



### GAGE. ABSOLUTE. ACCURATE.

#### COMPACT AND COMPLETELY SEALED

The 584 is designed as an extremely rugged yet inexpensive pressure transmitter with sealed external zero and span adjustments.

#### APPROVAL OPTIONS

Model 584 qualifies for FM, CSA, CE, and ATEX ratings. The stainless steel construction makes the 584 extremely resistant to damaging pressure spikes and shocks. The 584 is even more durable thanks to hermetically sealed electronics and high corrosion resistance. The 584 provides a 4 to 20 mA output signal, available ranges between 100 and 15K PISIS, and accuracy to  $\leq \pm 0.20\%$ .

The signal conditioner allows for 3:1 ranging of the standard pressure ranges.

#### JUST ONE PART OF A COMPLETE LINE OF SOLUTIONS FROM VIATRAN

The 584 represents one transmitter in a family of sensors designed for the process control industry. The model 544 has a similar rugged design for low-pressure measurement. Our X70 models are a mid-to-high cost transmitter without external adjustments. Fully adjustable, the model 571 includes 5:1 ranging and a built-in calibration signal. For differential pressure measurement, try the model IDP10.

Viatran's small and rugged Model 584 pressure transmitter is built to provide accurate and stable measurement in medium to high pressures.

#### FEATURES

- Hermetically sealed external controls  
Watertight/submersible
- All stainless steel enclosure
- FM, CSA, ATEX, CE approvals available  
contact Viatran for details
- 4-20 mA

#### TYPICAL APPLICATIONS

- Offshore oil rigs
- Shipboard/Marine
- Pulp and paper
- Chemical processing
- Water treatment
- Oil pumping



An ISO 9001:2001 Certified Company

## SPECIFICATIONS

### PERFORMANCE

|  |                             |
|--|-----------------------------|
| Full Scale Pressure Range (FSPR)       | 0-100 thru 0-15K PSIG, PSIS |
| Non-linearity (Best fit straight line) | ≤ 0.20% FSO                 |
| Hysteresis & Repeatability             | ≤ ±0.05% FSO                |
| Full Scale Output (FSO)                | 16 mA at 70°F               |
| Resolution                             | Infinite                    |
| Long Term Stability                    | ≤±0.25% FSO per 6 months    |
| Thermal Zero shift                     | ≤±1.0% FSO per 100°F        |
| Thermal Span shift                     | ≤±1.0% FSO per 100°F        |
| Compensated Temperature limits         | 0°F to +180°F               |
| Operating temperature range            | -40°F to +185°F             |
| Non-operating temperature range        | -65°F to 250°F              |


### ELECTRICAL

|                         |   |
|-------------------------|---|
| Supply Voltage          | 12 to 30 VDC  |
| Power Supply Regulation | ≤±0.02% FSO per volt  |
| Output Signal           | 4-20 mA at 70°F   |
| Load Impedance          | 1500 Ohms maximum at 40 VDC   |
| Zero Adjustment         | ≤ ± 20% FSO per volt  |
| Span Adjustment         | Rangeable down 3:1 from standard range  |
| Circuit Protection      | Varistor protected across the input leads for surges above 40V and currents to 250A peak with a pulse width of 8x20 µSec. Reverse polarity protected. |
| Bridge Resistance       | 5K Ohms nominal   |
| Insulation Resistance   | ≥200 MegOhms to case ground   |
| RFI/EMI Suppression     | Negligible to 500 MHz at 5 Watts direct contact   |
| Electrical Connection   | 1/2" NPT Male, 18 AWG, 72"  |
| Red                     | +Signal   |
| Black                   | -Signal   |
| Green                   | Case Ground   |

### MECHANICAL

|                          |  |
|--------------------------|--|
| Pressure connection      | 1/4" NPT female                              |
| Proof pressure           | 1.5 times FSPR or 20K PSI, whichever is less |
| Burst pressure           |  |
| 0-100 thru 0-3K PSI      | ≥5 times FSPR                                |
| Up to 5K PSI             | ≥4 times FSPR                                |
| 7.5K thru 10K PSI        | ≥2.7 times FSPR                              |
| Up to 15K PSI            | ≥2.3 times FSPR                              |
| Shock Limitation         | 100 G's                                      |
| Weight                   | 24oz.  |
| Material of Construction |  |
| Wetted parts             | 15-5 PH stainless steel                      |
| Housing                  | 316 and 15-5 PH stainless steel              |
| Enclosure Classification | NEMA/Type 4x                                 |
| Identification           | Laser etched on body                         |

### CERTIFICATIONS

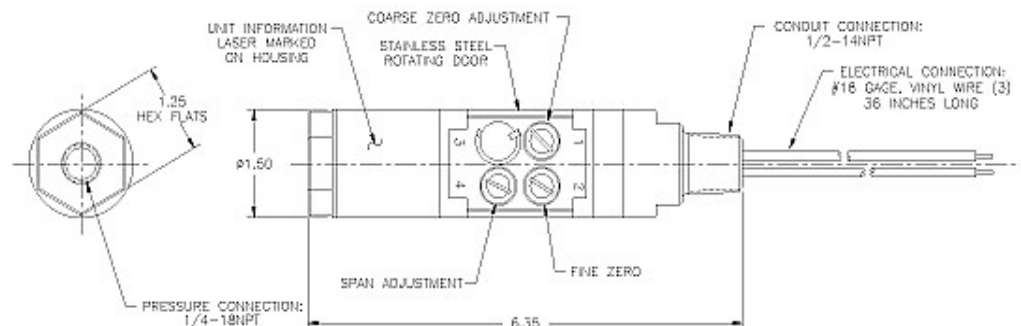
|      |  |
|------|--|
| FM   | Consult factory for available Options<br><b>Intrinsic Safety:</b> Class I, II, III, Division 1, Groups A-G, and AEx ia IIC, T4 at Ta=80°C, T5 at Ta=40°C, Indoor and Outdoor NEMA/Type 4X Hazardous Locations<br><b>Explosion Proof:</b> for use in Class I, Division 1, Groups A-D, Class II, Groups E,F,G, Class III, AEx d IIC, T5 at Ta=88°C, NEMA/Type 4X, Hazardous Locations<br><b>Nonincendive:</b> Class I,II,III Div. 2, Groups A-G and Class I, Zone 2, Group IIC, T4 at Ta=80°C, T5 at Ta=40°C |
| CSA  | <b>Intrinsic Safety:</b> Class I, Div. 1, A-D Class II, E-G, Class III, Ex ia IIC T4 at Ta=80°C, T5 at Ta=40°C<br><b>Explosion Proof:</b> Class I, A-D, Class II, E-G Class III Hazardous Locations.   |
| ATEX | <b>Flameproof:</b>  II 2 G<br>EEx d IIC, T5 (-20°C ≤ Ta ≤ 80°C)   |
| CE   | <b>EMC Directive 89/336/EEC and Low Voltage Directive 72/23/EEC</b><br>EN 61010-101993/A2:1995: Low Voltage Standard<br>EN 61326: EMC Conformity Standard<br><b>PED Directive 97/23/EC</b>   |

### OPTIONS (Codes)

|       |  |
|-------|--|
| BB    | Mini change electrical connector           |
| BP    | Micro change electrical connector          |
| DF    | Bleed port (10K PSI and below)             |
| DG    | Improved temperature and compensation      |
| DQ    | Cleaning for oxygen service                |
| EA    | Special calibration run                    |
| ME    | CSA Explosion Proof label                  |
| NG    | ATEX Flameproof label (consult factory)    |
| NH    | Customer specified identification          |
| NJ    | CE label                                   |
| NSR   | Non standard range                         |
| NX    | CSA Intrinsic Safety label                 |
| NY    | FM Explosion Proof label                   |
| NZ    | FM Nonincendive label                      |
| TF    | FM Intrinsic Safety label                  |
| Q ( ) | Hastelloy, Inconel or 316 SST wetted parts |
| W ( ) | Alternate pressure ports                   |
| Y ( ) | Alternate pressure ports                   |
| Z ( ) | Alternate electrical connection            |
| ZU    | Direct coupled cable                       |

### ACCESSORIES

Mounting Bracket  
Conduit Connection Box  
Loop Powered Digital Indicator



Note: Application of some available options may affect standard performance. Consult your Viatran Process team member for details



This information is accurate to the best of the manufacturer's knowledge, however, we reserve the right to change specifications at any time.