

KIP Fluid Control Valves - Series 6

Features & Benefits

- 2/2 and 3/2 direct acting
- Designed for long life and reliability
- Ideally suited for air, liquid, and vacuum control in a broad range of sectors
- Different materials available for compatibility with neutral gases and liquids
- Custom fitting or electrical hardware installation available upon request. Minimum order quantity (MOQ) applies.
- Explosion proof coil option for use in hazardous locations, FM approved



Technical Data

Operating Pressure:

2/2: 0 to 1200 psig, vacuum capable*

3/2: 0 to 400 psig, vacuum capable*

Orifice

2/2: Ø3/32" to Ø1/4" (2/2)

3/2: Ø5/64" to Ø1/4" (3/2)

MOPD**:

2/2: 15 - 1200 psig

3/2: 5 - 400 psig

Cv Range:

2/2: 0.350 to 0.900

3/2: 0.350 to 0.650

Actuation:

Solenoid

Coil:

AC, DC, rectified coil*

Coil Class Options:

B: 266°F (130°C) standard

H: 356°F (180°C)

Ex. Proof Coil:

Approvals: FM 222A6.AE,

CSA LR 57643-6,

Protection Rating:

Cl. I, Div. 1, Gr. A, B, C, D

Cl. II/III, Div. 1, Gr. E, F, G,

T3C (320°F)

Ingress protection: IP56

Connection:

2/2: 1/8" NPTF, 1/4" NPTF,

3/8" NPTF, manifold mount

3/2: 1/8" NPTF, 1/4" NPTF,

manifold mount

Electrical Connection:

24" flying leads or 1/4"

spade terminal

Switching Function:

2/2: NO, NC

3/2: NO, NC, Multi-purpose,

Voltage Options:

12VDC, 24VDC, 24/60VAC,

120/60VAC, 240/60VAC

Wattage:

10 watts, nominal

Ex, proof coil: 9-13W 24VDC,

10-15VA 120VAC

Duty Cycle:

Continuous

Weight:

15oz, typical

Material:

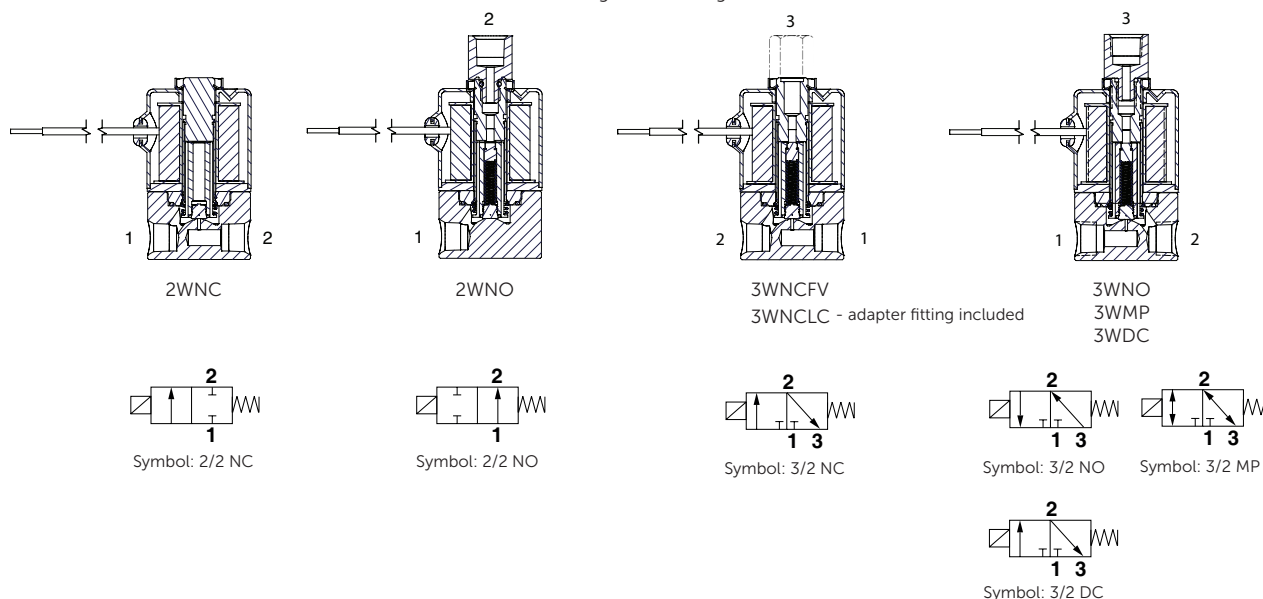
Body: brass or stainless steel

Internal wetted parts:

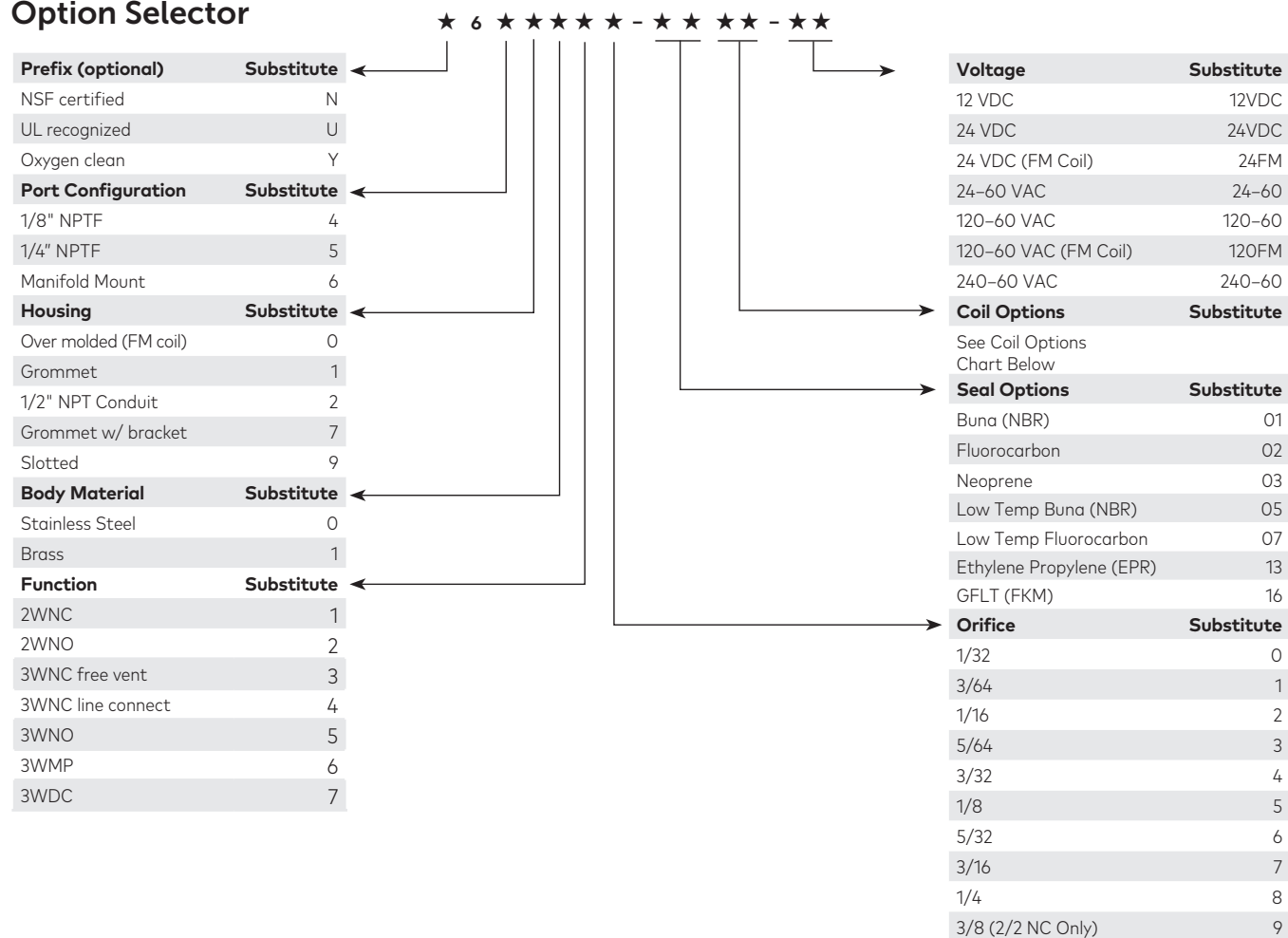
430FR & 300 series CRES

*For vacuum ratings and rectified coil options, call technical support at 860-677-0272 or email: farmingtontechnical@imiplc.com

**Manifold mount valves are limited to a maximum 400 MOPD rating for UL Recognition.



Option Selector



Coil Options

Number	Housing	Type	Class
01	1 - Grommet	Standard - dry tape wrapped with leads	B
01	2 - Conduit	Standard - dry tape wrapped with leads	B
41	1 - Grommet	Free-standing molded with leads	B
41	2 - Conduit	Free-standing molded with leads	B
51	9 - Slotted	1/4" Vertical Spade	B
67	0 - Over molded	Ex. Proof FM approved, 1/2" NPT integrated conduit over molded with leads	H
68	0 - Over molded	1/2" NPT integrated conduit over molded with leads	H
69	0 - Over molded	Integrated over molded DIN coil	H

*For class H coils replace second digit with 3. Example: 43 = Class H Free-standing molded with leads

Series 6 - 2/2 NC Cv and MOPD Values

Orifice Diameter		MOPD (psi)	Cv Value	Part Numbering
Body	Stop			
1/32		1200	0.035	6***10
3/64		1000	0.050	6***11
1/16		500	0.095	6***12
5/64		300	0.140	6***13
3/32		200	0.200	6***14
1/8		150	0.295	6***15
5/32		110	0.370	6***16
3/16		60	0.435	6***17
1/4		30	0.610	6***18
3/8		5	0.900	6***19

Series 6 - 2/2 NO Cv and MOPD Values

Orifice Diameter		MOPD (psi)	Cv Value	Part Numbering
Body	Stop			
	1/32	1000	0.035	6***20
	3/64	600	0.050	6***21
	1/16	350	0.095	6***22
	5/64	250	0.140	6***23
	3/32	175	0.200	6***24
	1/8	100	0.295	6***25

Series 6 - 3/2 NC Cv and MOPD Values

Orifice Diameter		MOPD (psi)	Cv Value Body	Cv Value Endstop	Part Numbering
Body	Stop				
1/32	1/32	300	0.035	0.025	6***40
3/64	3/64	250	0.050	0.065	6***41
1/16	1/16	200	0.090	0.115	6***42
5/64	5/64	175	0.135	0.180	6***43
3/32	3/32	125	0.180	0.210	6***44
1/8	1/8	85	0.275	0.240	6***45
5/32	1/8	50	0.370	0.240	6***46
3/16	1/8	30	0.455	0.240	6***47
1/4	1/8	15	0.650	0.240	6***48

For free vent, change fifth digit from 4 to 3

Series 6 - 3/2 NO Cv and MOPD Values

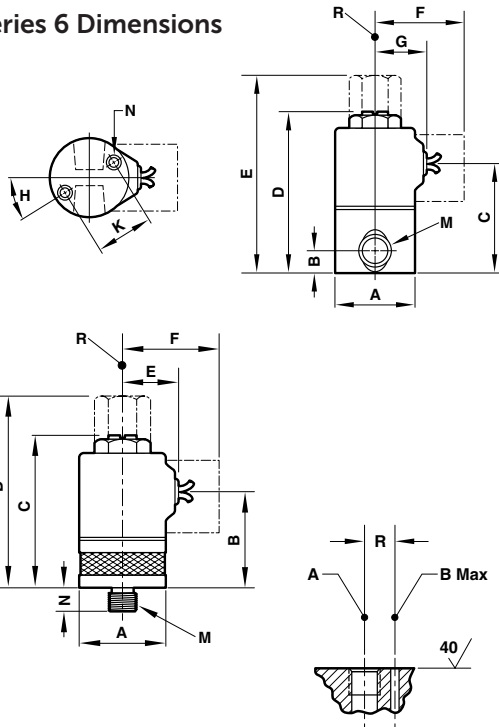
Orifice Diameter		MOPD (psi)	Cv Value Body	Cv Value Endstop	Part Numbering
Body	Stop				
1/32	1/32	400	0.035	0.025	6***50
3/64	3/64	250	0.050	0.065	6***51
1/16	1/16	200	0.090	0.115	6***52
5/64	5/64	175	0.135	0.180	6***53
3/32	3/32	125	0.180	0.210	6***54
1/8	1/8	85	0.275	0.240	6***55
5/32	1/8	50	0.370	0.240	6***56
3/16	1/8	35	0.455	0.240	6***57
1/4	1/8	15	0.650	0.240	6***58

Series 6 - 3/2 MP Cv and MOPD Values

Orifice Diameter		MOPD (psi)	Cv Value Body	Cv Value Endstop	Part Numbering
Body	Stop				
1/32	1/32	275	0.035	0.025	6***60
3/64	3/64	200	0.050	0.065	6***61
1/16	1/16	175	0.090	0.115	6***62
5/64	5/64	125	0.135	0.180	6***63
3/32	3/32	100	0.180	0.210	6***64
1/8	1/8	60	0.275	0.240	6***65
5/32	1/8	40	0.370	0.240	6***66
3/16	1/8	25	0.455	0.240	6***67
1/4	1/8	15	0.650	0.240	6***68



Series 6 Dimensions



Standard Valve

A	B	C	D	E	F	G	H	K	M	N	R
1.62 (41)	.344 (9)	G-2.04 (52) C-1.87 (48)	2.86 (73)	3.54 (90)	1.58 (40)	1.03 (26)	45°	1.24 (31)	1/8-27 NPTF or 1/4-18 NPTF	#10-32 UNF x 5/16 MFT	1/8-2 NPTF or 1/4-18 NPTF

Manifold Mount Valve

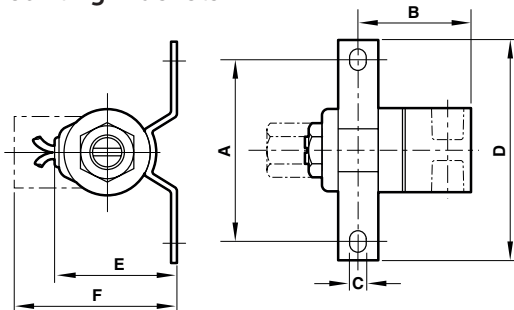
A	B	C	D	E	F	M	N	R
1.62 (41)	G- 1.73 (44) C- 1.56 (40)	2.55 (65)	3.23 (82)	1.03 (26)	1.58 (40)	1/2 20 UNF	.31 (8)	1/8-27 NPTF or 1/4-18 NPTF

Manifold Mount Interface

A	B	R
1/2 - 20 UNF-2B x .32 MFT	.27 (7)	.51 (13)

NOTE: A is underseat connection** B is overseat connection***

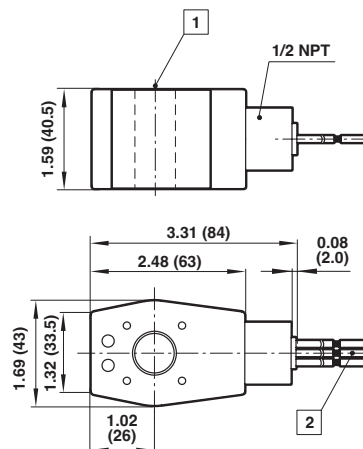
Mounting Brackets



Bracket Dimensions

A	B	C	D	E	F
2.13 (54)	1.97 (50)	.20 (5)	2.63 (67)	2.15 (55)	2.68 (68)

Explosion Proof Coil (FM Approved)



- 1 Ø 16 or 13 (with spacer tube)
- 2 Flying leads AWG 18" (460 mm long)

Warning

Improper selection, misuse, age or malfunction of components used in systems can cause failure in various modes. The system designer is warned to consider the failure modes of all component parts and to provide adequate safeguards to prevent personal injury or damage to equipment or property in the event of such failure modes. System designers and end users are cautioned to consult instruction sheets and specifications available from the factory. The system designer/end user is responsible for verifying that all requirements for the application are met.

Warranty

The products described herein are warranted subject to seller's Standard Terms and Condition of Sale, available at seller's website.

Proposition 65: These products may contain chemicals known to the state of California to cause cancer, or birth defects, or other reproductive harm.