

# Solenoid Valves

## For Electropneumatically Actuated Bellows and Diaphragm Valves

The 3-way solenoid valve opens when it receives an electrical signal, allowing air to enter the actuator. When the signal stops, the solenoid valve closes and vents pressure from the actuator.

It can be used with any valve/actuator assembly that requires 100 psig (6.8 bar) or less actuation pressure, as listed in specific valve catalogs. Two solenoid valves are required to operate double-acting assemblies. Additional plumbing—required to provide mounting space for solenoid valves on Swagelok® 3D, 4D, 8D, and DR series double-acting valve actuators—is not included.



### Features

- Indicator light
- Voltage surge suppressor
- Manual override button for greater operator control
- 24 in. (61 cm) leads with plug-in connector
- Alternating- or direct-current operating voltages
- Low power consumption
- Direct mounting to Swagelok bellows or diaphragm valve actuators with threaded adapter
- Lightweight, compact design
- All ports 10-32/M5  $\times$  0.8 internal threads

### Technical Data

<b>Temperature Range</b>		25 to 120°F (-3 to 48°C)	
<b>Max Operating Pressure</b>		100 psig (6.8 bar)	
<b>Media</b>		Filtered air (lubricated or oil free)	
<b>Flow Coefficient (C<sub>v</sub>)</b>		Inlet—0.034; exhaust—0.05	
<b>Power Consumption</b>	<b>Inrush</b>	ac: 4.5 V·A (50 Hz) 4.2 V·A (60 Hz)	dc: —
	<b>Holding</b>	ac: 3.5 V·A (50 Hz) 3.0 V·A (60 Hz)	dc: 1.8 W 2.1 W (with LED)
<b>Voltage Tolerance</b>		-15 % to +10 % of rating	
<b>Weight</b>		2.45 oz (70 g)	

### Materials of Construction

Component	Material
Body	Die cast zinc
Internal seals	Buna N
Adapter, spacer	Aluminum
Adapter O-ring	Fluorocarbon FKM

### Ordering Information

Operating Voltage	Valve Series	
	BN	All Others
24 V (ac)	MS-SOL-3K-BN	MS-SOL-3K
110/120 V (ac)	MS-SOL-2K-BN	MS-SOL-2K
220/240 V (ac)	MS-SOL-5K-BN	MS-SOL-5K
5 V (dc)	MS-SOL-6K-BN	MS-SOL-6K
12 V (dc)	MS-SOL-4K-BN	MS-SOL-4K
24 V (dc)	MS-SOL-1K-BN	MS-SOL-1K

### Warranty Information

Swagelok products are backed by The Swagelok Limited Lifetime Warranty. For a copy, visit [swagelok.com](http://swagelok.com) or contact your authorized Swagelok representative.

#### Safe Product Selection

When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

#### **⚠ WARNING**

Do not mix/interchange Swagelok products or components not governed by industrial design standards, including Swagelok tube fitting end connections, with those of other manufacturers.