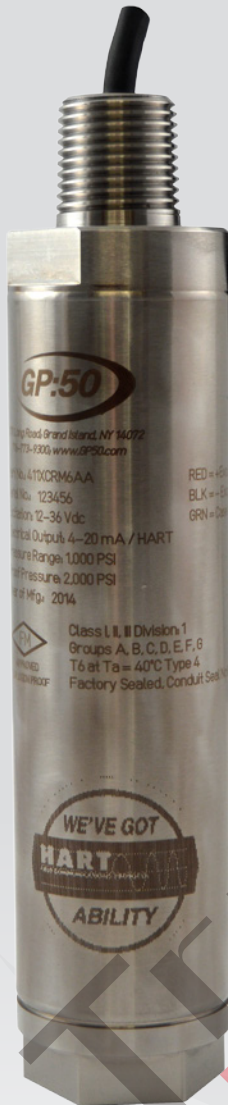




## SMART RANGEABLE HAZARDOUS LOCATION PRESSURE TRANSMITTER



Model 411, 411X/P  
Smart Rangeable Pressure Transmitter

### MODEL 411, 411X/P

#### FEATURES:

- 4-20 mA with digital HART protocol
- 0-15 PSI thru 0-100K PSI (0-1 thru 6,895 BAR)
- 5:1 turndown ratio
- Secondary containment for oil services
- Submersible version
- FM, CSA explosion-proof versions

#### APPLICATIONS:

- Offshore rigs and pumping platforms
- Oil and gas/chemical pipeline and processing
- Marine and shipboard service
- Submersible level

#### PRODUCT OVERVIEW:

The Model 411, 411X/P from GP:50 is a SMART rangeable pressure transmitter incorporating a 4-20 mA output with digital HART protocol. Units are offered with both CSA and FM approval options, as well as a variety of process and electrical connections. Improved accuracy provides for a stable measurement throughout the total compensated temperature range.

#### FIELD OPTIONS:

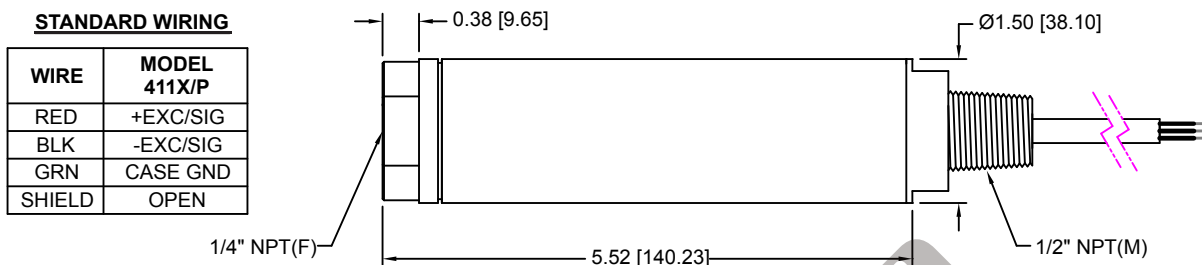
- 5:1 turndown ratio for most ranges
- Multiple pressure and temperature outputs
- Exotic wetted materials
- Submersible level option
- Alternate process connections
- Optional 4-20 mA temperature output



# GP:50 MODEL 411, 411X/P

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)



## REFERENCE SPECIFICATIONS

ELECTRICAL	MECHANICAL
<ul style="list-style-type: none"> <li>• <b>Supply Voltage:</b> 12-36 Vdc</li> <li>• <b>Output Signal:</b> Two wire 4-20 mA with digital HART protocol (optional 4-20 mA temperature output)</li> <li>• <b>Input Impedance:</b> 250 <math>\Omega</math> at 17 Vdc</li> <li>• <b>Insulation Resistance:</b> Better than 10 M<math>\Omega</math> at 50 Vdc</li> <li>• <b>Circuit Protection:</b> RFI/EMI, reverse polarity (voltage transients above 45 V to 20 A at 0.02 milliseconds)</li> <li>• <b>Resolution:</b> 12-bit</li> <li>• <b>Frequency Response:</b> From 0.07 to 40 sec (software adjustable)</li> <li>• <b>Connection:</b> 1/2" NPT M conduit with 6-ft 18 AWG multi conductor cable</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Process Connection:</b> 0-5 thru 0-15K PSI (0-0.3 thru 0-1,035 BAR), PSIV: 1/4" NPT (F) 0-20K thru 0-50K PSI (0-1,380 thru 0-3,450 BAR): Autoclave type F-250-C 0-60K thru 0-75K PSI (0-4,135 thru 0-5,170 BAR): Autoclave type F-312-C150</li> <li>• <b>Proof Pressure:</b> 0-15K (1,035 BAR) PSI 1.5X FSO 20K-100K (6,894 BAR) PSIG 1.2X FSO</li> <li>• <b>Burst Pressure:</b> 0-15K 3X FSO 20K-100K (6,894 BAR) PSIG 1.5X FSO or 125K PSIG (8,618 BAR), whichever is less</li> <li>• <b>Long-term Stability:</b> 0.25% FSPR over six months</li> <li>• <b>Approximate Weight:</b> &lt;24 oz (0.7 kg)</li> <li>• <b>Enclosure:</b> IP67</li> </ul>
<b>MATERIALS OF CONSTRUCTION</b> <ul style="list-style-type: none"> <li>• <b>Wetted Parts:</b> 17-4 PH stainless steel (Optional Inconel 718, K12X, or 13-8 Monel)</li> <li>• <b>Housing:</b> 316 stainless steel</li> </ul>	<b>THERMAL SPECIFICATIONS</b> <ul style="list-style-type: none"> <li>• <b>Compensated:</b> 0 to +170 °F (-18 °C to +77 °C)</li> <li>• <b>Operating Ambient:</b> -40 °F to +185 °F (-40 °C to +85 °C)</li> <li>• <b>Effect on Zero/Span (1:1):</b> <math>\pm 0.25\%</math> FSO/100 °F</li> <li>• <b>At 5:1 Ranging:</b> <math>\pm 0.50\%</math> FSO/100 °F</li> </ul>
<b>STATIC ACCURACY (BFSL) (HYSTERESIS, NON-LINEARITY &amp; REPEATABILITY @ +70 °F)</b> Standard: $\pm 0.25\%$ FSO Improved: $\pm 0.1\%$ FSO Zero Balance and FSO: $\pm 0.5\%$ FSO at +70 °F	
<b>PRESSURE RANGES</b> <ul style="list-style-type: none"> <li>• 0-15 PSI thru 0-100K PSIS, PSIA, PSIV, PSIG (1 BAR V thru 6,895 BAR)</li> <li>• <b>Range Adjustments:</b> 5:1 for ranges 0-5 PSI thru 0-100K PSI (0.3 BAR thru 6,895 BAR)</li> </ul>	

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

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.