

Low-frequency accelerometer

787-500

SPECIFICATIONS

| | | |
|---|------------------------------|--|
| Sensitivity, $\pm 5\%$, 25°C | | 500 mV/g |
| Acceleration range, VDC > 22 V | | 10 g peak |
| Amplitude nonlinearity | | 1% |
| Frequency response¹: | $\pm 10\%$ | 0.5 - 5,000 Hz |
| | ± 3 dB | 0.2 - 10,000 Hz |
| Resonance frequency | | 22 kHz |
| Transverse sensitivity, max | | 5% of axial |
| Temperature response: | -25°C | -10% |
| | +120°C | +10% |
| Power requirement: | | |
| Voltage source | | 18 - 30 VDC |
| Current regulating diode | | 2 - 10 mA |
| Electrical noise, equiv. g: | | |
| Broadband | 2.5 Hz to 25 kHz | 250 μ g |
| Spectral | 10 Hz | 2.5 μ g/ \sqrt Hz |
| | 100 Hz | 1.5 μ g/ \sqrt Hz |
| | 1,000 Hz | 1.5 μ g/ \sqrt Hz |
| Output impedance, max | | 100 Ω |
| Bias output voltage | | 12 VDC |
| Grounding | | case isolated, internally shielded |
| Temperature range | | -50° to +120°C |
| Vibration limit | | 500 g peak |
| Shock limit | | 5,000 g peak |
| Electromagnetic sensitivity, equiv. g, max | | 70 μ g/gauss |
| Sealing | | hermetic |
| Base strain sensitivity, max | | 0.0002 g/ μ strain |
| Sensing element design | | PZT, shear |
| Weight | | 145 grams |
| Case material | | 316L stainless steel |
| Mounting | | 1/4-28 captive hex head screw, 0.046" diameter safety wire hole |
| Output connector | | 2 pin, MIL-C-5015 style |
| Mating connector | | R6 type |
| Recommended cabling | | J10 / J9T2A |

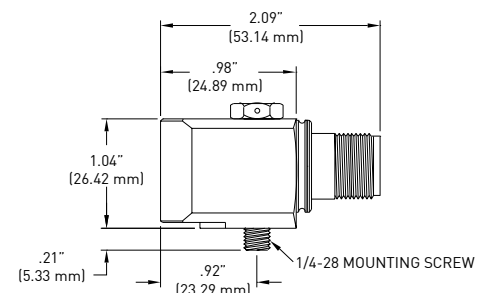
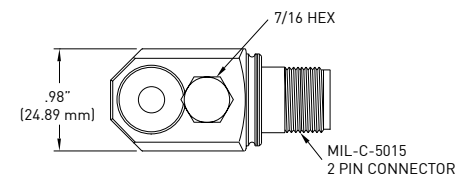
Notes: ¹ Frequency response limits, spectral and noise values are typical.

Accessories supplied: 1/4-28 captive hex head screw; calibration data (level 2)



Key features

- High sensitivity
- Clear signals at low vibration levels
- Improved signal to noise ratio
- Certified versions available for use in hazardous areas
- Manufactured in ISO 9001 facility



| Connections | |
|--------------|---------------|
| Function | Connector pin |
| power/signal | A |
| common | B |
| ground | shell |



Note: Due to continuous process improvement, specifications are subject to change without notice.
This document is cleared for public release.