

SRS Valve

Manifold mountable plastic switching solenoid valve

FEATURES

- 3-way, 2 position valve (NO, NC & Distributor)
- Design incorporates thermoplastics and non-corrosive metals
- Offers high-density manifold mounting with convenient manifold to PC board interface
- Weighs only 7 g, perfect where low weight is critical to overall system



MEDIA COMPATIBILITY

Gases and select liquids

WETTED MATERIALS

Body:
PBT; LNP Thermocomp®

Elastomers:
FKM

Non-corrosive metals:
302 series stainless steel; 430 FR series stainless steel; CMI-B core iron; electroless nickel plating

ELECTRICAL

Power 0.5, 1.0 or 2.0 W

Voltage 5, 12, 24 V_{DC} ± 10%

PHYSICAL PROPERTIES

Operating environment	0 to 70 °C
Storage temperature	-40 to 70 °C
Length	38 mm (1.5 in)
Width	10 mm (0.394 in)
Height	15.5 mm (0.61 in)
Porting	Manifold mount, (gasket and screws supplied)
Weight	7 g (0.23 oz)
Internal volume	0.0267 cm ³
Filtration (recommended)	40 µm
Lubrication	None required

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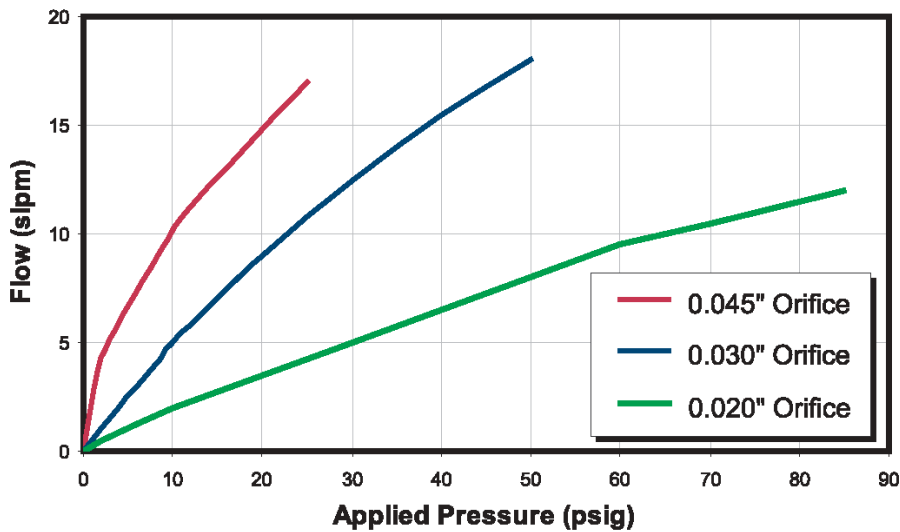
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PERFORMANCE CHARACTERISTICS

Part no.	Pressure	Vacuum	Orifice sizes/ Equivalent C_v ¹	Leak rate ²	Response
SRS10...	0...35 psig	0...27 "Hg (0...13 psi)	0.020" (0.510 mm)/ 0.0075 C_v	≤0.016 sccm (bubble tight)	<30 msec cycling (2 Watts)
SRS11...	0...85 psig				
SRS13...	0...20 psig		0.030" (0.762 mm)/ 0.017 C_v		
SRS14...	0...50 psig				
SRS16...	0...10 psig		0.045" (1.143 mm)/ 0.027 C_v		
SRS17...	0...20 psig				

FLOW CURVES (typical air flow)³



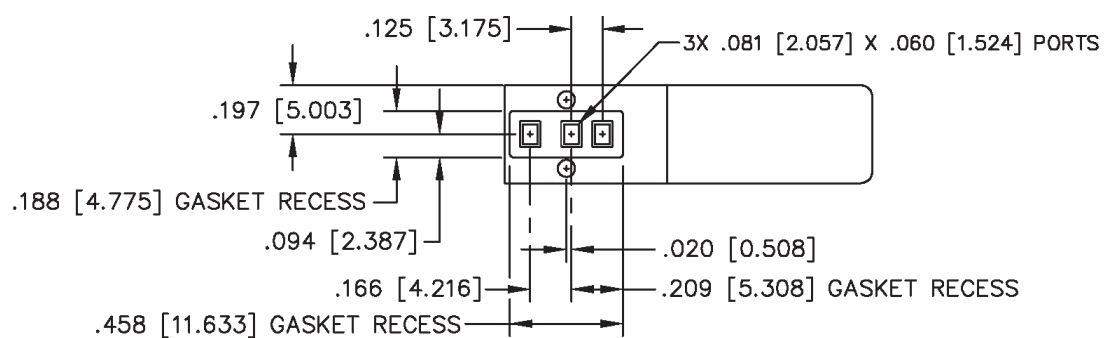
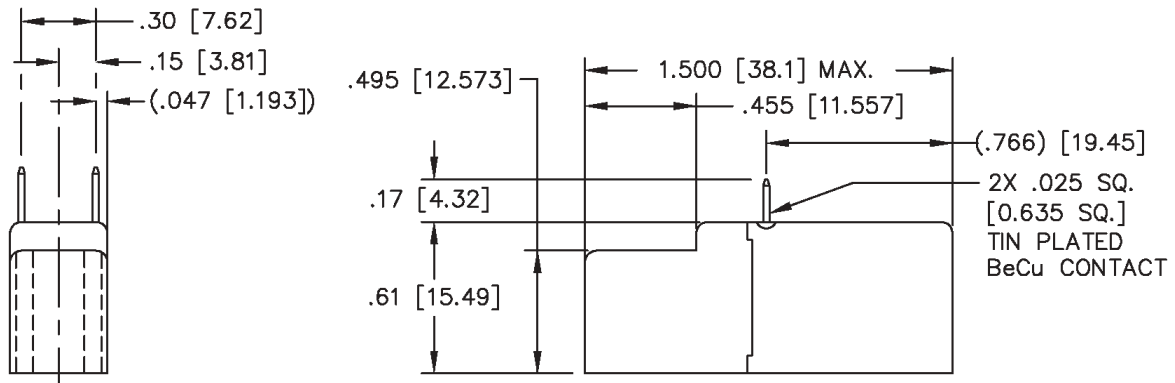
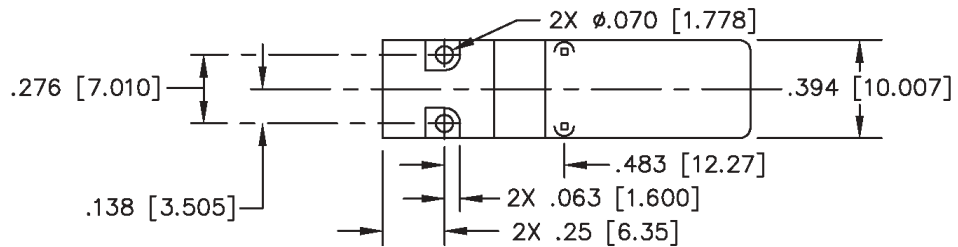
Notes:

- ¹ The C_v value is the volume flow in US gallons/min under specific flow conditions and describes the relative flow capacity of a valve. If several valves with the same nominal diameter are compared, the valve with the highest C_v value has the best flow dynamics design. The equivalent european measure is the k_v value expressed in m^3/h ($k_v = 0.86 C_v$).
- ² sccm denotes Standard Cubic Centimeters per Minute. It is a unit for the flow rate at standard conditions of temperature and pressure. 1000 sccm = 1 slpm.
- ³ slpm denotes Standard Liters per Minute. It is a unit for the flow rate at standard conditions of temperature and pressure. 1 slpm = 1000 sccm.

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OUTLINE DRAWING

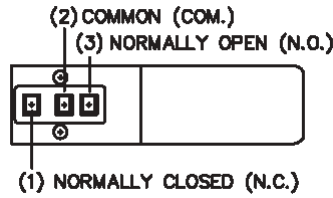


dimensions in inches (mm)

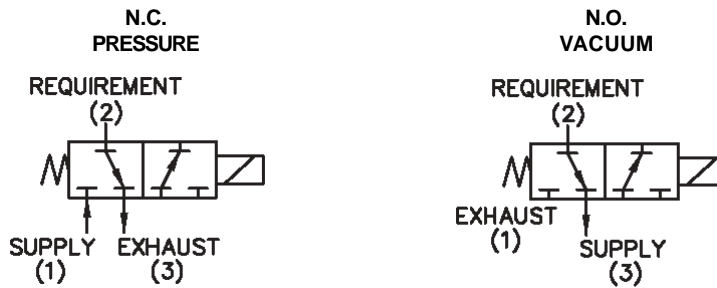
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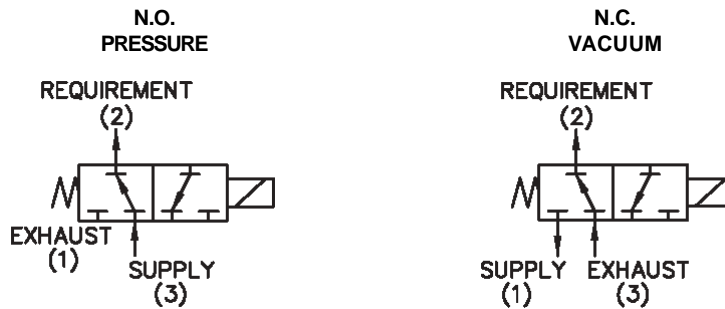
VALVE TYPE



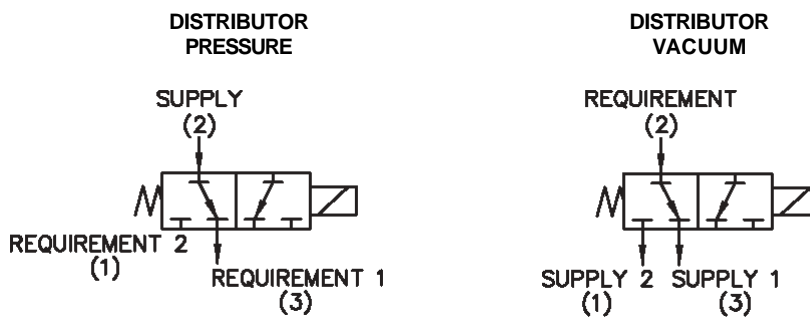
Type 1



Type 2



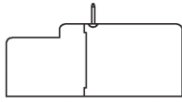
Type 3



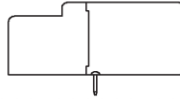
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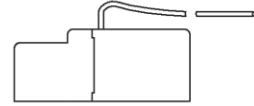
ELECTRICAL INTERFACE OPTIONS



SRS...F
(Square pins, front)



SRS...M
(Square pins, manifold)



SRS...L
(Wire leads)

ORDERING INFORMATION

Options	Series	Model no.			Type	Material	Seal material	Voltage	Electrical connection	
		Max. pressure	Orifice size	Coil wattage						
	SRS	10:	0...35 psi	0.020" (0.510 mm)	0.5 W	P: PBT	V: FKM	5: 5 V _{DC} 12: 12 V _{DC} 24: 24 V _{DC}	F: 0.025" square pins, front	
		11:	0...85 psi	0.020" (0.510 mm)	1 W				2: 3-way NO	
		13:	0...20 psi	0.030" (0.762 mm)	0.5 W				3: distributor	M: 0.025" square pins, manifold interface
		14:	0...50 psi	0.030" (0.762 mm)	1 W					
		16:	0...10 psi	0.045" (1.143 mm)	0.5 W					
		17:	0...20 psi	0.045" (1.143 mm)	1 W				L: insulated wire leads, 18", front	
Example: SRS 10 2 P V 12 M										

Note: Not all combinations might be available. Please contact First Sensor for further information.

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