



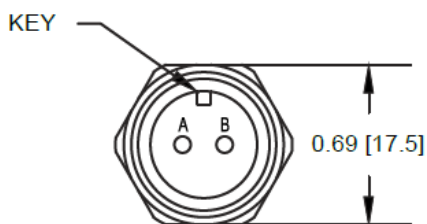
m/s² 780B and 780C

Features

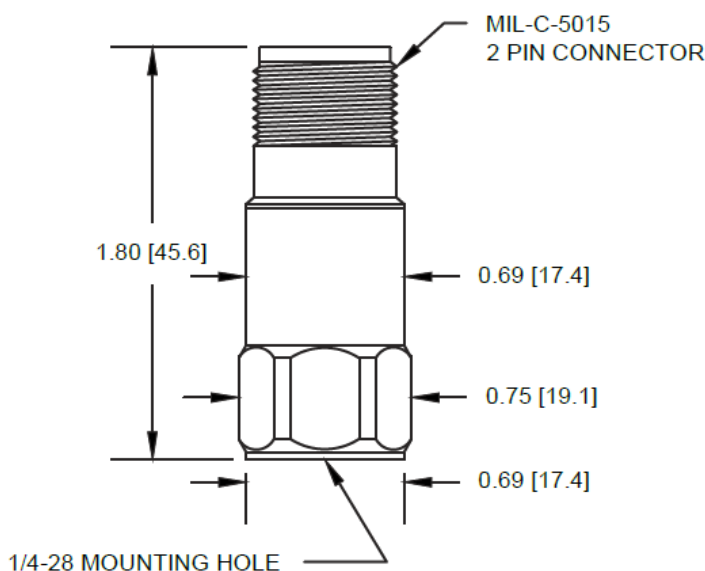
- Lightweight for walkaround programs
- Prevents ground loops in permanent mount applications with proper cabling
- Can be submersed with proper connector
- Hermetically sealed
- ESD protected
- Reverse wiring protection
- Manufactured in an approved ISO 9001 facility



Althen's top-exit 100 mV/g sensors are designed for monitoring areas with limited space. The general purpose accelerometer is ideal for monitoring machine vibration on a wide range of rotating equipment such as motors, pumps, fans, compressors, turbines and generators. A 316L stainless steel casing provides rugged durability for most extreme environments. The sensing element is housed in a case-isolated Faraday shield, providing maximum protection from ground loops and RF interference.



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



Note: Due to continuous process improvement, specifications are subject to change without notice.

Specification

	English	Metric	
Sensitivity, 25° C			
780B, ±10%	100 mV/g	9.8 mV/m/sec ²	
780C, ±15%	100 mV/g	9.8 mV/m/sec ²	
Acceleration range	80 g peak	784 m/sec ²	
Amplitude nonlinearity	1%	1%	
Frequency response:			
± 5%	180 - 300,000 RPM	3 - 5,000 Hz	
± 10%	60 - 540,000 RPM	1 - 9,000 Hz	
± 3 dB	30 - 840,000 RPM	0.5 - 14,000 Hz	
Resonance frequency	1.80 kCPM	30 kHz	
Transverse sensitivity, max	5% of axial	5% of axial	
Temperature response:			
-25° C	-10%	-10%	
+120° C	+10%	+10%	
Power requirement:			
Voltage source	18 - 30 VDC	18 - 30 VDC	
Current regulating diode	2 - 10 mA	2 - 10 mA	
Electrical noise, equiv. g:			
Broadband	2.5 Hz to 25 kHz	700 µg	6.9 x 10 ⁻³ m/s ²
Spectral	10 Hz	10 µg/√Hz	9.8 x 10 ⁻⁵ m/s ²
	100 Hz	5 µg/√Hz	4.9 x 10 ⁻⁵ m/s ²
	1,000 Hz	5 µg/√Hz	4.9 x 10 ⁻⁵ m/s ²
Output impedance, max	100 Ω	100 Ω	
Bias output voltage	12 VDC	12 VDC	
Grounding	case isolated, internally shielded		
Temperature range	-58 to +248° F	-50 to +120° C	
Vibration limit	500 g peak	4,900 m/sec ² peak	
Shock limit	5,000 g peak	49,000 m/sec ² peak	
Electromagnetic sensitivity, equiv g, max	70 µg/gauss	6.8 x 10 ⁻⁴ m/s ² /gauss	
Sealing	hermetic		
Base strain sensitivity, max	0.0002 g/µstrain	1.9 x 10 ⁻³ m/s ² /µstrain	
Sensing element design	PZT, shear		
Weight	2.19 oz	62 grams	
Case material	316L stainless steel		
Mounting	1/4-28 UNF tapped hole		
Output connector	2-pin, MIL-C-5015 style		
Mating connector	R6 type		
Recommended cabling	J10 / J9T2A		

Accessories supplied:

- Calibration data (level 2)
- SF6 mounting stud (metric mounting available on request)

Note: Frequency response and spectral noise values are typical.

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The information provided herein is to the best of our knowledge true and accurate, it is provided for guidance only. All specifications are subject to change without prior notification.

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Germany/Austria/Switzerland
info@althen.de

Benelux
sales@althen.nl

France
info@althensensors.fr

Sweden
info@althensensors.se

USA/Canada
info@althensensors.com

Other countries
info@althensensors.com