

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 sealings	Nitrile rubber
End cover screws	Zinc plated steel
Springs	Stainless steel
Mounting screws for solenoid	Stainless steel
Spool seals	Nitrile

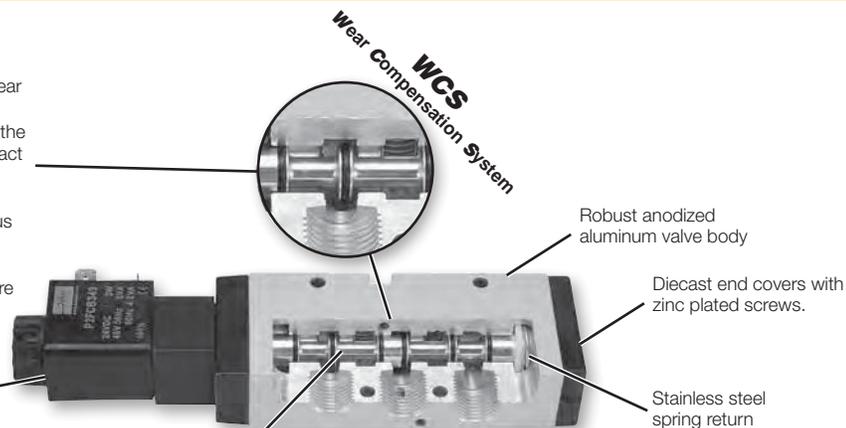
Features

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)
Double solenoid - 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)

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.

Viking Lite Series

Viking Xtreme Series

B Series

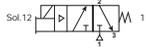
ADEX Series

N Series

D

Inline Valve Products

3/2 - 2 Position Single Solenoid



P2LAZ Shown

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

Viking Lite Series

3/2 - 2 Position Double Solenoid



P2LAZ Shown

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

Viking Xtreme Series

5/2 - 2 Position Single Solenoid



P2LAZ Shown

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

B Series

ADEX Series

5/2 - 2 Position Double Solenoid



P2LAZ Shown

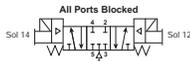
Port size	Cv	Response time (msec)	Weight lb (kg)	Voltage	Part number (NPT)	Part number (BSPP)
1/8	0.6	10 / 10	.042 (0.19)	24VDC	P2LAZ591EENDBB49	P2LAZ511EENDBB49
				120VAC	P2LAZ591EENDBB53	P2LAZ511EENDBB53
1/4	1.5	12 / 12	0.46 (0.21)	24VDC	P2LBZ592EENDBB49	P2LBZ512EENDBB49
				120VAC	P2LBZ592EENDBB53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

N Series

D

Inline Valve Products

5/3 - 3 Position, All Ports Blocked



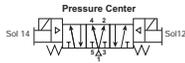
P2LAZ Shown

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	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

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)



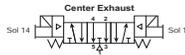
5/3 - 3 Position, Pressure Center



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	P2LCZ793EENDCB53	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)

Single & Double Solenoid Operated Valves

P2L A Z 5 91 E S N D C B 49

Valve size

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

Series

Viking Lite	Z
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Valve type / function

<i>Internal pilot supply to solenoid</i>	
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

E	Double solenoid operated valve
S*	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
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Valve type

N	14°F to 122°F (-10°C to 50°C)
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* Not available with 3-position valves.

Most popular.



Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D
 Inline Valve Products

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)	Manifold only (BSPP)
P2LCZ	4-way	Use Viking Xtreme IEM bar manifold		

Note: P2LCZ 3-way has no IEM manifold

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.

Valve Less Coil

Remove the last 3 digits of the part number of the full valve and add “N” at the end for valve less coil.



Part number example :

P2LBZ592ESNDBBB49
valve with 24VDC solenoid

P2LBZ592ESNDBN valve less coil

Replacement Solenoid Coil



Description
24VDC coil kit
110VAC coil kit

Part number
P2FCB449
P2FCB453

Replacement Solenoid Nut

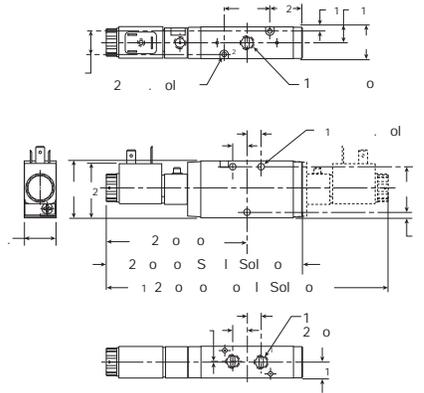


Description
Solenoid diffuser nut
PS1556



Description
Solenoid vented nut
PS2892P

P2LAZ 3/2 Single & Double Operators – Solenoid

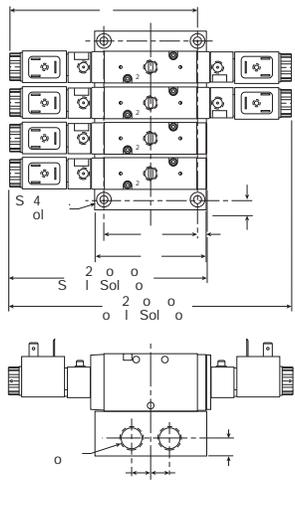


P2LAZ 3/2 (solenoid)

A	A ₁	B	C	C ₁
5.35 (136)	7.68 (195)	1.57 (40)	1.26 (32)	.16 (4)
D	E	E ₂	E ₃	H
3.84 (97.5)	.39 (10)	.91 (23)	1.26 (32)	.87 (22)
H ₁	J	J ₁	K ₂	M
.43 (11)	.65 (16.5)	.11 (2.75)	1.50 (38)	.39 (10)
N	N ₁	P	P ₁	
.02 (.5)	.43 (11)	∅ .12 (3.1)	∅ .17 (4.3)	

Inches (mm)

P2LAZ 3/2 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)

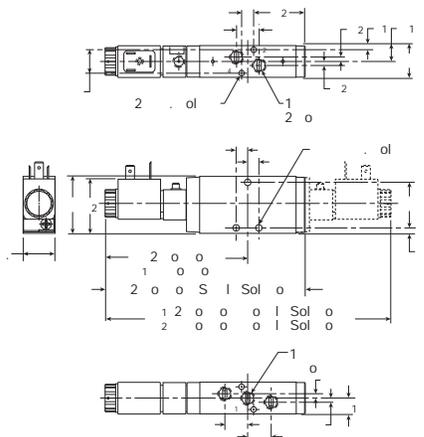
Manifold bolt	Torque value
M3x40 SHCS	4 in.lb (0.45 Nm)

**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)	∅ .22 (5.5)	.88 (7)

Inches (mm)

P2LAZ 5/2 & 5/3 Single & Double Operators – Solenoid

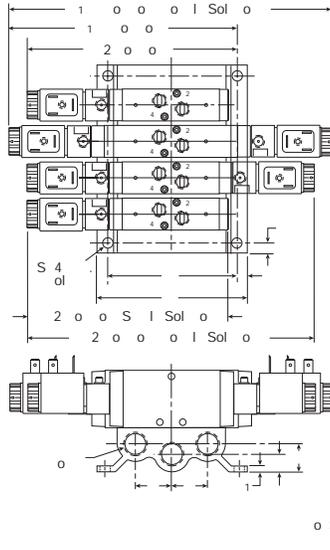


P2LAZ 5/2 & 5/3 (solenoid)

A	A ₁	A ₂	B	C
5.47 (139)	7.76 (197)	8.70 (221)	1.57 (40)	1.30 (33)
C ₁	D	D ₁	E	E ₂
.14 (3.5)	3.88 (98.5)	4.35 (110.5)	.31 (8)	1.86 (47.3)
E ₃	F	H	H ₁	H ₂
.33 (8.5)	.63 (16)	.87 (22)	.43 (11)	.12 (3)
J	J ₁	K ₂	M	N
.63 (16)	.12 (3)	1.50 (38)	.63 (16)	.12 (3)
N ₁	P			
.43 (11)	∅ .16 (4.1)			

Inches (mm)

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

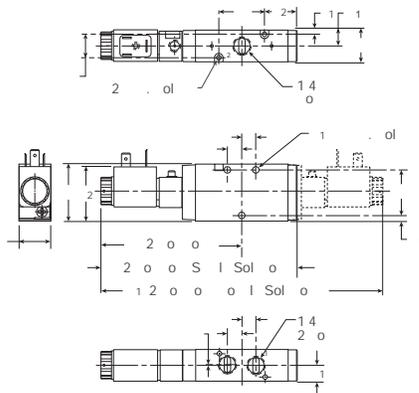


Number of valves	X
2	3.07 (78)
4	4.96 (126)
6	6.85 (174)
8	8.74 (222)
10	10.63 (270)
Inches (mm)	
Manifold bolt	Torque value
M4x45 Screw MRX	9 in.lb (0.75 Nm)

**P2LAZ 5/2 & 5/3
 IEM Aluminum bar manifold**

B	B ₁	C	D	F
5.10 (149.5)	6.36 (161.5)	3.46 (88)	4.02 (102)	.28 (7)
G	H	H ₁	J	K
5.47 (139)	7.76 (197)	8.70 (221)	.96 (24.5)	2.76 (70)
L	M	N	N ₁	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)				

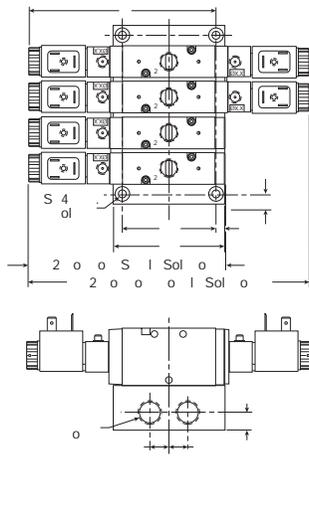
P2LBZ 3/2 Single & Double Operators – Solenoid



P2LBZ 3/2 (solenoid)

A	A ₁	B	C	C ₁
5.35 (136)	7.68 (195)	1.57 (40)	1.26 (32)	.16 (4)
D	E	E ₂	E ₃	H
3.84 (97.5)	.39 (10)	.91 (23)	1.26 (32)	.87 (22)
H ₁	J	J ₁	K ₂	M
.43 (11)	.65 (16.5)	.11 (2.75)	1.50 (38)	.39 (10)
N	N ₁	P	P ₁	
.02 (.5)	.43 (11)	Ø .12 Ø (3.1)	Ø .17 Ø (4.3)	
Inches (mm)				

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

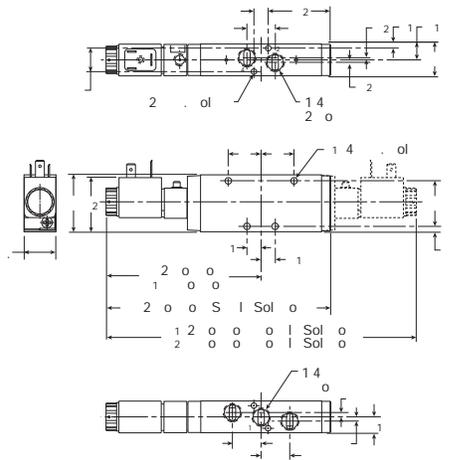


Number of valves	X
2	2.91 (74)
4	4.80 (122)
6	6.69 (170)
8	8.58 (218)
10	10.47 (266)
Inches (mm)	
Manifold bolt	Torque value
M3x40 SCHS	4 in.lb (0.45 Nm)

**P2LBZ 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)				

P2LBZ 5/2 & 5/3 Single & Double Operators – Solenoid

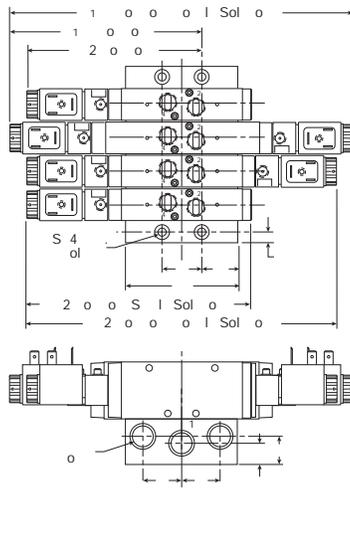


P2LBZ 5/2 & 5/3 (solenoid)

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

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)

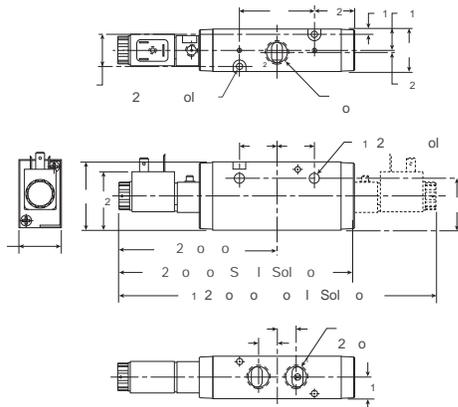
Manifold bolt	Torque value
M3x40 SCHS	9 in.lb (0.75 Nm)

**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)	1.57 (40)
R	S	T		
1.97 (50)	Ø .22 (5.5)	.97 (25)		

Inches (mm)

P2LCZ 3/2 Single & Double Operators – Solenoid

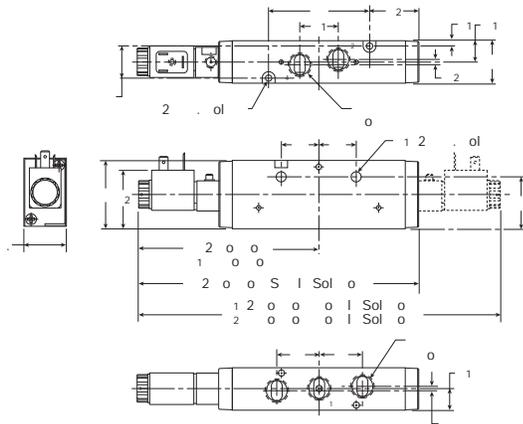


P2LCZ 3/2 (solenoid)

A	A1	B	C	D
6.50 (165)	8.66 (220)	1.89 (48)	1.46 (37)	4.33 (110)
E	E2	E3	H	H1
1.04 (26.5)	1.10 (28)	2.09 (53)	1.18 (30)	.59 (15)
H2	J	J1	K2	M
.06 (1.55)	.91 (23)	.14 (3.5)	1.50 (38)	.53 (13.5)
N1	P	P1		
.59 (15)	Ø .17 (4.4)	Ø .27 (6.9)		

Inches (mm)

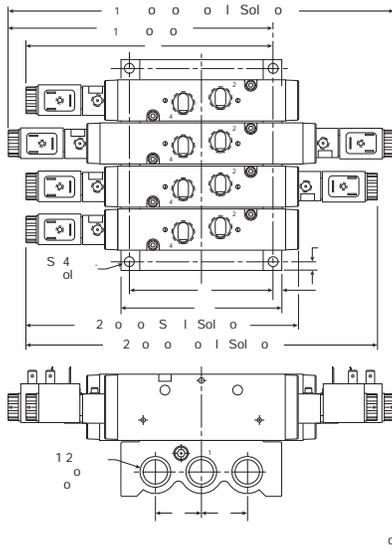
P2LCZ 5/2 & 5/3 Single & Double Operators – Solenoid



P2LBZ 5/2 & 5/3 (solenoid)

A	A1	A2	B	C
7.68 (195)	9.88 (251)	10.70 (272)	1.89 (48)	1.46 (37)
D	D1	E	E1	E2
4.94 (125.5)	5.35 (136)	1.04 (26.5)	1.06 (27)	1.71 (43.5)
E3	H	H1	H2	J
2.80 (71)	1.18 (30)	.59 (15)	.12 (.3)	.91 (23)
J1	K2	M	N	N1
.14 (3.5)	1.50 (38)	1.18 (30)	.08 (2)	.59 (15)
P	P1			
Ø .17 Ø (4.4)	Ø .27 Ø (6.9)			
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)					

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
D
 Inline Valve Products

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

2.5 watts to 7.3 watts

- Conduit
- Grommet
- 22mm & 30mm 3-pin (DIN 43650)

- 12VDC to 240VAC

Certification / approval

- IP65 Rated, RoHS, CE
- 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

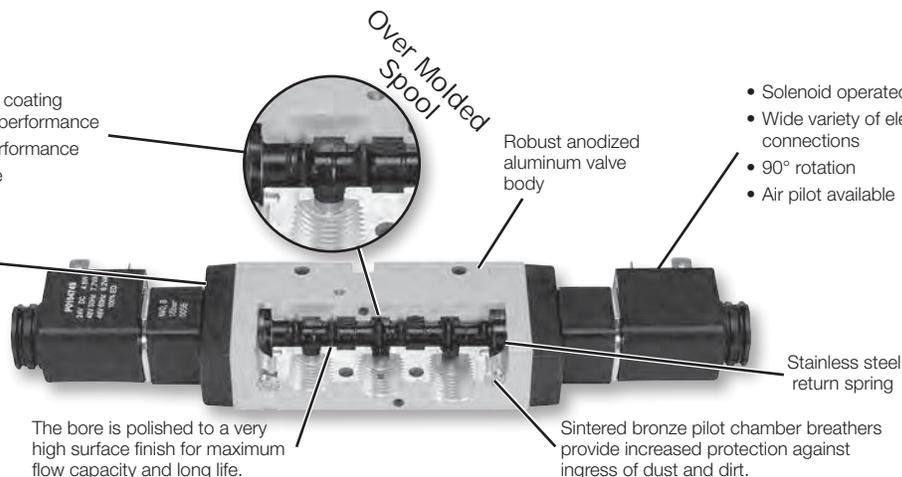
Body	Anodized aluminum
End caps	Anodized aluminum
Coils	Thermoplastic
Fasteners	Stainless steel
Spool	Aluminum and nitrile rubber
Springs	Stainless steel

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.



- Solenoid operated, IP65, RoHS, CE
- Wide variety of electrical connections
- 90° rotation
- Air pilot available



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

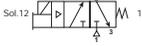
Operating temperature:

- Normal: 14°F to 122°F (-10°C to 50°C)
- Xtreme: -40°F to 140°F (-40°C to 60°C)

Minimum operating pressure, PSIG (bar)

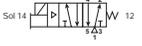
Valve type - Internal pilot	P2LAX	P2LBX	P2LCX	P2LDX
Single solenoid - spring return	46 (3.2)	51 (3.5)	51 (3.5)	51 (3.5)
Single remote pilot - spring return	46 (3.2)	51 (3.5)	51 (3.5)	51 (3.5)
Double solenoid - 2-position	22 (1.5)	22 (1.5)	22 (1.5)	22 (1.5)
Double remote pilot - 2-position	22 (1.5)	22 (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

Solenoid	Port size (NPT)	Cv	Valve type	Response time (msec)	Weight lb (kg)	Voltage	Part number	
  22mm DIN P2LAX 22mm DIN Shown	1/8"	0.7	P2LAX	18 / 40	0.84 (0.38)	24VDC 120VAC	P2LAX391ESNDDDB49 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)	1.72 (0.78)	24VDC	P2LCX393ESNDDDB49
							120VAC	P2LCX393ESNDDDB53
	1/2"	2.7	P2LDX	25 / 75	1.72 (0.78)	1.72 (0.78)	24VDC	P2LDX394ESNDDDB49
120VAC							P2LDX394ESNDDDB53	
 18" Grommet P2LAX 18" Grommet Shown	1/8"	0.7	P2LAX	18 / 40	0.84 (0.38)	24VDC 120VAC	P2LAX391ESNDDDG49 P2LAX391ESNDDDG53	
	1/4"	1.3	P2LBX	18 / 45	0.84 (0.38)	24VDC	P2LBX392ESNDDDG49	
						120VAC	P2LBX392ESNDDDG53	
	3/8"	2.5	P2LCX	25 / 75	1.72 (0.78)	1.72 (0.78)	24VDC	P2LCX393ESNDDDG49
							120VAC	P2LCX393ESNDDDG53
	1/2"	2.7	P2LDX	25 / 75	1.72 (0.78)	1.72 (0.78)	24VDC	P2LDX394ESNDDDG49
120VAC							P2LDX394ESNDDDG53	

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).

Single Solenoid, 4-way, 2-position, Normal Operating Pressure / Temperature

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	15 / 35	0.49 (0.22)	24VDC 120VAC	P2LAX591ESNDDDB49 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)	1.68 (0.76)	24VDC	P2LCX593ESNDDDB49
							120VAC	P2LCX593ESNDDDB53
	1/2"	2.7	P2LDX	25 / 75	1.68 (0.76)	1.68 (0.76)	24VDC	P2LDX594ESNDDDB49
120VAC							P2LDX594ESNDDDB53	
 18" Grommet P2LAX 18" Grommet Shown	1/8"	0.7	P2LAX	15 / 35	0.49 (0.22)	24VDC 120VAC	P2LAX591ESNDDDG49 P2LAX591ESNDDDG53	
	1/4"	1.3	P2LBX	18 / 45	0.84 (0.38)	24VDC	P2LBX592ESNDDDG49	
						120VAC	P2LBX592ESNDDDG53	
	3/8"	2.5	P2LCX	27 / 75	1.68 (0.76)	1.68 (0.76)	24VDC	P2LCX593ESNDDDG49
							120VAC	P2LCX593ESNDDDG53
	1/2"	2.7	P2LDX	25 / 75	1.68 (0.76)	1.68 (0.76)	24VDC	P2LDX594ESNDDDG49
120VAC							P2LDX594ESNDDDG53	

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.

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products

Double Solenoid, 4-way, 2-position, Normal Operating Pressure / Temperature

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	P2LAX591EENDDDB49 P2LAX591EENDDDB53
	1/4"	1.3	P2LBX	12 / 12	0.93 (0.42)	24VDC 120VAC	P2LBX592EENDDDB49 P2LBX592EENDDDB53
	3/8"	2.5	P2LCX	17 / 17	1.78 (0.81)	24VDC 120VAC	P2LCX593EENDDDB49 P2LCX593EENDDDB53
	1/2"	2.7	P2LDX	17 / 17	1.78 (0.81)	24VDC 120VAC	P2LDX594EENDDDB49 P2LDX594EENDDDB53
	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
 18" Grommet P2LAX 18" Grommet Shown	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

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).

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

Solenoid	Port size (NPT)	Cv	Valve type	Response time (msec)	Weight lb (kg)	Voltage	Part number	
							All ports blocked	Center exhaust
 22mm DIN P2LBX 22mm DIN Shown	1/8"	0.5	P2LAX	18 / 40	0.62 (0.28)	24VDC 120VAC	P2LAX691EENDDDB49 P2LAX691EENDDDB53	P2LAX891EENDDDB49 P2LAX891EENDDDB53
	1/4"	0.9	P2LBX	22 / 55	0.97 (0.44)	24VDC 120VAC	P2LBX692EENDDDB49 P2LBX692EENDDDB53	P2LBX892EENDDDB49 P2LBX892EENDDDB53
	3/8"	1.8	P2LCX	30 / 90	2.45 (1.11)	24VDC 120VAC	P2LCX693EENDDDB49 P2LCX693EENDDDB53	P2LCX893EENDDDB49 P2LCX893EENDDDB53
	1/2"	1.9	P2LDX	30 / 90	2.45 (1.11)	24VDC 120VAC	P2LDX694EENDDDB49 P2LDX694EENDDDB53	P2LDX894EENDDDB49 P2LDX894EENDDDB53
 18" Grommet P2LBX 18" Grommet Shown	1/8"	0.5	P2LAX	18 / 40	0.62 (0.28)	24VDC 120VAC	P2LAX691EENDDG49 P2LAX691EENDDG53	P2LAX891EENDDG49 P2LAX891EENDDG53
	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

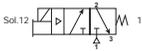
Notes: Above valves are rated for an operating temperature from 14°F to 122°F (-10°C to 50°C). See model code matrix for additional options.
 Response time: Actuate to 90% pressure / return to exhaust to 10% of supply pressure. 93 PSIG (6.3 bar) / temperature 68°F (20°C).

Most popular.



Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D
 Inline Valve Products

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

Solenoid	Port size (NPT)	Cv	Valve type	Response time (msec)	Weight lb (kg)	Voltage	Part number
  22mm DIN P2LAX 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	
  18" Grommet P2LAX 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 Rate Coils and are rated for an operating temperature from -40°F to 140°F (-40°C to 60°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

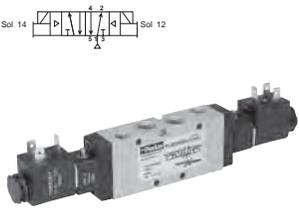
Solenoid	Port size (NPT)	Cv	Valve type	Response time (msec)	Weight lb (kg)	Voltage	Part number
  22mm DIN P2LAX 22mm DIN Shown	1/8"	0.7	P2LAX	15 / 45	0.84 (0.38)	12VDC	P2LAX591ESHDDDB47
						24VDC	P2LAX591ESHDDDB48
	1/4"	1.3	P2LBX	20 / 55	0.84 (0.38)	12VDC	P2LBX592ESHDDDB47
						24VDC	P2LBX592ESHDDDB48
	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	
  18" Grommet 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 Rate Coils and are rated for an operating temperature from -40°F to 140°F (-40°C to 60°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.

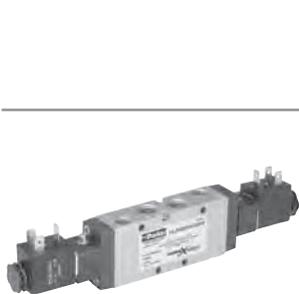


Double Solenoid, 4-way, 2-position, Xtreme Operating Pressure / Temperature

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	P2LAX591EEHddb47 P2LAX591EEHddb48
	1/4"	1.3	P2LBX	13 / 13	0.93 (0.42)	12VDC 24VDC	P2LBX592EEHddb47 P2LBX592EEHddb48
	3/8"	2.5	P2LCX	18 / 18	1.06 (0.48)	12VDC 24VDC	P2LCX593EEHddb47 P2LCX593EEHddb48
	1/2"	2.7	P2LDX	18 / 18	1.06 (0.48)	12VDC 24VDC	P2LDX594EEHddb47 P2LDX594EEHddb48
 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 Rate Coils and are rated for an operating temperature from -40°F to 140°F (-40°C to 60°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

Solenoid	Port size	Cv	Valve type (NPT)	Response time (msec)	Weight lb (kg)	Voltage	Part number	
							All ports blocked	Center exhaust
 22mm DIN P2LBX 22mm DIN Shown	1/8"	0.5	P2LAX	18 / 40	0.62 (0.28)	12VDC 24VDC	P2LAX691EEHddb47 P2LAX691EEHddb48	P2LAX891EEHddb47 P2LAX891EEHddb48
	1/4"	0.9	P2LBX	22 / 55	0.97 (0.44)	12VDC 24VDC	P2LBX692EEHddb47 P2LBX692EEHddb48	P2LBX892EEHddb47 P2LBX892EEHddb48
	3/8"	1.8	P2LCX	30 / 90	2.45 (1.11)	12VDC 24VDC	P2LCX693EEHddb47 P2LCX693EEHddb48	P2LCX893EEHddb47 P2LCX893EEHddb48
	1/2"	1.9	P2LDX	30 / 90	2.45 (1.11)	12VDC 24VDC	P2LDX694EEHddb47 P2LDX694EEHddb48	P2LDX894EEHddb47 P2LDX894EEHddb48
 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 Rate Coils and are rated for an operating temperature from -40°F to 140°F (-40°C to 60°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.



Viking Lite Series

Viking Xtreme Series

B Series

ADEX Series

N Series

D

Inline Valve Products

Single & Double Solenoid Operated Valves

P2L A X 5 91 E S H D D G 49

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

Series	
Viking Xtreme	X

Voltage / frequency	
42	24VAC
45	12VDC
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". Additional voltages are available upon request. Contact customer support for more information.

Enclosures / lead length	
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, FM / CSA
G	Grommet - 18" leads
H	1/2" NPT conduit - 18" leads
N	Solenoid pilot operator less coil

* Only available with voltage code "49" & override option "A", valve type "N" Only.

† Valve Type "N" Only.

Valve type / function		
<i>Internal pilot supply to solenoid*</i>		
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
<i>External pilot supply to the solenoids through ports #12 & #14</i>		
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 D31 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.

Overrides	
A	No override
C*	Flush - locking
D	Extended non-locking

* Override for valve type N only.

Solenoid pilot type	
D	Pilot exhaust vented
N	Tapped pilot exhaust (M5)

Valve type	
N	Normal vacuum to 145 PSIG (16 bar) 14°F to 122°F (-10°C to 50°C)
H*	Xtreme vacuum to 232 PSIG (10 bar) 14°F to 122°F (-10°C to 50°C)

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

12 End operator	
Double solenoid operated valve	E
Single solenoid spring return	S*

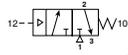
* Not available with 3-position valves.

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products

Most popular.



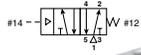
Single Remote Pilot, 3-way, 2-position, Xtreme Operating Pressure / Temperature



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

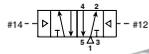
Single Remote Pilot, 4-way, 2-position, Xtreme Operating Pressure / Temperature



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 140°F (-40°C to 60°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).

Remote Air Pilot Operated Valves

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).

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

Note: NAMUR Mount for P2LBX is available upon request.

Valve type / function	
<i>Internal pilot supply to solenoid</i>	
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

Most popular.



Viking Lite Series

Viking Xtreme Series

B Series

ADEX Series

N Series

D

Inline Valve Products

ATEX Certified Single & Double Solenoid Operated Valves

Vacuum to 145 PSIG (vacuum to 10 bar)
 14°F to 122°F 22mm coils (enclosure option M)
 -4°F to 122°F 30mm coils (enclosure option S)

P2L A X 5 91 E S A D D M 49

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

Voltage	
49	24VDC

Enclosures	
M	ATEX 8-22T EExm T4 135°C
S	ATEX 8-30T EExm T6 85°C

Overrides	
D	Extended non-locking

Solenoid pilot type	
D	Vented pilot exhaust
N	Tapped pilot exhaust (M5)

12 end operator	
E	Double solenoid operated valve
S	Single solenoid spring return

Valve type / function	
<i>Internal Pilot Supply to Solenoid</i>	
2-position valve	5
3-position valve APB	6
3-position valve PC	7
3-position valve CE	8
<i>External Pilot Supply to Solenoids through Ports #12 & #14</i>	
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: For ATEX certified remote air pilot valves, build the valve part number from the model number index for remote pilot and add "-EX" following the number.

Example: P2LAX591PS-EX

Note: all valves include a 3 meter sealed cable with assembly.



ATEX Certified Solenoid Pilot Assemblies

P2F S 1 3 A 3 D M 49

Voltage	
49	24VDC

Enclosures	
M	ATEX 8-22T EExm T4 135°C
S	ATEX 8-30T EExm T6 85°C

Note: all valves include a 3 meter sealed cable with assembly.

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	P2LAXMAXG##NP	P2LAXMAXG##GP
P2LAX*	4-way	02 - 12	P2LAXMAXN##NP	P2LAXMAXN##GP
P2LBX*	3-way	02 - 12	P2LBXMAXG##NP	P2LBXMAXG##GP
P2LBX*	4-way	02 - 12	P2LBXMAXN##NP	P2LBXMAXN##GP
P2LCX	3-way / 4-way	02 - 12	P2LCXMAXN##NP	P2LCXMAXN##GP

Kits include: (1) manifold, valve hold down bolts and o-rings. Replace ## with number of valve stations.
 * 30mm solenoid coil option "A" not available on IEM bar manifold P2LAX or P2LBX.

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



Valve series	Valve function	## -Stations	Manifold only (NPT)	Manifold only (BSPP)
P2LAX*	3-way	02 - 12	AAP2LAXMAXG##NP	AAP2LAXMAXG##GP
P2LAX*	4-way	02 - 12	AAP2LAXMAXN##NP	AAP2LAXMAXN##GP
P2LBX*	3-way	02 - 12	AAP2LBXMAXG##NP	AAP2LBXMAXG##GP
P2LBX*	4-way	02 - 12	AAP2LBXMAXN##NP	AAP2LBXMAXN##GP
P2LCX	3-way / 4-way	02 - 12	AAP2LCXMAXN##NP	AAP2LCXMAXN##GP

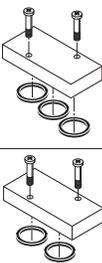
Kits include: (1) manifold, valve hold down bolts, o-rings and assembly. Replace ## with number of valve stations.
 * 30mm solenoid coil option "A" not available on IEM bar manifold P2LAX or P2LBX.

- 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: B3, 4-way manifold with station #1 blanked off with valves assembled

Line	Qty	Part number	Comment
1	1	AAP2LBXMAXN02NP	Add-A-Fold Assembly, 2-station IEM bar manifold
2	2	P2LBX591ESNNDDDB49	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

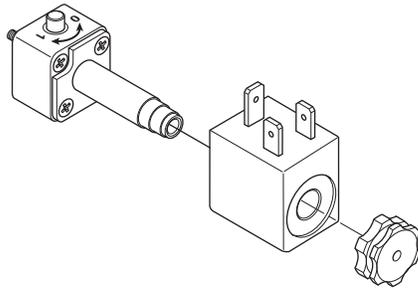
Type	Qty.	Kit number
P2LAX	12	P2LAXK87P
P2LBX	12	P2LBXK87P
P2LCX	12	P2LCXK87P

Manifold O-rings

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

Most popular.

22mm Solenoid Pilot Operators & Coils



22mm solenoid pilot options

The P2FP13*4* (NC) 3/2 solenoid pilot operators are designed for piloting pneumatic control valves with compressed air or other inert gases.

The P2FP operator is available for Normal operating pressures up to 10 bar or the Xtreme maximum operating pressure of 16 bar and wide band voltage tolerances required for mobile applications.

Corrosion resistant design

The pilot valve body is manufactured in thermoplastic PA6 material and the core tube brass / stainless steel. The plunger / core is made from stainless steel and the valve seats from FKM.

Solenoid pilot exhaust

These operators all exhaust out of the top of the core tube which is tapped M5. The standard solenoid nut (Solenoid pilot type "D") fitted to the core tube is a diffuser nut which allows the exhaust to escape to atmosphere. This nut also minimizes ingress of dirt into the valve through this port. The alternative plastic knurled nut (Solenoid pilot type "N") can be specified (refer to part number system) if the exhaust air needs captured and piped away using the M5 tapped port.

Mobile applications

Viking Xtreme valves are tested to +5g shock and vibration. Solenoid operated valves are designed to operate with wide voltage tolerance bands within the ambient temperature ranges stated in the technical section.

Coils

Coils are wound with enameled copper wire, having a temperature index of 180°C with class F insulation (155°C) and are encapsulated in Thermoplastic resin. When fitted with suitable connector and correct gasket, they give protection to IP65.

Manual override options

The pilot operators can be supplied with locking or non-locking manual override. The standard manual override is the monostable (spring return) extended brass override. Alternatively the bistable (locking) override can be specified as an alternative for the Normal duty 10 bar option.

Spares

Solenoid operators are available as spares complete with mounting screws and seals. Coils and connectors should be ordered separately unless ATEX certified and intrinsically safe is needed. ATEX certified operators and coils must be ordered together.

Transients

Interrupting the current through the solenoid coil produces momentary voltage peaks which, under unfavorable conditions, can amount to several hundred times the rated operating voltage. Normally, these transients do not cause problems, but to achieve the maximum life of relays in the circuit (and particularly of transistors, thyristors and integrated circuits) it is desirable to provide protection by means of voltage-dependent resistors (varistors). All connectors / cable plugs with LEDs include this type of circuit protection.

Materials

Pilot Valve

Body	Polyamide
Armature tube:	
Normal pilot operator	Brass
Xtreme pilot operator	Stainless steel
Plunger & core.....	Corrosion resistant CR-NI steel
Seals	FKM (viton™)
Screws.....	Stainless steel

Coil

Encapsulation material.....	Thermoplastic
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ATEX

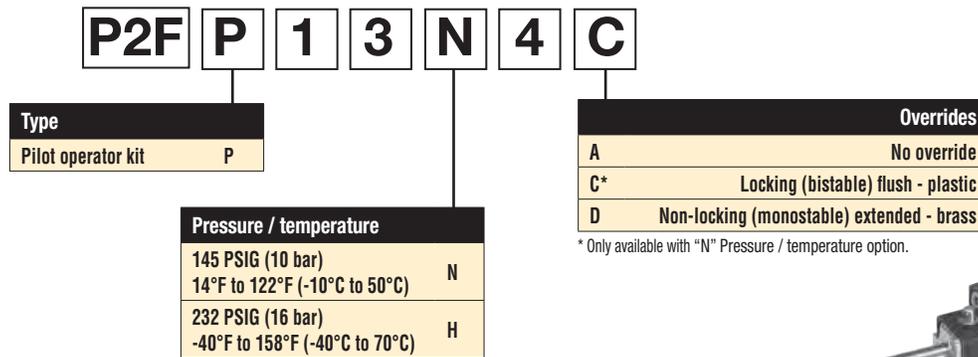


ATEX is a European Directive (94/9/EC) valid for products to be used within an explosive atmosphere.

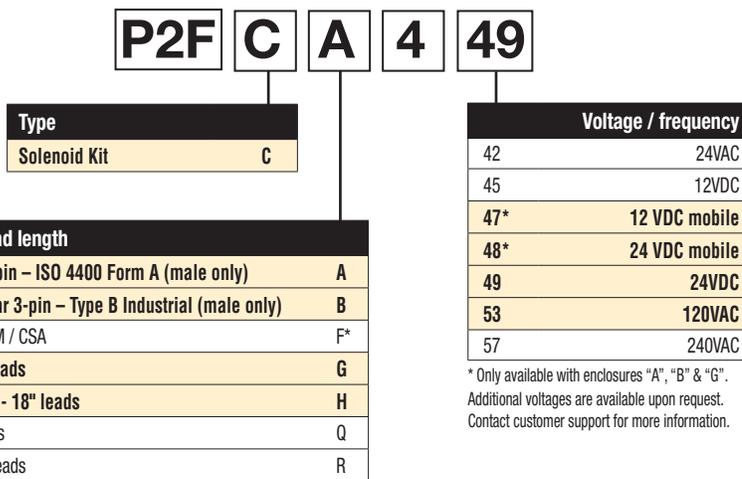
Both ATEX certified solenoid, remote pilot and manual operated valves, as well as complete solenoid pilot assemblies are available. For specific information regarding ATEX certification please visit www.parker/pneumatics.

Viking Lite Series
Viking Xtreme Series
B Series
ADEX Series
N Series
D Inline Valve Products

Pilot Operator Kits



Solenoid Kits



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

Solenoid Enclosures



Solenoid Information (Solenoids are rated for continuous duty.)

Voltage Code	Enclosure "A"			Enclosure "B" to "R"			
	AC 60Hz	DC 50Hz	DC	Power consumption	Holding (amps)	Power consumption	Holding (amps)
42	24	22		3.9VA	.14	7.3VA	.31
45	—	—	12	2.6W	.21	4.6W	.37
47*	—	—	12	6.2W	.52	5.5W	.46
48*	—	—	24	6.8W	.29	6.0W	.25
49	—	—	24	2.7W	.11	4.8W	.20
53	120	110	—	4.1VA	.04	6.3VA	.05
57	240	230	—	3.7VA	.02	6.4VA	.03

* Mobile voltages. Solenoid voltage characteristics for all coils located on page D31.

Replacement Solenoid Nut

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

Most popular.



Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D
 Inline Valve Products

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

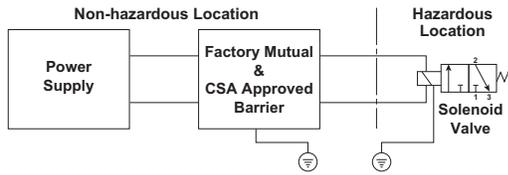
For use in low voltage (24VDC) Intrinsically Safe applications. **NO OTHER VOLTAGE IS APPROVED.**

Comes standard with non-lighted solenoid connector.

36mm Coil width.

Must be connected to an FM approved Barrier.

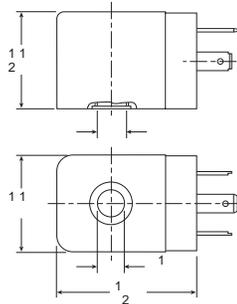
For dimensions, reference standard solenoid models. Maximum internally piloted valve pressure is 115 PSIG. Pressures to 145 PSIG can be used when external pilot is utilized and pilot pressure is limited to 115 PSIG.



Intrinsically safe solenoid pilot assembly kits

Description	Part number
24VDC	P2FS13N1AE49

Kit includes: coil, 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.

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:

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

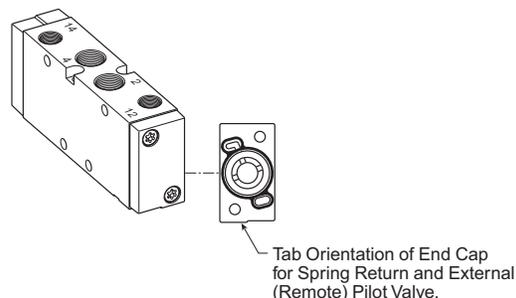
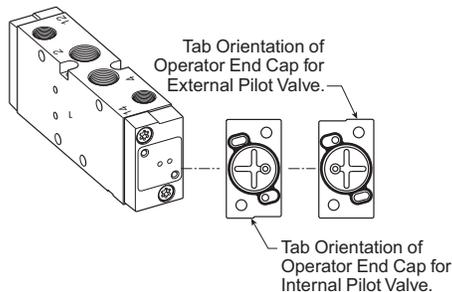


**Option F
Hazardous Duty FM / CSA**

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.



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 Valve Type.....145 PSIG (10 bar)
Xtreme Valve Type.....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)

Solenoid voltage characteristics

Non-mobile coils

+10% / -10% for all coils with Normal and Xtreme Operators

Mobile coils - normal pilot operator

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

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

Operating temperature			
Minimum inlet pressure (bar)	-10°C	+10°C	+50°C
	3	+30 / -30% VDC	+30 / -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 - Xtreme pilot operator

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

Operating temperature				
Minimum inlet pressure (bar)	-40°C	+10°C	+50°C	+70°C
	4	+30 / -25% VDC	+30 / -25% VDC	+30 / -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)

Operating temperature				
Minimum inlet pressure (bar)	-40°C	+10°C	+50°C	+70°C
	4	+30 / -30% VDC	+30 / -30% VDC	+25 / -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.

Viking Lite Series

Viking Xtreme Series

B Series

ADEX Series

N Series

D Inline Valve Products

Female Electrical Connectors / Accessories

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

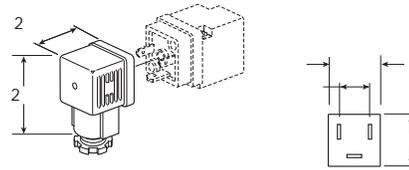
Description	Connector with 6' (2m) cord	Connector
Unlighted	PS2028JCP	PS2028BP
Light – 6-48V, 50/60Hz, 6-48VDC	PS2032J79CP*	PS203279BP
Light – 120V/60Hz	PS2032J83CP*	PS203283BP
Light – 240V/60Hz	N/A	PS203283BP

* 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.



Viking Lite Series

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

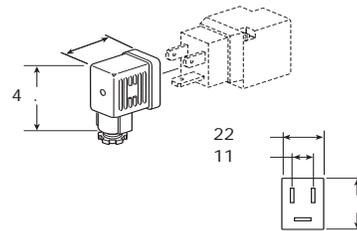
Description	Connector with 6' (2m) cord	Connector
Unlighted	PS2429JBP	PS2429BP
Light – 24V60Hz, 24VDC	PS2430J79BP*	PS243079BP
Light – 120V/60Hz	PS2430J83BP*	PS243083BP
Light – 240V/60Hz	N/A	PS243087BP

* 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.



Viking Xtreme Series

B Series

ADEX Series

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



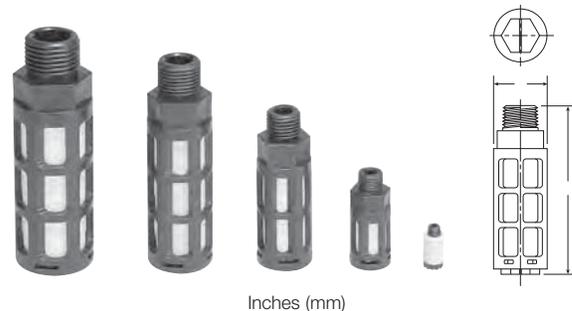
N Series

D

Inline Valve Products

Plastic Silencers

Thread size	A (mm)	B (mm)	Part number	
			NPT	BSPT
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



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

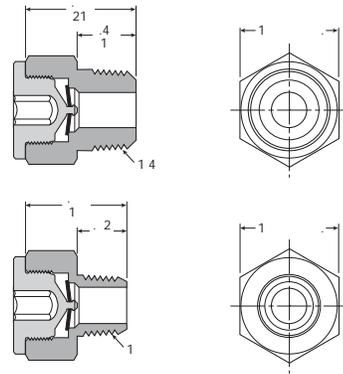
These protectors are intended for mobile applications, quick venting applications and alternative exhaust port breathers that require protection against clogging.

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.

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



Operating information

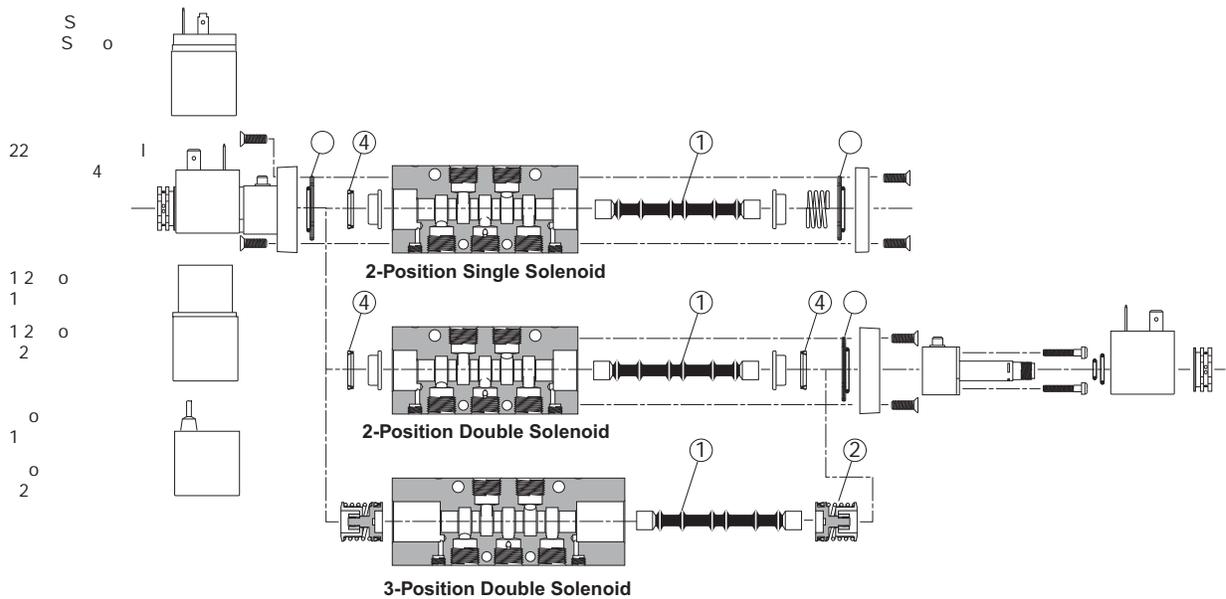
Operating pressure:	0 to 150 PSIG (0 to 10 bar)
Operating temperature:	-40°F to 140°F (-40°C to 60°C)

Material specifications

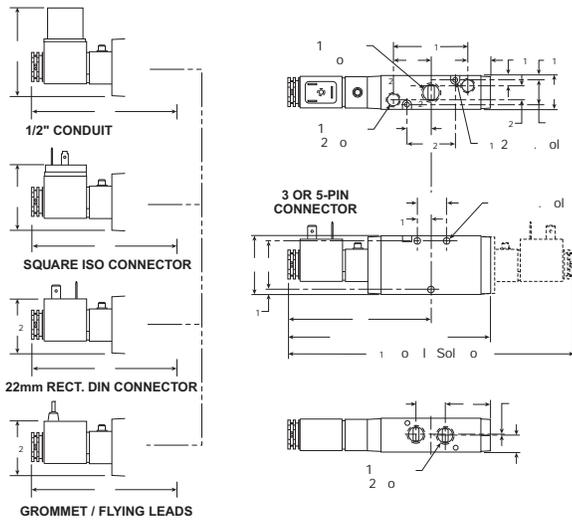
Body & pipe adapter	Brass
Membrane	Fluorocarbon

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, 4-way, 2-position, manual valves	Spool only (not shown)	P2LAXSK3
Size A, 4-way, 3-position, manual valves	Spool only (not shown)	P2LAXSK4
Size B, 4-way, 2 & 3-position valves	1 (1), 3 (2), 4 (2)	P2LBXSK1
Size C & Size D, 4-way, 2 & 3-position valves	1 (1), 3 (2), 4 (2)	P2LCDXSK1



P2LAX 3/2 Single & Double Operators – Solenoid

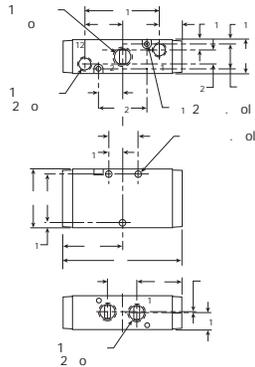


P2LAX 3/2 (solenoid)

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

Inches (mm)

P2LAX 3/2 Single & Double Operators – Remote Pilot

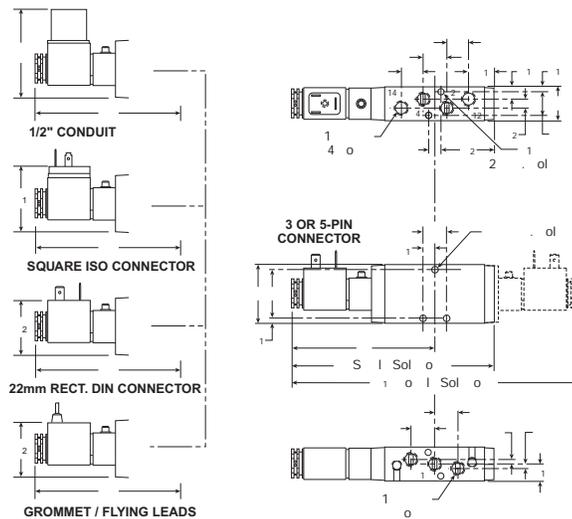


P2LAX 3/2 (remote)

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

Inches (mm)

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



P2LAX 5/2 & 5/3 (solenoid)

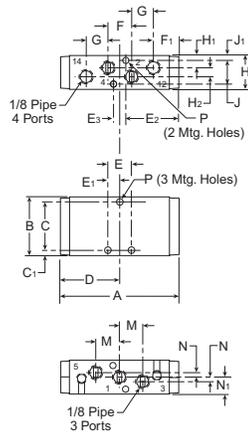
A	A1	B	C	C1
5.47 (139)	7.72 (196)	1.57 (40)	1.30 (33)	.14 (3.5)
D	E	E1	E2	E3
3.86 (98)	.63 (16)	.31 (8)	1.42 (36)	.33 (8.5)
F	F1	G	H	H1
.63 (16)	.67 (17)	.59 (15)	.87 (22)	.31 (8)
H2	J	J1	K	K1
.24 (6)	.63 (16)	.12 (3.9)	2.36 (60)	1.61 (41)
K2	M	N	N1	P
1.50 (38)	.63 (16)	.12 (3)	.43 (11)	Ø .17 (4.3)
P1				
Ø .12 (3.1)				

Inches (mm)

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products



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

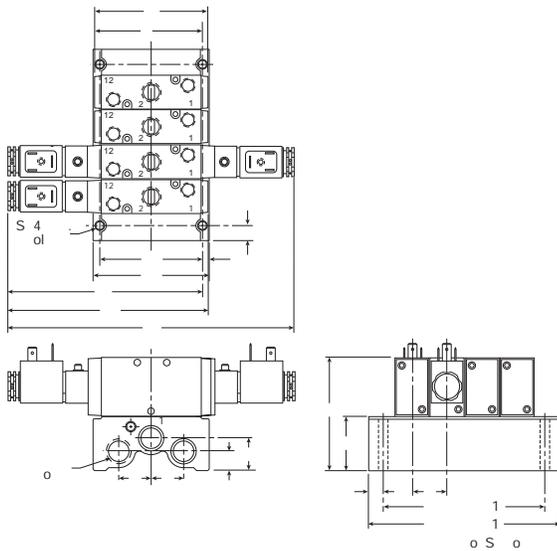


P2LAX 5/2 & 5/3 (remote)

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

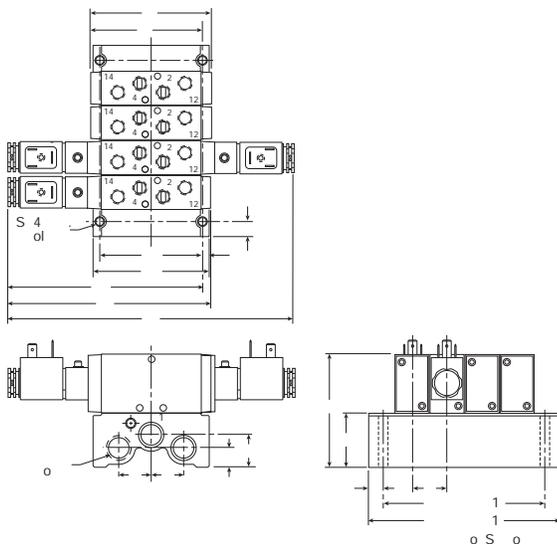


**P2LAX 3/2
 IEM Aluminum bar manifold**

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)



Viking Lite Series

Viking Xtreme Series

B Series

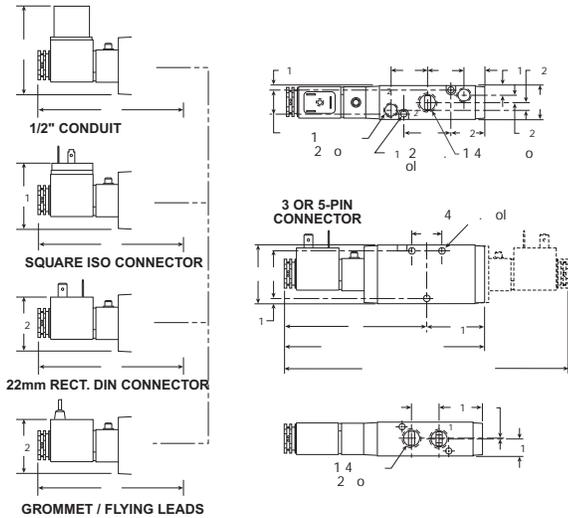
ADEX Series

N Series

D

Inline Valve Products

P2LBX 3/2 Single & Double Operators – Solenoid

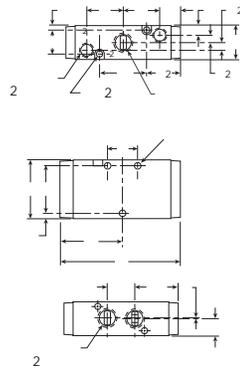


P2LBX 3/2 (solenoid)

A	A ₁	B	C	C ₁
5.35 (136)	7.60 (193)	1.57 (40)	1.26 (32)	.16 (4)
D	E	E ₁	E ₂	E ₃
3.80 (96.5)	.79 (20)	1.54 (39)	.51 (13)	1.26 (32)
F	G	H	H ₁	H ₂
.55 (14)	.98 (25)	.87 (22)	.26 (6.6)	.18 (4.5)
J	J ₁	K	K ₁	K ₂
.65 (16.5)	.11 (2.9)	2.36 (60)	1.61 (41)	1.50 (38)
M	M ₁	N	N ₁	P
.79 (20)	1.14 (29)	.02 (0.5)	.42 (11)	Ø .17 Ø (4.3)
P ₁	Ø .12 Ø (3.1)			

Inches (mm)

P2LBX 3/2 Single & Double Operators – Remote Pilot

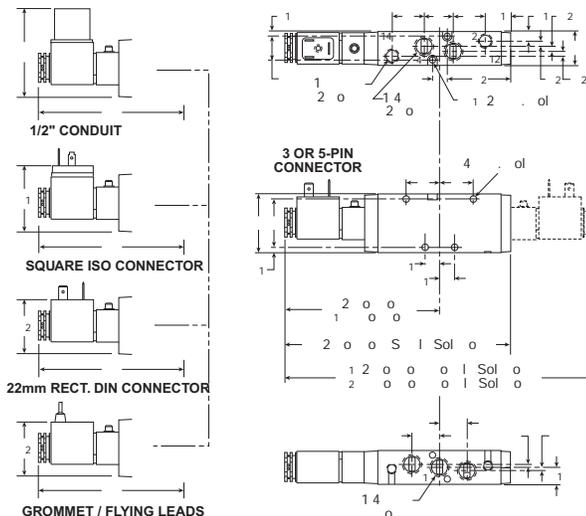


P2LBX 3/2 (remote)

A	B	C	C ₁	D
3.08 (78)	1.57 (40)	1.26 (32)	.16 (4)	1.54 (39)
E	E ₂	E ₃	F	G
.79 (20)	.51 (13)	1.26 (32)	.55 (14)	.98 (25)
H	H ₁	H ₂	J	J ₁
.87 (22)	.26 (6.6)	.18 (4.5)	.65 (16.5)	.11 (2.9)
M	M ₁	N	N ₁	P
.79 (20)	1.14 (29)	.02 (0.5)	.42 (11)	Ø .17 Ø (4.3)
P ₁	Ø .12 Ø (3.1)			

Inches (mm)

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



P2LBX 5/2 & 5/3 (solenoid)

A	A ₁	A ₂	B	C
6.14 (156)	8.39 (213)	9.23 (235)	1.57 (40)	1.26 (32)
C ₁	D	D ₁	E	E ₁
.16 (4)	4.21 (107)	4.64 (118)	.91 (23)	.39 (10)
E ₂	E ₃	F	F ₁	G
1.73 (44)	.39 (10)	.79 (20)	.67 (17)	.87 (22)
H	H ₁	H ₂	J	J ₁
.87 (22)	.26 (6.6)	.12 (3)	.65 (16.5)	.12 (3)
K	K ₁	K ₂	M	N
2.36 (60)	1.61 (41)	1.50 (38)	.79 (20)	.08 (2)
N ₁	P	P ₁		
.43 (11)	Ø .17 Ø (4.3)	Ø .12 Ø (3.1)		

Inches (mm)

Viking Lite Series

Viking Xtreme Series

B Series

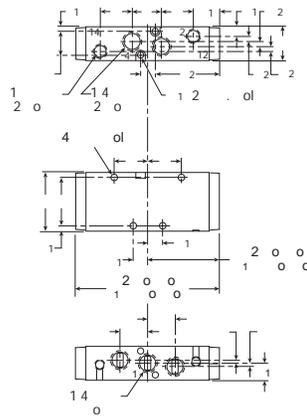
ADEX Series

N Series

D Inline Valve Products



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

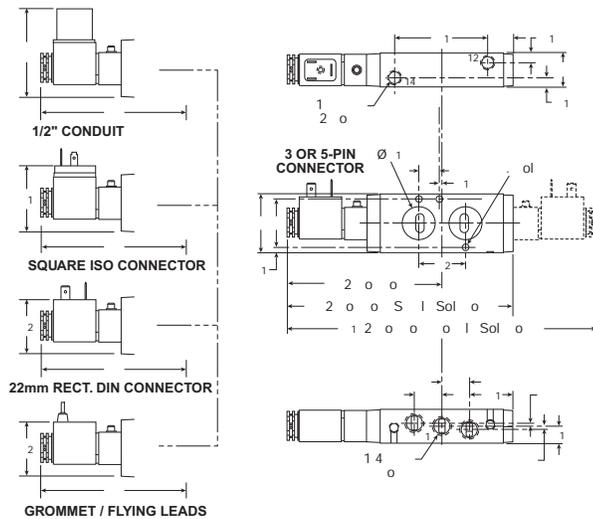


P2LBX 5/2 & 5/3 (remote)

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

Inches (mm)

P2LBX 5/2 Single & Double Operators – Solenoid _ NAMUR

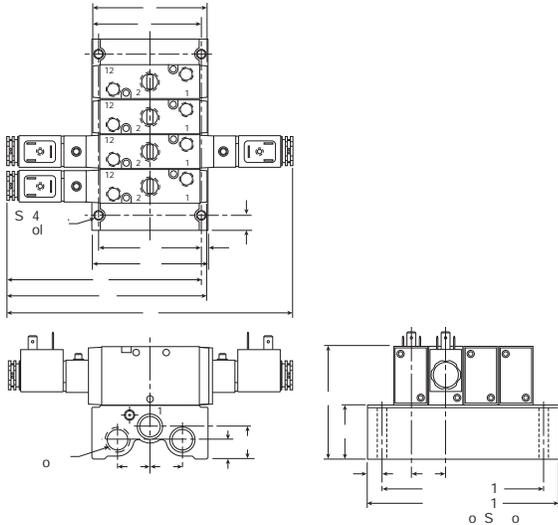


P2LBX 5/2 (NAMUR)

A	A1	B	C	C1
6.15 (156)	8.39 (213)	1.57 (40)	1.26 (32)	.16 (4)
D	E	E1	E2	F
4.21 (107)	.47 (12)	.08 (2)	.94 (24)	.67 (17)
F1	H	H1	M	M1
2.52 (64)	.87 (22)	.26 (6.6)	.79 (20)	1.14 (29)
N	N1	P	P1	
.08 (2)	.43 (11)	∅ .22 ∅ (5.5)	∅ .76 ∅ (19.4)	

Inches (mm)

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)

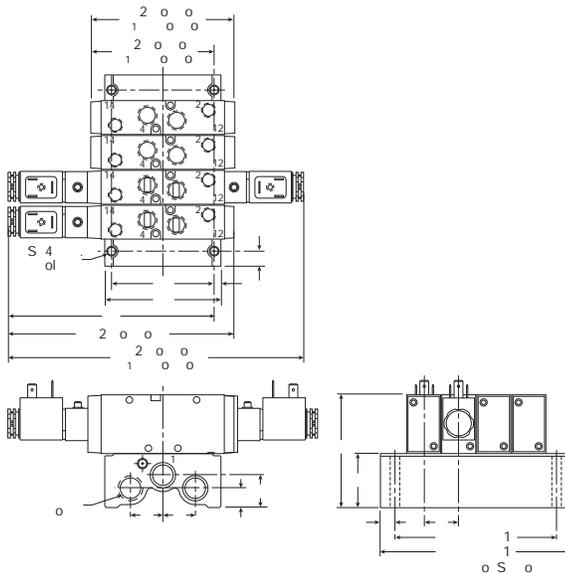
F	G	H	J	K
.40 (10.2)	5.33 (136)	7.6 (193)	.87 (22)	3.11 (79)

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 (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	A ₁	B	B ₁	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)

H ₁	J	K	L	M
9.23 (235)	.87 (22)	3.11 (79)	1.47 (37)	.87 (22)

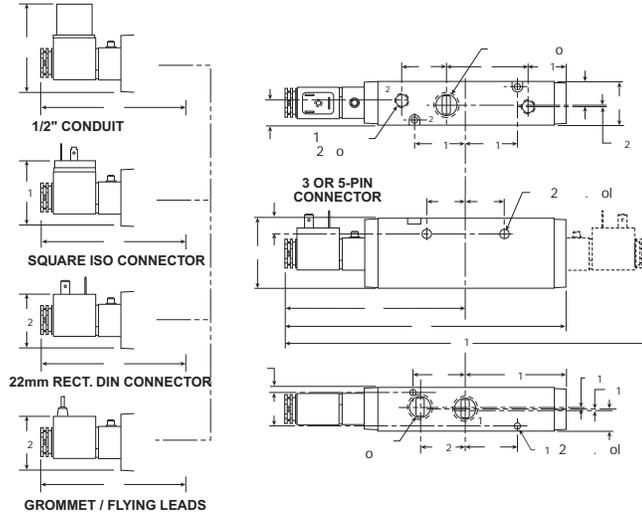
N	P	Q	R	S
.52 (13.2)	.93 (23.5)	1.56 (39.6)	2.36 (60)	Ø .22 (5.5)

T
.18 (4.6)

Inches (mm)

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
D
 Inline Valve Products

P2LCX 3/2 Single & Double Operators – Solenoid

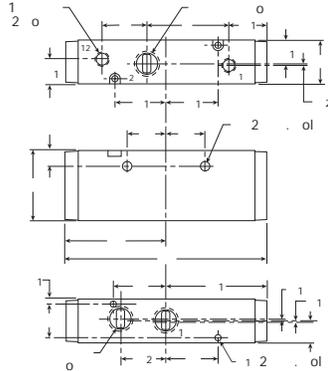


P2LCX 3/2 (solenoid)

A	A ₁	B	C	D
7.66 (194.5)	9.80 (249)	1.89 (48)	.43 (11)	4.90 (124.5)
E	E ₁	F	F ₁	G
1.04 (26.5)	1.40 (35.5)	2.24 (57)	1.02 (26)	1.22 (31)
H	H ₁	H ₂	J	J ₁
1.18 (30)	.67 (17)	.02 (0.5)	.91 (23)	.14 (3.5)
K	K ₁	K ₂	M	M ₁
2.52 (64)	1.77 (45)	1.65 (42)	1.40 (35.5)	2.76 (70)
M ₂	N	N ₁	P	P ₁
1.18 (30)	.55 (14)	.04 (1)	∅ .27 ∅ (6.9)	∅ .17 ∅ (4.4)

Inches (mm)

P2LCX 3/2 Single & Double Operators – Remote Pilot

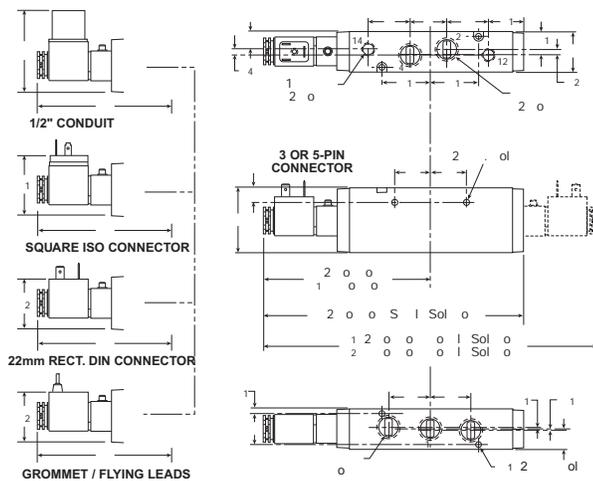


P2LCX 3/2 (remote)

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)	∅ .27 ∅ (6.9)
P ₁	∅ .17 ∅ (4.4)			

Inches (mm)

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



P2LCX 5/2 & 5/3 (solenoid)

A	A ₁	A ₂	B	C
7.68 (195)	9.84 (250)	10.71 (272)	1.89 (48)	.43 (11)
D	D ₁	E	E ₁	F
4.92 (125)	5.35 (136)	1.04 (26.5)	1.40 (35.5)	1.06 (27)
F ₁	G	H	H ₁	H ₂
1.02 (26)	1.22 (31)	1.18 (30)	.53 (13.5)	.12 (3)
H ₃	H ₄	J	J ₁	K
.51 (13)	.16 (4)	.91 (23)	.14 (3.5)	2.52 (64)
K ₁	K ₂	M	N	N ₁
1.77 (45)	1.65 (42)	1.18 (30)	.55 (14)	.04 (1)
P	P ₁	∅ .27 ∅ .17 ∅ (6.9) ∅ (4.4)		

Inches (mm)



Viking Lite
Series

Viking Xtreme
Series

B
Series

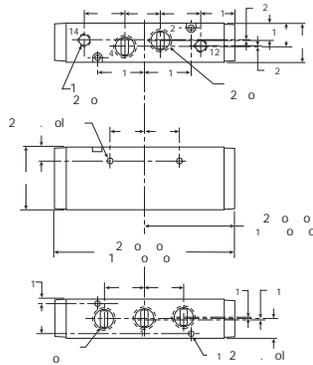
ADEX
Series

N
Series

D

Inline
Valve Products

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

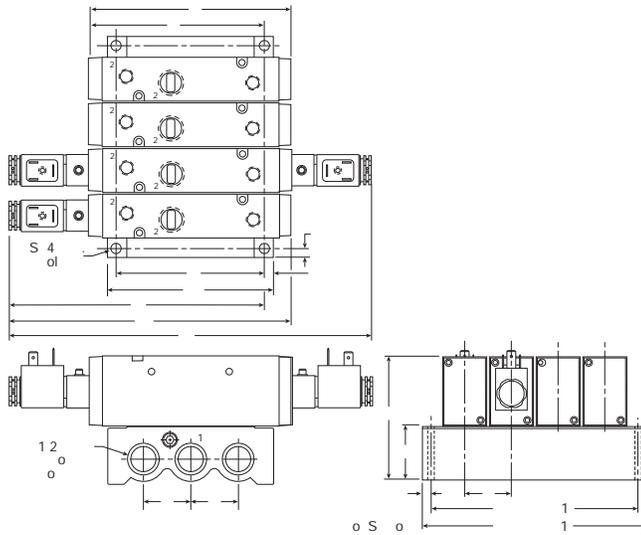


P2LCX 5/2 & 5/3 (remote)

A	A ₁	B	C	D
5.51 (140)	6.38 (162)	1.89 (48)	.43 (11)	2.76 (70)
D ₁	E	E ₁	F	F ₁
3.18 (81)	1.04 (26.5)	1.40 (35.5)	1.06 (27)	1.02 (26)
G	H	H ₁	H ₂	H ₃
1.22 (31)	1.18 (30)	.51 (13)	.02 (0.5)	.12 (3)
J	J ₁	M	N	N ₁
.91 (23)	.14 (3.5)	1.18 (30)	.55 (14)	.04 (1)
P	P ₁			
Ø .27 (6.9)	Ø .17 (4.4)			

Inches (mm)

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



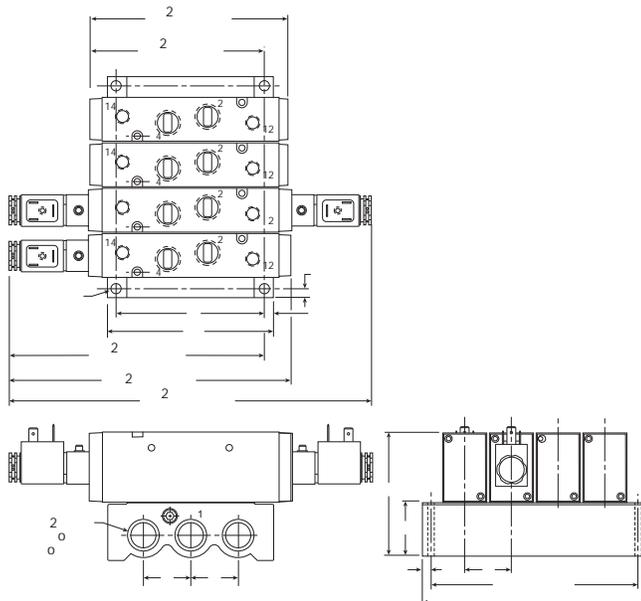
P2LCX 3/2

IEM Aluminum bar manifold

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

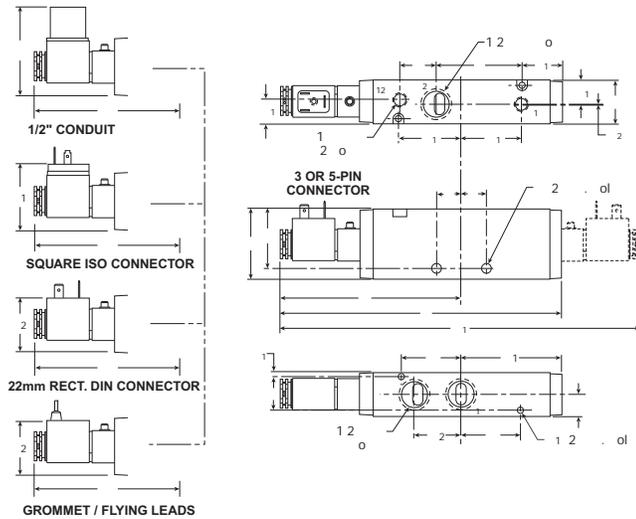
A	A ₁	B	B ₁	C
5.51 (140)	6.38 (162)	4.72 (120)	5.16 (131)	3.94 (100)
D	E	E ₁	F	G
4.41 (112)	6.89 (170)	7.13 (181)	.24 (6)	7.68 (195)
H	H ₁	J	K	L
9.84 (250)	10.71 (272)	1.26 (32)	3.43 (87)	1.54 (39)
P	Q	R	S	T
1.24 (31.5)	1.77 (45)	2.24 (57)	Ø .26 (6.5)	.24 (6)

Inches (mm)

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products



P2LDX 3/2 Single & Double Operators – Solenoid

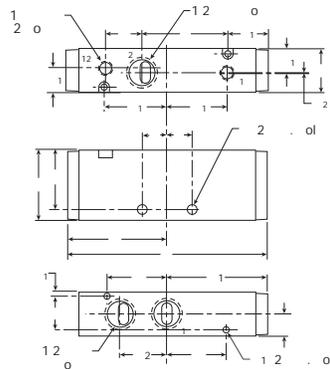


P2LDX 3/2 (solenoid)

A	A ₁	B	C	D
7.66 (194.5)	9.80 (249)	1.89 (48)	1.59 (40.5)	4.90 (124.5)
E	E ₁	F	F ₁	G
.67 (17)	1.65 (42)	2.36 (60)	1.08 (27.5)	.98 (25)
H	H ₁	H ₂	J	J ₁
1.18 (30)	.67 (17)	.02 (0.5)	.91 (23)	.14 (3.5)
K	K ₁	K ₂	M	M ₁
2.52 (64)	1.77 (45)	1.65 (42)	1.65 (42)	2.76 (70)
M ₂	N	P	P ₁	
1.30 (33)	.59 (15)	Ø .26 Ø (6.6)	Ø .17 Ø (4.4)	

Inches (mm)

P2LDX 3/2 Single & Double Operators – Remote Pilot

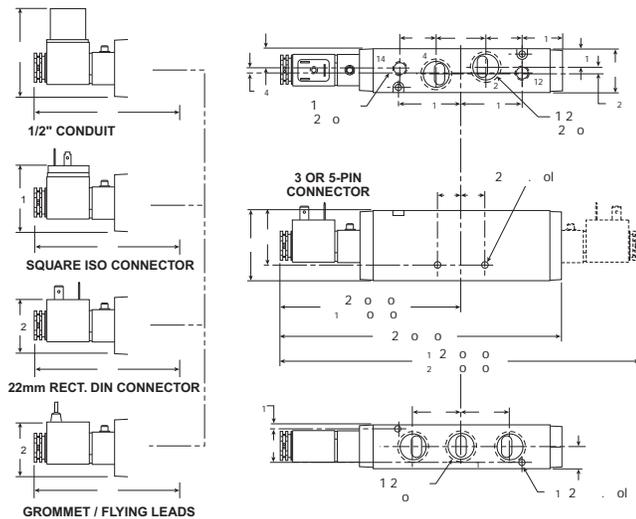


P2LDX 3/2 (remote)

A	B	C	D	E
5.51 (140)	1.89 (48)	1.59 (40.5)	2.76 (70)	.67 (17)
E ₁	F	F ₁	G	H
1.65 (42)	2.36 (60)	1.08 (27.5)	.98 (25)	1.18 (30)
H ₁	H ₂	J	J ₁	M
.67 (17)	.02 (0.5)	.91 (23)	.14 (3.5)	1.65 (42)
M ₁	M ₂	N	P	P ₁
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)

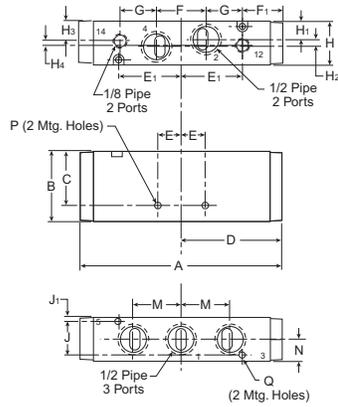
A	A ₁	A ₂	B	C
7.67 (195)	9.84 (250)	10.7 (272)	1.89 (48)	1.59 (40.5)
D	D ₁	E	E ₁	F
4.92 (125)	5.79 (147)	.67 (17)	1.65 (42)	1.34 (34)
F ₁	G	H	H ₁	H ₂
1.10 (28)	.98 (25)	1.18 (30)	.49 (12.5)	.20 (5)
H ₃	H ₄	J	J ₁	K
.51 (13)	.16 (4)	.91 (23)	.14 (3.5)	2.52 (64)
K ₁	K ₂	M	N	P
1.77 (45)	1.65 (42)	1.30 (33)	.59 (15)	Ø .26 Ø (6.6)

P₁
 Ø .17
 Ø (4.4)

Inches (mm)



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



P2LDX 5/2 & 05/3 (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)

- Viking Lite Series
- Viking Xtreme Series
- B Series
- ADEX Series
- N Series
- D**
- Inline Valve Products

B 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, making it ideally suited for OEM applications.

Ports

- B3: 1/8, 1/4 inch
- B5: 1/4, 3/8 inch
- B6: 3/8 inch
- B7: 1/2 inch
- B8: 3/4 inch

Mounting

- Inline
- Subbase
- IEM stackable base
- IEM aluminum bar
- 5-port subbase 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)
- 12VDC to 240VAC
- Female DIN electrical connectors

Certification / Approval

- Approved to be CE marked
- IP65 rated
- CSA, C/US



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	B7	B8
1. G. H	Single solenoid - air return					
2. A. J. S	Double solenoid	20 (138)	20 (138)	20 (138)	35 (241)	35 (241)
3. K. L	Single remote pilot - air return					
4. M	Double remote pilot	Vacuum				
5. 6. 7	Double solenoid - APB, CE, PC	30 (207)	30 (207)	30 (207)	45 (310)	45 (310)
8. 9. 0	Double remote pilot - APB, CE, PC	Vacuum				
E. V. W	Single solenoid - air return / spring assist	35 (241)	35 (241)	35 (241)	35 (241)	35 (241)
F. X. Y	Single remote pilot - air return / spring assist					
	External pilot*†					
All	"B" series	Vacuum				

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

† Not Available with B3 Dual 3/2.

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)
B3	120 (827)
B5 & B6	145 (1000)*§
B7 & B7	145 (1000)*†

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

† Not Available with Enclosure 5

§ Not available with Enclosures 0. 5 & X

Most popular.

Viking Lite Series

Viking Xtreme Series

B Series

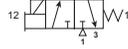
ADEX Series

N Series

D

Inline Valve Products

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
	3/8"	2.7 Cv	120VAC 24VDC	B6 Inline	B6V2BB553A B6V2BB549A
	1/2"	5.9 Cv	120VAC 24VDC	B7 Inline	B7V3BB553A B7V3BB549A
	3/4"	7.0 Cv	120VAC 24VDC	B8 Inline	B8V4BB553A B8V4BB549A

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

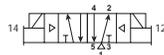
Single Solenoid, 4-way, 2-position



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
	1/2"	5.9 Cv	120VAC 24VDC	B7 Inline	B713BB553A B713BB549A
	3/4"	7.0 Cv	120VAC 24VDC	B8 Inline	B814BB553A B814BB549A
	Less base	0.65 Cv	120VAC 24VDC	B3 Subbase	B31VBB553C B31VBB549C

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
	1/2"	5.9 Cv	120VAC 24VDC	B7 Inline	B723BB553A B723BB549A
	3/4"	7.0 Cv	120VAC 24VDC	B8 Inline	B824BB553A B824BB549A
	Less base	0.65 Cv	120VAC 24VDC	B3 Subbase	B32VBB553C B32VBB549C

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

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products

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
	1/2"	5.7 Cv	120VAC 24VDC	B7 Inline	B753BB553A B753BB549A
	3/4"	6.6 Cv	120VAC 24VDC	B8 Inline	B854BB553A B854BB549A
	Less base	0.50 Cv	120VAC 24VDC	B3 Subbase	B35VBB553C B35VBB549C

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
	1/2"	5.7 Cv	120VAC 24VDC	B7 Inline	B763BB553A B763BB549A
	3/4"	6.6 Cv	120VAC 24VDC	B8 Inline	B864BB553A B864BB549A
	Less base	0.50 Cv	120VAC 24VDC	B3 Subbase	B36VBB553C B36VBB549C

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
	1/2"	5.7 Cv	120VAC 24VDC	B7 Inline	B773BB553A B773BB549A
	3/4"	6.6 Cv	120VAC 24VDC	B8 Inline	B874BB553A B874BB549A
	Less base	0.50 Cv	120VAC 24VDC	B3 Subbase	B37VBB553C B37VBB549C

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

Viking Lite Series

Viking Xtreme Series

B Series

ADEX Series

N Series

D

Inline Valve Products

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



Symbol	Port size	Cv	Valve type	Part number
	1/8"	0.75 Cv	B3 Inline, remote pilot	B3K0000XXC
	1/4"	1.4 Cv	B5 Inline, remote pilot	B5K1000XXC
	3/8"	1.4 Cv	B5 Inline, remote pilot	B5K2000XXC
	3/8"	2.7 Cv	B6 Inline, remote pilot	B6X2000XXA
	1/2"	5.9 Cv	B7 Inline, remote pilot	B7X3000XXA
	3/4"	7.0 Cv	B8 Inline, remote pilot	B8X4000XXA
	B3 Shown, M5 remote pilot ports			

Single Remote Pilot, 4-way, 2-position



Symbol	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
	1/2"	5.9 Cv	B7 Inline, remote pilot	B733000XXA
	3/4"	7.0 Cv	B8 Inline, remote pilot	B834000XXA
	B5 Shown, M5 remote pilot ports	Less base	0.65 Cv	B3 Subbase, remote pilot

Double Remote Pilot, 4-way, 2-position



Symbol	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
	1/2"	5.9 Cv	B7 Inline, remote pilot	B743000XXA
	3/4"	7.0 Cv	B8 Inline, remote pilot	B844000XXA
	B5 Shown, M5 remote pilot ports	Less base	0.65 Cv	B3 Subbase, remote pilot

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



Symbol	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
	1/2"	5.7 Cv	B7 Inline, remote pilot	B783000XXA
	3/4"	6.6 Cv	B8 Inline, remote pilot	B884000XXA
	B5 Shown, M5 remote pilot ports	Less Base	0.50 Cv	B3 Subbase, remote pilot

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products

B3 Subbase Side Ported Subbase Manifold, Subbase Valves Only



Valve series	Valve function	## – Stations	Manifold only (NPT)	Manifold only (BSPP)
B3	4-way	02 to 12	PSJ3B1N##NP	PSJ3B1G##NP

Kits include: (1) manifold, valve hold down bolts, gaskets. For external pilot valve option "X", external manifold galley must be pressurized. Replace ## with number of valve stations.

B3 Subbase Side Ported Subbase Manifold Add-A-Fold Assembly



Valve series	Valve function	## – Stations	Manifold assembly (NPT)	Manifold assembly (BSPP)
B3	4-way	02 to 12	AAPSJ3B1N##NP	AAPSJ3B1G##GP

Kits include: (1) manifold, valve hold down bolts, gaskets and assembly. For external pilot valve option "X", external manifold galley must be pressurized.

IEM Bar Manifold, Inline Valves Only



Valve series	Valve function	## – Stations	Manifold only (NPT)	Manifold only (BSPP)
B3	3-way	02 to 12	PSG3BXN##NP	PSG3BXG##NP
B3	4-way	02 to 12	PSM3BXN##NP	PSM3BXG##NP
B5	3-way	02 to 12	PSG5BXN##NP	PSG5BXG##NP
B5	4-way	02 to 12	PSM5BXN##NP	PSM5BXG##NP
B6	3-way	02 to 12	PSG6BXN##NP	PSG6BXG##NP
B6	4-way	02 to 12	PSM6BXN##NP	PSM6BXG##NP
B7, B8	4-way	02 to 12	PSM7BXN##NP	PSM7BXG##NP

Kits include: (1) manifold, valve hold down bolts, gaskets. For external pilot valve option "X", external manifold galley must be pressurized.

IEM Bar Manifold Add-A-Fold Assembly



Valve series	Valve function	## – Stations	Manifold assembly (NPT)	Manifold assembly (BSPP)
B3	3-way	02 to 12	AAPSG3BXN##NP	AAPSG3BXG##NP
B3	4-way	02 to 12	AAPSM3BXN##NP	AAPSM3BXG##NP
B5	3-way	02 to 12	AAPSG5BXN##NP	AAPSG5BXG##NP
B5	4-way	02 to 12	AAPSM5BXN##NP	AAPSM5BXG##NP
B6	3-way	02 to 12	AAPSG6BXN##NP	AAPSG6BXG##NP
B6	4-way	02 to 12	AAPSM6BXN##NP	AAPSM6BXG##NP
B7, B8	4-way	02 to 12	AAPSM7BXN##NP	AAPSM7BXG##NP

Kits include: (1) manifold, valve hold down bolts, gaskets and assembly. For external pilot valve option "X", external manifold galley must be pressurized.

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: B3, 4-way manifold with station #1 blanked off with valves assembled

Line	Qty	Part number	Comment
1	1	AAPSM3BXN03NP	Add-A-Fold Assembly
2	1	PS2920P	Blank Plate - station 1
3	2	B3100BB549C	4-way B3 - station 2, 3

Viking Lite Series

Viking Xtreme Series

B Series

ADEX Series

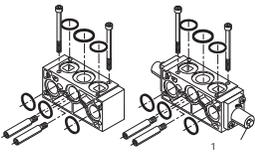
N Series

D

Inline Valve Products

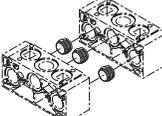
IEM Stackable Manifolds

- 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.

	Series	Type	Kit number	
			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.

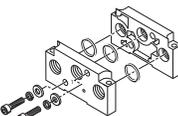
Isolator Plugs

	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)

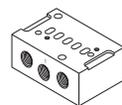
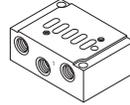
Kit includes: (3) plugs and (6) o-rings

End Plate Kits

	Series	Type	Kit number
	B3	4-way, NPT	PS2915P
	B5	4-way, NPT	PS2815P

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

Single Subbase, Subbase Valves Only

	Series	Type	Kit number
	B3	4-way, 1/4" NPT	PS2934P
	B5	4-way, 3/8" NPT	PS2834P

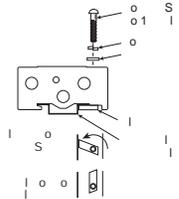
Kit includes: (1) subbase.
 (Hold down bolts & gasket are included with valve.)

Blanking Plate

		IEM universal		IEM Subbase	
		NPT	BSPP "G"	Blank	Blank
B3	3-way	PS2966P	PS2967P	PS2968P	—
	4-way	PS2920P	PS2921P	PS2969P	PS2994P
B5	3-way	PS2866P	PS2867P	PS2868P	—
	4-way	PS2820P	—	PS2869P	—
B6	3-way 4-way	PS2620P	—	—	—
B7-B8	4-way	PS2520P	—	PS2569P	—

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

DIN Rail Hardware Kit

	Valve type	IEM bar	Part number
	B3	(2) Screws, (2) Nuts, (2) Clamps	PS2991P

Viking Lite Series

Viking Xtreme Series

B Series

ADEX Series

N Series

D

Inline Valve Products

B3 Series

B3 1 0 B B 5 49 - C

Basic series	
B3 series	B3

Engineering level	
C	Current

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
Single remote pilot, 2-position NC - air return	K
Single remote pilot, 2-position NO - air return	L
Double remote pilot, 2-position	M
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
Single solenoid, 2-position - air return / spring assist	E
Single remote pilot, 2-position - air return / spring assist	F

Options	
Blank	None
02	Solenoid rotated 180° - pins down

	Voltage [§]		
	AC		DC
	60Hz	50Hz	
42	24	22	
45			12
49			24
53	120	110	
57	240	230	
XX	Remote pilot - M5 or valve less 15mm solenoid		
YY	Remote pilot - 5/32" (4mm) tube		

Enclosure / lead length	
0	None, remote pilot valve
5	15mm 3-pin DIN 43650C (male only)
X	Valve less 15mm solenoid

Overrides [§]	
0	None, remote pilot valve
B	Flush - non-locking
C	Flush - locking
D	Extended - non-locking
E	Extended - locking
X	Valve less 15mm solenoid

Port size / thread type	
3-way	
1/8" NPT inline	0*
1/8" BSPP "G" inline	5*
4-way	
1/8" NPT inline	0*
1/8" BSPP "G" inline	5*
1/4" NPT subbase	H†
1/8" NPT face mount	T**
Subbase valve less base	V‡

* Available for use on IEM Manifolds.
 ** 4-way only.
 ‡ Subbase valves available for 4-way valves only.

Pilot source / pilot exhaust	
0	None, remote pilot valve
B†	Internal - port #1 / vented
E*	Dual pressure - port #3 / vented
K†	External - body / tapped M5
X‡	External - manifold / vented

* Not available for 3-way Valves.
 † Not available for Remote Pilot Valves.
 ‡ See Pilot Source Note below.

§ Enclosure '5'
 - Override / Voltage Availability
 S - Standard
 O - Option

Voltage code	Override code Standard				
	B	C	D	E	
42	O	O	-	-	
45	O	O	-	-	
49	S	S	O	O	
53	S	S	O	O	
57	O	O	-	-	
Voltage code		"02" Option			
42	O	O	-	-	
45	O	O	-	-	
49	S	S	O	O	
53	S	S	O	O	
57	O	O	-	-	

Pilot Source 'X'
 External-Manifold / Vented

INLINE & SUBBASE Valves -
 Only used IF an IEM or 5-Ported Subbase Aluminum Bar Manifold requires a common external pilot signal through the manifold for low pressure / vacuum applications OR when used with Sandwich Regulators.

Most popular.



Viking Lite Series

Viking Xtreme Series

B Series

ADEX Series

N Series

D

Inline Valve Products

B5 Series

B5 1 1 B B 5 49 - C

Basic series
 B5 series **B5**

Engineering level
C Current

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
Single remote pilot, 2-position NC - air return	K*
Single remote pilot, 2-position NO - air return	L*
Double remote pilot, 2-position	M*
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*
Single solenoid, 2-position - air return / spring assist	E
Single remote pilot, 2-position - air return / spring assist	F*

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

Port Size / Thread Type	
3-way	
1/4" NPT inline	1*
3/8" NPT inline	2*
1/4" BSPP "G" inline	6*
3/8" BSPP "G" inline	7*
4-way	
1/4" NPT inline	1*
3/8" NPT inline	2*
1/4" BSPP "G" inline	6*
3/8" BSPP "G" inline	7*
3/8" NPT subbase	J†
1/4" NPT NAMUR mount	T‡
Subbase valve less base - NPT	V‡
1/4" BSPP "G" NAMUR mount	W‡

* Available for use on IEM manifolds.
 † 4-way only.
 ‡ Available with pilot source "0", "A", and "B" only.

Pilot Source / Pilot Exhaust	
Enclosures "0, 5 & X"	
None, remote pilot valve	0
Internal - port #1 / tapped M5	A†
Internal - port #1 / vented	B†
Dual pressure - port #3 / vented	E*
External - body / tapped M5	K†
External - manifold / vented	X†
Enclosures "A, B, C, D, E, F, G, H, N, Q & R"	
Internal - port #1 / tapped M5	A†
Internal - port #1 / vented	B†
Dual pressure - port #3 / tapped M5	D‡
External - body / tapped 1/8"	K†

* Not available for 3-way valves.
 † Not available for remote pilot valves.
 ‡ See pilot source note below.

Overrides§	
None. Remote pilot valve	0
No override	A†
Flush - non-locking	B*
Flush - locking	C
Extended - non-locking	D
Extended - locking	E*
Valve less 15mm solenoid	X

* Only available with encl. "5".
 † Only available with encl. "E".

Options	
Blank	None
02	Solenoid rotated 180° - pins down
MD††	Manual detent
VO*	Fluorocarbon seals

* Not available with enclosure "0", "5", "X", "E" or "F".
 †† Only available with operator function 1 & 3 and Enclosure "N", "X" or mobile voltages upon request.

	Voltage§		
	AC		DC
	60Hz	50Hz	
42	24	22	
45			12
49			24
53	120	110	
57	240	230	
XX	Remote pilot - M5 or valve less solenoid		
YY	Remote pilot - 5/32" (4mm) tube		

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)
C	3-pin automotive - mini
D	5-pin automotive - mini
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
Q†	Grommet - 72" leads
R	1/2" NPT conduit - 72" leads
X	Valve less 15mm solenoid

* 24 VDC & override "A" only.
 ** 12 VDC, 24 VDC, 120 VAC, 120 VAC or 240 VAC.
 † 24 VDC only.

Note: for mobile voltages, contact the application team.

§ Enclosure '5' - Override / Voltage Availability

S - Standard
 O - Option

Voltage code	Override code Standard				Voltage code	Override code "02" Option			
	B	C	D	E		B	C	D	E
42	O	O	-	-	42	O	O	-	-
45	O	O	-	-	45	O	O	-	-
49	S	S	O	O	49	S	S	O	O
53	S	S	O	O	53	S	S	O	O
57	O	O	-	-	57	O	O	-	-

Pilot Source 'X'
 External-Manifold / Vented or Tapped M5

INLINE & SUBBASE 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.



B6 Series

B6 1 2 B B 5 49 - A

Basic series	
B6 series	B6

Engineering level	
A	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
Single solenoid, 2-position - air return / spring assist	E
Single remote pilot, 2-position - air return / spring assist	F

Options	
Blank	None
02	Solenoid rotated 180° - pins down
42*	Series cylinder mount replacement

* Only available with port size "T" and "0", "A", "B", and "L" pilot source.

	Voltage [§]		
	AC		DC
	60Hz	50Hz	
42	24	22	
45			12
49			24
53	120	110	
57	240	230	
XX	Remote pilot - M5 or valve less 15mm solenoid		
YY	Remote pilot - 5/32" (4mm) tube		

Port size / thread type	
3-way / 4-way	
3/8" NPT inline	2*
3/8" BSPP "G" inline	7*
3/8" NPT NAMUR mount	T†

*Available for use on IEM manifolds.

†4-way only. Available with pilot source "0", "A", "B" and "L" only.

Pilot source / pilot exhaust	
Enclosures "0, 5 & X"	
None. Remote pilot valve	0
Internal - Port #1 / tapped M5	A†
Internal - Port #1 / vented	B†
Dual pressure - port #5 / vented	H
External - Body / tapped M5	K†
Enclosures "A, B, C, D, E, F, G, H, N, Q & R"	
Internal - Port #1 / tapped M5	A†
Internal - Port #1 / vented	B†
External - Body / tapped 1/8"	K†

* Not available for 3-way valves.

† Not available for remote pilot valves.

Overrides [§]	
None, remote pilot valve	0
No override	A†
Flush - non-locking	B*
Flush - locking	C
Extended - non-locking	D
Extended - locking	E*
Valve less 15mm solenoid	X

* Only available with enclosure "5".

† Only available with enclosure "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
Q	Grommet - 72" leads
R	1/2" NPT conduit - 72" leads
X	Valve less 15mm solenoid

* 24 VDC & override "A" only.

** 12 VDC, 24 VDC, 120 VAC or 240 VAC.

† 24 VDC only.

§ Enclosure '5' - Override / Voltage Availability

S - Standard

O - Option

Voltage code	Override code Standard				Voltage code	Override code "02" Option			
	B	C	D	E		B	C	D	E
42	O	O	-	-	42	O	O	-	-
45	O	O	-	-	45	O	O	-	-
49	S	S	O	O	49	S	S	O	O
53	S	S	O	O	53	S	S	O	O
57	O	O	-	-	57	O	O	-	-

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.



B7 & B8 Series

B7 1 3 A B G 53 - A

Basic series	
B7 series	B7
B8 series	B8

Engineering level	
A	Current

Options	
Blank	None

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
Single solenoid, 2-position - air return / spring assist	E
Single remote pilot, 2-position - air return / spring assist	F

	Voltage [§]		
	AC		DC
	60Hz	50Hz	
42	24	22	
45			12
49			24
53	120	110	
57	240	230	
XX	Remote pilot - M5 or valve less solenoid		
YY	Remote pilot - 5/32" (4mm) tube		

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
R	1/2" NPT conduit - 72" leads
X	Valve less 15mm solenoid

* 24 VDC & Override "A" only.

** 12 VDC, 24 VDC, 120 VAC or 240 VAC.

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 / tapped M5	A†
Internal - Port #1 / vented	B†
External - Body / tapped M5	K†
Enclosures "A, B, C, D, E, F, G, H, N, Q & R"	
Internal - Port #1 / tapped M5	A†
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
Extended - non-locking	D
Extended - locking	E*
Valve less 15mm solenoid	X

* Only available with encl. "5".

† Only available with encl. "E".

§ Enclosure '5' - Override / Voltage Availability

S - Standard

O - Option

Voltage code	Override code			
	B	C	D	E
42	O	O	-	-
45	O	O	-	-
49	S	S	O	O
53	S	S	O	O
57	O	O	-	-

Viking Lite Series

Viking Xtreme Series

B Series

ADEX Series

N Series

D

Inline Valve Products

INLINE Valves -

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



Voltage					Voltage					B5, B6, B7, B8		B5, B6, B7, B8	
Enclosure "5"					Enclosure "A"					Enclosure "A"		Enclosure "B" to "R"	
AC					AC								
Code	60Hz	50Hz	DC	Power consumption	Holding (Amps)	Code	60Hz	50Hz	DC	Power consumption	Holding (Amps)	Power consumption	Holding (Amps)
42	24	22		1.6VA	.065	42	24	22		3.9VA	.136	7.3VA	.309
45			12	1.2W	.098	45			12	2.6W	.208	4.6W	.365
47*			12	0.91W	.074	47*			12	—	—	4.9W	.298
48*			24	0.91W	.033	48*			24	—	—	4.8W	.142
49			24	1.2W	.049	49			24	2.7W	.112	4.8W	.200
53	120	110		1.6W	.013	53	120	110		4.1VA	.033	6.3VA	.047
57	240	230		1.6W	.007	57	240	230		3.7VA	.017	6.4VA	.026

Note: For enclosure "5" with "02" Option, solenoid wattage is 1.8W (2.4VA). Response time is 10% faster. Voltage rated +10 / -15%.

* 47 and 48 code are mobile voltages. voltage +25 / -30%.

15mm 3-Pin DIN 43650C

	Connector with cord	Connector only
	Cord length	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

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

Sandwich Regulators

- Use with B3 subbase valves on 5-ported subbase bar manifolds.
- Common port or dual port regulation control.
- Unregulated pressure supplied to valve pilot - use pilot source - 'X'.
- Easy adjust knob control.



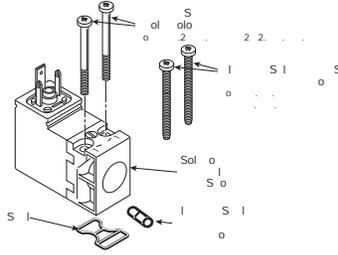
Pressure range	Cv	Common port with gauge *	Dual port without gauge
5-125 PSI	.33	PS2930166P	PS2930233P

* Gauge is 160 PSI. Gauge shipped unassembled. For different gauge mounting configuration, use brass adapters listed at bottom of page.

Solenoid Kits – B3 ‘C’, B5 ‘C’, B6 ‘A’, B7 ‘A’, B8 ‘A’ 3-Pin, EN175301-803 (Former DIN 43650C), 15mm



Standard



“02” Option

PS2982*##P – Enclosure ‘5’

	## Voltage						
Override	42	45	47*	48*	49	53	57
B	O	O	-	-	S	S	O
C	O	O	-	-	S	S	O
D	-	-	O	O	O	O	-
E	-	-	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.

PS3541*##P – Enclosure ‘5 with “02” Option

	## Voltage				
Override	42	45	49	53	57
B	O	O	S	S	O
C	O	O	S	S	O
D	-	-	O	O	-
E	-	-	O	O	-

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
Grommet 72" leads	Q
1/2" Conduit 72" leads	R

Voltage / frequency	
42	24VAC
45	12VDC
47*	12 VDC mobile
48*	24 VDC mobile
49	24VDC
53	120VAC
57	240VAC

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

* 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



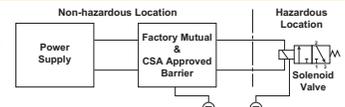
Option G & Q
 Grommet, 18" or 72" Leads



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

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.

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

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

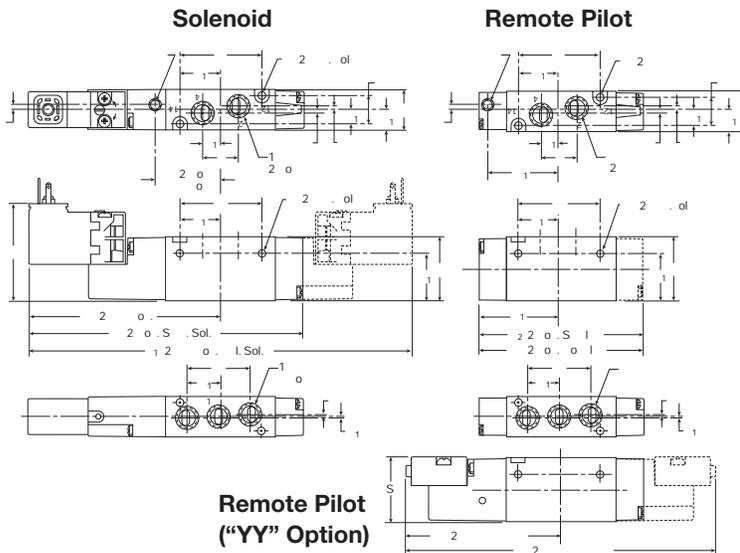


Comes standard with 1/2" conduit connection.
 Voltage range = ± 10%
 Ambient temperature range = -20°C (-4°F) to 60°C (140°F)
 Duty factor = 100%
 IP65 rated (with connected conduit connector)

Notes:

1. Maximum non-hazardous location voltage not to exceed 250V RMS.
2. Connect per Barrier Manufacturers instructions.
3. Factory Mutual requires connections per ISA RP 12.6 instructions.
4. CSA requires "Installation to be in accordance with the Canadian Electrical Code, Part I."
5. 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.

B3 Single & Double Operators – 4-way Inline

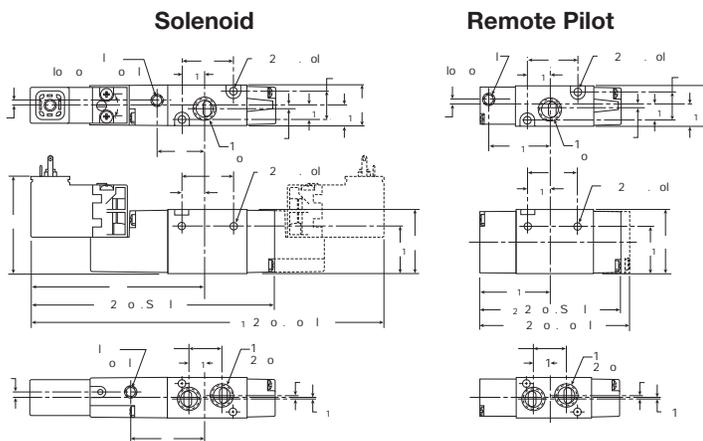


B3 4-way Inline

A 4.67 (119)	A1 6.44 (164)	A2 3.12 (79)	A3 3.33 (85)	B 1.66 (42)
C 1.13 (39)	C1 .84 (21)	D 3.22 (82)	D1 1.66 (42)	E 1.47 (37)
E1 .74 (19)	F .63 (16)	F1 .32 (8)	G 1.13 (29)	G1 1.50 (38)
H .71 (18)	H1 .36 (9)	J .51 (13)	J1 .26 (7)	K .06 (2)
L .11 (3)	M 1.12 (28)	M1 .56 (14)	N .05 (1)	N1 .05 (1)
P Ø .13 (3.3)	Q 2.69 (68)	R 5.37 (136)	S 1.16 (29)	

Inches (mm)

B3 Single & Double Operators – 3-way Inline

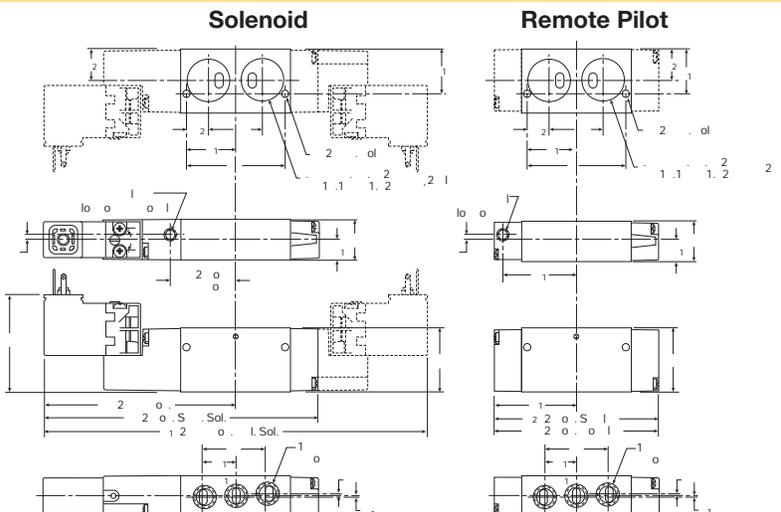


B3 3-way Inline

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

Inches (mm)

B3 Single & Double Operators – 4-way Face Mount

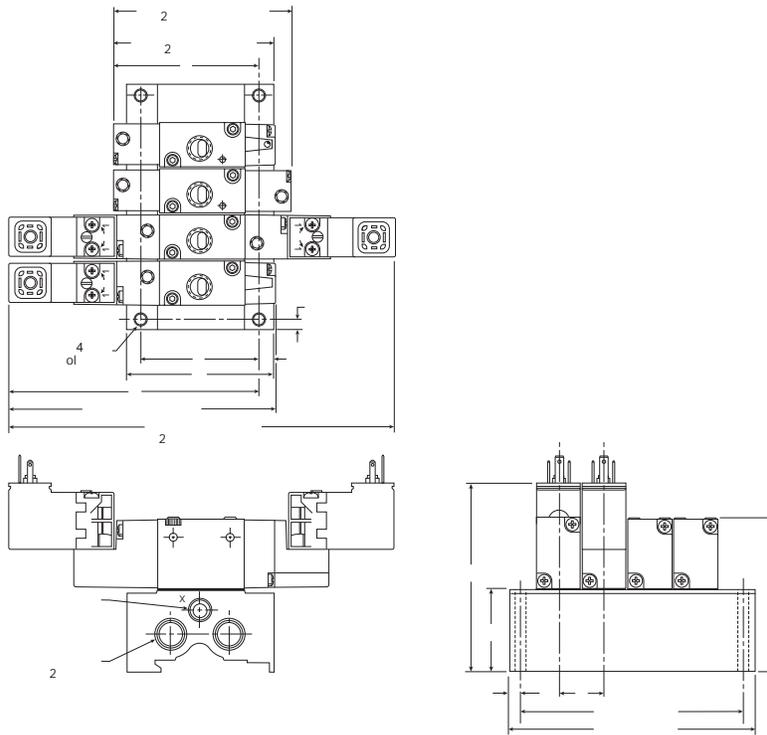


B3 4-way Face Mount

A 4.67 (119)	A1 6.44 (164)	A2 3.12 (79)	A3 3.33 (85)	B 1.66 (42)
B2 .58 (15)	C 1.13 (29)	C1 .81 (21)	D 3.22 (82)	D1 1.66 (42)
E 1.74 (44)	E1 .87 (22)	E2 .39 (10)	E3 .95 (24)	G 1.13 (29)
G1 1.50 (38)	H .71 (18)	H1 .36 (9)	L .11 (3)	M 1.12 (28)
M1 .56 (14)	N .05 (1)	N1 .05 (1)	P Ø .13 (3.3)	

Inches (mm)

B3 Single & Double Operators – 3-way IEM Aluminum Bar

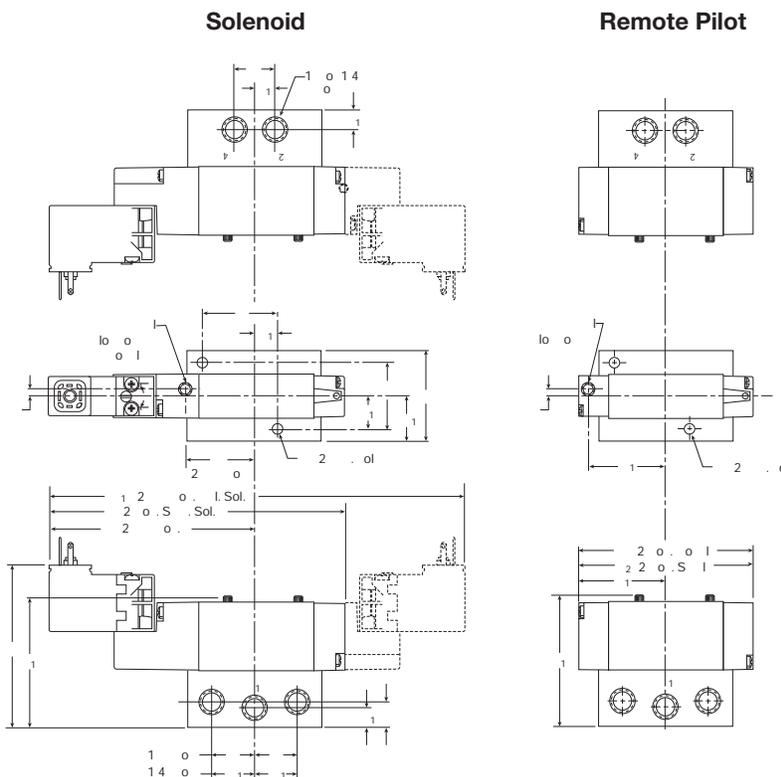


B3 4-way IEM Aluminum Bar Manifold

A	C	D	E	F
2.86 (72.6)	2.65 (67.3)	2.33 (59.2)	.25 (6.4)	1.80 (45.7)
G	H	J	K	L
.23 (5.9)	2.25 (57.2)	3.88 (98.6)	4.20 (106.7)	5.96 (151.4)
N	P	Q	R	S
2.93 (74.5)	1.27 (32.4)	2.40 (61.1)	.81 (20.5)	1.13 (28.8)
T	U			
1.64 (41.6)	Ø .23 Ø (5.8)			

Inches (mm)

B3 Single & Double Operators – 4-way Single Subbase



B3 4-way Single Subbase

A	A₁	A₂	A₃	B
4.67 (119)	6.44 (164)	3.12 (79)	3.33 (85)	2.63 (67)
B₁	C	C₁	D	D₁
2.21 (56)	.47 (12)	.37 (9)	3.22 (82)	1.66 (42)
E	E₁	F	F₁	G
1.25 (32)	.38 (10)	.69 (18)	.34 (9)	1.13 (29)
G₁	H	H₁	J	J₁
1.50 (38)	1.50 (38)	.75 (19)	1.12 (28)	.56 (14)
L	M	M₁	P	
.11 (3)	.71 (18)	.76 (19)	Ø .18 Ø (4)	

Inches (mm)

Viking Lite
Series

Viking Xtreme
Series

B
Series

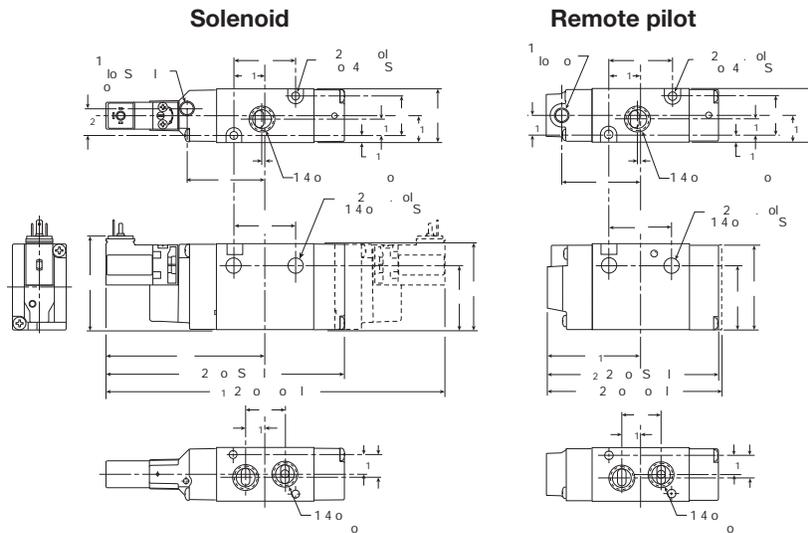
ADEX
Series

N
Series

D

Inline
Valve Products

B5 Single & Double Operators – 3-way Inline

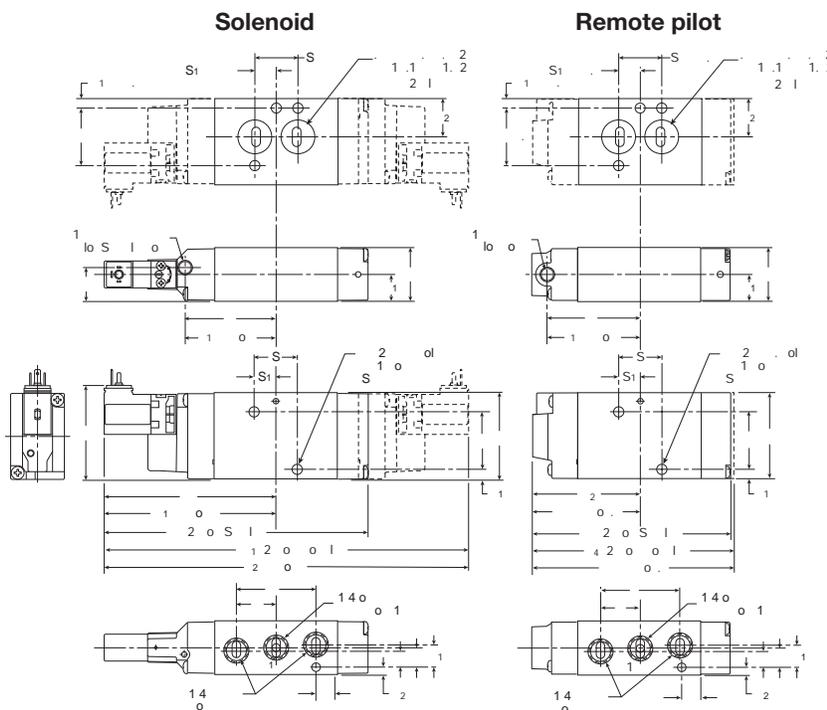


B5 3-way Inline

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

Inches (mm)

B5 Single & Double Operators – 4-way NAMUR Mount

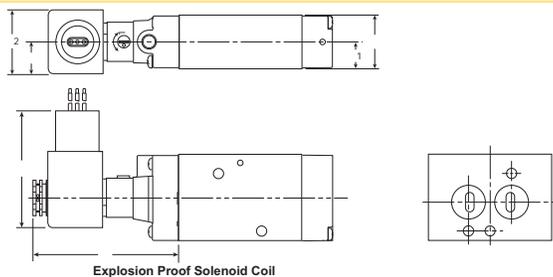


B5 4-way NAMUR Mount

A 5.78 (147)	A₁ 7.51 (191)	A₂ 8.45 (215)	A₃ 4.37 (110)	A₄ 4.70 (119)
A₅ 5.64 (143)	B 2.06 (52)	B₂ .84 (21)	C 1.18 (30)	C₁ .59 (15)
D 3.76 (96)	D₁ 4.23 (107)	D₂ 2.35 (60)	D₃ 2.82 (72)	F 2.01 (51)
F₁ 2.47 (63)	J₃ .74 (19)	K 2.00 (51)	K₁ 2.47 (63)	L 1.75 (44)
M .88 (22)	N .44 (11)	P .37 (9.4)	P₁ .50 (13)	P₂ .16 (4)
P₃ .40 (10)	Q 1.89 (48)	R 1.26 (32)	R₁ .21 (5)	S .94 (24)
S₁ .47 (12)	U Ø .224 Ø (5.7)			

Inches (mm)

B5 Alternative Electrical Enclosure Option F

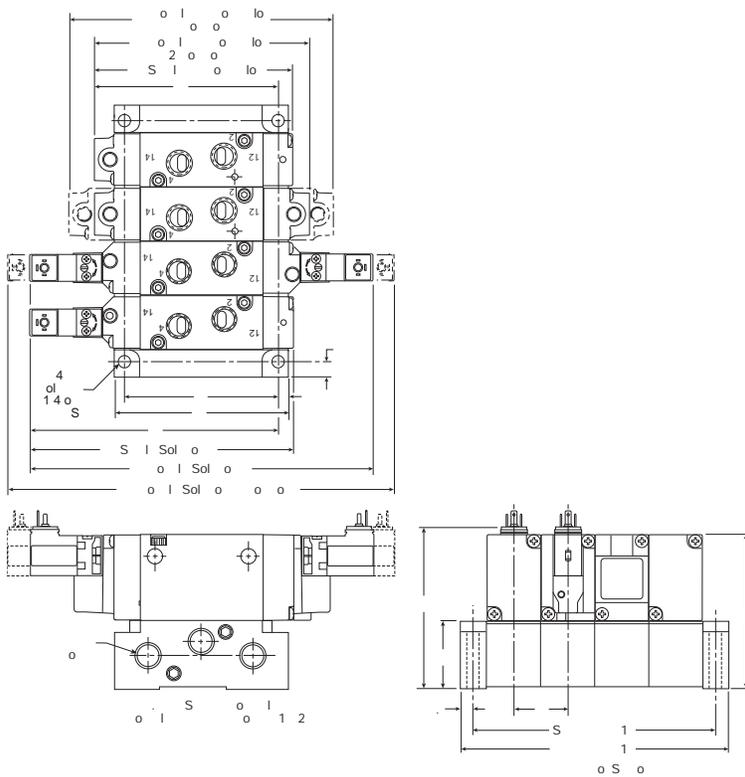


B5 4-way NAMUR Mount with Option F Enclosure

C 1.18 (30)	C₁ .59 (15)	C₂ 1.42 (36)	C₃ .71 (18)	F 3.15 (80)
G 2.60 (66)				

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 (7.1)	

Inches (mm)

Viking Lite Series

Viking Xtreme Series

B Series

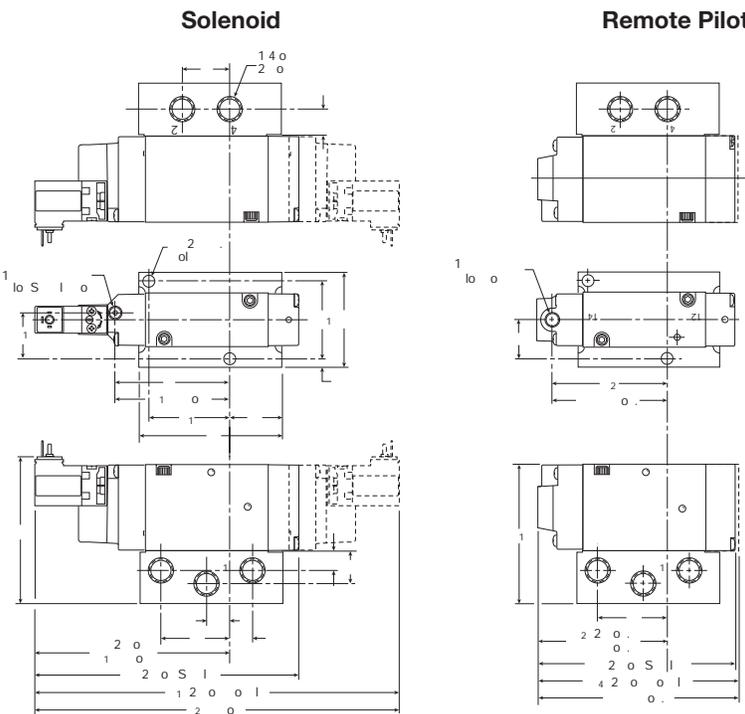
ADEX Series

N Series

D

Inline Valve Products

B5 Single & Double Operators – 4-way Single Subbase

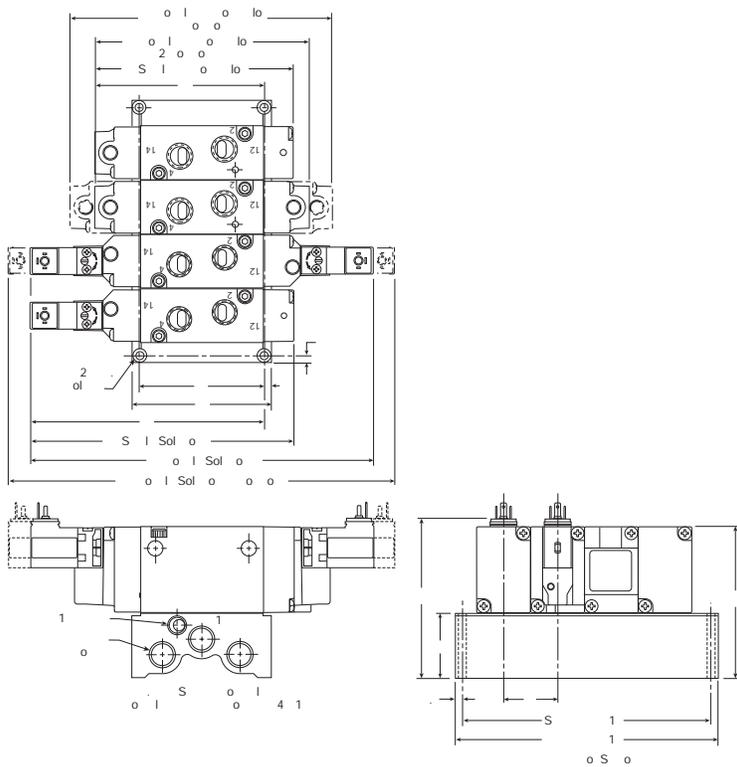


B5 4-way Subbase

A	A ₁	A ₂	A ₃	A ₄
5.78 (147)	7.52 (191)	8.46 (215)	4.37 (110)	4.70 (119)
A ₅	B	B ₁	C	C ₁
5.64 (143)	3.21 (82)	3.03 (77)	2.12 (54)	1.69 (43)
D	D ₁	D ₂	D ₃	E
4.26 (108)	4.73 (120)	2.85 (72)	3.32 (40)	2.51 (65)
E ₁	E ₂	E ₃	F	F ₁
2.98 (76)	2.60 (66)	3.07 (80)	2.90 (74)	1.69 (43)
G	H	J	J ₁	K
.95 (24)	.22 (5)	.84 (21)	.99 (25)	.71 (18)
L	M	N	P	R
1.50 (38)	.50 (13)	.46 (12)	Ø .27 (7)	1.00 (25)

Inches (mm)

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

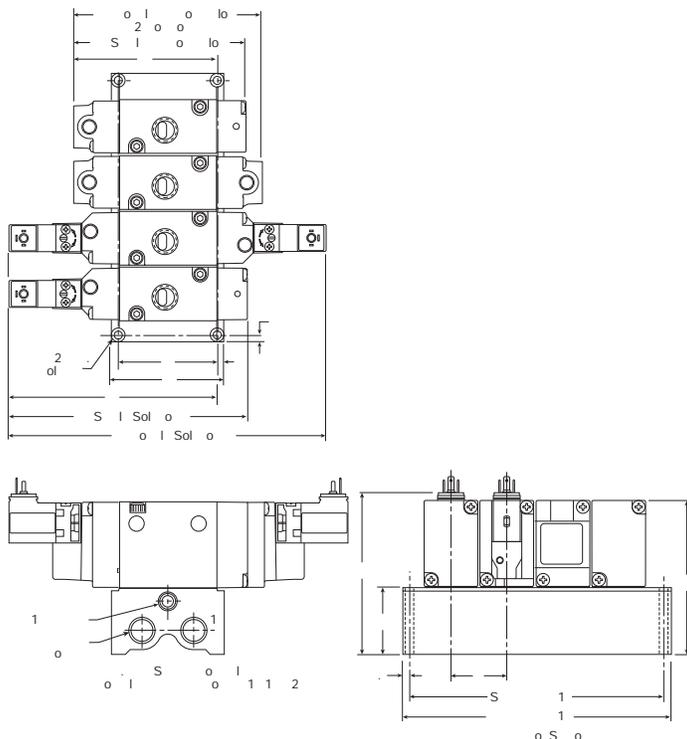


B5 4-way IEM Aluminum Bar Manifold

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)

B5 Single & Double Operators – 3-way IEM Aluminum Bar



B5 3-way IEM Aluminum Bar Manifold

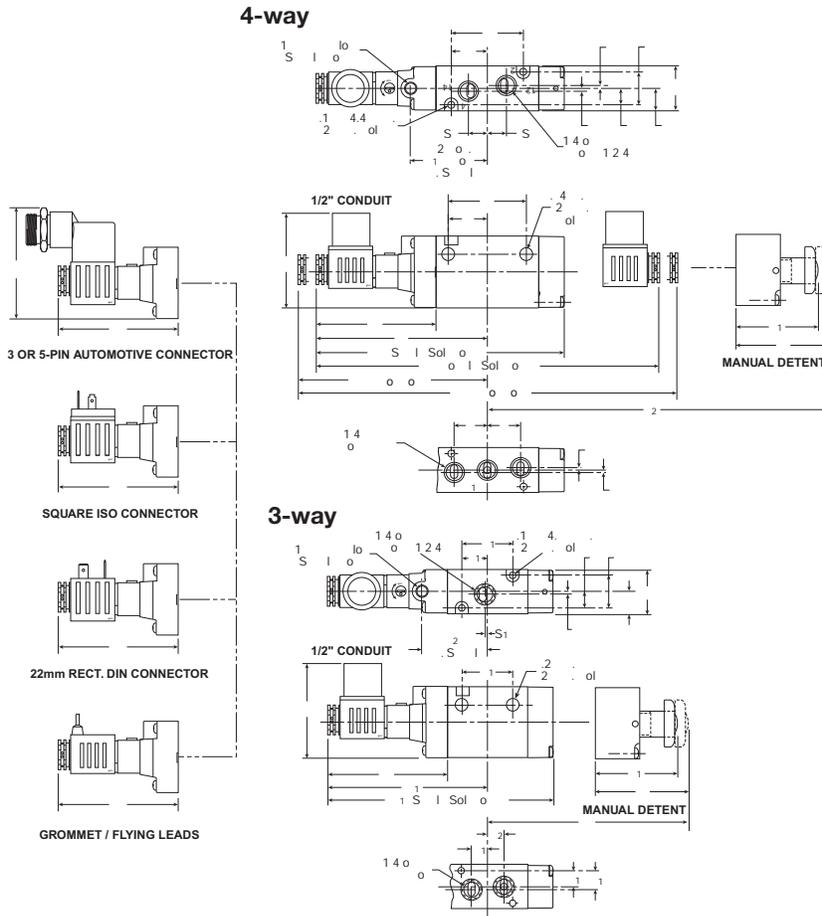
B	C	D	E	F
4.21 (106.9)	3.88 (98.6)	3.41 (86.6)	.18 (4.6)	2.12 (53.8)
G	H	J	K	L
.17 (4.3)	2.46 (62.5)	4.82 (122.4)	5.29 (134.4)	7.03 (178.6)
N	P	Q	R	S
3.50 (89.0)	1.44 (36.6)	3.36 (85.3)	1.26 (32.0)	1.76 (44.7)
T	U			
2.12 (53.8)	Ø .18 Ø (4.6)			

Inches (mm)

Viking Lite Series
Viking Xtreme Series
B Series
ADEX Series
N Series
D Inline Valve Products

B5 3 & 4-way Alternative Electrical Enclosures

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products

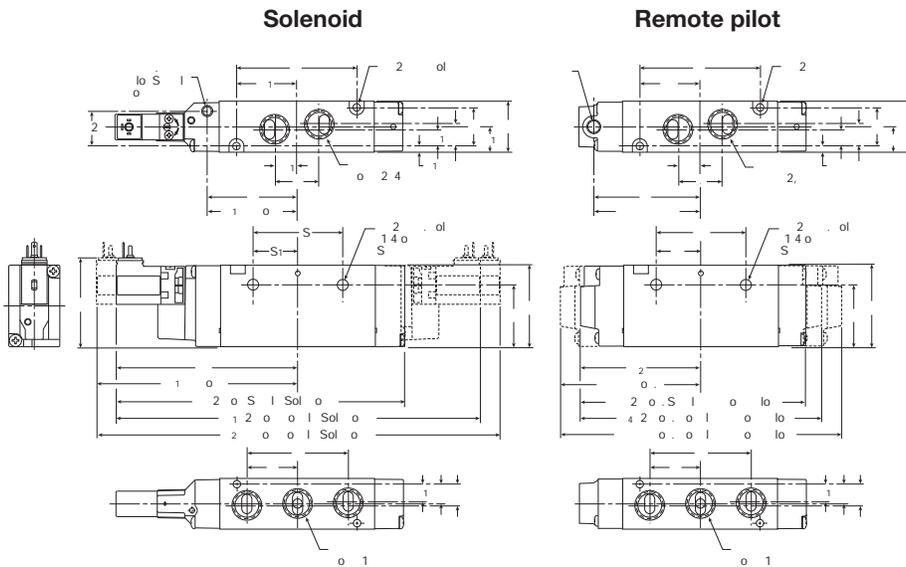


B5 Alternative – Electrical Enclosures

A	A1	B	C	D
9.94 (252.5)	.872 (221.4)	4.97 (126.2)	9.00 (228.6)	6.52 (165.6)
D1	E	E1	F	G
6.02 (152.9)	4.50 (114.3)	4.26 (108.1)	3.15 (80.0)	2.47 (62.8)
H	J	K	K1	L
2.05 (52.1)	1.03 (26.2)	1.89 (48.0)	1.40 (35.5)	.95 (24.1)
L1	M	N	P	Q
.70 (17.8)	1.18 (30.0)	.59 (15.0)	.87 (22.1)	.43 (10.9)
R	S	S1	T	T1
.08 (2.0)	.50 (12.7)	.06 (1.5)	2.01 (51.1)	2.47 (62.7)
T2	U	U1	U2	V
1.76 (44.8)	.87 (22.1)	.43 (10.9)	.45 (11.3)	.06 (1.5)
V1	W	W1	Y	Z
.37 (9.3)	.07 (1.8)	.50 (13)	2.90 (73.6)	2.40 (60.9)
Z1	Z2	Z3		
2.12 (53.8)	3.75 (95.2)	4.17 (105.8)		

Inches (mm)

B6 Single & Double Operators – 4-way Inline



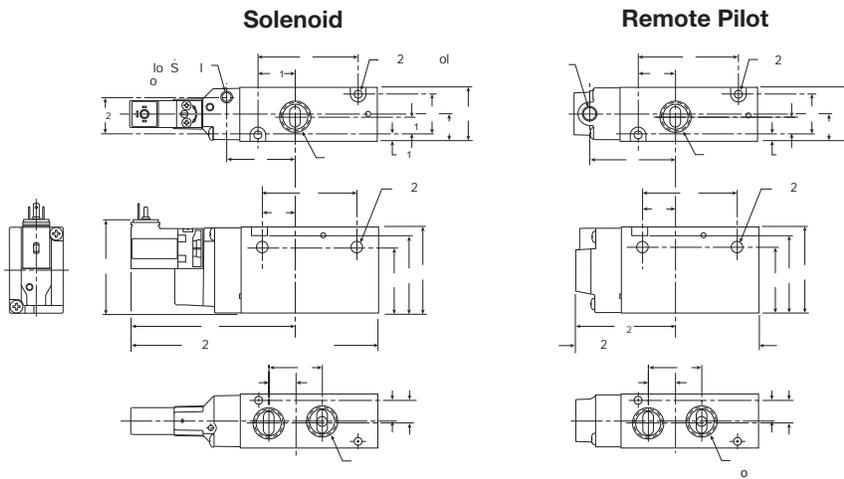
B6 4-way Inline

A	A1	A2	A3	A4
6.67 (169.5)	8.41 (213.7)	9.35 (237.6)	5.26 (133.7)	5.59 (142.1)
A5	B	C	C1	D
6.54 (166)	2.06 (52)	1.18 (30.0)	.59 (15)	4.21 (106.8)
D1	D2	D3	E	E1
4.68 (118.8)	2.80 (71)	3.27 (83.0)	2.79 (70.8)	1.39 (35.4)
F	F1	G	G1	H
2.45 (62.3)	2.92 (74.3)	1.03 (26.1)	.51 (13.1)	.91 (23)
H1	J	J1	J2	K
.14 (3.5)	.51 (13.1)	.39 (10)	.81 (20.6)	2.09 (53)
K1	L	M	N	P
2.56 (64.9)	2.34 (59.4)	1.17 (29.7)	.45 (11.5)	.49 (12.5)
P1	Q	R	S	S1
.41 (10.5)	1.89 (48)	1.45 (36.8)	2.09 (53)	1.04 (26.5)
T	U			
Ø .17 Ø (4.4)	Ø .27 Ø (6.9)			

Inches (mm)



B6 Single Operators – 3-way Inline

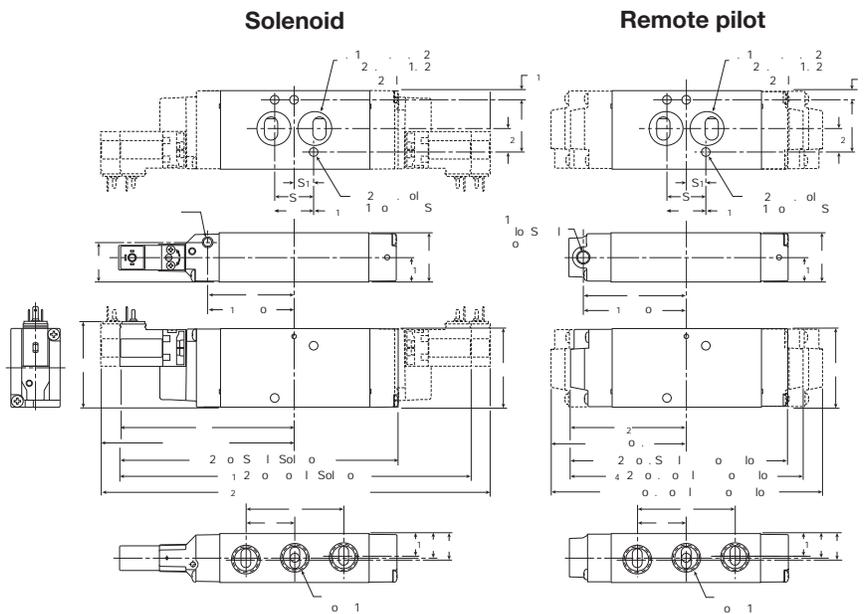


B6 3-way Inline

A 5.42 (137.7)	A3 4.01 (101.9)	B 2.06 (52)	C 1.18 (30.0)	C1 .59 (15.0)
D 3.63 (92.1)	D2 2.22 (56.3)	E 2.19 (55.6)	E1 0.82 (20.7)	F 1.87 (47.6)
H .91 (23.0)	H1 .14 (3.5)	J1 .39 (10.0)	J2 .81 (20.6)	K 1.51 (38.3)
L 1.17 (29.7)	M .59 (15.0)	N .45 (11.5)	P .49 (12.5)	Q 1.89 (48.0)
R 1.45 (36.8)	S 2.09 (53.0)	S1 0.76 (19.4)	T Ø .17 Ø (4.4)	U Ø .27 Ø (6.9)
V 1.69 (43.0)				

Inches (mm)

B6 Single & Double Operators – 4-way NAMUR Mount

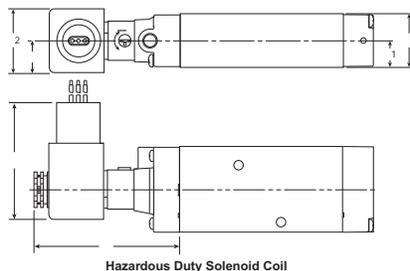


B6 4-way NAMUR Mount

A 6.67 (169.5)	A1 8.41 (213.7)	A2 9.35 (237.6)	A3 5.26 (133.7)	A4 5.59 (142.1)
A5 6.54 (166.0)	B 2.06 (52)	B2 .57 (14.4)	C 1.18 (30.0)	C1 .59 (15)
D 4.21 (106.8)	D1 4.68 (118.8)	D2 2.80 (71.0)	D3 3.27 (83.0)	F 2.45 (62.3)
F1 2.92 (74.3)	G .95 (24.2)	G1 .02 (0.53)	J3 .95 (24.1)	K 2.09 (53.0)
K1 2.56 (64.9)	L 2.34 (59.4)	M 1.17 (29.7)	N .59 (15)	P .63 (16)
P1 .55 (14)	Q 1.89 (48.0)	R 1.26 (32)	R1 .22 (5.5)	S .94 (24)
S1 .47 (12)	T Ø .17 Ø (4.4)	U Ø .27 Ø (6.9)		

Inches (mm)

B6 Alternative Electrical Enclosure Option F



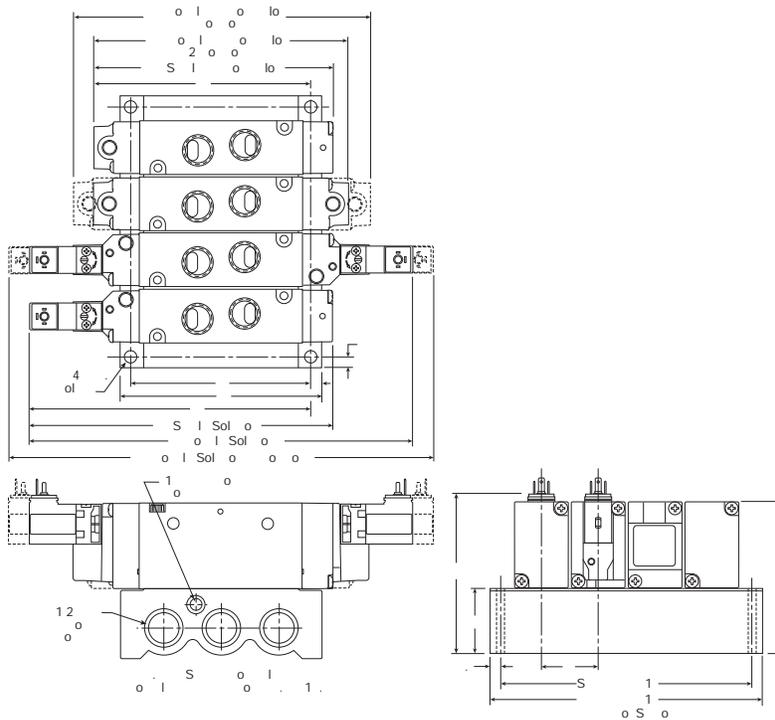
Hazardous Duty Solenoid Coil

B6 4-way NAMUR Mount with Option F Enclosure

C 1.18 (30)	C1 .59 (15)	C2 1.42 (36)	C3 .71 (18)	F 3.15 (80)
G 2.60 (66)				

Inches (mm)

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

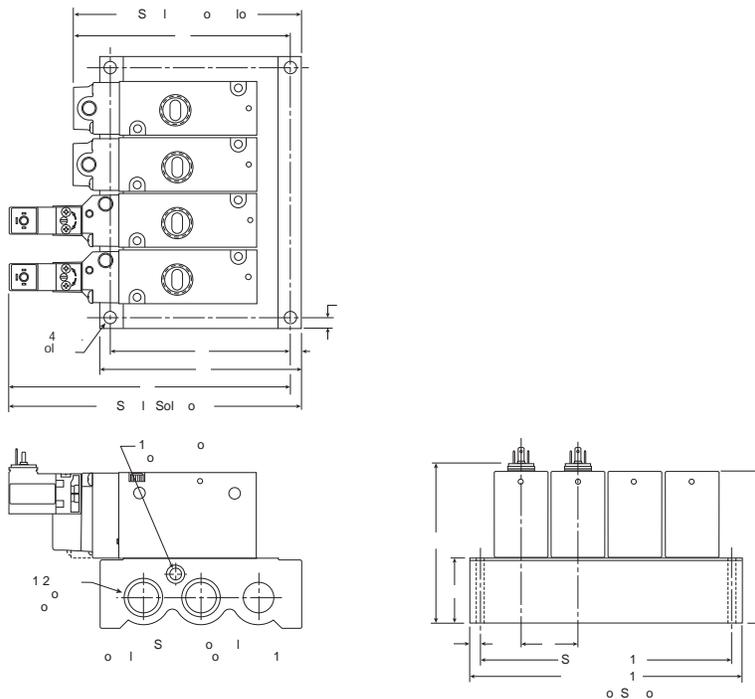


B6 4-way IEM Aluminum Bar Manifold

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)

B6 Single Operators – 3-way IEM Aluminum Bar

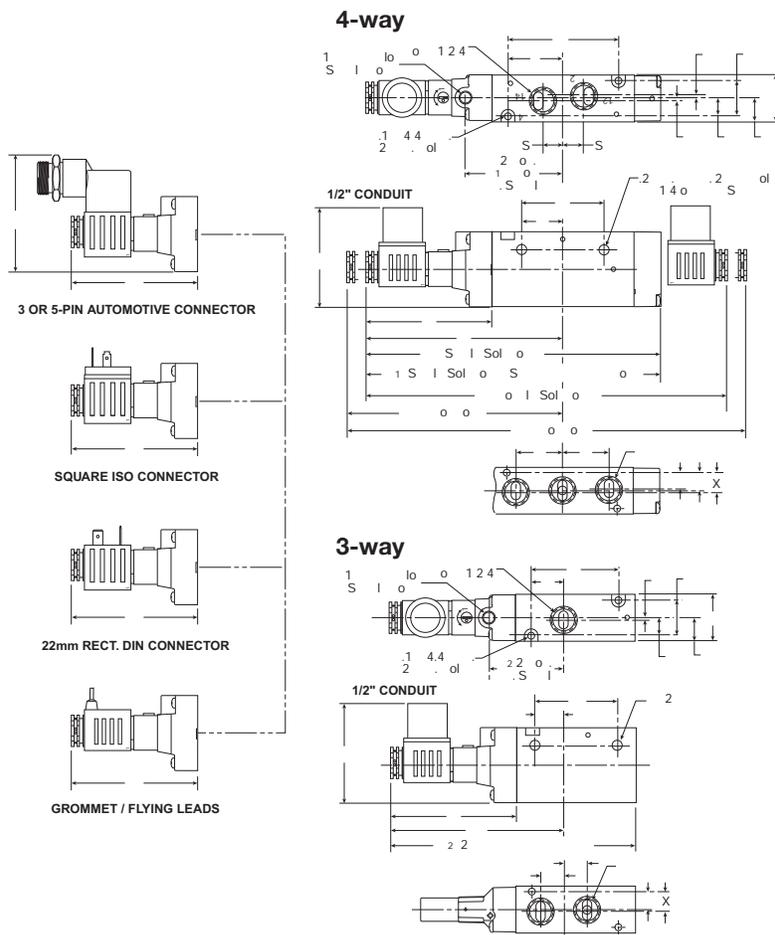


B6 3-way IEM Aluminum Bar Manifold

C	D	E	F	G
5.00 (127.0)	4.76 (121.0)	.24 (6.0)	3.94 (100.0)	.24 (6.0)
H	J	K	N	P
4.41 (112.0)	6.17 (156.8)	6.41 (162.8)	3.60 (91.3)	1.54 (39.0)
Q	R	S	T	U
3.43 (87.0)	1.24 (31.5)	1.77 (45.0)	2.24 (57.0)	Ø .26 Ø (6.5)

Inches (mm)

B6 3 & 4-way Alternative Electrical Enclosures

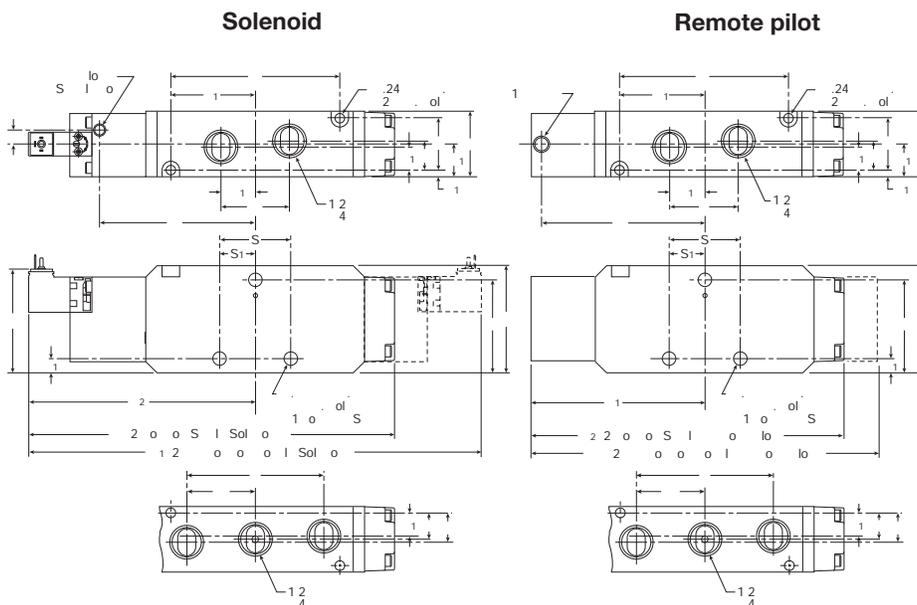


B6 Alternative – Electrical Enclosures

A	B	C	D	D1
10.84 (275.3)	5.41 (137.5)	9.89 (251.3)	7.41 (188.2)	7.74 (196.6)
D2	E	E2	F	G
6.17 (156.6)	4.94 (125.6)	4.37 (111.0)	3.15 (80.0)	2.47 (62.8)
H	H1	J	J1	K
2.09 (53.0)	2.09 (53.0)	1.04 (26.5)	0.76 (19.4)	2.79 (70.8)
K1	L	L1	M	N
2.19 (55.6)	1.39 (35.4)	.82 (20.7)	1.18 (30.0)	.59 (15.0)
P	Q	R	S	T
.91 (23.0)	.45 (11.5)	.06 (1.6)	.51 (13.1)	2.45 (62.3)
T1	T2	U	U1	V
2.93 (29.7)	1.89 (48.0)	.59 (15.0)	.59 (15.0)	.41 (10.5)
W	X	Y		
.45 (11.5)	.49 (12.5)	2.90 (73.6)		

Inches (mm)

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

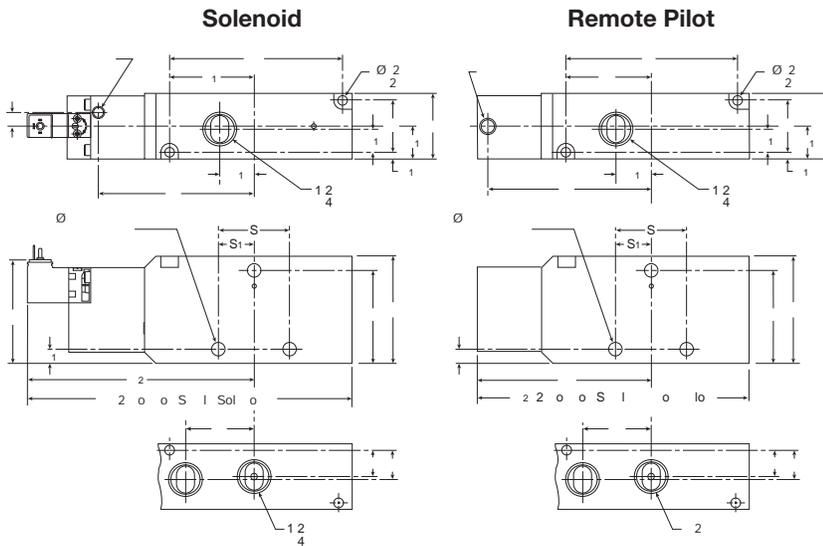


B7 & B8 4-way Inline

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)

B7 & B8 Single Operators – 3-way Inline

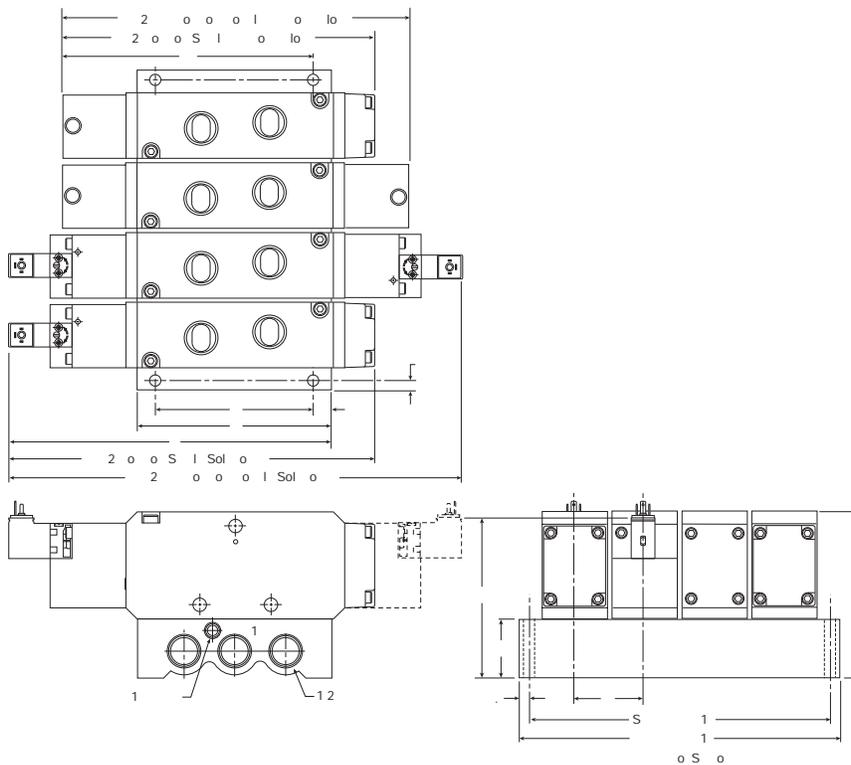


B7 & B8 3-way Inline

A	A₂	B	C	C₁
7.99 (203)	6.65 (169)	2.59 (66)	1.65 (42)	.83 (21)
D₁	D₂	E	E₁	F
4.29 (109)	5.63 (143)	4.21 (107)	2.13 (54)	4.06 (103)
G₁	H	H₁	J₁	M
.86 (22)	1.29 (33)	.16 (4)	.59 (15)	1.69 (43)
N	P	Q	R	R₁
.67 (17)	.75 (19)	2.68 (68)	2.32 (59)	.35 (9)
S	S₁	T	U	
1.81 (46)	.90 (23)	3.94 (100)	.35 (9)	

Inches (mm)

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



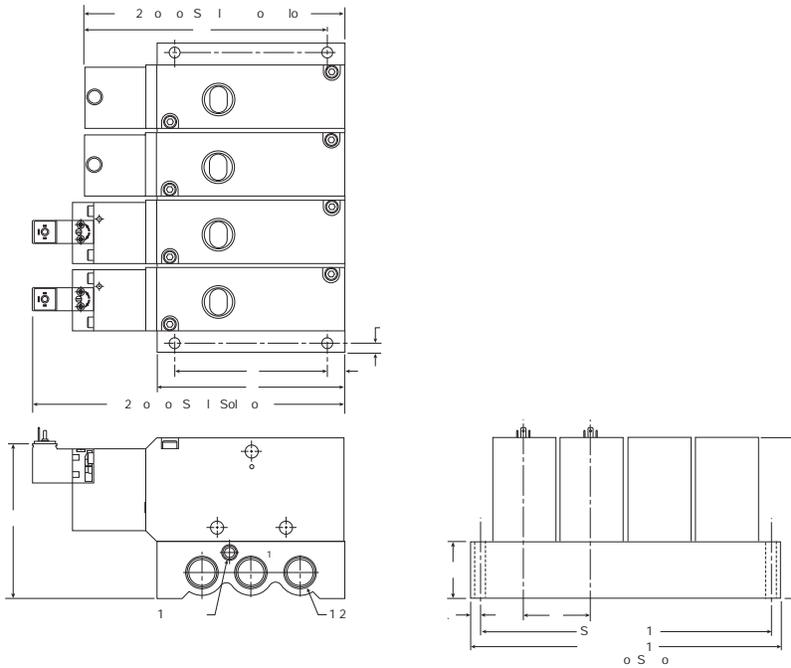
**B7 & B8 4-way IEM
 Aluminum Bar Manifold**

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)

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products

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

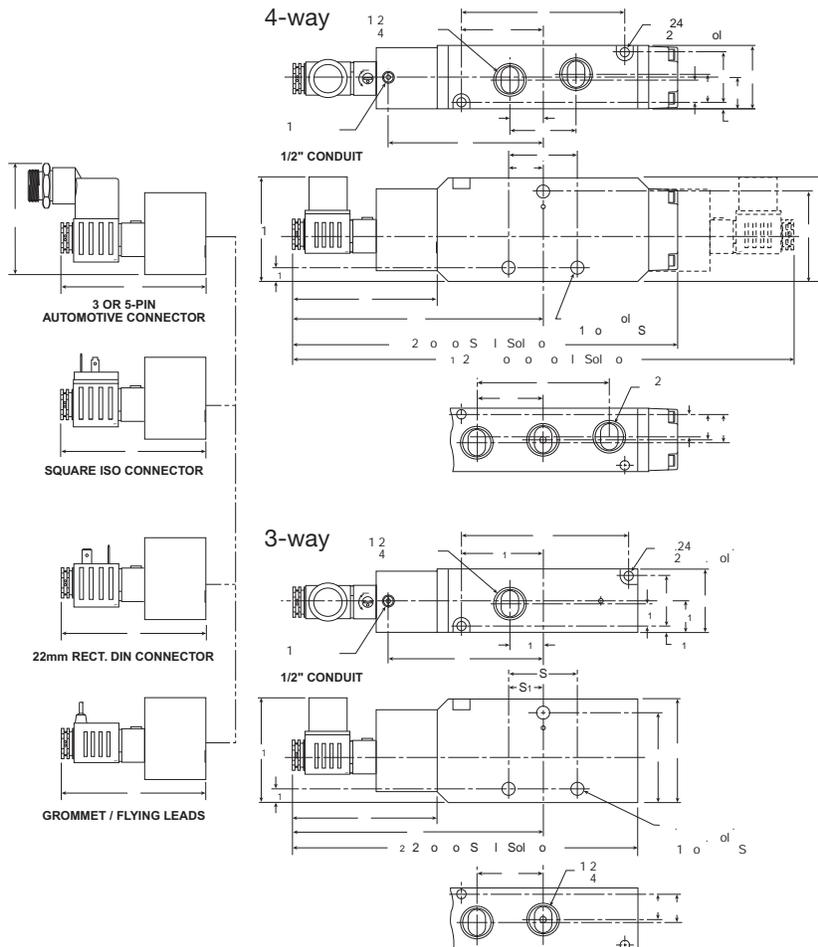


**B7 & B8 3-way IEM
 Aluminum Bar Manifold**

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	A ₁	A ₂	C	C ₁
9.92 (252)	12.91 (328)	8.78 (223)	1.65 (42)	.83 (21)
D	E	E ₁	F	G
6.46 (164)	4.21 (107)	2.13 (54)	3.74 (95)	1.73 (44)
G ₁	H	H ₁	J	J ₁
.86 (22)	1.29 (33)	.16 (4)	.75 (19)	.59 (15)
L	M	N	P	P ₁
3.39 (86)	1.69 (43)	.67 (17)	.75 (19)	.59 (15)
Q	R	R ₁	S	S ₁
2.68 (68)	2.32 (59)	.35 (9)	1.81 (46)	.90 (23)
Y	Y ₁	Z		
2.87 (73)	2.71 (69)	3.98 (101)		

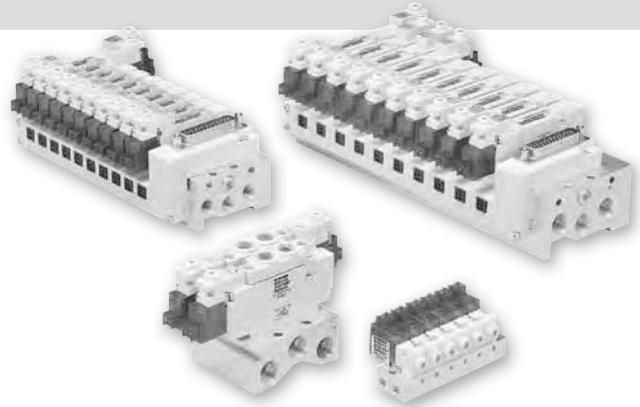
Inches (mm)

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D
 Inline Valve Products



ADEX Series

ADEX Series are miniature low power consumption solenoid valves, ideal for powering small to mid-sized pneumatic actuators used in automation and process applications. ADEX's versatility is further enhanced through its three mounting styles and electronic connectivity options.



Features

- Compact body size
- Fast response < 10ms

Ports

- A00S: M3 – .02 Cv
- A05: M5 – .18 Cv
- A12: 1/8 inch – .47 Cv

Mounting

- Inline
- Subbase mount

Solenoids

- 0.6 W
- 5VDC, 12VDC, 24VDC and 110/220VAC
- LED and surge suppression

Operating information

Maximum operating pressure*:

A05 & A12	Vacuum to 100 PSIG (Vacuum to 6.8 bar)
A00S (NC)	Vacuum to 100 PSIG (Vacuum to 6.8 bar)
A00S (NO)	Vacuum to 70 PSIG (Vacuum to 4.8 bar)

Minimum operating pressure: See chart below

Operating temperature:

Intermittent Duty (AC & DC Voltage):	32°F to 122°F (0°C to 50°C)
	Voltage Rated +10 / -10%
Continuous Duty (DC Voltage Only):	32°F to 104°F (0°C to 40°C)
	Voltage Rated +0 / -10%

* When using vacuum and pressure simultaneously on ports 1 & 3, normally closed valve, the maximum pressure is 85 PSIG (586 kPa).

When using vacuum and pressure simultaneously on ports 1 & 3, normally open valve, the maximum pressure is 58 PSIG (400 kPa).

Material specifications

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

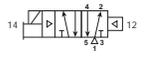
Minimum operating pressure

Description	Internal pilot		External pilot		
	PSIG	kPa	PSIG	kPa	
4-way	Single Solenoid	22	152	Vacuum	
				36	248
				Vacuum	
4-way	Double Solenoid – 2-position	15	104	Vacuum	
				36	248
4-way	Double Solenoid – 3-position	30	207	Vacuum	
				36	248
3-way	A00 Series	Vacuum			

Most popular.

Viking Lite Series
Viking Xtreme Series
B Series
ADEX Series
N Series
D Inline Valve Products

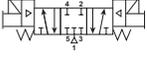
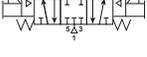
Single Solenoid, 4-way, 2-position

Symbol	Port size	Cv	Voltage	Valve type	Part number
	M5	.17 Cv	24VDC	A05 inline	A05RS251PM5MF
	M5	.17 Cv	12VDC	A05 inline	A05RS252PM5MF
	1/8"	.47 Cv	24VDC	A12 inline	A12RS251PN1MF
	1/8"	.47 Cv	12VDC	A12 inline	A12RS252PN1MF
	Less base	.18 Cv	24VDC	A06 subbase	A05PS251P
	Less base	.18 Cv	12VDC	A06 subbase	A05PS252P
	Less base	.44 Cv	24VDC	A12 subbase	A12PS251P
	Less base	.44 Cv	12VDC	A12 subbase	A12PS252P

Double Solenoid, 4-way, 2-position

Symbol	Port size	Cv	Voltage	Valve type	Part number
	M5	.17 Cv	24VDC	A05 inline	A05RD251PM5MF
	M5	.17 Cv	12VDC	A05 inline	A05RD252PM5MF
	1/8"	.47 Cv	24VDC	A12 inline	A12RD251PN1MF
	1/8"	.47 Cv	12VDC	A12 inline	A12RD252PN1MF
	Less base	.18 Cv	24VDC	A06 subbase	A05PD251P
	Less base	.18 Cv	12VDC	A06 subbase	A05PD252P
	Less base	.44 Cv	24VDC	A12 subbase	A12PD251P
	Less base	.44 Cv	12VDC	A12 subbase	A12PD252P

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

Symbol	Port size	Cv	Voltage	Valve type	Part number
	M5	.16 Cv	24VDC	A05 inline	A05RD351PM5MF
	M5	.16 Cv	12VDC	A05 inline	A05RD352PM5MF
	1/8"	.43 Cv	24VDC	A12 inline	A12RD351PN1MF
	1/8"	.43 Cv	12VDC	A12 inline	A12RD352PN1MF
	Less base	.16 Cv	24VDC	A06 subbase	A05PD351P
	Less base	.16 Cv	12VDC	A06 subbase	A05PD352P
	Less base	.40 Cv	24VDC	A12 subbase	A12PD351P
	Less base	.40 Cv	12VDC	A12 subbase	A12PD352P

Locking flush override. Mounting screws and gaskets included with valve.

A00 Valve Only – Single Solenoid, 3-way, 2-position*



A00SC231P Shown

* Screwdriver-Operated, Locking Manual Override (LMOR).

A00S	C23	—	1	P
Function				Connector Position
Single solenoid normally open	023			P With indicator light & surge suppression
Single solenoid normally closed	C23			
Flow				Voltage
Standard type	Blank			1 24VDC
Large flow type	J			2 12VDC
				4* 5VDC
				8* 110/50 VAC
				9 120/60 VAC

* Special Order

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
D
 Inline Valve Products

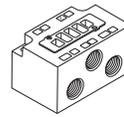
A00 Valve Subbase



Valve type	All Ports	Part number
A00	M3	A00SBM3

Mounting screws and gaskets included with valve.

A05 & A12 Subbases



A05PB

Valve type	Port size	Part number
A05	1/8" NPT	A05PBN1
	1/8" BSPP "G"	A05PBG1
A12	1/4" NPT	A12PBN2
	1/4" BSPP "G"	A12PBG2

Kit Includes: (1) Subbase (Holddown bolts and gasket are included with valve)

A00 Valve Manifold*



MMFS6A00M3 Shown

* Normally closed valves (A00SC23•P) and Normally open valves (A00S023•P) cannot be mounted on the same manifold simultaneously.

MMFS	2	A00	M5
Number of stations		Port size	
2 Stations	2	M3	
3 Stations	3	M5	
4 Stations	4		
•	•		
•	•		
20 Stations	20		

A05 Valve IEM Bar Manifold



MMFU10A05F Shown

4-way, NPTF (Individual wiring type)	MMFU##A05F
4-way, NPTF (Collective wiring type)	MMCU##A05F

– stations 2 to 20
 ## – stations 2 to 12
 (Even numbers only)

A12 Valve IEM Bar Manifold



MMFU10A12F Shown

4-way, NPTF (Individual wiring type)	MMFU##A12F
4-way, NPTF (Collective wiring type)	MMCU##A12F

– stations 2 to 20
 ## – stations 2 to 12
 (Even numbers only)

A05 Valve Subbase Bar Manifold (5-Ported)



4-way, M5 (Individual Wiring Type)	MMFS##A05FM5
4-way, M5 (Collective Wiring Type)	MMCS##A05FM5

– stations 2 to 20
 ## – stations 2 to 12
 (Even numbers only)

A12 Valve Subbase Bar Manifold (5-Ported)



4-way, 1/8" NPTF (Individual Wiring Type)	MMFS##A12FF1
4-way, 1/8" NPTF (Collective Wiring Type)	MMCS##A12FF1

– stations 2 to 20
 ## – stations 2 to 12
 (Even numbers only)

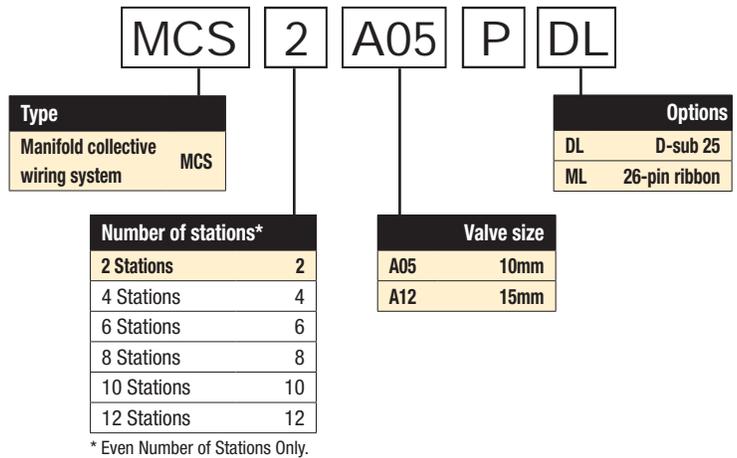
Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D
 Inline Valve Products



Collective Wiring



MCS10A05PDL Shown



Individual Wired Connectors P / R Type

Size	Voltage	Length	Part number
A00	DC	.5 meter	A05PDCCL5
		1 meter	A05PDCCL10
		3 meter	A05PDCCL30
A05	AC	.5 meter	A05PACCL5
		1 meter	A05PACCL10

A05PDCCL##

DC Voltage: Positive "+" (Red Wire)
 Negative "-" (Black Wire)

AC Voltage: Both Wires are Blue (Polarity Neutral)

Wired Connectors with Protective Cover - P / R Type

Size	Length	Part number
A00	1 meter	A05PDCCB10
A05		
A12		

The cover is made of chloroprene rubber for electrical use, assuring excellent weather and insulation resistance. However, be careful not to place it under splash of cutting oil.

Collective Wired Connectors P / R Type

Size	Part number	Part number	
		PNP	NPN
A05 Single	A05PSCCM	A05PSCC	
A12 Double	A05PDCCM	A05PDCC	

A05PDCC

PNP = SOURCING = "Negative Common" = Yellow Wires
 NPN = SINKING = "Positive Common" = Red Wires

Cable with Female D-Sub, 25-Pin Connector

Description	Part number
25-Pin, D-Sub cable, 1 meter (3.3 ft.)	DSS25FB1K

Note: For use with ADEX MCS system only.
 Connection to control system is through 25 colored wires AWG 24. Includes (2) M2.5 mm screws.

Viking Lite Series

Viking Xtreme Series

B Series

ADEX Series

N Series

D

Inline Valve Products

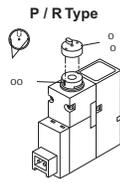
Blanking Plate

Size	Type	Part number
A00	Subbase	A00SBP
A05	Body ported	A05RGBP
	Subbase	A05PGBP
A12	Body ported	A12RGBP
	Subbase	A12PGBP

A00SBP A05RGBP A05PGBP

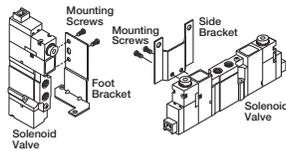
* Outlet pin cover used with collective wiring system only.

Extended Override Cover



Size	Orange: for 14 side solenoid	Green: for 12 side solenoid
A00	A05PLA	A05PLB
A05		
A12		

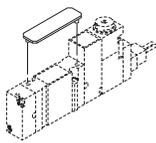
Mounting Bracket



Size	Type	Part number
A05	Side	A05RBS
	Foot	A05RBF
A12	Side	A12RBS
	Foot	A12RBF

Kit Includes: (1) Bracket, (2) Screws

Labeling Tag



Size	Description	Part number
A05	White Label Tag	A05PN
A12		

Exhaust Mufflers



Pipe thread	Part number
M5	P6M-PAC5
1/8" NPT	EM12
1/4" NPT	EM25

P6M - Plastic; EM - Sintered Bronze

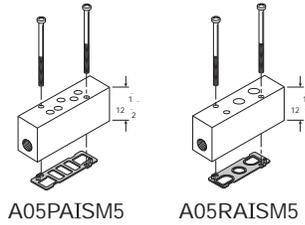
Plastic Silencers



Thread size	Part number	
	NPT	BSPT
M5	AS-5	N/A
1/8"	ASN-6	AS-6
1/4"	ASN-8	AS-8

Individual Air Supply Spacer

Mounts between valve and manifold. Supply from the manifold is blocked and only the valve mounted on the spacer receives the individual supply.



Size	Type	Port size	Internal pilot part number	External pilot* part number
A05	Inline	M5	A05RAISM5	A05RAXISM5
	Subbase	M5	A05PAISM5	A05PAXISM5
A12	Inline	1/8" NPT	A12RAISN1	A12RAXISN1
	Subbase	1/8" NPT	A12PAISN1	A12PAXISN1

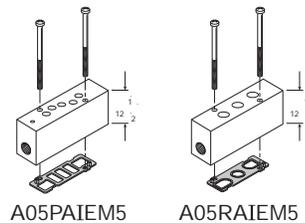
Can only be used on Collective wiring type manifolds.

* Can only be used with External Piloted valve. External pilot is located on the X Port of the manifold

Kit Includes: (1) Spacer, (2) Screws, and (1) Gasket

Individual Air Exhaust Spacer

Mounts between valve and manifold. Exhaust from the manifold is blocked and only the valve mounted on the spacer has the individual exhaust.



Size	Type	Port size	Internal pilot part number	External pilot* part number
A05	Inline	M5	A05RAIEM5	A05RAXIEM5
	Subbase	M5	A05PAIEM5	A05PAXIEM5
A12	Inline	1/8" NPT	A12RAIEN1	A12RAXIEN1
	Subbase	1/8" NPT	A12PAIEN1	A12PAXIEN1

Can only be used on Collective wiring type manifolds.

* Can only be used with External Piloted valve. External pilot is located on the X Port of the manifold

Kit Includes: (1) Spacer, (2) Screws, and (1) Gasket

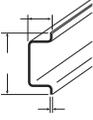
Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products



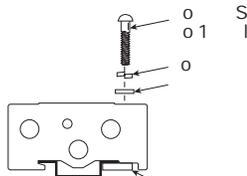
M3 & M5 Fittings

	Description	Part number
	M5 Plug Fitting	N220-1900J
	M3 to 3mm Barb	BC03M3
	M3 to 4mm Barb	BC04M3
	M5 to 3mm Barb	BC03M5

DIN Rail

	Length	Part number
	6 Feet	AM1DE200

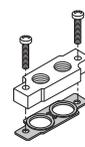
DIN Rail Hardware Kit



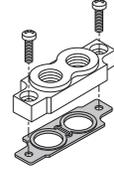
Size	Type	Dimensions			Part number
		A	B	C	
A05	IEM	2.24	1.00	.31	MFUA05DB
	Subbase	(57)	(25)	(8)	MFSA05DB
A12	IEM	2.91	1.00	.39	MFUA12DB
	Subbase	(74)	(25)	(10)	MFSA12DB

Kit includes: (2) Screws, (2) Clamps

Replacement Cylinder Port Plate Kits



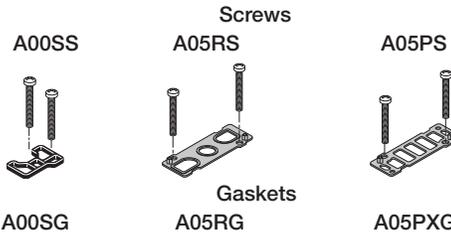
A05RABM5



A12RABN1

Size	Fitting	Part number
A05	M5	A05RABM5
A12	1/8" NPT	A12RABN1
	1/8" BSPP "G"	A12RABG1

Replacement Base Gasket Kits



Size	Type	Gasket only	Screw
A00	Subbase	A00SG	A00SS
	Body Ported	A05RG	A05RS
A05	Subbase Int.	A05PG	A05PS
	Subbase Ext.	A05PXG	A05PS
A12	Body Ported	A12RG	A12RS
	Subbase Int.	A12PG	A12PS
	Subbase Ext.	A12PXG	A12PS

These are spare parts, mounting screws and gaskets included with valves.

Viking Lite Series

Viking Xtreme Series

B Series

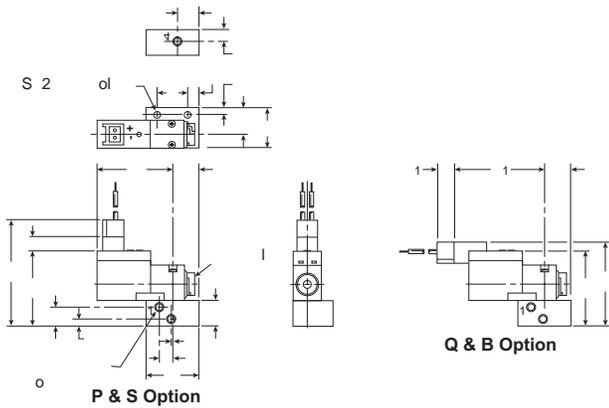
ADEX Series

N Series

D

Inline Valve Products

A00 Subbase

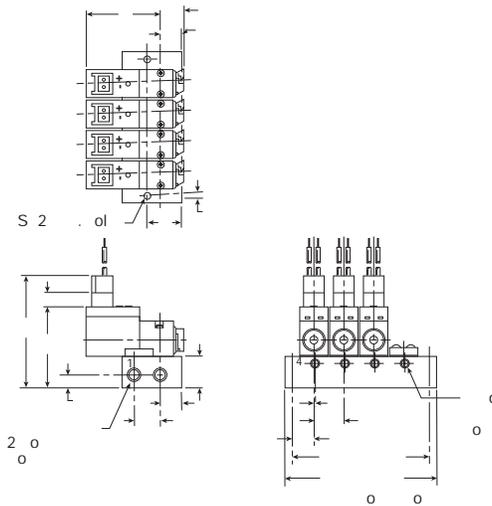


A00 - Subbase

A	A ₁	B	C	D
1.00 (25)	1.18 (30)	.41 (11)	.015 (.4)	.17 (4)
E	F	G	H	H ₁
.79 (20)	.12 (3)	.28 (7)	1.54 (39)	1.38 (34)
J	J ₁	K	L	M
.24 (6)	.20 (5)	1.11 (28)	.32 (8)	.18 (5)
N	P	Q	R	S
.47 (12)	.10 (3)	.39 (10)	.59 (15)	.106 (2.7)
T	.38 (10)			

Inches (mm)

A00 Manifold

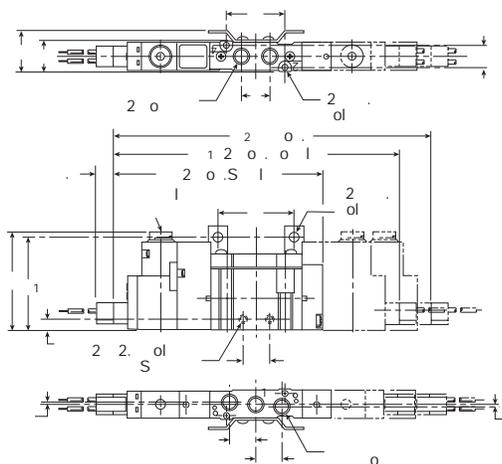


A00 - Manifold

A	B	C	D	E	
.36 (9)	1.00 (25)	.31 (8)	.10 (3)	.51 (13)	
F	G	H	J	K	
.31 (8)	.39 (10)	1.63 (42)	.20 (5)	1.22 (31)	
L	M	N	P	Q	
.20 (5)	.33 (9)	.02 (.6)	.41 (10.5)	.47 (12)	
S	U	X	W		
.125 (3.2)	.41 (10.5)	.45 (11.5)	.26 (6.5)		

Inches (mm)

A05R Single & Double Operators – Inline



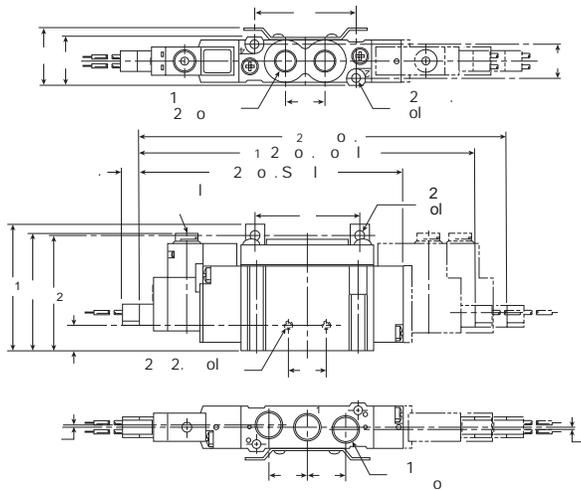
A05R – Inline

A	A ₁	A ₂	A ₃	B
2.91 (74)	3.94 (100)	4.25 (108)	.24 (6)	1.38 (35)
B ₁	C	D	E	F
1.30 (33)	.16 (4)	.38 (10)	1.06 (27)	.83 (21)
G	H	J	K	L
.57 (15)	.33 (9)	.40 (10)	.45 (11.4)	Ø .08 Ø (2.1)
M	N	P		
.37 (10)	.04 (1)	Ø .14 Ø (3.5)		

Inches (mm)

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products

A12R Single & Double Operators – Inline

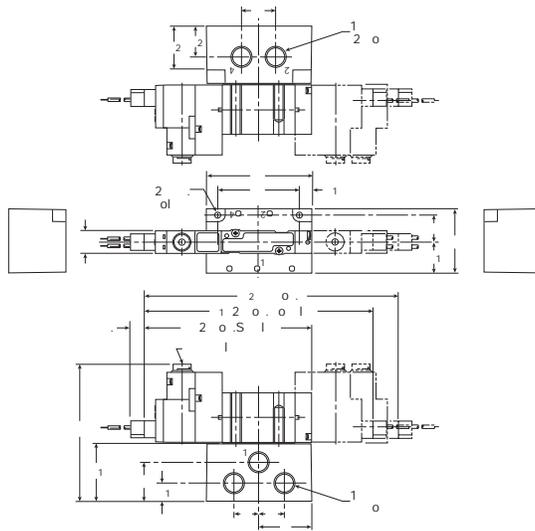


A12R – Inline

A	A1	A2	A3	B
3.68 (94)	4.69 (119)	5.12 (130)	.24 (6)	1.64 (42)
B1	B2	C	D	E
1.77 (45)	1.70 (43)	.35 (9)	.51 (13)	1.46 (37)
F	G	H	J	K
1.42 (36)	.80 (20)	.47 (12)	.55 (14)	.68 (17)
L	M	N	P	
∅ .12 ∅ (3.1)	.55 (14)	.03 (0.8)	∅ .14 ∅ (3.5)	

Inches (mm)

A05P Single & Double Operators – Subbase

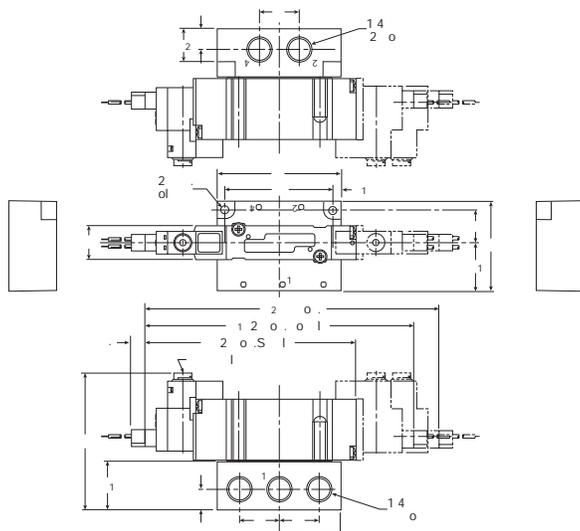


A05P – Subbase

A	A1	A2	A3	B
2.91 (74)	3.94 (100)	4.25 (108)	.24 (6)	2.35 (60)
B1	B2	C	C1	C2
.96 (25)	.75 (19)	.65 (17)	.30 (8)	.53 (14)
D	E	E1	F	G
.89 (23)	1.38 (35)	.20 (5)	.57 (15)	1.77 (45)
H	J	J1	K	L
.08 (28)	.45 (11.5)	.51 (13)	.39 (10)	∅ .13 ∅ (3.2)
M				
.45 (12)				

Inches (mm)

A12P Single & Double Operators – Subbase



A12P – Subbase

A	A1	A2	A3	B
3.68 (94)	4.69 (119)	5.12 (130)	.24 (6)	2.41 (61)
B1	B2	C	D	E
.87 (22)	.75 (19)	.37 (10)	1.10 (28)	1.89 (48)
E1	G	H	J	J1
.16 (4)	2.20 (56)	1.59 (41)	.57 (14.5)	.87 (22)
K	L	M		
.59 (15)	∅ .17 ∅ (4.3)	.71 (18)		

Inches (mm)



Viking Lite Series

Viking Xtreme Series

B Series

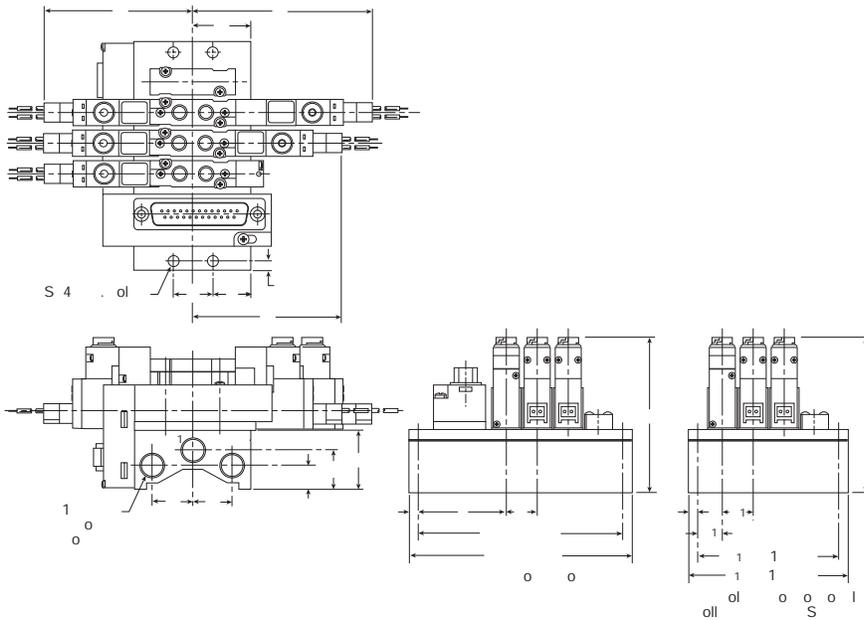
ADEX Series

N Series

D

Inline Valve Products

A05R Manifold – Valve Inline

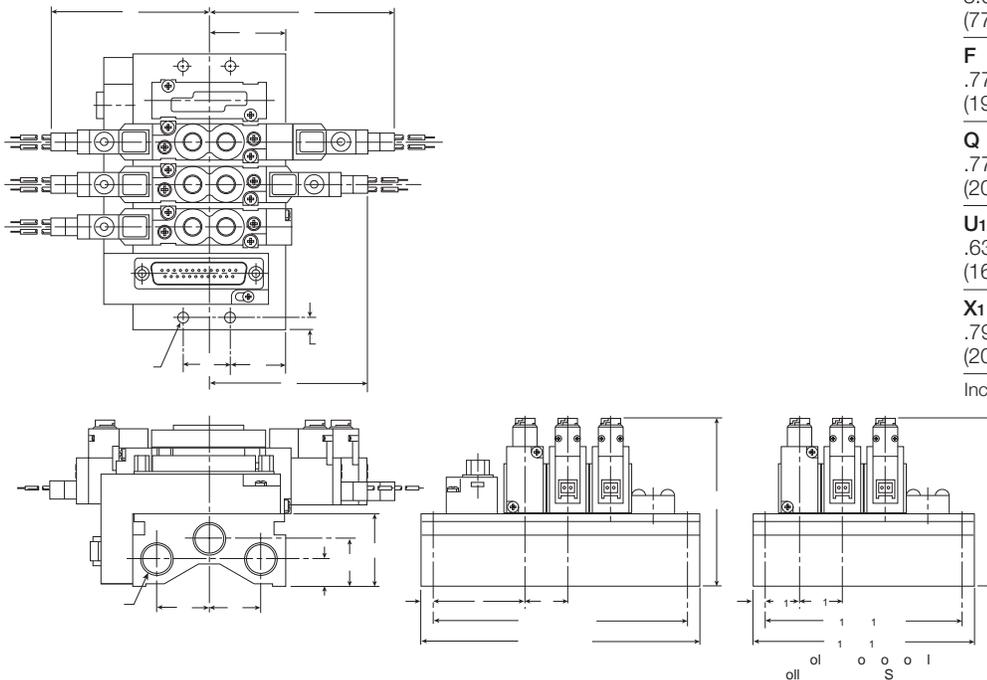


A05R - Manifold, Valve Inline

A	B	C	D	E
2.52 (64)	2.21 (56)	.94 (24)	.16 (4)	.61 (16)
F	G	H	J	M
.63 (16)	2.21 (56)	.94 (24)	.61 (16)	.37 (10)
Q	S	T	T₁	U
.63 (16)	Ø .18 (4.5)	1.34 (34)	.51 (13)	.49 (12.5)
U₁	V	W	W₁	X
.41 (10.5)	2.32 (59)	1.36 (35)	.37 (9.5)	.167 (43)
X₁				
.68 (17.5)				

Inches (mm)

A12R Manifold – Valve Inline

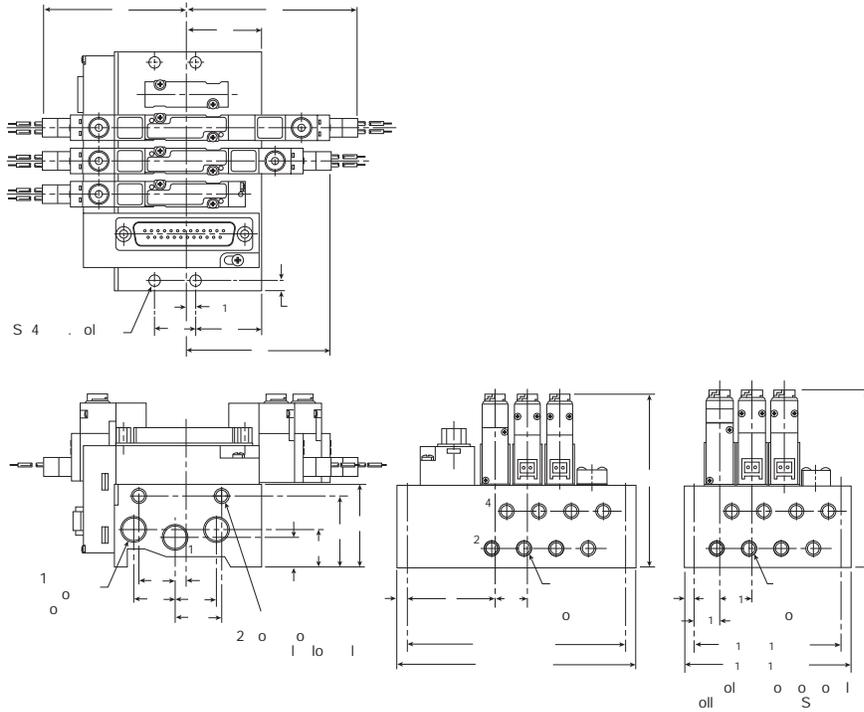


A12R - Manifold, Valve Inline

A	B	C	D	E
3.01 (77)	2.58 (66)	1.14 (29)	.20 (5)	.76 (19)
F	G	H	J	M
.77 (19.6)	2.58 (66)	1.08 (28)	.71 (18)	.41 (11)
Q	S	T	T₁	U
.77 (20)	Ø .18 (4.5)	1.48 (38)	.51 (13)	.69 (17.5)
U₁	V	W	W₁	X
.63 (16)	2.74 (70)	1.34 (34)	.39 (10)	1.73 (44)
X₁				
.79 (20)				

Inches (mm)

A05P Manifold – Side Ports

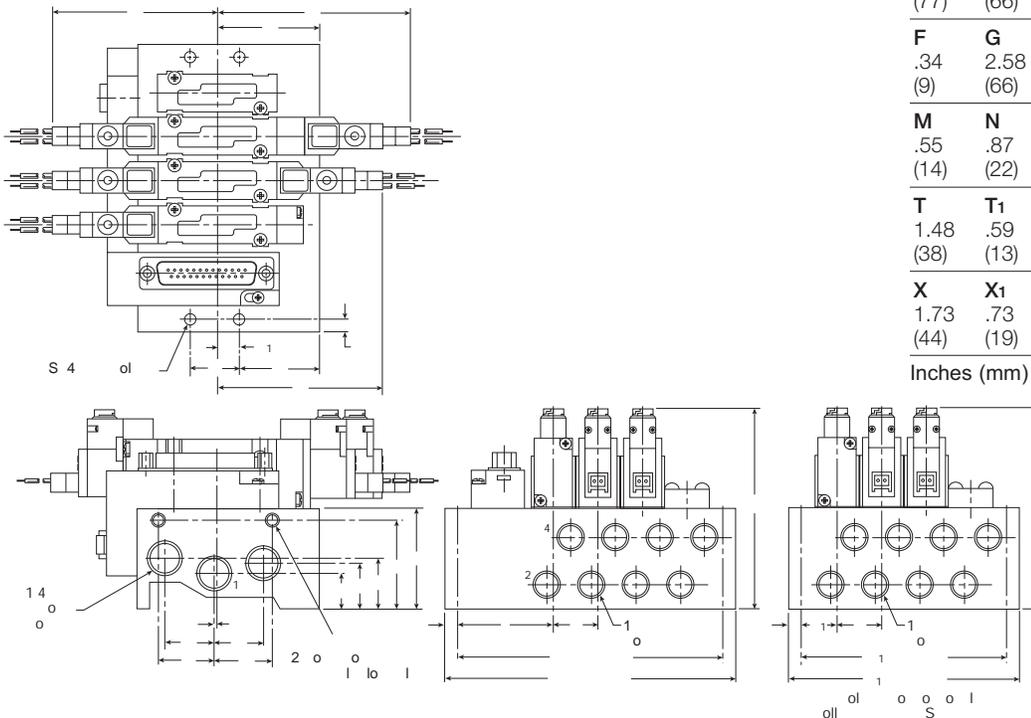


A05P – Manifold, Side Ports

A	B	C	D	E
2.52 (64)	2.21 (56)	1.12 (29)	.16 (4)	1.00 (26)
F	F1	G	H	J
.63 (16)	.19 (5)	2.21 (56)	1.26 (32)	1.08 (28)
L	M	N	P	Q
.59 (15)	.45 (11.5)	.55 (14)	.13 (3)	.63 (16)
R	S	T	T1	U
.71 (18)	∅ .18 ∅ (4.5)	1.34 (34)	.39 (10)	.49 (12.5)
U1	V	W	W1	X
.41 (10.5)	2.64 (67)	1.32 (34)	.37 (10)	1.65 (42)
X1				
.67 (18)				

Inches (mm)

A12P Manifold – Side Ports



A12P – Manifold, Side Ports

A	B	C	D	E	F
3.01 (77)	2.58 (66)	1.59 (40)	.20 (5)	1.25 (32)	.77 (20)
F	G	H	J	K	L
.34 (9)	2.58 (66)	1.57 (40)	1.38 (35)	.79 (20)	.71 (18)
M	N	P	Q	R	S
.55 (14)	.87 (22)	.04 (1)	.77 (20)	.91 (23)	∅ .18 ∅ (4.5)
T	T1	U	V	W	W1
1.48 (38)	.59 (13)	.69 (17.5)	3.09 (79)	1.34 (34)	.33 (9)
X	X1				
1.73 (44)	.73 (19)				

Inches (mm)

Viking Lite
Series

Viking Xtreme
Series

B
Series

ADEX
Series

N
Series

D

Inline
Valve Products

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
- 3/4" Body – 1/2", 3/4", 1" NPT
- 1-1/4" Body – 1", 1-1/4", 1-1/2" NPT
- BSPP "G" threads available

Certification / approval

- Approved to be CE marked (Standard L-Pilot & P-Pilot)
- NEMA 4 Option
- Hazardous Duty Option IP 65 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.

 Most popular.



Operating information

Operating pressure:

Solenoid valves - internal pilot

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

Solenoid valves - external 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.

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

Viking Lite Series

Viking Xtreme Series

B Series

ADEX Series

N Series

D

Inline Valve Products

Single Solenoid, Non-locking manual override, internal "P" 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
		3.0 to 4.4	3/8"	1/2"	120VAC	N3153904553	N3553904553	N3753904553
					24VDC	N3153904549	N3553904549	N3753904549
			1/2"	1/2"	120VAC	N3154904553	N3554904553	N3754904553
					24VDC	N3154904549	N3554904549	N3754904549
		9.0 to 11.0	1/2"	3/4"	120VAC	N3155904553	N3555904553	N3755904553
					24VDC	N3155904549	N3555904549	N3755904549
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 "P" pilot 125 PSI, standard service, P-pilot 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
		20.0 to 30.0	1-1/4"	1-1/4"	120VAC	N3257904753	N3657904753	N3857904753
				1-1/4"	120VAC	N3258904753	N3658904753	N3858904753
				1-1/2"	120VAC	N3259904753	N3659904753	N3859904753

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	
		3.0 to 4.4	3/8"	1/2"	N31431091	N35431091	N37431091	
				1/2"	N31441091	N35441091	N37441091	
			1/2"	3/4"	120VAC	N31451091	N35451091	N37451091
					24VDC	N31461091	N35461091	N37461091
		9.0 to 11.0	3/4"	1"	120VAC	N31471091	N35471091	N37471091
					24VDC	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
		20.0 to 30.0	1-1/4"	1-1/4"	N32471091	N36471091	N38471091
				1-1/4"	N32481091	N36481091	N38481091
				1-1/2"	N32491091	N36491091	N38491091

Normally Closed Normally Open

Viking Lite Series
Viking Xtreme Series
B Series
ADEX Series
N Series
D
Inline Valve Products

"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	
1/2" inlet & cyl - 3/4" exhaust - NPT	5
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
1-1/4" inlet & cyl - 1-1/2" exhaust - BSPP	S*
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.
 Note: BSPP is to the ISO 228 standard, and requires an R-BSPT male fitting.

"L" pilot code						
Code	Voltage			Solenoid enclosure options		
	AC 60hz	AC 50hz	DC	Standard duty (01, 45)	Cont. duty (04, 48)	200 PSI (46)
49			24	1, 2, 3, 5, 6, 8, 9, W	6, 8, 9	9
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		

"L" pilot configuration	
01*	External pilot, std service, 140 PSI
04*	External pilot, cont duty, 140 PSI
45	Internal pilot, std service, 140 PSI
48	Internal pilot, cont duty, 140 PSI

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

Solenoid type	
0	Standard

Solenoid enclosure	
1	Basic pilot
2	Basic pilot NLMO
3	Basic pilot LMO
5	Junction box NLMO
6	Junction box LMO
8	Junction box NLMO w/ light
9	Junction box LMO w/ light
W	Basic pilot ext. LMO

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series

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

N 365 8 9 0 47 53

Valve function - solenoid	
1-1/4" body	
2-Way, normally closed	325
3-Way, normally closed	365
3-Way, normally open	385

Port size / thread type	
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
1-1/4" inlet & cyl - 1-1/2" exhaust - BSPP	S
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.

"P" pilot code					
Code	Voltage			Enclosure options	
	AC 60hz	AC 50hz	DC	Standard duty	
49			24	5, 6	
53	120	110		5, 6, 8, 9	

"P" pilot configuration	
02	External pilot, std service, 125 PSI
47	Internal pilot, std service, 125 PSI

Solenoid type	
0	Standard

Solenoid enclosure	
5	Junction box NLMO
6	Junction box LMO
8	Junction box NLMO w/ light
9	Junction box LMO w/ light

N Series
 D Inline Valve Products



Replacement Pilots

Description	Standard L-pilot		Continuous duty L-pilot	
	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)

Replacement Pilots

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

** Voltage code - 49 & 53

Replacement Pilots

Description	Heavy duty P-Pilot		
	No override	Non-locking	Locking
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

Coils for L-Pilot Operated 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.

Coils for P-Pilot Operated Valves

Voltage Code **	Voltage			Coil	
	60Hz	50Hz	DC	19" Leads	72" Leads
42	24	—	—	K593099	—
43	—	24	—	K593098	—
45	—	—	12	K593094	—
49	—	—	24	K593097	—
51	—	—	48	—	K593254
53	115	—	—	K593108	—
58	—	230	—	K593111	—

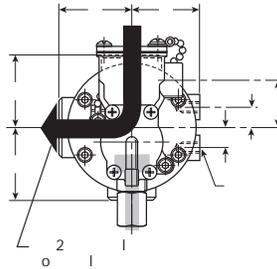
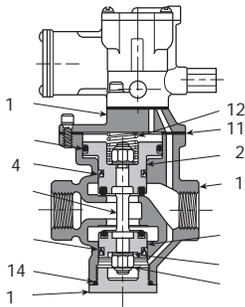
N □ □ □ □ □ □ □ * *
 Voltage Code

Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D
 Inline Valve Products



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

Normally Closed



Exhaust
Pressure

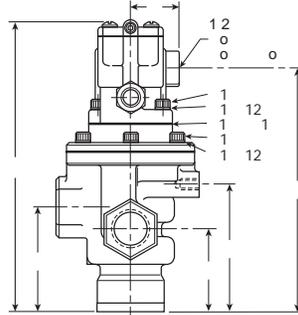
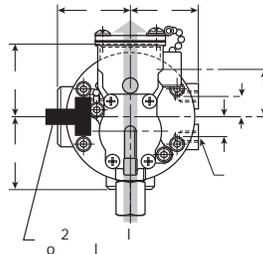
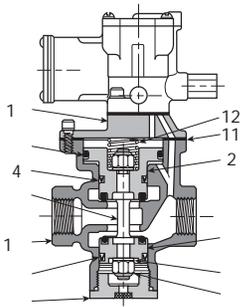
Top view indicates flow through 3-Way valve with coil de-energized.

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

Normally Open



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	
	1/2" Tap K053023	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

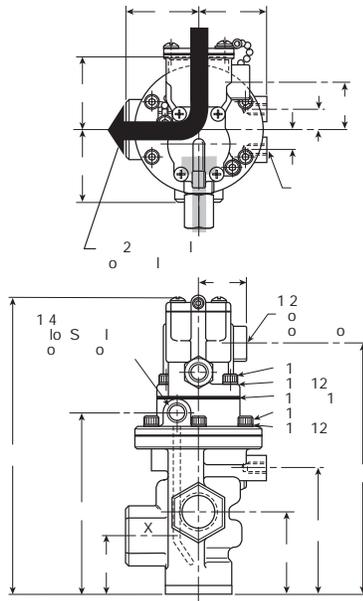
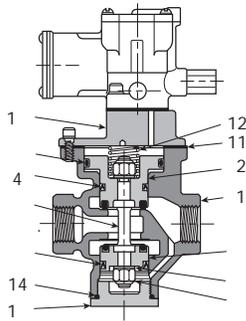
* Parts included in seal kit



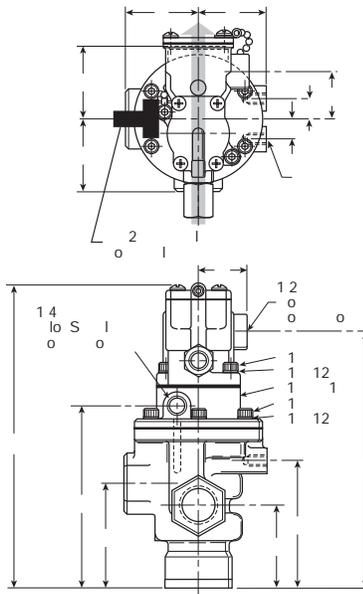
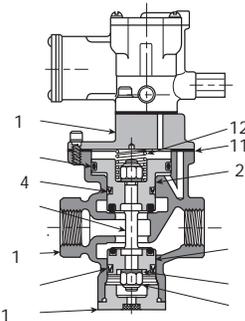
Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products

External 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.

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**

Key	3/8" Valve	3/4" Valve	Description
1	—	1/2" Tap K053067	Body (N.C.)
	3/8" Tap K053019	3/4" Tap K053069	
	1/2" Tap K053157	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

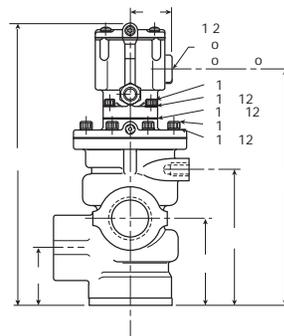
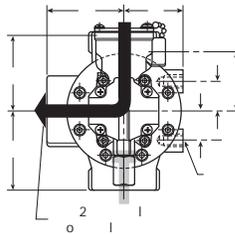
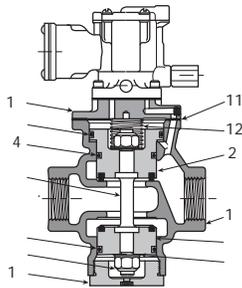
* Parts included in seal kit



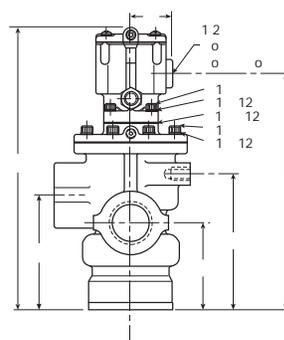
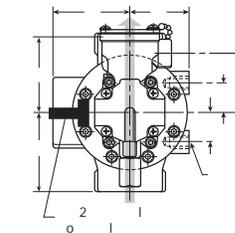
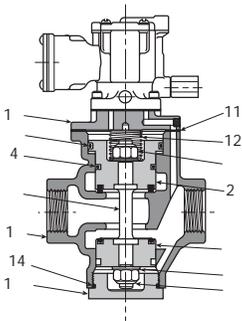
Viking Lite Series
Viking Xtreme Series
B Series
ADEX Series
N Series
D
Inline Valve Products

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	1-14" 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 K053111	Body (N.C.)
	1-1/4" Tap K053112	
	1-1/2" Tap K053113	
1A	1" Tap K053114	Body (N.O.)
	1-1/4" Tap K053115	
	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

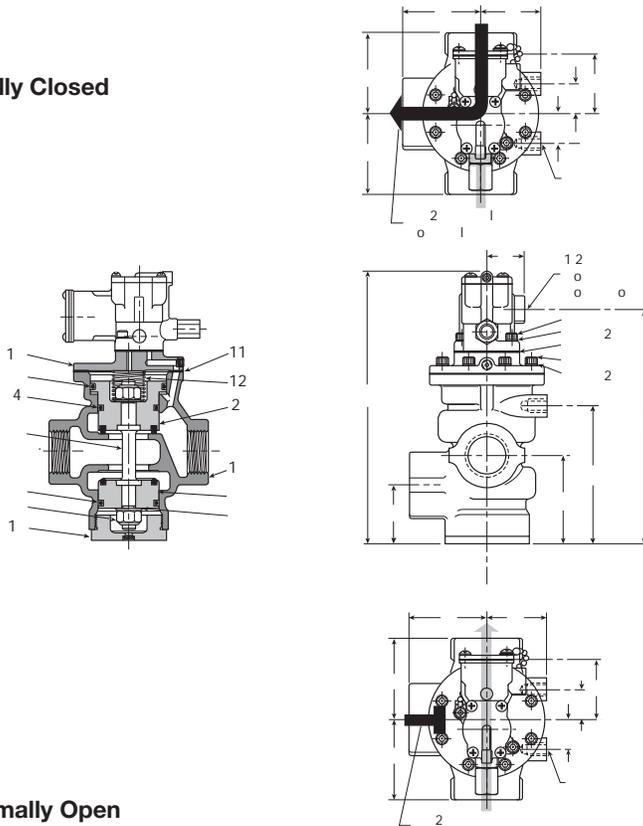
* Parts included in seal kit



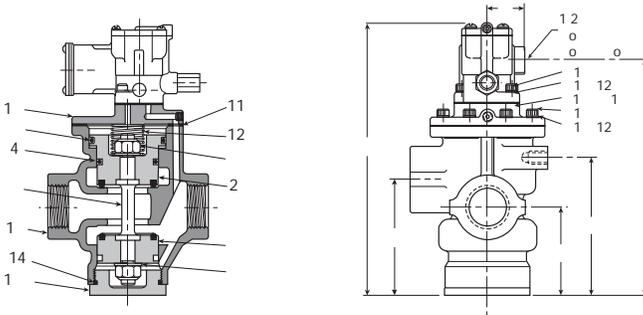
Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products

Continuous Duty 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.

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**

Key	1-1/4" Valve	Description
1	1" Tap K053111	Body (N.C.)
	1-1/4" Tap K053112	
	1-1/2" Tap K053113	
1A	1" Tap K053114	Body (N.O.)
	1-1/4" Tap K053115	
	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



Viking Lite Series

Viking Xtreme Series

B Series

ADEX Series

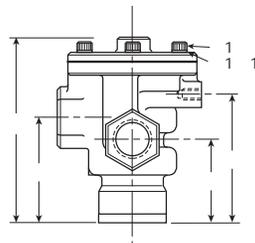
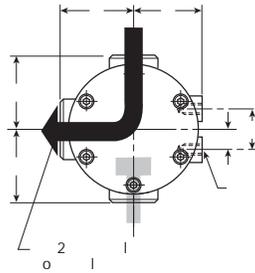
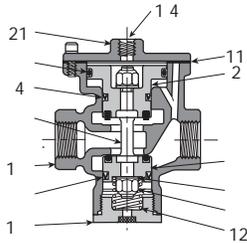
N Series

D

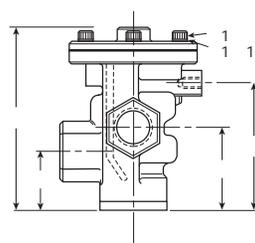
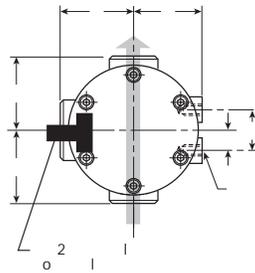
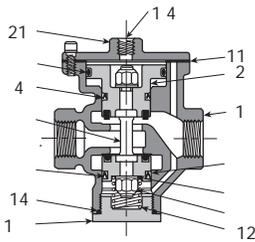
Inline Valve Products

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
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	1-1/4" Tap K053112	
	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	1-1/4" Tap K053115	
	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

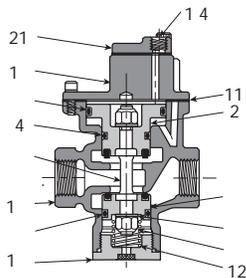
* Parts included in seal kit



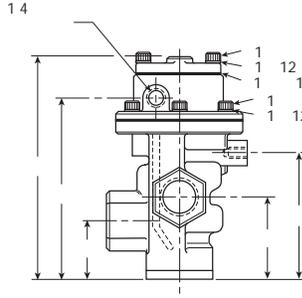
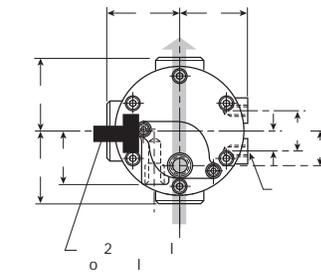
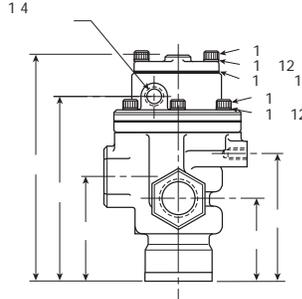
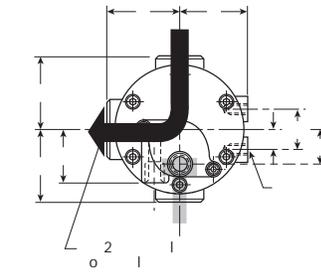
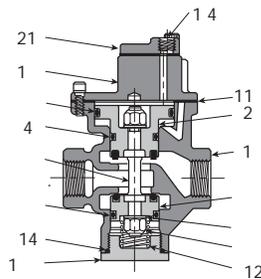
Viking Lite Series
 Viking Xtreme Series
 B Series
 ADEX Series
 N Series
 D Inline Valve Products

External 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
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:

- 3/8" Basic valve..... **K352031**
- 3/4" Basic valve..... **K352056**
- 1-1/4" Basic valve **K352083**

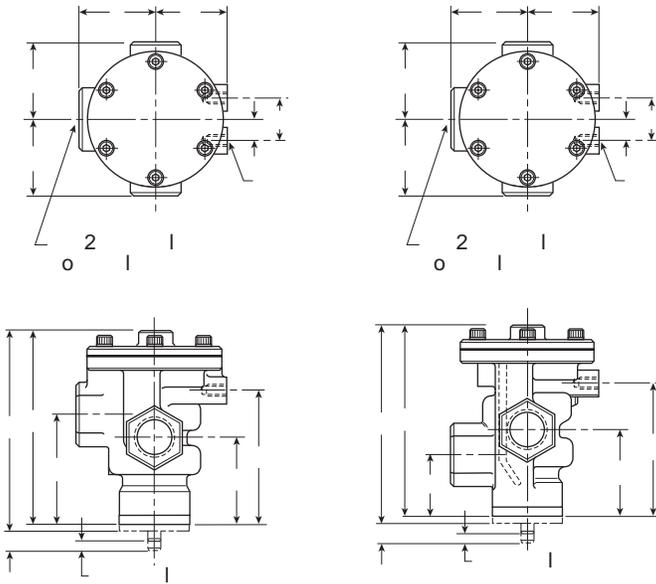
Key	3/8" Valve	3/4" Valve	1-1/4" Valve	Description
1	1/4" Tap K053011	1/2" Tap K053067	1" Tap K053143	Body (N.O.)
	—	3/4" Tap K053069	1-1/4" Tap K053110	
	1/2" Tap K053157	1" Tap K053221	1-1/2" Tap K053146	
1A	1/4" Tap K053010	1/2" Tap K053065	1" Tap K053159	Body (N.C.)
	—	3/4" Tap K053070	1-1/4" Tap K053144	
	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



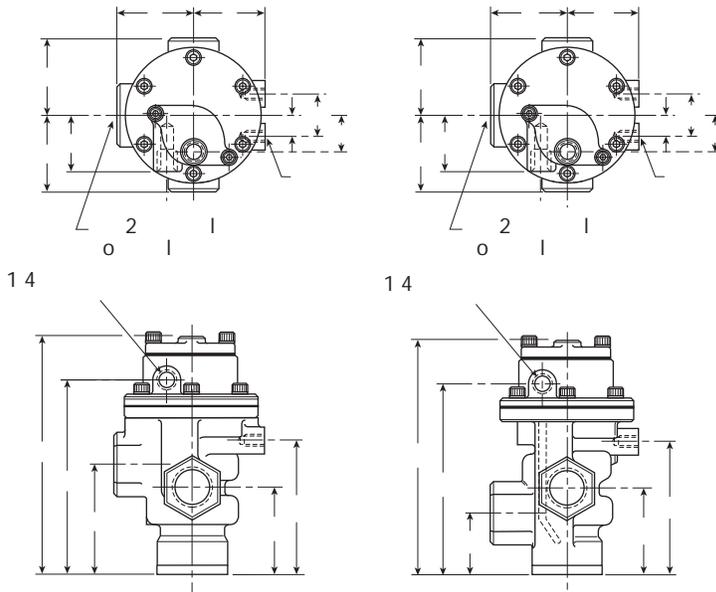
Internal Return - 3/8" & 3/4" Basic Body



**Internal Return -
 3/8" & 3/4" 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" Basic Body



**Internal Return -
 3/8" & 3/4" 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

Viking Lite Series
 Viking Xtreme Series
 B Series
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