

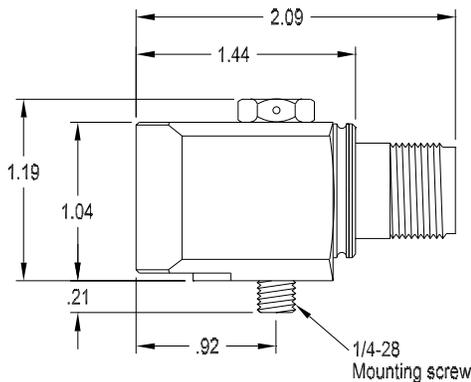
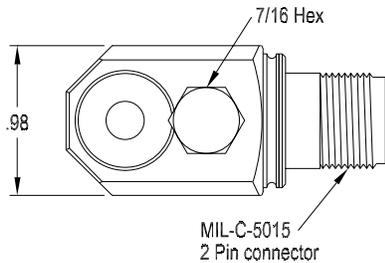


## Wilcoxon Research model 787A Low profile, general purpose accelerometer



### Features

- Corrosion resistant
- Hermetic design
- Ground isolated
- ESD protection
- Reverse wiring protection
- Mounts in any orientation



### Dynamic

Sensitivity, $\pm 5\%$ , 25° C.....	100 mV/g
Acceleration range, VDC >25V .....	80 g peak
Amplitude nonlinearity.....	1%
Frequency response:	
$\pm 10\%$ .....	1.0 - 5,000 Hz
$\pm 3$ dB.....	0.7 - 10,000 Hz
Resonance frequency.....	22 kHz
Transverse sensitivity, max.....	5% of axial
Temperature response:	
-25° C.....	-10%
+120° C.....	+10%

### Electrical

Power requirement:	
Voltage source .....	18 - 30 VDC
Current regulating diode .....	2 - 10 mA
Electrical noise, equiv. g:	
Broadband 2.5 Hz to 25 kHz.....	700 $\mu$ g
Spectral	
10 Hz.....	10 $\mu$ g/√Hz
100 Hz.....	5 $\mu$ g/√Hz
1000 Hz.....	5 $\mu$ g/√Hz
Output impedance, max.....	100 $\Omega$
Bias output voltage .....	12 VDC
Grounding.....	case isolated, internally shielded

### Environmental

Temperature range .....	-50 to 120° C
Vibration limit.....	500 g
Shock limit, min .....	5,000 g
Electromagnetic sensitivity, equiv. g, max .....	70 $\mu$ g/gauss
Sealing.....	hermetic
Base strain sensitivity, max .....	0.002 g/ $\mu$ strain

### Physical

Sensing element design.....	PZT / shear
Weight.....	145 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
ground	shell
power/ signal	A
common	B

Accessories supplied: #80165-01 captive hex head screw (international customers specify mounting requirements); calibration data (level 2).

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