



## Wilcoxon Research model 785A Low profile industrial accelerometer

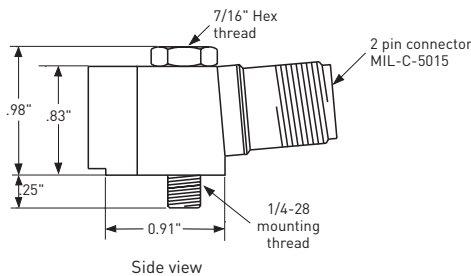


### Common applications

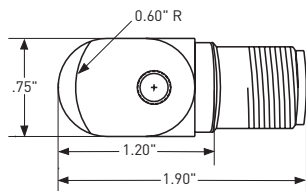
- General purpose
- Moderate industrial environments
- Conveyors and drives

### Features

- Corrosion resistant
- Hermetic design
- Ground isolated
- ESD protection
- Reverse wiring protection
- RFI protection



Side view



Bottom view

### Dynamic

Sensitivity, $\pm 10\%$ , 25° C .....	100 mV/g
Acceleration range .....	80 g peak
Amplitude nonlinearity .....	1%
Frequency response:	
$\pm 10\%$ .....	2 - 8,000 Hz
$\pm 3$ dB .....	1 - 12,000 Hz
Resonance frequency, mounted, min .....	30 kHz
Transverse sensitivity, max .....	5% of axial
Temperature response:	
-50° C .....	-10%
+120° C .....	+7%

### Electrical

Power requirement:	
Voltage source .....	18 - 30 VDC
Current regulating diode .....	2 - 10 mA
Electrical noise, equiv. g, nominal:	
Broadband 2.5 Hz to 25 kHz .....	1,260 $\mu$ g
Spectral	
10 Hz .....	11 $\mu$ g/√Hz
100 Hz .....	6 $\mu$ g/√Hz
1000 Hz .....	6 $\mu$ g/√Hz
Output impedance .....	100 $\Omega$
Bias output voltage, nominal .....	12 VDC
Grounding .....	case isolated, internally shielded

### Environmental

Temperature range .....	-50 to 120° C
Vibration limit .....	500 g
Shock limit, min .....	5,000 g
Sealing .....	hermetic
Base strain sensitivity, max .....	0.002 g/ $\mu$ strain

### Physical

Weight .....	85 g
Case material .....	316L stainless steel
Mounting .....	1/4-28 captive hex head screw with 0.046" diameter safety wire hole
Output connector .....	2 pin MIL-C-5015 style
Mating connector .....	R6 type
Recommended cabling .....	J10 / J9T2A

### Connections

Function	Connector pin
case	shell
power / signal	A
common	B

Notes: <sup>1</sup> At 90 inch/lb torque.

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