



## HIGH-PRESSURE HIGH-TEMPERATURE (HPHT) WECO® UNION PRESSURE TRANSMITTER

### MODEL 170 / 270 / 370 QX

#### FEATURES:

- 2"-1502, 2002 and 2202 WECO® Union compatible
- Process temperature rated to +350 °F (+177 °C)
- 0 to 5K thru 0 to 20K PSI (345 thru 1,379 BAR)
- Corrosion resistant materials
- Optional improved accuracy specifications
- Hazardous area location approvals

#### APPLICATIONS:

- High-pressure, high-temperature (HPHT) wells
- Choke and kill manifolds
- Blowout preventer (BOP)
- Hydraulic fracturing

#### PRODUCT OVERVIEW:

GP:50's Model 370-QX series is designed for High Pressure High Temperature (HPHT) well applications. This series is designed to fit the standard WECO® 2"- 1502 or 2"- 2002/2202 unions and operates at a continuous process temperature to +350 °F (+177 °C). It offers reliable service in high shock and vibration applications such as cementing, fracturing and drilling mud pressure measurement.

#### FIELD OPTIONS:

- WECO® 2" 1502 or 2" 2002 wing union fitting
- Stainless steel or Inconel X750/ X718 construction
- Shunt calibration signal
- 3 mV/V, 0 to 5 Vdc, 4-20 mA or CANbus output
- Comprehensive list of electrical connections including shipboard rated cable



Model 170 / 270 / 370 QX  
High-Pressure High-Temperature (HPHT)  
WECO® "Hammer" Union  
Pressure Transmitter



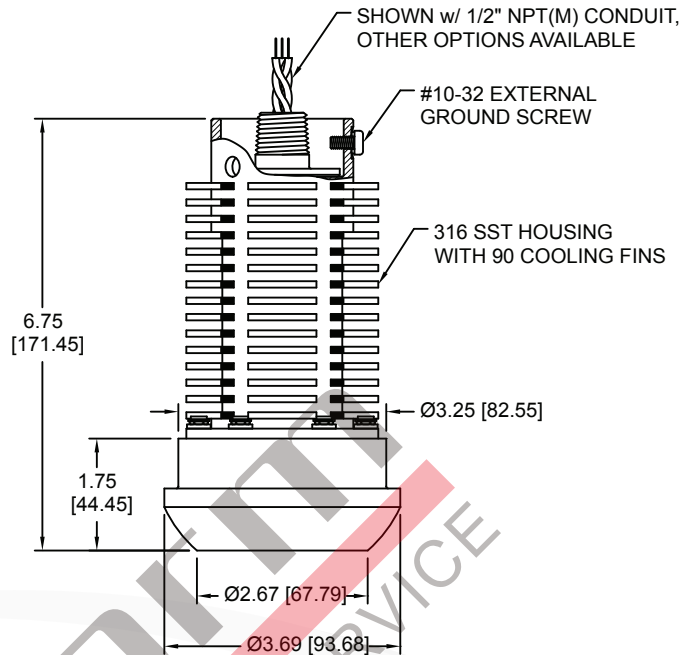
# GP:50 MODEL 170 / 270 / 370 QX

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)

### STANDARD WIRING

WIRE	MODEL 170QX	MODEL 270QX	MODEL 370QX
A/1/RED	+EXC	+EXC	+EXC/SIG
B/2/BLK	-EXC	-EXC	-EXC/SIG
C/3/BLU	+SIG	+SIG	+SHUNT (ALT)
D/4/WHT	-SIG	-SIG	N/C
E/5/ORG	+SHUNT (OPT)	+SHUNT (OPT)	+SHUNT (OPT)
F/6/BRN	-SHUNT (OPT)	-SHUNT (OPT)	-SHUNT (OPT)
G/7/GRN	CASE GND	CASE GND	CASE GND



## REFERENCE SPECIFICATIONS

<p><b>ELECTRICAL</b></p> <ul style="list-style-type: none"> <li>• <b>Supply Voltage:</b> (Model 170) 15 Vdc max (Model 270) 9 to 36 Vdc (Model 370) 9 to 36 Vdc (10 to 28 Vdc for GI/Al/I approvals)</li> <li>• <b>Output Signal:</b> (Model 170) 3 mV/V (Model 270) 0 to 5 Vdc (Model 370) 4-20 mA (Model 570) CANbus / SAE J1939</li> <li>• <b>Load Resistance:</b> (Model 170) &gt;100K <math>\Omega</math> (Model 270) &gt;10K <math>\Omega</math></li> <li>• <b>Connection:</b> Bendix PTO2E-10-6P standard</li> <li>• <b>Input Current:</b> (Model 170) 1 mA (Model 270) 8 mA (Model 370) 23 mA max.</li> <li>• <b>Shunt Calibration:</b> (Model 170/270) 100% FSO by shorting 2 pins, non-isolated version (Model 370) 100% FSO by powering 2 pins, fully isolated</li> </ul> <p><b>MATERIALS OF CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• <b>Sensor:</b> 17-4 PH stainless steel standard Inconel X750 and Inconel 718 optional</li> <li>• <b>Housing:</b> 300 series stainless steel</li> </ul>	<p><b>STATIC ACCURACY (BFSL)</b> (HYSTERESIS, NON-LINEARITY &amp; REPEATABILITY @ +70 °F)</p> <ul style="list-style-type: none"> <li>• Standard: <math>\leq \pm 0.25\%</math> FSO</li> <li>• Zero Balance/Span: <math>&lt; \pm 1.0\%</math> FSO/100 °F</li> </ul> <p><b>MECHANICAL</b></p> <ul style="list-style-type: none"> <li>• <b>Process Connection:</b> WECO® 2" - 1502 or 2002/2202</li> <li>• <b>Proof Pressure:</b> 1.5X FSO</li> <li>• <b>Burst Pressure:</b> 3.0X FSO</li> <li>• <b>Ingress Protection:</b> IP67 (some options may effect rating)</li> </ul> <p><b>PRESSURE RANGES</b></p> <p>0 to 1000 PSI thru 0 to 20K PSI (69 thru 1,379 BAR)</p> <p><b>THERMAL SPECIFICATIONS</b></p> <ul style="list-style-type: none"> <li>• <b>Compensated:</b> -40 °F to +350 °F (-40 °C to +177 °C)</li> <li>• <b>Operating Process:</b> -50 °F to +360 °F (-45 °C to +182 °C)</li> <li>• <b>Operating Ambient:</b> -50 °F to +120 °F (-45 °C to +49 °C) Assumes a +350 °F (+177 °C) process temp, otherwise -50 °F to +185 °F (-45 °C to +85 °C)</li> <li>• <b>Storage:</b> -60 °F to +190 °F (-51 °C to +87 °C)</li> </ul> <p><b>APPROVALS</b> (370 SERIES ONLY, OTHERS PENDING)</p> <ul style="list-style-type: none"> <li>• FM/CSA/ATEX/IEC Intrinsic Safety</li> <li>• FM/CSA/ATEX/IEC Zone 2</li> <li>• CE Marked</li> </ul>
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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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