

APPLICATIONS

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

MODEL SA • HARSH DUTY PRESSURE TRANSDUCER

The harsh duty 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 output from an unregulated supply. It is fully calibrated and compensated prior to shipment, and is field interchangeable.



SA SERIES

HARSH DUTY
PRESSURE TRANSDUCER

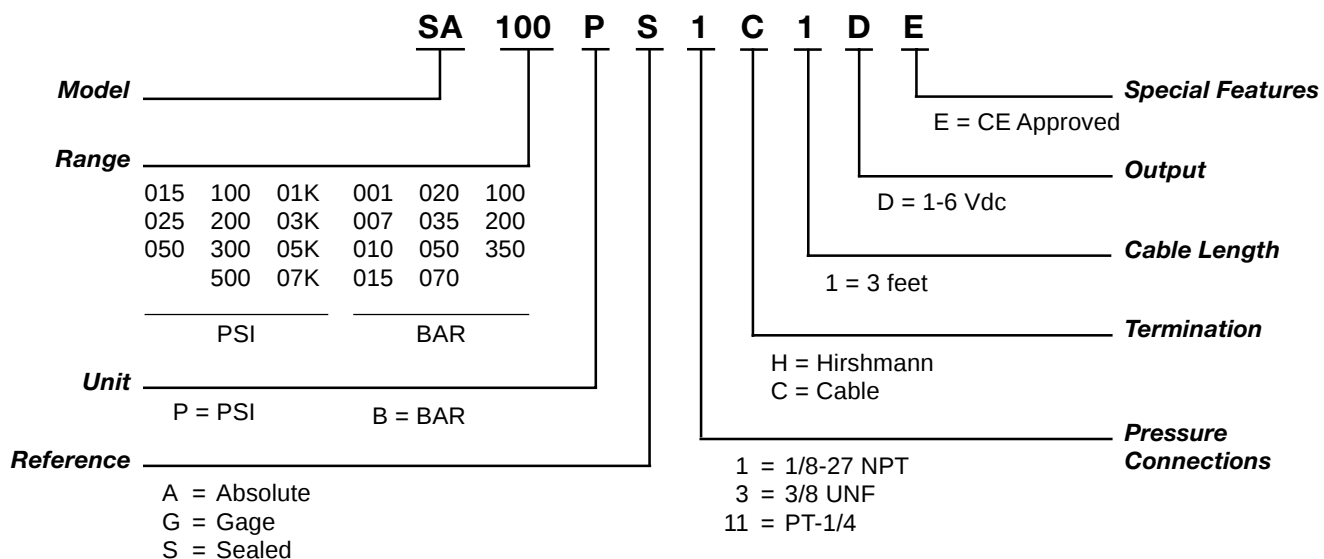
FEATURES

- Rugged stainless steel case
- PSIS and PSIA models
- Ranges to 7100 PSIS
- RFI/EMI protection
- Reverse polarity protection

BENEFITS

- For use in industrial environments
- Sealed construction
- Broad range of applications
- For use in high noise environments
- Installation safety

HOW TO ORDER



Note: Not all combinations are available. Minimum quantity orders apply. Contact the factory for more details.

TECHNICAL SPECIFICATIONS

RANGES

0-15, 25, 50 PSIG
 0-15,25, 50, 100, 200 PSIA
 0-500, 1000, 2000, 3000, 5000 PSIS
 0-1, 7, 10, 15, 20, 35, 50, 70, 100, 200, 350 Bar

PHYSICAL

Proof Pressure < 500 psi ≥ 500 psi
 2 X rated range 1.5 X rated range

Burst Pressure < 500 psi ≥ 500 psi
 10 X rated range 5 X rated range
 (30kpsi max)

Material in Contact with Media 300 series stainless steel,
 bronze compound

Weight Less than 3 oz. without cable

ENVIRONMENTAL *

Shock 50 g's peak (5 ms), 100 g's peak (11 ms)

Vibration Meets MIL-STD 810C, Figure 514-5, Curve AK,
 Time Schedule II Random Vibration Test
 (Overall g rms = 20.7 minimum)

ELECTRICAL *

Ratiometric Voltage

Zero Output 1.0 ± 0.15 Vdc

Full Scale Output* 5.0 ± 0.1 Vdc (1.0 - 6.0V)

Excitation 9-20 Vdc

Supply Current 15.0 mA typical (>500 PSI 20.0 mA)

Source (nominal) 10.0 mA

Sink (nominal) 5.0 mA

PERFORMANCE *

Response Time < 500 microseconds

EMI/RFI (10v/m radiated 150kHz-1GHz)

Electrical Connection 3ft shielded 3-conductor cable
 22 AWG Color coded

Accuracy $\pm 1.0\%$ F.S.O. best fit straight line, Includes:
 non-linearity, hysteresis, non-repeatability.
 Thermal errors are not included.

Operating Temperature Range -55° to 105°C
 $(-48^{\circ}$ to $221^{\circ}\text{F})$

Compensated Temperature Range -1° to 85°C
 $(30^{\circ}$ to $185^{\circ}\text{F})$

Thermal Effect on Zero Less than $\pm 1.0\%$ F.S.O. for any 55°C (100°F)
 change within the compensated range

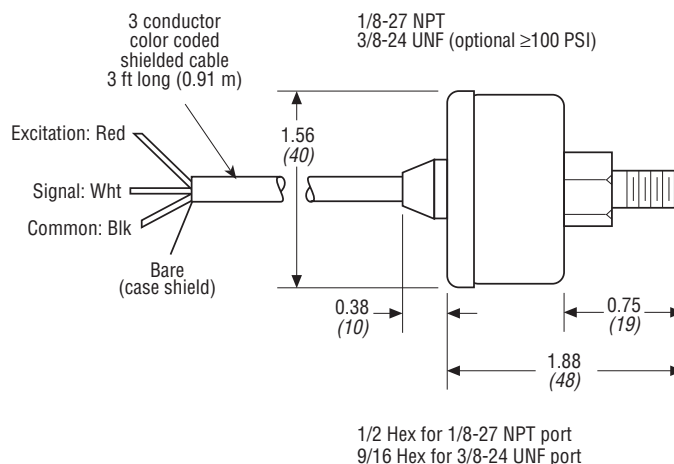
Thermal Effect on Full Scale Less than $\pm 1.0\%$ for any 55°C (100°F)
 change within the compensated range

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

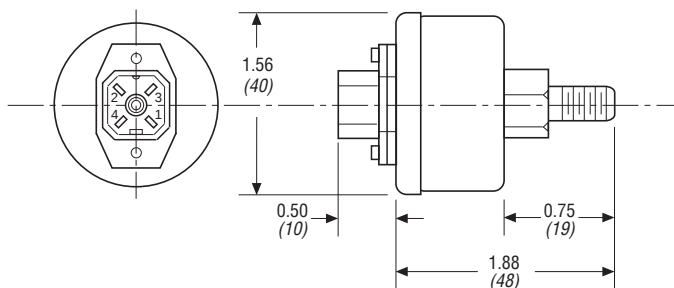
DIMENSIONS

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

SA WITH CABLE



SA WITH HIRSCHMANN CONNECTOR



PIN AND WIRE CODES

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

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

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Honeywell

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