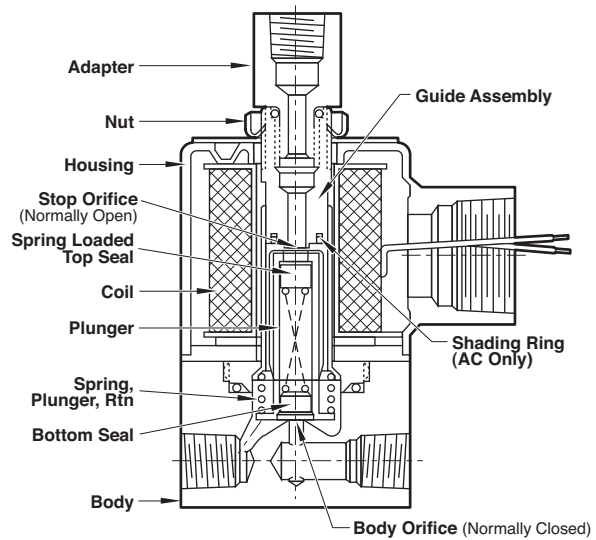


Solenoid Selection

1/2" NPT Conduit



Selecting the Best Solenoid Operator for Your Application

FEATURE	KIP Jr. (Series 9)	Series 1	Series 2	Series 3	Series 6
Size - Diameter (inches)	0.80	1	1	1-3/16	1-5/8
Maximum MOPD (psi)	100	800	1000	1000	1200
Vacuum Service	✓	✓	✓	✓	✓
Max. Cv - Body	0.050	0.305	0.305	0.490	0.610
Min. Cv - Body	0.035	0.030	0.030	0.030	0.035
Max. Cv - Stop	0.025	0.125	0.140	0.140	0.270
Min. Cv - Stop	0.015	0.025	0.025	0.025	0.024
Power Rating	.65 watts	6 watts	7 watts	7 watts	10 watts
Lead Wire Gauge	24 AWG	20 AWG/18 AWG	20 AWG/18 AWG	18 AWG	18 AWG
Low Wattage Operators to 1.5 Watt	Available	Available	Available	Available	N/A
1/8" NPTF Ports - Body	✓	✓	✓	✓	✓
1/4" NPTF Ports - Body				✓	✓
3/8" NPTF Ports - Body					4
#10 - 32 UNF Ports - Body	✓	✓	✓	✓	✓
1/8" NPT or 1/4" NPT Male Bottom Port		✓	✓	✓	
UL Recognized		✓	✓	✓	✓
CSA Approved		✓	✓	4	✓
Grommet Style Housing	✓	✓	✓	✓	✓
Conduit Style Housing		✓	✓	✓	✓
Spade Terminal Style - (Standard)			1/4"	1/4"	1/4"
Spade Terminal Style - (Options)			3/16"	3/16"	
Yoke Style (Open Frame)		✓	✓		
Side Metering				✓	✓
Bottom Metering		✓	✓		
Extended Flow Capabilities	✓	✓	✓	✓	✓
Operator Mount Manifolds	✓	✓	✓		✓
Valve Mount Manifolds	✓	✓	✓		✓
Diaphragm Isolated Version	✓	✓	✓		✓

Coils

U 2 4 0 1 1 5 - 0 2 5 1 - 24VDC*

All standard KIP valves are supplied with a Class "B" dry tape wound coil construction with 24" black leads, P/N (01) in the ordering system, unless otherwise specified.

When using this chart below note the available housing styles and the series in which coils are available.

The following chart shows all coil options readily available, for other options in OEM quantities consult KIP. Non-standard voltages, leadwire lengths, other lead wire types and colors, may require minimum quantities.

KIP standard voltages:

12VDC, 24VDC, 24/60, 120/60, 110/50, 220/50, 240/60.

Lead wire type -

AWG 20 on Series 1 and 2

AWG 18 on Series 1 and 2 with free standing molded coil

AWG 18 on Series 3 and 6

Coil classification -

Class B = 130° C or 266° F

Class F = 155° C or 311° F

Class H = 180° C or 356° F

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Number	Housing	Series	Type	Class
01	1 - Grommet	1, 2, 3, 6	Standard - dry tape wrapped with leads	B**
01	2 - Conduit	1, 2, 3, 6	Standard - dry tape wrapped with leads	B**
41	9 - Slotted	1	Free standing molded with leads	B**
61	9 - Slotted	2, 3,	Free standing molded with leads	B**
61	3 - Yoke	2, 3	Free standing molded with leads	B**
41	2 - Conduit	1, 2, 3	Potted with leads	B**
31	9 - Slotted	2, 3	3/16" Vertical spade	B**
51	9 - Slotted	2, 3	1/4" Vertical spade	B**
51	3 - Yoke	2, 3	1/4" Top spade (Available with FWR option***)	B**
41	1 - Grommet	6	Free standing molded with leads	B**
41	2 - Conduit	6	Free standing molded with leads	B**
51	9 - Slotted	6	1/4" Vertical spade	B**

* For Class F coils change the second digit to a 2. Consult KIP for minimum order quantities.

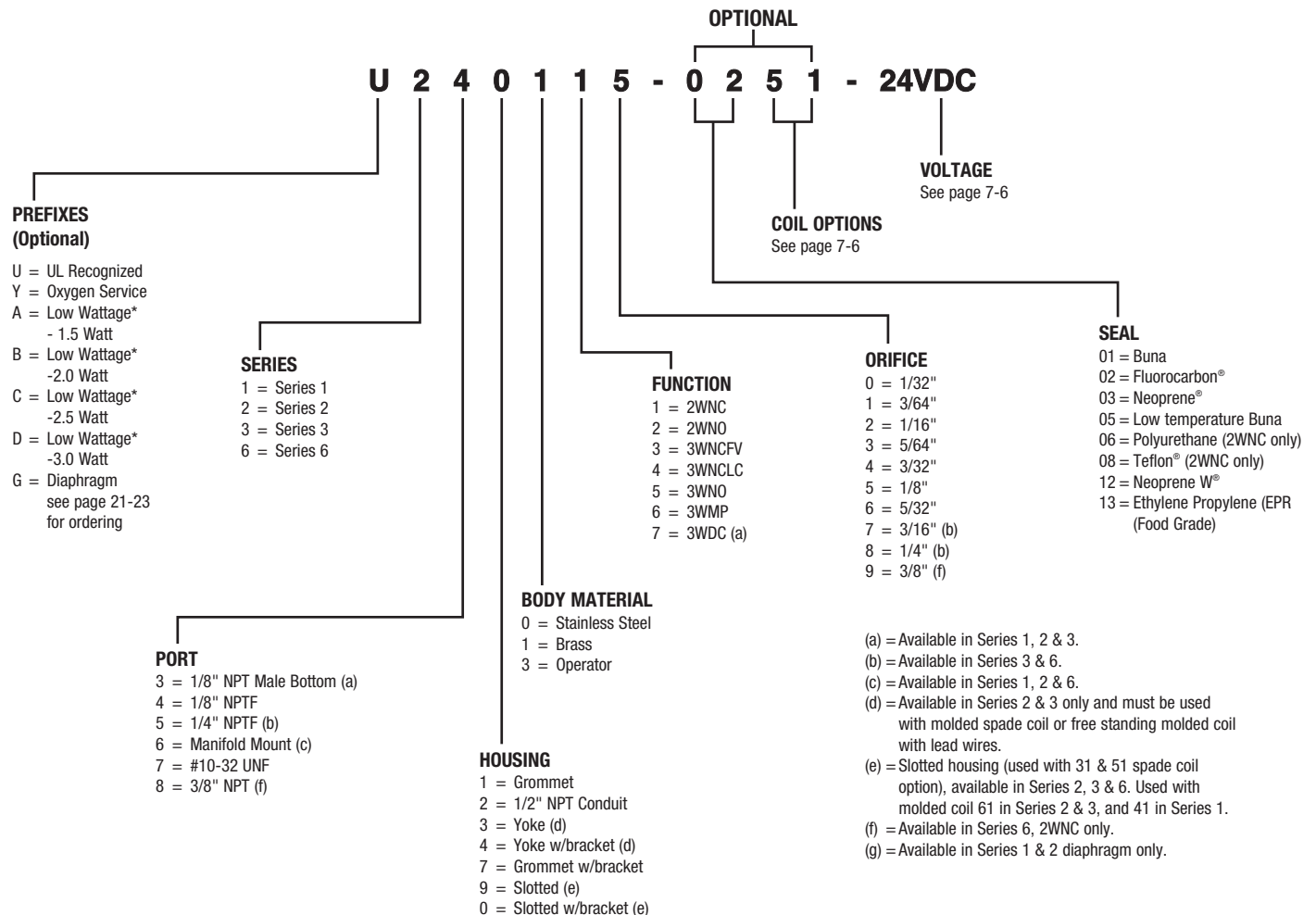
** For Class H coils change the second digit to a 3. Consult KIP for minimum order quantities.

*** Full wave rectification

KIP Part Identification Numbering (PIN) System For Valves

The KIP part number provides information about every aspect of the product it represents. The first letter is an optional prefix which identifies UL recognized, oxygen or low wattage. The following numbers identify series, ports, housing style, material, valve function, orifice, seal, coil construction and coil temperature, in that order. The numerical value for each respective category represents one of multiple options. Where possible, the organization of this KIP catalog presents information in the order of the part identification number. You may use the number as a guide to finding information within the catalog.

The following chart is the key to understanding the KIP Part Identification Number.



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*Available in Series 1, 2 & 3 for 2-Way Normally Closed, 3-Way Normally Closed and 3-Way Multi-Purpose functions.

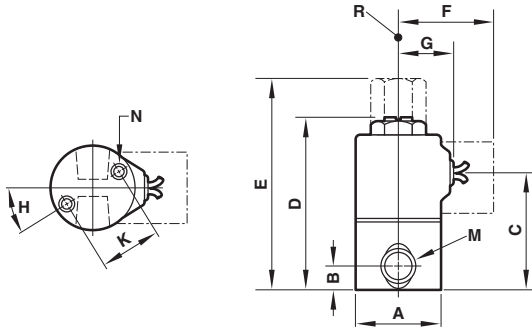
Series 6

Series 6	Orifice Diameter		Cv Factor		MOPD (psi)	Standard Valve Body Grommet				Manifold Mount** Valve Body-Grommet	
	Body	Stop	Body	Stop		Stainless Steel		Brass		Stainless Steel	Brass
						1/8" NPTF	1/4"NPTF	1/8" NPTF	1/4"NPTF		
2-Way Normally Open		1/32		0.035	1000	641020	651020	641120	651120	661020	661120
		3/64		0.050	600	641021	651021	641121	651121	661021	661121
		1/16		0.095	350	641022	651022	641122	651122	661022	661122
		5/64		0.140	250	641023	651023	641123	651123	661023	661123
		3/32		0.200	175	641024	651024	641124	651124	661024	661124
		1/8		0.295	100	641025	651025	641125	651125	661025	661125
2-Way Nomally Closed	1/32		0.035		1200	641010	651010	641110	651110	661010	661110
	3/64		0.050		1000	641011	651011	641111	651111	661011	661111
	1/16		0.095		500	641012	651012	641112	651112	661012	661112
	5/64		0.140		300	641013	651013	641113	651113	661013	661113
	3/32		0.200		200	641014	651014	641114	651114	661014	661114
	1/8		0.295		150	641015	651015	641115	651115	661015	661115
	5/32		0.370		110	641016	651016	641116	651116	661016	661116
	3/16		0.435		60	641017	651017	641117	651117	661017	661117
	1/4		0.610		30	641018	651018	641118	651118	661018	661118
	3/8		0.900		5	—	681019†	—	681119†	—	—
3-Way Normally Open	1/32	1/32	0.035	0.025	400	641050	651050	641150	651150	661050	661150
	3/64	3/64	0.050	0.065	250	641051	651051	641151	651151	661051	661151
	1/16	1/16	0.090	0.115	200	641052	651052	641152	651152	661052	661152
	5/64	5/64	0.135	0.180	175	641053	651053	641153	651153	661053	661153
	3/32	3/32	0.180	0.210	125	641054	651054	641154	651154	661054	661154
	1/8	1/8	0.275	0.240	85	641055	651055	641155	651155	661055	661155
	5/32	1/8	0.370	0.240	50	641056	651056	641156	651156	661056	661156
	3/16	1/8	0.455	0.240	35	641057	651057	641157	651157	661057	661157
	1/4	1/8	0.650	0.240	15	641058	651058	641158	651158	661058	661158
3-Way Normally Closed (For free vent, change fifth digit from 4 to 3)	1/32	1/32	0.035	0.025	300	641040	651040	641140	651140	661040	661140
	3/64	3/64	0.050	0.065	250	641041	651041	641141	651141	661041	661141
	1/16	1/16	0.090	0.115	200	641042	651042	641142	651142	661042	661142
	5/64	5/64	0.135	0.180	175	641043	651043	641143	651143	661044	661144
	3/32	3/32	0.180	0.210	125	641044	651044	641144	651144	661045	661145
	1/8	1/8	0.275	0.240	85	641045	651045	641145	651145	661046	661146
	5/32	1/8	0.370	0.240	50	641046	651046	641146	651146	661047	661147
	3/16	1/8	0.455	0.240	30	641047	651047	641147	651147	661048	661148
	1/4	1/8	0.650	0.240	15	641048	651048	641148	651148	-	-
3-Way Multi- Purpose	1/32	1/32	0.035	0.025	275	641060	651060	641160	651160	661060	661160
	3/64	3/64	0.050	0.065	200	641061	651061	641161	651161	661061	661161
	1/16	1/16	0.090	0.115	175	641062	651062	641162	651162	661062	661162
	5/64	5/64	0.135	0.180	125	641063	651063	641163	651163	661063	661163
	3/32	3/32	0.180	0.210	100	641064	651064	641164	651164	661064	661164
	1/8	1/8	0.750	0.240	60	641065	651065	641165	651165	661065	661165
	5/32	1/8	0.370	0.240	40	641066	651066	641166	651166	661066	661166
	3/16	1/8	0.455	0.240	25	641067	651067	641167	651167	661067	661167
	1/4	1/8	0.650	0.240	15	641068	651068	641168	651168	661068	661168

Note: Series 6 manifold mount 3-Way valves have a 1/4" NPTF adapter as standard. 1/8" NPTF available upon request.

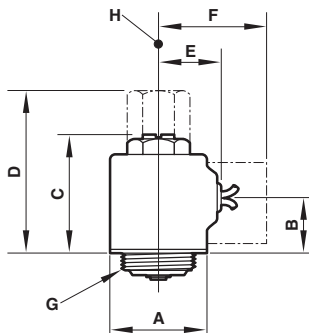
** Manifold Mount valve has maximum 400 MOPD rating for UL recognition.

† These valves are supplied with 3/8" NPTF ports.



Standard Valve

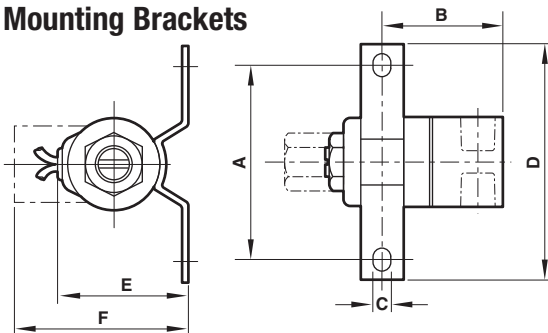
	A	B	C	D	E	F	G	H	K	M	N	R
Series 6	1.62 (41)	.344 (9)	G-2.04 (52) C-1.87 (48)	2.86 (73)	3.54 (90)	1.58 (40)	1.03 (26)	45°	1.24 (31)	1/8-27 NPTF or 1/4-18 NPTF	#10-32 UNF x 5/16 MFT	1/8-27 NPTF or 1/4-18 NPTF



Operator Standard

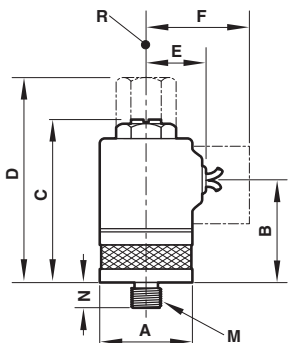
	A	B	C	D	E	F	G	H
Series 6	1.64 (42)	G-.97 (25) C-.80 (20)	1.79 (46)	2.48 (63)	1.03 (26)	1.58 (40)	1-32 UN	1/8-27 NPTF or 1/4-18 NPTF

Mounting Brackets



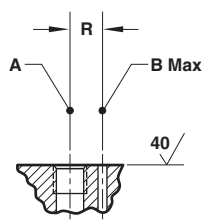
Bracket Dimensions

	A	B	C	D	E	F
Series 6	2.13 (54)	1.97 (50)	.20 (5)	2.63 (67)	2.15 (55)	2.68 (68)



Manifold Mount Valve

	A	B	C	D	E	F	m	n	r
Series 6	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
Series 6	1/2 - 20 UNF-2B x .32 MFT	.27 (7)	.51 (13)

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