

TA284 Series

Dual Output Sensor, Temperature & Acceleration, M8x1.25 Captive Bolt, Side Exit 3 Pin Connector, 100 mV/g, 10 mV/°C, ±10%

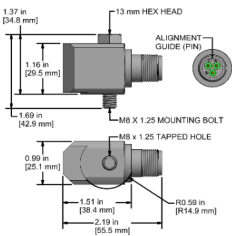


Product Features

- High Performance in a Low Cost Sensor
- Helps to Detect Bearing Defects and Temperature Changes
- ▶ Temperature (10 mV/°C) and Acceleration (100 mV/g) Outputs in One Sensor via a Standard 3 Pin MIL Connection
  - ▶ Popularly sold with SC300 Series Signal Conditioners with built-in Temperature Output

TA284-1A  
3 Pin Connector

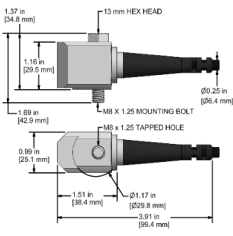
| Connector | Polarity                |
|-----------|-------------------------|
| Pin       |                         |
| A         | (+) Signal/Power        |
| B         | (-) Common              |
| C         | (+) Temperature Voltage |



Stock Product

TA284-2A  
CB105 Integral Cable

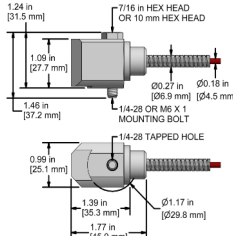
| Conductor | Polarity                |
|-----------|-------------------------|
| Red       | (+) Signal/Power        |
| Black     | (-) Common              |
| White     | (+) Temperature Voltage |
| Shield    | Cable Drain Wire        |



Built To Order

TA284-3A  
CB218 Armored Integral Cable

| Conductor | Polarity                |
|-----------|-------------------------|
| Red       | (+) Signal/Power        |
| Black     | (-) Common              |
| White     | (+) Temperature Voltage |
| Shield    | Cable Drain Wire        |



Built To Order

| Specifications                | Standard                                | Metric       | Specifications              | Standard             | Metric        |
|-------------------------------|-----------------------------------------|--------------|-----------------------------|----------------------|---------------|
| Part Number                   | TA284                                   |              | Environmental               |                      |               |
| Sensitivity (±10%)            | 100 mV/g                                |              | Operating Temperature Range | -40 to 250°F         | -40 to 121°C  |
| Frequency Response (±3dB)     | 30-900,000 CPM                          | 0.5-15 Hz    | Maximum Shock Protection    | 5,000 g, peak        |               |
| Frequency Response (±10%)     | 120-600,000 CPM                         | 2.0-10 Hz    | Electromagnetic Sensitivity | CE                   |               |
| Dynamic Range                 | ± 50 g, peak<br>*Vsource ≥ 22V, 12Vbias |              | Sealing                     | IP68                 |               |
| Temperature Measurement Range | -40 to 250°F                            | -40 to 121°C | Submersible Depth           | 200 ft.              | 60 m          |
| Temperature Output            | 10 mV/°C<br>750 mV = 25 °C (±1)         |              | SIL Rating                  | SIL 2                |               |
| Temperature Sensor            |                                         |              | Physical                    |                      |               |
| Settling Time                 | <2.5 seconds                            |              | Sensing Element             | PZT Ceramic          |               |
| Voltage Source (IEPE)         | 18-30 VDC                               |              | Sensing Structure           | Shear Mode           |               |
| Constant Current Excitation   | 2-10 mA                                 |              | Weight                      | 6.3 oz               | 180 grams     |
| Spectral Noise @ 10 Hz        | 14 µg/√Hz                               |              | Case Material               | 316L Stainless Steel |               |
|                               |                                         |              | Connector (Non-Integral)    | 3 Pin MIL-C-5015     |               |
|                               |                                         |              | Resonant Frequency          | 1,380,000 CPM        | 23000 Hz      |
|                               |                                         |              | Mounting Torque             | 2 to 5 ft. lbs.      | 2.7 to 6.8 Nm |
|                               |                                         |              | Mounting Hardware Supplied  | M8x1.25 Captive      |               |