

## 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



PLASTIC MELT PRESSURE

#### WIRING CODE

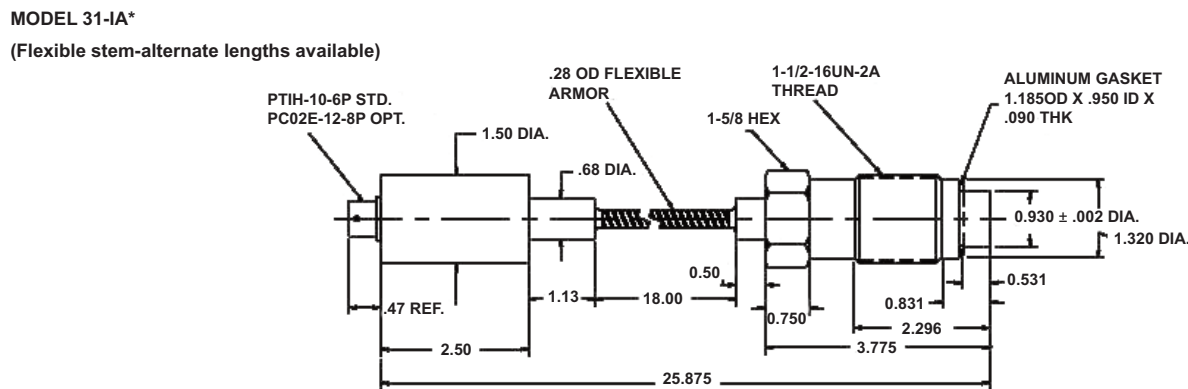
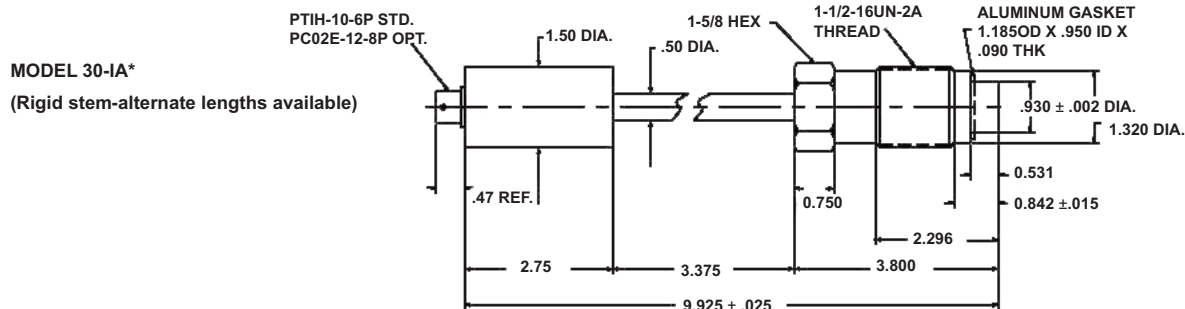
| PTIH-10-6P | 130, 131  | 230, 231   | 330, 331         |
|------------|-----------|------------|------------------|
| A/1        | + SIGNAL  | + SIGNAL   | + EXC./SIGNAL    |
| B/2        | - SIGNAL  | - SIGNAL** | COMMON WITH D/4* |
| C/3        | + EXC.    | + EXC.     | NC               |
| D/4        | - EXC.    | - EXC.**   | - EXC./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         | + EXC.           | + EXC.           | + EXC./SIGNAL |
| B/2         | + SIGNAL         | + SIGNAL         | NC            |
| C/3         | - EXC.           | - EXC.**         | NC            |
| D/4         | - SIGNAL         | - SIGNAL**       | - EXC./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     | + EXC./SIGNAL |
| BLACK   | - EXC./SIGNAL |
| SHIELD  | NC            |

\* -Excit./Signal for competitor wired mating connector assemblies.

\*\* - Signal and - Excitation are common to each other.



\* Some options may affect dimensions.

A5SL-30-IA.00



Specifications reflect standard product, improved performance/mechanical options available. Modifications may alter specs, consult factory for more information.

|   |   |                        |
|---|---|------------------------|
| <b>Full Scale Pressure Ranges - See ordering guide</b>              |   |                        |
| <b>Accuracy</b>   |   |                        |
| Static Error Band<br>(Non-linearity, Hysteresis, Non-repeatability) | ± 0.5% FSO(RSS)   |                        |
| <b>Material in Contact with Pressure Media</b>                      | 316 stainless steel   |                        |
| <b>Proof Pressure</b>   | 2 times full scale pressure range   |                        |
| <b>Temperature Limits</b>   |   |                        |
| Diaphragm   | 750°F (400°C) Standard Fill   |                        |
| Strain Gauge Housing  | 176°F (80°C)  |                        |
| <b>Temperature Effects</b>  |   |                        |
| 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<br>(± 2.0% FSO/100°C)                          |                        |
| Span  | Less than ± 1.0% FSO/100°F<br>(± 2.0% FSO/100°C)                          |                        |
| <b>Orientation Shift on Zero</b>                                    | Unit length x2 inHg, Option GJ zero and span control strongly recommended |                        |
| <b>Electricals</b>  |   |                        |
|   | <b>Excitation Voltage</b>   | <b>Output at 70° F</b> |
| Model 130/131   | 3.5-15 Vdc  | 3.33 mV/V ±2% FSO      |
| Model 230/231   | 9-40 Vdc  | 5.0 Vdc ±2% FSO        |
| Model 330/331   | 9-36 Vdc  | 4-20 mA ±2% FSO        |
| 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                                   |                        |
| <b>Connections</b>  |   |                        |
| Pressure  | 1 1/2" - 16 UNF-2A thread for standard PTIH-10-6P, standard               |                        |
| Electrical  | PT06A-10-6S (SR), standard mate (not included) See options.               |                        |
| <b>Enclosed Materials</b>   | 316 stainless steel   |                        |
| <b>Mounting Torque</b>  | 100 inch pounds   |                        |
| <b>Identification</b>   | Etched stainless steel nameplate welded to body.                          |                        |

## ORDERING GUIDE:

Use the following codes to identify desired item.

| MODEL | RANGE | TYPE | OPTIONS |
|-------|-------|------|---------|
| •     | -     | •    | - •/•/• |

Example: 130-IA-PO-3-CC

|                       |              |              |       |
|-----------------------|--------------|--------------|-------|
| <b>MODEL</b>          |              |              |       |
| 130-IA/131-IA         | 3.33 mV/V    |              |       |
| 230-IA/231-IA         | 0-5 Vdc      |              |       |
| 330-IA/331-IA         | 4-20 mA      |              |       |
| <b>PRESSURE RANGE</b> |              |              |       |
| <b>(PSI)</b>          |              | <b>(BAR)</b> |       |
| PO 25                 | RE 250       | UL 2         | US 20 |
| PT 30                 | RF 300       | UM 3         | UT 30 |
| PV 50                 | RH 500       | UN 5         | UV 50 |
| PX 75                 | RJ 600       | UP 7.5       | UX 75 |
| PZ 100                | RK 750       | UQ 10        |       |
| RB 150                | RM 1000      | UR 15        |       |
| RD 200                |              |              |       |
| <b>PRESSURE TYPE</b>  |              |              |       |
| 2                     | Gauge        |              |       |
| 3                     | Absolute     |              |       |
| 6                     | Sealed Gauge |              |       |

|                                     |  |
|-------------------------------------|--|
| <b>OPTIONS</b>                      |  |
| AA                                  | None (standard connector PTIH-10-6P)                                       |
| <b>ALTERNATE CONNECTOR OR CABLE</b> |  |
| CC                                  | Bendix PC02E-12-8P (8 pin)   |
| CD                                  | Cannon WK6-32S,  |
| CF                                  | 1/2" NPT(M) thread with 36" leads for conduit connection                   |
| <b>GENERAL</b>                      |  |
| GB                                  | Alternate Electronic Output - specify zero and span output values          |
| GJ                                  | Add Zero and Span Controls. (Approximately ± 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% ± 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 specifications stated throughout this brochure without prior notification. Please contact the factory on all critical dimensions and specifications for verification.