

# FLANGE MOUNTED LOW PRESSURE TRANSDUCER/TRANSMITTER

**Models 130, 230, 330**  
**131, 231, 331 w/ FX/FY option**

Shown with Option CF  
1/2" NPT conduit



## 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)

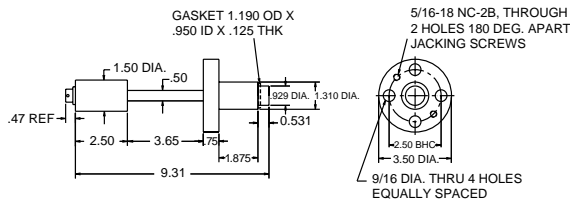
## ACCURACY:

- 0.5% FSO

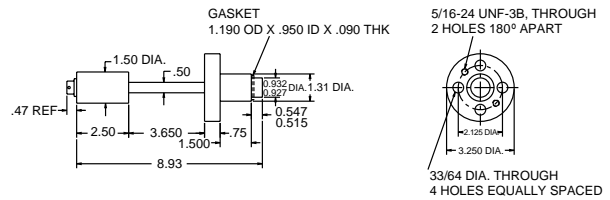
MODEL	OUTPUT @ 70°F	EXCITATION
130/131	3.33 mV/V ± 2% FSO	3.5-15 Vdc
230/231	5.0 Vdc ± 2% FSO	9-40 Vdc
330/331	4-20 mA ± 2% FSO	9-36 Vdc

# OUTLINE

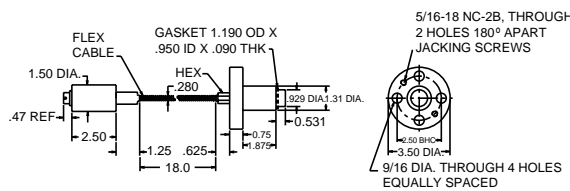
## MODEL 30-FX



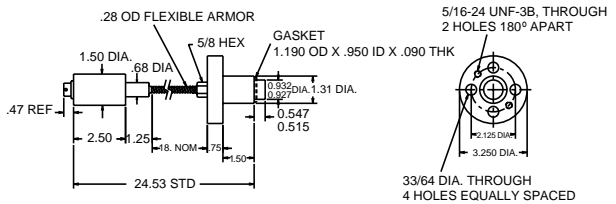
## MODEL 30-FY



## MODEL 31-FX



## MODEL 31-FY



## MODELS 130, 230, 330

These are the rigid stem versions of GP:50's plastic melt pressure transducers. Available in a standard length of 3.65 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	* -Excit./Signal for competitor wired mating connector assemblies. ** - Signal and - Excitation are common to each other.	
Red	+ Excit./Signal		
Black	- Excit./Signal		
Shield	NC		

# 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	3.5" OD Flange (FX option) 3.25" OD Flange (FY option)
Electrical	PTIH-10-6P, standard PT06A-10-6S (SR), standard mate (not included) See options.
Enclosed Materials	316 stainless steel
Mounting Torque	110 inch pounds max
Identification	Etched stainless steel nameplate welded to body.

# ORDERING GUIDE

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

Some options will affect dimensions.  
Consult factory if important.

Use the following codes to identify desired item.

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

Example: 130-FX-PO-3-CC

## MODEL

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

## FLANGE

FX 3.25"  
FY 3.50"

## 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 Nose  
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  
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.