



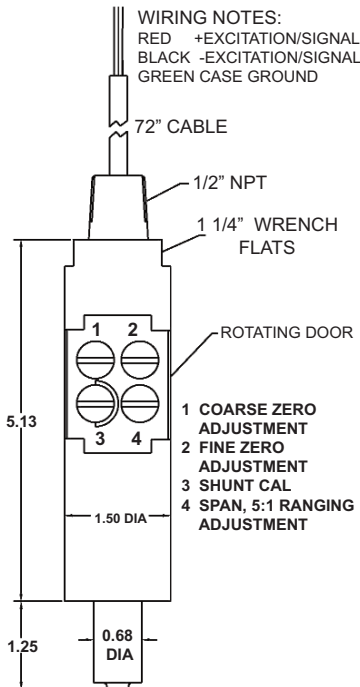
**MELT PRESSURE
TRANSDUCERS & TRANSMITTERS**
300 Industrial Drive, Grand Island, NY 14072 USA
Tel. (716)775-8830 • Fax (716)775-8020 • sales@gp50.com • www.gp50.com

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)

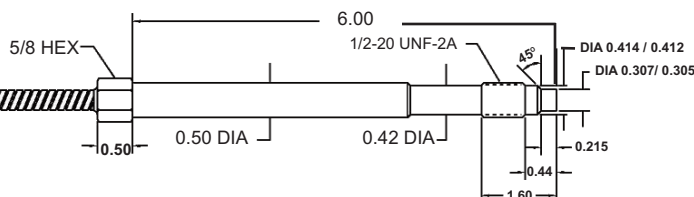
ACCURACY:

- (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.

Accuracy	Static Error Band (Non-linearity, Hysteresis, Non-repeatability) ± 0.5% FSO(RSS) 500 through 3000 psi ± .25% FSO(RSS) 5000 through 15000 psi	
Material in Contact with Pressure Media	15-5 PH stainless steel and hard chrome plated diaphragm surface. Diamond, Boron and Titanium Nitride coatings optional.	
Proof Pressure	2 times full scale pressure range or 35,000 psig whichever is less	
Temperature Limits	Diaphragm 750°F (400°C)	Strain Gauge Housing 176°F (80°C)
Temperature Effects	From Diaphragm Zero - 15 psi/100°F	From Strain Gauge Housing Zero / Span - Less than ± 1.0% FSO/100°F (± 2.0% FSO/100°C)
Electricals	Excitation Voltage 9-36 Vdc	Output at 70° F 4-20 mA ±2%
(Model 331X)		
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	
Range Calibration Signal	20% at upper range, 100% at lower range	
Connections	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
Enclosed Materials	316 stainless steel	
Mounting Torque	500 inch pounds, maximum	
Identification	Etched stainless steel nameplate welded to body.	

ORDERING GUIDE

Model: X 3X X QE - XX - XX / XX / XX / XX / XX

ELECTRICAL OUTPUT	
1	3.33 mV/V
2	0-5 Vdc
3	4-20 mA

BASE MODEL	
0	Rigid Stem Only
1	Rigid Stem and Flex

HAZARDOUS APPROVAL	
X	FM Explosion Proof
P	FM & CSA Explosion Proof

THREAD TYPE	
QE	Magnetically coupled, hermetically sealed zero & span controls

PRESSURE RANGE			
RH	500 PSI	UV	50 BAR
RJ	600 PSI	UX	75 BAR
RK	750 PSI	UY	100 BAR
RM	1,000 PSI	UZ	150 BAR
RO	1,500 PSI	VA	200 BAR
RR	2,000 PSI	VB	300 BAR
RS	2,500 PSI	VC	350 BAR
RT	3,000 PSI	VD	500 BAR
RV	5,000 PSI	VE	700 BAR
RX	7,500 PSI	VF	750 BAR
RZ	10,000 PSI	UA	1,000 bar
SB	15,000 PSI	UH	1,400 bar
SD	20,000 PSI	UB	1,500 bar
SF	30,000 PSI	UC	2,000 bar
SZ	Custom	SZ	Custom

CAPILLARY TUBE LENGTH	
Blank	18 Inch (457.2mm) Flex
HS	9 Inch (228.6mm) Flex
HY	12 Inch (304.8mm) Flex
HV	24 Inch (609.6mm) Flex
GT	30 Inch (762mm) Flex

RIGID STEM LENGTH	
Blank	6 Inch (152.4mm) Rigid Stem
HJ	1 3/16 Inch (30.2mm) Rigid Stem
HD	3 Inch (76.2mm) Rigid Stem
HU	4 Inch (101.6mm) Rigid Stem
GO	9 Inch (228.6mm) Rigid Stem
GN	12.5 Inch (317.5mm) Rigid Stem
HT	24 Inch (609.6mm) Rigid Stem

DIAPHRAGM OPTIONS	
Blank	15-5 PH Diaphragm
GP	Hastelloy C-276 Diaphragm & Threads
GQ	Boron Hardened Diaphragm
JW	Titanium Nitride Coated Diaphragm & Threads
QS	Diamond Coating (DLC)

FILL TYPES	
Blank	Mercury (Standard - Included)
GV	Silicon Oil Fill (500°F Max)
GX	Mineral Oil Fill (500°F Max)

CONNECTOR OPTIONS	
Blank	1/2" NPT (M) Thread with 72" Leads
CF	1/2" NPT (M) Thread with 36" Leads

* Other Options Available - Consult Factory