

LOW PRESSURE TRANSDUCER/TRANSMITTER

**Models 130, 230, 330
131, 231, 331 with IA option**



FEATURES:

- All-welded stainless steel construction
- State-of-the-art circuitry allows heavier diaphragm and increased fatigue life
- Standard options for every requirement

PRESSURE RANGES:

- From 0-25 to 0-1000 psig
(See ordering guide)

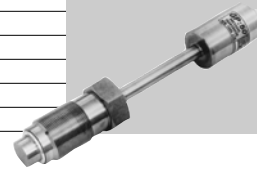
ACCURACY:

- 0.5% FSO

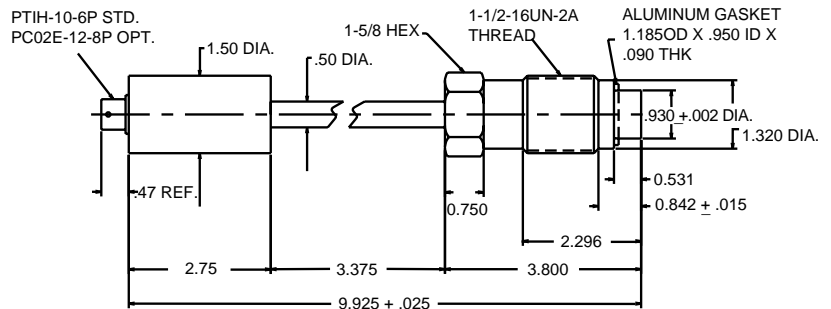
MODEL	OUTPUT @ 70°F	EXCITATION
130/131	3.33 mV/V ± 2% FSO	3.5-15 Vdc
230/231	5.0 Vdc ± 2% FSO	9-40 Vdc
330/331	4-20 mA ± 2% FSO	9-36 Vdc

PLASTIC MELT PRESSURE

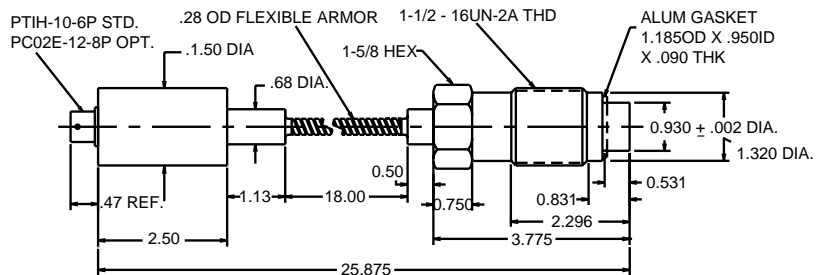
OUTLINE



MODEL 30-IA*



MODEL 31-IA*



* Some options will affect dimensions. Consult factory if important.

MODELS 130, 230, 330

These are the rigid stem versions of GP:50's plastic melt pressure transducers. Available in a standard length of 3.375 inches, they may be ordered in longer or shorter lengths to accommodate individual needs (See outline drawing & close up). The limiting minimums may be the die temperature and environment which must jointly combine to restrict the electronics and sensor from exceeding 180°F.

MODELS 131, 231, 331

The flexible tube version of the product line provides the ultimate in thermal isolation for those demanding applications reaching the upper limits of 750°F. Provided with a standard 18 inch length of flexible capillary tubing protected with a stainless steel armored jacket, (see outline drawing), the flexible capillary can be provided in shorter or longer lengths. Please call the factory for free consultation on your needs.

WIRING CODE

PTIH-10-6P	130, 131	230, 231	330, 331
A/1	+ Signal	+ Signal	+ Excit./Signal
B/2	- Signal	- Signal**	Common with D/4*
C/3	+ Excit.	+ Excit.	NC
D/4	- Excit.	- Excit.**	- Excit./Signal
E/5	Calibrate	Calibrate	NC Option ME
F/6	Calibrate	Calibrate	NC Option ME
PC02E-12-8P	130, 131	230, 231	330, 331
A/1	+ Excit.	+ Excit.	+ Excit./Signal
B/2	+ Signal	+ Signal	NC
C/3	- Excit.	- Excit.**	NC
D/4	- Signal	- Signal**	- Excit./Signal
E/5	Cal. (Common)	Cal. (Common)	NC Option ME
F/6	Cal. (Int. Res)	Cal. (Int. Res.)	NC Option ME
G/7	NC	NC	NC
H/8	Cal. (Ext. Res.)	Cal. (Ext. Res.)	NC
Pigtail	330, 331		
Red	+ Excit./Signal		
Black	- Excit./Signal		
Shield	NC		

* -Excit./Signal for competitor wired mating connector assemblies.
 ** - Signal and - Excitation are common to each other.

SPECIFICATIONS

Unless otherwise stated, these specifications are the standards to which the units are normally constructed. Alterations may be easily and readily accomplished by the standard modification code or by discussion with the factory. We invite your inquiry.

Full Scale Pressure Ranges - See ordering guide	
Accuracy Static Error Band (Non-linearity, Hysteresis, Non-repeatability)	± 0.5% FSO(RSS)
Material in Contact with Pressure Media	316 stainless steel
Proof Pressure	2 times full scale pressure range
Temperature Limits Diaphragm Strain Gauge Housing	750°F (400°C) Standard Fill 176°F (80°C)
Temperature Effects From Fill Zero	1 psi/100°F per inch of stem and capillary
From Strain Gauge Housing Zero	Less than ± 1.0% FSO/100°F (± 2.0% FSO/100°C)
Span	Less than ± 1.0% FSO/100°F (± 2.0% FSO/100°C)
Orientation Shift on Zero	Unit length x2 inHg, Option GJ zero and span control strongly recommended
Electricals Input Impedance Model 130, 131	350 ohm, nominal
Input Current Model 230, 231	8 mA, nominal
Load Impedance Model 130, 131	50,000 ohms minimum for less than 0.1% FSO attenuation
Model 330, 331	1350 ohms maximum, at 36 Vdc and 750 ohms at 24 Vdc
Output Current Model 230, 231	2.0 mA maximum for less than 0.1% FSO attenuation
Zero Balance Model 130, 131	0.0 mV/V ± 5% FSO @ 70°F, vertical tip down
Model 230, 231	0.0 Vdc ± 5% FSO @ 70°F, vertical tip down
Model 330, 331	4.0 mA ± 5% FSO @ 70°F, vertical tip down
Range Calibration Signal	80% ± 0.5% FSO standard 100, 200 series
Connections Pressure	1 1/2" - 16 UNF-2A thread for standard
Electrical	PTIH-10-6P, standard PT06A-10-6S (SR), standard mate (not included) See options.
Enclosed Materials	316 stainless steel
Mounting Torque	100 inch pounds
Identification	Etched stainless steel nameplate welded to body.

ORDERING GUIDE

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

Use the following codes to identify desired item.

MODEL	RANGE	TYPE	OPTIONS
• —	• —	• —	• / • / •

Example: 130-IA-PO-3-CC

MODEL

130-IA/131-IA 3.33 mV/V
 230-IA/231-IA 0-5 Vdc
 330-IA/331-IA 4-20 mA

PRESSURE RANGE

psi	bar
PO 25	UL 2
PT 30	UM 3
PV 50	UN 5
PX 75	UP 7.5
PZ 100	UQ 10
RB 150	UR 15
RD 200	US 20
RE 250	UT 30
RF 300	UV 50
RH 500	UX 75
RJ 600	
RK 750	
RM 1000	

PRESSURE TYPE

2 Gauge
 3 Absolute
 6 Sealed Gauge

OPTIONS

AA None (standard connector PTIH-10-6P)

ALTERNATE CONNECTOR OR CABLE

CC Bendix PCO2E-12-8P (8 pin)
 CD Cannon WK6-32S
 CF 1/2" NPT (M) thread with 36" leads for conduit connection

GENERAL

GB Alternate Electronic Output - specify zero and span output values
 GJ Add Zero and Span Controls. (Approximately $\pm 20\%$ FSO adjustment)
 GN 12.5" Rigid Stem
 GO 9" Rigid Stem
 GP Hastelloy C-276 Diaphragm and Thread
 GS 0-10 Vdc FSO, Model 2xx only, (Requires 16-32 Vdc excitation)
 GT 30" Armored Capillary Tube
 GV Silicone Oil Fill. (Increases Thermal Shift) Consult factory, 600°F max
 GX Mineral Oil Fill. (Increases Thermal Shift) Consult factory, 600°F max
 GZ Customer Special
 HS 9" Armored Capillary Tube
 HT 24" Rigid Stem
 HU 4" Rigid Stem
 HV 24" Armored Capillary Tube
 HY 12" Armored Capillary Tube
 JW Titanium Nitride-Coated Diaphragm & Threads
 ME Internal Calibration Resister set to 80% $\pm 0.5\%$ FSO (for 300 series units)
 MO Gentran Wiring
 MP Barber-Coleman Wiring

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