

3V & 4V SOLENOID VALVES

Encapsulated Coils Offer Economy and Protection

3V and 4V solenoid valves feature rugged, epoxy-encapsulated coils that are resistant to water, dust and corrosion. This epoxy-molded solenoid provides extra levels of safety and protection at no extra cost. In addition, solenoids are designed for long-term operation at minimal coil wattage. Lower-wattage coils consume less power, saving money and increasing efficiency.

Proven Design Minimizes Wear

Solenoid valves feature a short-stroke design that minimizes wear and maximizes service life. Valve bodies are made from brass or stainless steel. Coils have high-temperature Class F insulation for operation for nominal ambient temperature range as standard. Optional Class H insulation is available on application.

Applicable Standards

Solenoid valves are CSA certified and UL listed.

Watertight & Explosion-Proof Protection

The same solenoid valve that meets Type I enclosure requirements also meets Types 2, 3, 3S, 4 and 4X. Explosion-proof models meet Type 3, 3S, 4, 4X, 6, 6P, 7 and 9 requirements.

Design Eases Maintenance

Solenoid valves are easy to maintain or replace in the field. Operating voltages are stamped onto each coil, and the coils themselves can be easily swapped or replaced in the field without disconnecting the valve itself.



Ordering

Standard solenoids can be ordered mounted and piped as part of a complete valve/actuator assembly, or they can be ordered as a separate item. When ordered as part of a complete valve, the action that is desired when the valve is energized must be specified below the valve characteristics. If speed of operation is critical, contact DeZURIK with valve and actuator size, service conditions and required operating speed for recommendations.

3-Way Solenoid Valves

Three-way solenoid valves are available on:

- DR40A, DR55, DR85 Diaphragm Actuators (with or without positioner)
- DR145A and DR250A Diaphragm Actuators (with positioner only)
- Compact Spring-Return Actuators
- G-Series Spring-Return Cylinder Actuators

Port size is 1/4" (6.35mm), orifice size is 3/32" (2.38mm), and maximum pressure differential is 100 psig (690 kPa) air. Coil voltage on 3-Way solenoids is both 120 AC/60 Hz and 110 AC/50 Hz as standard. DC voltage on application is 60 psig (410 kPa).

4-Way Solenoid Valves

Four-way solenoid valves are for use on:

- DR145A and DR250A Diaphragm Actuators (without positioner)
- G-Series Double-Acting Cylinder Actuators
- Compact Double-Acting Actuators
- Knife Gate Valve Cylinder Actuators

Port size is $\frac{1}{4}$ " (6.35mm), $\frac{1}{2}$ " (12.7mm) or $\frac{3}{4}$ " 19.05 mm) and maximum pressure differential is 125 psig (860 kPa) air. Solenoid coil voltage is either 120 AC/60 Hz, 110 AC/50 Hz or 24 VDC depending on model order code.

Brass Body							
Туре	Enclosure Type	Voltage	Cv	Order Code Valve/ Actuator Assembly			
Explosion-proof & Watertight	3,3S,4,4X, 6,6P,7,9	120/60 110/50	.12	3V1002			
Explosion-proof & Watertight with manual override	3,3S,4,4X, 6,6P,7,9	120/60 110/50	.12	3V1003			
303 Stainless Steel Body							
Explosion-proof & Watertight	3,3S,4,4X, 6,6P,7,9	120/60 110/50	.12	3V1006			
Explosion-proof & Watertight with manual override	3,3S,4,4X, 6,6P,7,9	120/60 110/50	.12	3V1007			

Ordering Example:

PEC, 6, F1, CI, NBR, CR*GS-6-SC6, 3V1002

Solenoid to open valve when energized.

Brass Body – US Vo	Enclosure			Order Code
Туре	Туре	Voltage	Cv	Valve/
1,400	1,00	ronago		Actuator Assembly
Watertight & Explosion-	3,3S,4,4X,	120 AC	.80	4V2110
proof, single coil	6,6P,7,9	60 Hz	.80	402110
Watertight & Explosion-	3,3S,4,4X,	120 AC	.80	4V2111
proof, with manual override	6,6P,7,9	60 Hz	.00	
Watertight & Explosion-	3,3S,4,4X,	120 AC	1.40	4V1015
proof, single coil	6,6P,7,9	60 Hz	1.40	
Watertight & Explosion-	3,3S,4,4X,	120 AC	1.40	4V2001
proof, dual coil	6,6P,7,9	60 Hz	1.40	
Watertight & Explosion-	3,3S,4,4X,	120 AC	5.20	4V1045
proof, single coil	6,6P,7,9	60 Hz	5.20	
Watertight & Explosion-	3,3S,4,4X,	120 AC	5.20	4V1102
proof, dual coil	6,6P,7,9	60 Hz	5.20	
Watertight & Explosion-	3,3S,4,4X,	24 VDC	.80	4V1079
proof, single coil	6,6P,7,9	24 VDC	.00	
Watertight & Explosion-	3,3S,4,4X,	24 VDC	00	4V1108
proof, dual coil	6,6P,7,9	24 VDC	.80	
Watertight & Explosion-	3,3S,4,4X,	24 VDC	1.40	4V1051
proof, single coil	6,6P,7,9	24 VDC	1.40	
Watertight & Explosion-	3,3S,4,4X,	24 \/DC	1.40	4V2137
proof, dual coil	6,6P,7,9	24 VDC	1.40	
Watertight & Explosion-	3,3S,4,4X,	041//D0	5.20	4V2103
proof, single coil	6,6P,7,9	24 VDC		
Watertight & Explosion-	3,3S,4,4X,			4) (0.400
proof, dual coil	6,6P,7,9	24 VDC	5.20	4V2138
304 Stainless Steel	Body – US	Voltage	•	
Watertight & Explosion-	3,3S,4,4X,	120 AC	.70	4V2114
proof, single coil	6,6P,7,9	60 Hz		
Watertight & Explosion-	3,3S,4,4X,	120 AC	.70	4V2115
proof, with manual override	6,6P,7,9	60 Hz	./0	
Brass Body – Europe	ean Voltage	9		
Watertight &	3,3S,4,4X,	110 AC	70	4V2119
Explosion-proof,	6,6P,7,9	50 Hz	.70	
Watertight & Explosion-	3,3S,4,4X,	110 AC	70	4V2120
proof, with manual override	6,6P,7,9	50 Hz	.70	
Watertight & Explosion-	3,3S,4,4X,	110 AC		4V1015
proof, single coil	6,6P,7,9	50 Hz	1.40	
Watertight & Explosion-	3,3S,4,4X,	110 AC	1.10	4V2001
proof, dual coil	6,6P,7,9	50 Hz	1.40	
Watertight & Explosion-	3,3S,4,4X,	110 AC		4V1045
proof, single coil	6,6P,7,9	50 Hz	5.20	
Watertight & Explosion-	3,3S,4,4X,	110 AC		
proof, dual coil	6,6P,7,9	50 Hz	5.20	4V1102
304 Stainless Steel			ltage	l .
Watertight & Explosion-	3,3S,4,4X,	110 AC		
	6,6P,7,9	50 Hz	.70	4V2123
nroot single coll				4V2124
proof, single coil Watertight & Explosion-	3,3S,4,4X,	110 AC	.70	

Ordering Example:

PEC, 6, F1, CI, NBR, CR*GS-6-PC6, 4V2110

Energize to open.

Sales and Service



250 Riverside Ave. N. Sartell, Minnesota 56377 • Phone: 320-259-2000 • Fax: 320-259-2227

DeZURIK, Inc. reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing by DeZURIK, Inc. Certified drawings are available upon request.