

## 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**

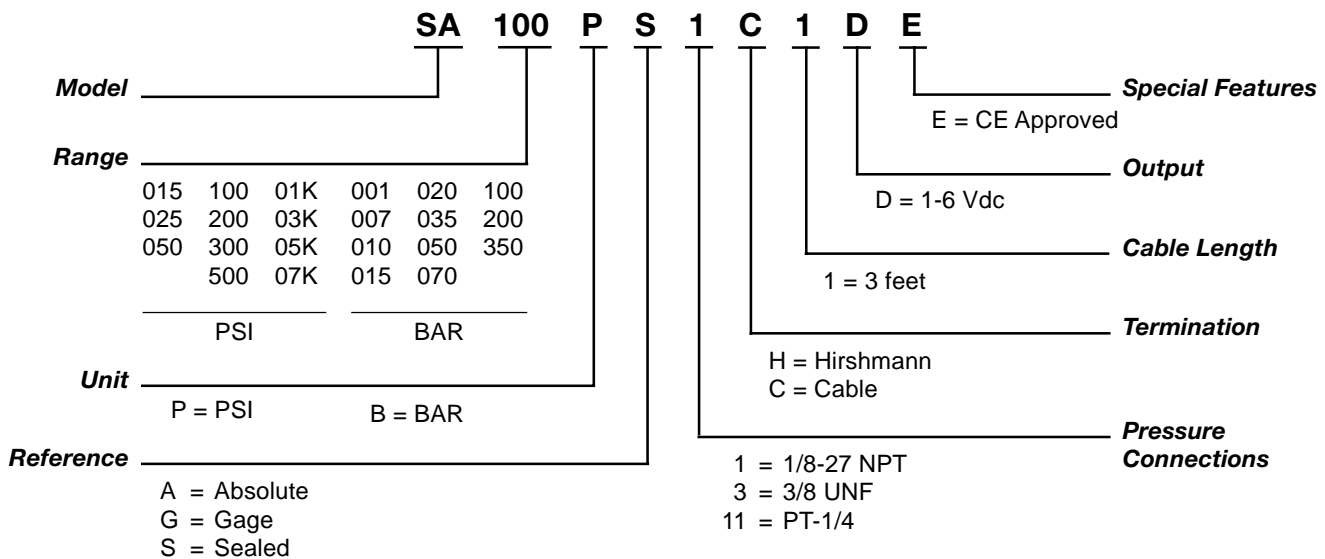
### FEATURES

- 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 2 X rated range	≥ 500 psi 1.5 X rated range
Burst Pressure	< 500 psi 10 X rated range	≥ 500 psi 5 X rated range (30kpsi max)
Material in Contact with Media	300 series stainless steel, braze 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 \*

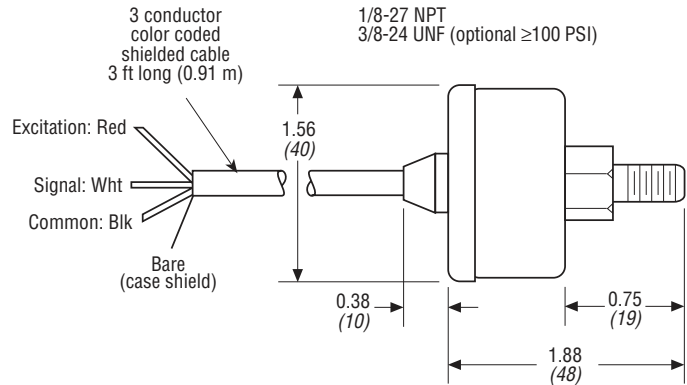
Response Time	< 500 microseconds
EMI/RFI	(10v/m radiated 150kHz-1GHz)
Electrical Connection	3ft shielded 3-conductor cable 22 AWG Color coded
Accuracy	±1.0% F.S.O. best fit straight line, Includes: non-linearity, hysteresis, non-repeatability. Thermal errors are not included.
Operating Temperature Range	-55° to 105°C (-48° to 221°F)
Compensated Temperature Range	-1° to 85°C (30° to 185°F)
Thermal Effect on Zero	Less than ±1.0% F.S.O. for any 55°C (100°F) change within the compensated range
Thermal Effect on Full Scale	Less than ± 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

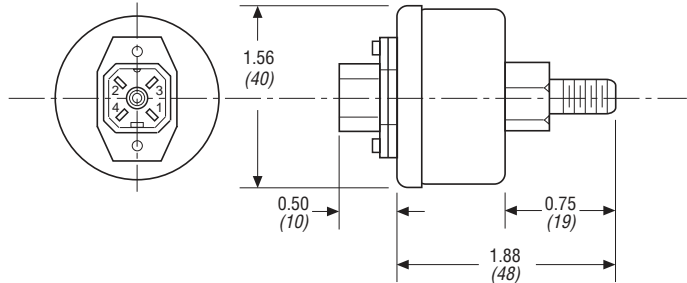
#### SA WITH CABLE



1/8-27 NPT  
3/8-24 UNF (optional ≥100 PSI)

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

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.

Item # 1063100 M.G. 3/01 Rev. A

# Honeywell

Sensing and Control  
Honeywell  
100 Discovery Way  
Acton, MA 01720 USA

Tel: (877) 384-1300; Fax: (978) 263-0630

[www.honeywell.com/sensing/](http://www.honeywell.com/sensing/)