

KIP Fluid Control Valves - Series 2



- > 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 1000 psig, vacuum capable*

3/2: 0 to 250 psig, vacuum capable*

Orifice

Ø1/32" to Ø5/32"

MOPD:

2/2: 100 - 1000 psig

3/2: 15 - 250 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) st

Connection:

1/8" NPTF or manifold mount

Electrical Connection:

24" flying leads and 3/16" or 1/4" spade terminal

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:

7 Watts, nominal

Duty Cycle:

Continuous

Response Time:

9ms, typical

Weight:

7oz, typical

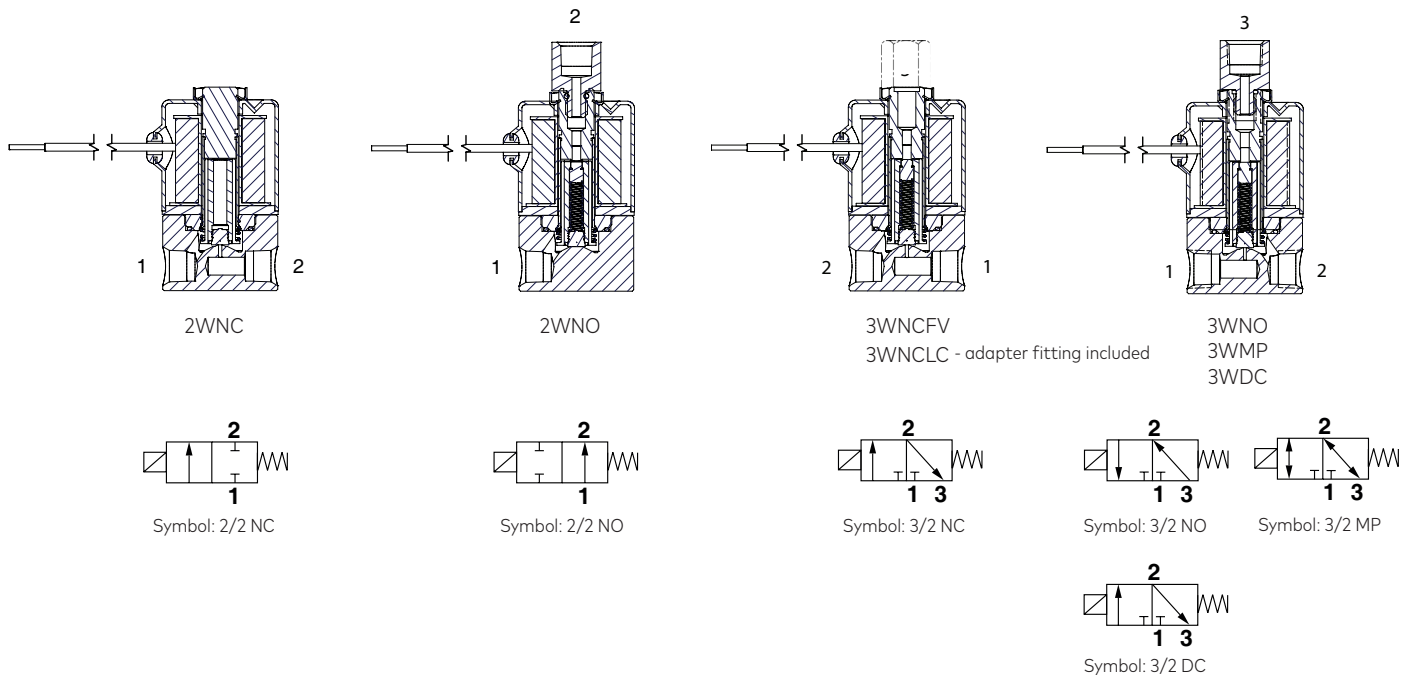
Material:

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



Standard Valve Selection

Series 2 - Valve Configurator

Prefix (optional)	Substitute						
NSF certified	N						
UL recognized	U						
Oxygen clean	Y						
Low watt* - 2.0	B						
Low watt* - 2.5	C						
Low watt* - 3.0	D						
Port Configuration	Substitute						
1/8" NPTF	4						
Manifold Mount	6						
Housing	Substitute						
Grommet	1						
1/2" NPT Conduit	2						
Yoke	3						
Grommet w/ bracket	7						
Slotted	9						
Body Material	Substitute						
Stainless Steel	0						
Brass	1						
Function	Substitute						
2WNC	1						
2WNO	2						
3WNC free vent	3						
3WNC line connect (1/8" NPT)	4						
3WNO	5						
3WMP	6						
3WDC	7						
Voltage							
12 VDC							
24 VDC							
24 - 60 VAC							
120 - 60 VAC							
240 - 60 VAC							
Coil Options	Substitute						
See Coil Options Chart Below							
Seal Options	Substitute						
Buna	01						
Fluorocarbon	02						
Low Temp Buna (NBR)	05						
Low Temp Fluorocarbon	07						
Ethylene Propylene (EPR)	13						
Orifice	Substitute						
1/32	0						
3/64	1						
1/16	2						
5/64	3						
3/32	4						
1/8	5						
5/32	6						

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
61	9 - Slotted	Free-standing, molded with leads	B
61	3 - Yoke	Free-standing, molded with leads	B
41	2 - Conduit	Potted with leads	B
31	9 - Slotted	3/16" Vertical Spade	B
51	9 - Slotted	1/4" Vertical Spade	B
51	3 - Yoke	1/4" Top Spade (Available with FWR option****)	B

*For class H coils replace second digit with 3.
Example: 43 = Class H Potted with leads

Series 2 - 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	-	1000	0.035	2***10	0.030	140	225	405
3/64	-	600	0.050	2***11	0.050	105	190	315
1/16	-	400	0.095	2***12	0.085	55	85	155
5/64	-	300	0.135	2***13	0.125	40	60	105
3/32	-	250	0.175	2***14	0.170	25	35	70
1/8	-	150	0.245	2***15	0.225	25	35	50
5/32	-	100	0.290	2***16	0.280	13	20	35

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 2 - 2/2 NO Cv and MOPD Values

Orifice Diameter		MOPD (psi)	Cv Value	Part Numbering
Body	Stop			
-	1/32	400	0.035	2***20
-	3/64	300	0.050	2***21
-	1/16	180	0.095	2***22
-	5/64	140	0.135	2***23

Series 2 - 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	250	0.035	0.025	2***40
3/64	3/64	175	0.050	0.065	2***41
1/16	1/16	125	0.085	0.115	2***42
5/64	5/64	100	0.125	0.140	2***43
3/32	5/64	75	0.165	0.140	2***44
1/8	5/64	45	0.240	0.140	2***45
5/32	5/64	20	0.285	0.140	2***46

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

Series 2 - 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	175	0.035	0.025	2***60
3/64	3/64	125	0.050	0.065	2***61
1/16	1/16	100	0.085	0.115	2***62
5/64	5/64	75	0.125	0.140	2***63
3/32	5/64	50	0.165	0.140	2***64
1/8	5/64	25	0.240	0.140	2***65
5/32	5/64	15	0.285	0.140	2***66

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

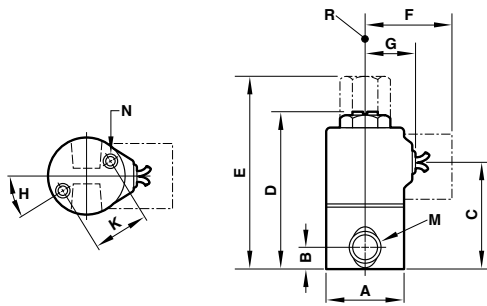
Series 2 - 3/2 NO Cv and MOPD Values

Orifice Diameter		MOPD (psi)	Cv Value Body	Cv Value Endstop	Part Numbering
Body	Stop				
1/32	1/32	200	0.035	0.025	2***50
3/64	3/64	150	0.050	0.065	2***51
1/16	1/16	125	0.085	0.115	2***52
5/64	5/64	100	0.125	0.140	2***53
3/32	5/64	75	0.165	0.140	2***54
1/8	5/64	60	0.240	0.140	2***55
5/32	5/64	25	0.285	0.140	2***56

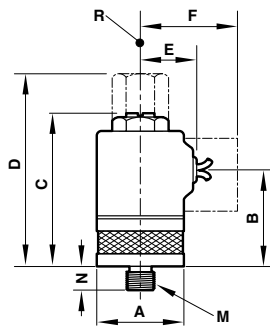
Series 2 - 3/2 Directional Control

Orifice Diameter		MOPD (psi)	Cv Value Body	Cv Value Endstop	Part Numbering
Body	Stop				
1/32	1/32	250	0.035	0.025	2***70
3/64	3/64	160	0.050	0.065	2***71
1/16	1/16	120	0.085	0.115	2***72
5/64	5/64	80	0.125	0.140	2***73
3/32	5/64	60	0.165	0.140	2***74
1/8	5/64	35	0.240	0.140	2***75
5/32	5/64	20	0.285	0.140	2***76

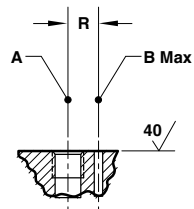
Series 2 Dimensions

 Dimensions in mm
 Projection/Third angle

Standard Valve

A	B	C	D	E	F	G	H	K	M	N	R
.99 (25)	.28 (7)	1.51 (38)	2.32 (59)	2.66 (68)	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
.99 (25)	1.26 (32)	1.98 (50)	2.41 (61)	.64 (16)	1.12 (29)	5/16 24 UNF	.25 (6)	1/8-27 NP


Manifold Mount Interface

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

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