

APPLICATIONS

- PNEUMATIC EQUIPMENT
- AIR COMPRESSORS
- AIR FILTRATION MONITORING
- INDUSTRIAL CONTROLS

MODEL ST • PRESSURE TRANSDUCER

The Model ST pressure transducer combines Honeywell's proven silicon pressure sensing with the latest in ASIC technology in a rugged, industrial package. High value, coupled with outstanding performance, make this an ideal transducer for industrial control applications such as air compressors and pneumatic equipment. Temperature compensated, calibrated, and amplified, the ST has pressure ranges from 0-1 to 0-250 PSI.

The ST offers three standard output options for user flexibility, which are as follows: a 0.50 to 4.50 Vdc ratiometric output from 5 Vdc excitation, a 0.50 to 4.50 Vdc regulated output from 7 to 35 Vdc excitation, or a 4-20 mA output from 9.5 - 35 Vdc. The ST transducer delivers $\pm 1.0\%$ full scale accuracy (BFSL) over a wide temperature range of -40°C to 100°C and utilizes a proven industry standard connector for high reliability.



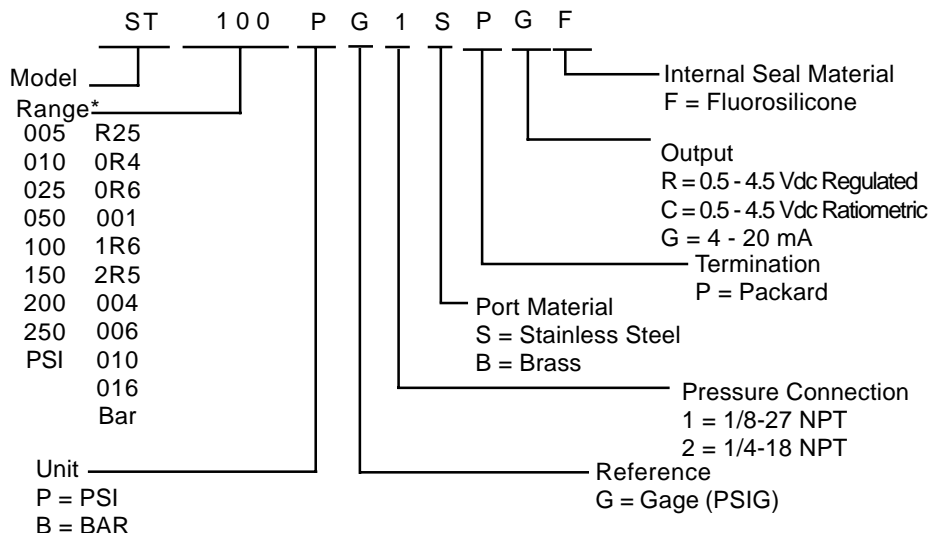
FEATURES

- High value and outstanding performance
- Amplified outputs
- Reverse polarity protection
- Less than 500 microseconds response time
- Industrial housing
- Exceeds CE Heavy Industrial EMC

BENEFIT

- Excellent OEM value
- Eliminates cost of external amplifiers
- Not damaged by reversed excitation
- Accurate high speed measurements
- Protected from harsh environments

HOW TO ORDER



* The character R replaces the decimal point in fractional pressure ranges.

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

TECHNICAL SPECIFICATIONS

| | |
|----------------|---|
| RANGES* | 5, 10, 25, 50, 100, 150, 200, 250 PSIG* |
| | 0.25, 0.4, 0.6, 1.0, 1.6, 2.5, 4.0, 6.0, 10.0, 16.0 Bar |

PHYSICAL

| | | |
|--------------------------------|--|-----------------------|
| Proof Pressure | <100 psi (5 bar), 3X rated range | >100 psi (5 bar), 2 X |
| Burst Pressure | <100 psi (5 bar), 5X rated range | >100 psi (5 bar), 3 X |
| Material in Contact With Media | 300 Series SS or brass, internal seal, silicon, polyetherimide | |
| Weight | 2.0 oz (57 gm) | |

ENVIRONMENTAL*

| | | |
|-----------|---|--|
| Shock | 50 g's peak (5 ms) | |
| Vibration | Figure 514.2-5, Curve AK, Table 514.2-V, Random Vibration Test (Overall g rms = 20.7 minimum) | |

ELECTRICAL*

| | VOLTAGE | CURRENT |
|------------------------|-----------------------------|-----------------|
| Zero Output | 0.5 Vdc | 4.0 mA |
| Full Scale Output* | 4.0 Vdc (0.50 - 4.50Vdc) | 16 mA (4-20 mA) |
| Excitation | | |
| <i>Ratiometric</i> | 5 Vdc±250mV (7.0Vdc max) | 9.5-35 Vdc |
| <i>Regulated</i> | 7 - 35 Vdc | |
| Supply Current | 5.0 mA typical (7.0 mA max) | N/A |
| Source (nominal) | 2.0 mA | N/A |
| Sink (nominal) | 20 µA @ zero output | N/A |
| Supply Rejection Ratio | 90 db | |
| Output Impedance | 25 Ω max. | N/A |

PERFORMANCE*

| | |
|---|--|
| Response Time | < 500 microseconds |
| EMI/RFI | Exceeds CE heavy industrial (30v/m radiated 150kHz-1gHz) |
| Electrical Connection | Packard Metri-Pack™ Packard Metri-Pack connector requires separate Packard #12065287 mating connector |
| Accuracy | ± 1.0% F.S.O. best fit straight line, Includes: non-linearity, hysteresis, non-repeatability. Thermal errors are not included. |
| Total Error Band | ± 2 % F.S.O. Includes: zero offset error, span error, thermal effect on zero and thermal effect on span, non-linearity, hysteresis, non-repeatability |
| Compensated Operating and Storage Temperature Range | -40° to 100°C (-40° to 212°F) |

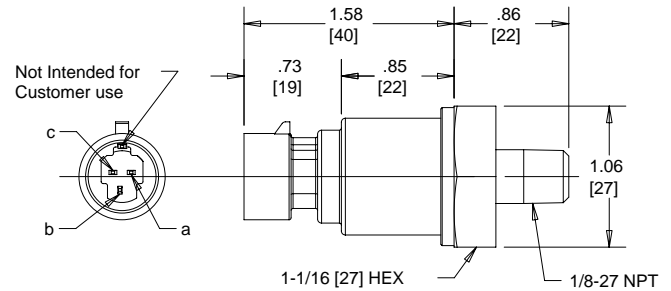
NOTES:

- * All specifications are measured at 25°C (77°F) and at rated excitation unless otherwise specified.
- * Meets IEC-68-2 or MIL-STD 810C.
- * Contact the factory to discuss other pressure ranges.

Item # 1122300 M.G. 9/00

DIMENSIONS

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



* 1/4-18 NPT optional. Contact the factory to discuss other pressure port options.

Pin and Wire Codes

| Pins | Voltage | Current |
|------|-------------|-------------|
| a | +Excitation | +Excitation |
| b | Output | -Excitation |
| c | Common | 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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