STELLAR TECHNOLOGY

ISO 9001/AS9100 Certified

YOUR ENGINEERED SOLUTION SOURCE SM

GT160

INDUSTRIAL PRESSURE TRANSDUCERS

DESCRIPTION

The Series GT160 pressure transducers are high accuracy millivolt/volt output sensors designed specifically for applications in very demanding test and measurement environments.

The Series GT160 pressure transducers offer a unique combination of small size, 0.1% static accuracy, enhanced thermal accuracy, and extended operating temperature range to achieve the results expected in these rigorous conditions. All GT160 units are constructed of welded stainless steel. Standard pressure ranges are 15 psi to 40,000 psi in both gage and absolute references.

All GT160 pressure transducers are shock and vibration resistant. A comprehensive selection of pressure ports, electrical terminations, and temperature compensation ranges are available. Each unit is shipped with a standard 19 point calibration record traceable to NIST.

STANDARD FEATURES

- ±0.1% FSO Accuracy
- 1" O.D.
- Stainless Steel Construction
- Ranges to 40K
- Improved Temperature Performance
- 19 Point Calibration Record
- Extended Operating Temperature Range

OPTIONAL FEATURES

- Alternate Materials of Construction
- Customer Specified Pressure Ports
- Customer Specified Electrical Connectors
- Temperature Compensation Available Between -320° F to +400° F
- Shunt Calibration
- Alternative Wetted Material

A US Manufacturer of: Pressure, Temperature, Load/ Force/Torque, and Displacement Sensors.

PERFORMANCE

STATIC ACCURACY
± 0.10% FSO at 2 mV/V.

RESOLUTION
Infinite.

THERMAL ZERO SHIFT
< ± 0.005% FSO/°F (typical).

THERMAL SENSOR SHIFT
< ± 0.005% FSO/°F (typical).

ZERO BALANCE
±1% FSO at 70°F.

FULL SCALE OUTPUT
2mV/V (±0.01mV/V).

MECHANICAL CHARACTERISTICS

STANDARD RANGES
0 - 15, 30, 50, 75, 100, 200, 500, 750, 1000, 5000, 7500, 10000, 15000, 20000, 25000, 30000, 40000 PSIA / PSIS.

PROOF PRESSURE

15-75 PSI ranges:	150 PSI.
100 PSI range and up:	1.5 X range

BURST PRESSURE
2X range or 200 PSI, whichever is greater.

OPERATING MEDIA
- Ranges under 100 PSIA: Materials Compatible with 316L Stainless Steel
- Ranges 100 PSIA and up: Materials Compatible with 17-4PH Stainless Steel

ENCLOSURE
Body and pressure cavity of stainless steel, hermetically sealed.

PRESSURE FITTING
(For ranges 15 psi thru 10,000 psi).
1/4" NPT Female (Standard)
1/4" NPT Male (No charge option).

(For ranges 15,000 psi thru 40,000 psi)
AE F250-C, or HIP HF4, or equivalent (Standard).
For additional pressure fittings please consult factory.

WEIGHT
4.5 oz. maximum.

ELECTRICAL CHARACTERISTICS

EXCITATION
10 Vdc recommended, 15 Vdc maximum.

INPUT/OUTPUT RESISTANCE
350 ± 3.5 ohms at 70°F.

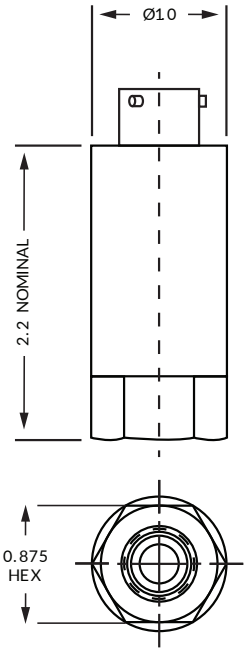
INSULATION RESISTANCE
> 10K megaohms at 50 Vdc at 70°F.

ELECTRICAL TERMINATION
PTIH-10-6P stainless steel connector or equivalent.
Optional electrical terminations available.

ENVIRONMENTAL CHARACTERISTICS

COMPENSATED TEMPERATURE RANGE
-30°F to +170°F.
(options available).

OPERATING TEMPERATURE RANGE
-65°F to +250°F.



MODIFICATIONS AND WARRANTY
MODIFICATIONS: We realize transducer applications vary greatly and as such our designs are flexible. Choice of pressure port, electrical termination, material compatibility and performance characteristics are a few of the many options available. Specifications on this datasheet represent the standard configuration only. Product and company names listed are trademarks of their respective companies. Specifications subject to change without notice.
WARRANTY: Stellar Technology warrants that its product shall be free from defective workmanship and/or material for a twelve month period from the date of shipment, provided that Stellar Technology's obligation hereunder shall be limited to correcting any defective material FOB our factory. No allowance will be made for any expenses incurred for correcting any defective workmanship and/or material without written consent by Stellar Technology. This warranty is in lieu of all other warranties expressed or implied.

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Due to the nature of technology, changes are inevitable. For latest technical specifications, see our website.

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