

Low Power Accelerometer with Temperature

Specially designed, high performance, low power accelerometer with temperature output for the CSI 9420 Wireless Vibration Transmitter enables up to 10 years operating life with a single SmartPower module.

DYNAMIC PERFORMANCE

Temperature Sensitivity	10 mV/°C with - 50°C offset
Acceleration Sensitivity (±15%)	25 mV/g (2.5 mV/m/s ²)
Measurement Range	±80 g (784 m/s ²)
Frequency Range (±3 dB)	1.6 to 10000 Hz (96 to 600000 cpm)
Mounted Resonant Frequency	25 kHz nominal
Broadband Resolution	3 mg rms (29 mm/s ²) (1 to 10 KHz)
Amplitude Linearity	±1% (0 based straight line method)
Transverse Sensitivity	≤7%

ENVIRONMENTAL / SAFETY

Shock Limit	5000 g pk (49050 m/s ²)
Temperature Range	-40 to 121°C (-40 to 250°F)
Sealing	Epoxy
Enclosure Rating	IP68 / Hazardous Location Approved
Agency Ratings (all standard)	CE Exia IIC T4, AExia IIC T4 Exia IIC T4, 40°≤Ta≤121°C, II 1 G Cl 1 Div 1 (Groups A, B, C, D), CLII Div 1 (Groups E, F, G), CLIII Div1 Cl 1 Div 2 (Groups A, B, C, D), ExnL IIC T4, AExnA IIC T4 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/Output Bias	5 VDC / 2.3 to 2.7 VDC
Output Impedance	<100 ohms
Case Isolation	>10 ⁹ ohms

MECHANICAL

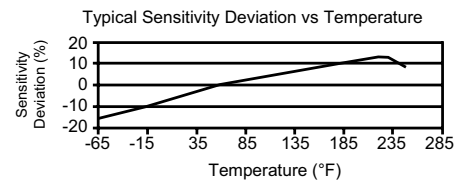
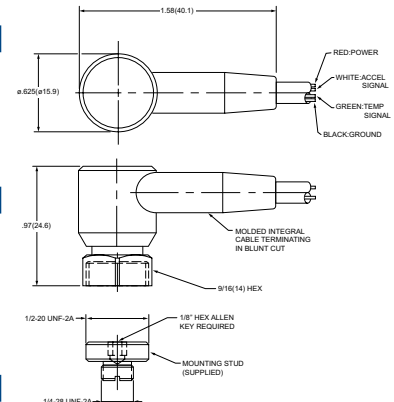
Weight	23 grams (0.81 oz) Sensor Only
Mounting Stud/Torque	¼"-28 NPT / 2.7 to 6.8 Nm (2 to 5 lb ft)
Mounting Hex/Torque	9/16" Flats / 9.5 to 10.8 Nm (7 to 8 lb ft)
Sensor Element/Geometry	Ceramic/Shear
Case Material	Stainless Steel
Connector Type (Side)	Molded Integral Cable/4 Wire/Tinned Leads

SUPPLIED ACCESSORIES

Single Point Calibration at 100 Hz
Mounting Stud

VERSIONS

1. A0394DI-1	Green Jacket, 9 meter Cable
2. A0394DI-4	Green Jacket, 30 meter Cable
3. A0394DA	Armored, Green Jacket, 3 meter Cable
4. A0394DA-1	Armored, Green Jacket, 9 meter Cable
5. A0394DA-4	Armored 23 meter, Green Jacket, 30 meter Cable
6. A0394DAC	Armored, Teflon Coated, 3 meter Cable
7. A0394DAC-1	Armored, Teflon Coated, 9 meter Cable
8. A0394DAC-4	Armored 23 meter, Teflon Coated, 30 meter Cable



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