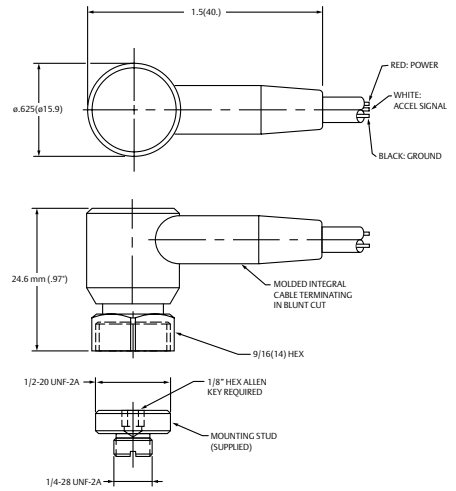
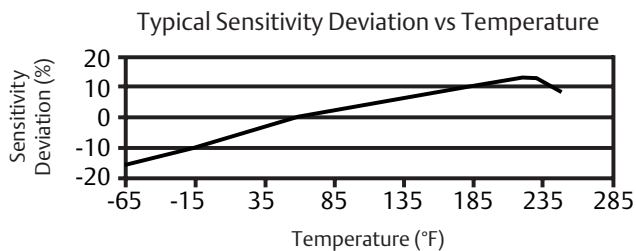


# Low-Power Accelerometer

Specially designed, high performance, low- power accelerometer for the AMS 9420 Wireless Vibration Transmitter enables up to 5 years operating life with a single SmartPower module.



| Dynamic Performance           |  |
|-------------------------------|--|
| Sensitivity (±15%)            | 25 mV/g (2.5 mV/m/s <sup>2</sup> )   |
| Measurement Range             | ±80 g (±784 m/s <sup>2</sup> )   |
| Frequency Range (±3 dB)       | 1.60 to 10,000 Hz (96 to 600,000 cpm)  |
| Mounted Resonant Frequency    | 25 kHz Nominal   |
| Broadband Resolution          | 3 mg rms (29 mm/s <sup>2</sup> )(1 to 10 KHz)  |
| Amplitude Linearity           | ±1% (0 Based Straight Line Method)   |
| Transverse Sensitivity        | ≤7%  |
| Environmental                 |  |
| Shock Limit                   | 5,000g pk (49,050 m/s <sup>2</sup> )   |
| Temperature Range             | -54 to 121°C (-65 to 250°F)  |
| Sealing                       | Epoxy  |
| Enclosure Rating              | IP68 / Hermetic  |
| Agency Ratings (All Standard) | CE<br>Exia IIC T4, AExia IIC T4<br>Exia IIC T4, 40° ≤ Ta ≤ 121°C, II 1 G<br>Cl 1 Div 1 (Groups A, B, C, D), CLII Div 1 (Groups E, F, G), CLIII Div1<br>Cl 1 Div 2 (Groups A, B, C, D), ExnL IIC T4, AExnA IIC T4<br>Ex nL IIC T4, 40° ≤ Ta ≤ 121°C, II 3 G |
| Electrical                    |  |
| Settling Time                 | ≤2 sec (Within 1% of Bias)   |
| Discharge Time Constant       | ≥0.1 sec   |
| Excitation Voltage            | 5 VDC  |
| Output Bias                   | 2.3 to 2.7 VDC   |
| Output Impedance              | <150 ohms  |
| Case Isolation                | >108 ohms  |



| Mechanical                |  |
|---------------------------|--|
| Weight                    | 23 grams (0.81 oz) Sensor Only                                 |
| Mounting Stud / Torque    | ¼-28 NPT / 2.7 to 6.8 Nm (2 to 5 lb ft)                        |
| Mounting Hex / Torque     | 9/16" Flats / 9.5 to 10.8 Nm (7 to 8 lb ft)                    |
| Sensor Element / Geometry | Ceramic / Shear  |
| Case Material             | Stainless Steel  |
| Connector Type (Side)     | Molded Integral Cable/3 Wire/<br>Tinned Leads                  |
| Supplied Accessories      |  |
| 3-Point Calibration       |  |
| Mounting Stud             |  |
| Versions                  |  |
| 1. A0394RI-1              | Green Jacket, 9 m (29.5 ft) Cable                              |
| 2. A0394RI-4              | Green Jacket, 30 m (98.4 ft) Cable                             |
| 3. A0394RA                | Armored, Green Jacket,<br>3 m (9.8 ft) Cable                   |
| 4. A0394RA-1              | Armored, Green Jacket,<br>9 m (29.5 ft) Cable                  |
| 5. A0394RA-4              | Armored 23 m (75.5 ft), Green Jacket,<br>30 m Cable            |
| 6. A0394RAC               | Armored, Teflon Coated,<br>3 m (9.8 ft) Cable                  |
| 7. A0394RAC-1             | Armored, Teflon Coated,<br>9 m (29.5 ft) Cable                 |
| 8. A0394RAC-4             | Armored 23 m (75.5 ft), Teflon Coated,<br>30 m (98.4 ft) Cable |

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