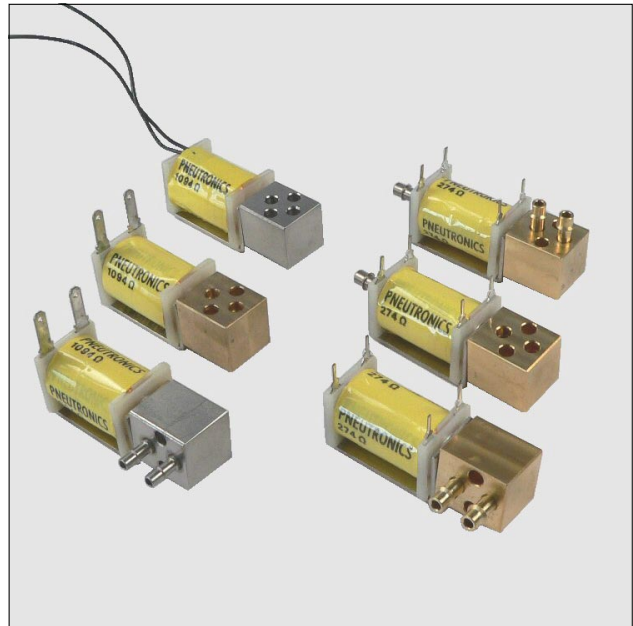


Series 11

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_{DC} ± 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 in³ (without fittings)

Filtration (recommended) 40 µm

Lubrication None required

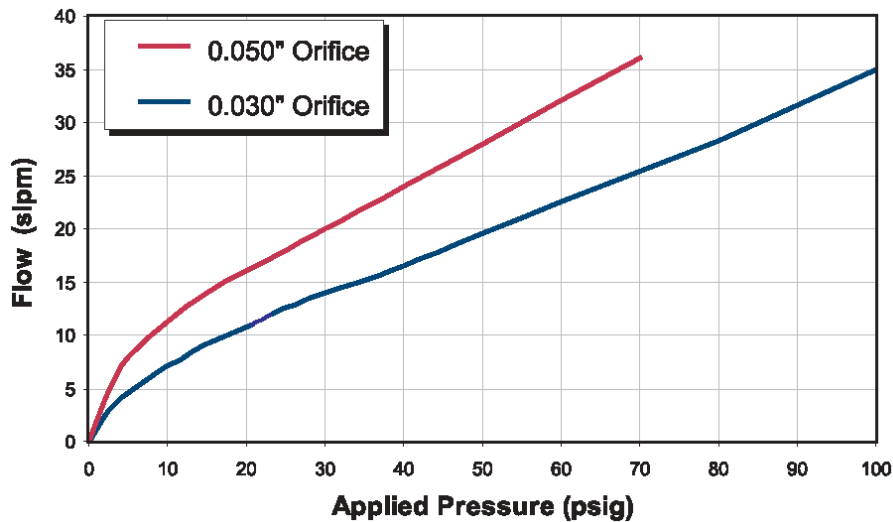
Series 11

PC mount switching solenoid valve

PERFORMANCE CHARACTERISTICS

Part no.	Pressure	Vacuum	Orifice sizes/ Equivalent C_v ¹	Leak rate ²	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)³

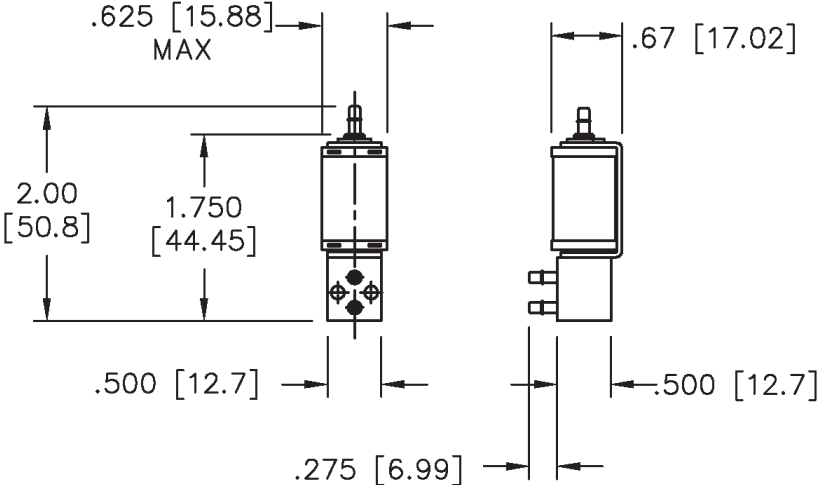


Notes:

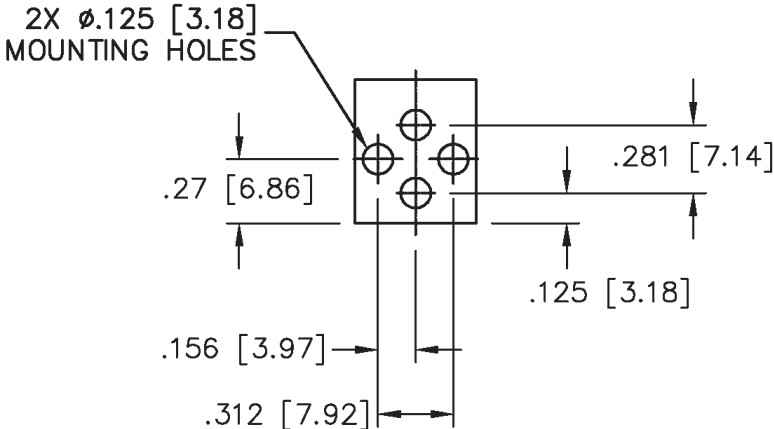
- ¹ The C_v value is the volume flow in US gallons/min under specific flow conditions and describes the relative flow capacity of a valve. If several valves with the same nominal diameter are compared, the valve with the highest C_v value has the best flow dynamics design. The equivalent european measure 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.

OUTLINE DRAWING

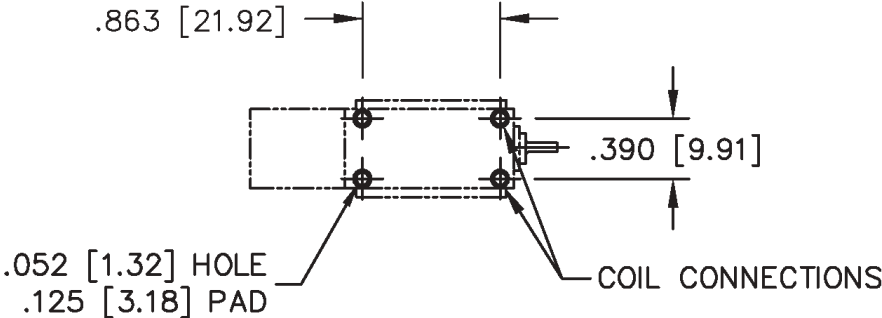
Basic dimensions



Port and mounting hole diagram



PC mounting diagram

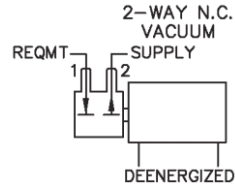
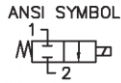
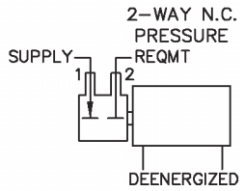


Series 11

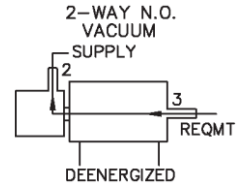
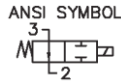
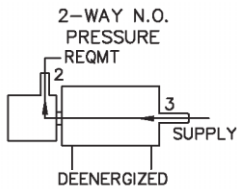
PC mount switching solenoid valve

VALVE TYPE

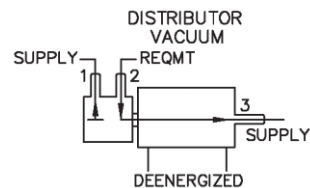
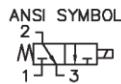
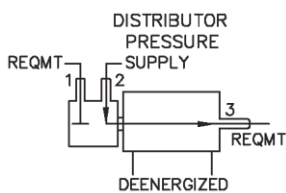
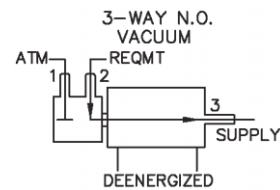
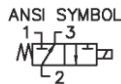
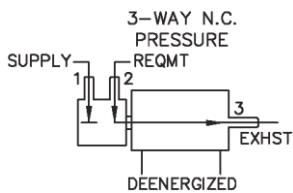
Type 1



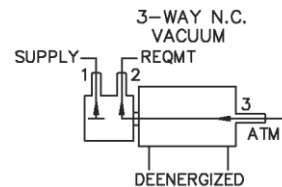
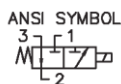
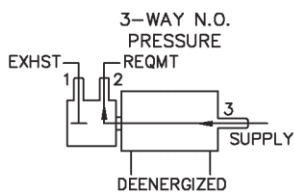
Type 2



Type 3



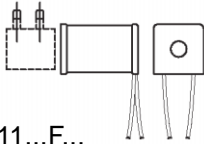
Type 4



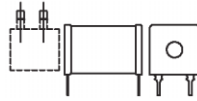
Series 11

PC mount switching solenoid valve

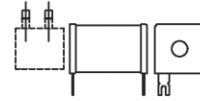
COIL STYLES



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

Series	Model no.			Type	Material		Voltage		Coil type	Pneumatic connection body	Pneumatic connection stem		
	Options	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 _{DC}	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 _{DC}	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 _{DC}	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 Sensortechincs sales representative for further information.

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