

KIP Fluid Control Valves - Series 3

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.



Technical Data

Operating Pressure:

2/2: 0 to 1000 psig, vacuum capable*

3/2: 0 to 275 psig, vacuum capable*

Orifice

Ø1/32" to Ø5/32"

MOPD:

2/2: 15 - 1000 psig

3/2: 5 - 275 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

Weight:

9oz, typical

Material:

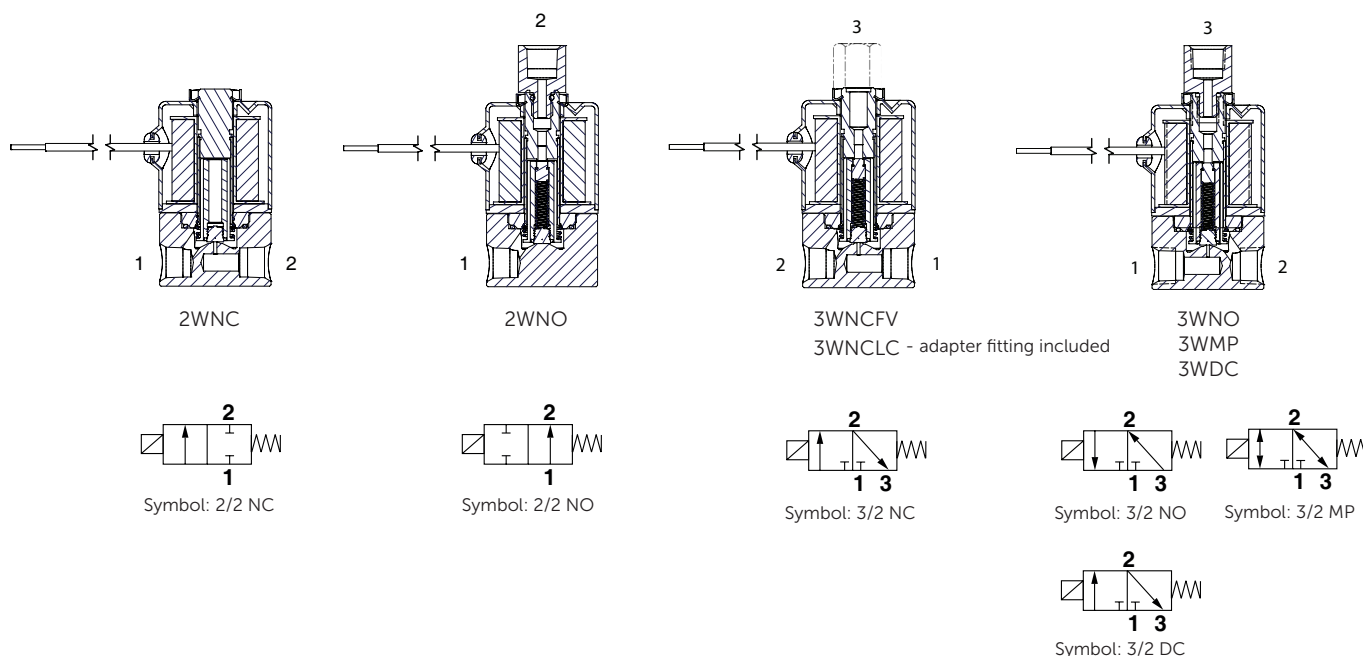
Body: brass or stainless steel

Internal wetted parts: 430FR & 300 series CRES

Ingress Protection:

IP6K9K (Housing 0 / Coil 70)

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



Option Selector

Prefix (optional)		Substitute	★ 3 ★ ★ ★ ★ ★ - ★ ★ ★ ★ - ★ ★	Voltage	Substitute
Port Configuration		Substitute			
NSF certified		N		12 VDC	12VDC
UL recognized		U		24 VDC	24VDC
Oxygen clean		Y		24-60 VAC	24-60
Low watt* - 2.0		B		120-60 VAC	120-60
Low watt* - 2.5		C		240-60 VAC	240-60
Low watt* - 3.0		D		Coil Options	Substitute
Housing		Substitute			
Cartridge (with IP6K9K coil)**		0		See Coil Options Chart Below	
1/8" NPTF		4		Seal Options	Substitute
1/4" NPTF		5			
Body Material	Substitute	0		Buna (NBR)	01
		1		Fluorocarbon	02
		2		Neoprene	03
		3		Low Temp Buna (NBR)	05
		7		Low Temp Fluorocarbon	07
Function	Substitute	9		Ethylene Propylene (EPR)	13
		1		GFLT (FKM)	16
2WNC		1		Orifice	Substitute
2WNO		2			
3WNC free vent		3			
3WNC line connect		4			
3WNO		5			
3WMP		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	1 - Grommet	Potted 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
70	0 - Over Molded (IP6K9K)	With TE 776428-2 connector	H

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

** IP6K9K models are only available with housing type 0, coil type 70, seal types 01, 03, 07, 16, and 12/24 VDC voltage options, Low watt versions are not available.

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	540	275	1000
3/64	-	600	0.050	3***11	0.050	125	200	340
1/16	-	400	0.095	3***12	0.085	60	150	160
5/64	-	300	0.140	3***13	0.125	30	100	95
3/32	-	250	0.185	3***14	0.180	20	75	55
1/8	-	150	0.265	3***15	0.225	12	50	35
5/32	-	100	0.330	3***16	0.280	7	25	20
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	Cv Value	Part
Body Stop		Body	Endstop	Numbering
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	Cv Value	Part
Body Stop		Body	Endstop	Numbering
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	45	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	Cv Value	Part
Body Stop		Body	Endstop	Numbering
1/32 1/32	175	0.035	0.025	3***60
3/64 3/64	125	0.050	0.065	3***61
1/16 1/16	100	0.085	0.115	3***62
5/64 5/64	75	0.125	0.145	3***63
3/32 5/64	50	0.165	0.145	3***64
1/8 5/64	25	0.240	0.145	3***65
5/32 5/64	15	0.290	0.145	3***66
3/16 5/64	10	0.345	0.145	3***67
1/4 5/64	5	0.415	0.145	3***68

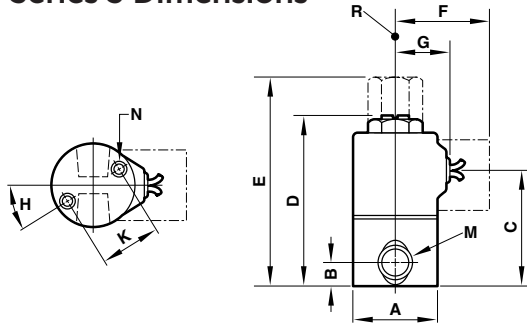
Consult Technical Support for low watt options for 3/2 MP valves

Series 3 - 3/2 Directional Control

Orifice Diameter	MOPD (psi)	Cv Value	Cv Value	Part
Body Stop		Body	Endstop	Numbering
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



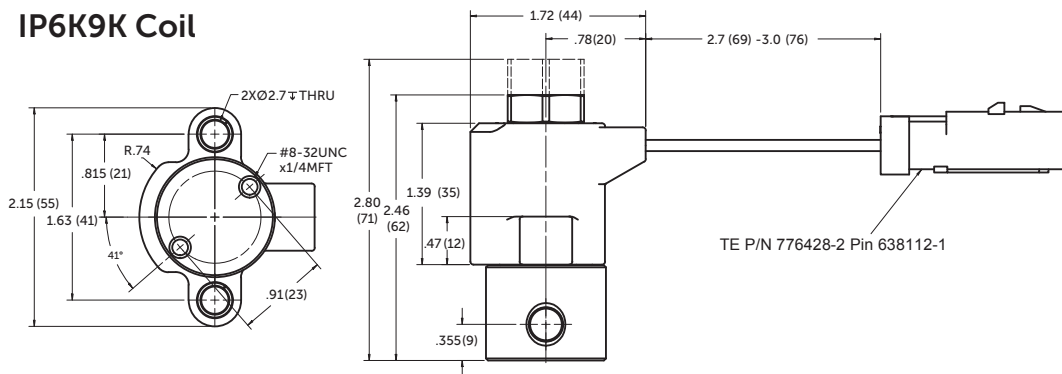
Series 3 Dimensions



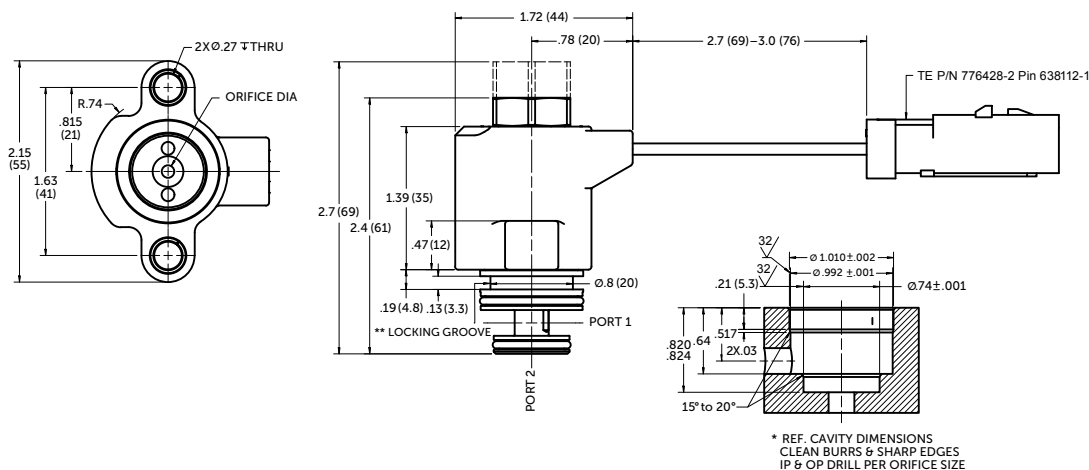
Standard Valve

	A	B	C	D	E	F	G	H	K	M	N	R
Series 3	1.18 (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

IP6K9K Coil



IP6K9K Coil with Cartridge Configuration



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.