

HAZARDOUS LOCATION FLUSH MOUNT PRESSURE TRANSDUCER



Model 311-IM Hazardous Location Flush Mount Pressure Transducer











MODEL 311-IM

FEATURES:

- Flush sensor eliminates media plugging
- 0-50 thru 0-750 PSI (4 thru 50 BAR)
- No zero offset due to installation
- FM, CSA, ATEX, and IEC approvals
- Rugged, all-welded stainless steel design
- Optional 5X proof pressure
- Optional tri-clamp adapter

APPLICATIONS:

- Blender discharge
- Frack pump suction pressure
- Wellhead control
- Sludge and slurries
- Adhesives and paints

PRODUCT OVERVIEW:

The Model 311-IM from GP:50 is a flush mounted, hazardous location approved pressure transducer, designed to provide added reliability within slurry or thick process media applications. Their rugged, allwelded flush mounted design facilitates accurate measurements of corrosive or higher viscosity media, in applications where non-flush port sensors are otherwise prone to clogging or damage. No zero offset is caused during sensor installation.

APPROVALS:

- FM, FM/CSA: Class I/II/III, Div 1, Grps A-G, T6 at Ta=40C
- FM: Class I, Zone 2 AEx nC IIC T5, Class I, Div. 2, Grp. A, B, C, D Class II, Grp. E, F, G, Class III T5, Ta = 80C
- CSA: Ex nA IIC T5, Ex nL IIC T5, Class I Div. 2 Grp. A, B, C, D Class II Div. 2 Grp. E, F, G Class III T5, Ta=80C
- ATEX: CE0575 II 3 G Ex nA IIC, Ex ic IIC T5, Ta=80C
- IEC: Ex na IIC, Ex ic IIC T5, Ta=80C (all Zone 2/Div 2 approvals are electrical connector dependent)



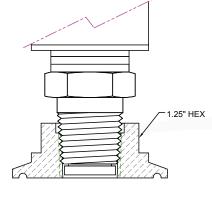


GP:50 MODEL 311-IM

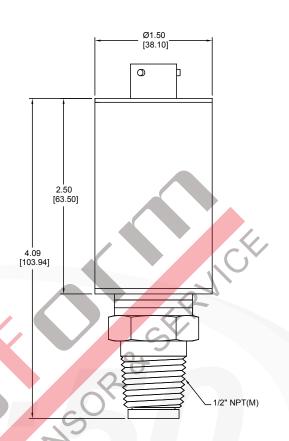
DIMENSIONAL DRAWING

All dimensions are in inches (mm)

STANDARD WIRING PIN MODEL 311-IM A/1/RED +EXC/SIG B/2/GRN CASE GND C/3/WHT N/C D/4/BLK -EXC/SIG E/5/BLU +SHUNT (OPT.) F/6/BRN -SHUNT (OPT.)



PORT DETAIL: SHOWN WITH OPT. TRI-CLAMP FITTING



REFERENCE SPECIFICATIONS

ELECTRICAL

• Excitation Voltage: 10 to 28 Vdc

• Output Signal: 4-20 mA

• Circuit Protection: RFI and EMI

• Load Impedance: $750~\Omega$ max. to 24~Vdc

• Insulation Resistance: >10 MΩ @ 50 Vdc, +70 °F

• Response Time: <5 ms 10% to 90%

• Connection: 6-pin Bendix connector (other options available)

MATERIALS OF CONSTRUCTION

 Wetted Parts: Inconel 718 and 316 stainless steel (optional Hastelloy, consult factory)

• Housing: 316 stainless steel

STATIC ACCURACY (RSS) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)

Standard: $\pm 0.5\%$, $\pm 0.2\%$

Zero Balance and FSO: $\pm 1\%$ at +70 °F

MECHANICAL

• Process Connection: 1/2" NPT (M)

• Proof Pressure: 2X FSO (5X optional)

• Burst Pressure: 5X FSO

 Approximate Weight: 0.7 lb (260 g) nominal, options may increase weight

PRESSURE RANGES

 0 to 50 PSI thru 0 to 750 PSI (0 to 3 thru 0 to 50 BAR), some options may affect range (PSIG, PSIS, PSIA, PSIV compound ranges available)

THERMAL SPECIFICATIONS

• Compensated: 0 °F to +180 °F (-18 °C to +82 °C)

• Operating Process: -40 $^{\circ}$ F to +176 $^{\circ}$ F (-40 $^{\circ}$ C to +80 $^{\circ}$ C)

• Storage: -65 °F to +250 °F (-53 °C to +121 °C)

• Effect on Zero/Span: $\pm 2.0\%$ FSO/100 °F

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.