

KIP Fluid Control Valves - Series 1



- > 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



Specifications

Operating Pressure:

2/2: 0 to 800 psig, vacuum capable*

3/2: 0 to 230 psig, vacuum capable*

Orifice:

Ø1/32" to Ø5/32"

MOPD:

2/2: 50 to 800 psig

3/2: 10 to 200 psig

Cv Range:

2/2: 0.035 to 0.290

3/2: 0.035 to 0.285

Actuation:

Solenoid

Coil:

AC, DC, rectified coil*

Coil Class Options:

B: 266°F (130°C) standard

H: 356°F (180°C)

Connection:

1/8" NPTF or manifold mount

Electrical Connection:

24" flying leads

Switching Function:

2/2: NO, NC

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

Voltage Options:

12VDC, 24VDC, 24/60VAC,

120/60VAC, 240/60VAC

Wattage:

6 Watts, nominal

Duty Cycle:

Continuous

Response Time:

9ms, typical

Weight:

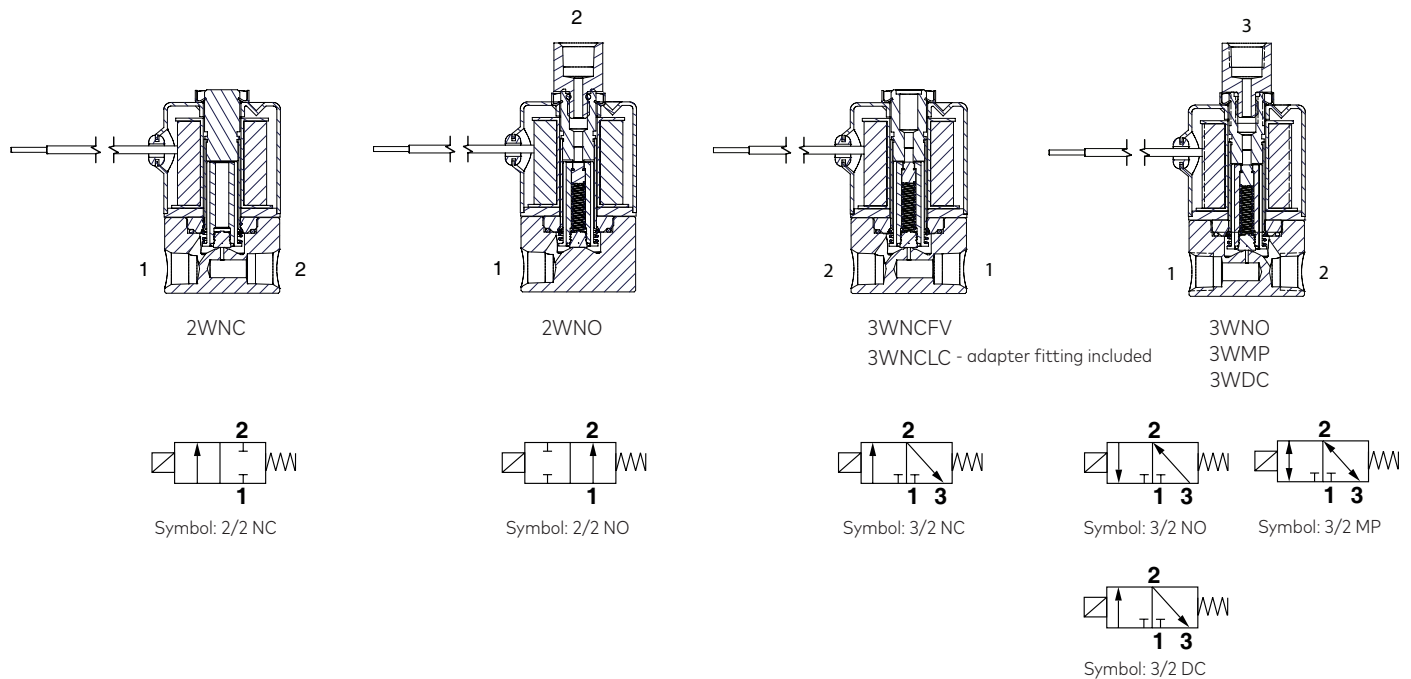
6oz, typical

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@imi-precision.com



Series 1 - 2/2 NC Cv and MOPD Values

Orifice Diameter		MOPD (psi)	Cv Value	Part Numbering	Cv Value Body	Low Watt Specifications (MOPD (psi))		
Body	Stop					2.0 Watt B	2.5 Watt C	3.0 Watt D
1/32	1/32	800	0.035	1***10	0.030	85	106	285
3/64	3/64	500	0.050	1***11	0.050	55	65	190
1/16	1/16	300	0.095	1***12	0.085	30	40	85
5/64	1/16	200	0.135	1***13	0.125	25	40	55
3/32	1/16	175	0.175	1***14	0.170	25	30	45
1/8	1/16	100	0.245	1***15	0.225	20	25	35
5/32	1/16	50	0.290	1***16	0.280	-	10	15

For low watt options, please use the prefix B for 2.0 watt, C for 2.5 watt, and D for 3.0 watt as shown.

Series 1 - 2/2 NO Cv and MOPD Values

Orifice Diameter		MOPD (psi)	Cv Value	Part Numbering
Body	Stop			
1/32	1/32	300	0.035	1***20
3/64	3/64	200	0.050	1***21
1/16	1/16	150	0.095	1***22

Series 1 - 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	200	0.035	0.025	1***40
3/64	3/64	150	0.050	0.065	1***41
1/16	1/16	100	0.085	0.115	1***42
5/64	1/16	80	0.125	0.115	1***43
3/32	1/16	60	0.165	0.115	1***44
1/8	1/16	40	0.240	0.115	1***45
5/32	1/16	10	0.285	0.115	1***46

For free vent, change fifth digit from 4 to 3
Consult Technical Support for low watt options for 3/2 NC valves

Series 1 - 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	150	0.035	0.025	1***60
3/64	3/64	100	0.050	0.065	1***61
1/16	1/16	80	0.085	0.115	1***62
5/64	1/16	60	0.125	0.115	1***63
3/32	1/16	35	0.165	0.115	1***64
1/8	1/16	20	0.240	0.115	1***65
5/32	1/16	10	0.285	0.115	1***66

Consult Technical Support for low watt options for 3/2 MP valves

Series 1 - 3/2 NO Cv and MOPD Values

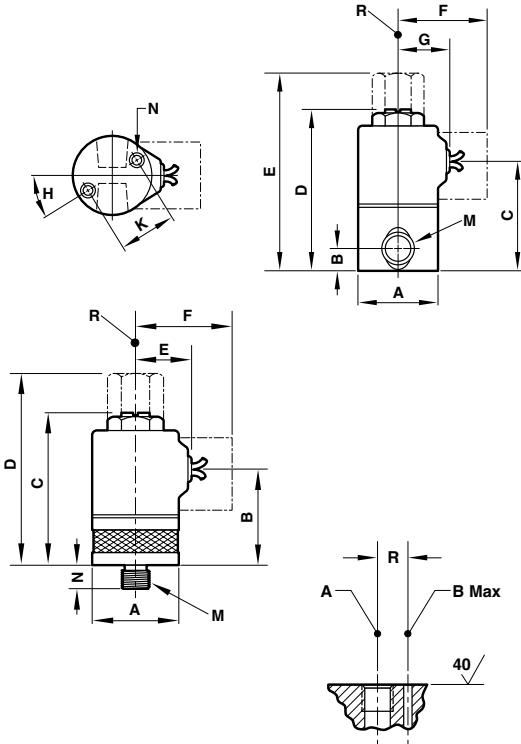
Orifice Diameter		MOPD (psi)	Cv Value Body	Cv Value Endstop	Part Numbering
Body	Stop				
1/32	1/32	160	0.035	0.025	1***50
3/64	3/64	125	0.050	0.065	1***51
1/16	1/16	100	0.085	0.115	1***52
5/64	1/16	80	0.125	0.115	1***53
3/32	1/16	60	0.165	0.115	1***54
1/8	1/16	40	0.240	0.115	1***55
5/32	1/16	10	0.285	0.115	1***56

Series 1 - 3/2 Directional Control

Orifice Diameter		MOPD (psi)	Cv Value Body	Cv Value Endstop	Part Numbering
Body	Stop				
1/32	1/32	230	0.035	0.025	1***70
3/64	3/64	160	0.050	0.065	1***71
1/16	1/16	120	0.085	0.115	1***72
5/64	1/16	80	0.125	0.115	1***73
3/32	1/16	60	0.165	0.115	1***74
1/8	1/16	35	0.240	0.115	1***75
5/32	1/16	20	0.285	0.115	1***76

Series 1 Dimensions

Dimensions in mm
Projection/Third angle



Standard Valve

	A	B	C	D	E	F	G	H	K	M	N	R
Series 1	.99 (25)	.28 (7)	1.33 (33)	2.12 (54)	2.47 (63)	1.12 (29)	.64 (16)	32- 1/2°	.73 (19)	1/8-27 NPTF	#8-32 UNC x 1/4 MFT	1/8-27 NPTF

Manifold Mount Valve

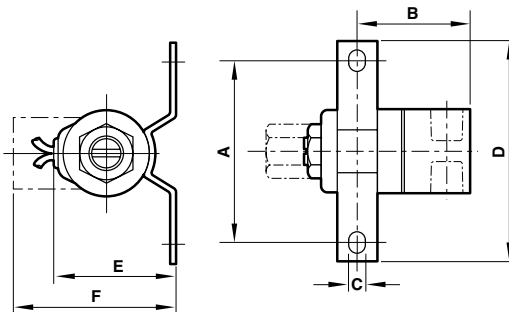
	A	B	C	D	E	F	M	N	R
Series 1	.99 (25)	1.07 (27)	1.87 (48)	2.22 (56)	.64 (16)	1.12 (29)	5/16 24 UNF	.25 (6)	1/8-27 NPTF

Manifold Mount Interface

	A	B	R
Series 1	5/16 - 24 UNF-2B x .26 MFT	.09 (2)	.31 (8)

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

Mounting Brackets



Bracket Dimensions

	A	B	C	D	E	F
Series 1	2.13 (54)	1.33 (34)	.20 (5)	2.63 (67)	1.45 (37)	1.93 (49)