MODEL SA • *PRESSURE TRANSDUCER*

The SA pressure transducer has a water resistant, stainless steel case for complete protection from harsh environments. Internal hermetic sealing is used to provide measurement of absolute pressures (PSIA) or pressures referenced to a sealed chamber (PSIS).

Underwriters Laboratories has approved the SA as a component in float and pressure-operated motor controllers (File #E93356). The SA produces a high level voltage output of 1-6V from an unregulated supply. It is fully calibrated and compensated prior to shipment, and is field interchangeable.

APPLICATIONS

- FREON AND AMMONIA REFRIGERATION SYSTEMS
- HYDRAULIC CONTROLS
- AGRICULTURAL SPRAYERS AND DUSTERS
- COMPRESSORS
- ENGINE CONTROLS
- ENERGY MANAGEMENT SYSTEMS
- ROBOTICS
- AUTOMATED MACHINING
- PNEUMATIC SYSTEMS

FEATURES	*BENEFITS*
• Rugged stainless steel case	• For use in industrial environments
• PSIS and PSIA models	• Sealed construction
• Ranges to 7100 PSIS	• Broad range of applications
• RFI/EMI protection	• For use in high noise environments
• Reverse polarity protection	• Installation safety

TECHNICAL SPECIFICATIONS

RANGE

	0-15, 25 PSIG (0-1 2 bar g)	0-50 PSIG 0-100, 200, 300 PSIS (0-3.5 bar g) (0-7, 14, 21 bar s)	0-500, 1000, 2000, 3000, 5000, 7112 PSIS (0-35, 70, 207, 345, 490 bar s)

PHYSICAL

Proof Pressure	2 x rated range	2 x rated range	1.5 x rated range
Burst Pressure	20 x rated range	10 x rated range	5 x rated range 25,000 PSI, (1725 bar) max
Material in Contact With Media	Brazed assembly of 300 series stainless steel		
Shock	50 g's peak (5 milliseconds)		
Vibration	Meets MIL-STD-810-C, Figure 514.2-5, Curve AK, 20.7 g rms minimum		
Weight	Less than 3 oz without cable		

ELECTRICAL

Full Scale Output	5 ± 0.1 Vdc @ 25˚C (1-6V)
Zero Output	1.0 ± 0.15 Vdc @ 25˚C (1.0 ± 0.20 Vdc for 100, 200 PSIA)
Excitation	< 500 PSI 9 to 24 Vdc @ 15 mA nominal 500 PSI 9 to 24 Vdc @ 20 mA nominal
Output Current (nominal)	Source: 10 mA Sink: 5 mA
Reverse Polarity Protection	Yes
Insulation Resistance	1000 (nominal)
Electrical Connection	3 ft (0.91 m) shielded 3-conductor cable

PERFORMANCE

Accuracy	± 1% FSO best fit straight line including effects of nonlinearity, hysteresis and nonrepeatability
Operating Temperature Range	-40˚ to 105˚C (-40 to 221˚F) Hirschmann -40˚ to 90˚C (40˚ to 194˚F)
Compensated Temperature Range	-1˚ to 85˚C (30˚ to 185˚F)
Thermal Effect on Zero	Less than ± 1% FSO for any 55˚C (100˚F) change within the compensated range
Thermal Effect on Full Scale Output	Less than ± 1% or any 55˚C (100˚F) change within the compensated range
EMI Error	Typically less than 2% FSO error over the frequency range from 20 MHz to 1 GHz at field strengths up to 10 volts/meter

Note:
- *All specifications are measured at 25˚C and rated excitation unless otherwise stated*

OPTIONS

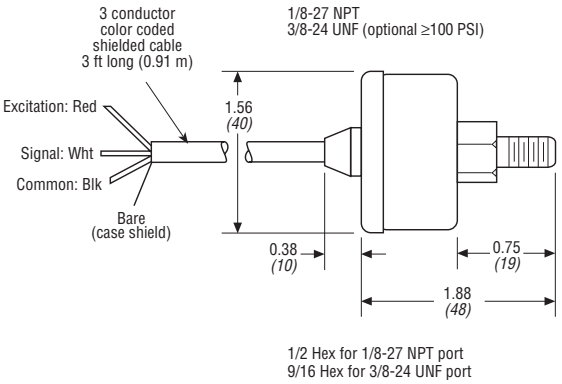
- Hirschmann connector, including mate
- PTIH Bendix connector, mate not included
- Absolute pressure version available in 0-15, 25, 50, 100 and 200.
- CE versions available

SA with Hirschmann connector

DIMENSIONS

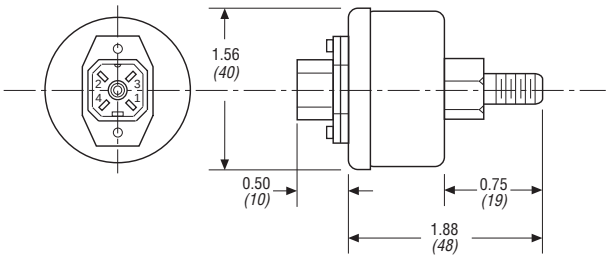
xx.xx = inches
(xx.x) = mm

SA with Cable



1/2 Hex for 1/8-27 NPT port
9/16 Hex for 3/8-24 UNF port

SA with Hirschmann Connector



PIN AND WIRE CODES

Wire Color Code	Hirschmann Pin Code	Function
Red	4	+ Excitation
White or Brown	2	Signal Output
Black	3	Common
Bare	NC	Case Shield