

KIP Fluid Control Valves - Series 3



- > 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: 15 - 300 psig

3/2: 5 - 100 psig

Cv Range:

2/2: 0.035 to 0.450

3/2: 0.035 to 0.415

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 1/4" NPTF

Electrical Connection:

24" flying leads 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:

9oz, typical

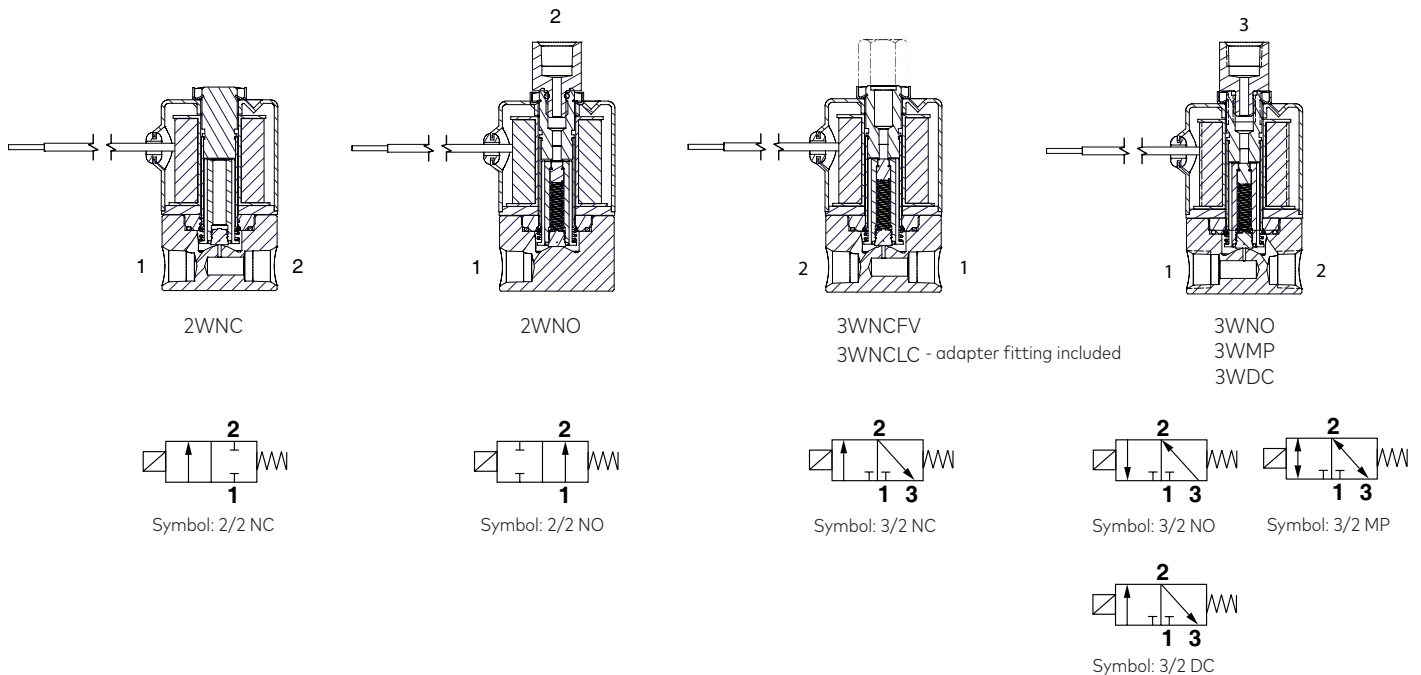
Material:

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 3 - 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
1/4" NPTF	5
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	4
3WNO	5
3WMP	6
3WDC	7

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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
3/16	7
1/4	8

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 3 - 2/2 NC Cv and MOPD Values

Orifice Diameter					Low Watt Specifications			
Body	Stop	MOPD (psi)	Cv Value	Part Numbering	Low Watt Cv Value	2.0 Watt B	2.5 Watt C	3.0 Watt D
1/32	-	1000	0.035	3***10	0.030	140	225	405
3/64	-	600	0.050	3***11	0.050	105	190	315
1/16	-	400	0.095	3***12	0.085	55	85	155
5/64	-	300	0.140	3***13	0.125	40	60	105
3/32	-	250	0.185	3***14	0.170	25	35	70
1/8	-	150	0.265	3***15	0.225	25	35	50
5/32	-	100	0.330	3***16	0.280	13	20	35
3/16	--	40	0.385	3***17	-	-	-	-
1/4		15	0.450	3***18	-	-	-	-

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

Series 3 - 2/2 NO Cv and MOPD Values

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

Series 3 - 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	3***40
3/64	3/64	175	0.050	0.065	3***41
1/16	1/16	125	0.085	0.115	3***42
5/64	5/64	100	0.125	0.145	3***43
3/32	5/64	75	0.165	0.145	3***44
1/8	5/64	45	0.240	0.145	3***45
5/32	5/64	20	0.290	0.145	3***46
3/16	5/64	10	0.345	0.145	3***47
1/4	5/64	5	0.415	0.145	3***48

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

Series 3 - 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	3***50
3/64	3/64	150	0.050	0.065	3***51
1/16	1/16	125	0.085	0.115	3***52
5/64	5/64	100	0.125	0.145	3***53
3/32	5/64	75	0.165	0.145	3***54
1/8	5/64	60	0.240	0.145	3***55
5/32	5/64	25	0.290	0.145	3***56
3/16	5/64	10	0.345	0.145	3***57
1/4	5/64	5	0.415	0.145	3***58

Series 3 - 3/2 MP Cv and MOPD Values

Orifice Diameter		MOPD (psi)	Cv Value Body	Cv Value Endstop	Part Numbering
Body	Stop				
-	1/32	175	0.035	0.025	3***60
-	3/64	125	0.050	0.065	3***61
-	1/16	100	0.085	0.115	3***62
-	5/64	75	0.125	0.145	3***63
-	3/32	50	0.165	0.145	3***64
-	1/8	25	0.240	0.145	3***65
-	5/32	15	0.290	0.145	3***66
-	3/16	10	0.345	0.145	3***67
-	1/4	5	0.415	0.145	3***68

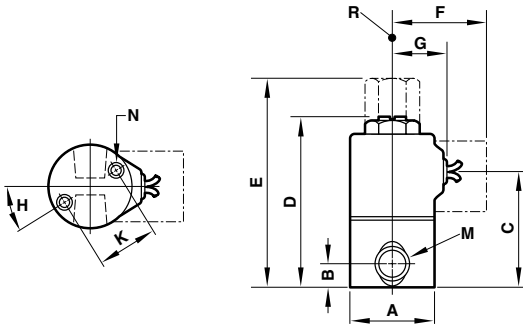
Consult Technical Support for low watt options for 3/2 MP valves

Series 3 - 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	3***70
3/64	3/64	160	0.050	0.065	3***71
1/16	1/16	120	0.085	0.115	3***72
5/64	5/64	80	0.125	0.145	3***73
3/32	5/64	60	0.165	0.145	3***74
1/8	5/64	35	0.240	0.145	3***75
5/32	5/64	20	0.285	0.145	3***76
3/16	5/64	10	0.345	0.145	3***77
1/4	5/64	5	0.415	0.145	3***78

Series 3 Dimensions

Dimensions in mm
Projection/Third angle



Standard Valve

	A	B	C	D	E	F	G	H	K	M	N	R
Series 3	118 (30)	.355 (9)	1.65 (42)	2.46 (62)	2.80 (71)	1.19 (30)	.78 (20)	41° 0°	.91 (23)	1/4-18 NPTF	#8-32 UNC x 1/4 MFT	1/4-18 NPTF