

APPLICATIONS

- PRESSURE TRANSDUCERS
- 'SMART' VALVES
- SOLID STATE PRESSURE SWITCHES
- PRESSURE TRANSMITTERS

MODEL SR • PRESSURE SENSOR

The Model SR is intended for OEM's requiring a small pressure sensor with high pressure capability and superior corrosion resistance. Constructed of a brazed assembly of 300 series stainless steels, the SR can tolerate a wide variety of corrosive media without risk of leaking.

The SR's design provides high working pressures and high overload and burst pressures at no extra cost. The sensing elements are isolated from the media without using oil-filled isolation technologies.

Unlike other low cost sensors, the SR's output is compensated for changes in temperature.



SR SERIES

PRESSURE SENSOR

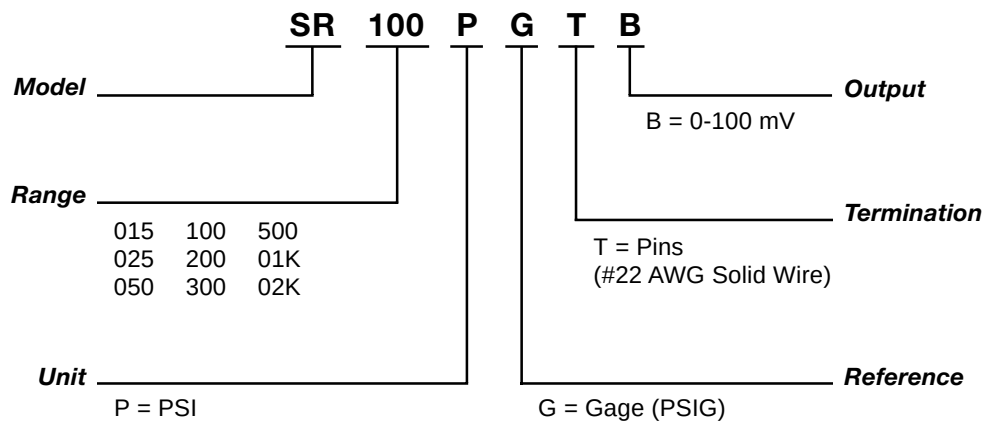
FEATURES

- High impedance silicon strain gages
- Stainless steel
- 0-15 to 0-2000 psi
- Constant current excitation
- Temperature compensated

BENEFIT

- Low current draw allows use with batteries
- Can be used with corrosive media
- Wide range of pressure measurements
- Works with readily available 4-20 mA amplifier IC's
- Easier, less expensive to use

HOW TO ORDER



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

TECHNICAL SPECIFICATIONS

RANGE

0-15, 25, 50, 100, 200, 300 psig (0-1, 2, 3, 7, 14, 20 bar g) (bar values approximate)	0-500, 1000, 2000 psig (0-35, 70, 140 bar g) (bar values approximate)
---	---

PHYSICAL

Proof Pressure	2 X rated range without damage	1.5 X rated range without damage
Burst Pressure	10 X rated range without bursting	5 X rated range without bursting
Material in Contact with Media	> 500 psi, 304 SS <=500 psi, brazed assy of 300 SS	
Shock Resistance	50 g's peak (5 milliseconds)	
Vibration Resistance	Meets MIL-STD 810B, Figure 514-4, Curve AP, Time Schedule II, Random Vibration Test (Overall g rms - 46.3 min)	
Weight	less than 1 oz (approx. 20 gm)	

ELECTRICAL

Span	25 mV/mA (minimum) at 77° F (25° C)
Excitation Current	4 mA, 5 Vdc max
Zero Balance	±5% F.S. at 77° F (25° C)
Input Resistance	1000 ohms (nominal)
Output Resistance	6000 ohms (nominal)
Insulation Resistance	1K megohms at 250 Vdc
Electrical Connection	four #22 AWG solid wires

PERFORMANCE

Accuracy	±1% span from best fit straight line including effects of non-linearity, hysteresis and repeatability
Operating Temperature Range	-40° to 212° F (-40° to 100° C)
Compensated Temperature Range	32° to 167° F (0° to 75° C)
Thermal Effect On Zero	Less than ±1% span -any 90° F (50° C) change within the compensated temperature range
Thermal Effect On Span	Less than ±1% span -any 90° F (50° C) change within the compensated temperature range

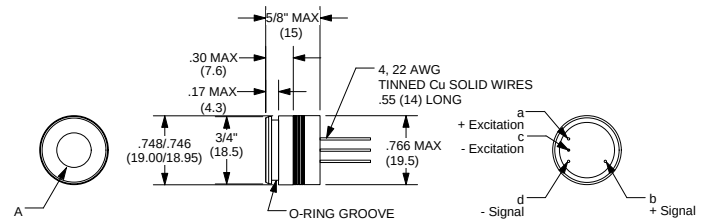
NOTES: (1) All specifications are measured at 25° C and rated excitation unless otherwise specified.

(2) Includes standard Viton O-ring.

(3) Capsule only. Does not include mounting device.

DIMENSIONS

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



PRESSURE RANGE (PSI)

Pressure Range (PSI)	* A			
	Bore Dia.	O-Ring	Sealing Depth**	Cavity Depth
15-500	.500 (12.70)	2-012	.21 (5.33)	.22 (5.58)
1000-1500	.375 (9.52)	2-010	.21 (5.33)	.22 (5.58)
2000	.375 (9.52)	2-010	.21 (5.33)	.22 (5.58)

CAUTION: Contact with sensing surface at bottom of cavity will affect accuracy and may cause damage. The O-ring groove on 2000 psi unit is wider to accommodate a backup ring behind the O-ring.
All dimensions in inches (mm).

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 # 1123700 M.G. 3/01

Honeywell

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

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

www.honeywell.com/sensing/