



STI Vibration Monitoring Inc.

Vibration Monitoring and Machine Protection Systems

www.stiweb.com



CMCP780A Compact Side Entry Accelerometer



Features

- Compact Side Exit Accelerometer
- 100 mV/g $\pm 10\%$
- 150°C Max Temperature Range
- ± 80 g Dynamic Range
- 1/4"-28 UNF or M8x1.25 Captive Mounting Bolt
- Sealed to IP68
- Choice of 2 Pin MS 5015 Connector or Integral Cable (over braided or submersible)
- Shown left: 2 Pin MS 5015 Connector



Typical Applications

For tight places on Fans, Motors, Pumps, Compressors, Centrifuges, Conveyors, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, HVAC, Spindles, Machine Tooling, Process Equipment and many more.

Technical Performance

Mounted Base Resonance:	28 kHz (nominal)
Sensitivity:	100 mV/g $\pm 10\%$ Nominal 80 Hz at 22°C
Frequency Response:	2.0 Hz to 14 kHz $\pm 5\%$ (120 cpm to 840k cpm)
	1.5 Hz to 16 kHz $\pm 10\%$ (90 cpm to 960 kcpm)
	0.8 Hz to 19 kHz $\pm 3\text{dB}$ (48 cpm to 1,140 kcpm)
Isolation:	Base Isolated
Measurement Range:	± 80 g
Transverse Sensitivity:	Less than 5%

Electrical

Supply Voltage:	18-30 VDC
Current Range:	0.5 mA to 8 mA
Bias Voltage:	10-12 Vdc
Electrical Noise:	0.1 mg max
Settling Time:	1 Second
Output Impedance:	200 Ohm max.
Case Isolation:	$>10^8$ Ohm at 500 Volt

Environmental

Operating Temperature Range:	-67 to 300°F (-55 to 150°C)
Sealing:	IP68 / Hermetically Sealed
Maximum Shock:	5000 g
Approvals:	CE Approved

Mechanical

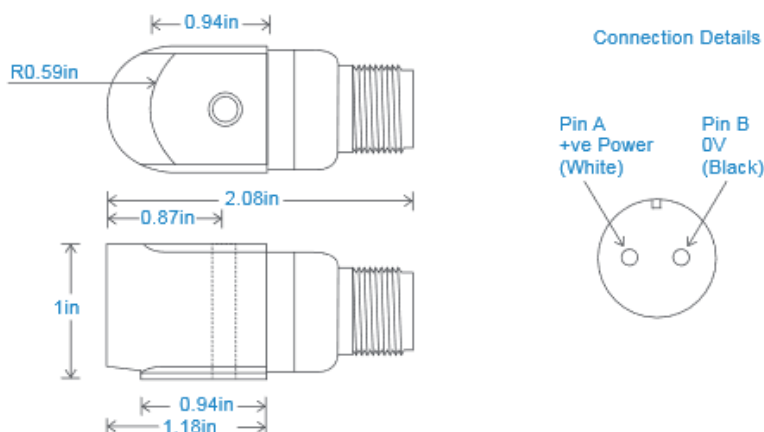
Case Material:	Stainless Steel
Sensing Element:	PZT/Shear
Mounting Torque:	5.9ft. lbs (8 Nm)
Weight:	4.7 Oz (135 grams)
Mating Connector:	2 Pin MS 5015 Connector or integral cable
Mounting Thread:	
CMCP780A:	1/4-28 UNF Captive Bolt
CMCP780A-M8:	M8x1.25 Captive Bolt

1010 East Main Street
League City, Texas 77573
USA

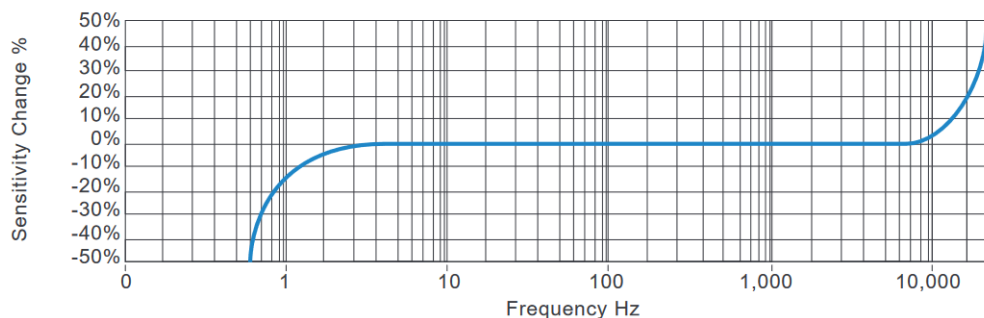
Phone: +1 (281) 334-0766
Fax: +1 (281) 334-4255
SalesSupport@stiweb.com

Condition Monitoring Custom Products

Dimensions



Frequency Response



Ordering Information

CMCP780A Compact Side Entry Accelerometer, 100 mV/g, ¼-28 UNF Captive Bolt
 CMCP780A-M8 Compact Side Entry Accelerometer, 100 mV/g, M8x1.25 Captive Bolt

Ordering Information, Alternative Sensitivity

CMCP780A-XXX Specify Sensitivity in Place of -XXX
 10 mV/g (-010), 30 mV/g (-030), 50mV/g (-050), 250mV/g (-250) and 500mV/g (-500)

Ordering Information, Alternative Versions with Integral Cable

CMCP780A-IXX Compact Side Entry Accelerometer, 100mV/g, Armored Cable, ¼-28 UNF Mount
 CMCP780A-IXX-M8 General Purpose Side Entry Accelerometer, 100mV/g, Armored Cable, M8x1.25 Mount
 (Specify Cable Length in Meters in Place of XX)

CMCP780A-IPXX Compact Side Entry Accelerometer, 100mV/g, Submersible, ¼-28 UNF Mount
 CMCP780A-IPXX-M8 General Purpose Side Entry Accelerometer, 100mV/g, Submersible, M8x1.25 Mount
 (Specify Cable Length in Meters in Place of XX)

Alternative Compact Sensor Versions



Compact M12 Connector
 CMCP780A-M12



Compact Armored
 CMCP780A-I



Compact Submersible
 CMCP780A-IP