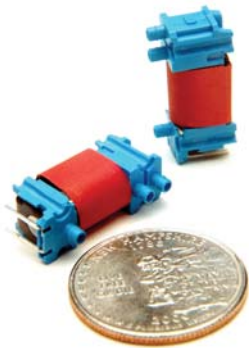


## X-Valve®

## 8mm Digital Solenoid Valve



X-Valve® is a two-position, three-way universal digital valve, just 8mm in width. The X-Valve's unitized body incorporates its functional features in a single glass-reinforced, PBT (Polybutylene Terephthalate) molded body.

### Features

- ◆ Offers compact size; only 8mm in width.
- ◆ Meets a range of pressure requirements including 6, 30, 50 & 100 psi.
- ◆ Satisfies a 0.016 sccm leakage specification (0.2 sccm for 50 & 100 psi) for over 25 million cycles.
- ◆ Ensures high reliability with its single piece body design.
- ◆ Allows for direct tubing connection or a radial seal for manifold assemblies through its universal barb design.

### Physical Properties

**Valve Type:**

3-Way, 2 Position  
NO, NC & Distributor  
(50 psi, NC or NO only)  
(100 psi, NC only)

**Media:**

Non-Reactive Gases and Select Liquids

**Operating Environment:**

0 to 50°C  
15 to 50°C for 100 psi

**Storage Temperature:**

-40 to 70°C

**Length:**

24 mm (.92 in)

**Width:**

7.9 mm (.31 in)

**Height:**

9 mm (.35 in)

**Spacing:**

8 mm (centerline)

**Porting:**

Universal barbs for 1/16" I.D. tubing  
(1/32" Wall Max.); Manifold mount with  
X-seal

**Weight:**

0.16 oz (4.5 grams)

**Internal Volume:**

0.074 cm<sup>3</sup> (.0045 in<sup>3</sup>)

### Electrical

**Power:**

0.5 Watt (low pressure model)  
1.0 Watt (high pressure model)

**Voltage:**

3, 5, 12, 24 VDC

*Not all voltage options are available  
in all models. See Ordering Info.*

**Electrical Connections:**

PC Pins, 4 mm centers (all models)

### Wetted Materials

PBT (Polybutylene Terephthalate);  
430 Series Stainless Steel; 302  
Series Stainless Steel (passivated);  
FKM (Fluoroelastomer); EPDM  
(Ethylene Propylene Diene  
Monomer); and Silicone

*Consult factory for details.*

### Performance Characteristics

**Leak Rate:**

≤0.016 sccm (bubble tight)  
≤0.2 sccm (50 & 100 psi only)

**Response:**

<20 msec cycling

**Pressure:**

0 to 6 psig  
0 to 30 psig  
0 to 50 psig  
0 to 100 psig

**Minimum Flow:**

4 lpm @ 6 psi  
6 lpm @ 30 psi  
5 lpm @ 50 psi  
9 lpm @ 100 psi

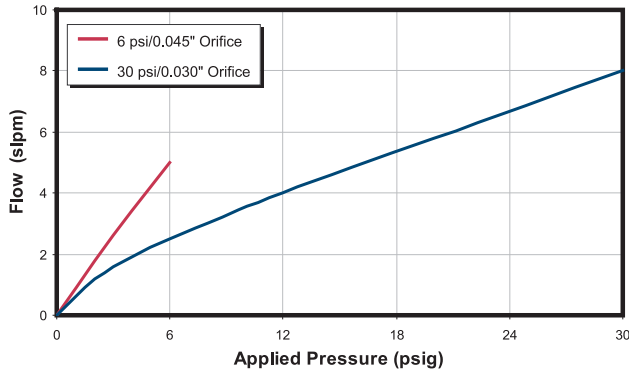
**Orifice Sizes/Equivalent C<sub>v</sub>:**

0.020"/0.005 C<sub>v</sub> (100 psid)  
0.030"/0.007 C<sub>v</sub> (50 psid)  
0.030"/0.010 C<sub>v</sub> (30 psid)  
0.045"/0.018 C<sub>v</sub> (6 psid)

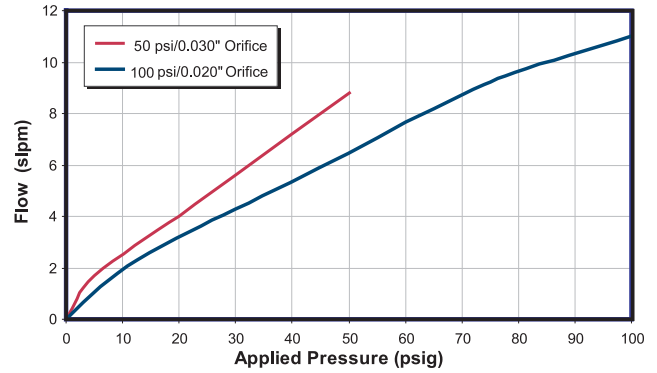
X-Valve is a registered trademark of Parker Hannifin Corporation.

**Flow**

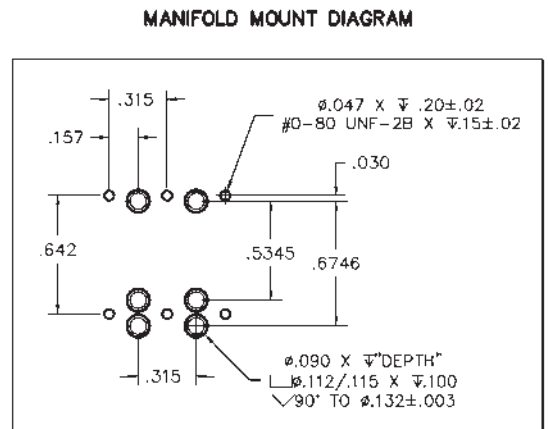
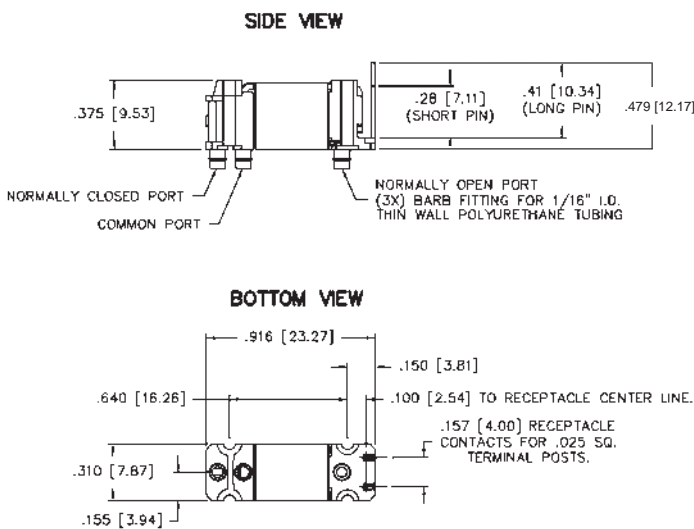
**X-Valve Typical Air Flow  
6 & 30 psi**



**X-Valve Typical Air Flow  
50 & 100 psi**



**CAD Drawing**



**Ordering Information**

Sample Part ID	X	1	05	1	F	-	0
Description	Series	Model	Voltage	Electrical Connection	Elastomer	-	Optional Accessories
Options	No: Pressure/Orifice/Coil Wattage/Type	03: 3 VDC	S: Standard Pins	F: FKM		S: Screws (2)	
	1: 6 psi/0.045"/0.5 Watt/Universal	05: 5 VDCc (6psi only)	L: Long Pin	E: EPDM (Consult Factory)		G: Gasket	
	2: 30 psi/0.030"/1 Watt/Universal	12: 12 VDC		S: Silicone (Consult Factory)		B: Screw & Gasket	
	3: 50 psi/0.030"/1 Watt/NC	24: 24 VDC				0: No Accessories	
	4: 50 psi/0.030"/1 Watt/NO					Accessory field not printed on valve	
5: 100 psi/0.020"/1 Watt/NC							

NOTE: Please consult Parker Life Sciences for other considerations. For more detailed information, visit us on the Web.

For more information, call us toll-free at 1-800-525-2857