (0.26)	24VDC	P2LAZ791EENDBB49	P2LAZ711EENDBB49
				120VAC	P2LAZ791EENDBB53	P2LAZ711EENDBB53
1/4	1.5	22 / 55	0.62 (0.28)	24VDC	P2LBZ792EENDBB49	P2LBZ712EENDBB49
				120VAC	P2LBZ792EENDBB53	P2LBZ712EENDBB53
3/8	2.5	30 / 90	1.32 (0.60)	24VDC	P2LCZ793EENDBB49	P2LCZ713EENDBB49
				120VAC	P2LCZ793EENDBB53	P2LCZ713EENDBB53

5/3 - 3-Position, Center Exhaust



P2LAZ Shown

Port Size	Cv	Response time (msec)	Weight lb (kg)	Voltage	Part Number (NPT)	Part Number (BSPP)
1/8	0.6	18 / 40	0.57 (0.26)	24VDC	P2LAZ891EENDBB49	P2LAZ811EENDBB49
				120VAC	P2LAZ891EENDBB53	P2LAZ811EENDBB53
1/4	1.5	22 / 55	0.62 (0.28)	24VDC	P2LBZ892EENDBB49	P2LBZ812EENDBB49
				120VAC	P2LBZ892EENDBB53	P2LBZ812EENDBB53
3/8	2.5	30 / 90	1.32 (0.60)	24VDC	P2LCZ893EENDBB49	P2LCZ813EENDBB49
				120VAC	P2LCZ893EENDBB53	P2LCZ813EENDBB53

Notes: Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C)

Viking Lite Single & Double Solenoid Operated Valves

P2L

A

Z

5

91

ES

N

D

C

B

49

Valve Size

1/8" A

1/4" B

3/8" C

Series

Viking Lite Z

Valve Type / Function

Internal pilot supply to solenoid

3/2 NC - 2-Position 3

5/2 2-Position 5

5/3 3-Position, APB 6

5/3 3-Position, PC 7

5/3 3-Position, CE 8

Main port thread

G1/8 (P2LA) 11

G1/4 (P2LB) 12

G3/8 (P2LC) 13

1/8" NPT (P2LA) 91

1/4" NPT (P2LB) 92

3/8" NPT (P2LC) 93

12 End Operator

EE Double Solenoid

ES* Single Solenoid, Spring Return

Voltage / Frequency

49 24VDC

53 120VAC

Blank Valve Less Coil

Enclosures / Lead Length

B 22mm Rectangular 3-Pin - Type B Industrial (Male Only)

N Valve Less Coil

Overrides

C Extended - Locking

B Flush - Non-Locking

Solenoid Pilot Type

D Pilot Exhaust Vented

Valve Type

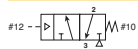
N 14°F to 122°F (-10°C to 50°C)

Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

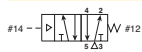
Single Remote Air Pilot, 3-way, 2-position



P2LBZ Shown

Port Size (NPT)	Cv	Response Time (msec)	Weight lb (kg)	Valve Type	Part Number
1/8"	0.7	15 / 45	0.25 (0.11)	P2LAX	P2LAZ391PS
1/4"	1.3	25 / 65	0.25 (0.11)	P2LBX	P2LBZ392PS
3/8"	2.5	25 / 65	0.67 (0.30)	P2LCX	P2LCZ393PS

Single Remote Air Pilot, 4-way, 2-position



P2LBZ Shown

Port Size (NPT)	Cv	Response Time (msec)	Weight lb (kg)	Valve Type	Part Number
1/8"	0.7	15 / 45	0.27 (0.12)	P2LAX	P2LAZ591PS
1/4"	1.3	20 / 55	0.27 (0.12)	P2LBX	P2LBZ592PS
3/8"	2.5	25 / 85	0.85 (0.35)	P2LCX	P2LCZ593PS

Double Remote Air Pilot, 4-way, 2-position



P2LBZ Shown

Port Size (NPT)	Cv	Response Time (msec)	Weight lb (kg)	Valve Type	Part Number
1/8"	0.7	11 / 11	0.22 (0.10)	P2LAX	P2LAZ591PP
1/4"	1.3	13 / 13	0.26 (0.12)	P2LBX	P2LBZ592PP
3/8"	2.5	18 / 18	0.77 (0.35)	P2LCX	P2LCZ593PP

Notes: Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C).

Viking Lite Remote Air Pilot Operated Valves

P2L A Z 5 91 PS					
Valve Size 1/8" A 1/4" B 3/8" C			Operators / Return PP Double Remote Pilot, 5/32" (4mm) tube PS* Single Remote Pilot, Spring Return, 5/32" (4mm) Tube * Not available with 3-position valves.		
Valve Type / Function Internal Pilot Supply To Solenoid 3/2 NC - 2-Position 3 5/2 2-Position 5 5/3 3-Position, APB 6 5/3 3-Position, PC 7 5/3 3-Position, CE 8			Main Port Thread 11 G1/8 (P2LA) 12 G1/4 (P2LB) 13 G3/8 (P2LC) 91 1/8" NPT (P2LA) 92 1/4" NPT (P2LB) 93 3/8" NPT (P2LC)		

Most popular.



For inventory, lead times, and kit lookup, visit www.pdnpplu.com

C5

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

IEM Bar Manifold, Inline Valve Only*



Valve Series	Valve Function	# of Stations	Weight lb (kg)	Manifold Only (NPT)	Manifold Only (BSPP)
P2LAZ / P2LBZ	3-way	2	0.84 (0.38)	91213202SXZN	91213202SXZ
P2LAZ / P2LBZ	3-way	4	1.41 (0.64)	91213204SXZN	91213204SXZ
P2LAZ / P2LBZ	3-way	6	1.96 (0.89)	91213206SXZN	91213206SXZ
P2LAZ / P2LBZ	3-way	8	2.54 (1.15)	91213208SXZN	91213208SXZ
P2LAZ / P2LBZ	3-way	10	3.09 (1.40)	91213210SXZN	91213210SXZ

Kits include: Manifold, valve hold down bolts, gaskets.



Valve Series	Valve Function	# of Stations	Weight lb (kg)	Manifold Only (NPT)	Manifold Only (BSPP)
P2LAZ	4-way	2	0.68 (0.31)	9121658068N	9121658068
P2LAZ	4-way	4	1.06 (0.48)	9121658075N	9121658075
P2LAZ	4-way	6	1.39 (0.63)	9121658076N	9121658076
P2LAZ	4-way	8	1.76 (0.80)	9121658077N	9121658077
P2LAZ	4-way	10	2.16 (0.98)	9121658078N	9121658078

Kits include: Manifold, valve hold down bolts, gaskets.



Valve Series	Valve Function	# of Stations	Weight lb (kg)	Manifold Only (NPT)	Manifold Only (BSPP)
P2LBZ	4-way	2	1.53 (0.69)	9121594805XN	9121594805X
P2LBZ	4-way	4	2.49 (1.13)	9121594806XN	9121594806X
P2LBZ	4-way	6	3.44 (1.56)	9121594807XN	9121594807X
P2LBZ	4-way	8	4.41 (2.00)	9121594808XN	9121594808X
P2LBZ	4-way	10	5.40 (2.45)	9121594812XN	9121594812X

Kits include: Manifold, valve hold down bolts, gaskets.

* For odd number of stations, consider Viking Xtreme bar manifold.

IEM Bar Manifold, Inline Valve Only



Valve Series	Valve Function	# of Stations	Manifold Only (NPT & BSPP)
P2LCZ	4-way		Use Viking Xtreme IEM bar manifold

Note: Only 4-way Viking Lite will mount on Viking Xtreme manifold. If 3-way desired, use 4-way and plug part #2 for N.C. valve function.

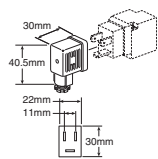
Manifold Accessories / Parts



Valve Series	Description	Weight lb (kg)	Kit Number
P2LAZ / P2LBZ *	3-way: Blanking kit with mounting screws (2)	0.22 (0.10)	912132BPSXZ
P2LAZ *	4-way: Blanking kit with mounting screws (2)	0.11 (0.05)	9121658063
P2LBZ *	4-way: Blanking kit with mounting screws (2)	0.04 (0.02)	9121594809X

*Note: O-ring for blanking kit included with manifold. For replacement o-rings or fastener bolts, use Viking Xtreme Kits.

22mm Rectangular 3-Pin – Type B Industrial (Use with Enclosure “B”)



Description	Connector with 6' (2m) Cord	Connector
Unlighted	PS2429JBP	PS2429BP
Light – 24VDC	PS2430J79BP*	PS243079BP
Light – 120V/60Hz	PS2430J83BP*	PS243083BP

* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord.
IP65 rated when properly installed.

Engineering data:

conductors: 2 poles plus ground; cable range (connector only):
6 to 8mm (0.24 To 0.31 Inch); contact spacing: 11mm

Most popular.

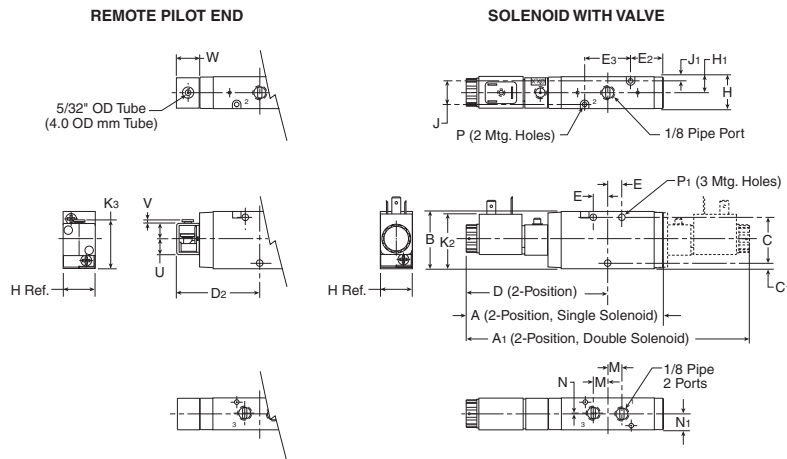
Replacement Parts

Description	Part Number
24VDC solenoid coil kit	P2FCB449
110VAC solenoid coil kit	P2FCB453
Remote pilot kit	P2FP1P
*Includes adaptor, gasket, screws	
Solenoid nut, diffuser	PS1556
Solenoid nut, vented	PS2892P



For inventory, lead times, and kit lookup, visit www.pdnplu.com

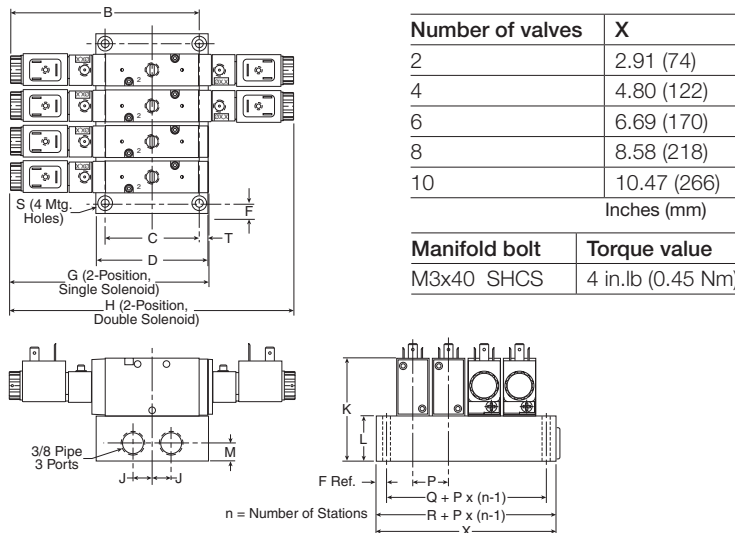
P2LAZ 3/2 Single & Double Operators – Solenoid & Remote Air Pilot



**P2LAZ 3/2
Solenoid & Remote Air Pilot**

A	A1	B	C	C1	D
5.35 (136)	7.68 (195)	1.57 (40)	1.26 (32)	.16 (4)	3.84 (97.5)
D2	E	E2	E3	H	H1
2.28 (58)	.39 (10)	.91 (23)	1.26 (32)	.87 (22)	.43 (11)
J	J1	K2	K3	M	N
.65 (16.5)	.11 (2.75)	1.50 (38)	1.31 (33.2)	.39 (10)	.02 (.5)
N1	P	P1	U	V	W
.43 (11)	Ø .12 Ø (3.1)	Ø .17 Ø (4.3)	0.43 (11)	0.087 (2.2)	0.59 (15.2)
Inches (mm)					

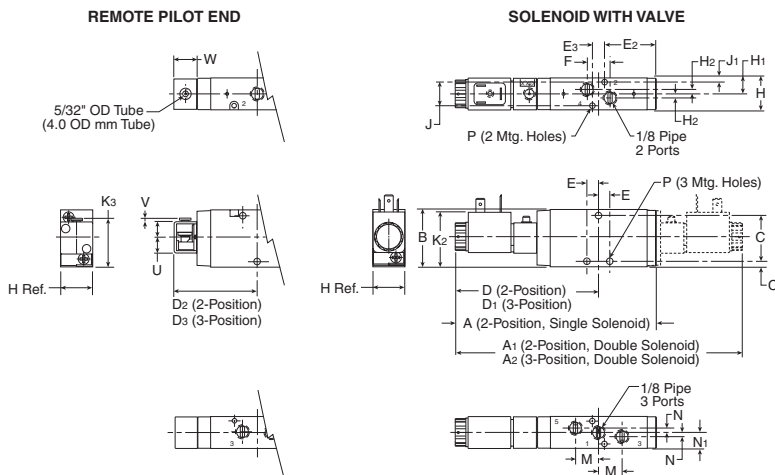
P2LAZ 3/2 Single & Double Operators – IEM Aluminum Bar Manifold



**P2LAZ 3/2
IEM Aluminum Bar Manifold**

B	C	D	F	G
5.06 (128.5)	2.44 (62)	2.99 (76)	.28 (7)	5.35 (136)
H	J	K	L	M
7.68 (195)	.51 (13)	2.78 (70.5)	1.20 (30.5)	.47 (12)
P	Q	R	S	T
.94 (24)	1.42 (36)	1.97 (50)	Ø .22 Ø (5.5)	.88 (7)
Inches (mm)				

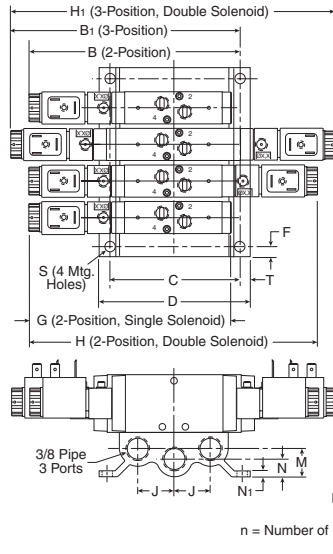
P2LAZ 5/2 & 5/3 Single & Double Operators – Solenoid & Remote Air Pilot



**P2LAZ 5/2 & 5/3
Solenoid & Remote Air Pilot**

A	A1	A2	B	C	C1
5.47 (139)	7.76 (197)	8.70 (221)	1.57 (40)	1.30 (33)	.14 (3.5)
D	D1	D2	D3	E	E2
3.88 (98.5)	4.35 (110.5)	2.33 (59.3)	2.80 (71)	.31 (8)	1.86 (47.3)
E3	F	H	H1	H2	J
.33 (8.5)	.63 (16)	.87 (22)	.43 (11)	.12 (3)	.63 (16)
J1	K2	K3	M	N	N1
.12 (3)	1.50 (38)	1.31 (33.2)	.63 (16)	.12 (3)	.43 (11)
P	U	V	W		
Ø .16 Ø (4.1)	0.43 (11)	0.087 (2.2)	0.59 (15.2)		
Inches (mm)					

P2LAZ 5/2 & 5/3 Single & Double Operators – IEM Aluminum Bar Manifold

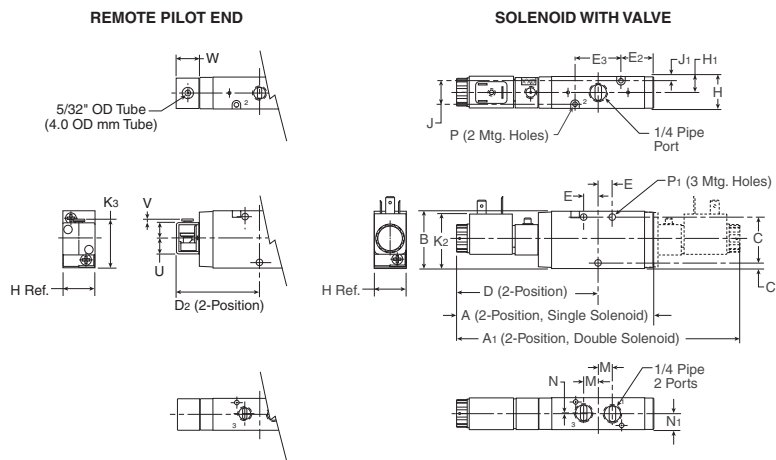


Number of valves	X
2	3.07 (78)
4	4.96 (126)
6	6.85 (174)
8	8.74 (222)
10	10.63 (270)
Inches (mm)	
Manifold bolt	Torque value
M4x45 Screw MRX	9 in.lb (0.75 Nm)

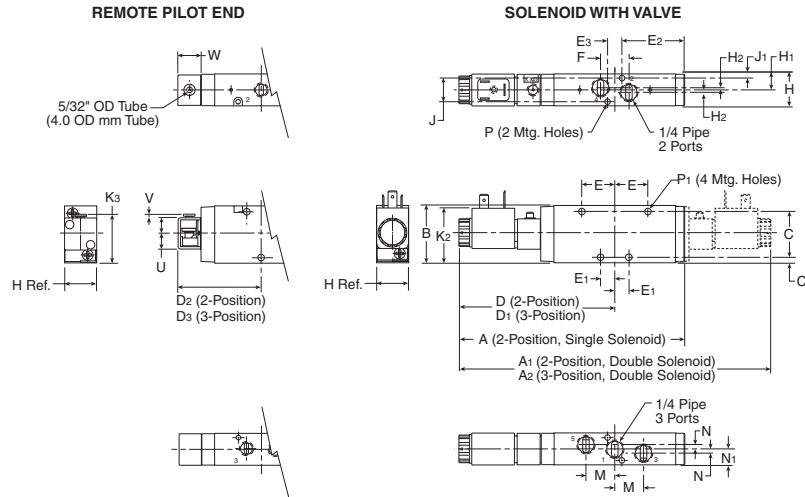
**P2LAZ 5/2 & 5/3
IEM Aluminum Bar Manifold**

B	B1	C	D	F
5.10 (149.5)	6.36 (161.5)	3.46 (88)	4.02 (102)	.28 (7)
G	H	H1	J	K
5.47 (139)	7.76 (197)	8.70 (221)	.96 (24.5)	2.76 (70)
L	M	N	N1	P
1.18 (30)	.75 (19)	.47 (12)	.16 (4)	.94 (24)
Q	R	S	T	
1.57 (40)	2.13 (54)	Ø .28 Ø (7)	.28 (7)	
Inches (mm)				

P2LBZ 3/2 Single & Double Operators – Solenoid & Remote Air Pilot



P2LBZ 5/2 & 5/3 Single & Double Operators – Solenoid & Remote Air Pilot

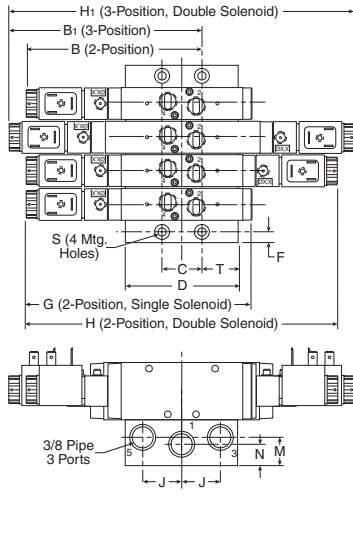


**P2LBZ 5/2 & 5/3
Solenoid & Remote Air Pilot**

A	A1	A2	B	C	C1
6.14 (156)	8.46 (215)	9.29 (236)	1.57 (40)	1.26 (32)	.16 (4)
D	D1	D2	D3	E	E1
4.23 (107.5)	4.65 (118)	2.68 (68)	3.09 (78.5)	.91 (23)	.39 (10)
E2	E3	F	H	H1	H2
1.14 (29)	.39 (10)	.79 (20)	.87 (22)	.43 (11)	.06 (1.5)
J	J1	K2	K3	M	N
.65 (16.5)	.11 (2.8)	1.50 (38)	1.31 (33.2)	.79 (20)	.08 (2)
N1	P	P1	U	V	W
.43 (11)	Ø .12 Ø (3.1)	Ø .17 Ø (4.3)	0.43 (11)	0.087 (2.2)	0.59 (15.2)

Inches (mm)

P2LBZ 5/2 & 5/3 Single & Double Operators – IEM Aluminum Bar Manifold



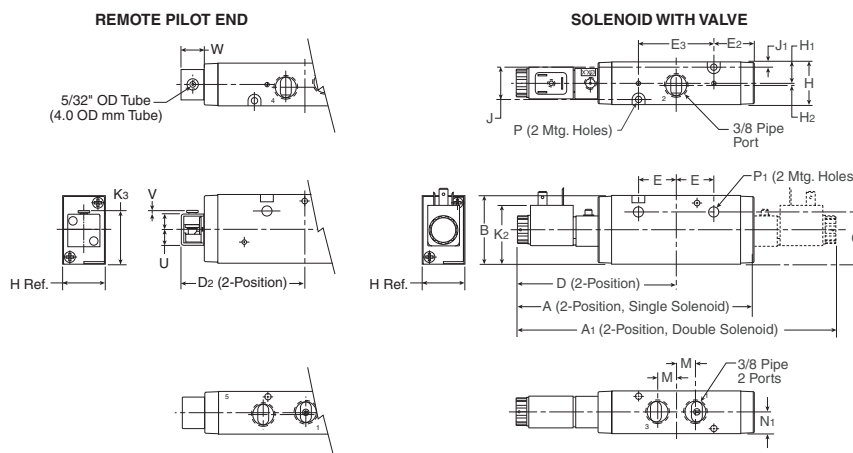
Number of valves	X
2	2.91 (74)
4	4.80 (122)
6	6.69 (170)
8	8.58 (218)
10	10.47 (266)
Inches (mm)	
Manifold bolt	Torque value
M3x40 SCHS	9 in.lb (0.75 Nm)

**P2LBZ 5/2 & 5/3
IEM Aluminum Bar Manifold**

B	B1	C	D	F
4.43 (112.5)	4.84 (123)	1.04 (26.5)	2.99 (76)	.28 (7)
G	H	H1	J	K
6.14 (156)	8.46 (215)	9.29 (236)	1.02 (26)	2.781 (70.5)
L	M	N	P	Q
1.20 (30.5)	.75 (19)	.57 (14.5)	.94 (24)	1.42 (36)
R	S	T		
1.97 (50)	Ø .22 Ø (5.5)	.97 (25)		

Inches (mm)

P2LCZ 3/2 Single & Double Operators – Solenoid & Remote Pilot

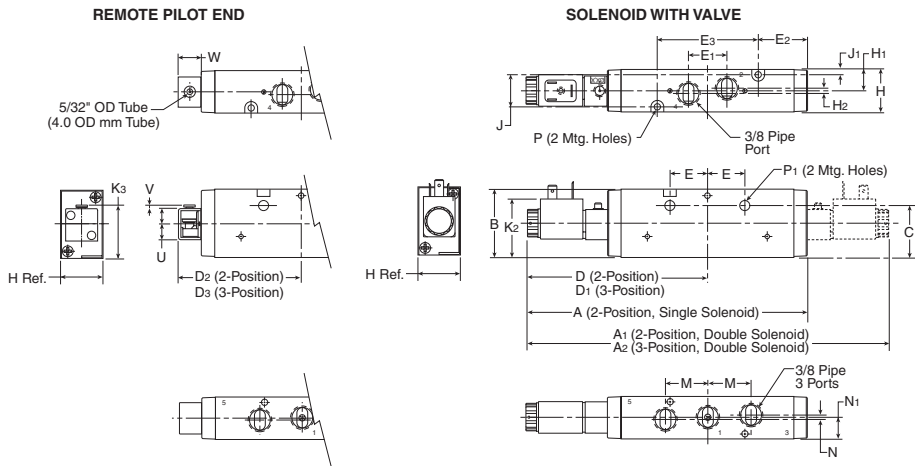


**P2LCZ 3/2
Solenoid & remote Air Pilot**

A	A1	B	C	D	D2
6.50 (165)	8.66 (220)	1.89 (48)	1.46 (37)	4.33 (110)	2.78 (70.5)
E	E2	E3	H	H1	H2
1.04 (26.5)	1.10 (28)	2.09 (53)	1.18 (30)	.59 (15)	.06 (1.55)
J	J1	K2	K3	M	N1
.91 (23)	.14 (3.5)	1.50 (38)	1.46 (37.2)	.53 (13.5)	.59 (15)
P	P1	U	V	W	
Ø .17 Ø (4.4)	Ø .27 Ø (6.9)	0.43 (11)	0.087 (2.2)	0.59 (15.2)	

Inches (mm)

P2LCZ 5/2 & 5/3 Single & Double Operators – Solenoid & Remote Air Pilot

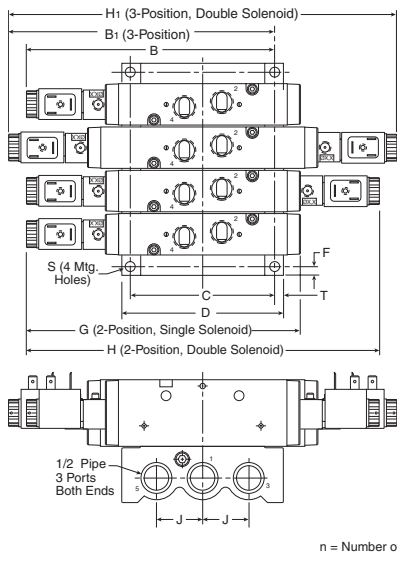


**P2LBZ 5/2 & 5/3
Solenoid & Remote Air Pilot**

A	A1	A2	B	C
7.68 (195)	9.88 (251)	10.70 (272)	1.89 (48)	1.46 (37)
D	D1	D2	D3	E
4.94 (125.5)	5.35 (136)	3.39 (86)	3.80 (96.5)	1.04 (26.5)
E1	E2	E3	H	H1
1.06 (27)	1.71 (43.5)	2.80 (71)	1.18 (30)	.59 (15)
H2	J	J1	K2	K3
.12 (.3)	.91 (23)	.14 (3.5)	1.50 (38)	1.48 (37.5)
M	N	N1	P	P1
1.18 (30)	.08 (2)	.59 (15)	Ø .17 Ø (4.4)	Ø .27 Ø (6.9)
U	V	W		
0.43 (11)	0.087 (2.2)	0.59 (15.2)		

Inches (mm)

P2LCZ 5/2 & 5/3 Single & Double Operators – IEM Aluminum Bar Manifold



Number of valves	X
2	3.29 (84)
4	5.96 (152)
6	8.44 (215)
8	10.93 (278)
10	13.41 (341)
Inches (mm)	
Manifold bolt	Torque value
M4x50 SCHS	15 in.lb (2.0 Nm)

**P2LCZ 5/2 & 5/3
IEM Aluminum Bar Manifold**

C	D	F	G	H
3.97 (101)	4.41 (112)	.24 (6)	7.68 (195)	9.88 (251)
H1	J	K	L	P
10.70 (272)	1.26 (32)	3.43 (87)	1.54 (39)	1.24 (31.5)
Q	R	S	T	
1.77 (45)	2.24 (57)	Ø .26 Ø (6.5)	.24 (6)	

Inches (mm)

Features

Viking Xtreme Series

The Viking Xtreme valve range is robust, versatile and combines high performance with compact installation dimensions. Large flow capacity, short change-over times and low change-over pressure are important characteristics of this valve range.

Ports

- P2LAX: 1/8 inch NPT & BSPP
- P2LBX: 1/4 inch NPT & BSPP
- P2LCX: 3/8 inch NPT & BSPP
- P2LDX: 1/2 inch NPT & BSPP

Mounting

- Inline
- IEM aluminum bar

Solenoids

1.2 watts to 7.3 watts

- 22mm (Type B) & 30mm 3-pin (DIN 43650)
- 15mm 3-pin (EN 17530-803)
- M12, 4-pin, surge suppression
- Grommet, surge suppression
- Conduit
- Deutsche Connectors, surge suppression

12VDC to 240VAC

Certification / approval

- IP65 Rated, RoHS, CE
- cCSAus Approved to 145 PSIG (10 bar)
- Canada Registration Number available (CRN)
- ATEX option available

Mobile applications

- Viking Xtreme tested to +5g shock and vibration
- Solenoids operate with wide voltage tolerance bands
- Corrosion resistant design
- Passed 500 hour salt spray test

Material specifications

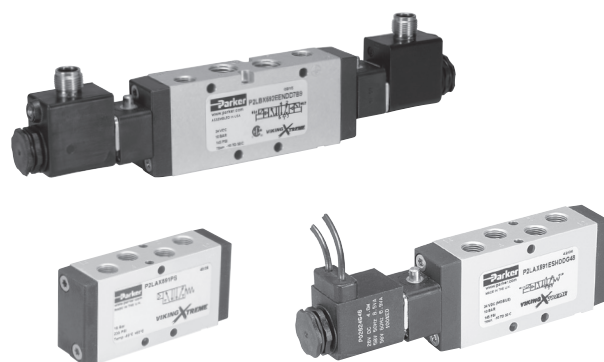
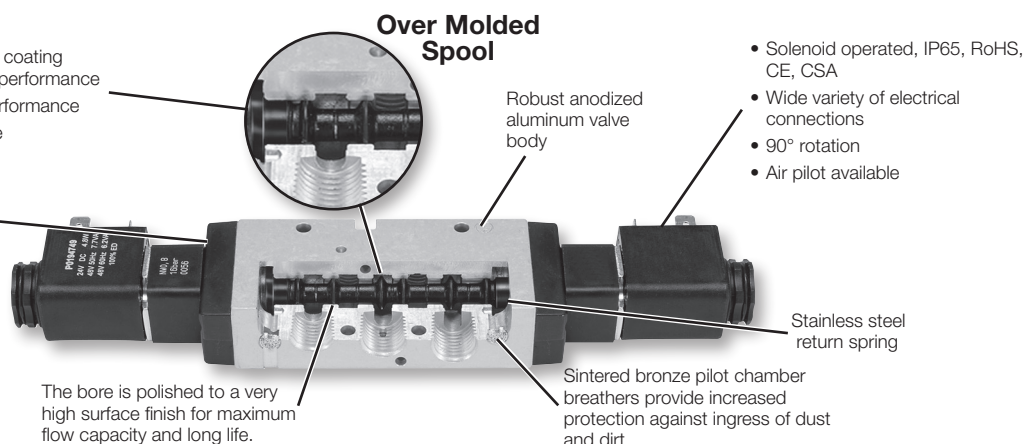
Body	Anodized aluminum
End caps	Anodized aluminum
Coils	Thermoplastic
Fasteners	Stainless steel
Spool	Aluminum and nitrile rubber
Springs	Stainless steel

Features

Over Molded Spool

- Aluminum spool with nitrile rubber coating ground to exact size for optimum performance
- Precision ground for maximum performance
- Wide operating temperature range
 - Low temperature to -40°

Diecast end covers with stainless steel screws to resist aggressive environments.



Operating information

Operating pressure:

- Normal: Vacuum to 145 PSIG (Vacuum to 10 bar)
- Xtreme: (P2LAX & P2LBX) Vacuum to 232 PSIG (Vacuum to 16 bar)
- (P2LCX & P2LDX) Vacuum to 174 PSIG (Vacuum to 12 bar)
- Minimum: See chart

Operating temperature:

- Normal: 14°F to 122°F (-10°C to 50°C)
- Xtreme: -40°F to 158°F (-40°C to 70°C)

Minimum operating pressure, PSIG (bar)

Valve Type - Internal Pilot	P2LAX	P2LBX	P2LCX	P2LDX
Single solenoid - spring return	46 (3.2)	51 (3.5)	51 (3.5)	51 (3.5)
Single remote pilot - spring return	46 (3.2)	51 (3.5)	51 (3.5)	51 (3.5)
Double solenoid - 2-position	22 (1.5)	22 (1.5)	22 (1.5)	22 (1.5)
Double remote pilot - 2-position	22 (1.5)	22 (1.5)	22 (1.5)	22 (1.5)
Double solenoid - 3-position (APB, PC, CE)	51 (3.5)	51 (3.5)	51 (3.5)	51 (3.5)
Double remote pilot - 3-position (APB, PC, CE)	51 (3.5)	51 (3.5)	51 (3.5)	51 (3.5)

Single Solenoid, 3-way, 2-position, Normal Operating Pressure / Temperature, Non-locking
Manual Override

Solenoid		Port Size (NPT)	Cv	Valve Type	Response Time (msec)	Weight lb (kg)	Voltage	Part Number
 P2LAX 22mm DIN Shown	22mm DIN	1/8"	0.7	P2LAX	18 / 40	0.84 (0.38)	24VDC	P2LAX391ESNDDDB49
							120VAC	P2LAX391ESNDDDB53
		1/4"	1.3	P2LBX	18 / 45	0.84 (0.38)	24VDC	P2LBX392ESNDDDB49
							120VAC	P2LBX392ESNDDDB53
		3/8"	2.5	P2LCX	25 / 75	1.72 (0.78)	24VDC	P2LCX393ESNDDDB49
							120VAC	P2LCX393ESNDDDB53
		1/2"	2.7	P2LDX	25 / 75	1.72 (0.78)	24VDC	P2LDX394ESNDDDB49
							120VAC	P2LDX394ESNDDDB53
 P2LAX 18" Grommet Shown	18" Grommet	1/8"	0.7	P2LAX	18 / 40	0.84 (0.38)	24VDC	P2LAX391ESNDDG49
							120VAC	P2LAX391ESNDDG53
		1/4"	1.3	P2LBX	18 / 45	0.84 (0.38)	24VDC	P2LBX392ESNDDG49
							120VAC	P2LBX392ESNDDG53
		3/8"	2.5	P2LCX	25 / 75	1.72 (0.78)	24VDC	P2LCX393ESNDDG49
							120VAC	P2LCX393ESNDDG53
		1/2"	2.7	P2LDX	25 / 75	1.72 (0.78)	24VDC	P2LDX394ESNDDG49
							120VAC	P2LDX394ESNDDG53
 P2LAX M12 Coil Shown	M12 Coil with LED	1/8"	0.7	P2LAX	18 / 40	0.84 (0.38)	24VDC	P2LAX391ESNDD7B9
							24VDC	P2LBX392ESNDD7B9
		1/4"	1.3	P2LBX	18 / 45	0.84 (0.38)	24VDC	P2LBX392ESNDD7B9
							24VDC	P2LCX393ESNDD7B9
		3/8"	2.5	P2LCX	25 / 75	1.72 (0.78)	24VDC	P2LCX393ESNDD7B9
							24VDC	P2LDX394ESNDD7B9
		1/2"	2.7	P2LDX	25 / 75	1.72 (0.78)	24VDC	P2LDX394ESNDD7B9
							24VDC	P2LDX394ESNDD7B9
 P2LAX 15mm DIN Shown	15mm DIN	1/8"	0.7	P2LAX	18 / 40	0.84 (0.38)	24VDC	P2LAX391ESNXB549
							120VAC	P2LAX391ESNXB553
		1/4"	1.3	P2LBX	18 / 45	0.84 (0.38)	24VDC	P2LBX392ESNXB549
							120VAC	P2LBX392ESNXB553
		3/8"	2.5	P2LCX	25 / 75	1.72 (0.78)	24VDC	P2LCX393ESNXB549
							120VAC	P2LCX393ESNXB553
		1/2"	2.7	P2LDX	25 / 75	1.72 (0.78)	24VDC	P2LDX394ESNXB549
							120VAC	P2LDX394ESNXB553

Notes: Above valves are rated for an operating temperature from 14°F to 122°F (-10°C to 50°C). See model code matrix for additional options.
Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C).

 Most popular.



For inventory, lead times, and kit
lookup, visit www.pdnplu.com

C12

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

Single Solenoid, 4-way, 2-position, Normal Operating Pressure / Temperature, Non-locking
Manual Override

Solenoid		Port Size (NPT)	Cv	Valve Type	Response Time (msec)	Weight lb (kg)	Voltage	Part Number
 P2LBX 22mm DIN Shown	22mm DIN	1/8"	0.7	P2LAX	15 / 35	0.49 (0.22)	24VDC	P2LAX591ESNDDDB49
							120VAC	P2LAX591ESNDDDB53
		1/4"	1.3	P2LBX	18 / 45	0.84 (0.38)	24VDC	P2LBX592ESNDDDB49
							120VAC	P2LBX592ESNDDDB53
		3/8"	2.5	P2LCX	27 / 75	1.68 (0.76)	24VDC	P2LCX593ESNDDDB49
							120VAC	P2LCX593ESNDDDB53
		1/2"	2.7	P2LDX	25 / 75	1.68 (0.76)	24VDC	P2LDX594ESNDDDB49
							120VAC	P2LDX594ESNDDDB53
 P2LAX 18" Grommet Shown	18" Grommet	1/8"	0.7	P2LAX	15 / 35	0.49 (0.22)	24VDC	P2LAX591ESNDDG49
							120VAC	P2LAX591ESNDDG53
		1/4"	1.3	P2LBX	18 / 45	0.84 (0.38)	24VDC	P2LBX592ESNDDG49
							120VAC	P2LBX592ESNDDG53
		3/8"	2.5	P2LCX	27 / 75	1.68 (0.76)	24VDC	P2LCX593ESNDDG49
							120VAC	P2LCX593ESNDDG53
		1/2"	2.7	P2LDX	25 / 75	1.68 (0.76)	24VDC	P2LDX594ESNDDG49
							120VAC	P2LDX594ESNDDG53
 P2LAX M12 Coil Shown	M12 Coil with LED	1/8"	0.7	P2LAX	15 / 35	0.49 (0.22)	24VDC	P2LAX591ESNDD7B9
							24VDC	P2LBX592ESNDD7B9
		1/4"	1.3	P2LBX	18 / 45	0.84 (0.38)	24VDC	P2LBX592ESNDD7B9
							24VDC	P2LCX593ESNDD7B9
		3/8"	2.5	P2LCX	27 / 75	1.68 (0.76)	24VDC	P2LCX593ESNDD7B9
							24VDC	P2LDX594ESNDD7B9
		1/2"	2.7	P2LDX	25 / 75	1.68 (0.76)	24VDC	P2LDX594ESNDD7B9
							24VDC	P2LDX594ESNDD7B9
 P2LAX 15mm DIN Shown	15mm DIN	1/8"	0.7	P2LAX	15 / 35	0.49 (0.22)	24VDC	P2LAX591ESNXB549
							120VAC	P2LAX591ESNXB553
		1/4"	1.3	P2LBX	18 / 45	0.84 (0.38)	24VDC	P2LBX592ESNXB549
							120VAC	P2LBX592ESNXB553
		3/8"	2.5	P2LCX	27 / 75	1.68 (0.76)	24VDC	P2LCX593ESNXB549
							120VAC	P2LCX593ESNXB553
		1/2"	2.7	P2LDX	25 / 75	1.68 (0.76)	24VDC	P2LDX594ESNXB549
							120VAC	P2LDX594ESNXB553

Notes: Above valves are rated for an operating temperature from 14°F to 122°F (-10°C to 50°C). See model code matrix for additional options.
Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C).

 Most popular.



For inventory, lead times, and kit
lookup, visit www.pdnplu.com

Double Solenoid, 4-way, 2-position, Normal Operating Pressure / Temperature, Non-locking
Manual Override

Solenoid		Port Size (NPT)	Cv	Valve Type	Response Time (msec)	Weight lb (kg)	Voltage	Part Number
  22mm DIN	P2LBX 22mm DIN Shown	1/8"	0.7	P2LAX	10 / 10	0.60 (0.27)	24VDC 120VAC	P2LAX591EENDDB49 P2LAX591EENDDB53
		1/4"	1.3	P2LBX	12 / 12	0.93 (0.42)	24VDC 120VAC	P2LBX592EENDDB49 P2LBX592EENDDB53
		3/8"	2.5	P2LCX	17 / 17	1.78 (0.81)	24VDC 120VAC	P2LCX593EENDDB49 P2LCX593EENDDB53
		1/2"	2.7	P2LDX	17 / 17	1.78 (0.81)	24VDC 120VAC	P2LDX594EENDDB49 P2LDX594EENDDB53
		1/8"	0.7	P2LAX	10 / 10	0.60 (0.27)	24VDC 120VAC	P2LAX591EENDDG49 P2LAX591EENDDG53
		1/4"	1.3	P2LBX	12 / 12	0.93 (0.42)	24VDC 120VAC	P2LBX592EENDDG49 P2LBX592EENDDG53
		3/8"	2.5	P2LCX	17 / 17	1.78 (0.81)	24VDC 120VAC	P2LCX593EENDDG49 P2LCX593EENDDG53
		1/2"	2.7	P2LDX	17 / 17	1.78 (0.81)	24VDC 120VAC	P2LDX594EENDDG49 P2LDX594EENDDG53
 18" Grommet	P2LAX 18" Grommet Shown	1/8"	0.7	P2LAX	10 / 10	0.60 (0.27)	24VDC 120VAC	P2LAX591EENDD7B9
		1/4"	1.3	P2LBX	12 / 12	0.93 (0.42)	24VDC	P2LBX592EENDD7B9
		3/8"	2.5	P2LCX	17 / 17	1.78 (0.81)	24VDC	P2LCX593EENDD7B9
		1/2"	2.7	P2LDX	17 / 17	1.78 (0.81)	24VDC	P2LDX594EENDD7B9
 M12 Coil with LED	P2LBX M12 Coil Shown	1/8"	0.7	P2LAX	10 / 10	0.60 (0.27)	24VDC 120VAC	P2LAX591EENXB549 P2LAX591EENXB553
		1/4"	1.3	P2LBX	12 / 12	0.93 (0.42)	24VDC 120VAC	P2LBX592EENXB549 P2LBX592EENXB553
		3/8"	2.5	P2LCX	17 / 17	1.78 (0.81)	24VDC 120VAC	P2LCX593EENXB549 P2LCX593EENXB553
		1/2"	2.7	P2LDX	17 / 17	1.78 (0.81)	24VDC 120VAC	P2LDX594EENXB549 P2LDX594EENXB553
 15mm DIN	P2LAX 15mm DIN Shown	1/8"	0.7	P2LAX	10 / 10	0.60 (0.27)	24VDC 120VAC	P2LAX591EENXB549 P2LAX591EENXB553
		1/4"	1.3	P2LBX	12 / 12	0.93 (0.42)	24VDC 120VAC	P2LBX592EENXB549 P2LBX592EENXB553
		3/8"	2.5	P2LCX	17 / 17	1.78 (0.81)	24VDC 120VAC	P2LCX593EENXB549 P2LCX593EENXB553
		1/2"	2.7	P2LDX	17 / 17	1.78 (0.81)	24VDC 120VAC	P2LDX594EENXB549 P2LDX594EENXB553

Notes: Above valves are rated for an operating temperature from 14°F to 122°F (-10°C to 50°C). See model code matrix for additional options.
Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C).

 Most popular.

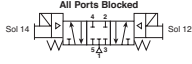
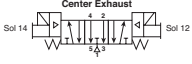


For inventory, lead times, and kit
lookup, visit www.pdnplu.com

C14

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

Double Solenoid, 4-way, 3-position All Ports Blocked, 3-position Center Exhaust,
Normal Operating Pressure / Temperature, Non-locking Manual Override

							Part number	
Solenoid	Port Size (NPT)	Cv	Valve Type	Response Time (msec)	Weight lb (kg)	Voltage	 	
							All Ports Blocked	Center Exhaust
 22mm DIN P2LBX 22mm DIN Shown	1/8"	0.5	P2LAX	18 / 40	0.62 (0.28)	24VDC 120VAC	P2LAX691EENDDB49 P2LAX691EENDDB53	P2LAX891EENDDB49 P2LAX891EENDDB53
	1/4"	0.9	P2LBX	22 / 55	0.97 (0.44)	24VDC 120VAC	P2LBX692EENDDB49 P2LBX692EENDDB53	P2LBX892EENDDB49 P2LBX892EENDDB53
	3/8"	1.8	P2LCX	30 / 90	2.45 (1.11)	24VDC 120VAC	P2LCX693EENDDB49 P2LCX693EENDDB53	P2LCX893EENDDB49 P2LCX893EENDDB53
	1/2"	1.9	P2LDX	30 / 90	2.45 (1.11)	24VDC 120VAC	P2LDX694EENDDB49 P2LDX694EENDDB53	P2LDX894EENDDB49 P2LDX894EENDDB53
	1/8"	0.5	P2LAX	18 / 40	0.62 (0.28)	24VDC 120VAC	P2LAX691EENDDG49 P2LAX691EENDDG53	P2LAX891EENDDG49 P2LAX891EENDDG53
 18" Grommet P2LBX 18" Grommet Shown	1/4"	0.9	P2LBX	22 / 55	0.97 (0.44)	24VDC 120VAC	P2LBX692EENDDG49 P2LBX692EENDDG53	P2LBX892EENDDG49 P2LBX892EENDDG53
	3/8"	1.8	P2LCX	30 / 90	2.45 (1.11)	24VDC 120VAC	P2LCX693EENDDG49 P2LCX693EENDDG53	P2LCX893EENDDG49 P2LCX893EENDDG53
	1/2"	1.9	P2LDX	30 / 90	2.45 (1.11)	24VDC 120VAC	P2LDX694EENDDG49 P2LDX694EENDDG53	P2LDX894EENDDG49 P2LDX894EENDDG53
	1/8"	0.5	P2LAX	18 / 40	0.62 (0.28)	24VDC	P2LAX691EENDD7B9	P2LAX891EENDD7B9
	1/4"	0.9	P2LBX	22 / 55	0.97 (0.44)	24VDC	P2LBX692EENDD7B9	P2LBX892EENDD7B9
 M12 Coil with LED P2LBX M12 Coil Shown	3/8"	1.8	P2LCX	30 / 90	2.45 (1.11)	24VDC	P2LCX693EENDD7B9	P2LCX893EENDD7B9
	1/2"	1.9	P2LDX	30 / 90	2.45 (1.11)	24VDC	P2LDX694EENDD7B9	P2LDX894EENDD7B9
	1/8"	0.5	P2LAX	18 / 40	0.62 (0.28)	24VDC 120VAC	P2LAX691EENXB549 P2LAX691EENXB553	P2LAX891EENXB549 P2LAX891EENXB553
	1/4"	0.9	P2LBX	22 / 55	0.97 (0.44)	24VDC 120VAC	P2LBX692EENXB549 P2LBX692EENXB553	P2LBX892EENXB549 P2LBX892EENXB553
	3/8"	1.8	P2LCX	30 / 90	2.45 (1.11)	24VDC 120VAC	P2LCX693EENXB549 P2LCX693EENXB553	P2LCX893EENXB549 P2LCX893EENXB553
 15mm DIN P2LBX 15mm DIN Shown	1/2"	1.9	P2LDX	30 / 90	2.45 (1.11)	24VDC 120VAC	P2LDX694EENXB549 P2LDX694EENXB553	P2LDX894EENXB549 P2LDX894EENXB553

Notes: Above valves are rated for an operating temperature from 14°F to 122°F (-10°C to 50°C). See model code matrix for additional options.

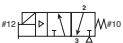
Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C).

 Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

Single Solenoid, 3-way, 2-position, Xtreme Operating Pressure / Temperature, Non-locking
Manual Override

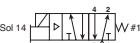
Solenoid	Port Size (NPT)	Cv	Valve Type	Response Time (msec)	Weight lb (kg)	Voltage		Part Number
  P2LBX 22mm DIN Shown	1/8"	0.7	P2LAX	15 / 45	0.84 (0.38)	12VDC		P2LAX391ESHDDDB47
						24VDC		P2LAX391ESHDDDB48
	1/4"	1.3	P2LBX	25 / 65	0.84 (0.38)	12VDC		P2LBX392ESHDDDB47
						24VDC		P2LBX392ESHDDDB48
	3/8"	2.5	P2LCX	25 / 85	1.01 (0.46)	12VDC		P2LCX393ESHDDDB47
						24VDC		P2LCX393ESHDDDB48
	1/2"	2.7	P2LDX	25 / 85	1.01 (0.46)	12VDC		P2LDX394ESHDDDB47
						24VDC		P2LDX394ESHDDDB48
 P2LBX 18" Grommet Shown	1/8"	0.7	P2LAX	15 / 45	0.84 (0.38)	12VDC		P2LAX391ESHDDG47
						24VDC		P2LAX391ESHDDG48
	1/4"	1.3	P2LBX	25 / 65	0.84 (0.38)	12VDC		P2LBX392ESHDDG47
						24VDC		P2LBX392ESHDDG48
	3/8"	2.5	P2LCX	25 / 85	1.01 (0.46)	12VDC		P2LCX393ESHDDG47
						24VDC		P2LCX393ESHDDG48
	1/2"	2.7	P2LDX	25 / 85	1.01 (0.46)	12VDC		P2LDX394ESHDDG47
						24VDC		P2LDX394ESHDDG48

Notes: Above valves have Mobile Rated Coils and are rated for an operating temperature from -40°F to 158°F (-40°C to 70°C).

See model code matrix for additional options.

Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C).

Single Solenoid, 4-way, 2-position, Xtreme Operating Pressure / Temperature Non-locking
Manual Override

Solenoid	Port Size (NPT)	Cv	Valve Type	Response Time (msec)	Weight lb (kg)	Voltage		Part Number
  P2LBX 22mm DIN Shown	1/8"	0.7	P2LAX	15 / 45	0.84 (0.38)	12VDC		P2LAX591ESHDDDB47
						24VDC		P2LAX591ESHDDDB48
	1/4"	1.3	P2LBX	20 / 55	0.84 (0.38)	12VDC		P2LBX592ESHDDDB47
						24VDC		P2LBX592ESHDDDB48
	3/8"	2.5	P2LCX	25 / 85	1.01 (0.46)	12VDC		P2LCX593ESHDDDB47
						24VDC		P2LCX593ESHDDDB48
	1/2"	2.7	P2LDX	25 / 85	1.01 (0.46)	12VDC		P2LDX594ESHDDDB47
						24VDC		P2LDX594ESHDDDB48
 P2LAX 18" Grommet Shown	1/8"	0.7	P2LAX	15 / 45	0.84 (0.38)	12VDC		P2LAX591ESHDDG47
						24VDC		P2LAX591ESHDDG48
	1/4"	1.3	P2LBX	25 / 65	0.84 (0.38)	12VDC		P2LBX592ESHDDG47
						24VDC		P2LBX592ESHDDG48
	3/8"	2.5	P2LCX	28 / 85	1.01 (0.46)	12VDC		P2LCX593ESHDDG47
						24VDC		P2LCX593ESHDDG48
	1/2"	2.7	P2LDX	25 / 85	1.01 (0.46)	12VDC		P2LDX594ESHDDG47
						24VDC		P2LDX594ESHDDG48

Notes: Above valves have Mobile Rated Coils and are rated for an operating temperature from -40°F to 158°F (-40°C to 70°C).

See model code matrix for additional options.

Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C).

 Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

Double Solenoid, 4-way, 2-position, Xtreme Operating Pressure / Temperature, Non-locking Manual Override

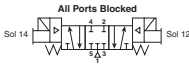
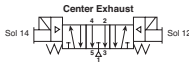
Solenoid	Port Size (NPT)	Cv	Valve Type	Response Time (msec)	Weight lb (kg)	Voltage	Part Number
  22mm DIN P2LBX 22mm DIN Shown	1/8"	0.7	P2LAX	11 / 11	0.60 (0.27)	12VDC 24VDC	P2LAX591EEHDDDB47 P2LAX591EEHDDDB48
	1/4"	1.3	P2LBX	13 / 13	0.93 (0.42)	12VDC 24VDC	P2LBX592EEHDDDB47 P2LBX592EEHDDDB48
	3/8"	2.5	P2LCX	18 / 18	1.06 (0.48)	12VDC 24VDC	P2LCX593EEHDDDB47 P2LCX593EEHDDDB48
	1/2"	2.7	P2LDX	18 / 18	1.06 (0.48)	12VDC 24VDC	P2LDX594EEHDDDB47 P2LDX594EEHDDDB48
	1/8"	0.7	P2LAX	11 / 11	0.60 (0.27)	12VDC 24VDC	P2LAX591EEHDDG47 P2LAX591EEHDDG48
	1/4"	1.3	P2LBX	13 / 13	0.93 (0.42)	12VDC 24VDC	P2LBX592EEHDDG47 P2LBX592EEHDDG48
	3/8"	2.5	P2LCX	18 / 18	1.06 (0.48)	12VDC 24VDC	P2LCX593EEHDDG47 P2LCX593EEHDDG48
	1/2"	2.7	P2LDX	18 / 18	1.06 (0.48)	12VDC 24VDC	P2LDX594EEHDDG47 P2LDX594EEHDDG48
 18" Grommet P2LAX 18" Grommet Shown	1/8"	0.7	P2LAX	11 / 11	0.60 (0.27)	12VDC 24VDC	P2LAX591EEHDDG47 P2LAX591EEHDDG48
	1/4"	1.3	P2LBX	13 / 13	0.93 (0.42)	12VDC 24VDC	P2LBX592EEHDDG47 P2LBX592EEHDDG48
	3/8"	2.5	P2LCX	18 / 18	1.06 (0.48)	12VDC 24VDC	P2LCX593EEHDDG47 P2LCX593EEHDDG48
	1/2"	2.7	P2LDX	18 / 18	1.06 (0.48)	12VDC 24VDC	P2LDX594EEHDDG47 P2LDX594EEHDDG48

Notes: Above valves have Mobile Rated Coils and are rated for an operating temperature from -40°F to 158°F (-40°C to 70°C).

See model code matrix for additional options.

Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C).

Double Solenoid, 4-way, 3-position All Ports Blocked, 3-position Center Exhaust, Xtreme Operating Pressure / Temperature Non-locking Manual Override

							Part number	
							 All Ports Blocked	 Center Exhaust
Solenoid	Port Size	Cv	Valve Type (NPT)	Response Time (msec)	Weight lb (kg)	Voltage	All Ports Blocked	Center Exhaust
 22mm DIN P2LBX 22mm DIN Shown	1/8"	0.5	P2LAX	18 / 40	0.62 (0.28)	12VDC 24VDC	P2LAX691EEHDDDB47 P2LAX691EEHDDDB48	P2LAX891EEHDDDB47 P2LAX891EEHDDDB48
	1/4"	0.9	P2LBX	22 / 55	0.97 (0.44)	12VDC 24VDC	P2LBX692EEHDDDB47 P2LBX692EEHDDDB48	P2LBX892EEHDDDB47 P2LBX892EEHDDDB48
	3/8"	1.8	P2LCX	30 / 90	2.45 (1.11)	12VDC 24VDC	P2LCX693EEHDDDB47 P2LCX693EEHDDDB48	P2LCX893EEHDDDB47 P2LCX893EEHDDDB48
	1/2"	1.9	P2LDX	30 / 90	2.45 (1.11)	12VDC 24VDC	P2LDX694EEHDDDB47 P2LDX694EEHDDDB48	P2LDX894EEHDDDB47 P2LDX894EEHDDDB48
 18" Grommet P2LBX 18" Grommet Shown	1/8"	0.5	P2LAX	18 / 40	0.62 (0.28)	12VDC 24VDC	P2LAX691EEHDDG47 P2LAX691EEHDDG48	P2LAX891EEHDDG47 P2LAX891EEHDDG48
	1/4"	0.9	P2LBX	22 / 55	0.97 (0.44)	12VDC 24VDC	P2LBX692EEHDDG47 P2LBX692EEHDDG48	P2LBX892EEHDDG47 P2LBX892EEHDDG48
	3/8"	1.8	P2LCX	30 / 90	2.45 (1.11)	12VDC 24VDC	P2LCX693EEHDDG47 P2LCX693EEHDDG48	P2LCX893EEHDDG47 P2LCX893EEHDDG48
	1/2"	1.9	P2LDX	30 / 90	2.45 (1.11)	12VDC 24VDC	P2LDX694EEHDDG47 P2LDX694EEHDDG48	P2LDX894EEHDDG47 P2LDX894EEHDDG48

Notes: Above valves have Mobile Rated Coils and are rated for an operating temperature from -40°F to 158°F (-40°C to 70°C).

See model code matrix for additional options.

Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C).

 Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

Viking Xtreme Single & Double Solenoid Operated Valves

P2L A X 5 91 ES H D D G 49

Valve Size	
1/8"	A
1/4"	B
3/8"	C
1/2"	D

Series	
Viking Xtreme	X

Valve Type / Function	
Internal Pilot Supply to Solenoid*	
3/2 NC - 2-Position	3
5/2 2-Position	5
5/3 3-Position, APB	6
5/3 3-Position, PC	7
5/3 3-Position, CE	8
External Pilot Supply to the Solenoids Through Ports #12 & #14	
3/2 NC - 2-Position	L
5/2 2-Position	N
5/3 3-Position, APB	P
5/3 3-Position, PC	Q
5/3 3-Position, CE	R

* Size A & B solenoid valves can be field converted from internal to external pilot. See page C25 for details.

Main Port Thread	
G1/8 (P2LA)	11
G1/4 (P2LB)	12
G1/4 (P2LB) NAMUR Mount	1N*
G3/8 (P2LC)	13
G1/2 (P2LD)	14
1/8" NPT (P2LA)	91
1/4" NPT (P2LB)	92
1/4" NPT (P2LB) NAMUR Mount	9N*
3/8" NPT (P2LC)	93
1/2" NPT (P2LD)	94

* NAMUR mount available for 5/2, 2-position only.

Operator Return	
Double Solenoid	EE
Single Solenoid, Spring Return	ES*

* Not available with 3-position valves.

Operator Type / Operating Pressure and Temperature	
Normal, Vacuum to 145 PSIG (10 bar), 14°F to 122°F (-10°C to 50°C), CSA Approved	N
Xtreme, Vacuum to 145 PSIG (10 bar), -40°F to 140°F (-40°C to 70°C), CSA Approved	K
Xtreme, Vacuum to 232 PSIG (16 bar), -40°F to 140°F (-40°C to 70°C)	H*

* P2LC and P2LD solenoid operated valves have a maximum pressure rating of 175 PSIG (12 bar)

Voltage	
B9†	24 VDC w/ Surge Suppression & LED
42	24VAC
45	12VDC
46†	12VDC Mobile with Surge Suppression
47*	12 VDC Mobile
48*	24 VDC Mobile
49	24VDC
53	120VAC
57	240VAC
Blank	Valve Less Coil

* Only available with enclosures "A", "B", "G" & "5".

‡ Enclosure "7" only

† Enclosure "G", "T", "V" only.

Enclosures / Lead Length	
5†	15mm, 3-Pin DIN 43650C, 8mm Pin Spacing
7§	M12 4-Pin Coil with Surge Suppression & LED
A	30mm Square 3-Pin - ISO 4400 Form A (male only)
B	22mm Rectangular 3-Pin - Type B Industrial (male only)
E*	Intrinsically Safe, FM / CSA
F‡	Hazardous Duty 1/2" NPT, FM / CSA
G	Grommet - 18" Leads
H	1/2" NPT Conduit - 18" Leads
N**	Valve Less "A - V, 7" Enclosure
T#	Grommet, Single Solenoid, 2-Pin Deutsche Connector, Surge Suppression
V#	Grommet, Double Solenoid, 4-Pin Deutsche Connector, Surge Suppression
X†	Valve Less 15mm Solenoid

* Only available with voltage code "49" & override option "A", valve type "N" Only. Solenoid coil only CSA approved.

** Solenoid pilot type "D" & "N" only.

Voltage code "46" only.

‡ Valve type "N" Only. Solenoid coil only CSA approved.

† Solenoid pilot type "X" only.

§ Voltage code "B9" only. Valve type "N" only.

Overrides	
A**	No Override
B†	Flush - Non-Locking
C*	Flush - Locking
D	Extended Non-Locking
E†	Extended - Locking
X†	Valve Less 15mm Solenoid

* Override for valve type "N" only.

** Not available on enclosure "5", 15mm solenoid. Available solenoid pilot type "D" & "N" only.

† Available solenoid pilot type "X" only.

Solenoid Pilot Type	
D**	Vented Pilot Exhaust
N**	Tapped Pilot Exhaust
X*	15mm Solenoid Vented Pilot Exhaust

* Available enclosure "5", "X" and operator type "N" only.

** Not available on enclosure "5" & "X".

Most popular.

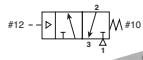


For inventory, lead times, and kit lookup, visit www.pdnplu.com

Part Numbers / Ordering Information

Remote Pilot Valves

Single Remote Pilot, 3-way, 2-position, Xtreme Operating Pressure / Temperature



P2LAX Shown

Port Size (NPT)	Cv	Response Time (msec)	Weight lb (kg)	Valve Type	Part Number
1/8"	0.7	15 / 45	0.68 (0.31)	P2LAX	P2LAX391PS
1/4"	1.3	25 / 65	0.68 (0.31)	P2LBX	P2LBX392PS
3/8"	2.5	25 / 65	0.88 (0.40)	P2LCX	P2LCX393PS
1/2"	2.7	25 / 65	0.88 (0.40)	P2LDX	P2LDX394PS

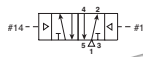
Single Remote Pilot, 4-way, 2-position, Xtreme Operating Pressure / Temperature



P2LAX Shown

Port Size (NPT)	Cv	Response Time (msec)	Weight lb (kg)	Valve Type	Part Number
1/8"	0.7	15 / 45	0.33 (0.15)	P2LAX	P2LAX591PS
1/4"	1.3	20 / 55	0.68 (0.31)	P2LBX	P2LBX592PS
3/8"	2.5	25 / 85	0.90 (0.41)	P2LCX	P2LCX593PS
1/2"	2.7	25 / 85	0.90 (0.41)	P2LDX	P2LDX594PS

Double Remote Pilot, 4-way, 2-position, Xtreme Operating Pressure / Temperature



P2LBX Shown

Port Size (NPT)	Cv	Response Time (msec)	Weight lb (kg)	Valve Type	Part Number
1/8"	0.7	11 / 11	0.33 (0.15)	P2LAX	P2LAX591PP
1/4"	1.3	13 / 13	0.68 (0.31)	P2LBX	P2LBX592PP
3/8"	2.5	18 / 18	0.90 (0.41)	P2LCX	P2LCX593PP
1/2"	2.7	18 / 18	0.90 (0.41)	P2LDX	P2LDX594PP

Double Remote Pilot, 4-way, 3-position All Ports Blocked, 3-position Center Exhaust, Xtreme Operating Pressure / Temperature



P2LBX Shown

Port Size (NPT)	Cv	Response Time (msec)	Weight lb (kg)	Valve Type	Part Number	
					All Ports Blocked	Center Exhaust
1/8"	0.5	18 / 50	0.31 (0.14)	P2LAX	P2LAX691PP	P2LAX891PP
1/4"	0.9	25 / 65	0.73 (0.33)	P2LBX	P2LBX692PP	P2LBX892PP
3/8"	1.8	30 / 90	0.93 (0.42)	P2LCX	P2LCX693PP	P2LCX893PP
1/2"	1.9	30 / 90	0.93 (0.42)	P2LDX	P2LDX694PP	P2LDX894PP

Notes: Above valves are rated for an operating temperature from -40°F to 158°F (-40°C to 70°C). See model code matrix for additional options.

Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C).

Viking Xtreme Remote Air Pilot Operated Valves

Operating information

Operating pressure:
(P2LAX & P2LBX)
Vacuum to 232 PSIG (Vacuum to 16 bar)
(P2LCX & P2LDX)
Vacuum to 174 PSIG (Vacuum to 12 bar)

Operating temperature:
-40°F to 158°F (-40°C to 70°C)

P2L A X 5 91 PS

Valve Size	
1/8"	A
1/4"	B
3/8"	C*
1/2"	D*

* P2LCX and P2LDX manual & remote air pilot valves have a maximum pressure rating of 175 PSIG (12 bar).

Valve Type / Function	
3/2 NC - 2-Position	3
5/2 2-Position	5
5/3 3-Position, APB	6
5/3 3-Position, PC	7
5/3 3-Position, CE	8

Operators / Return	
PP	Double Remote Pilot
PS*	Single Remote Pilot, Spring Return

* Not available with 3-position valves.

Main Port Thread	
11	G1/8 (P2LA)
12	G1/4 (P2LB)
1N*	G1/4 NPT (P2LB) NAMUR Mount
13	G3/8 (P2LC)
14	G1/2 (P2LD)
91	1/8" NPT (P2LA)
92	1/4" NPT (P2LB)
9N*	1/4 NPT (P2LB) NAMUR Mount
93	3/8" NPT (P2LC)
94	1/2" NPT (P2LD)

* 5/2, 2-position valve only.

Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

ATEX Certified Single & Double Solenoid Operated Valves

Viking ATEX valves meet ATEX directive 94/9/EC with the following classification : CE Ex II 2GD c 135oc. This directive lays down minimum safety requirements for products intended for use in potentially explosive atmospheres. The Directive is commonly referred to as the 'ATEX' Directive ('ATmospheres EXplosibles'), but may also be called the ATEX Equipment Directive or ATEX 95. Both ATEX certified solenoid, remote pilot and manual operated valves, as well as complete solenoid pilot assemblies are available.



ATEX classification details:

CE Ex: fulfils the ATEX directive

II : Group II Equipment Area

2GD : Equipment Category 2. Gas Zone 1,2 and Dust Zone 21,22

c : Safe Design (EN13463-5)

135°C : Real temperature of the surface of product for test

Temperature Class of Solenoid : T4 135°C, ATEX 8-22T

Operating information

Operating pressure: Vacuum to 145 PSIG (vacuum to 10 bar)

Operating temperature: 14°F to 122°F (-10°C to 50°C)

C

Inline Valves

Viking Lite

Viking Xtreme

B3, B5, B6 Series

B7, B8 Series

Air Saver Unit

"N" Series

P2L A X 5 91 ES A D D M 49

Valve Size

1/8"	A
1/4"	B
3/8"	C
1/2"	D

Voltage

49	24VDC
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Enclosures

M	ATEX 8-22T EExm T4 135°C
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Overrides

D	Extended Non-Locking
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Solenoid Pilot Type

D	Vented Pilot Exhaust
N	Tapped Pilot Exhaust (M5)

Operator Return

EE	Double Solenoid
ES*	Single Solenoid, Spring Return

* Not available with 3-position valves.

Valve Type / Function

Internal Pilot Supply To Solenoid

2-Position Valve	5
3-Position Valve APB	6
3-Position Valve PC	7
3-Position Valve CE	8

External Pilot Supply to Solenoids Through Ports #12 & #14

2-Position Valve	N
3-Position Valve APB	P
3-Position Valve PC	Q
3-Position Valve CE	R

Main Port Thread

G1/8 (P2LA)	11
G1/4 (P2LB)	12
G3/8 (P2LC)	13
G1/2 (P2LD)	14
1/8" NPT (P2LA)	91
1/4" NPT (P2LB)	92
3/8" NPT (P2LC)	93
1/2" NPT (P2LD)	94

NOTE:

1. ATEX Valve includes a coil with sealed 3 meter cable.
2. Replacement solenoid kit P2FS13A3DM49 includes coil with sealed 3 meter cable, valve armature, solenoid, solenoid nut, screws and o-rings.
3. Can be mounted to size A, B or C IEM Bar Manifolds.

These products are designed for utilization in applications falling under the scope of ATEX Directive 94/9/EC. This coverage could only be referred to as long as operations required for the installation and the maintenance of these products are complying with related standards.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

C20

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

IEM Bar Manifold, Viking Xtreme Solenoid / Remote Pilot Valves †



Valve Series	Valve Function	## - Stations	Manifold Only (NPT)	Manifold Only (BSPP)
P2LAX*	3-way	02 - 12	P2LAXGAXN##NP	P2LAXGAXG##NP
P2LAX*	4-way	02 - 12	P2LAXMAXN##NP	P2LAXMAXG##NP
P2LBX*	3-way	02 - 12	P2LBXGAXN##NP	P2LBXGAXG##NP
P2LBX*	4-way	02 - 12	P2LBXMAXN##NP	P2LBXMAXG##NP
P2LCX*	3-way / 4-way	02 - 12	P2LCXMAXN##NP	P2LCXMAXG##NP

Kits include: (1) manifold, valve hold down bolts and o-rings. Replace ## with number of valve stations.
Valve size A, B, C only.

* Enclosure option A, E & F can not be mounted on size A & B manifolds and enclosure F can not be mounted on size C manifolds due to width of solenoid.

Enclosure option A & E can be mounted on size A & B manifolds if valve is a single solenoid valve and if every other valve is mounted in reverse (staggered).

† Consider Viking Lite manifolds for alternative solutions.

IEM Bar Manifold Add-A-Fold Assembly (Viking Xtreme Solenoid / Remote Air Pilot Valves Only)



Valve Series	Valve Function	## - Stations	Manifold Only (NPT)	Manifold Only (BSPP)
P2LAX*	3-way	02 - 12	AAP2LAXGAXN##NP	AAP2LAXGAXG##NP
P2LAX*	4-way	02 - 12	AAP2LAXMAXN##NP	AAP2LAXMAXG##NP
P2LBX*	3-way	02 - 12	AAP2LBXGAXN##NP	AAP2LBXGAXG##NP
P2LBX*	4-way	02 - 12	AAP2LBXMAXN##NP	AAP2LBXMAXG##NP
P2LCX*	3-way / 4-way	02 - 12	AAP2LCXMAXN##NP	AAP2LCXMAXG##NP

Kits include: (1) manifold, valve hold down bolts, o-rings and assembly. Replace ## with number of valve stations.
Valve size A, B, C only.

* Enclosure option A, E & F can not be mounted on size A & B manifolds and enclosure F can not be mounted on size C manifolds due to width of solenoid.

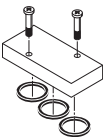
How to Order: 1. List Add-A-Fold assembly part number as line item 1

2. List the desired valves series part number in subsequent line items after the Add-A-Fold Assembly part number to complete the ordering code. Include all valves and blanking kits required. The left most station is station # 1 looking at the #12 end of the manifold.

Example: Viking Size B, 2 Station manifold, with 2, 4-way single solenoid valves

Line	Qty	Part number	Comment
1	1	AAP2LBXMAXN02NP	Add-A-Fold Assembly, 2-station IEM bar manifold
2	2	P2LBX592ESHDDDB49	4-way, Station 1, 2

Blanking Plate



Type	Kit Number
P2LAX 4-way	9121658063
P2LBX 4-way	9121594809X
P2LCX 3 & 4 way	P2LCXK20P
P2LAX 3-way	912132BPSXZ
P2LBX 3-way	912132BPSXZ

Kit includes: plate, screws, o-rings

Manifold Bolts

Type	Qty.	Kit Number
P2LAX	12	P2LAXK87P
P2LBX	12	P2LBXK87P
P2LCX	12	P2LCXK87P

Manifold O-rings

Type	Qty.	Kit Number
P2LAX	30	P2LAXK84P
P2LBX	18	P2LBXK84P
P2LCX	12	P2LCXK84P

Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

C21

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

C

Inline Valves

Viking
Lite

Viking
Extreme

B3, B5, B6
Series

B7, B8
Series

Air Saver
Unit

"N"
Series

Solenoids with Deutsche Connections : Environmentally-Sealed Transportation Connectors

Viking valves with solenoid options “T” & “V” include a grommet lead wire solenoid with internal surge suppression connected to Deutsche DTP Series male connectors. Heat shrunk cover holds the grommet lead wires together between the solenoid and deutsche connector. An environmentally-sealed connector designed specifically for cable to cable applications in harsh environments such as on the engine or transmission, under the hood, on the chassis or in the cab applications. On signal

level circuits where even a small degradation in connection may be critical, these connectors will provide the reliability and performance when properly connected to DTP female connector assemblies. Thermoplastic housings with silicone seals are used to allow the connector to withstand conditions of extreme temperature and moisture. Properly wired and mated connection will withstand immersion under three feet of water without loss of electronic qualities or leakage.

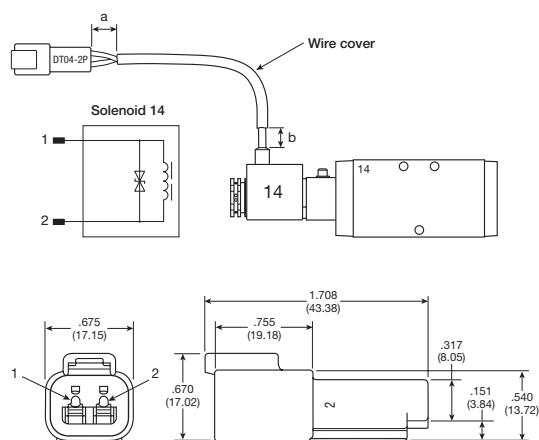
Deutsche Connector & Solenoid Information

		“T” Single Solenoid Option	“V” Double Solenoid Option
Solenoid Kit		P2FCT446	P2FCV446
Connector Information	Housing material	Thermoplastic	Thermoplastic
	Grommet seal material	Silicone	Silicone
	Connector housing / seal number	DT04-2P*	DT04-4P*
	Contact material	Copper alloy	Copper alloy
	Contact number	0460-202-16141*	0460-202-16141*
	Sealing plug (Wedge) material	Thermoplastic	Thermoplastic
	Wedge number	W2P*	W4P*
	Temperature rating of connector	-67°F (-55°C) to +257°F (+125°C)	-67°F (-55°C) to +257°F (+125°C)
Solenoid	Voltage	12VDC +10%, -30% mobile with bi-directional surge suppression	12VDC +10%, -30% mobile with bi-directional surge suppression
	Number of solenoids	1	2
	Connector pin out	pin 1 & 2	12 solenoid : pin 1 & 2 14 solenoid : pin 3 & 4
	Wire length (Connector to solenoid)	19" (483mm)	12 Solenoid : 19" (482mm) 14 Solenoid : 7.75" (196.5mm)
	Exposed insulated wire (a)	0.25" (6.4mm) - 0.5" (12.7mm)	0.25" (6.4mm) - 0.5" (12.7mm)
	Exposed insulated wire (b)	0.75" (19.1mm) - 1.5" (38.1mm)	0.75" (19.1mm) - 1.5" (38.1mm)
	Wire cover material	Heat shrunk PVC	Heat shrunk PVC

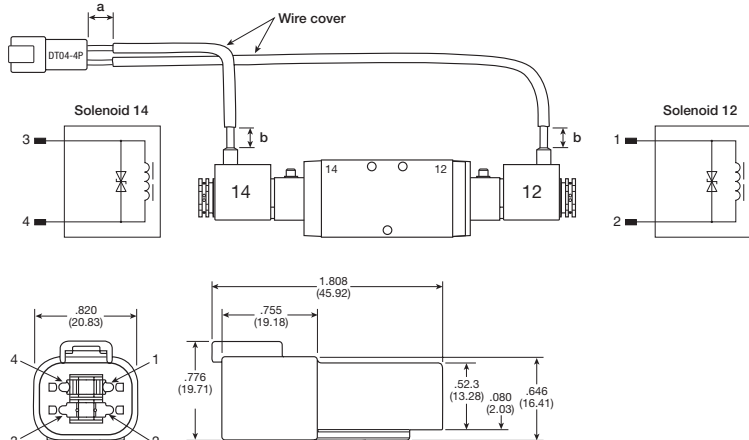
* Deutsche Industrial reference numbers. Male connections provided, mating female components and assemblies can be sourced from qualified Deutsche connector distributors.

Enclosure / Lead Length - Option “T”

Solenoid Kit P2FCT446 shown

**Enclosure / Lead Length - Option “V”**

Solenoid Kit P2FCV446 shown



Solenoid Kits

Solenoid Enclosures

P2FC B 4 49

Type	
Solenoid Kit	C

Enclosures / Lead Length	
M12 4-Pin Coil With Surge Suppression & LED	7 §
30mm Square 3-Pin – ISO 4400 Form A (male only)	A
22mm Rectangular 3-Pin – Type B Industrial (male only)	B
Hazardous duty, FM / CSA	F*
Grommet - 18" Leads	G
1/2" NPT Conduit - 18" Leads	H
Grommet, Single Solenoid, 2-Pin Deutsche Connector, Surge Suppression	T #
Grommet, Double Solenoid, 4-Pin Deutsche Connector, Surge Suppression	V #
Grommet 72" Leads	Q
1/2" Conduit 72" Leads	R

* Only available with voltage codes "45", "49", "53" & "57". Not for use with the Xtreme version (-40°C to 70°C).

Voltage code 46 only.

§ Voltage code B9 only.

B9 ‡	Voltage
24 VDC w/ Surge Suppression & LED	
42	24VAC
45	12VDC
12 VDC Mobile w/ surge Suppression	
46 †	
47*	12 VDC Mobile
48*	24 VDC Mobile
49	24VDC
53	120VAC
57	240VAC

* Only available with enclosures "A", "B" & "G". Additional voltages are available upon request. Contact customer support for more information.

‡ Enclosure 7 only

† Enclosure G, T, V only.



Option 7
M12, 4-Pin Coil with
Surge Suppression



Option A
30mm Square,
3-Pin ISO 4400, DIN 43650A



Option B
22mm Rectangular,
3-Pin DIN, Type B Industrial



Option G & Q
Grommet, 18" or 72" Leads

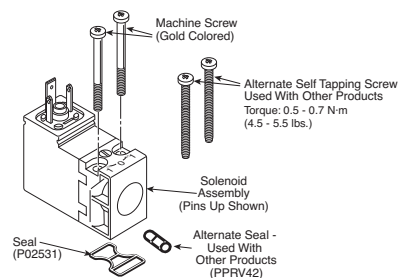


Option H & R
1/2" Conduit, 18" or 72" Leads

Solenoid Kits – 3-Pin, EN175301-803 (Former DIN 43650C), 15mm, 8mm



Standard



PS2982*##P – Enclosure '5'

★	## Voltage						
	42	45	47 †	48 †	49	53	57
Override							
B	O	O	S	S	S	S	O
C	O	O	S	S	S	S	O
D	O	O	O	O	O	O	O
E	O	O	O	O	O	O	O

S - Standard; O - Option

† Mobile voltage

Kit includes: Solenoid, (2) machine screws,
(2) self threading screws,
(1) gasket, (1) 3-cell gasket.

Solenoid Information (Solenoids are rated for continuous duty.)

Voltage				Enclosure "5"		Enclosure "A"		Enclosure "7", "B" to "R"	
Code	AC		DC	Power Consumption	Holding (Amps)	Power Consumption	Holding (amps)	Power Consumption	Holding (amps)
	60Hz	50Hz							
B9†	w	—	24	—	—	—	—	4.8W	.20
42	24	22	—	1.6VA	.065	3.9VA	.14	7.3VA	.31
45	—	—	12	1.2W	.098	2.6W	.21	4.6W	.37
46*†	—	—	12	—	—	—	—	5.5W	.46
47*	—	—	12	0.91W	.074	6.2W	.52	5.5W	.46
48*	—	—	24	0.91W	.033	6.8W	.29	6.0W	.25
49	—	—	24	1.2W	.049	2.7W	.11	4.8W	.20
53	120	110	—	1.6W	.013	4.1VA	.04	6.3VA	.05
57	240	230	—	1.6W	.007	3.7VA	.02	6.4VA	.03

* Mobile voltages. † Surge suppression.

Most popular.



For inventory, lead times, and kit
lookup, visit www.pdnplu.com

C24

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

Intrinsically safe solenoid valves ("E" option)

Hazardous location class:

Class I; Groups A, B, C & D

Class II; Groups E, F, & G

Class III; Div. I

For use in low voltage (24VDC) Intrinsically Safe applications.
 NO OTHER VOLTAGE IS APPROVED.

Comes standard with non-lighted solenoid connector.

Coil width: 30mm

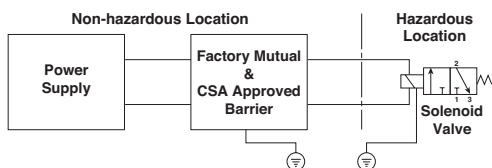
Must be connected to an FM approved Barrier.

For dimensions, reference standard solenoid models.

Maximum internally piloted valve pressure is 115 PSIG.

Pressures to 145 PSIG can be used when external pilot is utilized and pilot pressure is limited to 115 PSIG.

The intrinsically safe coil width (30mm) is wider than the body width of valve type A & B valves. If mounted on a manifold, the valves need to be staggered to fit and must be single solenoid valves only.



Intrinsically safe solenoid pilot assembly kits

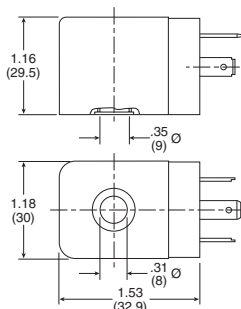
Description

Part number

24VDC

P2FS13N1AE49

Kit includes: coil, armature, connector, o-ring & screws



Hazardous duty solenoid valves ("F" option)

Hazardous location class:

Class I; Zone I EX, M, II & T4

Class I; Div. I, Groups A, B, C, & D

Class II & III; Div. I, Groups E, F, & G

Comes standard with 1/2" conduit connection.

Coil width: 36mm

Voltage range = $\pm 10\%$

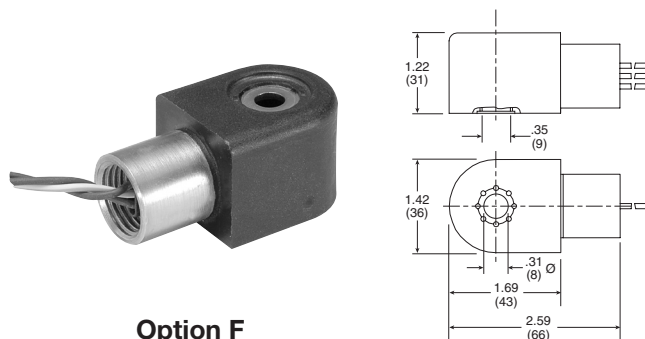
Ambient temperature range = -20°C (-4°F) to 60°C (140°F)

Duty factor = 100%

IP65 Rated (with connected conduit connector)

Notes:

- Maximum non-hazardous location voltage not to exceed 250V RMS.
- Factory Mutual requires connections per ISA RP 12.6 instructions.
- CSA requires "Installation to be in accordance with the Canadian Electrical Code. Part I."
- The hazardous duty coil width (36mm) is wider than the body width of valve type A, B, C & D valves. Valves can not be mounted to IEM manifolds without installing a blanking plate between valves.



**Option F
 Hazardous Duty FM / CSA**

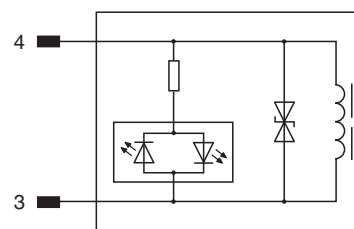
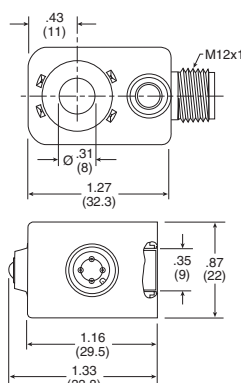
M12, 24VDC solenoid coil ("7" option)

Connection type: M12, metal thread, M12 x 1

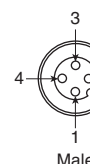
DIN EN 60947-5-2 appendix D

LED color: yellow

Bi-directional surge suppression



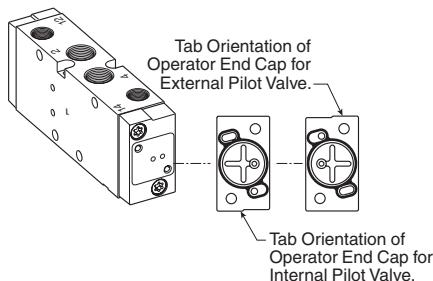
- Not Used
- Not Used
- +/- (blue)
- +/- (black)



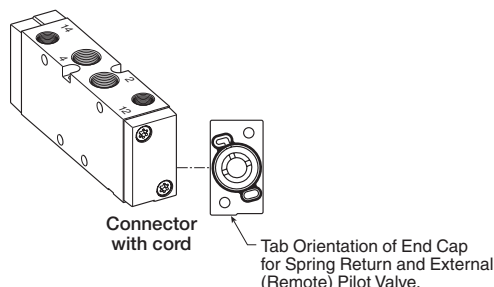
**4-Pin Female Wiring Diagram
 (only Pins 4 & 3 are used)
 Per ISO 20401**

Internal to external pilot conversion (size A & B only)

To convert from Internal to External Pilot Valve, simply remove the (2) fasteners that attach the end cap to the valve body. Rotate the end cap 180° and attach back to the valve body. For single solenoid valves, only the 14-End needs to be rotated. For double solenoid valves, both ends must be converted for proper function.



The 12 & 14-Ports are always tapped no matter what Valve Type / Function is selected. For Internal Pilot Function, ports do NOT need to be plugged.



22mm Rectangular 3-Pin – Type B Industrial (Use with Enclosure “B”)

Description	Connector with 6' (2m) Cord	Connector
Unlighted	PS2429JBP	PS2429BP
Light – 24V60Hz, 24VDC	PS2430J79BP*	PS243079BP
Light – 120V/60Hz	PS2430J83BP*	PS243083BP
Light – 240V/60Hz	N/A	PS243087BP

* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord.
IP65 rated when properly installed.

Engineering Data:

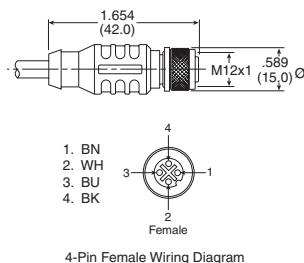
Conductors: 2 Poles Plus Ground; Cable Range (Connector Only):
6 to 8mm (0.24 to 0.31 Inch); Contact Spacing: 11mm

M12 A-code Cables

Description	Part Number
4-Pin female to flying lead cable, PVC, 2m	RKC 4.4T-2

RKC Female Sockets

* Only pins 3 and 4 are used with solenoids Option “7”.



4-Pin Female Wiring Diagram

15mm Solenoid Mount

Description	Part Number
15mm solenoid mount	P2FA22-15

Kit includes: adapter (1), O-rings (2), gasket (1), screws (4)

Most popular.

15mm 3-Pin DIN 43650C (Use with Enclosure “5”)

Description	Cord Length	Connector	Connector with Cord
Unlighted	18 Inches	PS2932BP	PS2932HBP
Unlighted	6 Feet	PS2932BP	PS2932JBP
Light – 12VAC or DC	6 Feet	PS294675BP	PS2946J75BP*
Light – 24VAC or DC	6 Feet	PS294679BP	PS2946J79BP*
Light – 110/120VAC	6 Feet	PS294683BP	PS2946J83BP*
Light – 240/230VAC		PS294687BP	N/A

* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord.
IP65 rated when properly installed.

Engineering data:

Conductors: 2 poles plus ground Cable range (connector only):
4 to 6mm (0.16 to 0.24 Inch) Contact spacing: 8mm

30mm Square 3-Pin – ISO 4400, DIN 43650A (Use with Enclosure “A”)

Description	Connector with 6' (2m) Cord	Connector
Unlighted	PS2028JCP	PS2028BP
Light – 6-48V, 50/60Hz, 6-48VDC	PS2032J79CP*	PS203279BP
Light – 120V/60Hz	PS2032J83CP*	PS203283BP

* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord.
IP65 rated when properly installed.

Engineering data:

Conductors: 2 poles plus ground; cable range (connector only):
8 to 10mm (0.31 To 0.39 Inch); contact spacing: 18mm

Replacement Solenoid Nut

Description	Part Number	Description	Part Number
Solenoid diffuser nut	PS1556	Solenoid vented nut	PS2892P

It is the users responsibility to verify product performance when applied at maximum tolerance ranges of multiple technical specifications simultaneously.

Operating temperature

- **Normal**.....14°F to 122°F (-10°C to 50°C)
- **Xtreme**..... -40°F to 158°F (-40°C to 70°C)

Flow Rating

Valve Size	Port Size	2-Position	3-Position
P2LAX	1/8"	0.7	0.5
P2LBX	1/4"	1.3	0.9
P2LCX	3/8"	2.5	1.8
P2LDX	1/2"	2.7	1.9

Operating pressure*

Maximum: Normal.....145 PSIG (10 bar)
Xtreme.....232 PSIG (16 bar)

Minimum:

Valve Type - Internal Pilot	Minimum PSIG (bar)			
	P2LAX	P2LBX	P2LCX	P2LDX
Single solenoid - spring return	46 (3.2)	51 (3.5)	51 (3.5)	51 (3.5)
Single remote pilot - spring return	46 (3.2)	51 (3.5)	51 (3.5)	51 (3.5)
Double solenoid - 2-position	22 (1.5)	22 (1.5)	22 (1.5)	22 (1.5)
Double remote pilot - 2-position	22 (1.5)	22 (1.5)	22 (1.5)	22 (1.5)
Double solenoid - 3-position (APB, PC, CE)	51 (3.5)	51 (3.5)	51 (3.5)	51 (3.5)
Double remote pilot - 3-position (APB, PC, CE)	51 (3.5)	51 (3.5)	51 (3.5)	51 (3.5)

Valve Type - External Pilot	P2LAX	P2LBX	P2LCX	P2LDX
All Viking series	Vacuum			

* P2LC and P2LD solenoid operated valves have a maximum pressure rating of 175 PSIG (12 bar).

Size A and B solenoid valves can be field converted from internal pilot to external pilot and visa versa. See previous page for information.

Solenoid voltage characteristics

Non-Mobile Coil -

Voltage Code 42, 45, 49, 53, 57

15mm, DIN 43650C (Enclosure: 5)
+10%, -15%

Mobile Coil -

Voltage Code 47, 48

15mm, Din 43650C (Enclosure: 5)
+25%, -30%

Voltage Code 46

(Enclosure G,T,V)
+10%, -30%

Inline Valve Products, Viking Xtreme Series

Solenoid voltage characteristics

Non-mobile coils -

Voltage code B9, 42, 45, 49, 53, 57

Enclosure (7, A, B, E, F, G, H)
+10%, -10%

Mobile coils - (valve type N)

22mm 12 & 24VDC - Mobile (47 & 48 voltage code)

Minimum inlet pressure (bar)	Operating Temperature		
	-10°C	+10°C	+50°C
3	+30 / -25% VDC	+30 / -20% VDC	+25 / -15% VDC
6	+30 / -30% VDC	+30 / -25% VDC	+25 / -20% VDC
8	+30 / -30% VDC	+30 / -30% VDC	+25 / -25% VDC
10	+30 / -30% VDC	+30 / -30% VDC	+25 / -30% VDC

30mm 12 & 24VDC - Mobile (47 & 48 voltage code)

Minimum inlet pressure (bar)	Operating Temperature		
	-10°C	+10°C	+50°C
3	+30 / -30% VDC	+30 / -30% VDC	+25 / -30% VDC
6	+30 / -30% VDC	+30 / -30% VDC	+25 / -30% VDC
8	+30 / -30% VDC	+30 / -30% VDC	+25 / -30% VDC
10	+30 / -30% VDC	+30 / -30% VDC	+25 / -30% VDC

Mobile coils - (valve type K & H)

22mm 12 & 24VDC - Mobile (47 & 48 voltage code)

Minimum inlet pressure (bar)	Operating Temperature			
	-40°C	+10°C	+50°C	+70°C
4	+30 / -25% VDC	+30 / -25% VDC	+30 / -10% VDC	+20 / -10% VDC
8	+30 / -30% VDC	+30 / -25% VDC	+30 / -15% VDC	+20 / -15% VDC
12	+30 / -30% VDC	+30 / -30% VDC	+30 / -15% VDC	+20 / -15% VDC
16	+30 / -30% VDC	+30 / -30% VDC	+30 / -20% VDC	+20 / -20% VDC

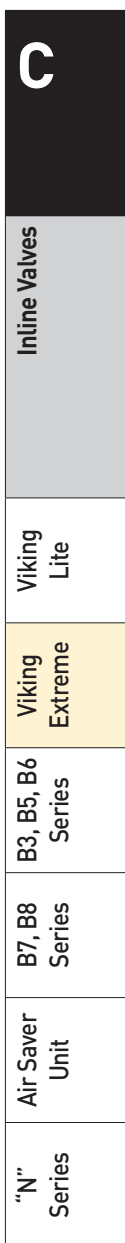
30mm 12 & 24VDC - Mobile (47 & 48 voltage code)

Minimum inlet pressure (bar)	Operating Temperature			
	-40°C	+10°C	+50°C	+70°C
4	+30 / -30% VDC	+30 / -30% VDC	+25 / -30% VDC	+15 / -30% VDC
8	+30 / -30% VDC	+30 / -30% VDC	+25 / -30% VDC	+15 / -30% VDC
12	+30 / -30% VDC	+30 / -30% VDC	+25 / -30% VDC	+15 / -30% VDC
16	+30 / -30% VDC	+30 / -30% VDC	+25 / -30% VDC	+15 / -30% VDC

Note: All table ratings are based on 100% continuous duty and 5G shock vibration. At 50% continuous duty all ratings are +30% / -30% for all Temperatures and Pressures.



For inventory, lead times, and kit lookup, visit www.pdnplu.com



Exhaust Protector

Features

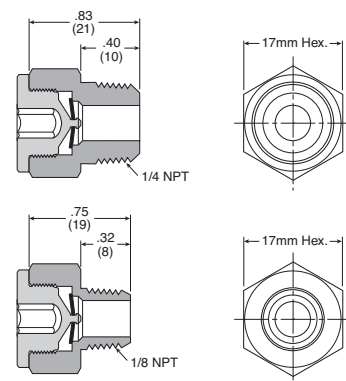
- 1/8 and 1/4 NPT male sizes
- Fitted with a brass pipe adapter and a fluorocarbon membrane
- Resistant to rust, clog, wash down and contamination

Applications

These protectors are intended for mobile applications, quick venting applications and alternative exhaust port breathers that require protection against clogging.

Ideal for valves exposed to harsh environmental conditions (which can cause a "caking up" in the exhaust pipe ports where the bronze mufflers or breather vents are installed).

Particularly suitable for time-sensitive applications such as axle-lift suspensions or pushers or tag axles.



Operating information

Operating pressure:	0 to 150 PSIG (0 to 10 bar)
Operating temperature:	-40°F to 140°F (-40°C to 60°C)

Flow data (SCFM)

Size	60 PSIG Inlet	90 PSIG Inlet	125 PSIG Inlet	Part Number
1/8"	40.1	56.5	75.5	E90016
1/4"	44.6	62.7	83.5	E90017

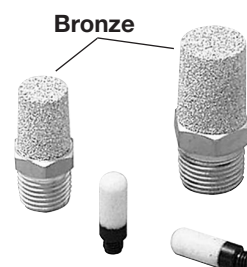
Material specifications

Body & pipe adapter	Brass
Membrane	Fluorocarbon

Exhaust Mufflers

Pipe Thread	Part Number
M5	P6M-PAC5
1/8" NPT	EM12
1/4" NPT	EM25
3/8" NPT	EM37
1/2" NPT	EM50

P6M - Plastic; EM - Sintered bronze



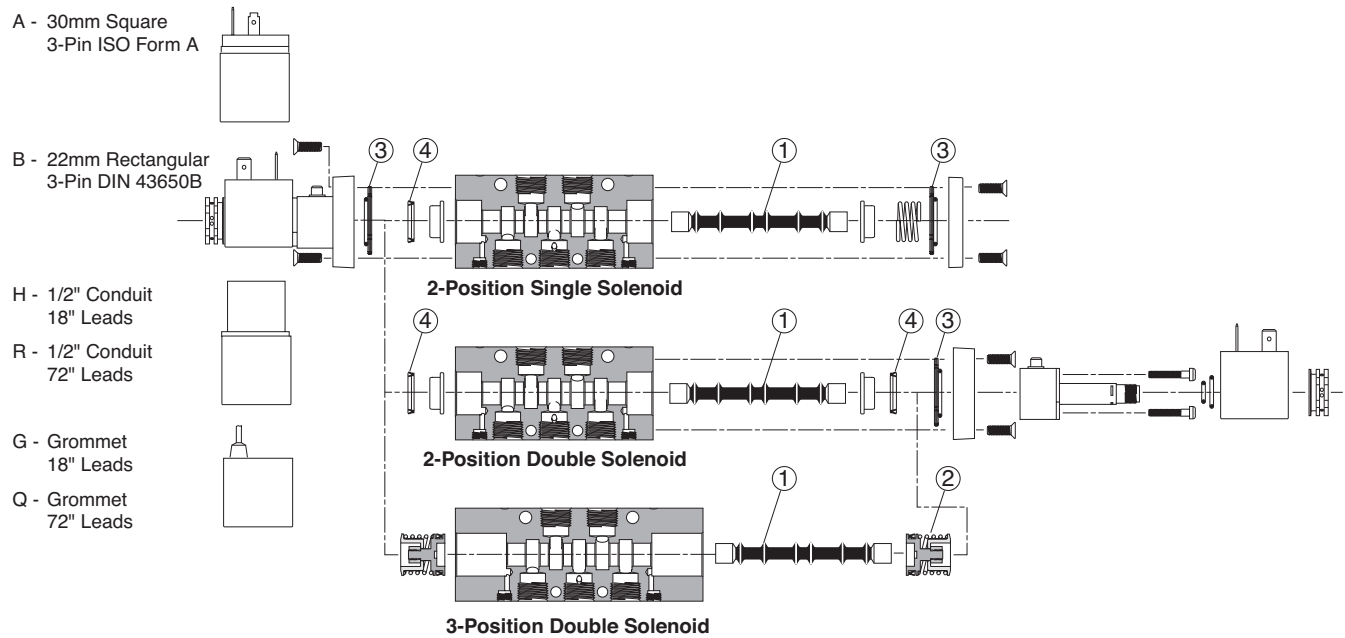
Plastic Silencers

Thread Size	A (mm)	B (mm)	Part Number		
			NPT	BSPT	Metric
M5	.43 (11)	.32 (8)	-	-	AS-5
1/8"	1.57 (40)	.63 (16)	ASN-6	AS-6	-
1/4"	2.56 (65)	.83 (21)	ASN-8	AS-8	-
3/8"	3.35 (85)	.98 (25)	ASN-10	AS-10	-
1/2"	3.74 (95)	1.18 (30)	ASN-15	AS-15	-



Spool Service Kits

Description	Includes Items (qty.)	Part Number
Size A, 4-way, 2-position, solenoid & air pilot valves	1 (1), 3 (2), 4 (2)	P2LAXSK1
Size A, 4-way, 3-position, solenoid & air pilot valves	1 (1), 2 (2), 3 (2), 4 (2)	P2LAXSK2
Size A & Size B, 3-way, 2-position, solenoid & air pilot valves	1 (1), 3 (2), 4 (2)	P2LAXBXSK1
Size B, 4-way, 2 & 3-position valves	1 (1), 3 (2), 4 (2)	P2LBXSK1
Size C & Size D, 3-way, 2-position valves	1 (1), 3 (2), 4 (2)	P2LCXDXXSK1
Size C & Size D, 4-way, 2 & 3-position valves	1 (1), 3 (2), 4 (2)	P2LCXDXXSK1



C

Inline Valves

Viking
Lite

Viking
Extreme

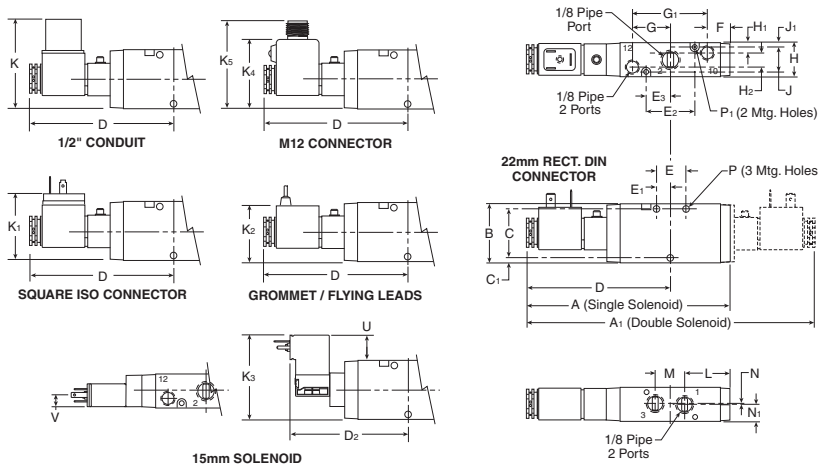
B3, B5, B6
Series

B7, B8
Series

Air Saver
Unit

"N"
Series

P2LAX 3/2 Single & Double Operators – Solenoid

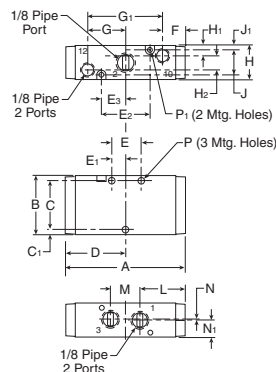


P2LAX 3/2 (solenoid)

A	A1	B	C	C1	D
5.35 (136)	7.60 (193)	1.57 (40)	1.26 (32)	.16 (4)	3.80 (97)
D2	E	E1	E2	E3	F
3.00 (76.8)	.79 (20)	.39 (10)	1.26 (32)	.63 (16)	.55 (14)
G	G1	H	H1	H2	J
.98 (25)	1.97 (50)	.87 (22)	.26 (6.6)	.35 (9)	.65 (16.5)
J1	K	K1	K2	K3	K4
.11 (2.9)	2.36 (60)	1.61 (41)	1.50 (38)	2.24 (57)	1.70 (43.3)
K5	L	M	N	N1	P
2.10 (53.3)	1.14 (29)	.79 (20)	.02 (0.5)	.42 (11)	Ø .17 Ø (4.3)
P1	U	V			
Ø .12 Ø (3.1)	0.81 (20.5)	0.29 (7.5)			

Inches (mm)

P2LAX 3/2 Single & Double Operators – Remote Air Pilot

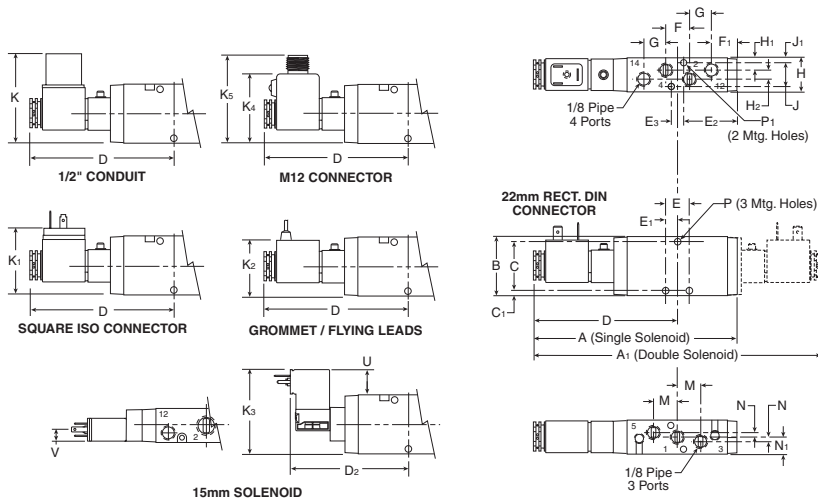


P2LAX 3/2 (remote air pilot)

A	B	C	C1	D	E
3.07 (78)	1.57 (40)	1.26 (32)	.16 (4)	1.54 (39)	.79 (20)
E1	E2	E3	F	G	G1
.39 (10)	1.26 (32)	.63 (16)	.55 (14)	.98 (25)	1.97 (50)
H	H1	H2	J	J1	L
.87 (22)	.26 (6.6)	.35 (9)	.65 (16.5)	.11 (2.9)	1.14 (29)
M	N	N1	P	P1	
.79 (20)	.02 (0.5)	.42 (11)	Ø .17 Ø (4.3)	Ø .12 Ø (3.1)	

Inches (mm)

P2LAX 5/2 & 5/3 Single & Double Operators, 4-way

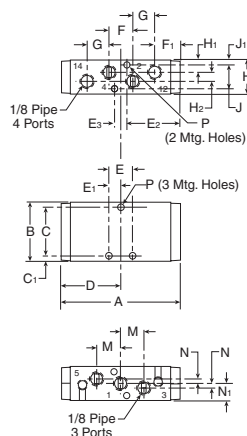


P2LAX 5/2 & 5/3 (solenoid)

A	A1	B	C	C1	D
5.47 (139)	7.72 (196)	1.57 (40)	1.30 (33)	.14 (3.5)	3.86 (98)
D2	E	E1	E2	E3	F
3.48 (88.3)	.63 (16)	.31 (8)	1.42 (36)	.33 (8.5)	.63 (16)
F1	G	H	H1	H2	J
.67 (17)	.59 (15)	.87 (22)	.31 (8)	.24 (6)	.63 (16)
J1	K	K1	K2	K3	K4
.12 (3.9)	2.36 (60)	1.61 (41)	1.50 (38)	2.24 (57)	1.63 (41.3)
K5	M	N	N1	P	P1
2.10 (53.3)	.63 (16)	.12 (3)	.43 (11)	Ø .17 Ø (4.3)	Ø .12 Ø (3.1)
U	V				
0.81 (20.5)	0.29 (7.5)				

Inches (mm)

P2LAX 5/2 & 5/3 Single & Double Operators – Remote Pilot

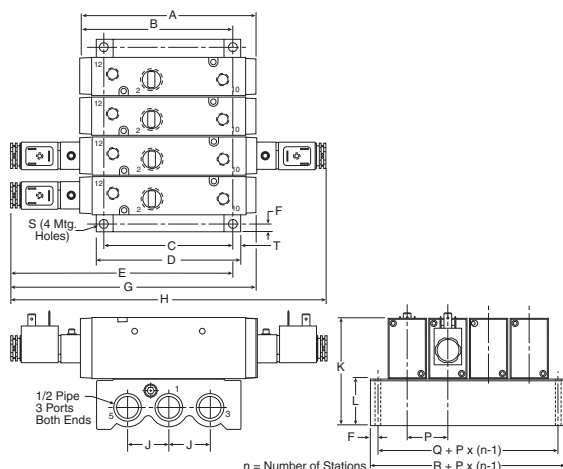


P2LAX 5/2 & 5/3 (remote)

A	B	C	C ₁	D
3.19 (81)	1.57 (40)	1.30 (33)	.14 (3.5)	1.59 (40.5)
E	E ₁	E ₂	E ₃	F
1.47 (16)	.31 (8)	1.42 (36)	.33 (8.5)	.63 (16)
F ₁	G	H	H ₁	H ₂
.67 (17)	.59 (15)	.87 (22)	.31 (8)	.24 (6)
J	J ₁	M	N	N ₁
.63 (16)	.12 (3)	.63 (16)	.12 (3)	.43 (11)
P	P ₁			
Ø .17 Ø (4.3)	Ø .12 Ø (3.1)			

Inches (mm)

P2LAX 3/2 Single & Double Operators – IEM Aluminum Bar Manifold

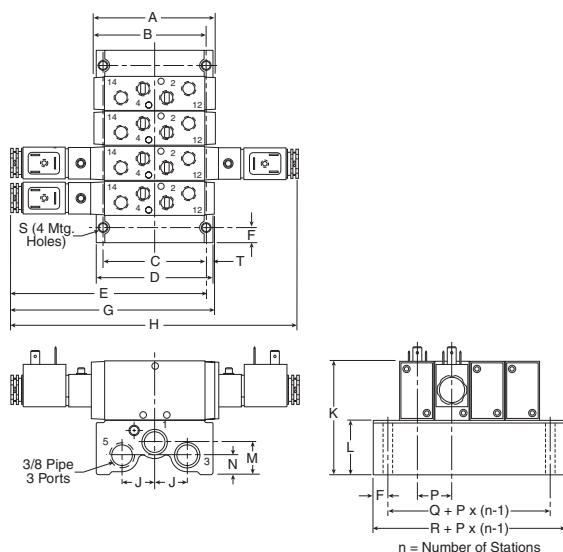


**P2LAX 3/2
IEM Aluminum bar manifold**

A	B	C	D	E
3.07 (78)	2.83 (72)	2.76 (70)	3.12 (79)	5.18 (132)
F	G	H	J	K
41 (10.5)	5.35 (136)	7.72 (193)	.87 (22)	3.11 (79)
L	M	N	P	Q
1.54 (39)	.87 (22)	.52 (13.2)	.93 (23.5)	1.56 (39.5)
R	S	T		
2.36 (60)	Ø .22 Ø (5.5)	.18 (4.5)		

Inches (mm)

P2LAX 5/2 & 5/3 Single & Double Operators – IEM Aluminum Bar Manifold

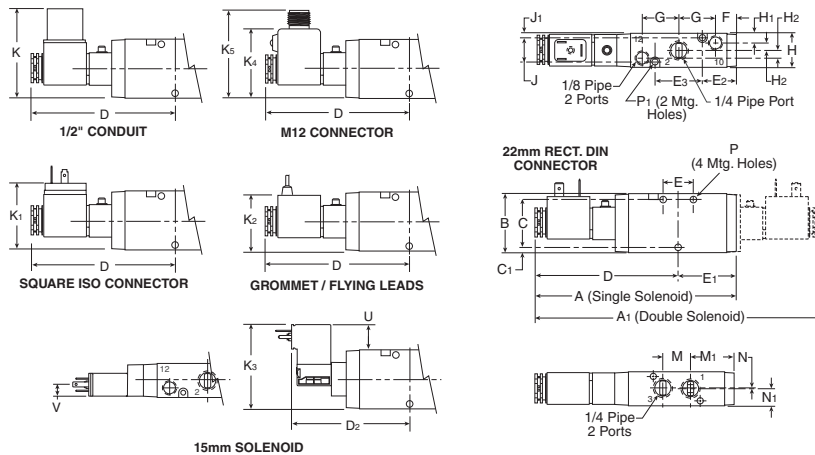


**P2LAX 5/2 & 5/3
IEM Aluminum bar manifold**

A	B	C	D	E
3.19 (81)	2.97 (76)	2.76 (70)	3.12 (79)	5.26 (134)
F	G	H	J	K
41 (10.5)	5.47 (139)	7.72 (196)	.87 (22)	3.11 (79)
L	M	N	P	Q
1.54 (39)	.87 (22)	.52 (13.2)	.93 (23.5)	1.56 (39.5)
R	S	T		
2.36 (60)	Ø .22 Ø (5.5)	.18 (4.5)		

Inches (mm)

P2LBX 3/2 Single & Double Operators – Solenoid

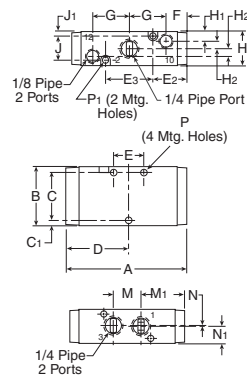


P2LBX 3/2 (solenoid)

A	A1	B	C	C1	D
5.35 (136)	7.60 (193)	1.57 (40)	1.26 (32)	.16 (4)	3.80 (96.5)
D2	E	E1	E2	E3	F
3.02 (76.8)	.79 (20)	1.54 (39)	.51 (13)	1.26 (32)	.55 (14)
G	H	H1	H2	J	J1
.98 (25)	.87 (22)	.26 (6.6)	.18 (4.5)	.65 (16.5)	.11 (2.9)
K	K1	K2	K3	K4	K5
2.36 (60)	1.61 (41)	1.50 (38)	2.24 (57)	1.63 (41.3)	2.10 (53.3)
M	M1	N	N1	P	P1
.79 (20)	1.14 (29)	.02 (0.5)	.42 (11)	Ø .17 Ø (4.3)	Ø .12 Ø (3.1)
U	V				
0.81 (20.5)	0.29 (7.5)				

Inches (mm)

P2LBX 3/2 Single & Double Operators – Remote Air Pilot

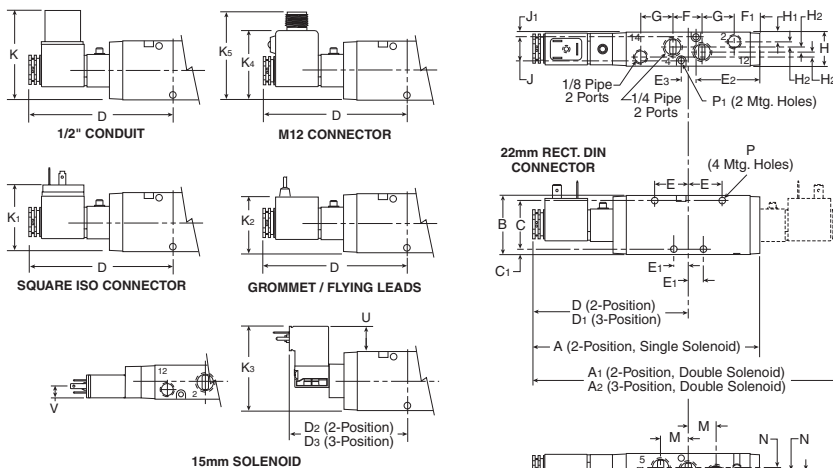


P2LBX 3/2 (remote air pilot)

A	B	C	C1	D	E
3.08 (78)	1.57 (40)	1.26 (32)	.16 (4)	1.54 (39)	.79 (20)
E2	E3	F	G	H	H1
.51 (13)	1.26 (32)	.55 (14)	.98 (25)	.87 (22)	.26 (6.6)
H2	J	J1	M	M1	N
.18 (4.5)	.65 (16.5)	.11 (2.9)	.79 (20)	1.14 (29)	.02 (0.5)
N1	P	P1			
.42 (11)	Ø .17 Ø (4.3)	Ø .12 Ø (3.1)			

Inches (mm)

P2LBX 5/2 & 5/3 Single & Double Operators – Solenoid



P2LBX 5/2 & 5/3 (solenoid)

A	A1	A2	B	C	C1
6.14 (156)	8.39 (213)	9.23 (235)	1.57 (40)	1.26 (32)	.16 (4)
D	D1	D2	D3	E	E1
4.21 (107)	4.64 (118)	3.48 (88.3)	3.92 (99.6)	.91 (23)	.39 (10)
E2	E3	F	F1	G	H
1.73 (44)	.39 (10)	.79 (20)	.67 (17)	.87 (22)	.87 (22)
H1	H2	J	J1	K	K1
.26 (6.6)	.12 (3)	.65 (16.5)	.12 (3)	2.36 (60)	1.61 (41)
K2	K3	K4	K5	M	N
1.50 (38)	2.24 (57)	1.70 (43.3)	2.10 (53.3)	.79 (20)	.08 (2)
N1	P	P1	U	V	
.43 (11)	Ø .17 Ø (4.3)	Ø .12 Ø (3.1)	0.81 (20.5)	0.29 (7.5)	

Inches (mm)

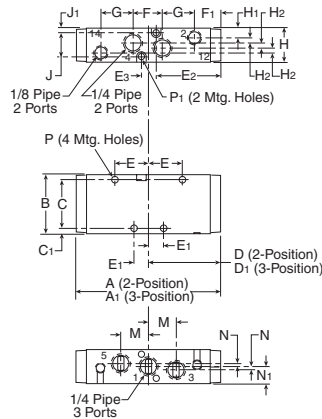


For inventory, lead times, and kit
 lookup, visit www.pdnplu.com

C32

Parker Hannifin Corporation
 Pneumatic Division
 Richland, Michigan
www.parker.com/pneumatics

P2LBX 5/2 & 5/3 Single & Double Operators – Remote Air Pilot

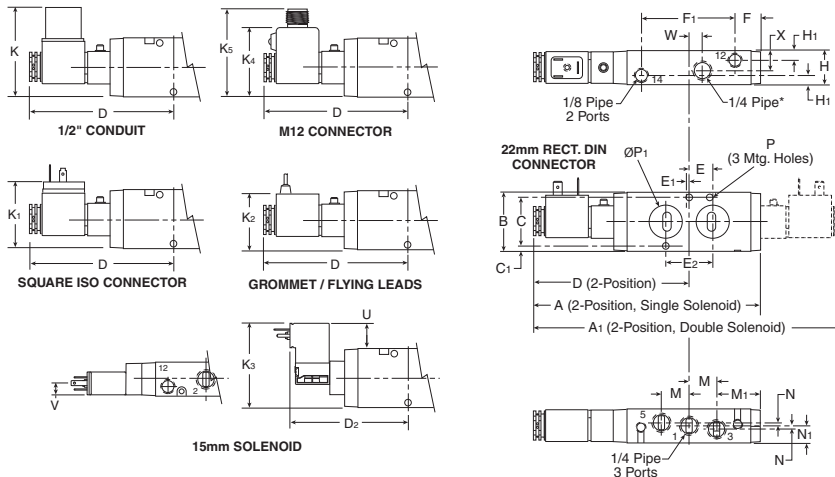


P2LBX 5/2 & 5/3 (remote air pilot)

A	A1	B	C	C1	D
3.95 (100)	4.61 (117)	1.57 (40)	1.26 (32)	.16 (4)	1.93 (49)
D1	E	E1	E2	E3	F
2.28 (58)	.91 (23)	.39 (10)	1.73 (44)	.39 (10)	.79 (20)
F1	G	H	H1	H2	J
.67 (17)	.87 (22)	.8 (22)	.26 (6.6)	.12 (3)	.65 (16.5)
J1	K	M	N	N1	P
.11 (2.8)	2.90 (74)	.79 (20)	.08 (2)	.43 (11)	Ø .17 Ø (4.3)
P1					
Ø .12 Ø (3.1)					

Inches (mm)

P2LBX 5/2 Single & Double Operators – Solenoid NAMUR



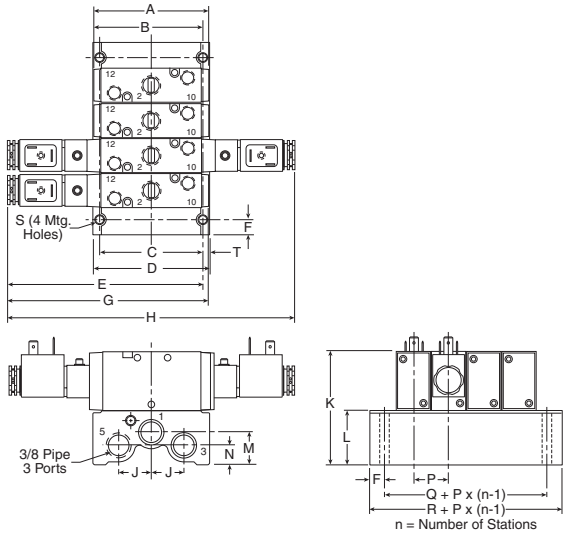
P2LBX 5/2 (NAMUR)

A	A1	B	C	C1	D
6.15 (156)	8.39 (213)	1.57 (40)	1.26 (32)	.16 (4)	4.21 (107)
D2	E	E1	E2	F	F1
3.48 (88.3)	.47 (12)	.08 (2)	.94 (24)	.67 (17)	2.52 (64)
K	K1	K2	K3	K4	K5
2.36 (60)	1.61 (41)	1.50 (38)	2.24 (57)	1.70 (43.3)	2.10 (53.3)
H	H1	M	M1	N	N1
.87 (22)	.26 (6.6)	.79 (20)	1.14 (29)	.08 (2)	.43 (11)
P	P1	U	V	W	X
Ø .22 Ø (5.5)	Ø .76 Ø (19.4)	0.81 (20.5)	0.29 (7.5)	0.39 (10)	0.50 (12.6)

Inches (mm)

* Valve includes 1/4 pipe plug, o-rings and mounting bolts.

P2LBX 3/2 Single & Double Operators – IEM Aluminum Bar Manifold

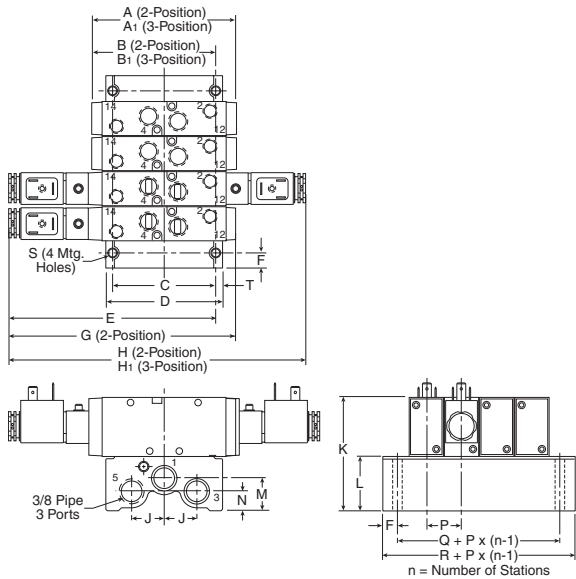


P2LBX 3/2
IEM Aluminum bar manifold

A	B	C	D	E
3.86 (78)	2.91 (74)	2.76 (70)	3.12 (79)	5.17 (131)
F	G	H	J	K
.40 (10.2)	5.33 (136)	7.6 (193)	.87 (22)	3.11 (79)
L	M	N	P	Q
1.47 (37)	.87 (22)	.52 (13.2)	.93 (23.5)	1.56 (39.6)
R	S	T		
2.36 (60)	Ø .22 Ø (5.5)	.18 (4.6)		

Inches (mm)

P2LBX 5/2 & 5/3 Single & Double Operators – IEM Aluminum Bar Manifold

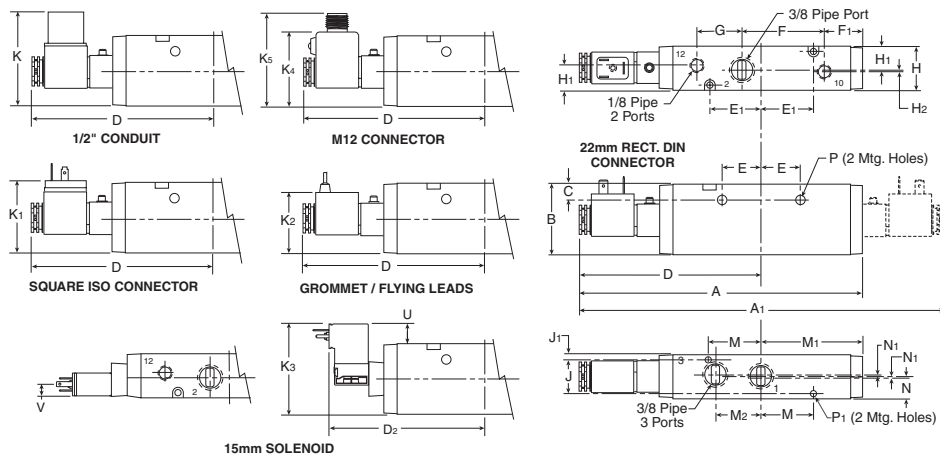


P2LBX 5/2 & 5/3
IEM Aluminum bar manifold

A	A1	B	B1	C
3.86 (98)	4.70 (120)	3.42 (84)	3.73 (95)	2.76 (70)
D	E	F	G	H
3.12 (79)	5.59 (142)	.40 (10.2)	6.14 (156)	8.39 (213)
H1	J	K	L	M
9.23 (235)	.87 (22)	3.11 (79)	1.47 (37)	.87 (22)
N	P	Q	R	S
.52 (13.2)	.93 (23.5)	1.56 (39.6)	2.36 (60)	Ø .22 Ø (5.5)
T				
.18 (4.6)				

Inches (mm)

P2LCX 3/2 Single & Double Operators – Solenoid

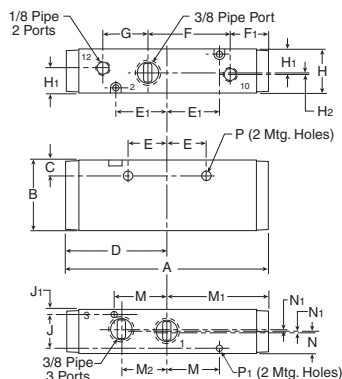


P2LCX 3/2 (solenoid)

A	A ₁	B	C	D
7.66 (194.5)	9.80 (249)	1.89 (48)	.43 (11)	4.90 (124.5)
D ₂	E	E ₁	F	F ₁
4.17 (105.8)	1.04 (26.5)	1.40 (35.5)	2.24 (57)	1.02 (26)
G	H	H ₁	H ₂	J
1.22 (31)	1.18 (30)	.67 (17)	.02 (0.5)	.91 (23)
J ₁	K	K ₁	K ₂	K ₃
.14 (3.5)	2.52 (64)	1.77 (45)	1.65 (42)	2.41 (61.3)
K ₄	K ₅	M	M ₁	M ₂
1.78 (45.3)	2.26 (57.3)	1.40 (35.5)	2.76 (70)	1.18 (30)
N	N ₁	P	P ₁	U
.55 (14)	.04 (1)	Ø .27 Ø (6.9)	Ø .17 Ø (4.4)	0.52 (13.3)
V				
0.65 (7.5)				

Inches (mm)

P2LCX 3/2 Single & Double Operators – Remote Air Pilot

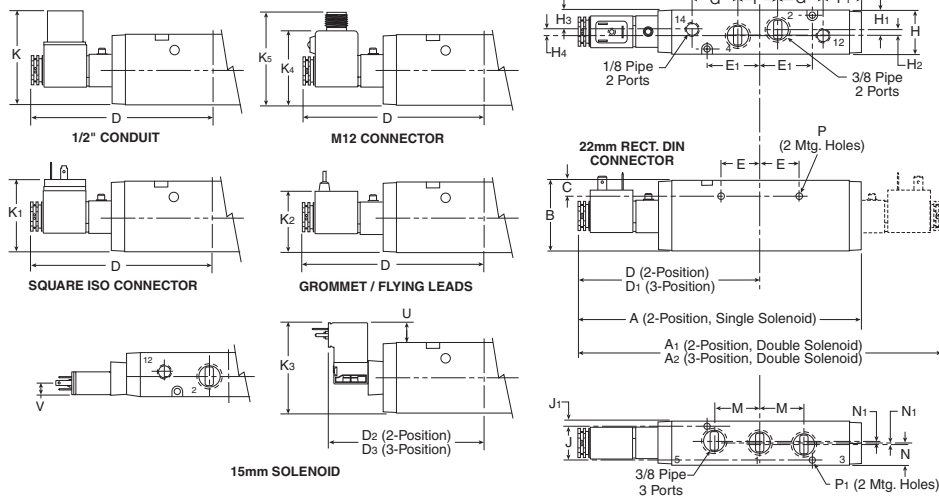


P2LCX 3/2 (remote air pilot)

A	B	C	D	E
5.51 (140)	1.89 (48)	.43 (11)	2.76 (70)	1.04 (26.5)
E ₁	F	F ₁	G	H
1.40 (35.5)	2.24 (57)	1.02 (26)	1.22 (31)	1.18 (30)
H ₁	H ₂	J	J ₁	M
.67 (17)	.02 (0.5)	.91 (23)	.14 (3.5)	1.40 (35.5)
M ₁	M ₂	N	N ₁	P
2.76 (70)	1.18 (30)	.55 (14)	.04 (1)	Ø .27 Ø (6.9)
P₁				
Ø .17 Ø (4.4)				

Inches (mm)

P2LCX 5/2 & 5/3 Single & Double Operators – Solenoid

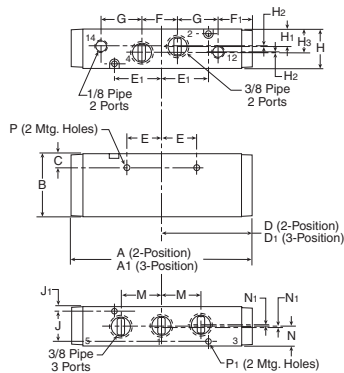


P2LCX 5/2 & 5/3 (solenoid)

A	A1	A2	B	C
7.68 (195)	9.84 (250)	10.71 (272)	1.89 (48)	.43 (11)
D	D1	D2	D3	E
4.92 (125)	5.35 (136)	4.17 (105.8)	4.61 (117.2)	1.04 (26.5)
E1	F	F1	G	H
1.40 (35.5)	1.06 (27)	1.02 (26)	1.22 (31)	1.18 (30)
H1	H2	H3	H4	J
.53 (13.5)	.12 (3)	.51 (13)	.16 (4)	.91 (23)
J1	K	K1	K2	K3
.14 (3.5)	2.52 (64)	1.77 (45)	1.65 (42)	2.41 (61.3)
K4	K5	M	N	N1
1.78 (45.3)	2.26 (57.3)	1.18 (30)	.55 (14)	.04 (1)
P	P1	U	V	
Ø .27 (6.9)	Ø .17 (4.4)	0.52 (13.3)	0.29 (7.5)	

Inches (mm)

P2LCX 5/2 & 5/3 Single & Double Operators – Remote Air Pilot

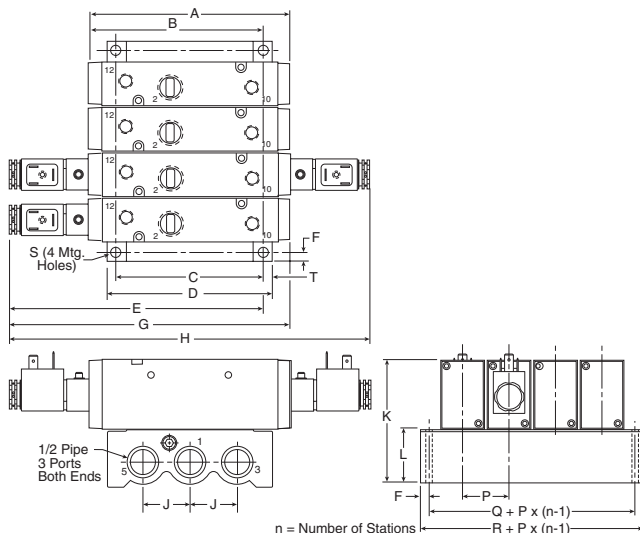


P2LCX 5/2 & 5/3 (remote air pilot)

A	A1	B	C	D	D1
5.51 (140)	6.38 (162)	1.89 (48)	.43 (11)	2.76 (70)	3.18 (81)
E	E1	F	F1	G	H
1.04 (26.5)	1.40 (35.5)	1.06 (27)	1.02 (26)	1.22 (31)	1.18 (30)
H1	H2	H3	J	J1	M
.51 (13)	.02 (0.5)	.12 (3)	.91 (23)	.14 (3.5)	1.18 (30)
N	N1	P	P1		
.55 (14)	.04 (1)	Ø .27 (6.9)	Ø .17 (4.4)		

Inches (mm)

P2LCX 3/2 Single & Double Operators – IEM Aluminum Bar Manifold



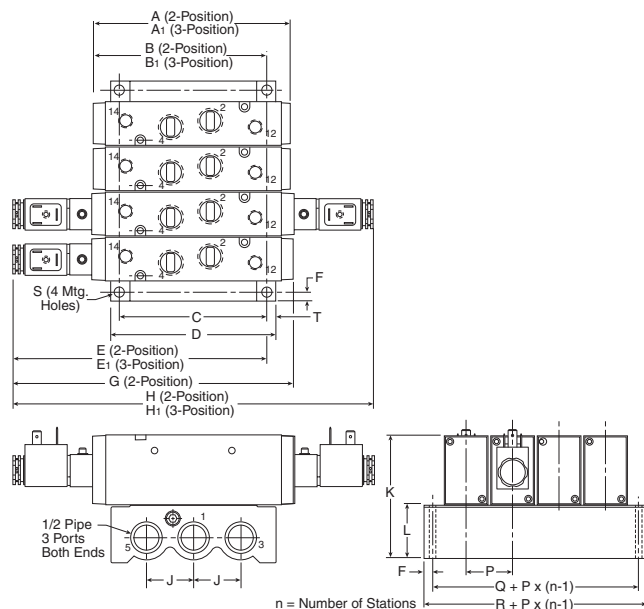
P2LCX 3/2

IEM Aluminum bar manifold

A	B	C	D	E	F
5.51 (140)	4.96 (126)	3.94 (100)	4.41 (112)	7.11 (180.5)	.24 (6)
G	H	J	K	L	P
7.66 (194.5)	9.80 (249)	1.26 (32)	3.43 (87)	1.54 (39)	1.24 (31.5)
Q	R	S	T		
1.77 (45)	2.24 (57)	Ø .26 (6.5)	.24 (6)		

Inches (mm)

P2LCX 5/2 & 5/3 Single & Double Operators – IEM Aluminum Bar Manifold

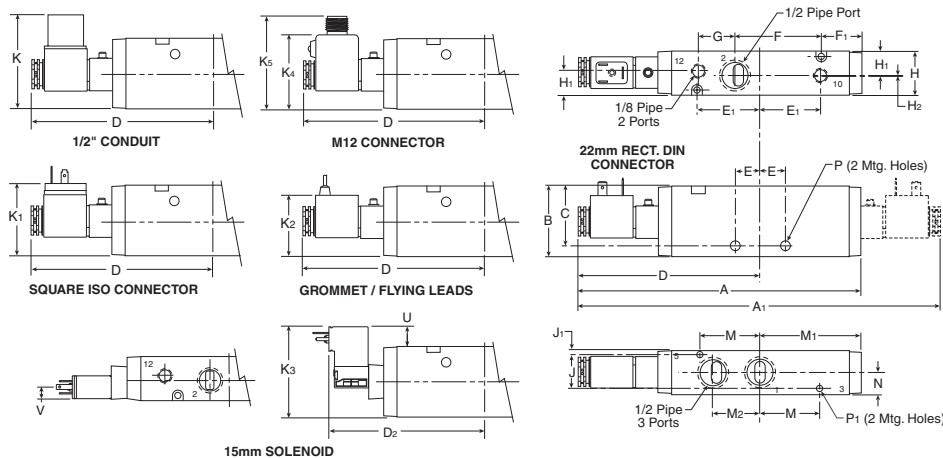


**P2PCX 5/2 & 5/3
IEM Aluminum bar manifold**

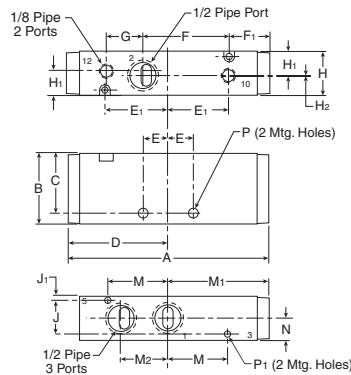
A	A ₁	B	B ₁	C
5.51 (140)	6.38 (162)	4.72 (120)	5.16 (131)	3.94 (100)
D	E	E ₁	F	G
4.41 (112)	6.89 (170)	7.13 (181)	.24 (6)	7.68 (195)
H	H ₁	J	K	L
9.84 (250)	10.71 (272)	1.26 (32)	3.43 (87)	1.54 (39)
P	Q	R	S	T
1.24 (31.5)	1.77 (45)	2.24 (57)	Ø .26 (6.5)	.24 (6)

Inches (mm)

P2LDX 3/2 Single & Double Operators – Solenoid



P2LDX 3/2 Single & Double Operators – Remote Air Pilot

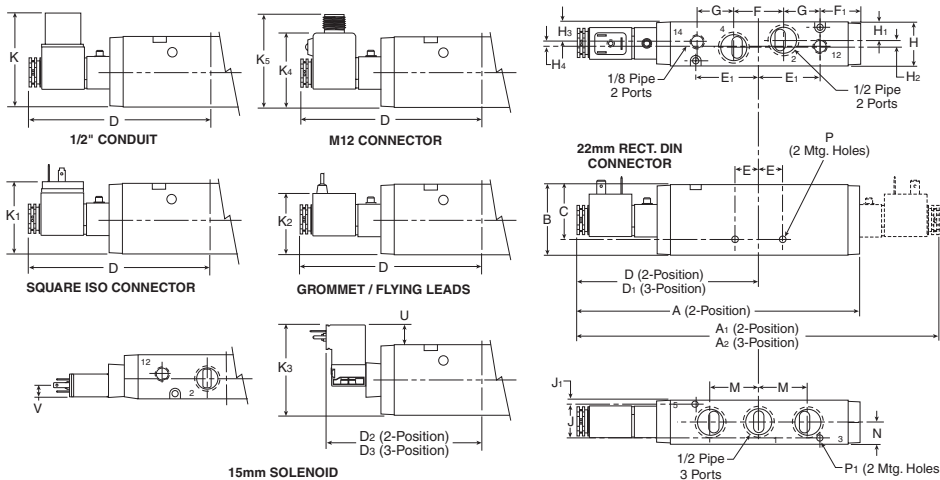


P2LDX 3/2 (remote air pilot)

A	B	C	D	E
5.51 (140)	1.89 (48)	1.59 (40.5)	2.76 (70)	.67 (17)
E1	F	F1	G	H
1.65 (42)	2.36 (60)	1.08 (27.5)	.98 (25)	1.18 (30)
H1	H2	J	J1	M
.67 (17)	.02 (0.5)	.91 (23)	.14 (3.5)	1.65 (42)
M1	M2	N	P	P1
2.76 (70)	1.30 (33)	.59 (15)	Ø .26 Ø (6.6)	Ø .17 Ø (4.4)

Inches (mm)

P2LDX 5/2 & 5/3 Single & Double Operators – Solenoid

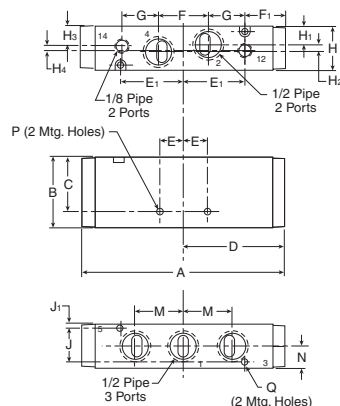


P2LDX 5/2 & 5/3 (solenoid)

A	A1	A2	B	C
7.67 (195)	9.84 (250)	10.7 (272)	1.89 (48)	1.59 (40.5)
D	D1	D2	D3	E
4.92 (125)	5.79 (147)	4.17 (105.3)	4.61 (117.2)	.67 (17)
E1	F	F1	G	H
1.65 (42)	1.34 (34)	1.10 (28)	.98 (25)	1.18 (30)
H1	H2	H3	H4	J
.49 (12.5)	.20 (5)	.51 (13)	.16 (4)	.91 (23)
J1	K	K1	K2	K3
.14 (3.5)	2.52 (64)	1.77 (45)	1.65 (42)	2.41 (61.3)
K4	K5	M	N	P
1.78 (45.3)	2.26 (57.3)	1.30 (33)	.59 (15)	Ø .26 Ø (6.6)
P1	U	V		
Ø .17 Ø (4.4)	0.52 (13.3)	0.29 (7.5)		

Inches (mm)

P2LDX 5/2 & 5/3 Single & Double Operators – Remote Pilot



P2LDX 5/2 & 5/3 (remote)

A	B	C	D	E
5.47 (139)	1.89 (48)	1.59 (40.5)	2.63 (67)	.67 (17)
E1	F	F1	G	H
1.65 (42)	1.34 (34)	1.08 (27.5)	.98 (25)	1.18 (30)
H1	H2	H3	H4	J
.49 (12.5)	.20 (5)	.51 (13)	.16 (4)	.91 (23)
J1	P	M	N	Q
.14 (3.5)	Ø .26 Ø (6.6)	1.29 (32.7)	.59 (15)	Ø .17 Ø (4.4)

Inches (mm)

Features

B3, B5 & B6 Series

B Series, an exceptional performing industrial valve in a compact size with an enhanced flow range.

Available in solenoid pilot operated and remote air pilot models. The B series features Parker's proven WCS (Wear Compensating Seal) system ensuring long life and fast response.

Ports

- B3: 1/8 NPT – 0.75 Cv
- B5: 1/4 & 3/8 NPT – 1.40 Cv
- B6: 3/8 NPT – 2.50 Cv

Mounting

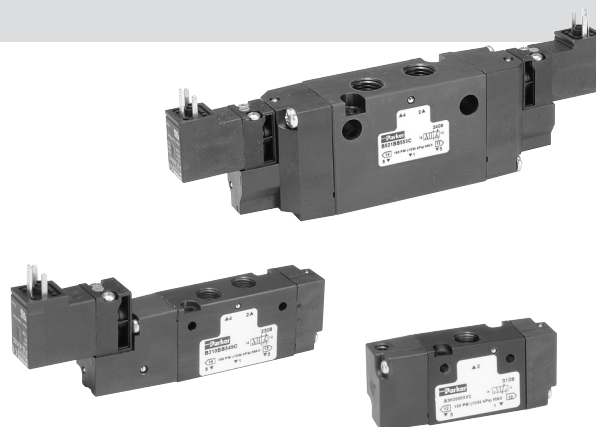
- Inline
- IEM stackable base
- IEM aluminum bar

Solenoids

- 1.2 W – 15mm, 3-pin EN175301-803
- 24VDC, 120VAC
- Female DIN electrical connectors

Certification / Approval

- Approved to be CE marked
- IP65 rated



Operating information

Operating pressure:	Vacuum to 145 PSIG (Vacuum to 10 bar)
Minimum:	See chart below
CSA-NRTL/C:	See chart below
Operating temperature:	5°F to 120°F (-15°C to 49°C)

Material specifications

Body	Anodized aluminum
End caps	Nylon polymer - 33% glass filled
Seals	Nitrile
Solenoid	Polyamide
Spool	Aluminum

Minimum operating pressure

Operator / Function	Internal Pilot	Minimum PSIG (kPa)		
		B3	B5	B6
1, G, H	Single solenoid - air return			
2, A, J, S	Double solenoid	20 (138)	20 (138)	20 (138)
3*	Single remote pilot - air return			
4, M*	Double remote pilot	Vacuum	Vacuum	Vacuum
5, 6, 7	Double solenoid - APB, CE, PC	30 (207)	30 (207)	30 (207)
8, 9, 0*	Double remote pilot - APB, CE, PC	Vacuum	Vacuum	Vacuum
X, Y*	Single remote pilot - air return / spring assist*	35 (241)	35 (241)	35 (241)

* Remote Pilot Signal 35-145 PSIG (241-1000 kPa).

C

Inline Valves

Viking
LiteViking
ExtremeB3, B5, B6
SeriesB7, B8
SeriesAir Saver
Unit"N"
Series

Single Solenoid, 3-way, 2-position, NC



Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
	1/8"	0.75 Cv	120VAC 24VDC	B3 Inline	B3G0BB553C B3G0BB549C
	1/4"	1.4 Cv	120VAC 24VDC	B5 Inline	B5G1BB553C B5G1BB549C
	3/8"	1.4 Cv	120VAC 24VDC	B5 Inline	B5G2BB553C B5G2BB549C

B3 shown, 3-Pin DIN 43650C electrical connection. Non-locking flush override.

Single Solenoid, 4-way, 2-position



Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
	1/8"	0.75 Cv	120VAC 24VDC	B3 Inline	B310BB553C B310BB549C
	1/4"	1.4 Cv	120VAC 24VDC	B5 Inline	B511BB553C B511BB549C
	3/8"	1.4 Cv	120VAC 24VDC	B5 Inline	B512BB553C B512BB549C
	3/8"	2.7 Cv	120VAC 24VDC	B6 Inline	B612BB553A B612BB549A

B3 shown, 3-Pin DIN 43650C electrical connection. Non-locking flush override.

Double Solenoid, 4-way, 2-position



Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
	1/8"	0.75 Cv	120VAC 24VDC	B3 Inline	B320BB553C B320BB549C
	1/4"	1.4 Cv	120VAC 24VDC	B5 Inline	B521BB553C B521BB549C
	3/8"	1.4 Cv	120VAC 24VDC	B5 Inline	B522BB553C B522BB549C
	3/8"	2.7 Cv	120VAC 24VDC	B6 Inline	B622BB553A B622BB549A

B5 shown, 3-Pin DIN 43650C electrical connection. Non-locking flush override.

ANSI / (NFPA) T3.21.3-1990 standard for Cv measurement.

15mm 3-Pin DIN 43650C, 8mm Pin Spacing

	Cord Length	Connector	Connector with Cord
Unlighted	18 Inches	PS2932BP	PS2932HBP
Unlighted	6 Feet	PS2932BP	PS2932JBP
Light – 12VAC or DC	6 Feet	PS294675BP	PS2946J75BP *
Light – 24VAC or DC	6 Feet	PS294679BP	PS2946J79BP *
Light – 110/120VAC	6 Feet	PS294683BP	PS2946J83BP *
Light – 240/230VAC		PS294687BP	N/A

* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord.

IP65 rated when properly installed.

Engineering data:

Conductors: 2 poles plus ground, polarity insensitive
Cable range (connector only): 4 to 6mm (0.16 To 0.24 Inch)
Contact spacing: 8mm

15mm 3-Pin DIN 43650C to 1/2" Conduit

Description	Connector
	PS2998P

Note: Rated up to 250VAC or VDC; 6 amps
IP65 rated when properly installed.

Most popular.



For inventory, lead times, and kit
lookup, visit www.pdnplu.com

C40

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

Common Part Numbers

Double Solenoid, 4-way, 3-position, APB



Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
	1/8"	0.60 Cv	120VAC 24VDC	B3 Inline	B350BB553C B350BB549C
	1/4"	1.1 Cv	120VAC 24VDC	B5 Inline	B551BB553C B551BB549C
	3/8"	1.1 Cv	120VAC 24VDC	B5 Inline	B552BB553C B552BB549C
	3/8"	2.1 Cv	120VAC 24VDC	B6 Inline	B652BB553A B652BB549A

B5 shown, 3-Pin DIN 43650C electrical connection. Non-locking flush override.

Double Solenoid, 4-way, 3-position, CE



Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
	1/8"	0.60 Cv	120VAC 24VDC	B3 Inline	B360BB553C B360BB549C
	1/4"	1.1 Cv	120VAC 24VDC	B5 Inline	B561BB553C B561BB549C
	3/8"	1.1 Cv	120VAC 24VDC	B5 Inline	B562BB553C B562BB549C
	3/8"	2.1 Cv	120VAC 24VDC	B6 Inline	B662BB553A B662BB549A

B5 shown, 3-Pin DIN 43650C electrical connection. Non-locking flush override.

Double Solenoid, 4-way, 3-position, PC



Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
	1/8"	0.60 Cv	120VAC 24VDC	B3 Inline	B370BB553C B370BB549C
	1/4"	1.1 Cv	120VAC 24VDC	B5 Inline	B571BB553C B571BB549C
	3/8"	1.1 Cv	120VAC 24VDC	B5 Inline	B572BB553C B572BB549C
	3/8"	2.1 Cv	120VAC 24VDC	B6 Inline	B672BB553A B672BB549A

B5 shown, 3-Pin DIN 43650C electrical connection. Non-locking flush override.

ANSI / (NFPA) T3.21.3-1990 standard for Cv measurement.

15mm 3-Pin DIN 43650C, 8mm Pin Spacing

	Cord Length	Connector	Connector with Cord
	18 Inches	PS2932BP	PS2932HBP
	6 Feet	PS2932BP	PS2932JBP
	6 Feet	PS294675BP	PS2946J75BP *
	6 Feet	PS294679BP	PS2946J79BP *
	6 Feet	PS294683BP	PS2946J83BP *
		PS294687BP	N/A

* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord.
IP65 rated when properly installed.

Engineering data:

Conductors: 2 poles plus ground, polarity insensitive
Cable range (connector only): 4 to 6mm (0.16 To 0.24 Inch)
Contact spacing: 8mm

Most popular.

15mm 3-Pin DIN 43650C to 1/2" Conduit

Description	Connector
 1/2" NPTF conduit – Unlighted with 3' (1m) leads 20 AWG wire	PS2998P

Note: Rated up to 250VAC or VDC; 6 amps
IP65 rated when properly installed.



For inventory, lead times, and kit
lookup, visit www.pdnplu.com

Common Part Numbers

Single Remote Pilot, 3-way, 2-position, NC



Symbol



B3 Shown, M5 Remote Pilot Ports

Port Size

Cv

Valve Type

Part Number

1/8"

0.75 Cv

B3 Inline, remote pilot

B3X0000XXC

1/4"

2.7 Cv

B5 Inline, remote pilot

B5X1000XXC

3/8"

1.4 Cv

B5 Inline, remote pilot

B5X2000XXC

Single Remote Pilot, 4-way, 2-position



Symbol



B5 Shown, M5 Remote Pilot Ports

Port Size

Cv

Valve Type

Part Number

1/8"

0.75 Cv

B3 Inline, remote pilot

B330000XXC

1/4"

1.4 Cv

B5 Inline, remote pilot

B531000XXC

3/8"

1.4 Cv

B5 Inline, remote pilot

B532000XXC

3/8"

2.7 Cv

B6 Inline, remote pilot

B632000XXA

Double Remote Pilot, 4-way, 2-position



Symbol



B5 Shown, M5 Remote Pilot Ports

Port Size

Cv

Valve Type

Part Number

1/8"

0.75 Cv

B3 Inline, remote pilot

B340000XXC

1/4"

1.4 Cv

B5 Inline, remote pilot

B541000XXC

3/8"

1.4 Cv

B5 Inline, remote pilot

B542000XXC

3/8"

2.7 Cv

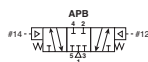
B6 Inline, remote pilot

B642000XXA

Double Remote Pilot, 4-way, 3-position, APB



Symbol



B5 Shown, M5 Remote Pilot Ports

Port Size

Cv

Valve Type

Part Number

1/8"

0.60 Cv

B3 Inline, remote pilot

B380000XXC

1/4"

1.1 Cv

B5 Inline, remote pilot

B581000XXC

3/8"

1.1 Cv

B5 Inline, remote pilot

B582000XXC

3/8"

2.1 Cv

B6 Inline, remote pilot

B682000XXA

ANSI / (NFPA) T3.21.3-1990 standard for Cv measurement.

Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

B3 Series

B3	1	0	B	B	5	49	-	C
-----------	----------	----------	----------	----------	----------	-----------	----------	----------

Basic Series

B3 Series	B3
-----------	----

Engineering Level

C	Current
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Operator Function

3-way	
Single Solenoid, 2-Position Nc - Air Return	G
Single Solenoid, 2-Position No - Air Return	H
Double Solenoid, 2-Position	J
Double Remote Pilot, 2-Position	M
Single Remote Pilot, 2-Position Nc - Air Return / Spring Assist	X
Single Remote Pilot, 2-Position No - Air Return / Spring Assist	Y
4-Way	
Single Solenoid, 2-Position - Air Return	1
Double Solenoid, 2-Position	2
Single Remote Pilot, 2-Position - Air Return	3
Double Remote Pilot, 2-Position	4
Double Solenoid, 3-Position - APB	5
Double Solenoid, 3-Position - CE	6
Double Solenoid, 3-Position - PC	7
Double Remote Pilot, 3-Position - APB	8
Double Remote Pilot, 3-Position - CE	9
Double Remote Pilot, 3-Position - PC	0

Options

Blank	None
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Voltage

	AC		DC
	60Hz	50Hz	
49			24
53	120	110	
XX	Remote Pilot - M5 or Valve Less 15mm Solenoid		

Enclosure / Lead Length

0	None, Remote Pilot Valve
5	15mm 3-Pin Din 43650c (Male Only)

Overrides

0	Remote Pilot Valve
B	Flush - Non-Locking
C	Flush - Locking
X	Valve Less 15mm Solenoid

Pilot Source / Pilot Exhaust

0	Remote Pilot Valve
B†	Internal - Port #1 / Vented

Port Size / Thread Type

3-way, 4-way *	
1/8" NPT Inline	0

* Available for use on IEM Manifolds.

† Not available for Remote Pilot Valves.

 Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

C43

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

C
Inline Valves
Viking Lite
Viking Extreme
B3, B5, B6 Series
B7, B8 Series
Air Saver Unit
"N" Series

B5 Series

C

Inline Valves

Viking Lite

Viking Extreme

B3, B5, B6 Series

B7, B8 Series

Air Saver Unit

"N" Series

B5

Basic Series

B5 Series

B5

1

1

B

B

5

49

-

C

Engineering Level

C

Current

Options

Blank

None

Voltage

AC

60Hz

50Hz

DC

49

53

XX

24

120

110

Remote Pilot - M5 or Valve Less Solenoid

Enclosure / Lead Length

0

5

X

Remote Pilot Valve

15mm 3-Pin DIN 43650C (male only)

Valve Less 15mm Solenoid

Overrides

0

B *

C *

Remote Pilot Valve

Flush - Non-Locking

Flush - Locking

Port Size / Thread Type

3-way, 4-way *

1/4" NPT Inline

3/8" NPT Inline

1

2

Pilot Source / Pilot Exhaust

Remote Pilot Valve

Internal - Port #1 / Vented

0

B †

Operator Function

3-Way

Single Solenoid, 2-Position Nc - Air Return

Single Solenoid, 2-Position No - Air Return

Double Solenoid, 2-Position

Double Remote Pilot, 2-Position

Single Remote Pilot, 2-Position Nc - Air Return / Spring Assist

Single Remote Pilot, 2-Position No - Air Return / Spring Assist

4-Way

Single Solenoid, 2-Position - Air Return

Double Solenoid, 2-Position

Single Remote Pilot, 2-Position - Air Return

Double Remote Pilot, 2-Position

Double Solenoid, 3-Position - APB

Double Solenoid, 3-Position - CE

Double Solenoid, 3-Position - PC

Double Remote Pilot, 3-Position - APB

Double Remote Pilot, 3-Position - CE

Double Remote Pilot, 3-Position - PC

G

H

J

M*

X*

Y*

1

2

3*

4*

5

6

7

8*

9*

0*

* Pilot source/pilot exhaust, override, and enclosure must be "0".

* 4-way available for use on IEM manifolds

† Not available for remote pilot valves.

* Only available with encl. "5".

 Most popular.

For inventory, lead times, and kit lookup, visit www.pdnplu.com

C44

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

B6 Series

B6

Basic Series

B6 Series

B6

1

2

B

B

5

49

-

A

Engineering Level

A

Current

Operator function

4-way

Single Solenoid, 2-Position - Air Return

1

Double Solenoid, 2-Position

2

Single Remote Pilot, 2-Position - Air Return

3

Double Remote Pilot, 2-Position

4

Double Solenoid, 3-Position - APB

5

Double Solenoid, 3-Position - CE

6

Double Solenoid, 3-Position - PC

7

Double Remote Pilot, 3-Position - APB

8

Double Remote Pilot, 3-Position - CE

9

Double Remote Pilot, 3-Position - PC

0

Port Size / Thread Type

4-way

3/8" NPT Inline

2*

* Available for use on IEM manifolds.

Pilot Source / Pilot Exhaust

None. Remote Pilot Valve

0

Internal - Port #1 / Vented

B†

† Not available for remote pilot valves.

Overrides^s

Remote Pilot Valve

0

Flush - Non-Locking

B *

Flush - Locking

C *

Valve Less 15mm Solenoid

X

* Available for use on IEM manifolds.

Enclosure / Lead Length

0

Remote Pilot Valve

5

15mm 3-Pin DIN 43650C (male only)

X

Valve Less 15mm Solenoid

Voltage

AC

60Hz

50Hz

DC

49

24

53

120

110

XX

Remote Pilot - M5 or Valve Less 15mm Solenoid

Options

Blank

None

 Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

C
Inline Valves
Viking Lite
Viking Extreme
B3, B5, B6 Series
B7, B8 Series
Air Saver Unit
"N" Series

B3 B5 B6 IEM Manifold, Inline Valves Only



Valve Series	Valve Function	## – Stations	Manifold Kit Only (NPT)
B3	4-way	2	PSM3BXN02NP
		4	PSM3BXN04NP
		6	PSM3BXN06NP
		8	PSM3BXN08NP
B5	4-way	2	PSM5BXN02NP
		4	PSM5BXN04NP
		6	PSM5BXN06NP
		8	PSM5BXN08NP
B6	4-way	2	PSM6BXN02NP
		4	PSM6BXN04NP
		6	PSM6BXN06NP
		8	PSM6BXN08NP

Kits include: (1) manifold, valve hold down bolts, O-rings.

C

Inline Valves

Viking
Lite

Viking
Extreme

B3, B5, B6
Series

B7, B8
Series

Air Saver
Unit

"N"
Series

Most popular.

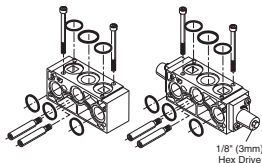


For inventory, lead times, and kit
lookup, visit www.pdnplu.com

Accessories**IEM Stackable Manifolds**

- Individual Manifold Bases stack together to form lightweight custom length manifold system.
- Easy-to-connect male / female tie rods for modular assembly.
- Utilizes B3 and B5 4-way Inline Valves.
- Low-cost built-in Flow Controls with heavy-duty brass adjusting needles to control meter-out exhaust flow.
- Accessories include Isolator Plugs for pressure isolation and Universal Blanking Plates for auxiliary inlet and exhaust supply and future valve additions.

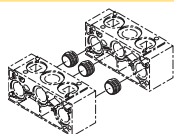
		Kit Number	
Series	Type	Standard	Flow Control
B3	4-way	PS2917P	PS2918P
B5	4-way	PS2817P	PS2818P



Kit includes: (1) manifold base, (2) hold-down bolts, tie-rods, gaskets and o-rings.

Isolator Plugs

Series	Description	Kit Number
B3	4-way, IEM stackable	PS2919P
B5	4-way, IEM stackable	PS2819P

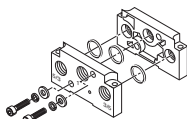


Used to isolate the #1, #3 or #5 gallery between two manifold bases. (IEM stackable only)

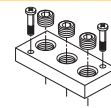
Kit includes: (3) plugs and (6) o-rings

End Plate Kits

Series	Type	Port Type	Kit Number
B3	4-way, NPT	1/4	PS2915P
B5	4-way, NPT	3/8	PS2815P



Kit includes: right and left end plate, o-rings, socket head cap screws, flat washers and lockwashers.

Blanking Plate

		IEM Universal	IEM
		NPT	Blank
B3	4-way	PS2920P	PS2969P
B5	4-way	PS2820P	PS2869P
B6	4-way	PS2620P	—

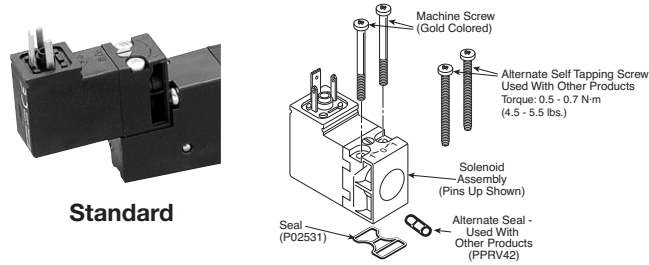
Kit includes: (1) plate, (2) screws, seal / gaskets

 Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

Solenoid Kits – B3 ‘C’, B5 ‘C’, B6 ‘A’, 3-Pin, EN175301-803 (Former DIN 43650C), 15mm



Standard

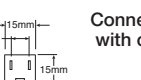
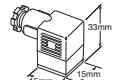
PS2982*##P – Enclosure ‘5’

	## Voltage	
Override *	49	53
B	S	S
C	S	S

S - Standard;

Kit includes: Solenoid, (2) machine screws, (2) self threading screws, (1) gasket, (1) 3-cell gasket.

15mm 3-Pin DIN 43650C, 8mm Pin Spacing

			
	Connector with cord	Connector only	
	Cord Length	Connector	Connector with Cord
Unlighted	18 Inches	PS2932BP	PS2932HBP
Unlighted	6 Feet	PS2932BP	PS2932JBP
Light – 12VAC or DC	6 Feet	PS294675BP	PS2946J75BP *
Light – 24VAC or DC	6 Feet	PS294679BP	PS2946J79BP *
Light – 110/120VAC	6 Feet	PS294683BP	PS2946J83BP *
Light – 240/230VAC		PS294687BP	N/A

* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord.
IP65 rated when properly installed.

Engineering data:

Conductors: 2 poles plus ground, polarity insensitive
Cable range (connector only): 4 to 6mm (0.16 To 0.24 Inch)
Contact spacing: 8mm

15mm 3-Pin DIN 43650C to 1/2" Conduit

	Description	Connector
	1/2" NPTF conduit – Unlighted with 3' (1m) leads 20 AWG wire	PS2998P

Note: Rated up to 250VAC or VDC; 6 amps
IP65 rated when properly installed.

Most popular.



For inventory, lead times, and kit
lookup, visit www.pdnplu.com

Solenoid Information (Solenoids are rated for continuous duty.)

Voltage				Enclosure "5"	
Code	AC		DC	Power Consumption	Holding (Amps)
	60Hz	50Hz			
49			24	1.2W	.049
53	120	110		1.6W	.013

Response Time (Sec)

		Enclosure "5"			
Valve Size	Port Size	0 Cu. In. Test Chamber		25 * Cu. In. Test Chamber	
		Fill	Exhaust	Fill	Exhaust
2-Position Single Solenoid / Internal Air Return					
B3	1/8"	.024	.026	.149	.242
B5	1/4"	.038	.040	.106	.156
B5 *	3/8"	.039	.041	.150	.245
B6 *	3/8"	.037	.038	.096	.132
2-Position Double Solenoid					
B3	1/8"	.013	.015	.122	.213
B5	1/4"	.016	.018	.082	.132
B5 *	3/8"	.016	.018	.129	.222
B6 *	3/8"	.016	.017	.074	.110
3-Position Double Solenoid					
B3	1/8"	.021	.023	.091	.141
B5	1/4"	.022	.023	.091	.141
B5 *	3/8"	.022	.024	.135	.229
B6 *	3/8"	.024	.026	.094	.139

Average Fill Time (Seconds): With 100 PSIG supply, time required to fill from 0-90 PSIG and exhaust from 100 PSIG to 10 PSIG is measured from instant of energizing, or de-energizing 120V/60Hz solenoid. Times shown are average.

* For 3/8" ported, 50 cu. in. test chamber is used. For 1/2" & 3/4", a 200 cu. in. test chamber is used.

Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

B3C Series

Spool / Body Service Kits

		<i>Kit Includes:</i>
PS2901CP	4-Way, 2-Pos	Item 15, 21 (2), 24, 25, 31 (2), grease packet
PS2902CP	4-Way, 3-Pos APB	Item 16, 21 (2), 31 (2), grease packet
PS2903CP	4-Way, 3-Pos CE	Item 16, 21 (2), 31 (2), grease packet
PS2904CP	4-Way, 3-Pos PC	Item 16, 21 (2), 31 (2), grease packet
PS2971CP	3-Way, 2-Pos	Item 15, 21 (2), 24, 25, 31 (2), grease packet

Valve to Manifold Kits

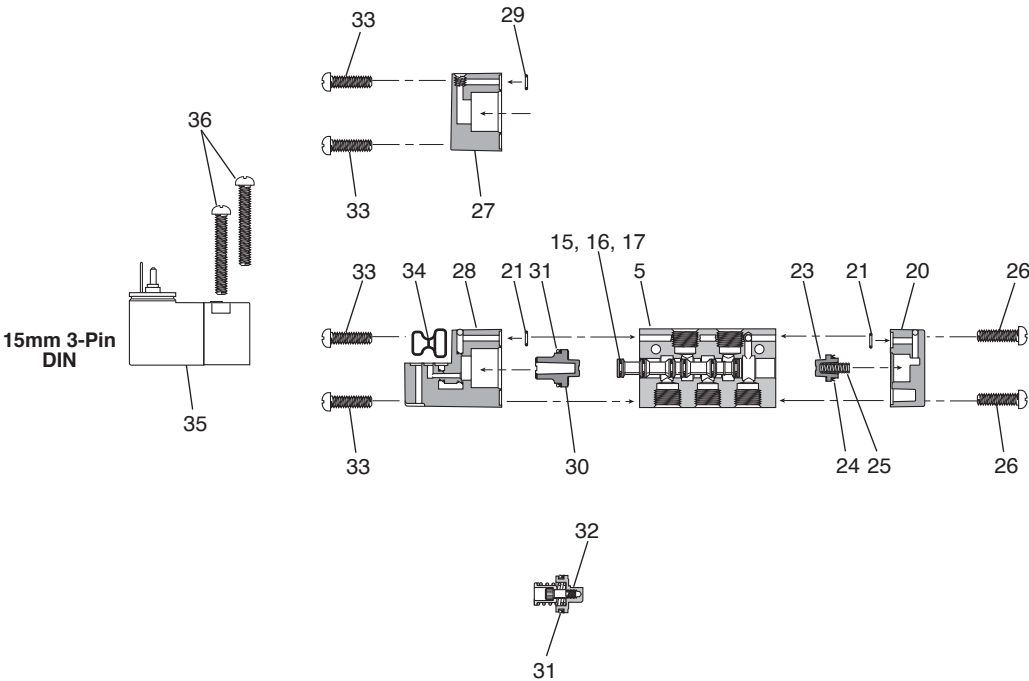
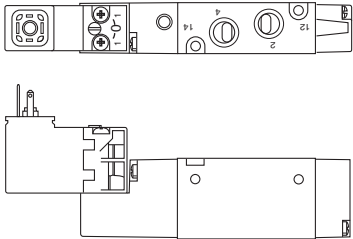
PS2980P	Gasket (10) - Inline 3-Way Valve to Segmented Manifold
PS2981P	Gasket (10) - Inline 4-Way Valve to Segmented Manifold
PS2984P	O-ring (10) - Inline Valve to IEM Bar Manifold
PS2987P	Mounting Bolts (10) - Inline Valve / Subbase Valve

Manifold to Manifold Kit

PS2996P	Gasket (10), Tie Rods (10) - 4-Way Manifold
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Solenoid Kit Kit Includes: 35, 36, 34

PS2982*##P	3-Pin, EN175301-803, 15mm
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Item List – Parts not sold separately.

Item	Description	Item	Description	Item	Description
5	Inline Body - Tapped Ports	25*	Spring, Return Assist	33	Screws - Operator Adapter
15*	Spool - 2-Position (Seals Assembled)	26	Screws - Return Operator	34*	Gasket - Solenoid to Adapter
16*	Spool - 3-Position (Seals Assembled)	27	Remote Pilot Operator	35*	15mm Solenoid
17*	Spool Seal	28a	Solenoid Adapter - Vent Exhaust	36*	Self Tapping Screw - Solenoid (Effective May 99)
20	Return Operator	29	O-ring - Remote Pilot	36*	Machine Screw - Solenoid (Jan 96 - May 99)
21*	Gasket - Body to Operator	30	Operator Piston - 2-Position		
23	Return Piston	31*	Lip Seal - Operator Piston		
24*	Lip Seal - Return Piston	32	Operator Piston Mechanism - 3-Position		

Note: * Parts are available in kits shown.

B5C Series

Spool / Body Service Kits

PS2801*P	4-Way, 2-Pos	<i>Kit Includes:</i>
PS2802*P	4-Way, 3-Pos APB	Item 2, 10 (2), 14, 15, 116, 6 (2), grease packet
PS2803*P	4-Way, 3-Pos CE	Item 3, 6 (2), 10 (2), 13 (2), grease packet
PS2804*P	4-Way, 3-Pos PC	Item 3, 6 (2), 10 (2), 13 (2), grease packet
PS2871*P	3-Way, 2-Pos NC	Item 2, 10 (2), 14, 15, 116, 6 (2), grease packet

* Fluorocarbon Seal Kit (i.e. PS2801VP)

Valve to Manifold Kits

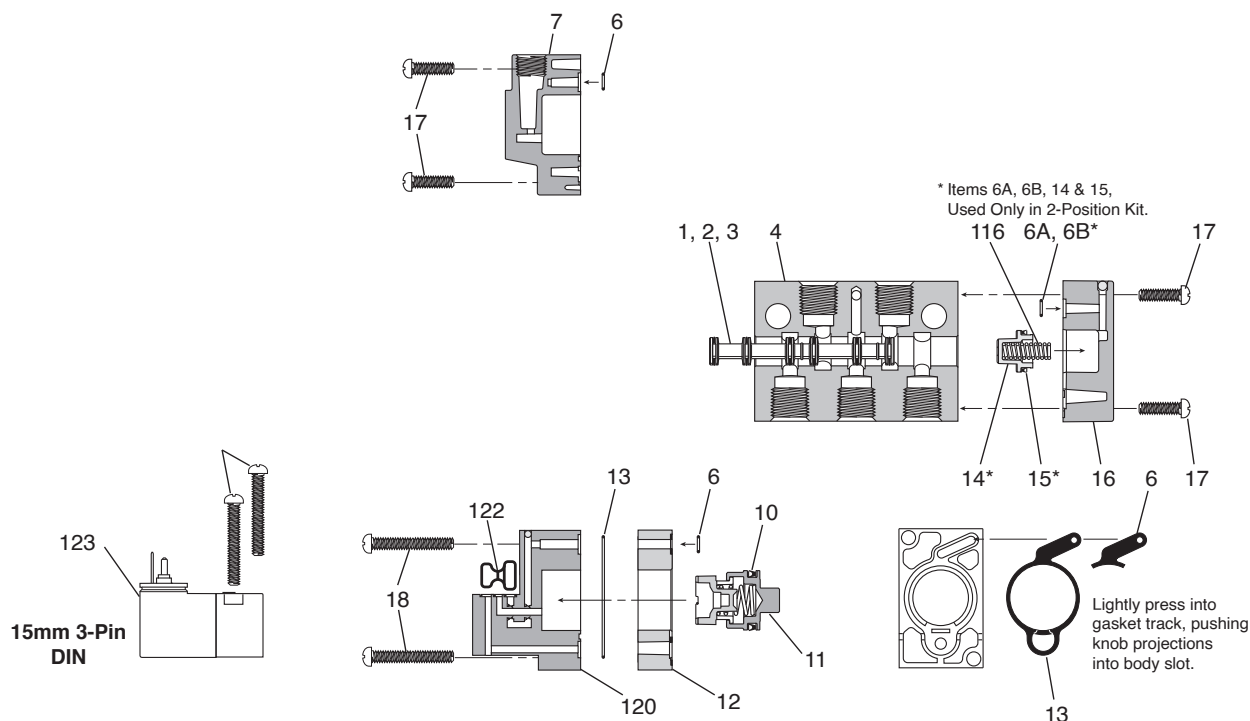
PS2884P	O-ring (10) - Inline Valve to IEM Manifold (All)
PS2887P	Mounting Bolts (10) - Inline & Subbase Valve

Manifold to Manifold Kit

PS2896P	Gasket (10), Tie Rods (10) - 4-Way Manifold
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Solenoid Kit *Kit Includes: 25, 122, 123*

PS2982*##P	3-Pin, EN175301-803, 15mm
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Item List – Parts not sold separately.

Item	Description	Item	Description	Item	Description
1*	Spool Seal	10*	Lip Seal - Operator Piston	18*	Screws - Operator Adapter - 3-Position
2*	Spool - 2-Position (Seals Assembled)	11	Operator Piston Mechanism - 3-Position	25a*	Self Tapping Screw - Solenoid (Effective May 99)
3*	Spool - 3-Position (Seals Assembled)	12	Adapter - 3-Position	25b*	Machine Screw - Solenoid (Jan 96 - May 99)
4	Inline Body	13*	Gasket - 3-Position Adapter to Body	116*	Spring, Return Assist
6A*	Gasket - Body to Operator	14	Return Piston	120a	Solenoid Adapter - Vent Exhaust
6B	O-ring - Body to Operator (Effective July 2007)	15*	Lip Seal - Return Piston	122*	Gasket - Solenoid to Adapter
7	Remote Pilot Operator	16	Return Operator	123*	15mm Solenoid
		17*	Screws - Operator Adapter - 2-Position		

Note: * Parts are available in kits shown.

C	Inline Valves
Viking Lite	
Viking Extreme	
B3, B5, B6 Series	
B7, B8 Series	
Air Saver Unit	
"N" Series	

B6A Series

Spool / Body Service Kits

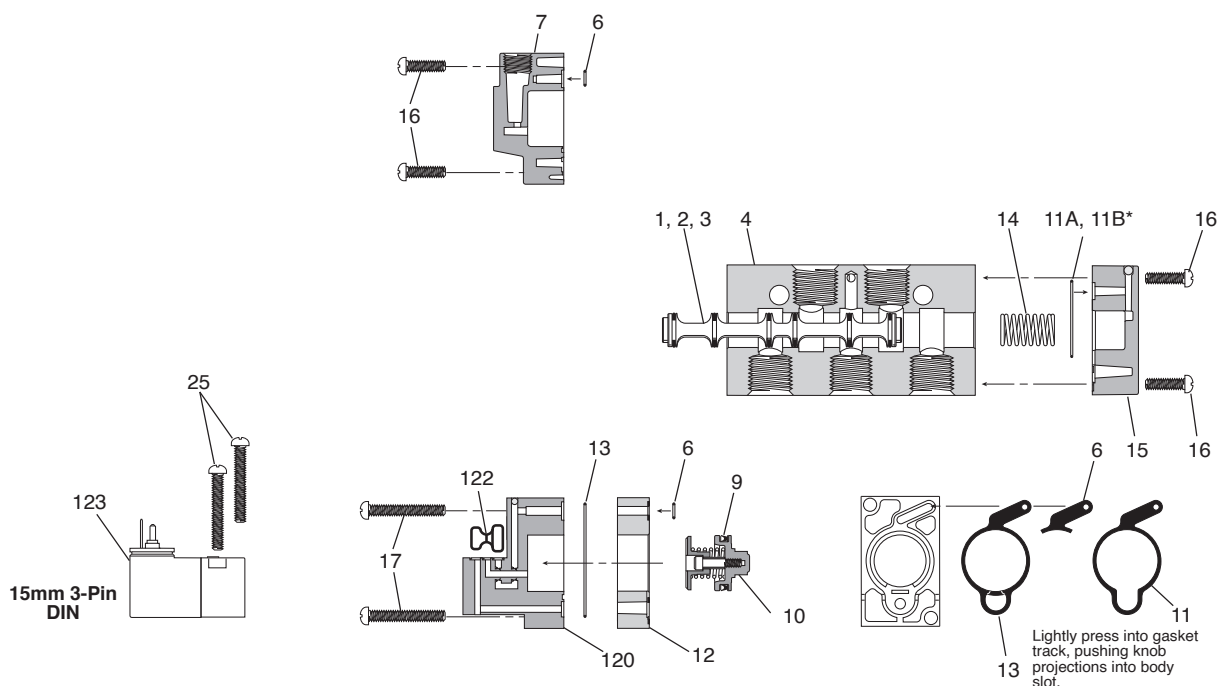
PS2601P	4-Way, 2-Pos	Kit Includes:
PS2602P	4-Way, 3-Pos APB	Item 2, 6 (2), 9 (2), 11, 14, grease packet
PS2603P	4-Way, 3-Pos CE	Item 3, 6 (2), 9 (2), 13 (2), grease packet
PS2604P	4-Way, 3-Pos PC	Item 3, 6 (2), 9 (2), 13 (2), grease packet

Solenoid Kit Kit Includes: 25, 122, 123

PS2982***P 3-Pin, EN175301-803, 15mm

Valve to Manifold Kits

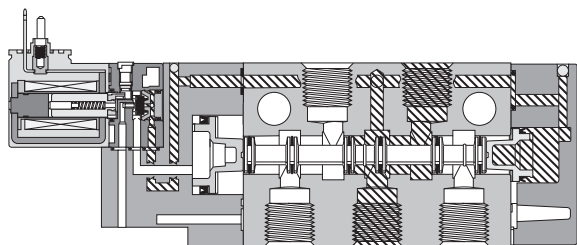
PS2684P	O-ring (10) - Inline Valve to IEM Manifold
PS2887P	Mounting Bolts (10) - Inline Valve



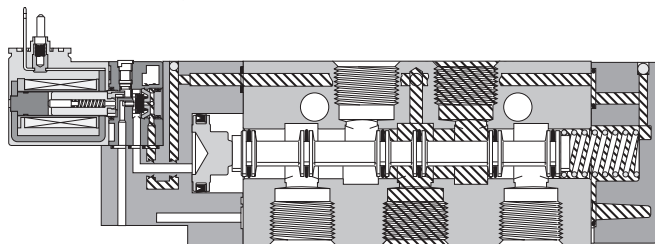
Item List – Parts not sold separately.

Item	Description	Item	Description	Item	Description
1*	Spool Seal	10	Operator Piston Mechanism - 3-Position	15a	Return Operator
2*	Spool - 2-Position (Seals Assembled)	11A*	Gasket - Body to Return Cap	16*	Screws - Operator Adapter - 2-Position
3*	Spool - 3-Position (Seals Assembled)	11B*	O-ring - Body to Operator (Effective Feb. 2008)	17*	Screws - Operator Adapter - 3-Position
4	Inline Body - 4-Way	12	Adapter - 3-Position	120a	Solenoid Adapter - Vent Exhaust
6*	Gasket - Body to Operator	13	Gasket - 3-Position Adapter to Body	122*	Gasket - Solenoid to Adapter
7	Remote Pilot Operator	14*	Spring, Return Assist	123*	15mm Solenoid
9*	Lip Seal - Operator Piston				

Note: * Parts are available in kits shown. For kit components, order VALVE LESS SOLENOID for assembled and tested repair valve.



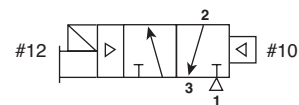
B5 Single Solenoid Inline - Air Return
 Shown De-Energized



B6 Single Solenoid Inline - Spring / Air Return
 Shown De-Energized

 **Pressure**  **Exhaust**

**Single Solenoid
 3-Way, 2-Position
 NC (NNP)**

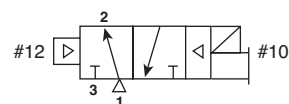


Normally Closed:

De-energized position – Solenoid #12 de-energized. Pressure at inlet port 1 blocked, outlet port 2 connected to exhaust port 3.

Energized position – Solenoid #12 energized. Pressure at inlet port 1 connected to outlet port 2, exhaust port 3 is blocked.

**Single Solenoid
 3-Way, 2-Position
 NO (NP)**



Normally Open:

De-energized position – Solenoid #10 de-energized. Pressure at inlet port 1 connected to outlet port 2, exhaust port 3 is blocked.

Energized position – Solenoid #10 energized. Pressure at inlet port 1 blocked, outlet port 2 connected to exhaust port 3.

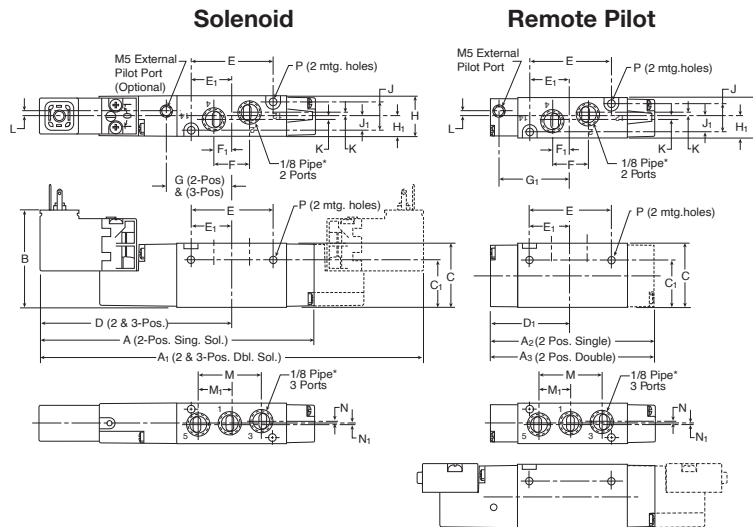
3-Way Configuration

B3, B5:

Looking at the #1 and #3 ports, the solenoid (or remote operator) is on the #3 port end for NC and the #1 port end for NO. The same spool is used for both.

C	
Inline Valves	
Viking Lite	
Viking Extreme	
B3, B5, B6 Series	
B7, B8 Series	
Air Saver Unit	
"N" Series	

B3 Single & Double Operators – 4-way Inline

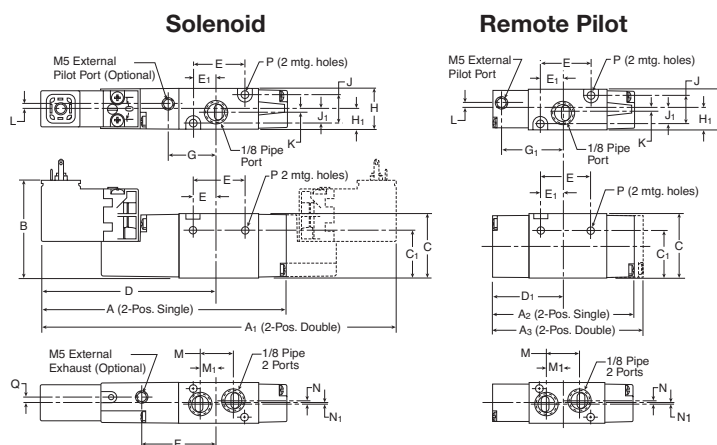


B3 4-Way Inline

A	A1	A2	A3	B
4.67 (119)	6.44 (164)	3.12 (79)	3.33 (85)	1.66 (42)
C	C1	D	D1	E
1.13 (39)	.84 (21)	3.22 (82)	1.66 (42)	1.47 (37)
E1	F	F1	G	G1
.74 (19)	.63 (16)	.32 (8)	1.13 (29)	1.50 (38)
H	H1	J	J1	K
.71 (18)	.36 (9)	.51 (13)	.26 (7)	.06 (2)
L	M	M1	N	N1
.11 (3)	1.12 (28)	.56 (14)	.05 (1)	.05 (1)
P				
Ø .13 Ø (3.3)				

Inches (mm)

B3 Single & Double Operators – 3-way Inline

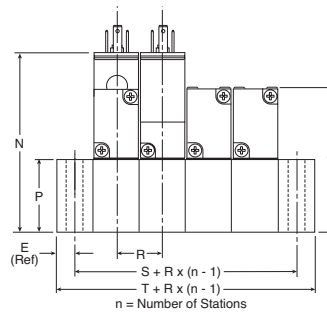
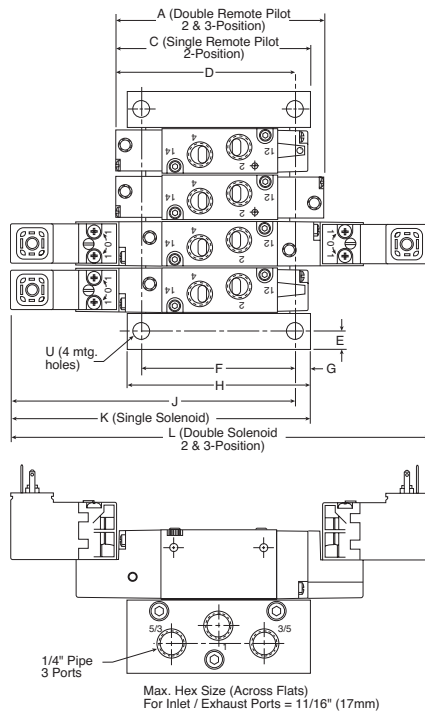


B3 3-Way Inline

A	A1	A2	A3	B
4.20 (107)	5.96 (151)	2.65 (67)	2.86 (73)	1.66 (42)
C	C1	D	D1	E
1.13 (39)	.84 (21)	2.93 (74)	1.38 (35)	.98 (25)
E1	F	G	G1	H
.44 (11)	1.32 (34)	.85 (22)	1.22 (31)	.71 (18)
H1	J	J1	K	L
.36 (9)	.51 (13)	.26 (7)	.06 (2)	.11 (3)
M	M1	N	N1	P
.63 (16)	.27 (7)	.12 (3)	.06 (2)	Ø .13 Ø (3.3)
Q				
.08 (2)				

Inches (mm)

B3 Single & Double Operators – 4-way IEM Stackable

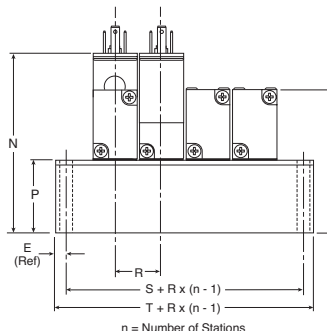
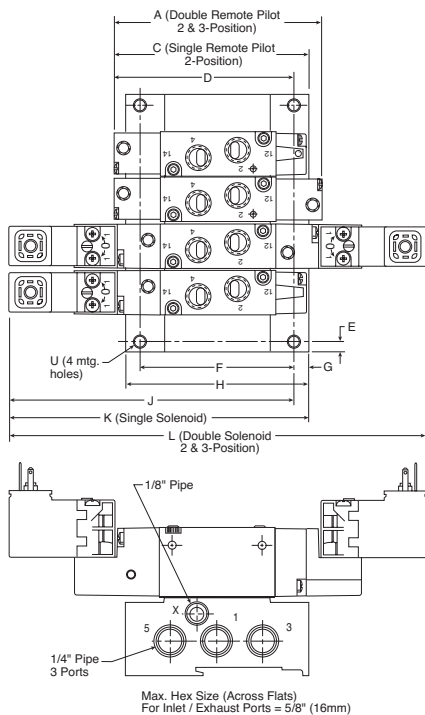


B3 4-Way IEM Stackable

A	C	D	E	F
3.33 (84.6)	3.12 (79.2)	2.91 (73.9)	.30 (7.6)	2.49 (63.3)
G	H	J	K	L
.25 (6.4)	3.00 (76.2)	4.46 (113.3)	4.67 (118.6)	6.43 (163.3)
N	P	Q	R	
2.91 (73.9)	1.25 (31.8)	2.38 (60.5)	.74 ±.01 (18.8) ± .3	
S	T	U		
1.34 (34.0)	1.94 (49.3)	Ø .28 Ø (7.1)		

Inches (mm)

B3 Single & Double Operators – 4-way IEM Aluminum Bar

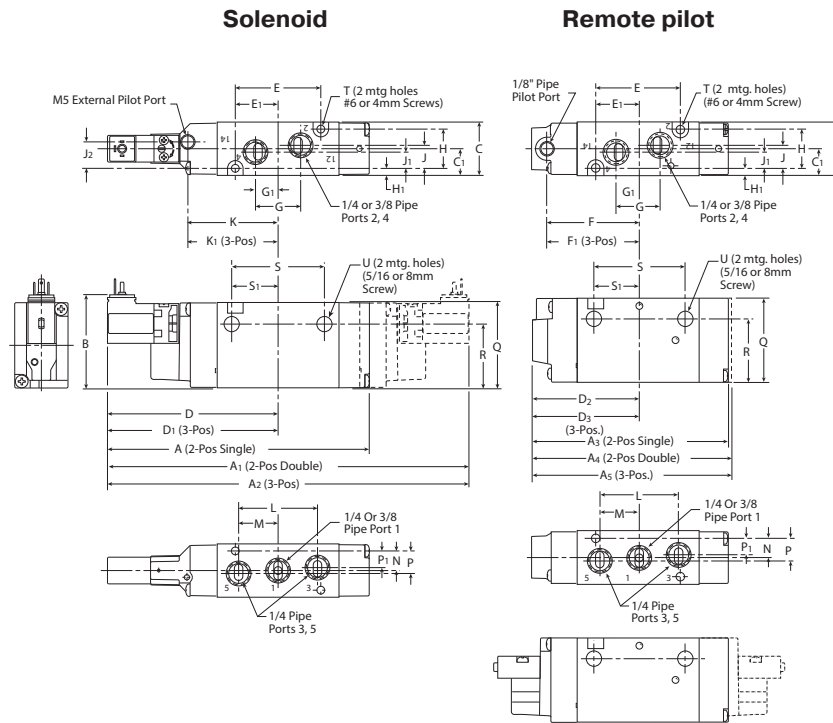


B3 4-Way IEM Aluminum Bar Manifold

A	C	D	E	F
3.33 (84.6)	3.17 (80.5)	2.94 (74.7)	.25 (6.4)	2.54 (64.5)
G	H	J	K	L
.23 (5.9)	3.00 (76.2)	4.50 (114.2)	4.73 (120.1)	6.43 (163.3)
N	P	Q	R	S
2.94 (74.7)	1.28 (32.5)	2.41 (61.2)	.81 (20.5)	1.13 (28.8)
T	U			
1.64 (41.6)	Ø .23 Ø (5.8)			

Inches (mm)

B5 Single & Double Operators – 4-way Inline

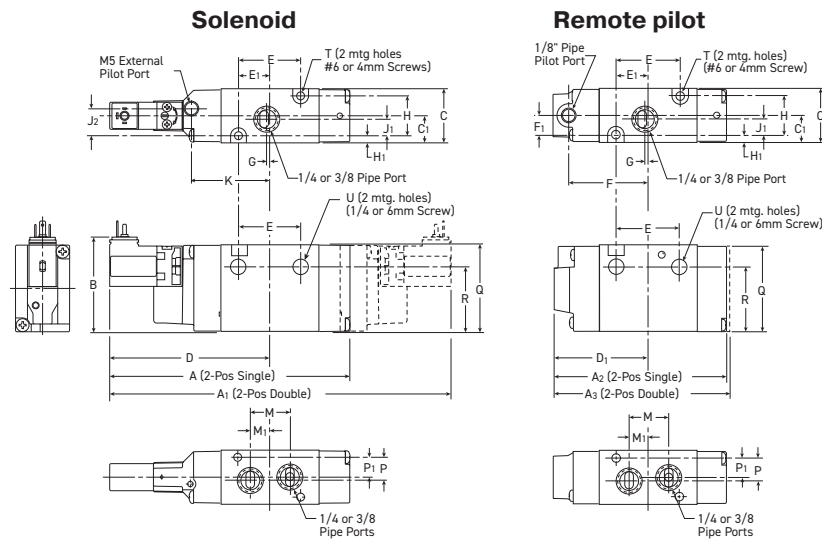


B5 4-Way Inline

A	A1	A2	A3	A4
5.78 (147)	7.51 (191)	8.45 (215)	4.37 (110)	4.70 (119)
A5	B	C	C1	D
5.64 (143)	2.06 (52)	1.18 (30)	.59 (15)	3.76 (96)
D1	D2	D3	E	E1
4.23 (107)	2.35 (60)	2.82 (72)	1.89 (48)	.95 (24)
F	F1	G	G1	H
2.01 (51)	2.47 (63)	1.00 (25)	.50 (13)	.87 (22)
H1	J	J1	J	K
.16 (4)	.51 (13)	.36 (9)	.58 (15)	2.00 (51)
K1	L	M	N	P
2.47 (63)	1.75 (44)	.88 (22)	.43 (8)	.50 (13)
P1	Q	R	S	S1
.37 (92)	1.89 (48)	1.41 (36)	2.05 (52)	1.03 (26)
T	U			
Ø .177 Ø (4.5)	Ø .34 Ø (9)			

Inches (mm)

B5 Single & Double Operators – 3-way Inline

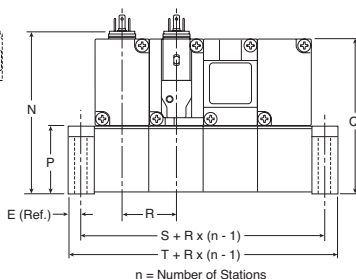
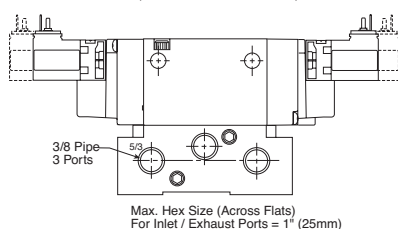
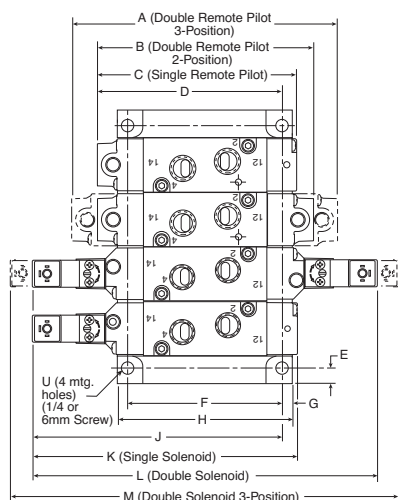


B5 3-Way Inline

A	A1	A2	A3	B
5.29 (134)	7.03 (179)	3.88 (99)	4.21 (107)	2.06 (52)
C	C1	D	D1	E
1.18 (30)	.59 (15)	3.43 (87)	2.11 (54)	1.40 (36)
E1	F	F1	G	H
.70 (18)	1.77 (45)	.43 (11)	.06 (2)	.87 (22)
H1	J1	J2	K	M
.16 (4)	.36 (9)	.58 (15)	1.67 (42)	.88 (22)
M1	P	P1	Q	R
.44 (11)	.50 (13)	.37 (9)	1.89 (48)	1.41 (36)
T	U			
Ø .177 Ø (4.5)	Ø .26 Ø (6.6)			

Inches (mm)

B5 Single & Double Operators – 4-way IEM Stackable

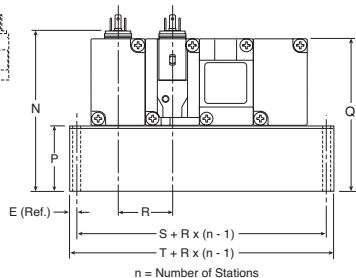
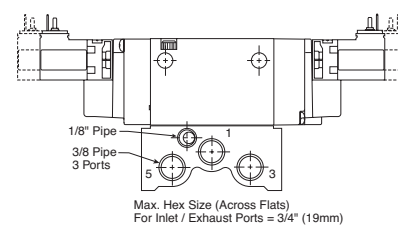
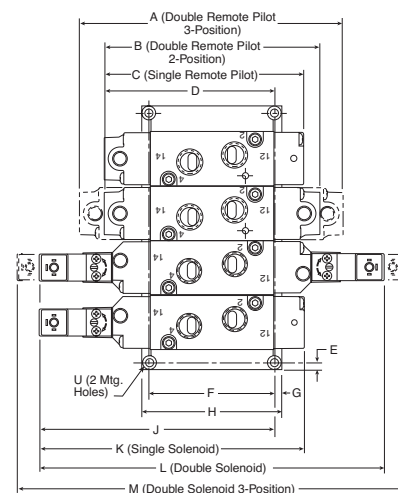


B5 4-Way IEM Stackable

A	B	C	D	E
5.64 (143.3)	4.70 (119.4)	4.37 (110.0)	4.29 (109.0)	.29 (7.4)
F	G	H	J	K
3.44 (87.4)	.24 (6.1)	3.92 (99.6)	5.48 (139.2)	5.78 (146.8)
L	M	N	P	Q
7.52 (191.0)	8.46 (214.9)	3.56 (90.4)	1.50 (38.1)	3.42 (86.9)
R	S	T	U	
1.21 ± .01 (30.7) ± (.3)	1.79 (45.5)	2.37 (60.2)	Ø .28 Ø (7.1)	

Inches (mm)

B5 Single & Double Operators – 4-way IEM Aluminum Bar

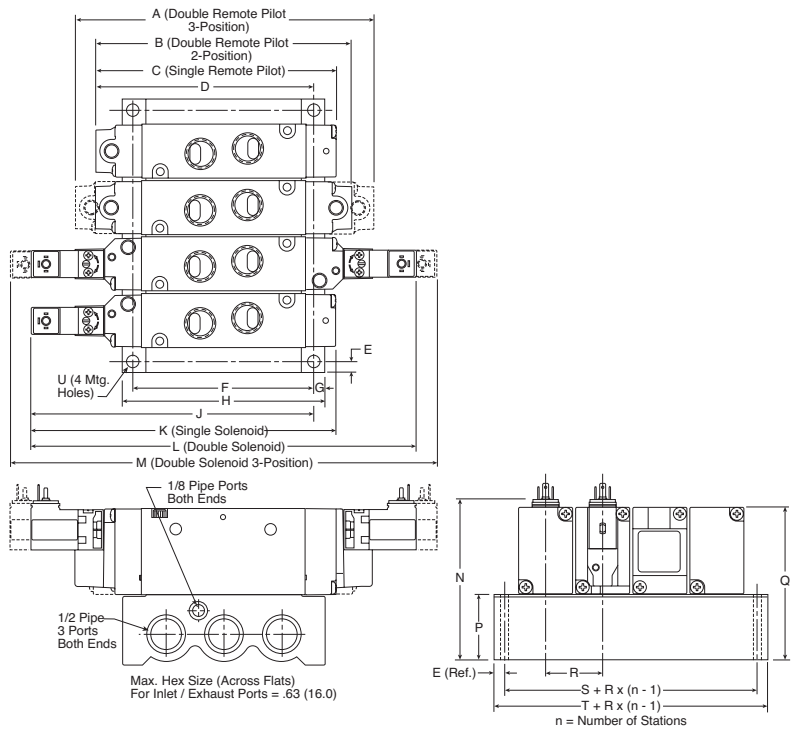


B5 4-Way IEM Aluminum Bar Manifold

A	B	C	D	E
5.64 (143.3)	4.70 (119.4)	4.37 (110.0)	3.74 (95.0)	.18 (4.6)
F	G	H	J	K
2.78 (70.6)	.17 (4.3)	3.12 (79.2)	5.15 (130.8)	5.78 (146.8)
L	M	N	P	Q
7.52 (191.0)	8.46 (214.9)	3.50 (89.0)	1.44 (36.6)	3.36 (85.3)
R	S	T	U	
1.26 (32.0)	1.78 (45.2)	2.14 (54.4)	Ø .22 Ø (5.5)	

Inches (mm)

B6 Single & Double Operators – 4-way IEM Aluminum Bar



B6 4-Way IEM Aluminum Bar Manifold

A	B	C	D	E
6.54 (166.0)	5.59 (142.1)	5.26 (133.7)	4.76 (121.0)	.24 (6.0)
F	G	H	J	K
3.94 (100.0)	.24 (6.0)	4.41 (112.0)	6.17 (156.8)	6.67 (169.5)
L	M	N	P	Q
8.41 (213.7)	9.35 (237.6)	3.60 (91.3)	1.54 (39.0)	3.43 (87.0)
R	S	T	U	
1.24 (31.5)	1.77 (45.0)	2.24 (57.0)	ø .26 ø (6.5)	

Inches (mm)

C

Inline Valves

Viking
Lite

Viking
Extreme

B3, B5, B6
Series

B7, B8
Series

Air Saver
Unit

"N"
Series

Features

B7 and B8 High Flow Inline

B7 and B8 Size valves are an exceptional performing industrial valve with a high flow range up to 7.00 Cv.

Available in solenoid pilot operated and remote air pilot models. The B series features Parker's proven WCS (Wear Compensating Seal) system ensuring long life and fast response.

Ports

- B7: 1/2 inch – 5.90 Cv
- B8: 3/4 inch – 7.00 Cv

Mounting

- Inline
- IEM aluminum bar

Solenoids

- 1.2 W – 15mm, 3-pin EN175301-803
- 2.5 to 7.3 watt - conduit, grommet, 22mm & 30mm, 3-pin DIN (433650)
- 24VDC, 120VAC
- Female DIN electrical connectors

Certification / Approval

- Approved to be CE marked
- IP65 rated
- cCSAus[‡]



Operating information

Operating pressure:	Vacuum to 145 PSIG (Vacuum to 10 bar)
Minimum:	See chart below
CSA-NRTL/C:	See chart below
Operating temperature:	5°F to 120°F (-15°C to 49°C)

Material specifications

Body	Anodized aluminum
End caps	Nylon polymer - 33% glass filled
Seals	Nitrile
Solenoid	Polyamide
Spool	Aluminum

Minimum operating pressure

Operator / Function	Internal Pilot	Minimum PSIG (kPa)	
		B7	B8
1, G, H	Single solenoid - air return	35 (241)	35 (241)
2, A, J, S	Double solenoid	35 (241)	35 (241)
3*	Single remote pilot - air return	35 (241)	35 (241)
5, 6, 7	Double solenoid - APB, CE, PC	45 (310)	45 (310)
8, 9, 0*	Double remote pilot - APB, CE, PC	Vacuum	Vacuum
V, W, X, Y*	Single remote pilot - air return / spring assist	35 (241)	35 (241)
External pilot *			
All	"B" series	Vacuum	Vacuum

* External Pilot Pressure / Remote Pilot Signal 35-145 PSIG (241-1000 kPa).

‡ CSA-NRTL/C operating pressure

Note: For CSA-NRTL/C approved solenoid valves – insert an 'L' at the end of the valve part number.

Valve	Maximum PSIG (kPa)
B7 & B8	145 (1000) [†]

* Enclosure Option E is CSA / FM approved at source. For certification of valve / solenoid assembly, consult factory.

[†] Not Available with Enclosure 5

C

Inline Valves

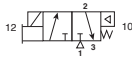
Viking
LiteViking
ExtremeB3, B5, B6
SeriesB7, B8
SeriesAir Saver
Unit"N"
Series

For inventory, lead times, and kit lookup, visit www.pdnplu.com

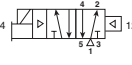
C59

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

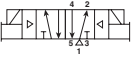
Single Solenoid, 3-way, 2-position, NC

 B7 shown, 3-Pin DIN 43650C electrical connection. Non-locking flush override.		Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
			1/2"	5.9 Cv	120VAC 24VDC	B7 Inline	B7V3BB553A B7V3BB549A
			3/4"	7.0 Cv	120VAC 24VDC	B8 Inline	B8V4BB553A B8V4BB549A

Single Solenoid, 4-way, 2-position

 B7 shown, 3-Pin DIN 43650C electrical connection. Non-locking flush override.		Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
			1/2"	5.9 Cv	120VAC 24VDC	B7 Inline	B713BB553A B713BB549A
			3/4"	7.0 Cv	120VAC 24VDC	B8 Inline	B814BB553A B814BB549A

Double Solenoid, 4-way, 2-position

 B7 shown, 3-Pin DIN 43650C electrical connection. Non-locking flush override.		Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
			1/2"	5.9 Cv	120VAC 24VDC	B7 Inline	B723BB553A B723BB549A
			3/4"	7.0 Cv	120VAC 24VDC	B8 Inline	B824BB553A B824BB549A

ANSI / (NFPA) T3.21.3-1990 standard for Cv measurement.

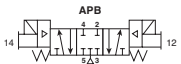
PS2982*##P – Enclosure ‘5’

	## Voltage	
Override *	49	53
B	S	S
C	S	S

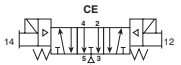
Kit includes: Solenoid, (2) machine screws, (2) self threading screws, (1) gasket, (1) 3-cell gasket.

Common Part Numbers

Double Solenoid, 4-way, 3-position, APB

	Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
		1/2"	5.7 Cv	120VAC 24VDC	B7 Inline	B753BB553A B753BB549A
		3/4"	6.6 Cv	120VAC 24VDC	B8 Inline	B854BB553A B854BB549A

Double Solenoid, 4-way, 3-position, CE

	Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
		1/2"	5.7 Cv	120VAC 24VDC	B7 Inline	B763BB553A B763BB549A
		3/4"	6.6 Cv	120VAC 24VDC	B8 Inline	B864BB553A B864BB549A

Double Solenoid, 4-way, 3-position, PC

	Symbol	Port Size	Cv	Voltage	Valve Type	Part Number
		1/2"	5.7 Cv	120VAC 24VDC	B7 Inline	B773BB553A B773BB549A
		3/4"	6.6 Cv	120VAC 24VDC	B8 Inline	B874BB553A B874BB549A

ANSI / (NFPA) T3.21.3-1990 standard for Cv measurement.

PS2982*##P – Enclosure ‘5’

	## Voltage	
Override *	49	53
B	S	S
C	S	S

Kit includes: Solenoid, (2) machine screws, (2) self threading screws, (1) gasket, (1) 3-cell gasket.

C

Inline Valves

 Viking
Lite

 Viking
Extreme

 B3, B5, B6
Series

 B7, B8
Series

 Air Saver
Unit

 “N”
Series


For inventory, lead times, and kit lookup, visit www.pdnplu.com

C61

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

B7 & B8 Series

C

Inline Valves

Viking Lite

Viking Extreme

B3, B5, B6 Series

B7, B8 Series

Air Saver Unit

"N" Series

B7 **1** **3** **A** **B** **G** **53** **-** **A**

Basic Series	
B7 Series	B7
B8 Series	B8

Engineering Level	
A	Current
AL	CSA Current

Operator Function	
3-way	
Single Solenoid, 2-Position Nc - Air Return / Spring Assist	V
Single Solenoid, 2-Position No - Air Return / Spring Assist	W
Single Remote Pilot, 2-Position Nc - Air Return / Spring Assist	X
Single Remote Pilot, 2-Position No - Air Return / Spring Assist	Y
4-way	
Single Solenoid, 2-Position - Air Return	1
Double Solenoid, 2-Position	2
Single Remote Pilot, 2-Position - Air Return	3
Double Remote Pilot, 2-Position	4
Double Solenoid, 3-Position - APB	5
Double Solenoid, 3-Position - CE	6
Double Solenoid, 3-Position - PC	7
Double Remote Pilot, 3-Position - APB	8
Double Remote Pilot, 3-Position - CE	9
Double Remote Pilot, 3-Position - PC	0

Options	
Blank	None

Voltage [§]			
	AC		DC
	60Hz	50Hz	
49			24
53	120	110	

Port Size / Thread Type	
B7 Series	
1/2" NPT Inline	3*
1/2" BSPP "G" Inline	8*
B8 Series	
3/4" NPT Inline	4*
3/4" BSPP "G" Inline	9*

* Available for use on IEM manifolds.

Pilot Source / Pilot Exhaust	
Enclosures "0, 5 & X"	
None, Remote Pilot Valve	0
Internal - Port #1 / Vented	B†
External - Body / Tapped M5	K†
Enclosures "A, B, E, F, G, H & N"	
Internal - Port #1 / Vented	B†
External - Body / Tapped 1/8"	K†

† Not available for remote pilot valves.

Overrides [§]	
None, Remote Pilot Valve	0
No Override	A†
Flush - Non-Locking	B*
Flush - Locking	C
Valve Less 15mm Solenoid	X

* Only available with encl. "5".

† Only available with encl. "E".

Enclosure / Lead Length	
0	None, Remote Pilot Valve
5	15mm 3-Pin DIN 43650C (male only)
A	30mm Square 3-Pin - ISO 4400 Form A (male only)
B	22mm Rectangular 3-Pin - Type B Industrial (male only)
E*	Intrinsically Safe - 30mm 3-Pin
F**	Hazardous Duty 1/2" NPT Conduit - 18" Leads
G	Grommet - 18" Leads
H	1/2" NPT Conduit - 18" Leads
N	Valve Less "A - R" Coil
X	Valve Less 15mm Solenoid

* 24 VDC & Override "A" only.

** 24 VDC or 120 VAC.

Alternative Voltages -

Contact Parker for voltages other than 24VDC and 120VAC

INLINE Valves -

Only used IF an IEM Aluminum Bar Manifold requires a common external pilot signal through the manifold for low pressure / vacuum applications.

 Most popular.

§ Enclosure '5' - Override / Voltage Availability

S - Standard
O - Option

Voltage Code	Override Code	
	Standard	
	B	C
49	S	S
53	S	S



For inventory, lead times, and kit lookup, visit www.pdnplu.com

C62

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

Accessories**Manifolds****IEM Bar Manifold, Inline Valves Only**

Valve Series	Valve Function	## – Stations	Manifold Only (NPT)	Manifold Only (BSPP)
B7, B8	4-way / 3-way	2	P2M7BXN02NP	P2M7BXG02NP
B7, B8	4-way / 3-way	4	P2M7BXN04NP	P2M7BXG04NP
B7, B8	4-way / 3-way	6	P2M7BXN06NP	P2M7BXG06NP
B7, B8	4-way / 3-way	8	P2M7BXN08NP	P2M7BXG08NP

Kits include: (1) manifold, valve hold down bolts, gaskets. For external pilot valve option "X", external manifold galley must be pressurized.
4-Way or 3-Way valves can mount to same IEM Bar Manifold.

C

Inline Valves

Viking
LiteViking
ExtremeB3, B5, B6
SeriesB7, B8
SeriesAir Saver
Unit"N"
Series

 Most popular.



For inventory, lead times, and kit
lookup, visit www.pdnplu.com

C63

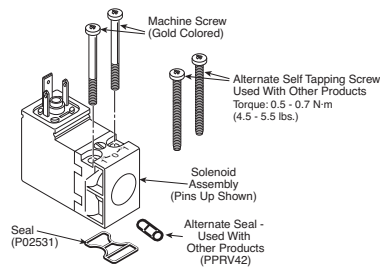
Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

Accessories

Solenoid Kits – B7 ‘A’, B8 ‘A’ 3-Pin, EN175301-803 (Former DIN 43650C), 15mm



Standard



PS2982*##P – Enclosure ‘5’

	## Voltage	
Override *	49	53
B	S	S
C	S	S

S - Standard;

Kit includes: Solenoid, (2) machine screws, (2) self threading screws, (1) gasket, (1) 3-cell gasket.

Solenoid Kits Alternate Enclosures

P2FC A 4 49

Enclosures / Lead Length	
30mm Square 3-Pin – ISO 4400 Form A (male only)	A
22mm Rectangular 3-Pin – Type B Industrial (male only)	B
Hazardous Duty, FM / CSA	F*
Grommet - 18" Leads	G
1/2" NPT Conduit - 18" Leads	H

Voltage / Frequency	
49	24VDC
53	120VAC

* Only available with voltage codes “45”, “49”, “53” & “57”.



Option A & E
30mm Square
3-pin ISO 4400, DIN 43650A



Option B
22mm Rectangular
3-pin DIN, Type B Industrial



Option G
Grommet, 18"



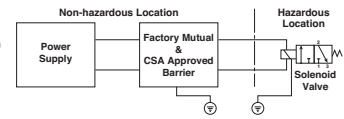
Option F, H & R
1/2" Conduit, 18"

Most popular.

Inline Valve Products - B7 & B8 Series Solenoid Kit Options

Intrinsically Safe Solenoid Valves (“E” Option)

Hazardous Location Class:
Class I; Groups A, B, C & D
Class II; Groups E, F, & G
Class III; Div. I



For use in low voltage (24VDC) Intrinsically Safe applications.
NO OTHER VOLTAGE IS APPROVED. 1.6W coil.

36mm coil width.

Comes standard with non-lighted solenoid connector.

Must be connected to an FM approved Barrier.

For dimensions, reference standard solenoid models.

Maximum internally piloted valve pressure is 115 PSIG.

Pressures to 145 PSIG can be used when external pilot is utilized and pilot pressure is limited to 115 PSIG.

Intrinsically Safe Solenoid Pilot Assembly Kits

Description	Part Number
24VDC	P2FS13N1AE49

Kit includes: coil, armature, connector, o-ring and screws.

Hazardous Duty Solenoid Valves (“F” Option)

Hazardous Location Class:
Class I; Zone I EX, M, II & T4
Class I; Div. I. Groups A, B, C, & D
Class II & III; Div. I. Groups E, F, & G



Comes standard with 1/2" conduit connection.

Voltage range = ± 10%, 4.6W

Ambient temperature range = -20°C (-4°F) to 60°C (140°F)

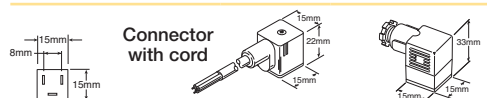
Duty factor = 100%

IP65 rated (with connected conduit connector)

Notes:

1. Maximum non-hazardous location voltage not to exceed 250V RMS.
2. Factory Mutual requires connections per ISA RP 12.6 instructions.
3. CSA requires “Installation to be in accordance with the Canadian Electrical Code. Part I.”
4. The hazardous duty coils are wider in size than both the B5 and the B6 valve.
If mounted on a manifold, the valves need to be staggered to fit.

15mm 3-Pin DIN 43650C, 8mm Pin Spacing

			
	Cord Length	Connector	Connector with Cord
Unlighted	18 Inches	PS2932BP	PS2932HBP
Unlighted	6 Feet	PS2932BP	PS2932JBP
Light – 12VAC or DC	6 Feet	PS294675BP	PS2946J75BP *
Light – 24VAC or DC	6 Feet	PS294679BP	PS2946J79BP *
Light – 110/120VAC	6 Feet	PS294683BP	PS2946J83BP *
Light – 240/230VAC		PS294687BP	N/A

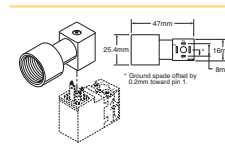
* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord.
IP65 rated when properly installed.

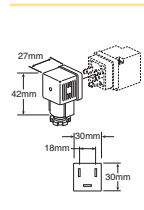
Engineering data:

Conductors: 2 poles plus ground, polarity insensitive
Cable range (connector only): 4 to 6mm (0.16 To 0.24 Inch)
Contact spacing: 8mm

15mm 3-Pin DIN 43650C to 1/2" Conduit

		Description	Connector
		1/2" NPTF conduit – Unlighted with 3' (1m) leads 20 AWG wire	PS2998P

Note: Rated up to 250VAC or VDC; 6 amps
IP65 rated when properly installed.30mm Square 3-Pin – ISO 4400, DIN 43650A
(Use with Enclosure “A”)

			
	Description	Connector with 6' (2m) Cord	Connector
	Unlighted	PS2028JCP	PS2028BP
	Light – 6-48V. 50/60Hz. 6-48VDC	PS2032J79CP *	PS203279BP
	Light – 120V/60Hz	PS2032J83CP *	PS203283BP
	Light – 240V/60Hz	N/A	PS203283BP

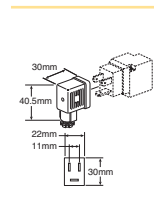
* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord. IP65
rated when properly installed.

Engineering data:

Conductors: 2 poles plus ground; cable range (connector only): 8 to 10mm
(0.31 To 0.39 Inch); contact spacing: 18mm

22mm Rectangular 3-Pin – Type B Industrial
(Use with Enclosure “B”)

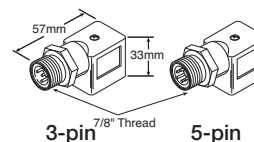
		Description	Connector with 6' (2m) Cord	Connector
		Unlighted	PS2429JBP	PS2429BP
		Light – 24V60Hz. 24VDC	PS2430J79BP *	PS243079BP
		Light – 120V/60Hz	PS2430J83BP *	PS243083BP
		Light – 240V/60Hz	N/A	PS243087BP

* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord.
IP65 rated when properly installed.

Engineering Data:

Conductors: 2 Poles Plus Ground; Cable Range (Connector Only): 6 to 8mm
(0.24 to 0.31 Inch); Contact Spacing: 11mm

3-Pin / 5-Pin Male Automotive Connectors
(Use on 22mm Rectangular 3-Pin Solenoid)

Description	3-pin	5-pin
Unlighted	PS2893CP	PS2893DP
Lighted - Voltage	PS2893C##P	PS2893D##P

— 79 = 6 to 48VAC/VDC

83 = 100 to 240VAC/48 to 120 VDC

 Most popular.

For inventory, lead times, and kit
lookup, visit www.pdnplu.com

C65

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

Solenoid Information (Solenoids are rated for continuous duty.)

Voltage						B7, B8					
Enclosure "5"						Enclosure "A"					
AC						AC					
Code	60Hz	50Hz	DC	Power Consumption	Holding (Amps)	Code	60Hz	50Hz	DC	Power Consumption	Holding (Amps)
49			24	1.2W	.049	49			24	2.7W	.112
53	120	110		1.6W	.013	53	120	110		4.1VA	.033

Response Time (Sec)

Enclosure "5"						Enclosure "A, B, C, D, G, H"					
0 Cu. In. Test Chamber						0 Cu. In. Test Chamber					
25 * Cu. In. Test Chamber						25 * Cu. In. Test Chamber					
Valve Size	Port Size	Fill	Exhaust	Fill	Exhaust	Fill	Exhaust	Fill	Exhaust	Fill	Exhaust
2-Position Single Solenoid / Internal Air Return											
B7	1/2"	.073	.075	.195	.275	.049	.051	.167	.249		
B8	3/4"	.072	.074	.166	.226	.049	.051	.142	.206		
2-Position Single Solenoid Spring / Air Return											
B7	1/2"	.071	.074	.194	.275	.049	.051	.167	.249		
B8	3/4"	.072	.074	.176	.239	.046	.048	.142	.204		
2-Position Double Solenoid											
B7	1/2"	.026	.028	.145	.228	.022	.024	.138	.225		
B8	3/4"	.026	.028	.123	.185	.022	.024	.115	.178		
3-Position Double Solenoid											
B7	1/2"	.049	.051	.167	.257	.028	.030	.148	.238		
B8	3/4"	.035	.037	.136	.206	.028	.030	.130	.195		

Average Fill Time (Seconds): With 100 PSIG supply, time required to fill from 0-90 PSIG and exhaust from 100 PSIG to 10 PSIG is measured from instant of energizing, or de-energizing 120V/60Hz solenoid. Times shown are average.

C

Inline Valves

Viking
LiteViking
ExtremeB3, B5, B6
SeriesB7, B8
SeriesAir Saver
Unit"N"
Series

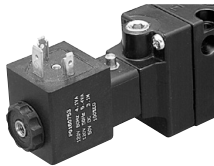
For inventory, lead times, and kit
lookup, visit www.pdnplu.com

C66

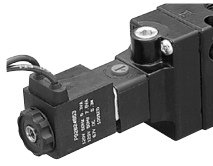
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Richland, Michigan
www.parker.com/pneumatics

Alternate Solenoid Enclosures

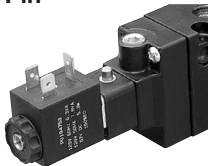
- Enclosure "A": 2.6W - 4.1VA (Coil rotates in 45° increments)
- Enclosure "B" - "H": 4.6W - 7.3VA (Coil rotates in 90° increments)



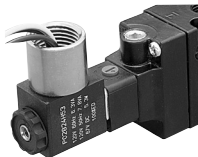
"A" 30mm 3-Pin



"G" Grommet



"B" 22mm 3-Pin



"F", "H". 1/2"
Conduit

C

Inline Valves

Viking
Lite

Viking
Extreme

B3, B5, B6
Series

B7, B8
Series

Air Saver
Unit

"N"
Series

B7A / B8A Series

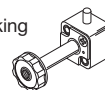
Spool / Body Service Kits

PS2501P	4-Way, 2-Pos	Item 2, 6 (2), 9 (2), 11, grease packet
PS2502P	4-Way, 3-Pos APB	Item 3, 6 (2), 9 (2), 13 (2), grease packet
PS2503P	4-Way, 3-Pos CE	Item 3, 6 (2), 9 (2), 13 (2), grease packet
PS2504P	4-Way, 3-Pos PC	Item 3, 6 (2), 9 (2), 13 (2), grease packet
PS257101P	3-Way, 2-Pos. NO	Item 2, 6, 9, grease packet
PS257102P	3-Way, 2-Pos. NO	Item 2, 6, 9, grease packet

Armature / Override Kit –

Kit Includes: Item 22, 23, 24 (2), 57, 58 Assembled

P2FP13N4D* Non-Locking



P2FP13N4C* Locking

* Comes with a Thru Nut and A Diffuser Nut.

Valve to Manifold Kits

PS2584P	O-ring (10) - Inline Valve to IEM Manifold
PS2587P	Mounting Bolts (10) - Inline Valve

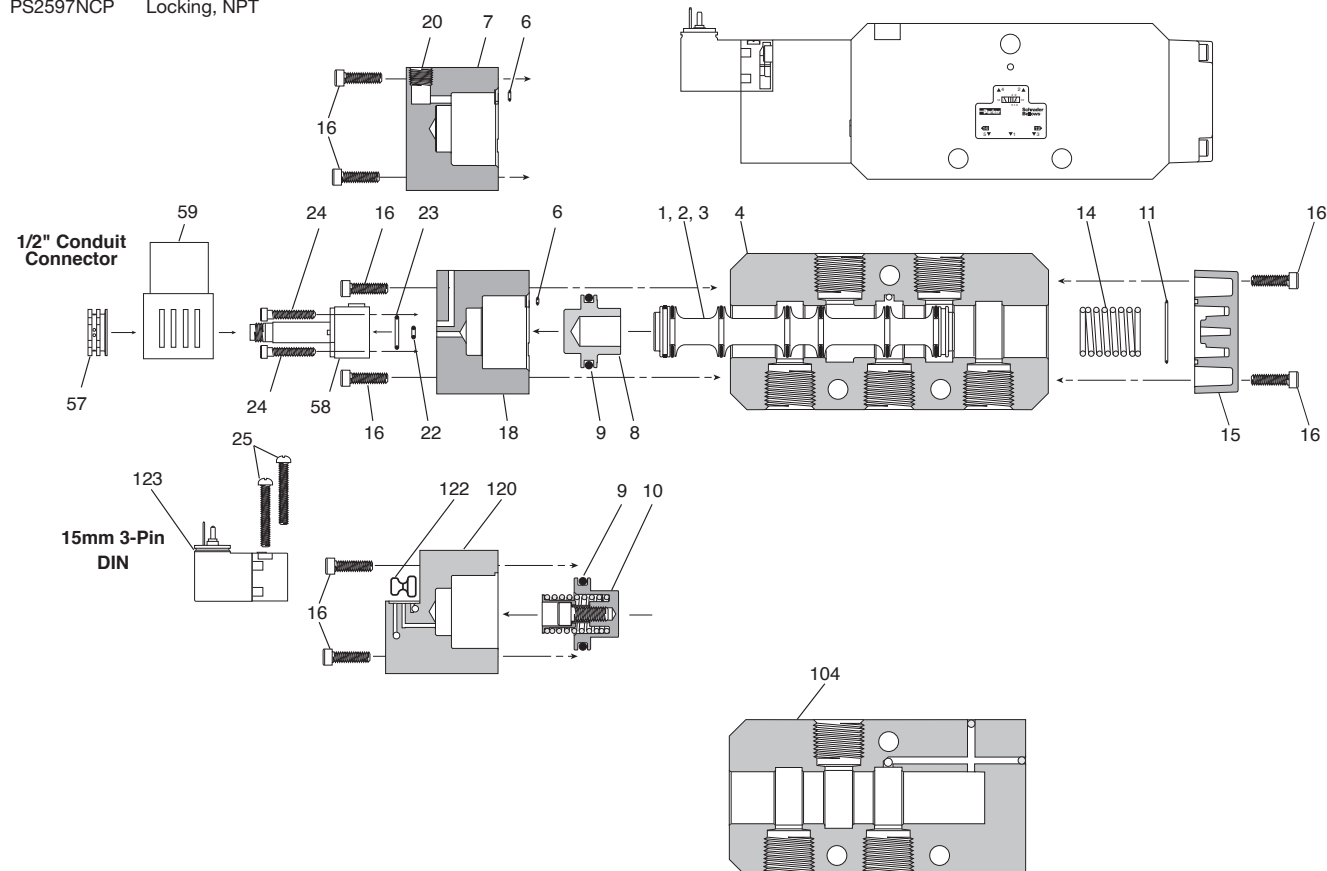
Solenoid Kit *Kit Includes: 25, 122, 123*

PS2982*##P	3-Pin, EN175301-803, 15mm
PS3541*##P	3-Pin, EN175301-803, 15mm Option 2

Pilot Replacement Kit – Alternate Enclosure

Kit Includes: Item 6, 8, 9, 10, 16 (4), 18, 20, 22, 23, 24 (2), 57, 58 Assembled

PS2597GBP	Non-Locking, BSPP
PS2597GCP	Locking, BSPP
PS2597NBP	Non-Locking, NPT
PS2597NCP	Locking, NPT

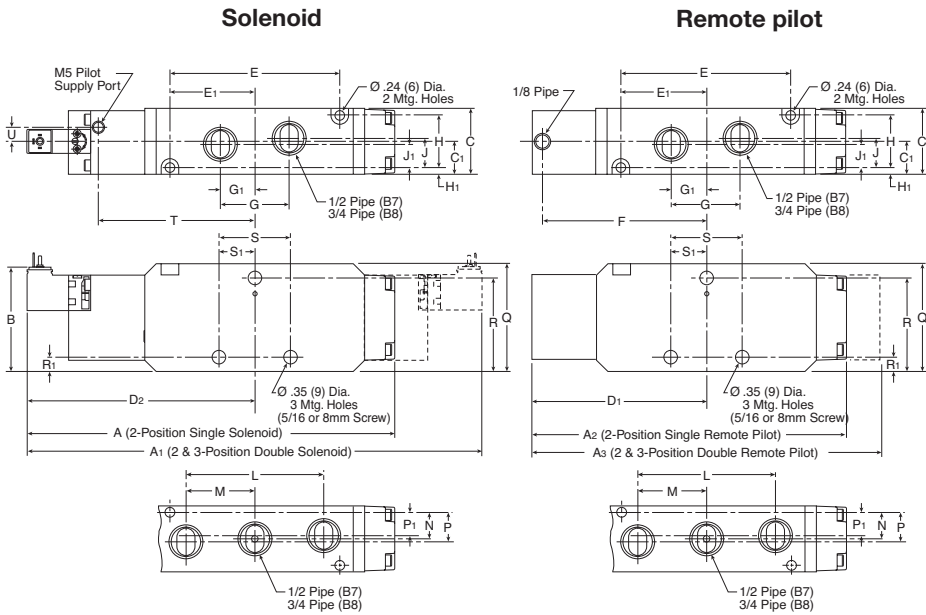


Item List – Parts not sold separately.

Item	Description	Item	Description	Item	Description
1*	Spool Seal	15a	Return Operator	58b*	Solenoid Base Assembly - Non Locking
2*	Spool - 2-Position (Seals Assembled)	16*	Screws - Operator Adapter	59*	Coil - Alternate Enclosure (see Page C51)
3*	Spool - 3-Position (Seals Assembled)	8*	Operator Adapter - Alt Enclosure	104	Inline Body - 3-Way
4	Inline Body - 4-Way	20*	1/8" NPT Pipe Plug	120a	Solenoid Adapter - Vent Exhaust
6*	Gasket - Body to Operator	22*	O-ring - Small - Solenoid Base	120b	Solenoid Adapter - Tapped Exhaust
7	Remote Pilot Operator	23*	O-ring - Large - Solenoid Base	120c	Solenoid Adapter - Ext Pilot. Vent Exhaust
8	Operator Piston - 2-Position	24*	Bolts - Solenoid Base	120d	Solenoid Adapter - Ext Pilot. Tapped Exhaust
9*	Lip Seal - Operator Piston	25*	Self Tapping Screw - Solenoid (Effective Jan 00)	122*	Gasket - Solenoid to Adapter
10	Operator Piston Mechanism - 3-Position			123*	15mm Solenoid
11*	Gasket - Body to Return Cap	57*	Solenoid Nut		
14*	Spring, Return Assist	58a*	Solenoid Base Assembly - Locking		

Note: * Parts are available in kits shown. For kit components, order VALVE LESS SOLENOID for assembled and tested repair valve.

B7& B8 Single & Double Operators – 4-way Inline



B7 & B8 4-Way Inline

A	A1	A2	A3	B
9.13 (232)	11.29 (287)	7.79 (198)	8.62 (219)	2.59 (66)
C	C1	D1	D2	E
1.65 (42)	.83 (21)	4.29 (109)	5.63 (143)	4.21 (107)
E1	F	G	G1	H
2.13 (54)	4.06 (103)	1.73 (44)	.87 (22)	1.29 (33)
H1	J	J1	L	M
.16 (4)	.75 (19)	.59 (15)	3.39 (86)	1.69 (43)
N	P	P1	Q	R
.67 (17)	.75 (19)	.59 (15)	2.68 (68)	2.32 (59)
R1	S	S1	T	U
.35 (9)	1.81 (46)	.90 (23)	3.94 (100)	.35 (9)

Inches (mm)

C

Inline Valves

Viking
Lite

Viking
Extreme

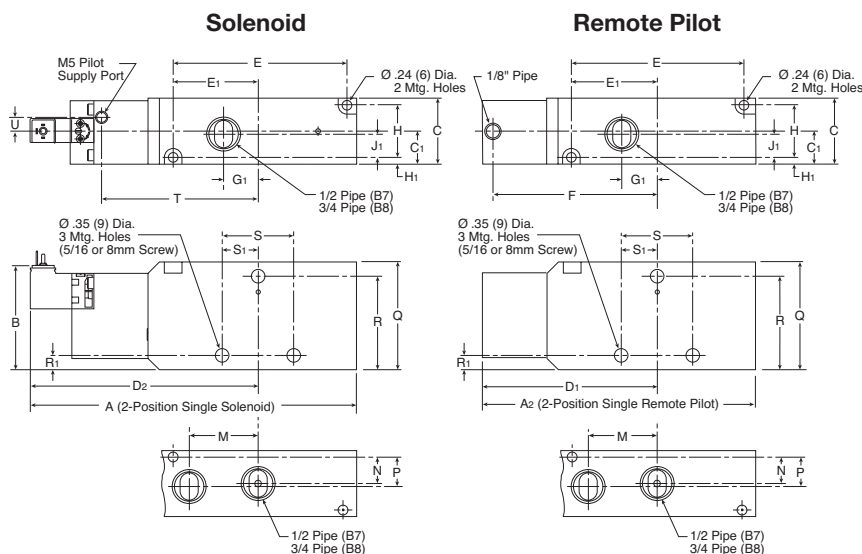
B3, B5, B6
Series

B7, B8
Series

Air Saver
Unit

"N"
Series

B7 & B8 Single Operators – 3-way Inline

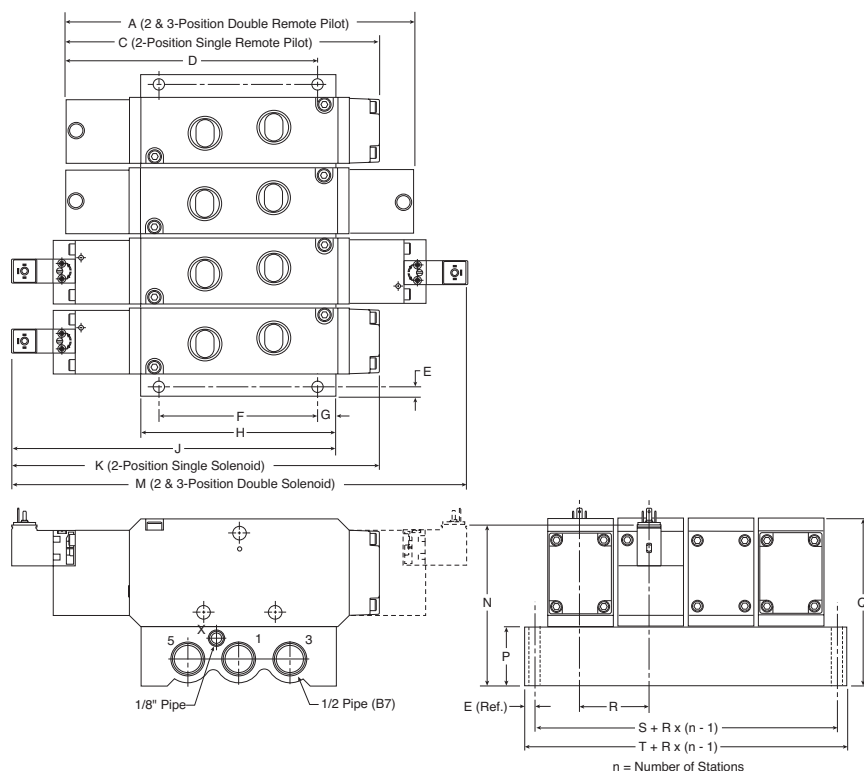


B7 & B8 3-Way Inline

A	A ₂	B	C	C ₁
7.99 (203)	6.65 (169)	2.59 (66)	1.65 (42)	.83 (21)
D ₁	D ₂	E	E ₁	F
4.29 (109)	5.63 (143)	4.21 (107)	2.13 (54)	4.06 (103)
G ₁	H	H ₁	J ₁	M
.86 (22)	1.29 (33)	.16 (4)	.59 (15)	1.69 (43)
N	P	Q	R	R ₁
.67 (17)	.75 (19)	2.68 (68)	2.32 (59)	.35 (9)
S	S ₁	T	U	
1.81 (46)	.90 (23)	3.94 (100)	.35 (9)	

Inches (mm)

B7 & B8 Single & Double Operators – 4-way IEM Aluminum Bar

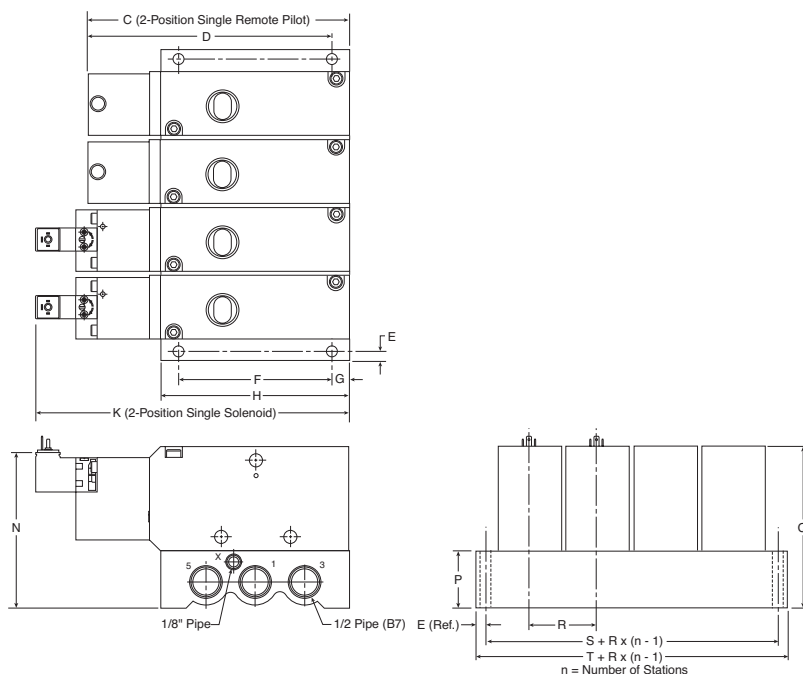


**B7 & B8 4-Way IEM
Aluminum Bar Manifold**

A	C	D	E	F
7.79 (198)	8.62 (219)	6.26 (159)	.24 (6)	3.94 (100)
G	H	J	K	M
.45 (11.5)	4.84 (123)	8.07 (205)	9.13 (232)	11.29 (287)
N	P	Q	R	S
4.00 (101.5)	1.48 (37.5)	4.15 (105.5)	1.77 (45)	2.24 (57)
T				
2.72 (69)				

Inches (mm)

B7 & B8 Single Operators – 3-way IEM Aluminum Bar

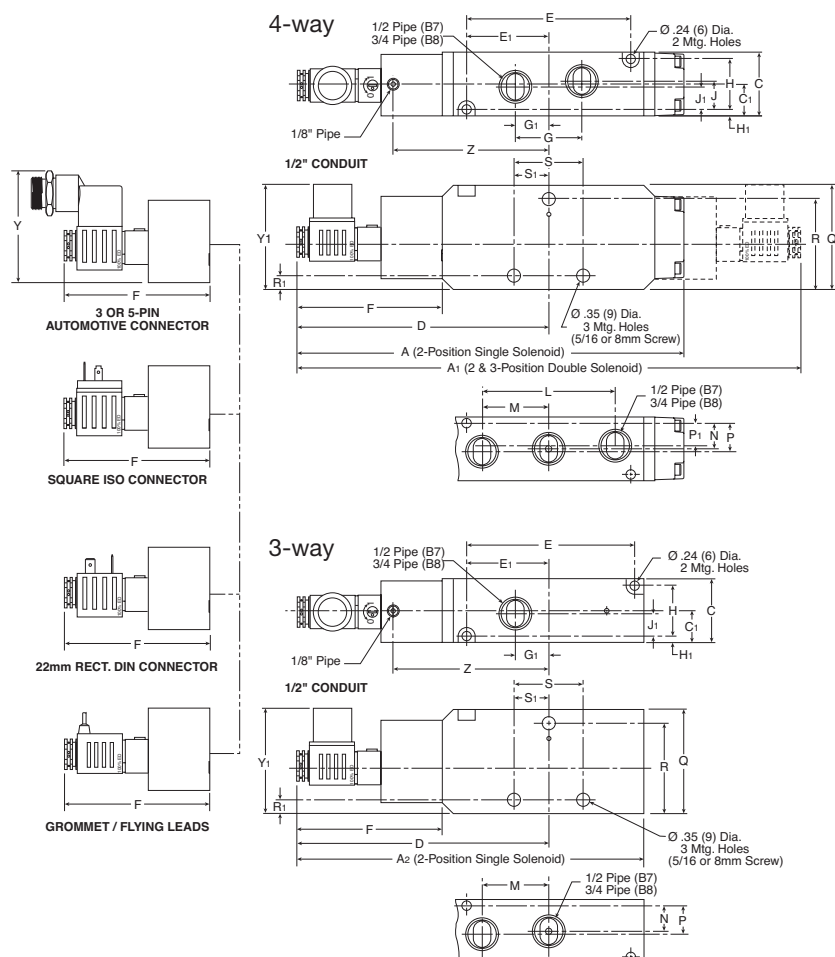


**B7 & B8 3-Way IEM
Aluminum Bar Manifold**

C	D	E	F	G
6.65 (169)	4.92 (124.9)	.24 (6)	3.94 (100)	.45 (11.5)
H	K	N	P	Q
4.84 (123)	7.99 (203)	4.00 (101.5)	1.48 (37.5)	4.15 (105.5)
R	S	T		
1.77 (45)	2.24 (57)	2.72 (69)		

Inches (mm)

B7 & B8 3 & 4-way Alternative Electrical Enclosures



**B7 & B8 3 & 4-Way Alternative
Electrical Enclosures**

A	A1	A2	C	C1
9.92 (252)	12.91 (328)	8.78 (223)	1.65 (42)	.83 (21)
D	E	E1	F	G
6.46 (164)	4.21 (107)	2.13 (54)	3.74 (95)	1.73 (44)
G1	H	H1	J	J1
.86 (22)	1.29 (33)	.16 (4)	.75 (19)	.59 (15)
L	M	N	P	P1
3.39 (86)	1.69 (43)	.67 (17)	.75 (19)	.59 (15)
Q	R	R1	S	S1
2.68 (68)	2.32 (59)	.35 (9)	1.81 (46)	.90 (23)
Y	Y1	Z		
2.87 (73)	2.71 (69)	3.98 (101)		

Inches (mm)

An easy solution to your environmental protection efforts!

The Air Saver Unit contributes to power savings and CO₂ reduction.

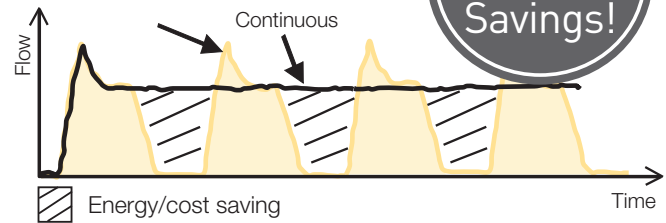
Parker Air Saver Unit

Pulsing air technology reduces consumption.

The Air Saver Unit is a valve that converts a continuous air blow to a pulsed air blow without the need for any other external control. Air is blown with a series of ON and OFF pulses. When the blow is OFF, there is no air consumption.

When using an Air Saver Unit several significant benefits can be achieved. Air blowing accounts for almost 50% of all compressed air used in plants. By using switching valve technology the Air Saver Unit can reduce air consumption by up to 50%!

- Large reductions in air consumption.
- Savings in compressor power consumption.
- Reduction in plant CO₂ emissions.
- Big contribution to energy-saving activities.
- Improved efficiency.



Up to
50%*
Savings!

* To achieve the benefits of pulsed air, the Air Saver Unit should be installed no more than 3 meters away from the air blow orifice. For optimal results install within 1 meter.



ASV200 Series



ASC/ASO500 Series



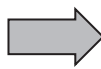
ASV2000 Series



ASV5000 Series

Try our fast and easy online savings calculator! www.linktovms.com/airsaver

Sample Application



4
nozzles
6mm
dia.



\$0.10 /
kWh



1 min
blow
per 4
min
cycle



3 shifts
5 days /
week



ENGINEERING YOUR SUCCESS.

Prepared for

Prepared by

Air Saver Unit Valve Calculator
Summary Sheet

VALUE IMPACT SUMMARY

Reduced Total Annual Air Discharge Per Blowing Nozzle (cfm) by:	3,232,005
Reduced Annual CO ₂ Emissions Generated (Per Blowing Nozzle - in Tons) by:	5.77 tons
Reduced Annual Air Generating Costs Per Blowing Nozzle by:	\$ 892.03
Quantity of Air Blowing Nozzles With Same Application Specifications	4
Reduced Annual Air Generating Costs For All Nozzles by:	\$ 3,568.13
Reduced Annual CO ₂ Emissions Generated (For All Blowing Nozzles) by:	23.07



For inventory, lead times, and kit
lookup, visit www.pdnplu.com

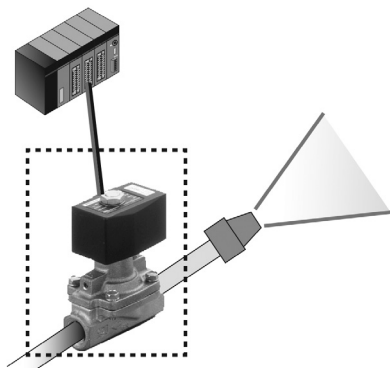
C72

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

Installation is simple and reduction in air consumption can be realized immediately.

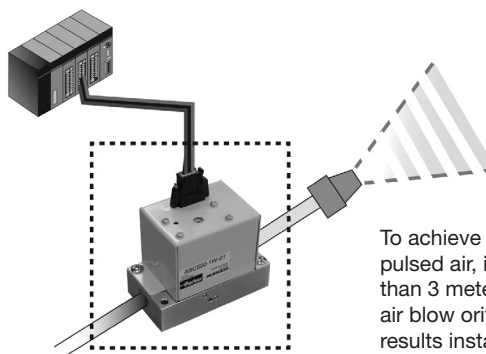
- When using an electrically operated solenoid valve to control the air blow, an Air Saver Unit can quickly and easily be retrofitted providing an immediate reduction in air consumption with no changes to the PLC program.

Before introduction of the unit



After introduction of the unit

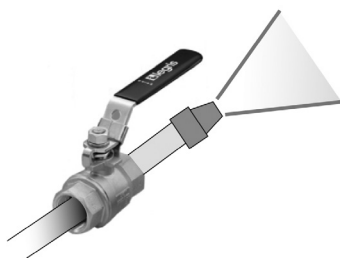
- Easy to install. Change the current solenoid valve to Air Saver Unit. (ASC500 or ASO500)
- Program change of controller is not necessary.



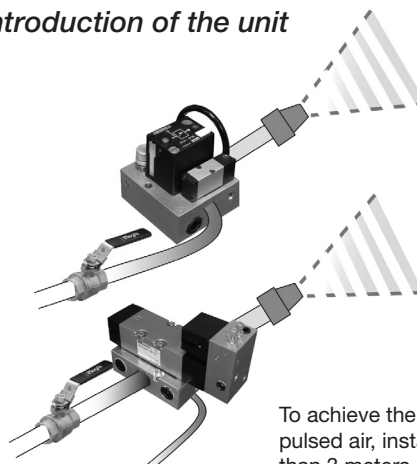
To achieve the benefits of pulsed air, install no more than 3 meters away from the air blow orifice. For optimal results install within 1 meter.

- When using manual valves such as ball valves, simply install either ASV200, ASV500 or ASV2000 units which do not need electrical power. Installing the unit brings immediate reduction in air consumption and improved compressor efficiency.

Before introduction of the unit



After introduction of the unit



To achieve the benefits of pulsed air, install no more than 3 meters away from the air blow orifice. For optimal results install within 1 meter.

[Company A] Food & Beverage manufacturer

"When we tested ASV5000, we achieved about 55% reduction of our air consumption. Because air blow efficiency was improved, we plan to use more Air Saver Units in other areas in the plant".

[Company B] Manufacturer of office document machines

"We are working on energy-saving activities. In those activities, we decided to use an Air Saver Unit. We have more than 100 points of air blow and we reduced our air consumption by 42% using this unit".



C	Inline Valves	
	Viking Lite	
	Viking Extreme	
	B3, B5, B6 Series	
	B7, B8 Series	
	Air Saver Unit	
	"N" Series	

Specifications

								
	ASV200	ASV2000	ASV5000	ASV13000	ASV15000	ASC500	ASO500	Unit
Function	Normally closed						Normally open	--
Fluid	Non lubricated air							--
Flow (at 72.5 psi)	5.3	70.6	176.6	459.1	529.7	15.9	15.9	scfm
Adjustable Pulse Frequency	Up to 5	Up to 5	Up to 5	Up to 1	Up to 1	2-22	2-22	Hz
Port Size	M5	3/8"	1/2"	1"	1-1/4"	1/8"	1/8"	NPT (BSPP)
Operating Temperature	23 to 122							° F
Pressure Range	43.5 - 116	0 - 116				29 - 101.5	29 - 72.5	PSI
Pilot Air Supply	Internal pilot	43.5 - 116 *				Internal pilot		PSI
Blow	Pulse blow					Pulse/Continuous blow		--
Rated Voltage	Electrical power is not necessary					DC 24 V		V
Power Consumption	-					1.2 W		W
Grade Of Insulation	-					NEMA 1		--
Permissible Voltage Fluctuation	-					+ or - 10		%
Wiring	-					e-CON standard 4 pole sockets		--
Filtration	Dry w/ 40 µm filtration †							--

Notes:

* External pilot of 43.5 - 116 is required, to ensure proper operation.

† For maximum life of the unit we recommend 5 micron, but 40 micron filtration is acceptable and will not void warranty.

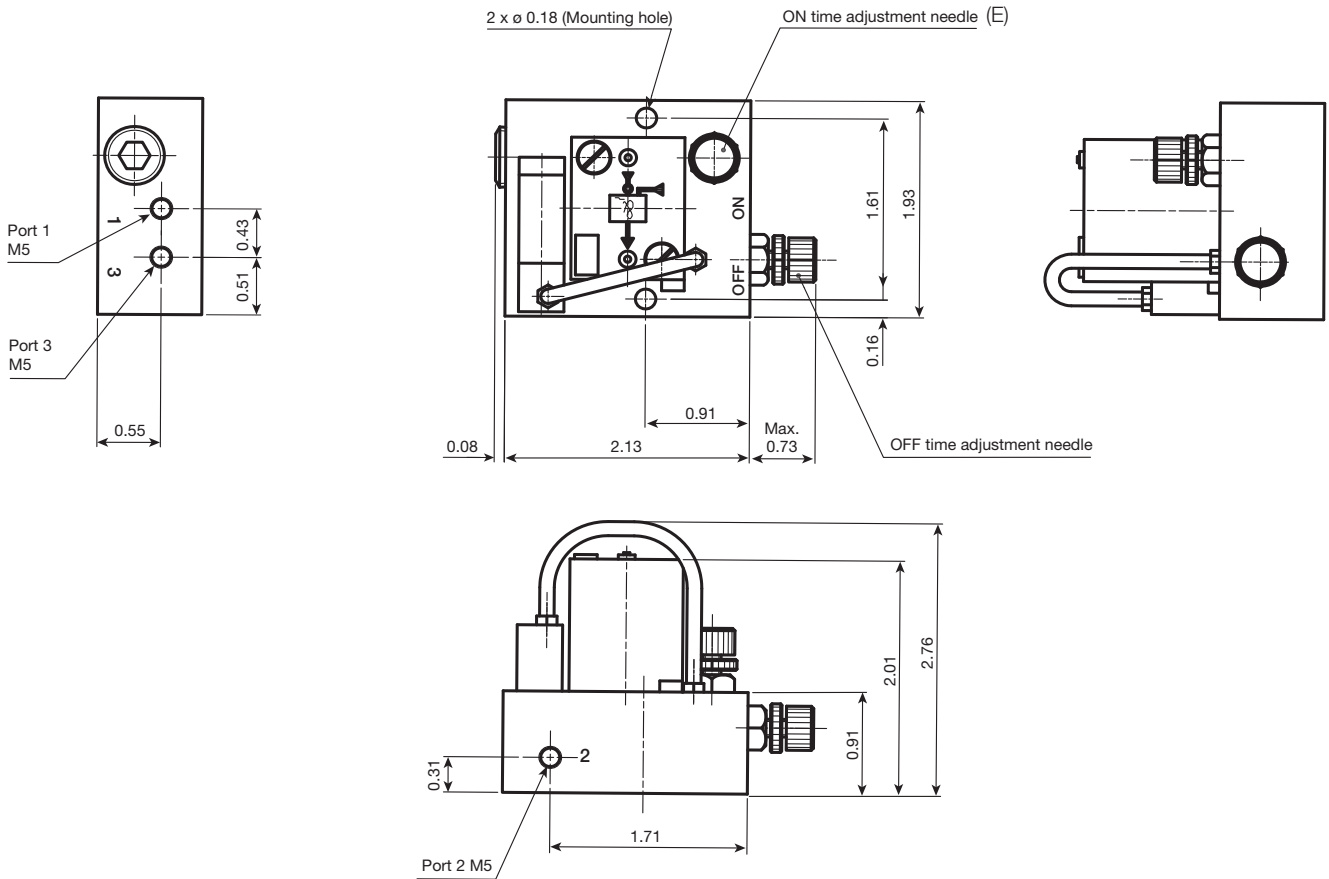
To achieve the benefits of pulsed air, the Air Saver Unit should be installed no more than 3 meters away from the air blow orifice.
For optimal results install within 1 meter.



Ordering Information ASV200-AA-M5

Function	Fluid	Flow @ 72.5 psi	Port Size	Operating Temperature	Pressure Range, psi	Pilot air Supply, psi	Blow Type	Grease		Part Number
Normally closed	Dry air	5.3 scfm	M5	23-122°F (A)	43.5-116	Internal pilot	Pulse	Food grade		ASV200-AA-M5
								Petrolatum (B), (for painting applications) (C), (D)		WPASV200-AA-M5

Dimensions: ASV200-AA-M5



Piping

- Port 1: Supply port (Compressor side)
- Port 2: Output port (Blow nozzle side)
- Port 3: Exhaust port*

* In order to keep out dust, the air muffler is recommended for exhaust port.

Notes:

- A. When temperature of valve goes below 5°C (41°F), complete dry air shall be supplied to prevent from freezing.
- B. Air Saver Units with WP prefix are suitable for most painting applications. Test before use if in direct contact with painted surface.
- C. If test in painting application fails, try cycling Air Saver Unit for 48 hours and repeat test.
- D. DO NOT use "WP" Air Saver Unit in 'clear coat' applications.
- E. Adjustable to maximum frequency of 5Hz.

Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

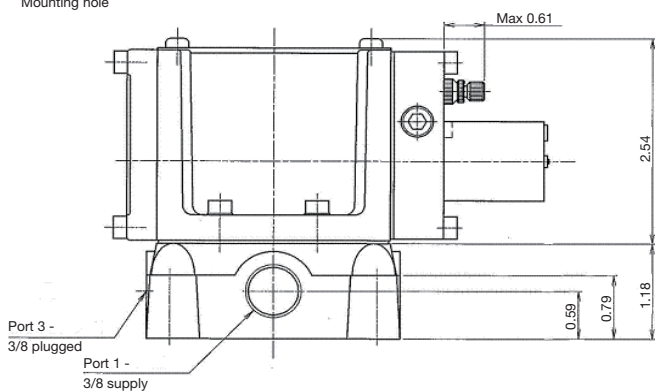
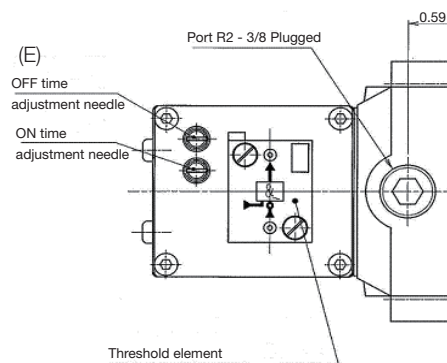
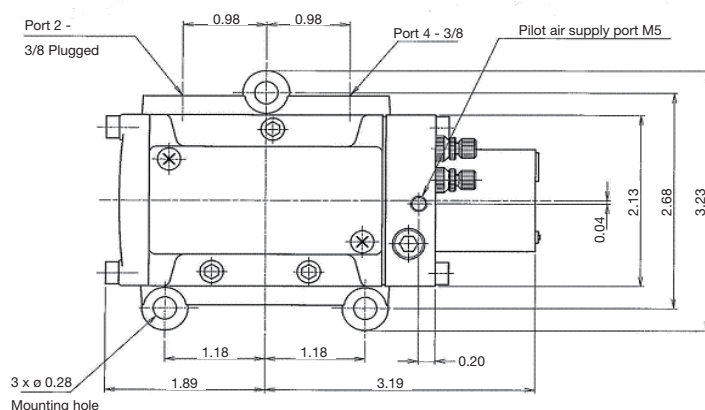
C	Inline Valves
	Viking Lite
	Viking Extreme
	B3, B5, B6 Series
	B7, B8 Series
	Air Saver Unit
	"N" Series



Ordering Information ASV2000-AA-xx

Function	Fluid	Flow @ 72.5 psi	Port Size	Operating Temperature	Pressure Range, psi	Pilot air Supply, psi	Blow Type	Grease	Port Type	Part Number
Normally closed	Dry air	70.6 scfm	3/8"	23-122°F (A)	0-116	43.5-116	Pulse	Standard	NPT	ASV2000-AA-97
									BSP	ASV2000-AA-17
								Petrolatum (B), (for painting (C), applications) (D)	NPT	WPASV2000-AA-97
									BSP	WPASV2000-AA-17

Dimensions: ASV2000-AA-97 (NPT model)



Piping

- Port 1: Supply port (Compressor side)
 Port 2: Plugged
 Port 3: Plugged
 Port 4: Output port (Blow nozzle side)
 Port R2: Plugged
 Port X: M5 pilot air supply
 >43.5 psi is required

Notes:

- When temperature of valve goes below 5°C (41°F), complete dry air shall be supplied to prevent from freezing.
- Air Saver Units with WP prefix are suitable for most painting applications. Test before use if in direct contact with painted surface.
- If test in painting application fails, try cycling Air Saver Unit for 48 hours and repeat test.
- DO NOT use "WP" Air Saver Unit in 'clear coat' applications.
- Adjustable to maximum frequency of 5Hz.

Most popular.



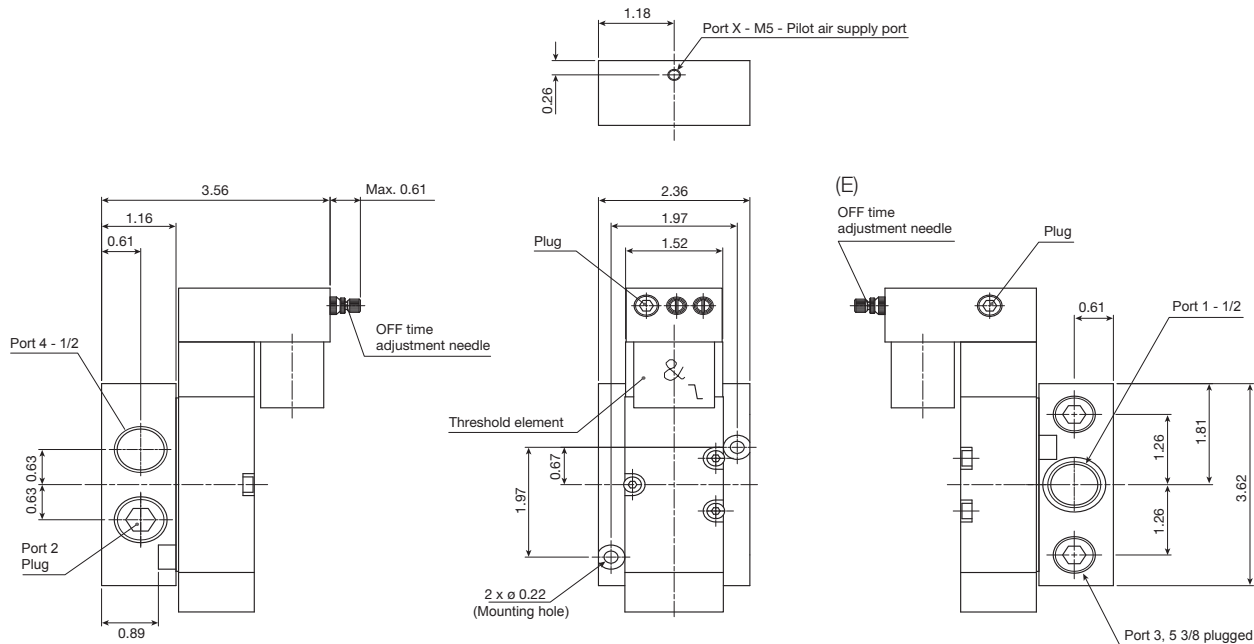
For inventory, lead times, and kit
lookup, visit www.pdnplu.com



Ordering Information ASV5000-AA-xx

Function	Fluid	Flow @ 72.5 psi	Port Size	Operating Temperature	Pressure Range, psi	Pilot air Supply, psi	Blow Type	Grease	Port Type	Part Number
Normally closed	Dry air	176.6 scfm	1/2"	23-122°F (A)	0-116	43.5-116	Pulse	Food grade	NPT	ASV5000-AA-91
									BSPP	ASV5000-AA-21
									NPT	WPASV5000-AA-91
									BSPP	WPASV5000-AA-21

Dimensions: ASV5000-AA-91 (NPT model)



Piping

- Port 1: Supply port (Compressor side)
- Port 2: Plugged
- Port 3: Plugged
- Port 4: Output port (Blow nozzle side)
- Port 5: Plugged
- Port X: M5 pilot air supply >43.5 psi is required

Notes:

- A. When temperature of valve goes below 5°C (41°F), complete dry air shall be supplied to prevent from freezing.
- B. Air Saver Units with WP prefix are suitable for most painting applications. Test before use if in direct contact with painted surface.
- C. If test in painting application fails, try cycling Air Saver Unit for 48 hours and repeat test.
- D. DO NOT use "WP" Air Saver Unit in 'clear coat' applications.
- E. Adjustable to maximum frequency of 5Hz.

Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

C77

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

C

Inline Valves

Viking Lite

Viking Extreme

B3, B5, B6 Series

B7, B8 Series

Air Saver Unit

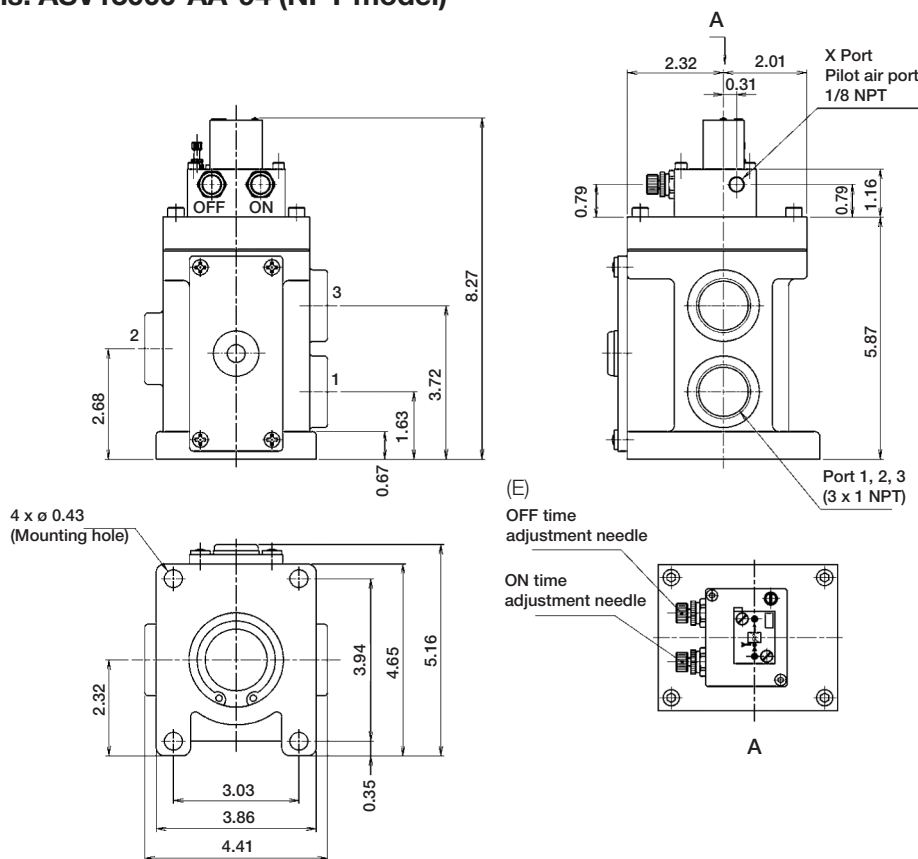
"N" Series



Ordering Information ASV13000-AA-xx

Function	Fluid	Flow @ 72.5 psi	Port Size	Operating Temperature	Pressure Range, psi	Pilot air Supply, psi	Blow Type	Grease	Port Type	Part Number
Normally closed	Dry air	459.1 scfm	1"	23-122°F (A)	0-116	43.5-116	Pulse	Petrolatum (for painting applications)	(B), (C), (D)	WPASV13000-AA-94
									BSPP	WPASV13000-AA-34

Dimensions: ASV13000-AA-94 (NPT model)



Piping

Port 1: Supply port (Compressor side)
 Port 2: Output port (Blow nozzle side)
 Port 3: Plugged

Port X: 1/8 NPT pilot air supply
 >43.5 psi is required

Notes:

- When temperature of valve goes below 5°C (41°F), complete dry air shall be supplied to prevent from freezing.
- Air Saver Units with WP prefix are suitable for most painting applications. Test before use if in direct contact with painted surface.
- If test in painting application fails, try cycling Air Saver Unit for 48 hours and repeat test.
- DO NOT use "WP" Air Saver Unit in 'clear coat' applications
- Adjustable to maximum frequency of 1Hz.

Most popular.



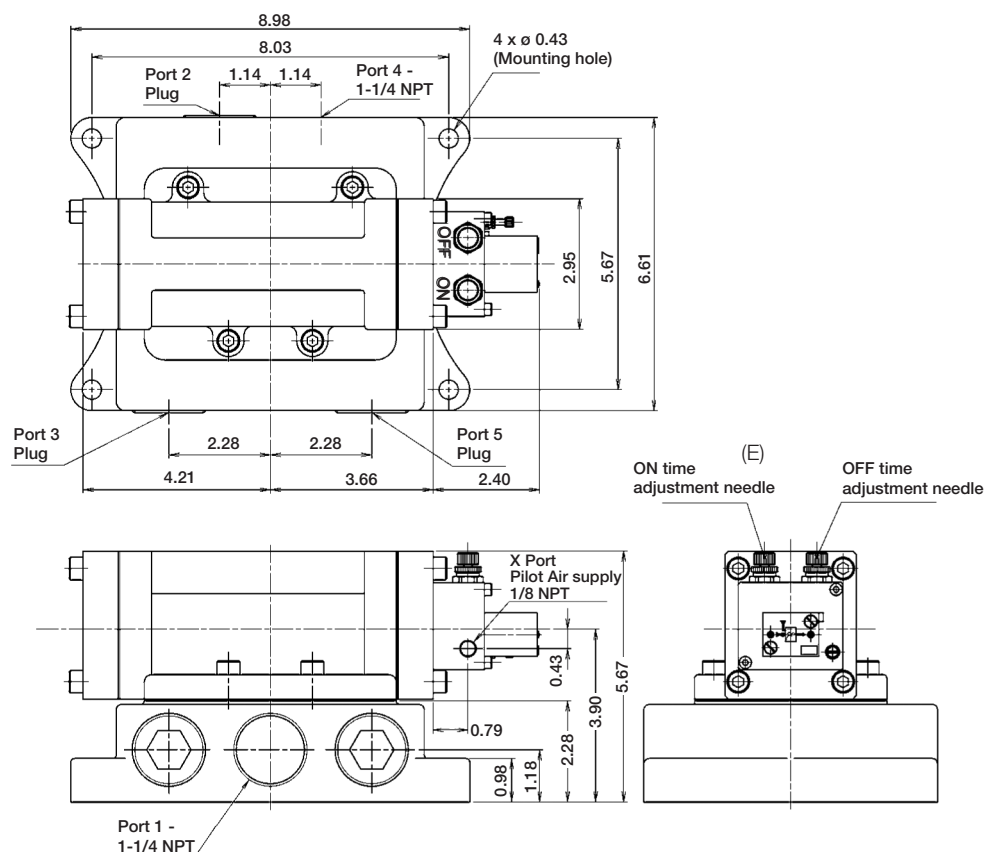
For inventory, lead times, and kit
 lookup, visit www.pdnplu.com



Ordering Information ASV15000-AA-xx

Function	Fluid	Flow @ 72.5 psi	Port Size	Operating Temperature	Pressure Range, psi	Pilot air Supply, psi	Blow Type	Grease	Port Type	Part Number
Normally closed	Dry air	529.7 scfm	1-1/4"	23-122°F (A)	0-116	43.5-116	Pulse	Petrolatum (B), (for painting (C), applications) (D)	NPT	WPASV15000-AA-92
									BSPP	WPASV15000-AA-42

Dimensions: ASV15000-AA-92 (NPT model)



Piping

Port 1: Supply port (Compressor side)

Port 2: Plug (1-1/4)

Port 3: Plug (1-1/4)

Port 4: Output port (Blow nozzle side)

Port 5: Plug (1-1/4)

Port X: 1/8 NPT pilot air supply
>43.5 psi is required

Notes:

- A. When temperature of valve goes below 5°C (41°F), complete dry air shall be supplied to prevent from freezing.
- B. Air Saver Units with WP prefix are suitable for most painting applications. Test before use if in direct contact with painted surface.
- C. If test in painting application fails, try cycling Air Saver Unit for 48 hours and repeat test.
- D. DO NOT use "WP" Air Saver Unit in 'clear coat' applications.
- E. Adjustable to maximum frequency of 1Hz.

 Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

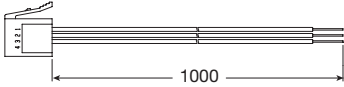


Ordering Information ASC500-1W / ASO500-1W

Function	Fluid	Flow @ 72.5 psi	Port Size	Operating Temperature	Pressure Range, psi	Pilot air Supply, psi	Blow Type	Port Type	Part Number
Normally closed	Dry air	15.9 scfm	1/8"	23-122°F	29-72.5	Internal pilot	Pulse/continuous	NPT	ASC500-1W-90
								BSPP	ASC500-1W-10
Normally open	Dry air	15.9 scfm	1/8"	23-122°F (A)	29-72.5	Internal pilot	Pulse/continuous	NPT	ASO500-1W-90
								BSPP	ASO500-1W-10

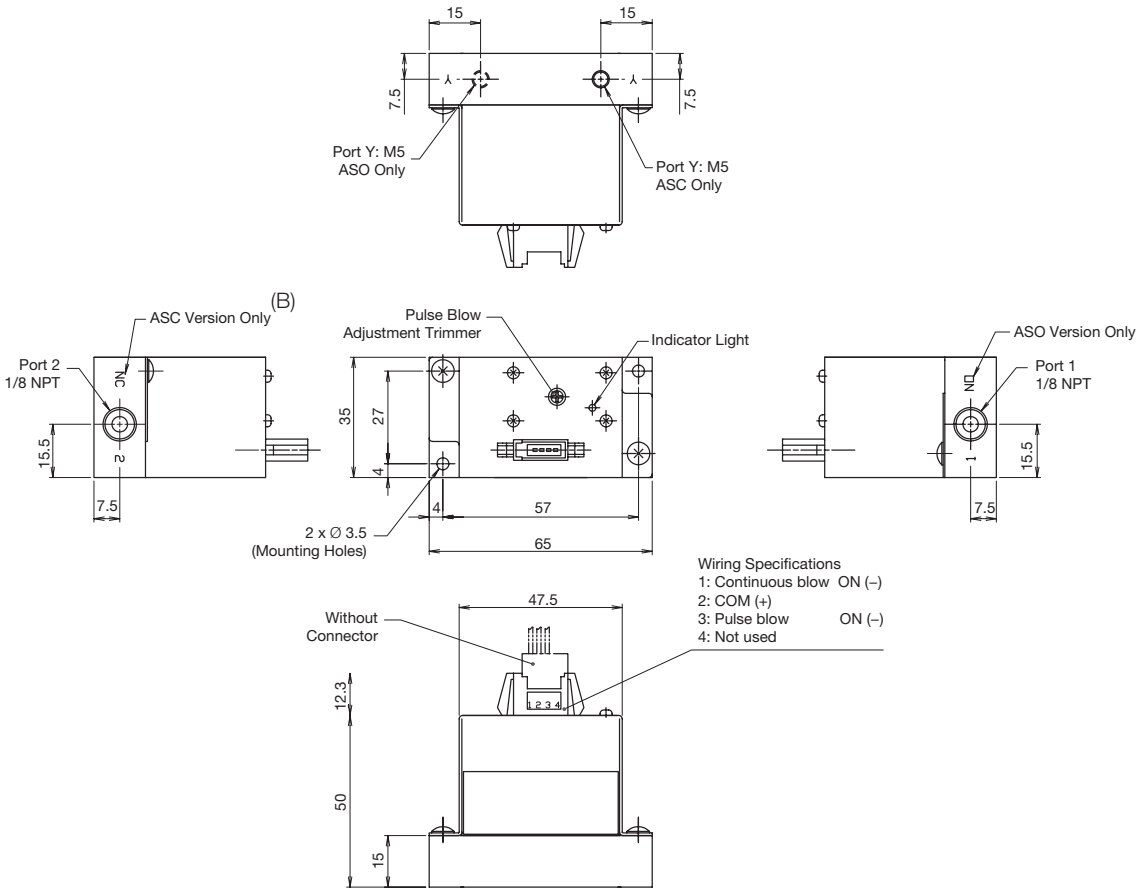
Cable

Cable with specific connector (AWG26 ASC/ASO in common)



ASC-D24-CL10

Dimensions: ASC500-1W-90 / ASO500-1W-90 (NPT model)



Piping

Port 1: Supply port (Compressor side)
 Port 2: Output port (Blow nozzle side)
 Y port: Pilot exhaust port*

* In order to avoid dust, it is recommended to attach an air muffler.

Notes:

- A. When temperature of valve goes below 5°C (41°F), complete dry air shall be supplied to prevent from freezing.
- B. Adjustable to maximum frequency of 22Hz.

Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

C80

Parker Hannifin Corporation
 Pneumatic Division
 Richland, Michigan
www.parker.com/pneumatics

Features

N Series

For decades Parker Pneumatics and Heavy Industrial have been synonymous with durability and long life. High flow-speed N Series poppet valves have been operating in foundries, steel mills, and automotive casting & stamping plants without fail.

Features

- Continuous duty rated option
- Non-lube service
- Hi-flow, short stroke poppet
- Indicator lights available

Specifications

- 2-way NC
- 3-way NO & NC
- Selector function

Ports

- 3/8" Body – 3/8", 1/2" NPT; 3.0 to 4.4 Cv
- 3/4" Body – 3/4", 1" NPT; 9.0 to 11.0 Cv
- 1-1/4" Body – 1", 1-1/2" NPT; 20.0 to 30.0 Cv
- BSPP "G" threads available

Certification / approval

- Approved to be CE marked (Standard L-Pilot & P-Pilot)
- NEMA 4 Option
- Hazardous Duty Option IP65 Rating / NEMA 4

Material specifications

Valve body	Cast aluminum
Poppet assembly	Aluminum and stainless steel
Pilot Valve	Zinc, stainless steel, brass, copper, zinc plated steel
Seals	Nitrile

Lubrication

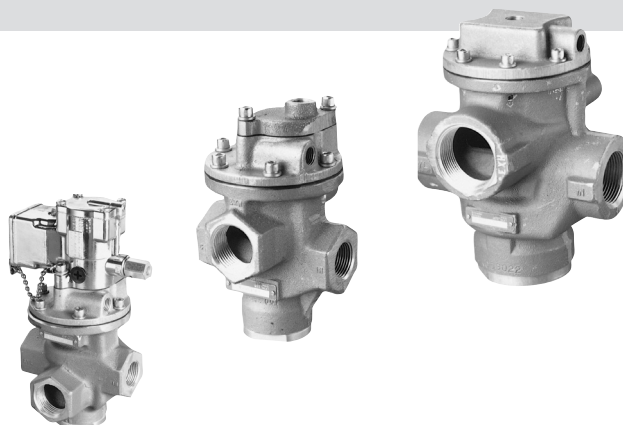
The high speed poppet valves are pre-lubricated to permit use with non-lubricated air. However, air should be lubricated to assure maximum seal life.

F442 lubricating oil is recommended. This oil is specially formulated to provide peak performance and maximum service life from air-operated equipment.

Installation

CAUTION: DO NOT RESTRICT THE INLET TO POPPET VALVES

Restriction of the inlet can starve the air supply to the pilot section of internally piloted poppet valves and result in slow shifting or failure of the valve to shift properly. Always connect the supply line directly to the inlet of the valve using the full pipe size of the valve inlet. Never use a quick coupling to connect a poppet valve to the air supply. On valves with a small inlet port, use of an upstream surge tank may be required at lower operating pressures to insure an adequate air supply and proper operation.



Operating information

Operating pressure:

Solenoid valves - internal pilot supply

3/8" Basic	3/4" Basic	1-1/4" Basic
20 to 140 PSIG (standard)	25 to 140 PSIG (200 PSIG option available)	25 to 140 PSIG (200 PSIG option available)

Solenoid valves - external pilot supply

Air pressure thru valve (PSI)	External pilot pressure required (PSI) *	
	3/8" Basic	3/4" Basic
25 PSI	35-200	35-200
50 PSI	45-200	40-200
75 PSI	55-200	50-200
100 PSI	65-200	65-200

Vacuum up to 1" HG, less than a perfect vacuum.

* With 200 PSI option. Do not exceed 140 PSI with standard pilots.

Internal pilot - remote pilot valve

Air pressure thru valve (PSI)	Remote pilot pressure (PSI)		
	3/8" Basic	3/4" Basic	1-1/4" Basic
25 PSI	30-250	30-250	30-250
50 PSI	50-250	50-250	50-250
75 PSI	70-250	75-250	70-250
100 PSI	95-250	95-250	90-250
150 PSI	140-250	145-250	130-250
200 PSI	175-250	185-250	175-250
250 PSI	215-250	230-250	205-250

Operating temperature:

Operator type	Duty cycle *	Minimum ambient temperature	Maximum ambient temperature
Standard service	Intermittent	0°F (-18°C)	125°F (52°C)
Solenoid	Continuous	0°F (-18°C)	100°F (38°C)
Special service	Intermittent	0°F (-18°C)	125°F (52°C)
Solenoid	Continuous	0°F (-18°C)	125°F (52°C)
Remote pilot	Not applicable	0°F (-18°C)	200°F (93°C)

* Applications with pilot valves energized for ten (10) minutes or longer with a duty cycle greater than 70% are considered to be continuously energized.

$$\text{Duty cycle} = \frac{\text{Time energized}}{\text{Time energized} + \text{time off}} \times 100\% = \% \text{ Duty Cycle}$$

C

Inline Valves

Viking Lite

Viking Extreme

B3, B5, B6 Series

B7, B8 Series

Air Saver Unit

"N" Series

Single Solenoid, Non-locking manual override, internal "L" pilot 140 PSI, standard service, junction box w/ light.



Body Size	Cv	In / cyl Ports	Exhaust Port	Voltage	2-way, 2-position normally closed	3-way, 2-position normally closed	3-way, 2-position normally open
3/8"	3.6 to 3.9	3/8"	1/2"	120VAC	N3153904553	N3553904553	N3753904553
				24VDC	N3153904549	N3553904549	N3753904549
		1/2"	1/2"	120VAC	N3154904553	N3554904553	N3754904553
				24VDC	N3154904549	N3554904549	N3754904549
3/4"	7.7 to 9.6	3/4"	1"	120VAC	N3156904553	N3556904553	N3756904553
				24VDC	N3156904549	N3556904549	N3756904549
		1"	1"	120VAC	N3157904553	N3557904553	N3757904553
				24VDC	N3157904549	N3557904549	N3757904549

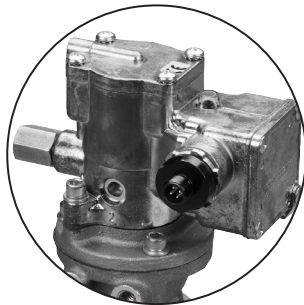
Normally Closed Normally Open

Single Solenoid, Non-locking manual override, internal "L" pilot 140 PSI, standard service, junction box w/ light, 4-pin M12.

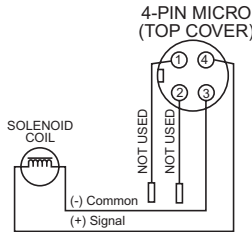


Normally Closed

Body Size	Cv	In / cyl Ports	Exhaust Port	Voltage	2-way, 2-position normally closed	3-way, 2-position normally closed	3-way, 2-position normally open
3/8"	3.6 to 3.9	3/8"	1/2"	24VDC	N3153J04579F	N3553J04579F	N3753J04579F
		1/2"	1/2"	24VDC	N3154J04579F	N3554J04579F	N3754J04579F
3/4"	7.7 to 9.6	3/4"	1"	24VDC	N3156J04579F	N3556J04579F	N3756J04579F
		1"	1"	24VDC	N3157J04579F	N3557J04579F	N3757J04579F



4-Pin Male/Single Solenoid
(Encl. Option J, Wiring Option F)
(Per ISO 202/01)



Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

"N" Series 3/8", 3/4" & 1-1/4" Body Sizes - Solenoid 'L' Pilot

N **315** **3** **9** **0** **45** **53**

Valve Function - Solenoid	
3/8" & 3/4" Body	
2-Way, Normally Closed	315
3-Way, Normally Closed	355
3-Way, Normally Open	375
1-1/4" Body	
2-Way, Normally Closed	325
3-Way, Normally Closed	365
3-Way, Normally Open	385

Port Size / Thread Type	
3/8" Body Size	
3/8" Inlet & Cyl - 1/2" Exhaust - NPT	3
1/2" Inlet & Cyl - 1/2" Exhaust - NPT	4
1/2" Inlet & Cyl - 1/2" Exhaust - BSPP	N
3/4" Body Size	
3/4" Inlet & Cyl - 1" Exhaust - NPT	6
3/4" Inlet & Cyl - 1" Exhaust - BSPP	Q *
1" Inlet & Cyl - 1" Exhaust - NPT	7
1-1/4" Body Size	
1" Inlet & Cyl - 1 1/4" Exhaust - NPT	7
1-1/4" Inlet & Cyl - 1-1/2" Exhaust - NPT	8
1-1/2" Inlet & Cyl - 1-1/2" Exhaust - NPT	9
1-1/2" Inlet & Cyl - 1-1/2" Exhaust - BSPP	T *

* Not available with valve function 325.

** Available Solenoid Enclosure J only.

Note: BSPP is to the ISO 228 standard, and requires an R-BSPT male fitting.

Solenoid Enclosure / Override	
Basic Pilot	1
Basic Pilot NLMO	2
Basic Pilot LMO	3
Junction Box NLMO	5
Junction Box LMO	6
Junction Box NLMO w/ Light	8
Junction Box LMO w/ Light	9
Basic Pilot ext. LMO	W
JIC NLMO w/ Light - 3-Pin Automotive	E
JIC NLMO w/ Light - 4-Pin M12	J
JIC NLMO w/ Light - 5-Pin Automotive	N

Solenoid Type	
0	Standard
5 *	Hazardous Duty
8 *	NEMA 4 Solenoid

* Available with enclosure 2 & 3, 'L', pilot configuration 04 & 48, and voltage 49 & 53 ONLY.

"L" Pilot Configuration	
Blank	None
C	Chrysler Wiring - Enclosure 'J' & 'N'
F	Ford Wiring - Enclosure 'E', 'J' & 'N'
G	GM Wiring - Enclosure 'J' & 'N'

"L" Pilot Code						
Code	Voltage			Solenoid Enclosure Options		
	AC 60hz	AC 50hz	DC	Standard Duty (01, 45)	Cont. Duty (04, 48)	200 PSI (46)
42	24	24	6	5, 6	6	
45			12	1, 5, 6		
49			24	1, 2, 3, 5, 6, 8, 9, W	6, 8, 9	9
51			48	1		
53	120	110		1, 2, 3, 5, 6, 8, 9, E, N, W	1, 6, 8, 9, N	8, 9, E
57	240	220		1, 3, W		
61			120	5, 6		
79			24	E, J	E, J	E, J

"L" Pilot Configuration	
01 *	External Pilot, Std Service, 140 PSI
04 *	External Pilot, Cont Duty, 140 PSI
45	Internal Pilot, Std Service, 140 PSI
46	Internal Pilot, Std Service, 200 PSI
48	Internal Pilot, Cont Duty, 140 PSI

* Not available with valve function 325, 365, and 385 (1-1/4" body).

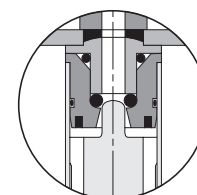
Continuous Duty Pilots

Continuous duty pilots are designed for applications where cycling is infrequent and the pilot is to be energized for indefinite periods of time . . . hours, days or weeks. Typical uses include fail-safe or emergency shutdown circuits where the pilot is to be energized and the valve open as long as the main control is "live" in order to shut off air to equipment in the event of power failure.

The Continuous duty pilot operates satisfactorily in ambient temperatures up to 125°F, even when continuously energized and without the benefit of the cooling air which normally flows through the pilot during frequent cycling. Under certain conditions,

satisfactory operation may be obtained at ambient temperatures above 125°F. CONSULT FACTORY.

Incorporating the performance-proven design features of the standard L-Pilot, the continuous duty pilot utilizes a bullet-shaped stem on the upper end of the plunger. This bullet-shaped stem, seating in a high-temperature rubber o-ring, provides both a bubble-tight seal and positive release.



Continuous Duty Pilot

Most popular.



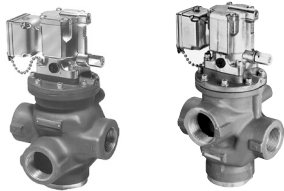
For inventory, lead times, and kit lookup, visit www.pdnplu.com

C83

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

C	Inline Valves
	Viking Lite
	Viking Extreme
	B3, B5, B6 Series
	B7, B8 Series
	Air Saver Unit
"N"	Series

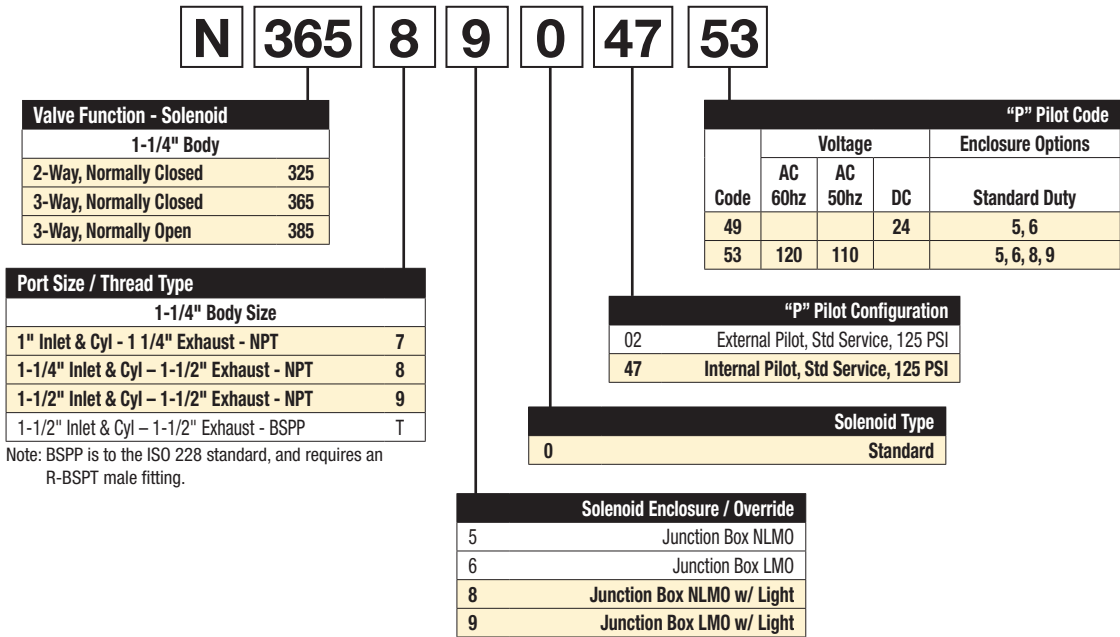
Single Solenoid, Non-locking manual override, internal "P" pilot 125 PSI, standard service, P-pilot junction box w/ light.



Normally Closed Normally Open

Body size	Cv	In / cyl ports	Exhaust port	Voltage	2-way, 2-position normally closed	3-way, 2-position normally closed	3-way, 2-position normally open
1-1/4"	19.5 to 26.7	1"	1-1/4"	120VAC	N3257904753	N3657904753	N3857904753
		1-1/4"	1-1/2"	120VAC	N3258904753	N3658904753	N3858904753
		1-1/2"	1-1/2"	120VAC	N3259904753	N3659904753	N3859904753

"N" Series 1-1/4" Body Sizes - Solenoid Hi-Flow 'P' Pilot



Most popular.



For inventory, lead times, and kit lookup, visit www.pdnplu.com

Ordering Information

Remote Pilot

Single Remote Pilot, 1/4" NPT remote pilot port with internal pilot return.

		Body size	Cv	In / cyl ports	Exhaust port	2-way, 2-position normally closed	3-way, 2-position normally closed	3-way, 2-position normally open
		3/8"	3.6 to 3.9	3/8"	1/2"	N31431091	N35431091	N37431091
				1/2"	1/2"	N31441091	N35441091	N37441091
		3/4"	7.7 to 9.6	3/4"	1"	N31461091	N35461091	N37461091
				1"	1"	N31471091	N35471091	N37471091

Normally Closed Normally Open

Single Remote Pilot, 1/4" NPT remote pilot port with internal pilot return.

		Body size	Cv	In / cyl ports	Exhaust port	2-way, 2-position normally closed	3-way, 2-position normally closed	3-way, 2-position normally open
		1-1/4"	19.5 to 26.7	1"	1-1/4"	N32471091	N36471091	N38471091
				1-1/4"	1-1/2"	N32481091	N36481091	N38481091
				1-1/2"	1-1/2"	N32491091	N36491091	N38491091

Normally Closed Normally Open

"N" Series 3/8", 3/4" & 1-1/4" Body Sizes - Remote Pilot

N 314 3 1 091		
Valve Function - Solenoid	Port Size / Thread Type	Pilot Configuration
3/8" & 3/4" Body	3/8" Body Size	089 *† External Pilot Return
2-Way, Normally Closed 314	3/8" Inlet & Cyl - 1/2" Exhaust - NPT 3	091 Internal Pilot Return
3-Way, Normally Closed 354	1/2" Inlet & Cyl - 1/2" Exhaust - NPT 4	
3-Way, Normally Open 374	1/2" Inlet & Cyl - 1/2" Exhaust - BSPP N	
1-1/4" Body	3/4" Body Size	
2-Way, Normally Closed 324	1/2" Inlet & Cyl - 3/4" Exhaust - BSPP P	
3-Way, Normally Closed 364	3/4" Inlet & Cyl - 1" Exhaust - NPT 6	
3-Way, Normally Open 384	3/4" Inlet & Cyl - 1" Exhaust - BSPP Q	
	1" Inlet & Cyl - 1" Exhaust - NPT 7	
	1-1/4" Body Size	
	1" Inlet & Cyl - 1 1/4" Exhaust - NPT 7	
	1-1/4" Inlet & Cyl - 1-1/2" Exhaust - NPT 8	
	1-1/2" Inlet & Cyl - 1-1/2" Exhaust - NPT 9	
	1-1/2" Inlet & Cyl - 1-1/2" Exhaust - BSPP T*	

Note: BSPP is to the ISO 228 Standard, and requires an R-BSPT male fitting.

* Not available with 1-1/4" body size with Port Size option T
† Not available with 3/8" body size with Port Size option 3

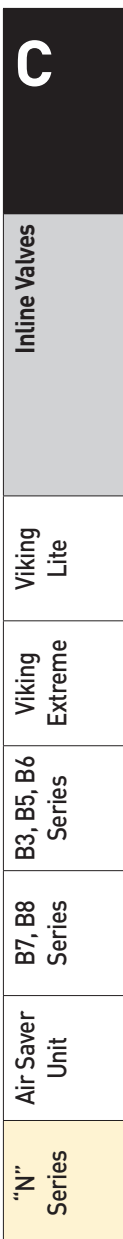
 Most popular.



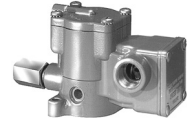
For inventory, lead times, and kit lookup, visit www.pdnplu.com

C85

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

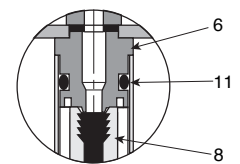
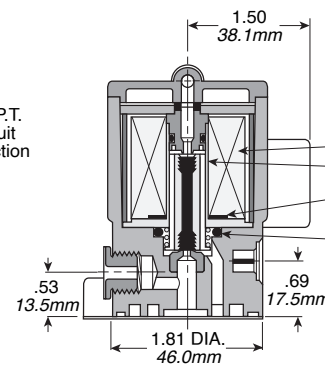
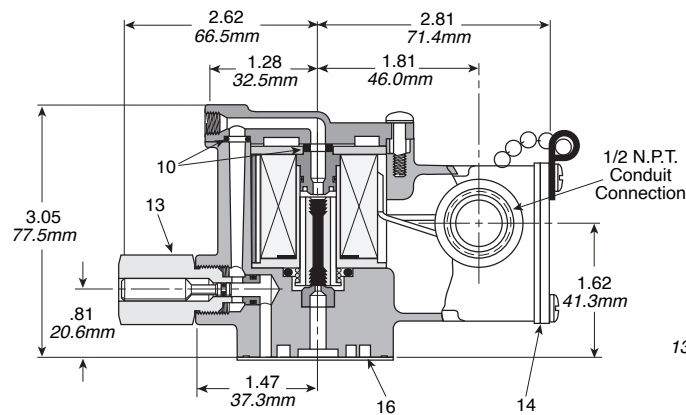


Replacement Pilots

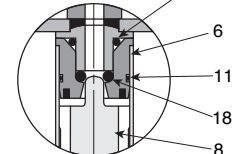


Description	Standard L-Pilot		Continuous Duty L-Pilot	
Override Type	Locking	Non-locking	Locking	Non-locking
Basic with override	K0653035**	K0652035**	K0853025**	K0852025**
JIC with junction box & override	K0656035**	K0655035**	K0856025**	K0855025**
JIC pilot with junction box & override & indicator lights (120VAC only)	K0659035**	K0658035**	K0859025**	K0858025**

** Voltage code - (reference model index for availability)



**Standard Duty
Pilot Only**



**Continuous Duty
Pilot Only**

Parts List

Item no.	Part Number	Description	Item no.	Part Number	Description
4	K593025	Coil 120V 60Hz / 110V 50Hz	12	K272004	Plunger Guide
	K593035	Coil 240V 60Hz / 220V 50Hz	13	K152003	Override Assembly
	K593003	Coil 6VDC / 24V 60Hz	14	K183047	Cover Gasket
	K593010	Coil 12VDC	16*	K183001	Gasket
	K593014	Coil 24VDC	18*	H13473	O-Ring
	K593041	Coil 120VDC	20*	H13413	O-Ring
5	H14213	Seal	22	H19102	120 AC Only – Indicator Light
6	K423006	Top Seat	24	K183108	Gasket
	K423010	Top Seat (Continuous Duty)			
8	K343002	Plunger (STD. Service)			
	K343001	Plunger (Continuous Duty)			
10*	H14201	Seal			
11*	K41RB72011	O-Ring (STD. Service)			
	H24969	O-Ring (Continuous Duty)			

Coil leads are 19" long.

* Parts included in Service Kit.

Continuous Duty Kit K352366

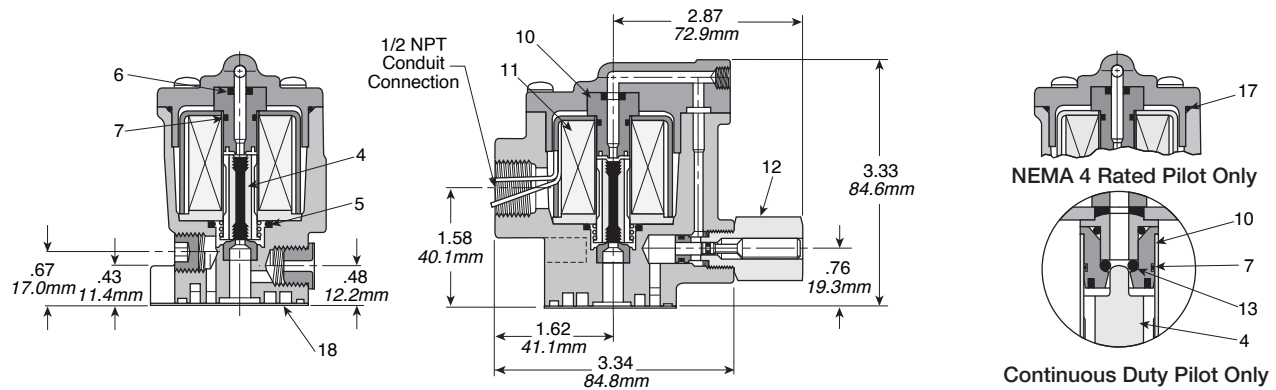
Standard Service Kit K352166

Replacement Pilots



Description	Hazardous Duty L-Pilot		NEMA 4 L-Pilot	
Hazardous duty L-pilot - UL & CSA	K0451025**	N/A		
Override Type	Locking	Non-Locking	Locking	Non-Locking
Hazardous duty with override	K0453025**	K0452025**		
NEMA 4 with override			K2553025**	K255202549

** Voltage code - 49 & 53



Parts List

Item no.	Part Number	Description
4*	K343002	Plunger (STD. Service)
	K343001	Plunger (Continuous Duty)
5*	K14213	Seal
6*	K41RB72009	O-Ring
	K41RB72008	O-Ring (STD. Service)
7*	K41RB72011	O-Ring (STD. Service)
	H24969	O-Ring (Continuous Duty)
10	K423001	Top Seat
	K423002	Top Seat (Continuous Duty)
	K593025	Coil 120V 60Hz / 110V 50Hz
	K593035	Coil 240V 60Hz / 220V 50Hz
11	K593003	Coil 6VDC / 24V 60Hz
	K593010	Coil 12VDC
	K593014	Coil 24VDC
	K593041	Coil 120VDC

Item no.	Part Number	Description
12	K152003	Override Assembly
13*	H13473	O-Ring
17*	H13716	Gasket (NEMA 4 Rated Pilot Only)
18*	K183001	Gasket

Coil leads are 19" long.

* Parts included in Service Kit.

Continuous Duty Kit **K352366**

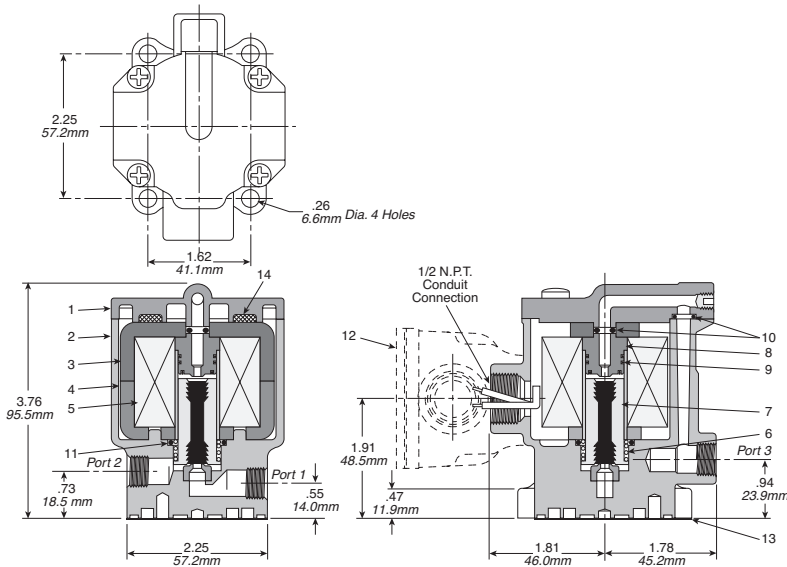
Standard Service Kit **K352166**

Replacement Pilots



Description	Heavy Duty P-Pilot		
	No Override	Non-Locking	Locking
Override Type			
Basic with override	K1351045**	N/A	N/A
JIC with junction box & override	N/A	K1355045**	K1356045**
JIC Pilot with junction box & override & indicator lights (120VAC only)	N/A	K135804553	K135904553

** Voltage code - 49 & 53



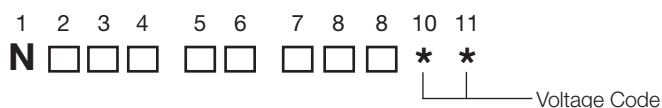
Parts List

Item no.	Part Number	Description	Item no.	Part Number	Description
1	K062005	Cover Assy	6	K473010	Spring N.O. Valve
2	K112045	Body, Man. Mtd. (1/8" Bottom Seal)		K473011	Spring N.C. Valve
3	K112046	Body, Man. Mtd. (3/16" Bottom Seal)	7 •	K343042	Plunger
4	K013001	Magnet Bar	8	K423020	Top Seat (1/8" Orifice)
	K272002	Sleeve Sub Assy		K423022	Top Seat (3/16" Orifice)
5*	K593108	Coil (115V 60Hz)	9 •	H13436	Seal
	K593112	Coil (230V 60Hz)	10 •	H14202	Seal
	K593097	Coil 24VDC	11 •	H14215	Seal
	K593107	Coil 115VDC	12	K322004	Junction Box Kit
			13 •	K183012	Gasket

* Coil leads are 19" long.
• Parts included in Seal Kit K352064.

Coils for Pilot Operated Valves

The voltage code of the valve can be identified in the 10th and 11th digit of the valve part number.



L-Pilot Valves

Voltage Code **	Voltage			Coil	
	60Hz	50Hz	DC	19" Leads	72" Leads
40	12	—	—	K593007	—
41,42	24	—	6	K593003	—
45*	—	—	12	K593010	—
49*	—	—	24 (Standard)	K593014	—
79	—	—	24 (Arc Suppressed)	K593271	—
51*	—	—	48	—	K593185
53*	120	110	—	K593025	—
57*	240	240	—	K593035	—
60	240	220	—	K593035	—
61	—	—	120	K593041	—

* Indicates voltages approved for solenoid operators designed for use in hazardous locations.

P-Pilot Valves

Voltage Code **	Voltage			Coil	
	60Hz	50Hz	DC	19" Leads	72" Leads
43	—	24	—	K593098	—
45	—	—	12	K593094	—
49	—	—	24	K593097	—
51	—	—	48	—	K593254
53	115	—	—	K593108	—
58	—	230	—	K593111	—

Solenoid Characteristics Chart

Voltage Range +10/-15% of Nominal

3/8" & 3/4" Basic – L-Pilot

Voltage/ Cycles	Amps Inrush	Amps Holding	Resistance Ohms	Watts	Insulation Class
120/60VAC	.29	.18	122	12	B
110/50VAC	.21	.14	122	12	B
240/60VAC	.18	.12	610	12	B
24/50VAC	1.2	.75	6.4	9.5	B
6VDC	—	1.4	4.5	7.6	B
12VDC	—	.66	17.7	9	B
24VDC	—	.32	71	9	B
48VDC	—	.22	216	11	B

NOTE: Continuous duty type service is for applications where pilot valve is energized more than ten (10) minutes.

Solenoid Characteristics Chart

Voltage Range +10/-15% of Nominal

1-1/4" Basic – P-Pilot

Voltage/ Cycles	Amps Inrush	Amps Holding	Resistance Ohms	Watts	Insulation Class
120/60VAC	.46	.25	35	18.5	B
110/50VAC	.36	.19	48	12	B
230/60VAC	.26	.15	125	19.5	B
220/50VAC	.20	.11	191	15	B
24/60VAC	2.3	1.4	1.3	20	B
24/50VAC	1.6	.9	2.1	12	B
12VDC	—	.7	17	8	B
24VDC	—	.33	68	8	B
48VDC	—	.16	275	7.5	B

NOTE: Continuous duty type service is for applications where pilot valve is energized more than ten (10) minutes.

Hazardous Duty Solenoid Listing

Valves with solenoid operators designed for hazardous locations are UL & CSA Approved as follows:

National Electric Code	Ambient Conditions	NEMA Classification
Class I Div. 1, Group C	Ethyl, Ether, Etc. Gases & Vapors	VII (7)
Class I Div. 1, Group D	Gasoline, Etc. Gases & Vapors	VII (7)
Class I Div. 2, Group B	Butadiene, Etc., Liquid, Fluid or Vapor Normally Contained, or Atmosphere Ventilated	VII (7)
Class II Div. 1, Group E	Metal Dust	IX (9)
Class II Div. 1, Group F	Coal, Coke, Carbon Black Dust	IX (9)
Class II Div. 1, Group G	Flour, Starch, Grain Dust	IX (9)

See Article 500 – Hazardous (Classified) Locations, National Electric Code.

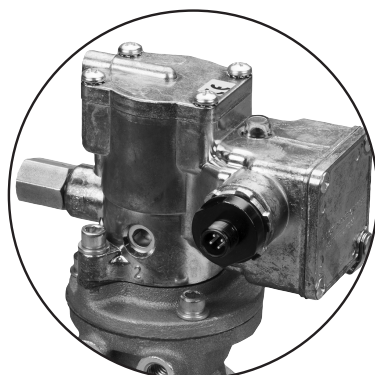


For inventory, lead times, and kit lookup, visit www.pdnplu.com

Flow

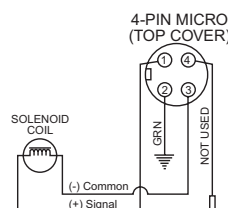
Basic Valve Size	Inlet Port Size	Exhaust Port Size	Cv Inlet to Cylinder	Cv Cylinder to Exhaust
3/8" 3-Way, Normally Closed	3/8" Pipe	1/2" Pipe	3.6	4.2
	1/2" Pipe	1/2" Pipe	3.8	4.3
3/8" 3-Way, Normally Open	3/8" Pipe	1/2" Pipe	3.6	4.1
	1/2" Pipe	1/2" Pipe	3.9	4.5
3/4" 3-Way, Normally Closed	1/2" Pipe	3/4" Pipe	8.2	9.2
	3/4" Pipe	1" Pipe	9.3	10.8
3/4" 3-Way, Normally Open	1/2" Pipe	3/4" Pipe	7.7	6.6
	3/4" Pipe	1" Pipe	9.6	11.4
1-1/4" 3-Way, Normally Closed	1" Pipe	1-1/4" Pipe	19.5	23.5
	1-1/4" Pipe	1-1/2" Pipe	23.3	26.9
	1-1/2" Pipe	1-1/2" Pipe	23.3	26.9
1-1/4" 3-Way, Normally Open	1" Pipe	1-1/4" Pipe	20.4	24.8
	1-1/4" Pipe	1-1/2" Pipe	25.0	29.1
	1-1/2" Pipe	1-1/2" Pipe	26.7	29.9

Wiring Connections

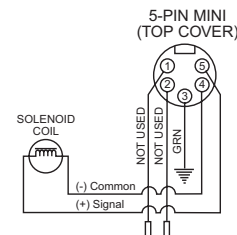


Chrysler Connection

4-Pin Male/Single Solenoid (Encl. Option J, Wiring Option C)

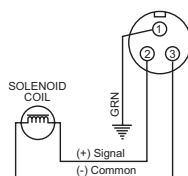


5-Pin Male/Single Solenoid (Encl. Option N, Wiring Option C)

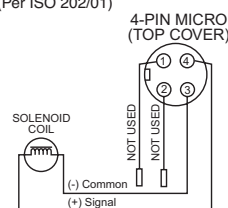


Ford Connection

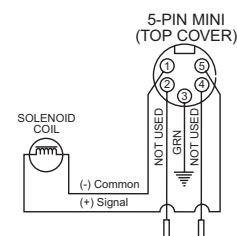
3-Pin Male/Single Solenoid (Encl. Option E, Wiring Option F)



4-Pin Male/Single Solenoid (Encl. Option J, Wiring Option F) (Per ISO 202/01)

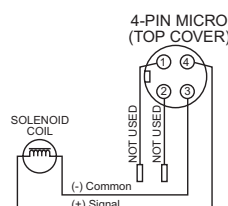


5-Pin Male/Single Solenoid (Encl. Option N, Wiring Option F)

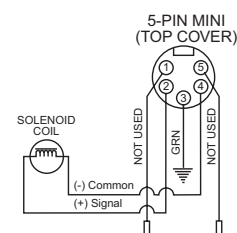


GM Connection

4-Pin Male/Single Solenoid (Encl. Option J, Wiring Option G)



5-Pin Male/Single Solenoid (Encl. Option N, Wiring Option G)



Automotive Connections

- 3-Pin & 5-Pin "Mini" (7/8 UNF Thread)
- 4-Pin "Micro" (M12 Thread)

Solenoid Configurations

"E", "J", "N"

Selection

Although reasonable safety factors are designed into each speed poppet valve, it is important that application requirements do not exceed the rated limitation of the valve. This precaution insures a sufficient safety factor.

Life Expectancy

Normal multimillion cycle life expectancy of high speed poppet series valves is based on the use of properly filtered and lubricated air at room temperature. In actual laboratory tests, the high speed poppet valves provide maintenance-free service life in excess of 20,000,000 cycles.

Lubrication

The high speed poppet valves are pre-lubricated to permit use with non-lubricated air. However, air should be lubricated to assure maximum seal life.

F442 lubricating oil is recommended. This oil is specially formulated to provide peak performance and maximum service life from air-operated equipment.

Other good air line lubricating oils may be used provided they atomize readily and are of the medium aniline type. Aniline point range must be between 180°F - 220°F. Viscosity SUS @ 100°F of 140-170. High aniline oils will shrink seals; low aniline oils will swell seals, reducing operating life and expectancy.

Installation

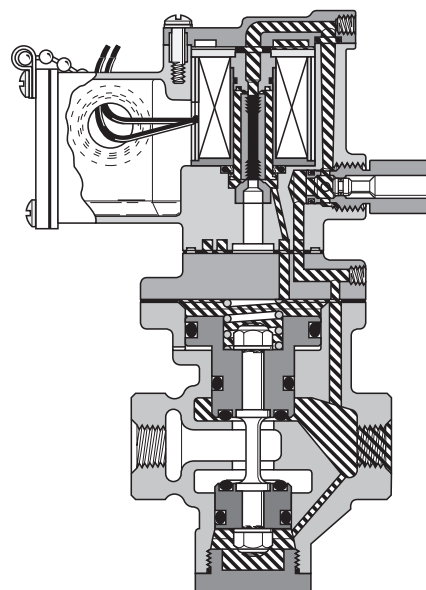
Valves should be installed with reasonable accessibility for service whenever possible. Care should be taken to hold piping length to a minimum and to protect valves from exposure to extreme heat, dirt and moisture. Piping should be clean and clear of dirt and chips. Threads should be the correct size and undamaged. Pipe joint compound should be used sparingly and only on pipe threads, never in the valve body. Care should be taken in installation to avoid undue strain on valve.

For the small port size options, it is recommended that an air reservoir is located close to the valve inlet as to not starve the valve of air pressure.

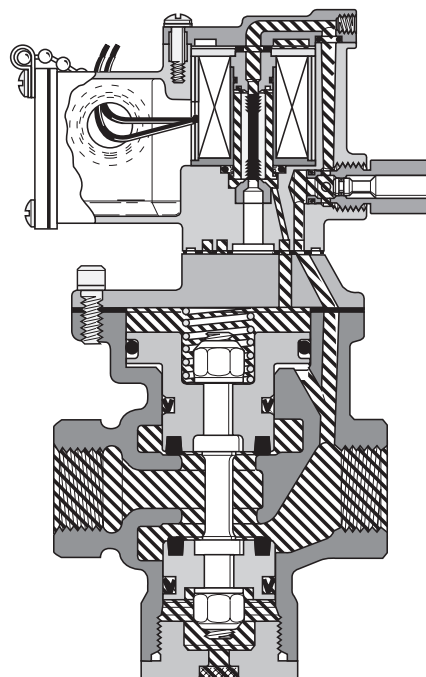


CAUTION: DO NOT RESTRICT THE INLET TO POPPET VALVES

Restriction of the inlet can starve the air supply to the pilot section of internally piloted poppet valves and result in slow shifting or failure of the valve to shift properly. Always connect the supply line directly to the inlet of the valve using the full pipe size of the valve inlet. Never use a quick coupling to connect a poppet valve to the air supply. On valves with a small inlet port, use of an upstream surge tank may be required at lower operating pressures to insure an adequate air supply and proper operation.



**3/8" Solenoid Pilot De-Energized
 Normally Closed**



**1-1/4" Solenoid Pilot De-Energized
 Normally Open**

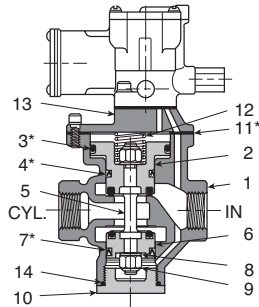
C	
Inline Valves	
Viking Lite	
Viking Extreme	
B3, B5, B6 Series	
B7, B8 Series	
Air Saver Unit	
"N" Series	

Dimensional Data - Single Solenoid

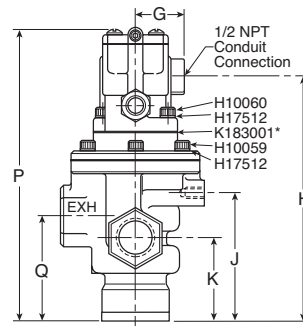
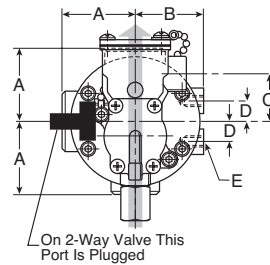
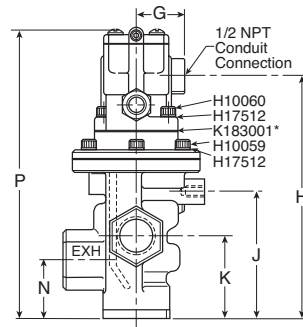
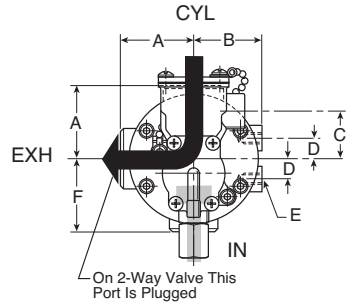
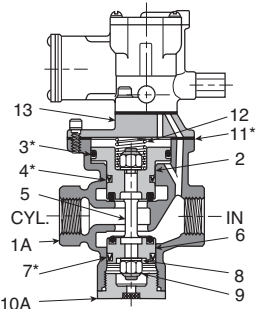
N Series - 3/8", 3/4"

Internal Pilot - 3/8" & 3/4" Basic Body

Normally Closed



Normally Open



Exhaust
Pressure

Top view indicates flow through 3-Way valve with coil de-energized.

NOTE: For normal valve operation, override must be in "out" position.

Internal Pilot -
3/8" & 3/4" Basic Body

Key	3/8" Body		3/4" Body	
	Inch	mm	Inch	mm
A	1.56	40	2.13	54
B	1.50	38	1.94	49
C	1.81	46	1.34	34
D	.56	14	.56	14
E	3/8-16UNC 7/16" deep		3/8-16UNC 9/16" deep	
F	1.75	44	2.25	57
G	1.50	38	1.50	38
H	5.92	150	7.14	181
J	3.19	81	3.75	95
K	1.88	47	2.44	62
N	1.44	37	1.78	45
P	7.36	196	8.58	218
Q	2.31	59	3.09	84

Service Kits

Include all parts normally required for in-service maintenance:

3/8" Basic valve with standard service L-Pilots.....**K352076**

3/8" Basic valve with continuous duty L-Pilots.....**K352276**

3/4" Basic valve with standard service L-Pilots.....**K352077**

3/4" Basic valve with continuous duty L-Pilots.....**K352277**

Key	3/8" Valve	3/4" Valve	Description
1	—	1/2" Tap K053075	Body (N.C.)
	3/8" Tap K053022	3/4" Tap K053076	
	—	1" Tap K053220	
1A	—	3/4" Tap K053077	Body (N.O.)
	3/8" Tap K053025	3/4" Tap K053078	
	1/2" Tap K053026	1" Tap K053218	
2	K212001	K212002	Upper piston assy
3*	H13648	H13728	Seal

Key	3/8" Valve	3/4" Valve	Description
4*	H14510	H13676	U-cup (3/8), o-ring (3/4)
5	K493002	K493009	Stem
6	K202001	K202002	Lower piston assy.
7*	H14509	H13676	U-cup (3/8), o-ring (3/4)
8	H17811	H17813	Washer (2)
9	H06326	H06332	Stop nut (2)
10	K103035	K103053	Bottom cap (N.C.)
10A	K092020	K092034	Bottom cap assy. (N.O.)
11*	K183049	K183057	Gasket
12	K473014	K473015	Spring
13	K563015	K563017	Adapter
14*	K41RB72121	K41RB72221	O-ring

* Parts included in seal kit



For inventory, lead times, and kit lookup, visit www.pdnplu.com

C92

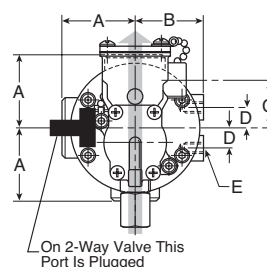
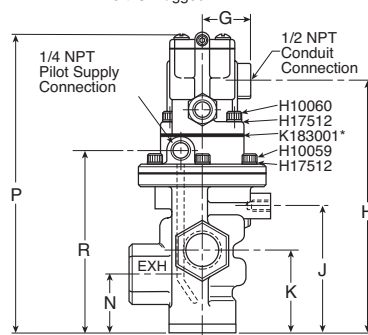
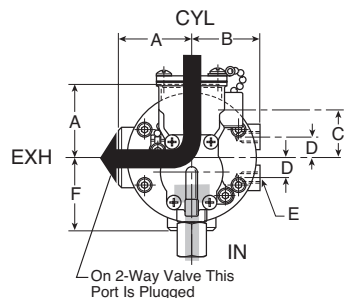
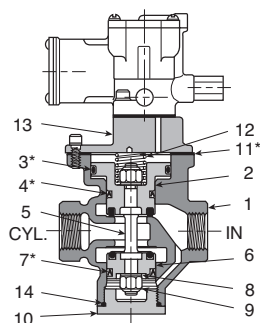
Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

Dimensional Data - Single Solenoid

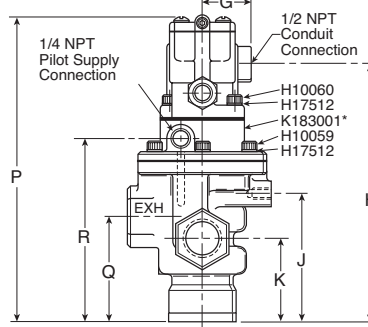
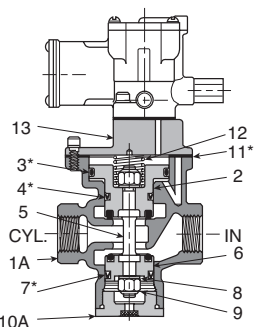
N Series - 3/8", 3/4"

External Pilot - 3/8" & 3/4" Basic Body

Normally Closed



Normally Open



Key	3/8" Valve	3/4" Valve	Description
1	—	1/2" Tap K053067	Body (N.C.)
	3/8" Tap K053019	3/4" Tap K053069	
	—	1" Tap K053221	
1A	—	3/4" Tap K053065	Body (N.O.)
	3/8" Tap K053018	3/4" Tap K053070	
	1/2" Tap K053064	1" Tap K053219	
2	K212001	K212002	Upper piston assy
3*	H13648	H13728	Seal

Key	3/8" Valve	3/4" Valve	Description
4*	K41RB72211	H13676	O-ring
5	K493002	K493009	Stem
6	K202001	K202002	Lower piston assy.
7*	K41RB72210	H13676	O-ring
8	H17811	H17813	Washer (2)
9	H06326	H06332	Stop nut (2)
10	K103035	K103053	Bottom cap (N.C.)
10A	K092020	K092034	Bottom cap assy. (N.O.)
11	K473014	K473015	Spring
12*	K183049	K183057	Gasket
13	K563016	K563021	Adapter
14*	K41RB72121	K41RB72221	O-ring

* Parts included in seal kit

Exhaust
Pressure

Top view indicates flow through 3-Way valve with coil de-energized.

NOTE: For normal valve operation, override must be in "out" position.

External Pilot -
3/8" & 3/4" Basic Body

Key	3/8" Body		3/4" Body	
	Inch	mm	Inch	mm
A	1.56	40	2.13	54
B	1.50	38	1.94	49
C	1.81	46	1.34	34
D	.56	14	.56	14
E	3/8-16UNC 7/16" deep		3/8-16UNC 9/16" deep	
F	1.75	44	2.25	57
G	1.50	38	1.50	38
H	6.42	163	7.45	189
J	3.19	81	3.75	95
K	1.88	47	2.44	62
N	1.44	37	1.78	45
P	7.86	200	8.89	226
Q	2.31	59	3.09	84
R	4.34	110	5.38	137

Service Kits

Include all parts normally required for in-service maintenance:

- 3/8" Basic valve with standard service L-Pilots.....**K352076**
- 3/8" Basic valve with continuous duty L-Pilots.....**K352276**
- 3/4" Basic valve with standard service L-Pilots.....**K352077**
- 3/4" Basic valve with continuous duty L-Pilots.....**K352277**



For inventory, lead times, and kit lookup, visit www.pdnplu.com

C93

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

C

Inline Valves

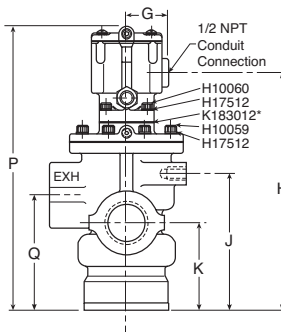
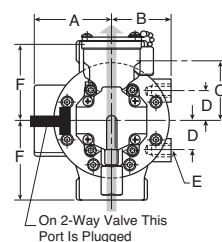
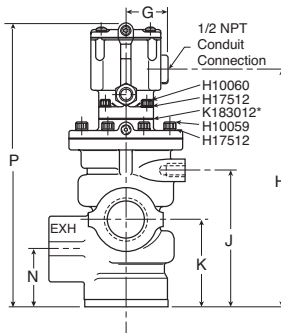
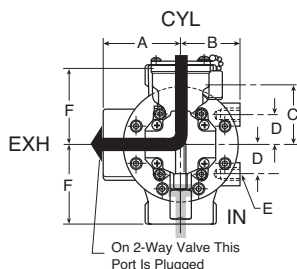
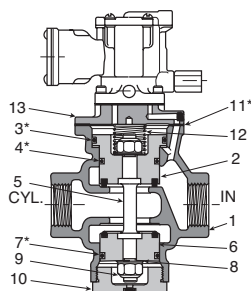
Viking
LiteViking
ExtremeB3, B5, B6
SeriesB7, B8
SeriesAir Saver
Unit"N"
Series

Dimensional Data - Single Solenoid

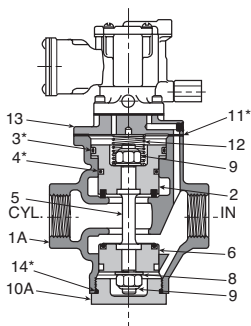
N Series - 1-1/4"

Internal Pilot - 1-1/4" Basic Body

Normally Closed



Normally Open



Exhaust
Pressure

Top view indicates flow through 3-Way valve with coil de-energized.

NOTE: For normal valve operation, override must be in "out" position.

Internal Pilot -
1-1/4" Basic Body

Key	1-1/4" Body	
	Inch	mm
A	3.00	76
B	2.25	57
C	1.34	34
D	1.19	30
E	1/2-13 UNC 3/4 Deep	
F	3.13	80
G	1.50	38
H	9.30	236
J	5.34	136
K	3.44	87
N	2.31	59
P	11.14	283
Q	4.56	116

Service Kits

Include all parts normally required for in-service maintenance:

1-1/4" Basic valve with standard service P-Pilots **K352078**

Key	1-1/4" Valve	Description
1	1" Tap	Body (N.C.)
	K053111	
	1-1/2" Tap	
	K053113	
1A	1" Tap	Body (N.O.)
	K053114	
	1-1/4" Tap	
	K053115	
2	1-1/2" Tap	Upper piston assy
	K053116	
2	K313029	Upper piston assy
3*	H13752	O-ring

Key	1-1/4" Valve	Description
4*	H13728	Seal
5	K493016	Stem
6	K313028	Lower piston
7*	H13728	Seal
8	H17817	Washer
9	H06338	Stop nut
10	K092046	Bottom cap (N.C.)
10A	K103061	Bottom cap (N.O.)
11*	K183058	Gasket
12	K473016	Spring
13	K012003	Adapter
14*	K41RB72143	O-ring

* Parts included in seal kit



For inventory, lead times, and kit lookup, visit www.pdnplu.com

C94

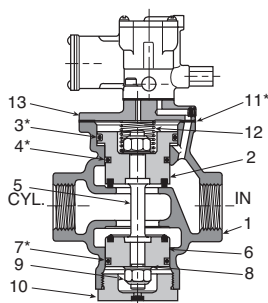
Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

Dimensional Data - Single Solenoid

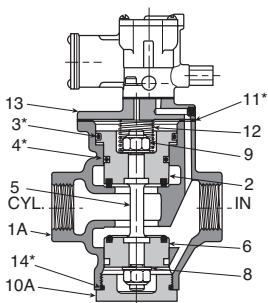
N Series - 1-1/4"

Continuous Duty Pilot - 1-1/4" Basic Body

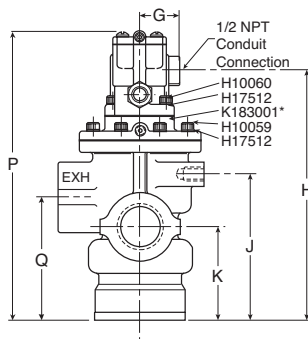
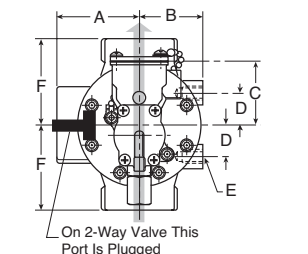
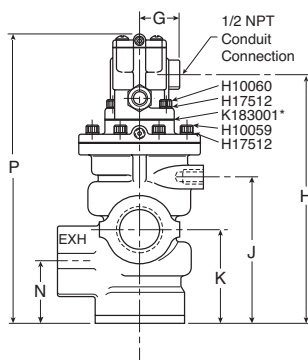
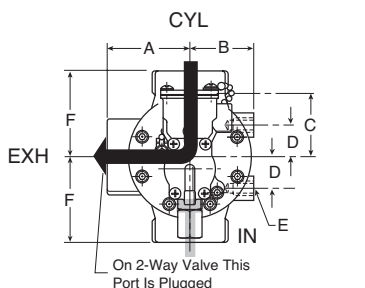
Normally Closed



Normally Open



Key	1-1/4" Valve	Description
1	1" Tap K053111	Body (N.C.)
	1-1/2" Tap K053113	
	1" Tap K053114	
1A	1-1/4" Tap K053115	Body (N.O.)
	1-1/2" Tap K053116	
2	K313029	Upper piston assy
3*	H13752	O-Ring



Key	1-1/4" Valve	Description
4*	H13728	Seal
5	K493016	Stem
6	K313028	Lower piston
7*	H13728	Seal
8	H17817	Washer
9	H06338	Stop nut
10	K092046	Bottom cap (N.C.)
10A	K103061	Bottom cap (N.O.)
11*	K183058	Gasket
12	K473016	Spring
13	K012003	Adapter
14*	K41RB72143	O-ring

* Parts included in seal kit

Exhaust
Pressure

Top view indicates flow through 3-Way valve with coil de-energized.

NOTE: For normal valve operation, override must be in "out" position.

Continuous Duty Pilot - 1-1/4" Basic Body

Key	1-1/4" Body	
	Inch	mm
A	3.00	76
B	2.25	57
C	1.34	34
D	1.19	30
E	1/2-13 UNC	3/4 Deep
F	3.13	80
G	1.50	38
H	9.02	229
J	5.34	136
K	3.44	87
N	2.31	59
P	10.45	265
Q	4.56	116

Service Kits

Include all parts normally required for in-service maintenance:

1-1/4" Basic valve with continuous duty L-Pilot.....**K352080**



For inventory, lead times, and kit lookup, visit www.pdnplu.com

C95

Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

C
Inline Valves

Viking Lite

Viking Extreme

B3, B5, B6 Series

B7, B8 Series

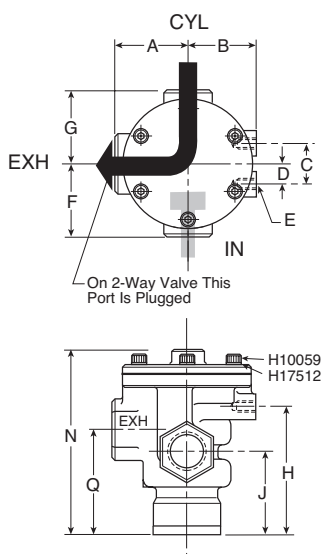
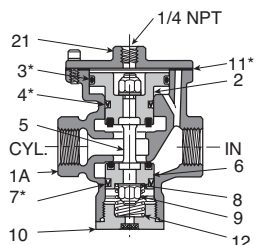
Air Saver Unit

"N" Series

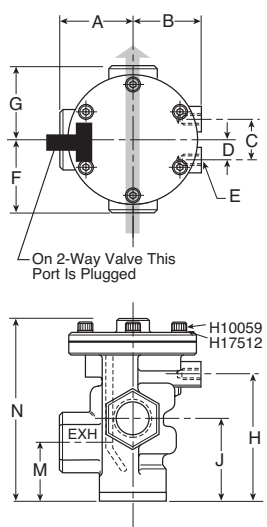
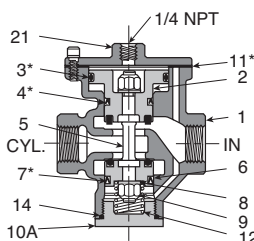
Dimensional Data - Remote Operated

Internal Return - 3/8", 3/4", 1-1/4" Basic Body

Normally Closed



Normally Open



Exhaust
Pressure

Top view indicates flow through 3-Way valve.

NOTE: For normal valve operation, override must be in “out” position.

Internal Return - 3/8", 3/4", 1-1/4"
Basic Body

Key	3/8" Body		3/4" Body		1-1/4" Body	
	Inch	mm	Inch	mm	Inch	mm
A	1.56	40	2.13	54	3.00	76
B	1.50	38	1.94	49	2.25	57
C	1.13	29	1.13	29	2.38	60
D	.56	14	.56	14	1.19	30
E	3/8–16UNC 7/16" deep		3/8– 16UNC 9/16" deep		1/2–13UNC 3/4" deep	
F	1.75	44	2.25	57	3.13	79
G	1.56	40	2.13	54	3.13	79
H	3.19	81	3.75	95	5.34	136
J	1.88	48	2.44	62	3.44	87
M	1.44	37	1.78	45	2.66	67
N	4.22	107	5.31	135	7.19	183
Q	2.31	59	3.09	78	4.56	116

Service Kits

Include all parts normally required for in-service maintenance:

3/8" Basic valve.....**K352073**

3/4" Basic valve.....**K352074**

1-1/4" Basic valve**K352075**

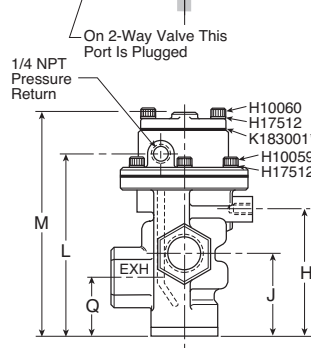
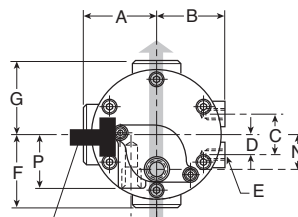
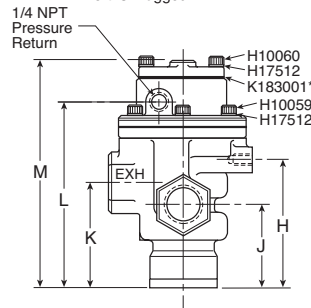
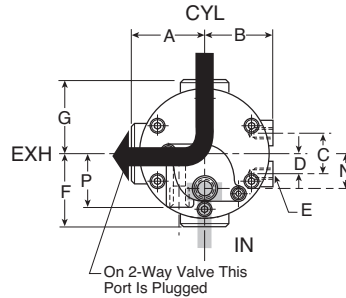
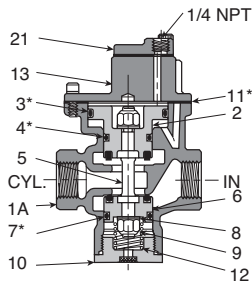
Key	3/8" Valve	3/4" Valve	1-1/4" Valve	Description
1	—	1/2" Tap K053075	1" Tap K053111	Body (N.O.)
	3/8" Tap K053022	3/4" Tap K053076	—	
	1/2" Tap K053023	1" Tap K053220	1-1/2" Tap K053113	
1A	—	1/2" Tap K053077	1" Tap K053114	Body (N.C.)
	3/8" Tap K053025	3/4" Tap K053078	—	
	1/2" Tap K053026	1" Tap K053218	1-1/2" Tap K053116	
2	K212001	K212002	K313029	Upper piston assy
3*	H13648	H13728	H13752	Seal
4*	H14510	H13676	H13728	Seal

Key	3/8" Valve	3/4" Valve	1-1/4" Valve	Description
5	K493002	K493009	K493016	Stem
6	K202001	K202002	K313028	Lower piston assy.
7*	H13499	H13676	H13728	Seal
8	H17811	H17813	H17817	Washer (2)
9	H06326	H06332	H06338	Stop nut (2)
10	K092020	K092034	K092046	Bottom cap (N.C.)
10A	K103035	K103053	K103061	Bottom cap (N.O.)
11*	K183049	K183057	K183058	Gasket
12	K473014	K473015	K473016	Spring
14*	K41RB72121	K41RB72221	K41RB72143	O-ring
21	K123018	K123021	K123024	Cover

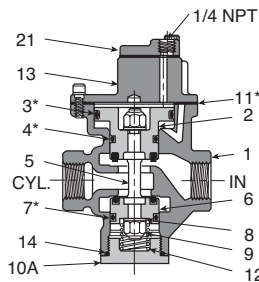
* Parts included in seal kit

External Return - 3/8", 3/4", 1-1/4" Basic Body

Normally Closed



Normally Open



Key	3/8" Valve	3/4" Valve	1-1/4" Valve	Description
1	1/4" Tap K053011	1/2" Tap K053067	1" Tap K053143	Body (N.O.)
	—	3/4" Tap K053069	—	
	1/2" Tap K053157	1" Tap K053221	1-1/2" Tap K053146	
1A	1/4" Tap K053010	1/2" Tap K053065	1" Tap K053159	Body (N.C.)
	—	3/4" Tap K053070	—	
	1/2" Tap K053064	1" Tap K053219	1-1/2" Tap K053145	
2	K212001	K212002	K313029	Upper piston assy
3*	H13648	H13728	H13752	Seal
4*	H13529	H13676	H13728	Seal

Key	3/8" Valve	3/4" Valve	1-1/4" Valve	Description
5	K493002	K493009	K493016	Stem
6	K202001	K202002	K313028	Lower piston assy.
7*	H13499	H13676	H13728	Seal
8	H17811	H17813	H17817	Washer (2)
9	H06326	H06332	H06338	Stop nut (2)
10	K092020	K092034	K092046	Bottom cap assy. (N.C.)
10A	K103035	K103053	K103061	Bottom cap (N.O.)
11*	K183049	K183057	K183058	Gasket
12	K473014	K473015	K473016	Spring
13	K563016	K563021	K563027	Adapter
14*	K41RB72121	K41RB72221	K41RB72143	O-ring
21	K323027	K323027	Not used	Cover

* Parts included in seal kit

Exhaust
Pressure

Top view indicates flow through 3-Way valve.

NOTE: For normal valve operation, override must be in "out" position.

Internal Return - 3/8", 3/4", 1-1/4" Basic Body

Key	3/8" Body	3/4" Body	1-1/4" Body
	Inch mm	Inch mm	Inch mm
A	1.56 40	2.13 54	3.00 76
B	1.50 38	1.94 49	2.25 57
C	1.13 29	1.13 29	2.38 60
D	.56 14	.56 14	1.19 30
E	3/8-16UNC 7/16" deep	3/8-16UNC 9/16" deep	1/2-13UNC 3/4" deep
F	1.75 44	2.25 57	3.13 79
G	1.56 40	2.13 54	3.13 79
H	3.19 81	3.75 95	5.34 136
J	1.88 48	2.44 62	3.44 87
K	2.31 59	3.09 78	4.56 116
L	4.34 110	5.38 137	7.31 186
M	5.31 135	6.34 161	7.88 200
N	Left of center .53 13 On center 1.00 25		
Q	1.44 37	1.78 45	2.31 59

Service Kits

Include all parts normally required for in-service maintenance:

3/4" Basic valve.....K352056
1-1/4" Basic valve K352083



For inventory, lead times, and kit lookup, visit www.pdnplu.com

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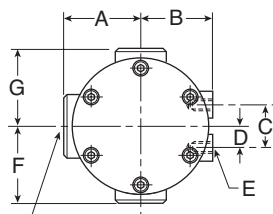
Parker Hannifin Corporation
Pneumatic Division
Richland, Michigan
www.parker.com/pneumatics

C

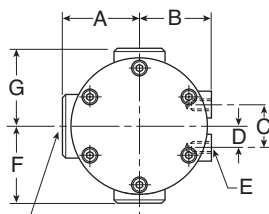
Inline Valves

Viking
LiteViking
ExtremeB3, B5, B6
SeriesB7, B8
SeriesAir Saver
Unit"N"
Series

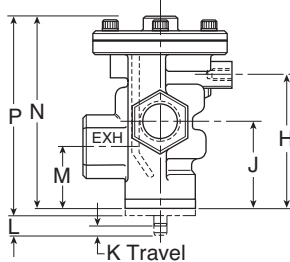
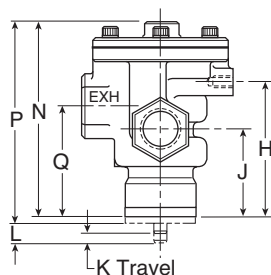
Internal Return - 3/8", 3/4" & 1-1/4" Basic Body



On 2-way valve this port is plugged

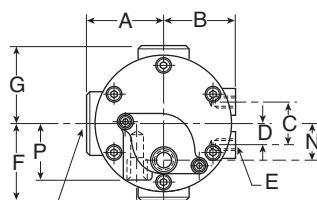


On 2-way valve this port is plugged

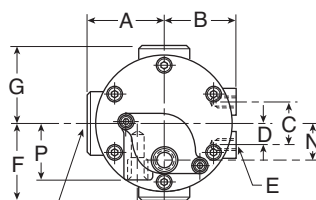
Internal Return -
3/8", 3/4" & 1-1/4" Basic Body

Key	3/8" Body		3/4" Body		1-1/4" Body	
	Inch	mm	Inch	mm	Inch	mm
A	1.56	40	2.13	54	3.00	76
B	1.50	38	1.94	49	2.25	57
C	1.13	29	1.13	29	2.38	60
D	.56	14	.56	14	1.19	30
E	3/8-16UNC 7/16" deep		3/8-16UNC 9/16" deep		1/2-13UNC 3/4" deep	
F	1.75	44	2.25	57	3.13	79
G	1.56	40	2.13	54	3.13	79
H	3.19	81	3.75	95	5.34	136
J	1.88	48	2.44	62	3.44	87
K	.50	13	.50	13	.50	13
L	.11	3	.16	4	.25	6
M	1.44	37	1.78	45	2.66	67
N	4.22	107	5.31	135	7.19	183
P	4.78	121	5.56	141	7.53	191
Q	2.31	59	3.09	78	4.56	116

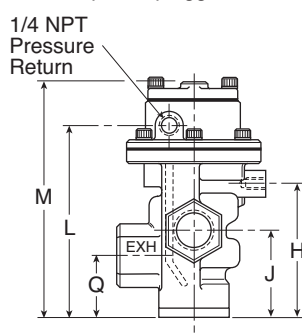
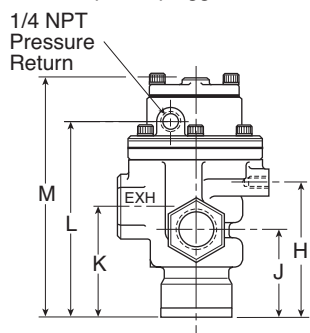
External Return - 3/8", 3/4" & 1-1/4" Basic Body



On 2-way valve this port is plugged



On 2-way valve this port is plugged

External Return -
3/8", 3/4" & 1-1/4" Basic Body

Key	3/8" Body		3/4" Body		1-1/4" Body	
	Inch	mm	Inch	mm	Inch	mm
A	1.56	40	2.13	54	3.00	76
B	1.50	38	1.94	49	2.25	57
C	1.13	29	1.13	29	2.38	60
D	.56	14	.56	14	1.19	30
E	3/8-16UNC 7/16" deep		3/8-16UNC 9/16" deep		1/2-13UNC 3/4" deep	
F	1.75	44	2.25	57	3.13	79
G	1.56	40	2.13	54	3.13	79
H	3.19	81	3.75	95	5.34	136
J	1.88	48	2.44	62	3.44	87
K	2.31	59	3.09	78	4.56	116
L	4.34	110	5.38	137	7.31	186
M	5.31	135	6.34	161	7.88	200
N	Left of center .53 13		On center 1.00 25			
Q	1.44	37	1.78	45	2.31	59

C
Inline Valves
Viking Lite
Viking Extreme
B3, B5, B6 Series
B7, B8 Series
Air Saver Unit
"N" Series



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