

8

SERIES





8 Series Valves

Heavy-Duty, Mid-Range Solenoid Valves

General Specifications:

Overmold Coil Construction

- Meets NEMA 4 and 4X Requirements
- Unique internal design resulting in improved magnetic circuitry
- Wide variety of electrical connection structures

One Piece Flange Tube Assembly

- Eliminates one weld joint for increased strength and reduced leakage potential
- Allows for high vacuum operation
- Wrench flats on conduit for ease of installation

Rugged Construction

Wide Variety of Construction Materials

Weight: Approximately 1 lb., 7 ounces

Agency Approvals: UL recognition, CUL recognition

Features:

- 1/8" NPT and 1/4" NPT porting
- Orifice Diameters: Body Orifice - 1/32" to 1/4" Stop Orifice - 3/32" to 3/16"
- Weight approximately 1 lb., 7 oz.
- Media temperature limitations of -40°F to 180°F
- 2-way and 3-way operation
- Operating pressure up to 1100 PSI (82.75 bar)
- Power consumption of 11 watt continuous duty
- DIN, conduit, spade and wire lead type electrical connections
- Standard voltages: 24V/50-60 Hz, 120V/50-60 Hz, 240V/50-60 Hz, 6, 12, 24 VDC
- Standard seal material is Buna N, Viton, EPDM with others optional
- Body sizes: 1-1/2"

8 Series Solenoid Valves:

The 8 Series solenoid valves are heavy-duty, mid-sized, general purpose valves featuring high performance pressure and flow characteristics. They are commonly used in OEM pneumatic and hydraulic component assemblies, as well as automobile suspension systems, emissions monitoring and control equipment, truck fan clutch controls, dental/vision chairs, medical tables and beds, liquid recycling systems and HVAC applications.

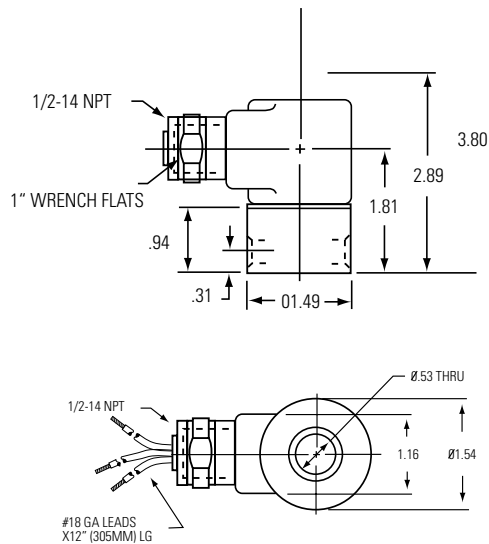


Valve Model Number Matrix

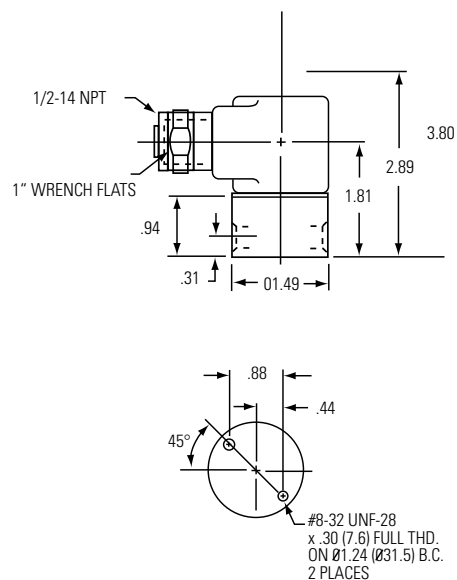
2 WAYS	82 FAMILY	3 FUNCTION	7 COIL TYPE OVERMOLD	2 PORT SIZE	N PORT TYPE	T BODY MATERIALS	V SEAL MATERIALS	4 ORIFICE SIZE	F WATTAGE	1 VOLTAGE	OPTIONS
2 2-Way	82 1-1/2" body	3 2-Way Normally Closed	Class "F" A Conduit	1 1/8"	N NPT Female	B Brass	A Buna	1 1/32" (.80)	F 11.0	1 120/60	U UL Approval
3 3-Way		3-way Normally Closed Line Connect	B 1/4" Spades C 18" Leads 7 DIN 43650	2 1/4" Q Defined Elsewhere	D Defined Elsewhere	T 303 Stainless Family 82 Only O Without Body	E EPDM F FDA Buna G FDA EPDM V Viton	2 3/64" (1.2) 4 1/16" (1.6) 5 5/64" (2.0) 6 3/32" (2.4) 8 1/8" (3.2) 9 5/32" (4.0) A 3/16" (4.8) C 1/4" (6.4) R 1/16"x 3/64" (1.6 x 1.2) T 1/8"x 3/32" (3.2 x 2.4) V 1/32"x 3/64" (.8 x 1.2)	2 24/60 3 240/60 4 6 VDC 5 12 VDC 6 24 VDC	C CSA Approval L CUL Approval S UL/CSA Approval	
		4 Normally Open 5 Directional Control 6 Normally Closed Free Venting 7 Universal	H Hazardous Location								

Dimensions

2-Way Normally Closed



2 & 3-Way Normally Closed/Normally Open

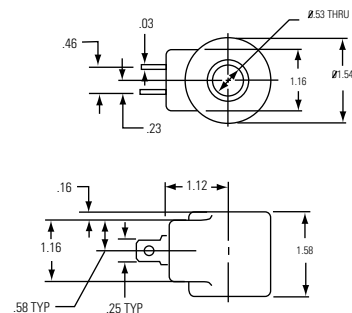


Conduit Connection

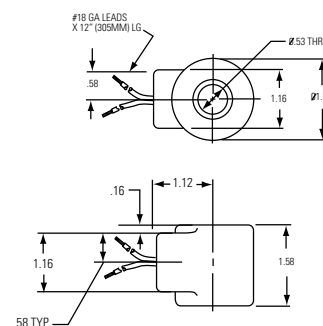
Maximum Operating Pressure Differential (PSI)

2-Way Pressure Ratings		Orifice Diameter		C _v Factor		Maximum Operating Pressure Differential		
De-energized	Energized	Orif. No.	Body	Stop	Body	Stop	AC	DC
2-Way Normally Closed		1	1/32 (.80)		.024		1200 (82.75)	1100 (75.86)
		2	3/64 (1.2)		.062		1100 (75.86)	1000 (68.96)
		4	1/16 (1.6)		.095		1000 (68.10)	600 (41.38)
		5	5/64 (2.0)		.120		600 (41.38)	325 (22.41)
		6	3/32 (2.4)		.180		400 (27.59)	275 (18.97)
		8	1/8 (3.2)		.280		225 (15.52)	150 (10.34)
		9	5/32 (4.0)		.400		120 (8.28)	60 (4.14)
		A	3/16 (4.8)		.500		80 (5.51)	30 (2.07)
		C	1/4 (6.4)		.750		25 (1.73)	10 (0.70)
2-Way Normally Open		2	3/64 (1.2)		.062		500 (35.48)	
		4	1/16 (1.6)		.095		300 (21.0)	
		6	3/32 (2.4)		.180		150 (10.0)	
3-Way Pressure Ratings		Orifice Diameter		C _v Factor		Maximum Operating Pressure Differential		
De-energized	Energized	Orif. No.	Body	Stop	Body	Stop	AC/DC	
3-Way Normally Closed		V	1/32 (.80)	3/64 (1.2)	.024	.062	600 (41.38)	
		2	3/64 (1.2)	3/64 (1.2)	.062	.062	275 (18.97)	
		4	1/16 (1.6)	1/16 (1.6)	.095	.095	220 (15.17)	
		6	3/32 (2.4)	3/32 (2.4)	.180	.180	130 (8.97)	
		T	1/8 (3.2)	3/32 (2.4)	.280	.180	90 (6.21)	
		9	5/32 (4.0)	3/32 (2.4)	.400	.180	40 (2.76)	
		A	3/16 (4.8)	3/32 (2.4)	.500	.180	25 (1.73)	
		C	1/4 (6.4)	3/32 (2.4)	.750	.180	10 (0.70)	
3-Way Normally Open		R	1/16 (1.6)	3/64 (1.2)	.095	.062	225 (15.52)	
		4	1/16 (1.6)	1/16 (1.6)	.095	.095	150 (10.35)	
		6	3/32 (2.4)	3/32 (2.4)	.180	.180	100 (6.90)	
		T	1/8 (3.2)	3/32 (2.4)	.280	.180	50 (3.45)	
		9	5/32 (4.0)	3/32 (2.4)	.400	.180	40 (2.76)	
		A	3/16 (4.8)	3/32 (2.4)	.500	.180	20 (1.38)	
		C	1/4 (6.4)	3/32 (2.4)	.750	.180	10 (0.70)	
3-Way Directional Control		R	1/16 (1.6)	3/64 (1.2)	.095	.062	300 (20.70)	
		4	1/16 (1.6)	1/16 (1.6)	.095	.095	250 (17.25)	
		6	3/32 (2.4)	3/32 (2.4)	.180	.180	140 (9.66)	
		T	1/8 (3.2)	3/32 (2.4)	.280	.180	120 (8.62)	
		9	5/32 (4.0)	3/32 (2.4)	.400	.180	65 (4.48)	
		A	3/16 (4.8)	3/32 (2.4)	.500	.180	25 (1.73)	
3-Way Universal		V	1/32 (.80)	3/64 (1.2)	.062	.062	350 (24.14)	
		2	3/64 (1.2)	3/64 (1.2)	.062	.062	200 (13.80)	
		4	1/16 (1.6)	1/16 (1.6)	.095	.095	175 (12.07)	
		6	3/32 (2.4)	3/32 (2.4)	.180	.180	100 (6.90)	
		T	1/8 (3.2)	3/32 (2.4)	.280	.180	50 (3.45)	
		9	5/32 (4.0)	3/32 (2.4)	.400	.180	25 (1.73)	

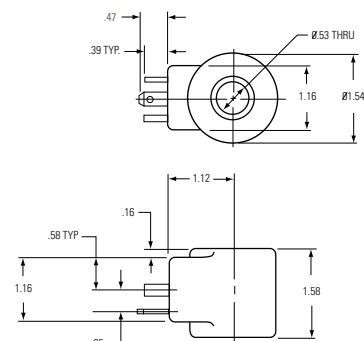
Coil Options



Dual Spade



Dual Lead



DIN Connection

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