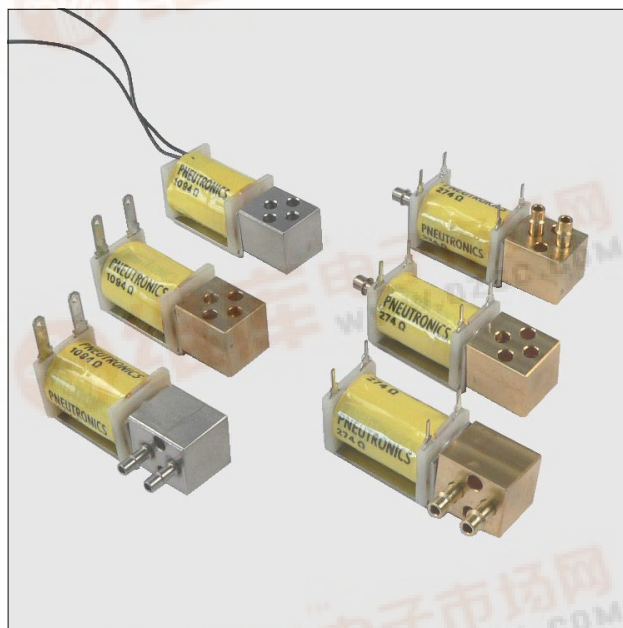


FEATURES

- 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)

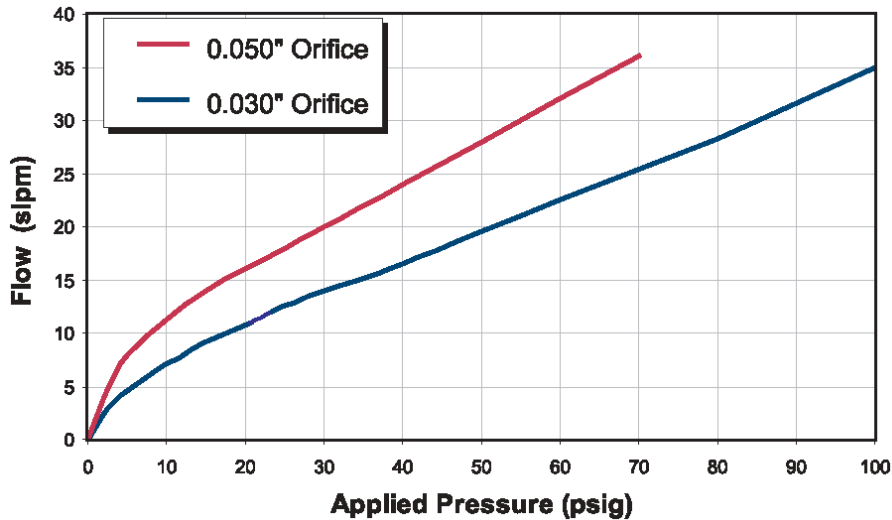
Filtration (recommended) 40 µm

Lubrication None required

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				<30 msec cycling (2 Watt)
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				<30 msec cycling (2 Watt)
1118...	0...10 psig				

FLOW CURVE (typical air flow)³

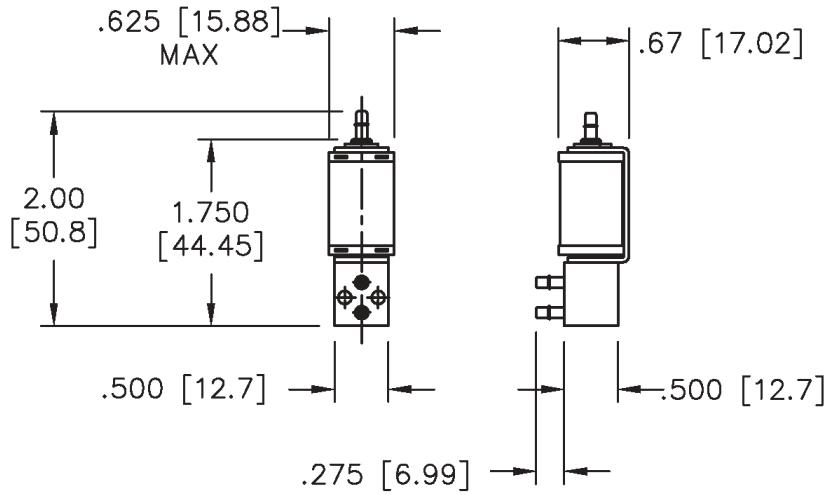


Notes:

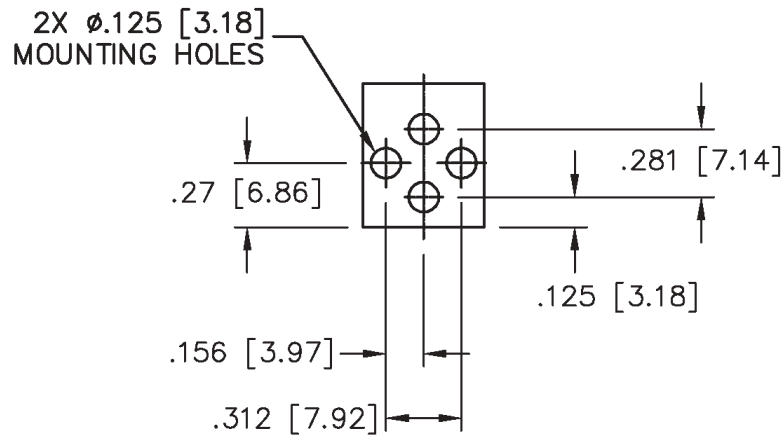
- ¹ The C_v value is the volume flow in US gallons/min under specific flow conditions and describes the relative flow capacity of a valve. If several valves with the same nominal diameter are compared, the valve with the highest C_v value has the best flow dynamics design. The equivalent european measure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

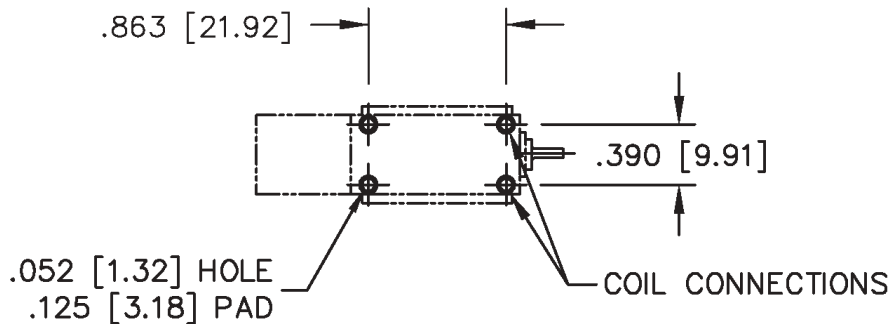
Basic dimensions



Port and mounting hole diagram

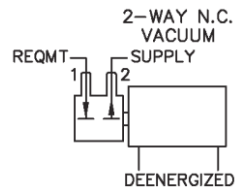
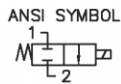
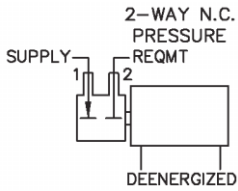


PC mounting diagram

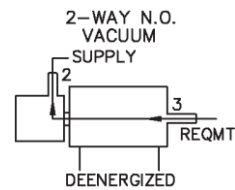
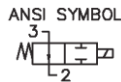
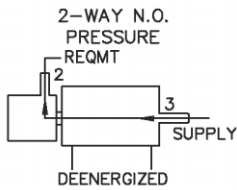


VALVE TYPE

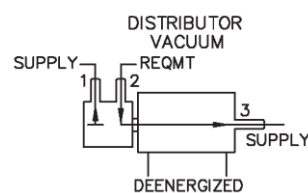
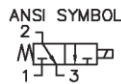
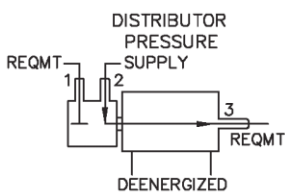
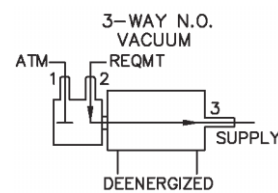
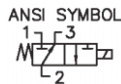
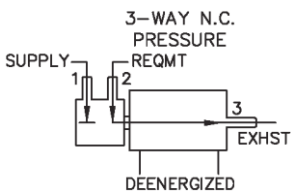
Type 1



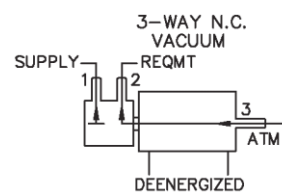
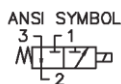
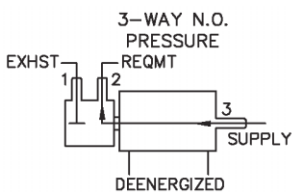
Type 2



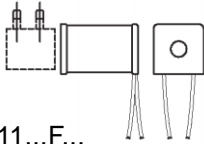
Type 3



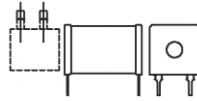
Type 4



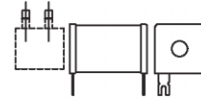
COIL STYLES



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 _{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 Sensortech sales representative for further information.

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