



# MULTI-RANGE PROCESS PRESSURE TRANSDUCER

## Model 1171

### FEATURES:

- 5 Through 100,000 PSI Ranges in PSISG, PSIA, Vacuum Options
- 4-20 mA Loop Powered
- 5:1 Ranging
- Waterproof
- Magnetic Coupling / Sealed
- 316 SS
- CE Approved
- FM Explosion Proof, and intrinsically safe approved
- CSA intrinsically safe approved

### APPLICATIONS:

- Off Shore Rigs and Pumping Platforms
- Pipelines and Processing
- Shipboard and Marine Applications
- Plastics and Paper - All Processes

This rugged, harsh-environment transmitter is small in size and designed to solve your worst weather nightmare.

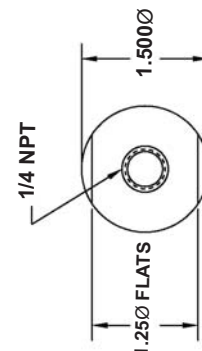
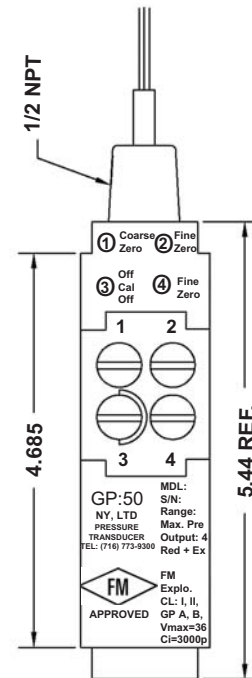
Completely sealed, it can be submersed to 100 feet with submersible conduit. The all welded construction and 15-5 and 316 stainless steels used in the pressure cavity make the 1171 watertight and strong against corrosion. The unit is designed without an "O"-ring and insures reliability.

The external zero, span, and calibration controls are hermetically sealed and easily adjusted with the help of a magnetically-coupled drive system. This unit allows for 5:1 ranging of the transmitter's standard pressure range.

Pressure ranges include 5 through 75,000 PSI and are available in sealed gauge, absolute and sealed vacuum.

Featuring a calibration circuit that permits setup and ranging, there is no need for calibrated pressure source.

1171 is FM explosion proof, Intrinsically Safe, and CE Approved.



PETROLEUM & PROCESS



# Pressure, Level & Temperature Transmitters & Transducers

Ordering: Specify model, and pressure range and indicate modifications or accessories required.

\*Measured fluid temperature in excess of the compensated temperature limits may be acceptable depending on ambient temperature conditions.

<b>Full Scale Pressure Range (FSPR)</b>	0-5, 10, 15 PSISG, A, SV and 3-15 PSISG 0-20, 25, 30, 50, 75, 100, 150, 200, 300, 400, 500, 750, 1000, 1500, 2000, 3000, 4000, 5000, 7500, 10,000, 15,000, 20,000, 25,000, 30,000, 40,000 50,000, 75,000, 100,000 PSISG, PSIA
<b>Supply Voltage</b>	9-36 Vdc
<b>Regulations</b>	Less than 0.02% FSO/V over supply voltage range.
<b>Output Signal</b>	4-20 mA, 2 wire loop Powered
<b>Load Impedance</b>	1350 ohms a 36 Vdc
<b>Accuracy</b>	Greater than 0.25% of calibrated span including errors due to linearity, hysteresis and repeatability, RSS
<b>Combined Zero &amp; Span Temperature Effects on Accuracy</b>	Less than 1.0% per 100°F
<b>Combined Zero &amp; Span Temperature Effects on Accuracy At 5:1 Ranging</b>	Less than 3.5% FSPR per 100°F
<b>Compensated Temperature Limits*</b>	0 thru +170°F based on actual operating temperature.
<b>Operating Temperature Limits</b>	-10 to +176°F
<b>Range Adjustments</b>	5:1
<b>Range Calibration Signal</b>	20% and 100%, calibration signals provided by maintain-contact switch.
<b>Range Calibration Signal Accuracy</b>	Greater than 1.0%. Exact pressure to output correlation data provided.
<b>Zero Balance</b>	Fine and Coarse adjustable
<b>Interaction Between Zero &amp; Span Range</b>	Zero Adjustment does not affect range. Span adjustment effect on zero is less than 0.5%
<b>Circuit Protection</b>	Reverse polarity protected Units are protected against voltage transients above 45V to 20A at 0.02 milliseconds.
<b>Insulation Resistance</b>	Better than 10 megohms at 50V DC
<b>Proof Pressure</b>	5 to 50 PSI 100 PSI 75 to 15,000 2xFSPR or 20,000 PSI, whichever is less. 20,000 to 100,000 PSI 1.2 x FSPR or 125,000 PSI which ever is less.

<b>Burst Pressure</b>	0-5 thru 0-50 PSISG, A, SV and 3-15 PSISG 250 PSI  0-75 thru 0-15,000 PSIG, A-5 times full scale pressure range or 22,500 PSIG, whichever is less.  0-20,000 thru 0-100,000 PSIG, A-1.5 times full scale pressure range or 125,000 PSIG, whichever is less.
<b>Long-Term Stability</b>	Greater than 0.25% FSPR over six months.
<b>Resolution</b>	Infinite
<b>Response Time</b>	Approximately 5 milliseconds
<b>Shock &amp; Vibration Without Change</b>	100 g's PK to PK
<b>Enclosure Materials</b>	15-5 SS and 316 SS
<b>Measured Fluids</b>	Any gas or liquid compatible with 15-5 SS Inconel X750 optional.
<b>Standard Process Pressure Connection</b>	0-5 thru 0-15,000 PSI -1/4" Female Connection.  0-20,000 thru 0-50,000 PSI - 9/16"-18 gland thread, pressure relieved. 1/4" OD high pressure tube, 60 degree cone. Conforms to Autoclave type F-250-C.  0-61,00 thru 0-75,000 PSI - 5/8" -18 gland thread pressure relieved. 5/16" OD high pressure tube, 60 degree cone. Conforms to Autoclave type F-312-C150.
<b>Electrical Connection</b>	1/2" NPT male
<b>Enclosure Classification</b>	NEMA 3, 4
<b>Weight</b>	Less than 28 oz.
<b>Hazardous Location FM Explosion Proof (FM Standard)</b>	Class I, II, III Division I Groups A, B, C, D, E, F, G
<b>FM Intrinsically Safe</b>	Class I, II, III Division I Groups A, B, C, D, E, F, G Ta= 80°C, T4
<b>CE</b>	Approved
<b>Accessories</b>	Mounting Bracket, Conduit connection box, Loop powered digital indicator.