

TA253 Series

Low Cost, Low G, Dual Output Sensor, Temperature & Acceleration, Top Exit 3 Pin Connector, 500 mV/g, 10 mV/°C, ±15%



VIBRATION ANALYSIS HARDWARE



Product Features

High Performance in a Low Cost Sensor

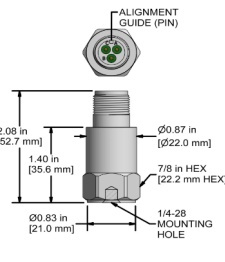
Helps to Detect Bearing Defects and Temperature Changes

- ▶ 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

TA253-1A

3 Pin Connector

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

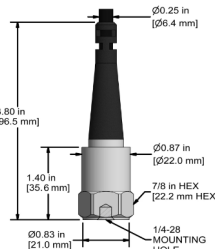


Stock Product

TA253-2A

CB105 Integral Cable

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

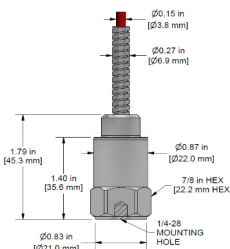


Built To Order

TA253-3A

CB218 Amored Integral Cable

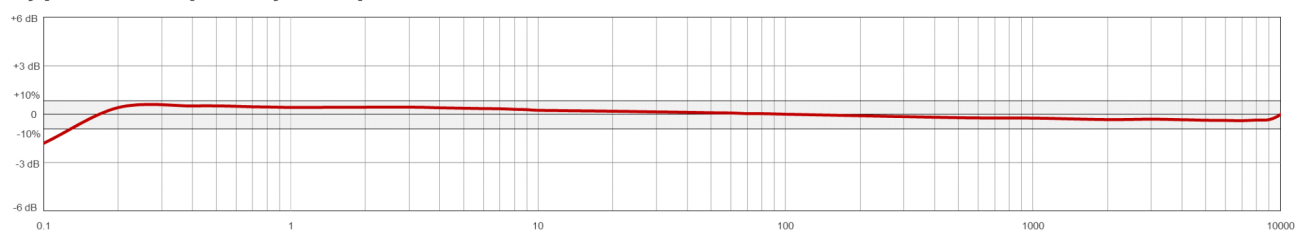
| Conductor | Polarity |
|-----------|-------------------------|
| Red | (+) Signal/Power |
| Black | (-) Common |
| White | (+) Temperature Voltage |
| Shield | Cable Drain Wire |



Built To Order

| Specifications | Standard | Metric | Specifications | Standard | Metric |
|-------------------------------|--|----------------|-----------------------------|--------------------------|------------------------------|
| Part Number | TA253 | M/ or M8/TA253 | Environmental | | |
| Sensitivity (±15%) | 500 mV/g | | Operating Temperature Range | -40 to 250 °F | -40 to 121 °C |
| Frequency Response (±3dB) | 6-600,000 CPM | 0.1-10000 Hz | Electromagnetic Sensitivity | CE | |
| Dynamic Range | ± 10 g, peak *Vsource ≥ 22V, 12Vbias | | Sealing | Welded, Hermetic | |
| Temperature Measurement Range | -40 to 250 °F | -40 to 121 °C | Physical | | |
| Temperature Output | 10 mV/°C | | Sensing Element | PZT Ceramic | |
| Electrical | | | Sensing Structure | Shear Mode | |
| Settling Time | 5 Seconds | | Weight | 3.7 oz | 104 grams |
| Voltage Source (IEPE) | 18-30 VDC | | Case Material | 316L Stainless Steel | |
| Constant Current Excitation | 2-10 mA | | Mounting Thread | 1/4-28 Blind Tapped Hole | |
| Spectral Noise @ 10 Hz | 1.7 µg/√Hz | | Connector (Non-Integral) | 3 Pin MIL-C-5015 | |
| Spectral Noise @ 100 Hz | .2 µg/√Hz | | Resonant Frequency | 960,000 CPM | 16000 Hz |
| Spectral Noise @ 1000 Hz | .12 µg/√Hz | | Mounting Torque | 2 to 5 ft. lbs. | 2.7 to 6.8 Nm |
| Output Impedance | <100 ohm | | Mounting Hardware Supplied | 1/4-28 Stud | M6x1 or M8x1.25 Adapter Stud |
| Bias Output Voltage | 10-14 VDC | | Calibration Certificate | CA10 | |
| Case Isolation | >10 ⁸ ohm | | | | |

Typical Frequency Response



Backed by our Unconditional Lifetime Warranty & Free Annual Recalibration Service

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