

SPACE RESTRICTED, HIGH PRESSURE TRANSDUCER/TRANSMITTER

Model 131, 231, 331 with IB option



FEATURES:

- All-welded stainless steel construction
- Exposed capillary and jam bushing for confined spaces
- State-of-the-art circuitry allows heavier diaphragm and increased fatigue life
- Standard options for every requirement

PRESSURE RANGES:

- From 0-500 to 0-30,000 psig
(See ordering guide)

ACCURACY:

- $\pm 1.0\%$ FSO, 500 psi through 3000 psi
- $\pm 0.25\%$ FSO, 5000 psi through 30,000 psi

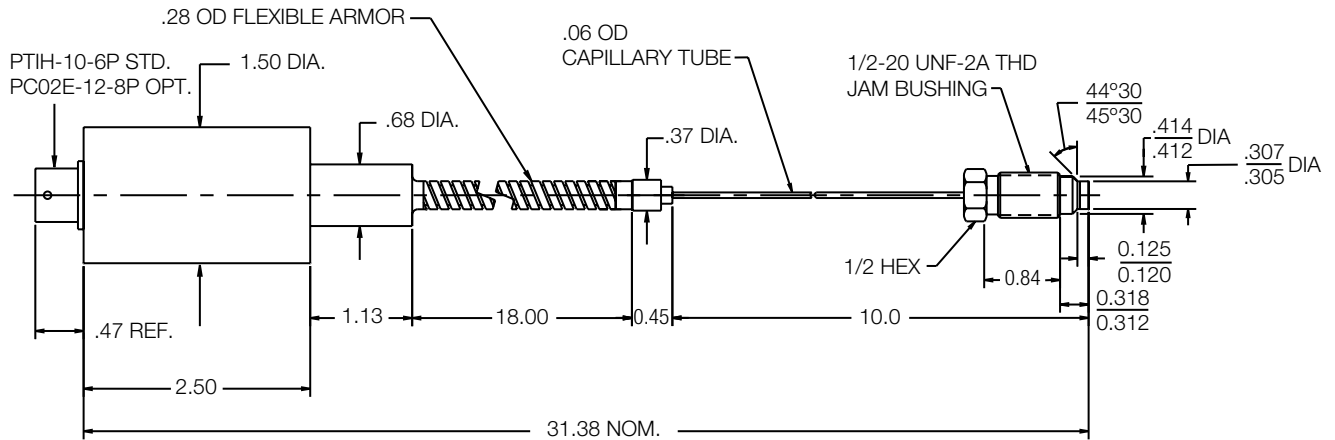
MODEL	OUTPUT @ 70°F	EXCITATION
131	3.33 mV/V $\pm 2\%$ FSO	3.5 - 15 Vdc
231	5.0 Vdc $\pm 2\%$ FSO	9 - 40 Vdc
331	4-20 mA $\pm 2\%$ FSO	9 - 36 Vdc

PLASTIC MELT PRESSURE

OUTLINE



Some options will affect dimensions.
Consult factory if important.



WIRING CODE

MODELS 131, 231, 331

The flexible tube 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 stainless steel armored capillary tubing and approximately 10" of exposed capillary, (see outline drawing), they can be provided in shorter or longer lengths, with or without the armor, for machine geometries requiring alternative packages. Many variations are possible. Please call the factory for free consultation on your needs.

PTIH-10-6P	131	231	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-12P	131	231	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

* -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)	± 1.0% FSO(RSS) 500 through 3000 psi ± .25% FSO(RSS) 5000 through 30000 psi
Material in Contact with Pressure Media	15-5 PH stainless steel and hard chrome plated diaphragm surface
Proof Pressure	2 times full scale pressure range or 35,000 psi whichever is less
Temperature Limits	
Diaphragm	750°F (400°C)
Strain Gauge Housing	176°F (80°C)
Temperature Effects from Diaphragm	
From Fill	
Zero	8 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)
Electricals	
Input Impedance	
Model 131	350 ohm, nominal
Input Current	
Model 231	8 mA, nominal
Load Impedance	
Model 131	50,000 ohms minimum for less than 0.1% FSO attenuation
Model 332	1350 ohms maximum, at 36 Vdc
Output Current	
Model 231	2.0 mA maximum for less than 0.1% FSO attenuation
Zero Balance	
Model 131	0.0 mV/V ± 5% FSO @ 70°F
Model 231	0.0 Vdc ± 5% FSO @ 70°F
Model 331	4.0 mA ± 5% FSO @ 70°F
Range Calibration Signal	80% ± 0.5% FSO standard 100, 200 series
Connections	
Pressure	1/2" - 20 UNF-2A jam bushing standard
Electrical	PTIH-10-6P, standard PT06A-10-6S (SR), standard mate (not included) See options.
Enclosed Materials	316 stainless steel
Mounting Torque	500 inch pounds, maximum
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	PORT	OPTIONS
•	—	• / • / •

Example: 131-IB-RV-CF/GJ

MODEL

131-IB 3.33 mV/V
 231-IB 5 Vdc
 331-IB 4-20 mA

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	UH	1400
SD	20000	UB	1500
SF	30000	UC	2000
SZ	Other		

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.

OPTIONS

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

ALTERNATE CONNECTOR OR CABLE

CC Bendix PC02E-12-8P,
 [Mate: PC06A-12-8S-(SR), not included]
 CD Cannon WK6-32S,
 [Mate: WK6-21C, not included]
 CF 1/2" NPT(M) thread with 24" potted leads
 CZ Alternate connector/ cable/ other

ALTERNATE PRESSURE PORT

FB M18 X 1.5 Metric jam bushing
 FG M14 X 1.5 Metric jam bushing
 FZ Non-Standard pressure port

GENERAL

GB Alternate Electronic Output - specify zero and span output values
 GP Hastelloy C-276 Diaphragm and Thread
 GQ Boron-Hardened diaphragm
 GS 0-10 Vdc FSO, Model 2xx only, (Requires 16-32 Vdc excitation)
 GT 30" Armored Capillary Tube (exposed capillary approx. 10")
 GV Silicone Oil Fill. (Increases Thermal Shift) Consult factory
 GX Mineral Oil Fill. (Increases Thermal Shift) Consult factory
 HS 9" Armored Capillary Tube (exposed capillary approx. 19")
 HV 24" Armored Capillary Tube (exposed capillary approx. 10")
 HY 12" Armored Capillary Tube (exposed capillary approx. 16")
 JW Titanium Nitride-Coated Diaphragm & Threads
 ME Internal Calibration Resister set to 80% ±0.5% FSO
 (for 300 series units)
 GJ Add Zero and Span Controls. (Approximately ±20% FSO adjustment)
 GZ Customer Special
 MO Gentran Wiring
 MP Barber-Coleman Wiring