



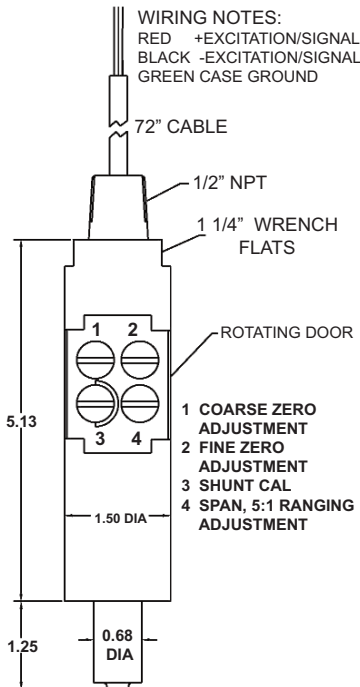
**MELT PRESSURE  
TRANSDUCERS & TRANSMITTERS**  
2770 Long Road, Grand Island, NY 14072 USA  
Tel. (716)773-9300 • Fax (716)773-5019 • sales@gp50.com • www.gp50.com

## Product Specification Sheet

### PLASTIC MELT PRESSURE TRANSMITTER

w/ NON-INTRUSIVE ZERO & SPAN CONTROLS FOR HAZARDOUS ENVIRONMENTS

**Model 331X/331P with QE option**



#### FEATURES:

- Rugged, all-welded, all stainless steel construction.
- Interchangeable with existing systems.
- Many options available, Hastelloy C-276 or Boron-Hardening
- FM Explosion-Proof (Class I, Division I, Groups A, B, C, D)
- Magnetically coupled zero & span adjustments & shunt cal switch
- Coarse Zero Adjustment, approximately  $\pm 20\%$  of upper range
- Fine Zero Adjustment, approximately  $\pm 0.5\%$  of upper range
- Span Adjustment, 5:1 Ranging optional
- Internal Calibration Resistor set to 80% standard (for 5:1 ranging option cal is 100% for lower range and 20% for upper range)

#### PRESSURE RANGES:

- From 0-500 through 0-15,000 psig (See ordering guide)

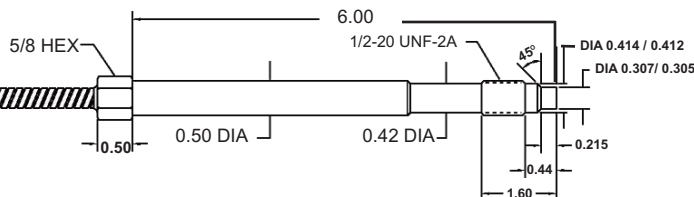
#### ACCURACY:

- (Non -Linearity, Hysteresis, Non-repeatability)
- $\pm 0.25\%$  FSO, RSS (0-5000 psi & higher)
  - $\pm 0.5\%$  FSO, RSS (0-500 and 0-3500 psi)

#### GENERAL

The GP:50 product line of melt pressure transducers and transmitters are based on the proven bonded strain gage principle successfully utilized in thousands of applications. Our unique design incorporates a heavier sensor allowing a thicker tip diaphragm, provides better linearity, and reduces costs.

The design incorporates an extremely small capillary tubing that transmits the media pressure to the strain gage sensor and mating electronics via a mechanical fill fluid. (Mercury is the standard, silicone and mineral oil are readily available depending on the application).



**\*REFER TO APPENDIX A  
FOR WIRING CODES\***

Some options will affect dimensions  
Consult factory if important

GP:50 reserves the right to make product improvements and amendments to the product specifications stated throughout this brochure without prior notification. Please contact the factory on all critical dimensions and specifications for verification.



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Specifications reflect standard product, improved performance/mechanical options available. Modifications may alter specs, consult factory for more information.

<b>Accuracy</b>	<b>Static Error Band (Non-linearity, Hysteresis, Non-repeatability)</b> ± 0.5% FSO(RSS) 500 through 3000 psi ± .25% FSO(RSS) 5000 through 15000 psi	
<b>Material in Contact with Pressure Media</b>	15-5 PH stainless steel and hard chrome plated diaphragm surface. Diamond, Boron and Titanium Nitride coatings optional.	
<b>Proof Pressure</b>	2 times full scale pressure range or 35,000 psig whichever is less	
<b>Temperature Limits</b>	Diaphragm 750°F (400°C)	Strain Gauge Housing 176°F (80°C)
<b>Temperature Effects</b>	From Diaphragm Zero 15 psi/100°F	
	From Strain Gauge Housing <b>Zero / Span</b> Less than ± 1.0% FSO/100°F (± 2.0% FSO/100°C)	
<b>Electricals</b>	<b>Excitation Voltage</b>	<b>Output at 70° F</b>
(Model 331X)	9-36 Vdc	4-20 mA ± 2%
Zero Balance (Model 330/331)	4.0 mA ±5% FSO at 70°F	
Load Impedance (Model 330,331)	1350 ohms max. at 36 Vdc & 750 ohms at 24 Vdc	
<b>Range Calibration Signal</b>	20% at upper range, 100% at lower range	
<b>Connections</b>	Pressure 1/2" - 20 UNF-2A thread for standard (M18 x 1.5 metric thread optional) Electrical 1/2" NPT (M) thread with 72" cable, 18 AWG wires	
<b>Enclosed Materials</b>	316 stainless steel	
<b>Mounting Torque</b>	500 inch pounds, maximum	
<b>Identification</b>	Etched stainless steel nameplate welded to body.	

**ORDERING GUIDE**

Use the following codes to identify desired item.

MODEL	RANGE	OPTIONS
•	+	•
•	+	•/•/•

Example: 331X-QE-RV-CF/GN

MODEL	
331X	4-20 mA FM Explosion Proof
331P	FM+CSA
PRESSURE RANGE	
(PSI)	(BAR)
RH 500	UV 50
RJ 600	UX 75
RK 750	UY 100
RM 1000	UZ 150
RO 1500	VA 200
RR 2000	VB 300
RS 2500	VC 350
RT 3000	VD 500
RV 5000	VE 700
RX 7500	VF 750
RZ 10000	UA 1000
SB 15000	SZ Other

**OPTIONS**

CF 1/2" NPT(M) thread with 72" leads

**GENERAL**

- GB Alternate Electronic Output - specify zero and span output values
- GP Hastelloy C-276 Diaphragm and Thread
- GQ Boron-Hardened diaphragm
- GV Silicone Oil Fill. (Increases Thermal Shift) Consult factory
- GX Mineral Oil Fill. (Increases Thermal Shift) Consult factory
- QE Zero and Span Adjustments Magnetically Coupled and Hermetically Sealed
- JW Titanium Nitride-Coated Diaphragm & Threads
- GK 5:1 Ranging (will affect standard shunt calibration)

**RIGID STEM**

- GN 12.5" Rigid Stem
- GO 9" Rigid Stem
- HD 3" Rigid Stem
- HJ 1 3/16" Rigid Stem
- HU 4" Rigid Stem

**FLEX TUBING**

- GT 30" Armored Capillary Tube
- HS 9" Armored Capillary Tube
- HV 24" Armored Capillary Tube
- HY 12" Armored Capillary Tube