



CRYOGENIC & HIGH TEMPERATURE PRESSURE TRANSDUCER

Model 311-HD (Cryogenic) Model 311-QX (High Temperature)



Model 311

Cryogenic or High Temperature
Pressure Transducer



FEATURES:

- Cryogenic service down to -320 °F (-195 °C) process (311-HD)
- High temperature operation to +350 °F (+177 °C) process (311-QX)
- Remote electronics via stainless armored flex cable
- ATEX & CSA hazardous area approvals
- Remote electronics provide analog or digital output
- Pressure ranges from 0-150 thru 0-15K PSI (10 thru 1020 BAR)
- Corrosion-resistant, all stainless steel housings and wetted parts
- Economically priced

APPLICATIONS:

- CNG/LNG processing, transportation, dispensing & storage
- Oil field and well service nitrogen pumping equipment
- High Temperature Reactor pressures

PRODUCT OVERVIEW:

The Model 311-HD & 311-QX series from GP:50 offer reliable pressure sensing in cryogenic or high temperature applications. Remote mounted electronics provide a high-level 4-20 mA or 0-5 Vdc output with optional CANbus, RS485 Modbus, USB or RS232 digital protocols. The SST, armor jacketed cable provides flexibility in mounting the electronics away from the process temperature. 18"-36" remote flex lengths are available.

FIELD OPTIONS:

- ATEX, CSA approvals
- 18"-36" armor jacketed cable lengths
- Zero and span adjustments
- Inconel, Monel and Hastelloy ports/sensors
- CANbus, RS485 Modbus, USB, or RS232 digital protocols



U.K. GP50 Distributor ; Interface Force Measurements Ltd

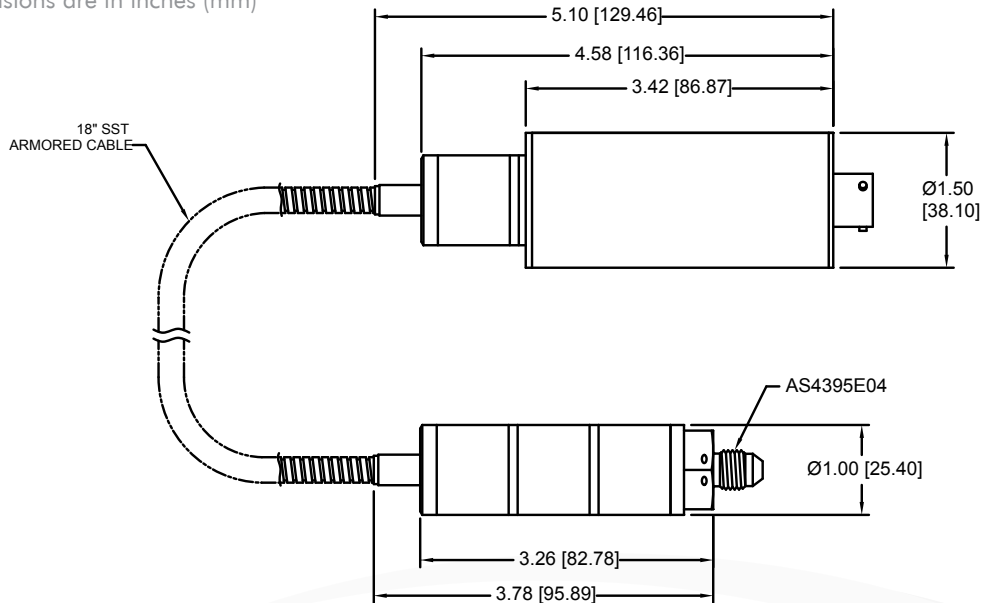
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GP:50 MODEL 311-HD / 311-QX

DIMENSIONAL DRAWING

All dimensions are in inches (mm)



STANDARD WIRING

PIN	MODEL 311 SERIES
A/1	+EXC/SIG
B/2	CASE GND
C/3	N/C
D/4	-EXC/SIG
E/5	N/C
F/6	N/C

REFERENCE SPECIFICATIONS

ELECTRICAL
<ul style="list-style-type: none"> • Output Signal: 0 to 5 Vdc or 4-20 mA • Excitation Voltage: (mA Output) 10 to 28 Vdc (Voltage Output) 14.5 to 32 Vdc • Response Time: <4 ms • Zero & FSO Balance: ±1% FSO • Connection: PTIH-10-6P (6-Pin Amphenol)
MATERIALS OF CONSTRUCTION
<ul style="list-style-type: none"> • Port/Sensor: 17-4PH stainless steel (Inconel, Hastelloy, Monel optional) • Armored cable: 316L • Housing: 316/316L
STATIC ACCURACY (BFSL) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)
Standard: 0.5% FSO Improved: 0.2% FSO
MECHANICAL
<ul style="list-style-type: none"> • Process Connection: AS4395E04 pressure port • Proof Pressure: 1.5X Pressure Range • Burst Pressure: 2X Pressure Range • Approximate Weight: 1 lb (0.5 kg)

**Standard configurations shown.
Please consult factory for other options.**

PRESSURE RANGES
<ul style="list-style-type: none"> • Cryogenic Ranges: 150 PSI thru 6K PSIG (10 thru 345 BAR) • High Temperature Ranges: 150 PSI thru 15K PSIG (10 thru 1,020 BAR) • Sealed gauge or absolute formats
THERMAL SPECIFICATIONS
Cryogenic Unit (311-HD): <ul style="list-style-type: none"> • Compensated: -320 °F to +70 °F (-195 °C to +21.1 °C) • Operating Range: (Ambient) -40 °F to +250 °F (-40 °C to +122 °C) • Effect on Zero/Span: ±1.0% FSO/100 °F for ranges ≥ 1K PSI (69 BAR) ±2.0% FSO/100 °F for ranges < 1K PSI (69 BAR)
High Temperature Unit (311-QX): <ul style="list-style-type: none"> • Compensated: +70 °F to +350 °F (+21.1 °C to +177 °C) • Operating Range: (Ambient) -40 °F to +250 °F (-40 °C to +122 °C) • Effect on Zero/Span: ±1.0% FSO/100 °F for ranges ≥ 1K PSI (69 BAR) ±2.0% FSO/100 °F for ranges < 1K PSI (69 BAR)
<p><i>Units are optimized to run at the extreme temperature.</i></p> <p><i>Cryogenic Units: -320 °F</i></p> <p><i>High Temperature Units: +350 °F</i></p>

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact GP:50 for assistance with your application.

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