

PRESSURE TRANSDUCER/TRANSMITTER with HART COMMUNICATION

Models 330-QO (Rigid Stem only)
331-QO (Rigid with Flex)
335-QO (with Temperature)



FEATURES:

- All-welded stainless steel construction
- HART communication, compatible with HART communicator
- 3:1 Ranging
- Interchangeable with existing systems
- State-of-the-art circuitry allows heavier diaphragm and increased fatigue life
- FM Explosion Proof Available (Class I, II, III, Division I, Groups A, B, C, D, E, F, G)

PRESSURE RANGES:

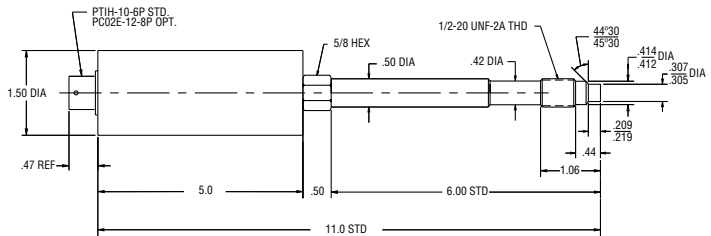
- From 0-500 to 0-30,000 psi

ACCURACY:

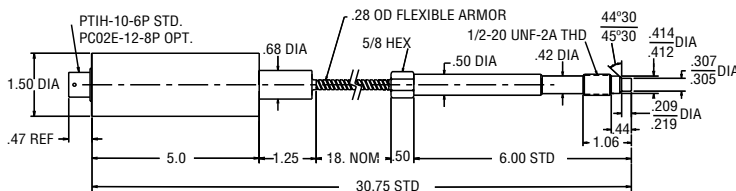
- $\pm 0.25\%$ FSO

| OUTPUT @ 70°F | EXCITATION |
|-----------------------|------------|
| 4-20 mA $\pm 2\%$ FSO | 9 - 36 Vdc |

MODEL 330

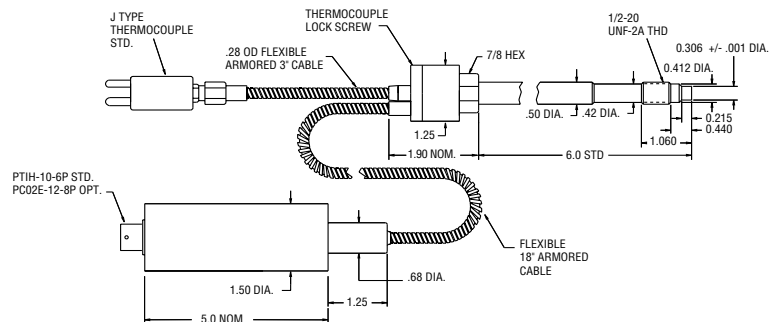


MODEL 331



Some options will affect dimensions. Consult factory if important.

MODEL 335



WIRING CODE

| PTIH-10-6P | 330, 331, 335 |
|------------|-----------------|
| A/1 | + Excit./Signal |
| B/2 | Common with D/4 |
| C/3 | NC |
| D/4 | - Excit./Signal |
| E/5 | NC Option ME |
| F/6 | NC Option ME |

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 Output | 4-20 mA \pm 2% FSO |
| Accuracy | |
| Static Error Band (Non-linearity, Hysteresis, Non-repeatability) | \pm 0.25% FSO (RSS) |
| Material in Contact with Pressure Media | 15-5 PH stainless steel and hard chrome plated diaphragm surface (other options available, see ordering guide) |
| 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 | 12 psi/100°F per inch of stem and capillary |
| From Strain Gauge Housing | |
| Zero | Less than \pm 1.0% FSO/100°F (\pm 2.0% FSO/100°C) |
| Span | Less than \pm 1.0% FSO/100°F (\pm 2.0% FSO/100°C) |
| Electricals | |
| Load Impedance | 50,000 ohms minimum for less than 0.1% |
| FSO attenuation | 1350 ohms maximum, at 36 Vdc |
| Zero Balance | 4.0 mA \pm 5% FSO @ 70°F |
| Connections | |
| Pressure | 1/2" - 20 UNF-2A |
| Electrical | PTIH-10-6P, standard |
| Enclosed Materials | 316 stainless steel |
| Mounting Torque | 500 inch pounds, maximum |

ORDERING GUIDE

Use the following codes to identify desired item.

| MODEL | RANGE | OPTIONS |
|-------|-------|-----------|
| • | — | • / • / • |

Example: 330-QO-RV-CF/GP

MODEL

| | |
|---------|------------------------|
| 330-QO | 4-20 mA HART |
| 331-QO | 4-20 mA HART |
| 335-QO | 4-20 mA HART |
| 330X-QO | 4-20 mA HART, Expl Prf |
| 331X-QO | 4-20 mA HART, Expl Prf |
| 335X-QO | 4-20 mA HART, Expl Prf |

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.

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

OPTIONS

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

ALTERNATE CONNECTOR

CC Bendix PC02E-12-8P
CF 1/2" NPT(M) thread with 60" potted leads

ALTERNATE PRESSURE PORT

FB* M18 X 1.5 Metric
FG* M14 X 1.5 Metric
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
GV Silicone Oil Fill. (Increases Thermal Shift) Consult factory
GX Mineral Oil Fill. (Increases Thermal Shift) Consult factory
JW Titanium Nitride-Coated Diaphragm & Threads
QJ* NaK Fill for 750° max applications
GW* NaK Fill with Inconel diaphragm and stem for 1000° max
QS Diamond Coating
GZ Customer Special

RIGID STEM

GN 12 1/2" Rigid Stem
GO 9" Rigid Stem
HD 3" Rigid Stem
HJ 1 3/16" Rigid Stem
HT 24" Rigid Stem
MU Non-standard Rigid Stem

FLEX TUBING

GT 30" Armored Capillary Tube (exposed capillary approx. 10")
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")
MT Non-standard Armored Capillary Tube (50" max)

* Not available on Models 330X, 331X, 335X

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