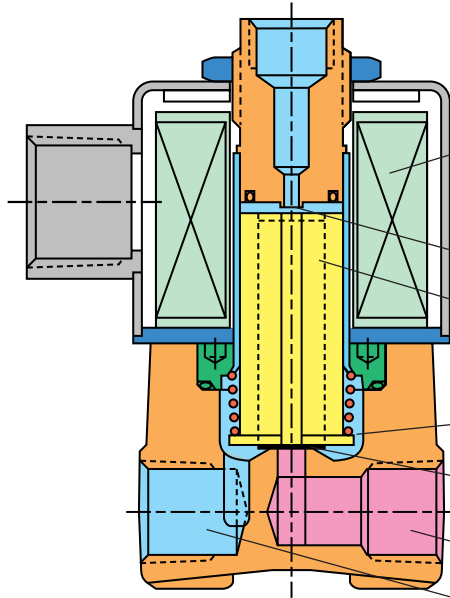


Solenoid Valves

The most versatile line of multi-wattage valves in the industry.

"2" Series Solenoid Valves

17 Watts



General Information

Features only two moving parts, is of packless construction, operates in any position and can be serviced without removal from pipe line.

SIZE – Largest direct lift valve on the market.

COIL CONSTRUCTION – Non-molded is standard for AC and DC voltages

COIL HOUSING – Steel housing with black finish for greater coil heat dissipation.

STOP ORIFICE

COMPENSATED PLUNGER – Spring loaded top seal for greater cycle life.

PLUNGER RETURN SPRING – Stainless steel, provides positive plunger return regardless of mounting position.

BODY ORIFICE SEAT is machined as part of body, guaranteeing leakproof internal structure.

ORIFICE PORT – (under seat)

CAVITY PORT – (over seat)

Standard Specifications

Brass Body with stainless steel internal parts – compatible with common media including air, inert gases, hydraulic fluids, petroleum products, etc.

Maximum Operating Pressure Differential: up to 750 psi (xx bar)

Orifice Diameters: Body – 1/16" to 3/8" (1.6 to 9.5) Stop – 3/32" to 3/16" (2.4 to 4.8)

Response Time: 20 to 25 milliseconds

Power Consumption: 17 watts continuous duty

Vacuum: Special to 10 microns

Port Size: 1/4" NPT and 3/8" NPT

Housing: Grommet, 1/2" conduit

Seal Material: Buna N standard, others optional

Leakage: Bubble tight

Coil Type: Continuous Rating
17 watt – Class B (130°C), non-molded standard

Ambient Temp: Standard; Class B to +130°C

Standard Voltages: 24V/60 Hz, 120V/60 Hz, 240V/60 Hz, 12, 24 VDC. Other voltages and wattages available upon request

Media Temp: Standard:
-45°F (-43°C) to +185°F (+85°C)

Leadwire: 18 AWG, 18 inches long standard

Valve Model Number Matrix

2 WAYS	22 FAMILY	4 FUNCTION	8 COIL TYPE	-	3 PORT SIZE	N PORT TYPE	B BODY MATERIALS	-	A SEAL MATERIALS	4 ORIFICE SIZE	J WATTAGE	2 VOLTAGE
2 2-way	22 "2" Series	3 2-Way Normally Closed	Molded Class "B" 1 with 18" leads		2 1/4"	N NPT Female	B Brass		A Buna	4 1/16" (1.6)	J 17 watts	1 120/60
3 3-way		3-Way Normally Closed Line Connect	M 18" leads/conduit		3 3/8"	D Defined elsewhere	O without body		E EPDM	6 3/32" (2.4)		2 24/60
		4 Normally Open	Non-Molded Class "B" 0 with 18" leads						V Viton	8 1/8" (3.2)		3 240/60
		5 Directional Control	8 18" leads/conduit							9 5/32" (4.0)		4 6VDC
		7 Universal								A 3/16" (4.8)		5 12VDC
										C 1/4" (6.4)		6 24VDC
										D 5/16" (8.0)		
										E 3/8" (9.5)		

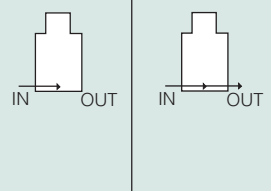
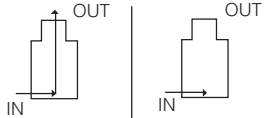
Standard Port Locations and ANSI Symbols

	2-Way		3-Way			
	Normally Closed	Normally Open	Normally Closed	Normally Open	Directional	Multi-Purpose
Standard Port Units						
ANSI Symbol						

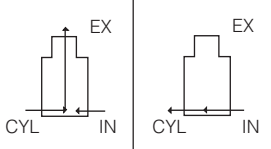
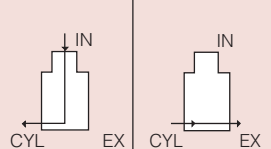
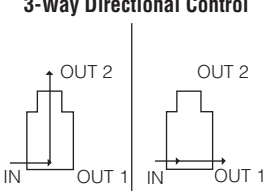
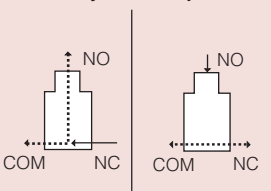
- NC** – Normally Closed
- NO** – Normally Open
- CYL** – Cylinder Port
- EX** – Exhaust Port
- COM** – Common Port

Maximum Operating Pressure Differential (PSI)

2-Way Pressure Ratings

Type		Orifice Number	Orifice Diameter		Cv Factor		Maximum Operating Pressure Differential	
			Body	Stop	Body	Stop	AC	DC
De-energized	Energized							
2-Way Normally Closed 		4	1/16 (1.6)		.12		750 (51.7)	750 (51.7)
		6	3/32 (2.4)		.21		500 (34.5)	500 (34.5)
		8	1/8 (3.2)		.32		300 (20.7)	300 (20.7)
		9	5/32 (4.0)		.50		225 (15.5)	225 (15.5)
		A	3/16 (4.8)		.69		140 (9.7)	140 (9.7)
		C	1/4 (6.35)		.94		100 (6.9)	100 (6.9)
		D	5/16 (8.0)		1.48		45 (3.1)	45 (3.1)
		E	3/8 (9.5)		1.90		35 (2.4)	35 (2.4)
2-Way Normally Open 		6	3/32 (2.4)		.25		275 (19.0)	275 (19.0)
		8	1/8 (3.2)		.35		175 (12.1)	175 (12.1)
		9	5/32 (4.0)		.45		125 (8.6)	125 (8.6)
		A	3/16 (4.8)		.50		100 (6.9)	100 (6.9)

3-Way Pressure Ratings

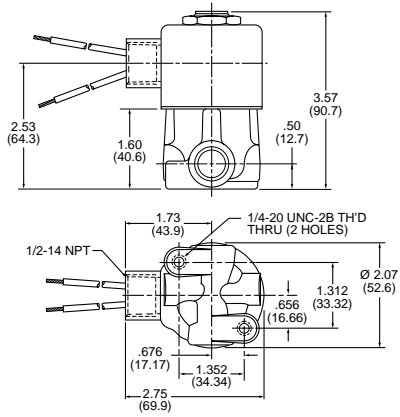
3-Way Normally Closed Line Connection 		6	3/32 (2.4)	3/32 (2.4)	.25	.25	225 (15.5)	225 (15.5)
		8	1/8 (3.2)	1/8 (3.2)	.35	.35	150 (10.3)	150 (10.3)
		9	5/32 (4.0)	5/32 (4.0)	.45	.45	125 (8.6)	125 (8.6)
		A	3/16 (4.8)	3/16 (4.8)	.50	.50	85 (5.9)	85 (5.9)
		C	1/4 (6.35)	3/16 (4.8)	.75	.50	50 (3.4)	50 (3.4)
		D	5/16 (8.0)	3/16 (4.8)	1.10	.50	25 (1.7)	25 (1.7)
		E	3/8 (9.5)	3/16 (4.8)	1.95	.50	15 (1.0)	15 (1.0)
3-Way Normally Open 		6	3/32 (2.4)	3/32 (2.4)	.25	.25	275 (19.0)	275 (19.0)
		8	1/8 (3.2)	1/8 (3.2)	.35	.35	175 (12.1)	175 (12.1)
		9	5/32 (4.0)	5/32 (4.0)	.45	.45	125 (8.6)	125 (8.6)
		A	3/16 (4.8)	3/16 (4.8)	.50	.50	75 (5.2)	75 (5.2)
		C	1/4 (6.35)	3/16 (4.8)	.75	.50	50 (3.4)	50 (3.4)
		D	5/16 (8.0)	3/16 (4.8)	1.10	.50	40 (2.8)	40 (2.8)
		E	3/8 (9.5)	3/16 (4.8)	1.95	.50	30 (2.1)	30 (2.1)
3-Way Directional Control 		6	3/32 (2.4)	3/32 (2.4)	.25	.25	200 (13.8)	200 (13.8)
		8	1/8 (3.2)	1/8 (3.2)	.35	.35	175 (12.1)	175 (12.1)
		9	5/32 (4.0)	5/32 (4.0)	.45	.45	125 (8.6)	125 (8.6)
		A	3/16 (4.8)	3/16 (4.8)	.50	.50	75 (5.2)	75 (5.2)
		C	1/4 (6.35)	3/16 (4.8)	.75	.50	60 (4.1)	60 (4.1)
		D	5/16 (8.0)	3/16 (4.8)	1.10	.50	40 (2.8)	40 (2.8)
		E	3/8 (9.5)	3/16 (4.8)	1.95	.50	20 (1.4)	20 (1.4)
3-Way Multi-Purpose 		6	3/32 (2.4)	3/32 (2.4)	.25	.25	150 (10.3)	150 (10.3)
		8	1/8 (3.2)	1/8 (3.2)	.35	.35	110 (7.6)	110 (7.6)
		9	5/32 (4.0)	5/32 (4.0)	.45	.45	75 (5.2)	75 (5.2)
		A	3/16 (4.8)	3/16 (4.8)	.50	.50	50 (3.4)	50 (3.4)
		C	1/4 (6.35)	3/16 (4.8)	.75	.50	30 (2.1)	30 (2.1)
		D	5/16 (8.0)	3/16 (4.8)	1.10	.50	15 (1.0)	15 (1.0)
		E	3/8 (9.5)	3/16 (4.8)	1.95	.50	10 (.7)	10 (.7)

Values in parenthesis are metric. Example: inch (millimeter) — psi (bar)

Dimensions

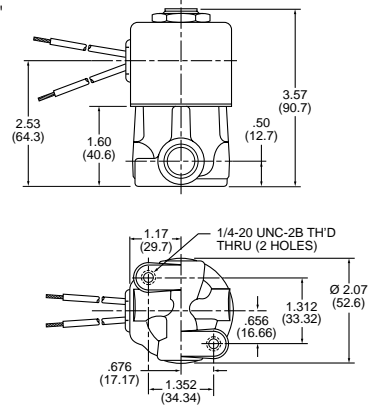
2-WAY NORMALLY CLOSED CONDUIT HOUSING

1/4" & 3/8"
Ports



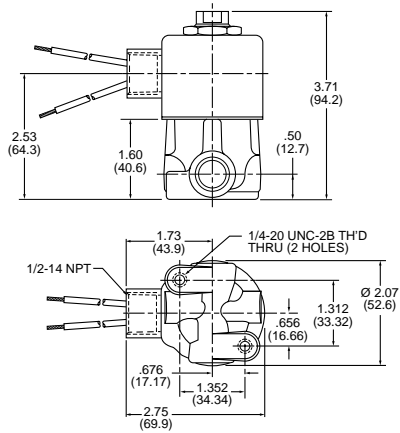
2-WAY NORMALLY CLOSED GROMMET HOUSING

1/4" & 3/8"
Ports



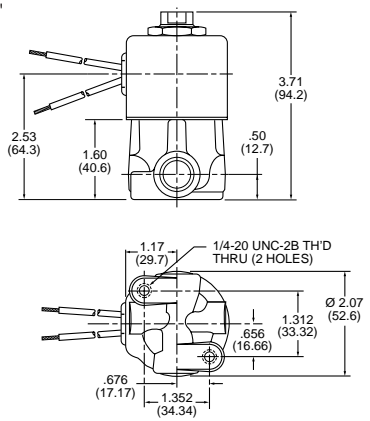
3-WAY LINE CONNECT CONDUIT HOUSING

1/4" & 3/8"
Ports



3-WAY LINE CONNECT GROMMET HOUSING

1/4" & 3/8"
Ports



! WARNING !

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND/OR PROPERTY DAMAGE.