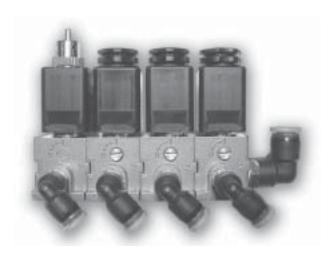
# AUTOMATIC VALVE



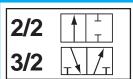








**DIRECT INLINE POPPET VALVES** 





### **DESIGN FEATURES**



### **DIRECT SOLENOID VALVES**

- Direct acting solenoid valves for compact, low profile and high performance.
- 2 way or 3 way function.
- Many options available to meet your specific requirements: materials, flows, environmental ratings, manifolding. Please consult the Factory.



### **MANUAL VALVES**

- Long life poppet construction.
- Corrosion resistant internals.
- Body design simplifies mounting and piping.
- Optional ring guard available to protect against accidental valve actuation.



### PRODUCTS CERTIFIED TO INCLUDE

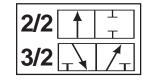
- CSA (C22.2)
- UL (STD 429)
- PTB (EEmIIT5) (EExiaIICT6)
- CE (73/23/EEC), (89/336/EEC)
- ATEX (2018x)

### **INDEX**

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### **SPECIFICATIONS**



#### VALVE OPERATION





2/2 NC - 2 way 2 position normally closed valves shift and apply pressure when a maintained signal is applied to the operator then reset and block pressure when the signal is removed.





3/2 NC - 3 way 2 position normally closed valves shift and apply pressure when a maintained signal is applied to the operator then reset and exhaust pressure when the signal is removed.



**ENERGIZED** 

DE-ENERGIZED

**ENERGIZED** 





2/2 NO - 2 way 2 position normally open valves shift and block pressure when a maintained signal is applied to the operator then reset and apply pressure when the signal is removed.





(Vacuum - 150 PSIG)

Lubrication of Automatic Valves is not required but recommended to maximize service life. Oils should be compatible with seal material, have an ISO 32 or lighter viscosity, and have an aniline range of 82°C

MEDIA AIR OR INERT GAS

3/2 NO - 3 way 2 position normally open valves shift and exhaust pressure when (EXH) a maintained signal is applied to the operator then reset and apply pressure when the signal is removed.

П	DE-ENERGIZED ENERGIZED		DE-ENERGIZED ENERGIZED		
	OPERATING TEMPERATURES	Solenoid Pilot Operated	BUNA-N SEALS (NBR, Standard 260A/360A)	FLUOROELASTOMER SEALS (FPM (FKM), Standard K02 - Option A 260A/360A)	
		Standard	-18°C to +52°C (0°F to +125°F)	-18°C to +66°C (0°F to +150°F)	
	OPERATING PRESSURES	Solenoid Pilot Operated	INLET PORT	EXTERNAL PILOT PORT	
		Standard	100 - 1030 kPa	Not Required	

#### **FILTRATION AND LUBRICATION**





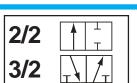
(180°F) to 99°C (210°F). Refer to Maintenances section of catalog for recommended lubricants. Filter to 50 microns or better.

For temperatures below 40°F, air must be dry to prevent formation of ice.

# MODEL NUMBER CHART

#### **SOLENOID MODELS**

SERIES		BASE TYPE		ORT IZE	В	ODY TYPE	D	ESIGN		OPERATOR 1	OPI	ERATOR 2		VOLTAGE		OPTIONS
K02	2	SUB-BASE	2 3	1/8 1/4	J	3 WAY NC 3 WAY NO 2 WAY NC 2 WAY NO	A	SINGLE	х	STANDARD SOLENOID	R	SPRING RETURN	AB DA	110/50, 120/60 220/50, 240/60, 125VDC 22/50, 24/60, 12VDC 24VDC	C CT G Y Z	CONDUIT COIL CONDUIT COIL HIGH TEMPERATURE 18" FLYING LEADS EXPLOSION-PROOF COIL EXPLOSION-PROOF COIL
К03	0	SUB-BASE	2 3	1/8 1/4					B D	WEATHER-PROOF SOLENOID EXPLOSION-PROOF SOLENOID					A F G	FLUOROELASTOMER SEALS POTTED SOLENOID GROMMET SOLENOID 24" LEAD WIRE HIGH TEMP COIL





# **STANDARD SOLENOID MODELS**





### **MODEL NUMBERS**

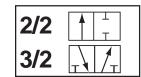
### **SOLENOIDS**

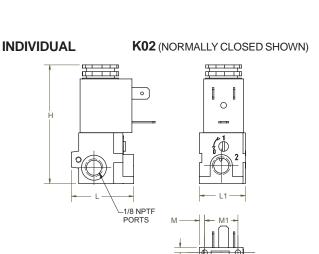
					2/	2	3/	2	
SERIES	PORT SIZE		Cv (l/min)	12 2 10 1 1 1 1	1D 2 12	12 2 10	1D 2 12	Kg (LB)	
	1	2	3		NORMALLY CLOSED	NORMALLY OPEN	NORMALLY CLOSED	NORMALLY OPEN	
1400	1/8	1/8		0.1	K0222JAXR*	K0222KAXR*	K0222GAXR*	K0222HAXR*	,14
K02	1/4	1/4	M5	(100)	K0223JAXR*	K0223KAXR*	K0223GAXR*	K0223HAXR*	(.3)
K03	1/8	1/8	1/8	0.2	K0302JABR - **	K0302KABR - **	K0302GABR - **	K0302HABR - **	,57
RUS	1/4 1/4 1/4		(200)	K0303JABR - **	K0303KABR - **	K0303GABR - **	K0303HABR - **	(1.3)	

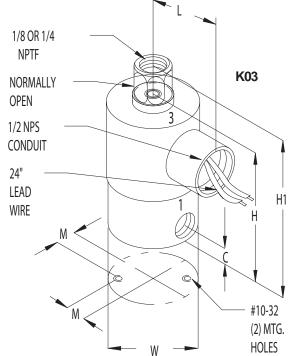
\*Coils sold separately. Refer to Electrical Section for selection. \*\* Coil included. Must specify voltage. Refer to Electrical Section for selection.



### **DIMENSIONAL INFORMATION**

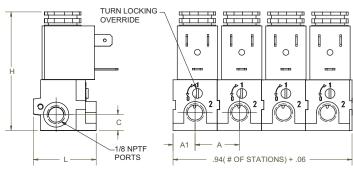




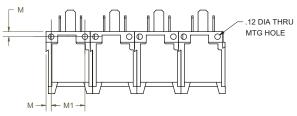


**MANIFOLD** 

### K02 (NORMALLY CLOSED SHOWN)

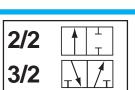


EACH STATION MOUNTS TO ADJACENT STATION USING A SINGLE MOUNTING SCREW AND O-RING (PROVIDED WITH INDIVIDUAL UNIT)



SERIES	Α	A1	С	Н	H1	L	L1	М	M1	W
K02	24.1 .95	11.9 .47	8.9 .35	65.0 2.56	-	34 1.34	25.1 .99	2.8 .11	18.0 .71	-
K03	-	-	8,6 .34	62.7 2.47	87,3 3.44	39.7 1.56	-	11.2 .44	-	41.3 1.63

Units of Measure: Top - mm, Bottom - inches





# **MANUAL MODELS**





# **K08 MODEL NUMBERS**

				2/2	3/2	
BUTTON	PORT SIZE	PORT LOCATION	Cv (l/min)	2 1	2 2 1 3 1 3	Kg (LB)
GREEN	1/4	SIDE	0.8 (790)	260A-2G	360A-2G	,4 (.9)
RED	1/4	SIDE	0.8 (790)	260A-2R	360A-2R	,4 (.9)

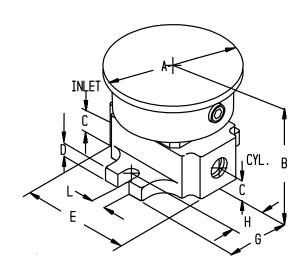
OPTION	PART NUMBER
GUARD	6098



### **DIMENSIONAL INFORMATION**

2/2	<b>↑</b>
3/2	T

**MANUAL** 

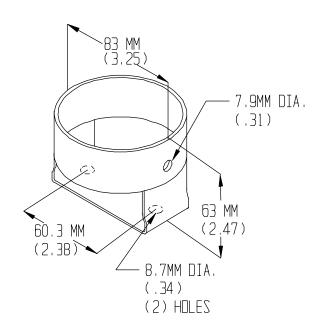


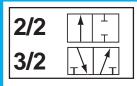
SERIES	Α	В	С	D	E	G	Н	L
260A	69,9	65,1	12,7	7,9	65,1	34,9	29,4	7,9
	2.75	2.56	.50	.31	2.56	1.38	1.16	.31
360A	69,9	65,1	12,7	7,9	65,1	34,9	29,4	7,9
	2.75	2.56	.50	.31	2.56	1.38	1.16	.31

AIR PRESSURE	HAND FORCE
20 LB	4 LB
40 LB	6 LB
60 LB	8 LB
80 LB	9 LB
100 LB	10 LB

Units of Measure: Top - mm, Bottom - inches

**GUARD** 







### **OPTIONS**

(LISTED AT THE END OF THE MODEL NUMBER IN ALPHA-NUMERIC ORDER)

### A-FLUOROELASTOMER SEALS

For applications where fluid media or ambient conditions are not compatible with nitrile seals. Note: Fluorocarbon seals do not increase the effective temperature range of the valve. For high temperature applications, consult the factory.

### C - CONDUIT COIL (K02)

Refer to Electrical Section for details.

### CT - CONDUIT COIL HIGH TEMPERATURE (K02)

Refer to Electrical Section for details.

### F-POTTED SOLENOID (K03)

Refer to Electrical Section for details.

### G - COIL WITH 18" FLYING LEADS (K02)

Refer to Electrical Section for details.

#### G - GROMMET SOLENOID WUTH 24" FLYING LEADS (K03)

Refer to Electrical Section for details.

### T-HIGH TEMPERATURE COIL (K03)

Refer to Electrical Section for details.

### Y - EXPLOSION-PROOF COIL (CSA, FM) (K02)

Refer to Electrical Section for details.

### Z-EXPLOSION-PROOF COIL (ATEX, PTB) (K02)

Refer to Electrical Section for details.

G



# **ELECTRICAL INFORMATION**

2/2	T T
3/2	T

DESCRIPT	ION	WHEN THE 8TH CHARACTER OF MODEL NUMBER IS:	INSTRUCTIONS	COIL PART NUMBER ** = VOLTAGE
NEMA 4 WITH DIN 43650 CONNECTION	0 0 7 0 4 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	x	Order coil separately (specify voltage code from below)	7019-9**
NEMA 4X WITH 18" LEADS	AP I STATE TO THE STATE OF THE	х	Order coil separately (specify voltage code from below)	7019-9**G
NEMA 4X 1/2" CONDUIT WITH 30" LEADS	### 12 12 12 12 12 12 12 12 12 12 12 12 12	x	Order coil separately (specify voltage code from below)	7019-9**C
EXPLOSION-PROOF 1/2" CONDUIT WITH 24" LEADS [ CSA 202633X FM APPROVED CL. !; ZONE1Ex m    T4;	## 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	x	Order coil separately (specify voltage code from below)	7019-9**Y
NEMA 4X 1/2" CONDUIT WITH 24" LEADS		В	Solenoid included (specify voltage code from below)	A5983-**F
EXPLOSION-PROOF 1/2" CONDUIT WITH 24" LEADS [ NEMA 4, 4x, 7c, 70, 9E, 9F, 9G UL CLASS I GROUP C&D: CLASS II, GROUPS E,F&G]		D	Solenoid included (specify voltage code from below)	A6454-**F
EXPLOSION-PROOF WITH 3m CABLE AND STRAIN RELIEF (EX II 2G EEXm II T - I EC EXM II T-)		Z	Order coil separately (specify voltage code from below)	7152-9**

K02

NOZ													
VOLTAGE +/- 10 %	* * C O D E	CURRENT (AMPS)						RESISTANCE (OHMS @ 25° C)			POWER (AC = VA		
		INRUSH			HOLDING			(OHMS @ 25° C)			DC = WATTS)		
		NEMA											
		4	7	z	4	7	z	4	7	Z	4	7	Z
22/50 24/60	DA	.40	.55	-	.40	.32	-	31	19	-	4.8	4.5	-
110/50 120/60	AA	.08	.096	-	.06	.54	.029	840	530	1164	4.8	6.5	3.0
220/50 240/60	AB	.04	.048	-	.03	.027	.015	3400	2345	6730	6.0	6.5	3.0
12 VDC	DA	.40	-	-	.40	.375	.267	31	32	45	4.8	7	3.5
24 VDC	DB	.20	-	.136	.20	.187	.136	121	128	177	4.8	-	3.5
24 VDC	DBL	-	-	-	-	-	-	320	-	-	1.8	4.5	-
125 VDC	АВ	.04	-	-	.04	.06	-	3400	2000	-	4.8	7	-

K03

VOLTAGE +/- 10 %	* * C O D E			RENT (IPS)	'	RESIS	TANCE	POWER (AC = VA		
		INRUSH		HOLDING		(OHMS	@ 25° C)	DC = WATTS)		
		В	D	В	D	В	D	В	D	
22/50 24/60	DA	-	-	-	-	-	-	-	-	
110/50 120/60	AA	.259	.26	.163	.16	156	156	8.7	8.7	
220/50 240/60	AB	.130	.13	.082	.08	636	636	8.7	8.7	
12 VDC	DA	.795	-	.795	.80	15.1	15.1	9.5	9.5	
24 VDC	DB	.387	-	.387	.39	62	62	9.5	9.5	
120 VDC	AB	-	-	.11	.08	636	636	-	-	

DIN 43650 CONNECTORS								
ТҮРЕ	STRAIN RELIEF	1/2" CONDUIT	MOLDED	STRAIN RELIE	EF WITH LIGHT	STRAIN RELIEF WITH LIGHT + 6' CORD		
	WITHOUT CORD	WITHOUT CORD	WITH 6' CORD	100-240 AC 48-120 DC	6-48 AC/DC	100-240 AC 48-120 DC	6-48 AC/DC	
PART NUMBER	7020-001	7039-001	7020-006	7020-AA	7020-DB	7094-006	7094-007	



# **NOTES**