

SRS Valve



Manifold Mountable Plastic Solenoid Valve

The 10mm SRS Series Plastic Solenoid Valve converts a digital electrical signal into a digital pneumatic output. The SRS Valve is constructed of engineering thermoplastics and non-corrosive metals to exceed the specifications demanded by critical applications in the life sciences.

Features

- ◆ Design incorporates thermoplastics and non-corrosive metals.
- ◆ Offers high-density manifold mounting with convenient manifold to PC board interface.
- ◆ Weighs only 0.23 ounces; perfect where low weight is critical to overall system.

Physical Properties

Valve Type:

3-Way, 2 Position
(NO, NC, & Distributor)

Media:

Gases and select liquids

Operating Environment:

0 to 70°C

Storage Temperature:

-40 to 70°C

Length:

1.5 in (38.1 mm)

Width:

0.394 in (10 mm)

Height:

0.61 in (15.49 mm)

Porting:

Manifold mount; Gasket and screws supplied

Weight:

.23 oz (6.57 grams)

Internal Volume:

0.0267 cm³

Filtration:

40 micron (recommended)

Lubrication:

None required

Electrical

Power:

0.5, 1.0, or 2.0 Watts

Voltage:

5, 12, 24 VDC \pm 10%

Wetted Materials

Crystalline Plastics:

PBT; LNP Thermocomp®

Elastomers:

FKM

Non-Corrosive Metals:

302 Series Stainless Steel; 430 FR Series Stainless Steel; CMI-B Core Iron; Electroless Nickel Plating

Performance Characteristics

Leak Rate:

\leq 0.016 sccm (bubble tight)

Response:

<30 msec cycling (2 Watts)

Pressure:

0 to 85 psig (0.020" orifice)

0 to 50 psig (0.030" orifice)

0 to 20 psig (0.045" orifice)

Vacuum:

0-27 in Hg

Orifice Sizes/Equivalent C_v:

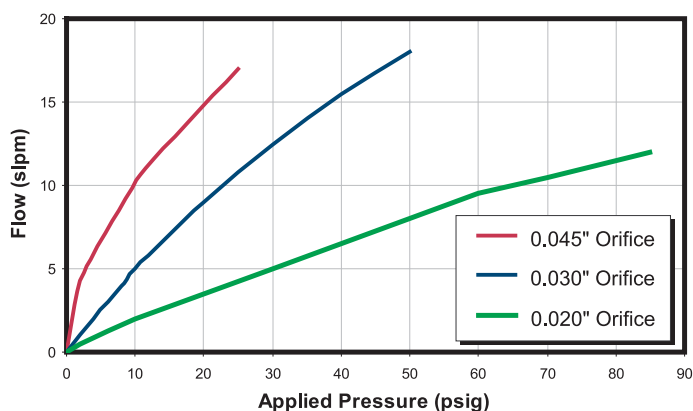
0.020"/0.0075 C_v

0.030"/0.017 C_v

0.045"/0.027 C_v

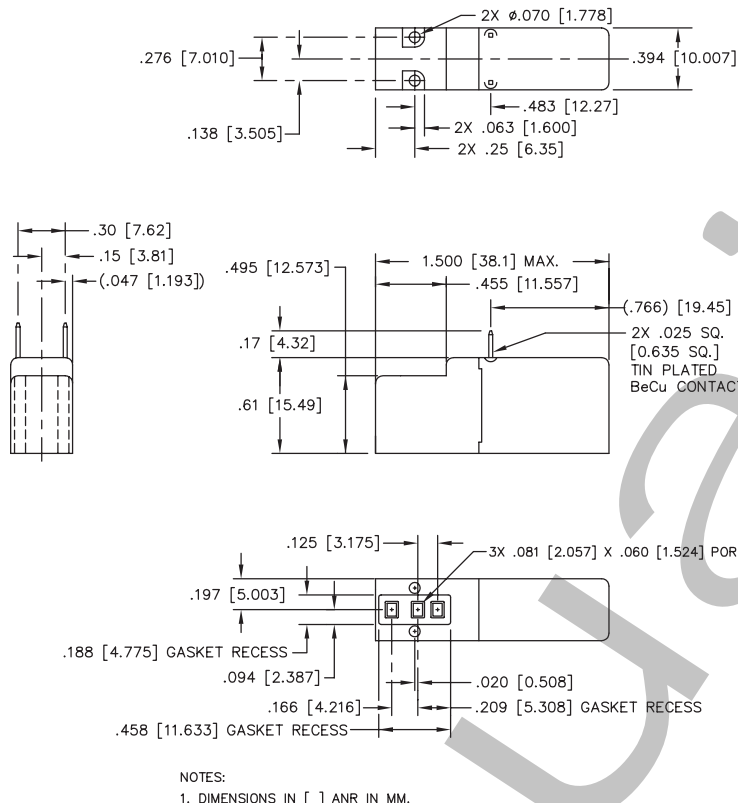
Flow

SRS Typical Air Flow

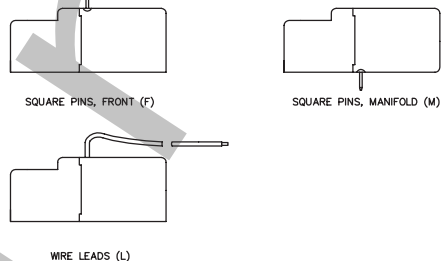


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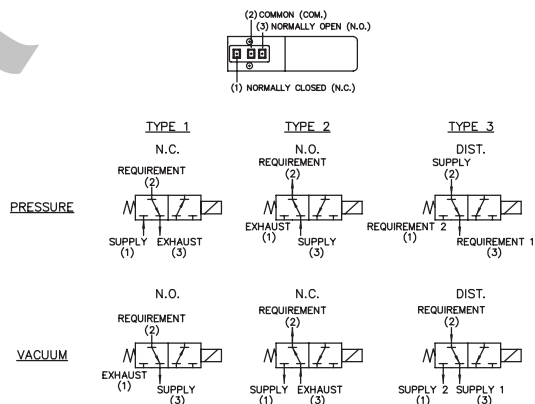
Dimensions



ELECTRICAL INTERFACE OPTIONS



TYPICAL VALVE SELECTION CONSIDERATIONS:



Ordering Information

Sample Part ID	SRS	10	2	P	V	12	M
Description	Series	Model Number	Type	Material	Seal Material	Voltage	Electrical Connection
Options		No: Pressure/Orifice/Coil Wattage 10: 0-35 psi/0.020"/0.5 Watt 11: 0-85 psi/0.020"/1 Watt 13: 0-20 psi/0.030"/0.5 Watt 14: 0-50 psi/0.030"/1 Watt 16: 0-10 psi/0.045"/0.5 Watt 17: 0-20 psi/0.045"/1 Watt	1: 3-Way NC 2: 3-Way NO 3: Distributor	P: Engineering Plastic	V: FKM	5: 5 VDC 12: 12 VDC 24: 24 VDC	F: 0.025" Square Pins, Front M: 0.025" Square Pins, Manifold Interface L: Insulated Wire Leads, 18", Front

NOTE: Please consult Parker Life Sciences for other considerations. For more detailed information, visit us on the Web, or call and refer to Performance Spec. #790-002090-001 and Drawing #890-003061-001.