

# PISTON TYPE PRESSURE SNUBBERS & PIGTAIL STEAM SYPHONS

## PISTON TYPE PRESSURE SNUBBERS

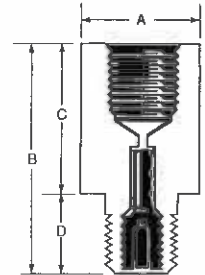
While NOSHOK fluid filled pressure gauges and machined orifices greatly reduce the effects of vibration and pulsation, there is occasional need for additional inline snubbing. Traditionally, pressure snubbers are expensive and results are sometimes questionable. However, NOSHOK offers a piston type snubber that breaks that tradition.

Unlike sintered metal snubbers, NOSHOK piston type snubbers resist clogging and are self-cleaning. Five different size pistons are included with each snubber and provide the correct amount of snubbing for virtually every application. Changing the piston is easily accomplished by removing a set screw, removing the existing piston, inserting the new piston and replacing the set screw.

NOSHOK snubbers are available in both brass and stainless steel in both 1/4" NPT and 1/2" NPT. A suggested application chart with piston size recommendations is included with each snubber.



	1/4" NPT		1/2" NPT
	IN MM		
A	0.812 20.6		1.125 28.6
B	1.562 39.7		1.875 47.6
C	1.062 27		1.25 31.8
D	0.531 13.5		0.625 15.9



PISTON	SUGGESTED USE
A, B*	Gases
B, C	Water
C, D	Light Oil
E	Heavy Oil

MODEL NO.	SIZE	MATERIAL	PRESSURE RATING
1325	1/4" NPT	Brass	6000 PSI
1335	7/16-20 SAE-4	Brass	6000 PSI
1350	1/2" NPT	Brass	6000 PSI
5025	1/4" NPT	316 Stainless Steel	15000 PSI
5050	1/2" NPT	316 Stainless Steel	15000 PSI

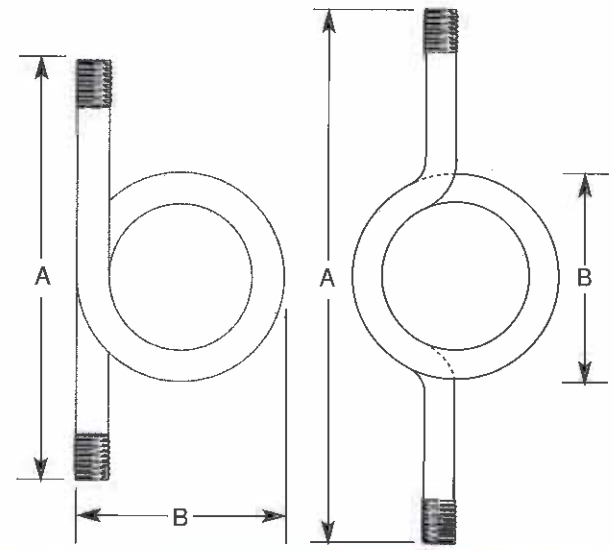
\*Snubber assembled and shipped with the B piston installed.

## PIGTAIL STEAM SYPHONS

Pigtail (or coiled pipe) steam syphons should be used in all steam applications. Pigtail steam syphons protect the instrument from damaging effects of direct exposure to high temperature steam.

To properly install and use a pigtail steam syphon, install the syphon in the pressure port, fill the syphon with water and install the pressure gauge. The water will fill the lower half of the coil and will act as a protective barrier between the high temperature steam and the pressure gauge.

We recommend pigtail steam syphons for all steam applications.



MODEL NO.	COIL STYLE	SIZE	MATERIAL	PRESSURE RATING
1025	180°	1/4" NPT	Welded Steel, Schedule 40	500 PSI @ 400°F
1050		1/2" NPT	Welded Steel, Schedule 80	1097 PSI @ 650°F
2025		1/4" NPT	Welded 316 SS, Schedule 40	529 PSI @ 400°F
2050		1/2" NPT	Seamless 316 SS, Schedule 80	1967 PSI @ 400°F
1525	360°	1/4" NPT	Welded Steel, Schedule 40	500 PSI @ 400°F
1550		1/2" NPT	Welded Steel, Schedule 80	1097 PSI @ 650°F
2525		1/4" NPT	Welded 316 SS, Schedule 40	500 PSI @ 400°F
2550		1/2" NPT	Welded 316 SS, Schedule 80	2650 PSI @ 500°F

CONNECTION SIZE		1/4" NPT	1/2" NPT	
180°	A	IN MM	5.5 139.7	8.875 225.425
	B	IN MM	2.5 63.5	4.0 101.6
360°	A	IN MM	7.25 184.15	12.0 304.8
	B	IN MM	2.625 66.675	4.125 104.775

NOSHOK Magnetic Spring Contact Switches (MSCS) are an excellent choice when an accurate pressure switch is required in addition to a high quality reliable pressure gauge.

These magnetic spring contact switches are fully adjustable by the user with the advantage of accurate field adjustment because they are actuated by the pressure gauge pointer. A removable adjustment key also makes them tamper proof.

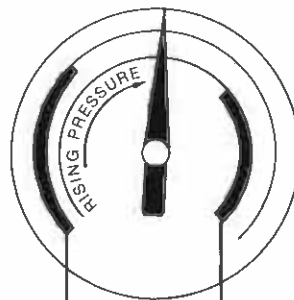
They operate with an extremely broad power supply, AC or DC up to 250V max. This feature allows them to be used virtually anywhere in the world in addition to very remote applications with only DC battery pack power available.

The standard units consist of (2) two magnetic spring contact switches. Switch (1) one is normally closed and switch (2) two is normally open with operation referenced on rising (or increasing) pressure. Either one or both switches may be used.

Magnetic spring contact switches are available as a factory installed option on models 40.105, 40.115, 40.400 and 40.410. The lowest full scale pressure range it may be used on is 0-60 PSI because of the increased load on the pointer and bourdon tube.

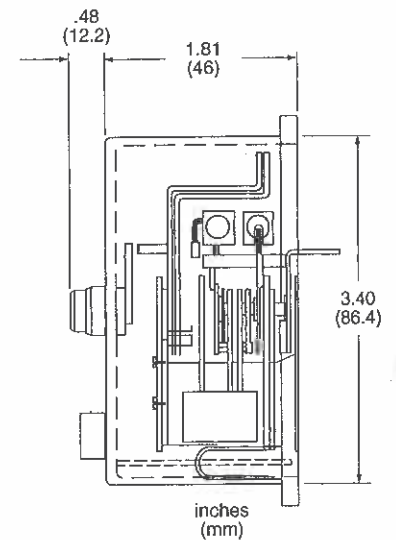
Typical applications include air compressors, gas compressors, hydraulic and pneumatic circuitry, die-cast machinery, plastic injection molding machinery, and anywhere accurate off/on switching capabilities based on pressure are required.

The NOSHOK MSCS is pre-wired with a matching 4-pin connector in its standard configuration but is also available with an optional connector with 5 feet of 4-wire, color coded shielded cable.

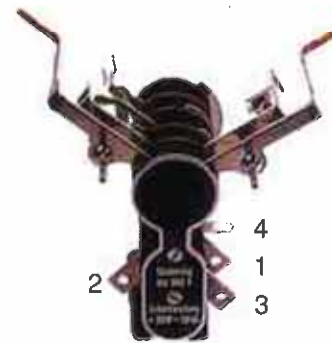


**CONTACT NO. 1**  
Normally Closed,  
Opens on Rising  
Pressure

**CONTACT NO. 2**  
Normally Open,  
Closes on Rising  
Pressure.



SPECIFICATIONS	
Type of Power	A.C. or D.C. 24 to 250V max
Maximum Amps	1.0 A
Maximum Switching Capacity	30W/50 VA
Gauge Accuracy	Add an additional $\pm 2\%$ Error on Full Scale Ranges of 0-160 PSI and Above. For Full Scale Ranges of 0-60 PSI and 0-100 PSI Add an additional $\pm 3\%$ Error.
Minimum Magnet Holding Force	1g
Contact Pin Material	Silver Tungsten
Ambient Temperature Limitation	0°F to 140°F (-18°C to 61°C)
Minimum Full Scale Pressure Range	0-60 PSI



### WIRING AND TERMINAL LOCATION

1. Contact Switch No. 1; Red or Black
2. Contact Switch No. 2; Blue
3. Power; Green or Brown
4. Ground; Yellow/Green Stripe

PRESSURE & VACUUM CONVERSIONS							
Lbs. per Sq. in.	Bar	Kilopascals	Kilograms per Sq. cm	Ounces per Sq. in.	Inches of Mercury	Millimeters of Mercury	Inches of Water
psi	bar	kPa	Kg/cm <sup>2</sup>	osi	in. Hg	mm Hg*	in. H <sub>2</sub> O
1	.0689476	6.89476	.0703069	16	2.03602	51.71486	27.6807
14.5038	1	100	1.019716	232.0608	29.530	750.0626	401.8596
.145038	.01	1	.0101972	2.320608	.295299	7.500610	4.014742
14.2233	.9806649	98.06649	1	227.5739	28.95901	735.5588	393.7118
.0625	.0043092	.4309223	.0043942	1	.1272513	3.23218	1.73004
.4911542	.0338639	3.386389	.0345316	7.85847	1	25.4	13.59548
.0193368	.0013332	.1333225	.0013595	.3093888	.0393701	1	.535255
.0361263	.0024908	.2490819	.0025422	.578020	.0735539	1.868268	1

\* 1 kPa = 1 kN/m<sup>2</sup>, 1 mmg Hg = 1 Torr, 1 Kg/cm<sup>2</sup> = 1 kp/cm<sup>2</sup>  
 (Conversions of: H<sub>2</sub>O are at 39.2°F (4°C); Hg are at 32°F (0°C))

CONVERSIONS FOR HYDRAULIC RAM CAPACITY		
PSI x AREA = (LBS.) FORCE	TONS = $\frac{\text{PSI} \times .7854 \times D^2}{2000}$	PSI = $\frac{\text{TONS}}{D^2 \times .0003927}$

For further assistance with conversions please consult the factory.

### NOSHOK DIAPHRAGM SEALS

The NOSHOK Diaphragm Seal is a device which isolates the measuring element of an instrument from the pressure media. The area between the top of the diaphragm and the instruments' measuring element is completely filled with a suitable liquid. Displacement of the liquid through movement of the diaphragm transmits pressure changes to the instrument.

For further information and application assistance please consult factory.



