

TA233 Series

Dual Output Sensor, Temperature & Acceleration, Top Exit 3 Pin Connector, 500 mV/g, 10 mV/°C, ±10%



Product Features

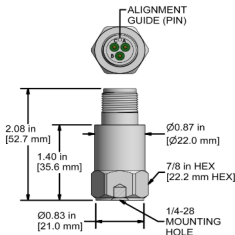
High Performance in a Low Cost Sensor

Helps to Detect Bearing Defects and Temperature Changes

- ▶ Temperature (10 mV/°C) and Acceleration (500 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

TA233-1A  
3 Pin Connector

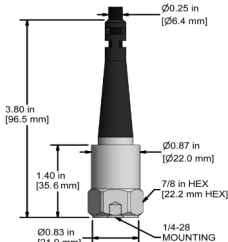
| Connector | Polarity                |
|-----------|-------------------------|
| Pin       |                         |
| A         | (+) Signal/Power        |
| B         | (-) Common              |
| C         | (+) Temperature Voltage |



Stock Product

TA233-2A  
CB105 Integral Cable

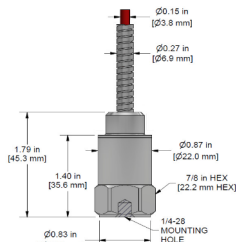
| Conductor | Polarity                |
|-----------|-------------------------|
| Red       | (+) Signal/Power        |
| Black     | (-) Common              |
| White     | (+) Temperature Voltage |
| Shield    | Cable Drain Wire        |



Built To Order

TA233-3A  
CB218 Amored Integral Cable

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



Built To Order

| Specifications                | Standard                                | Metr         | Specifications              | Standard                 | Metric        |
|-------------------------------|-----------------------------------------|--------------|-----------------------------|--------------------------|---------------|
| Part Number                   | TA233                                   | M/ or M8/TA2 | Environmental               |                          |               |
| Sensitivity (±10%)            | 500 mV/g                                |              | Operating Temperature Range | -40 to 250 °F            | -40 to 121 °C |
| Frequency Response (±3dB)     | 6-600,000 CPM                           | 0,1-100 Hz   | Maximum Shock Protection    | 5,000 g, peak            |               |
| Frequency Response (±10%)     | 36-180,000 CPM                          | 0,6-301 Hz   | Electromagnetic Sensitivity | CE                       |               |
| Dynamic Range                 | ± 10 g, peak<br>*Vsource ≥ 22V, 12Vbias |              | Sealing                     | Welded, Hermetic         |               |
| Temperature Measurement Range | -40 to 250 °F                           | -40 to °C    | SIL Rating                  | SIL 2                    |               |
| Temperature Output            | 10 mV/°C                                |              | Physical                    |                          |               |
| Temperature Sensor            | 750 mV = 25 °C (±1)                     |              | Sensing Element             | PZT Ceramic              |               |
| Settling Time                 | 5 Seconds                               |              | Sensing Structure           | Shear Mode               |               |
| Voltage Source (IEPE)         | 18-30 VDC                               |              | Weight                      | 3.7 oz                   | 104 grams     |
| Constant Current Excitation   | 2-10 mA                                 |              | Case Material               | 316L Stainless Steel     |               |
| Spectral Noise @ 10 Hz        | 14 µg/√Hz                               |              | Mounting Thread             | 1/4-28 Blind Tapped Hole |               |
|                               |                                         |              | Connector (Non-Integral)    | 3 Pin MIL-C-5015         |               |
|                               |                                         |              | Resonant Frequency          | 960,000 CPM              | 16000 Hz      |