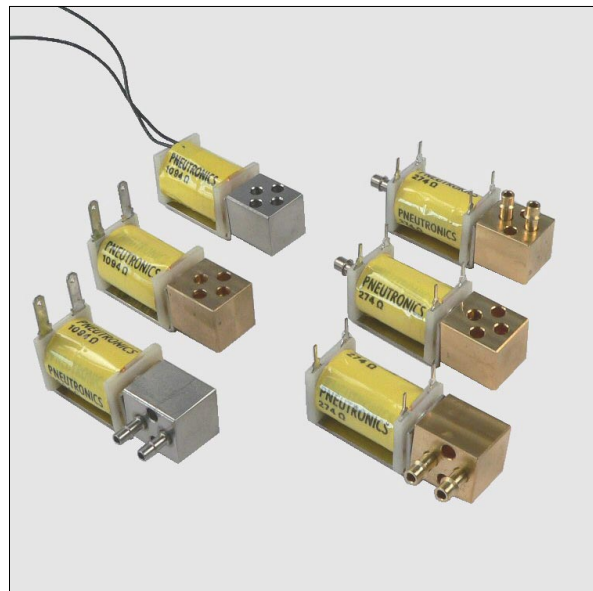


# Series 11

## PC mount switching solenoid valve

### FEATURES

- 2-way or 3-way, 2 position valve (NO, NC & Distributor)
- Offer a discrete valve design with a 200 million life cycle rating
- Available in manifold mounting
- Provide a range of electrical coil options, including PC mountable, spade lugs, or wire leads
- Powerful enough for a range of uses that require high flow



### MEDIA COMPATIBILITY

Gases and selected liquids

### WETTED MATERIALS

Body:

360 HO2 brass;  
302 series stainless steel (passivated)

Stem base:

385 HO2 brass;  
303 series stainless steel (passivated)

All others:

FKM; EPDM; 430 FR series stainless steel (passivated); 302 series stainless steel

### ELECTRICAL

Power 0.5, 1.0 or 2.0 W

Voltage 5, 12, 24 V<sub>DC</sub> ± 10%

### PHYSICAL PROPERTIES

Operating environment 0 to 70 °C

Storage temperature -40 to 70 °C

Length 43.9 mm (1.73 in)

Width 15.9 mm (0.625 in)

Height 17 mm (0.67 in)

Porting 10-32 tapped ports, 1/16, 5/64 or 1/8 in stem barbs

Weight 60 g (2.1 oz)

Internal volume 0.026 in<sup>3</sup> (without fittings)

Filtration (recommended) 40 µm

Lubrication None required

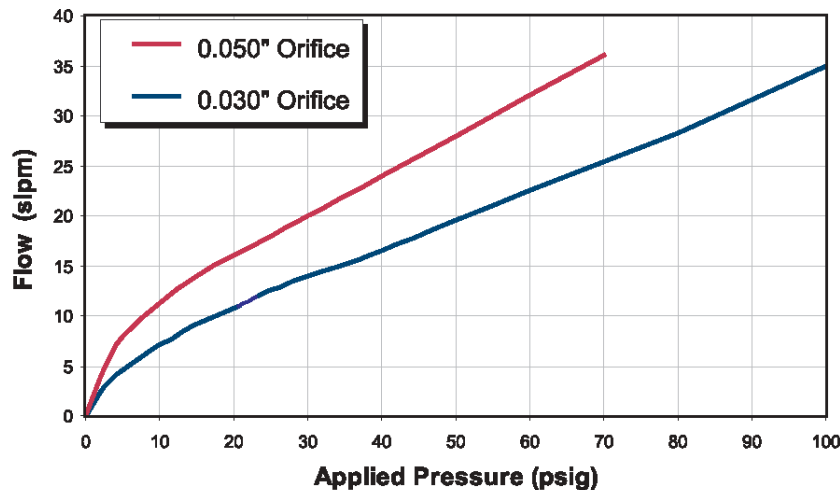
# Series 11

## PC mount switching solenoid valve

### PERFORMANCE CHARACTERISTICS

Part no.	Pressure	Vacuum	Orifice sizes/ Equivalent $C_v$ <sup>1</sup>	Leak rate <sup>2</sup>	Response
1110...	0...100 psig	0...27 "Hg (0...13 psi)	0.030" (0.762 mm)/ 0.017 $C_v$	≤0.016 sccm (bubble tight)	<30 msec cycling (2 Watt)
1113...	0...50 psig				
1116...	0...25 psig				
1112...	0...70 psig		0.050" (1.270 mm)/ 0.035 $C_v$		<30 msec cycling (2 Watt)
1115...	0...25 psig				
1118...	0...10 psig				

### FLOW CURVE (typical air flow)<sup>3</sup>



**Notes:**

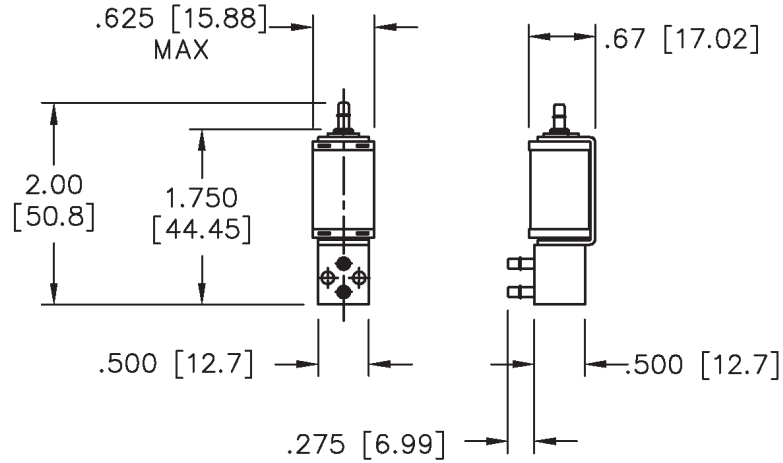
- <sup>1</sup> The  $C_v$  value is the volume flow in US gallons/min under specific flow conditions and describes the relative flow capacity of a valve. If several valves with the same nominal diameter are compared, the valve with the highest  $C_v$  value has the best flow dynamics design. The equivalent european measure is the  $k_v$  value expressed in  $m^3/h$  ( $k_v = 0.86 C_v$ ).
- <sup>2</sup> 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.
- <sup>3</sup> 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.

# Series 11

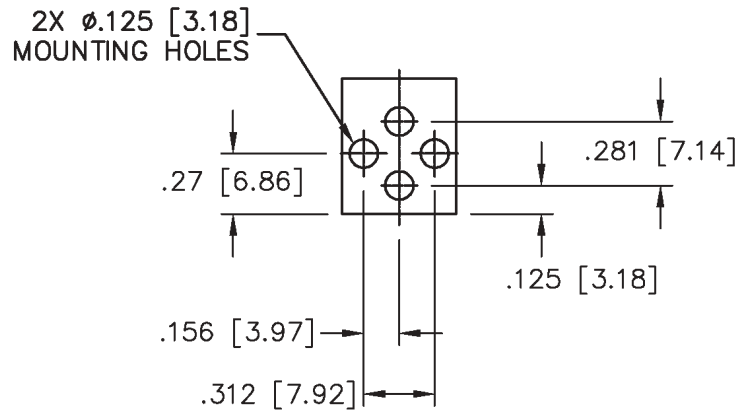
## PC mount switching solenoid valve

### OUTLINE DRAWING

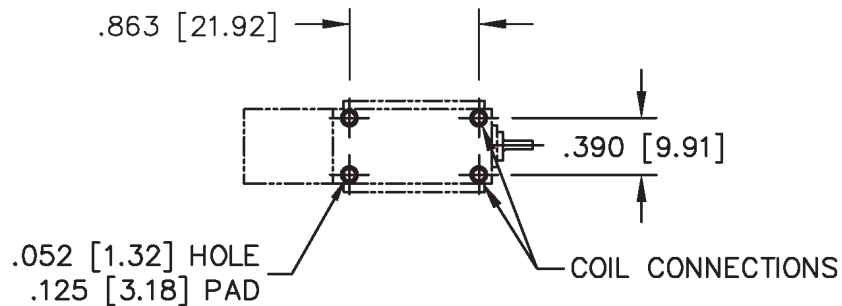
#### Basic dimensions



#### Port and mounting hole diagram



#### PC mounting diagram



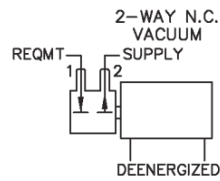
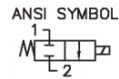
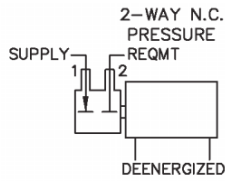
# Series 11

## PC mount switching solenoid valve

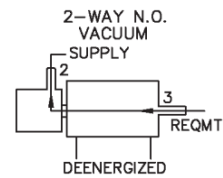
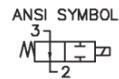
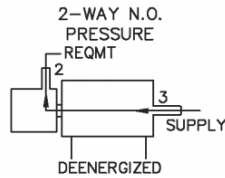
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### VALVE TYPE

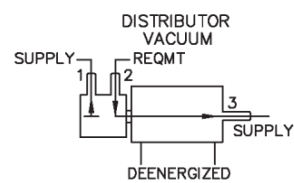
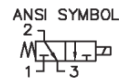
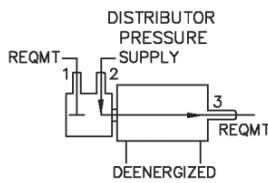
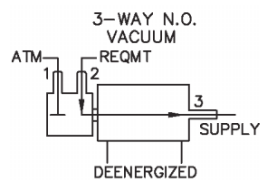
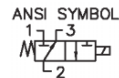
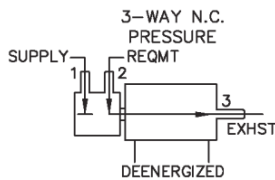
#### Type 1



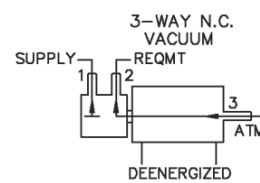
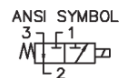
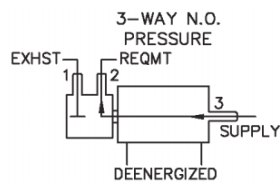
#### Type 2



#### Type 3



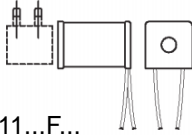
#### Type 4



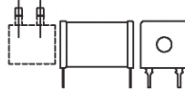
# Series 11

## PC mount switching solenoid valve

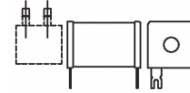
### COIL STYLES



11...F...  
(Wire leads, no terminals)



11...P...  
(PC mount, 4 PC pins)



11...S...  
(PC mount, 2 solder pads)

### BODY STYLES



11...0...  
(No barbs,  
face seal to manifold)



11...6...  
(0.062" barbs,  
1/16" I.D. tubing)



11...7...  
(0.078" barbs,  
5/64" I.D. tubing)



11...8...  
(0.125" barbs,  
1/8" I.D. tubing,  
1/4" O.D. max.)

### STEM STYLES



11...0  
(Type 1 top seat,  
plugged)



11...6  
(0.062" top seat,  
1/16" I.D. tubing)



11...7  
(0.078" top seat,  
5/64" I.D. tubing)



11...8  
(0.125" top seat,  
1/8" I.D. tubing,  
1/4" O.D. max.)

### ORDERING INFORMATION

Options	Series	Model no.			Type	Material		Voltage	Coil type	Pneumatic connection body	Pneumatic connection stem							
		Max. pressure	Orifice size	Coil wattage		Body	Plunger & seal											
	11	10:	0...100 psi	0.030" (0.762 mm)	2 W	1:	2-way NC	BV:	brass	FKM	5:	5 V <sub>DC</sub>	P:	4 PC pins	0:	no barbs	0:	type 1/ none
		12:	0...70 psi	0.050" (1.27 mm)	2 W	2:	2-way NO	SV:	SS*	FKM	12:	12 V <sub>DC</sub>	S:	2 solder taps	6:	1/16" barbs	6:	1/16" barbs*
		13:	0...50 psi	0.030" (0.762 mm)	1 W	3:	3-way NC or distributor	BE:	brass	EPDM	24:	24 V <sub>DC</sub>	Q:	Quick connect	7:	5/64" barbs	7:	5/64" barbs
		15:	0...25 psi	0.050" (1.27 mm)	1 W	4:	3-way NO						F:	Wire leads, 18", no terminals	8:	1/8" barbs	8:	1/8" barbs
		16:	0...25 psi	0.030" (0.762 mm)	0.5 W													
		18:	0...10 psi	0.050" (1.27 mm)	0.5 W													
						*Stainless steel								*1/16" barbs not available for 0.050" orifice				
Example:	11	10			3		BV		12		P			7				7

**Note: Not all combinations might be available. Please contact your nearest Sensortech sales representative for further information.**

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