

# SARTELL Valves, Inc.

**DeZURIK** Water Controls

**SARTELL** Valves & Controls

## 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 Sartell Valves, Inc. 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  $\frac{1}{4}$ " (6.35mm), orifice size is  $\frac{3}{32}$ " (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 1/4" (6.35mm), 1/2" (12.7mm) or 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				
Type	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 Voltage				
Type	Enclosure Type	Voltage	Cv	Order Code Valve/ Actuator Assembly
Watertight & Explosion-proof, single coil	3,3S,4,4X, 6,6P,7,9	120 AC 60 Hz	.80	4V2110
Watertight & Explosion-proof, with manual override	3,3S,4,4X, 6,6P,7,9	120 AC 60 Hz	.80	4V2111
Watertight & Explosion-proof, single coil	3,3S,4,4X, 6,6P,7,9	120 AC 60 Hz	1.40	4V1015
Watertight & Explosion-proof, dual coil	3,3S,4,4X, 6,6P,7,9	120 AC 60 Hz	1.40	4V2001
Watertight & Explosion-proof, single coil	3,3S,4,4X, 6,6P,7,9	120 AC 60 Hz	5.20	4V1045
Watertight & Explosion-proof, dual coil	3,3S,4,4X, 6,6P,7,9	120 AC 60 Hz	5.20	4V1102
Watertight & Explosion-proof, single coil	3,3S,4,4X, 6,6P,7,9	24 VDC	.80	4V1079
Watertight & Explosion-proof, dual coil	3,3S,4,4X, 6,6P,7,9	24 VDC	.80	4V1108
Watertight & Explosion-proof, single coil	3,3S,4,4X, 6,6P,7,9	24 VDC	1.40	4V1051
Watertight & Explosion-proof, dual coil	3,3S,4,4X, 6,6P,7,9	24 VDC	1.40	4V2137
Watertight & Explosion-proof, single coil	3,3S,4,4X, 6,6P,7,9	24 VDC	5.20	4V2103
Watertight & Explosion-proof, dual coil	3,3S,4,4X, 6,6P,7,9	24 VDC	5.20	4V2138
304 Stainless Steel Body - US Voltage				
Watertight & Explosion-proof, single coil	3,3S,4,4X, 6,6P,7,9	120 AC 60 Hz	.70	4V2114
Watertight & Explosion-proof, with manual override	3,3S,4,4X, 6,6P,7,9	120 AC 60 Hz	.70	4V2115
Brass Body - European Voltage				
Watertight & Explosion-proof,	3,3S,4,4X, 6,6P,7,9	110 AC 50 Hz	.70	4V2119
Watertight & Explosion-proof, with manual override	3,3S,4,4X, 6,6P,7,9	110 AC 50 Hz	.70	4V2120
Watertight & Explosion-proof, single coil	3,3S,4,4X, 6,6P,7,9	110 AC 50 Hz	1.40	4V1015
Watertight & Explosion-proof, dual coil	3,3S,4,4X, 6,6P,7,9	110 AC 50 Hz	1.40	4V2001
Watertight & Explosion-proof, single coil	3,3S,4,4X, 6,6P,7,9	110 AC 50 Hz	5.20	4V1045
Watertight & Explosion-proof, dual coil	3,3S,4,4X, 6,6P,7,9	110 AC 50 Hz	5.20	4V1102
304 Stainless Steel Body - European Voltage				
Watertight & Explosion-proof, single coil	3,3S,4,4X, 6,6P,7,9	110 AC 50 Hz	.70	4V2123
Watertight & Explosion-proof, with manual override	3,3S,4,4X, 6,6P,7,9	110 AC 50 Hz	.70	4V2124

### Ordering Example:

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

Energize to open.

## Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:

Web Site: [www.sartellvalves.com](http://www.sartellvalves.com) E-Mail: [info@sartellvalves.com](mailto:info@sartellvalves.com)

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