

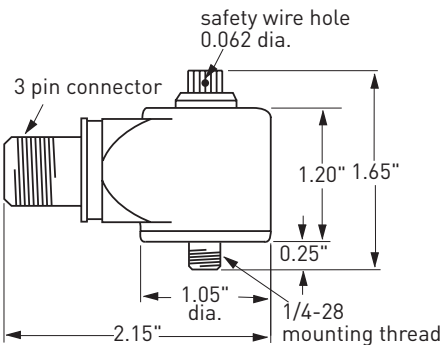


Wilcoxon Research model 797T-1 General purpose accelerometer with internal temperature sensor



Features

- Senses both acceleration and temperature
- Rugged design
- Hermetic seal
- Ground isolated
- ESD protection
- Reverse wiring protection
- Mounts in any orientation



Dynamic

Sensitivity, $\pm 5\%$, 25° C.....	100 mV/g
Acceleration range	80 g peak
Amplitude nonlinearity.....	1%
Frequency response:	
$\pm 5\%$	3 - 5,000 Hz
$\pm 10\%$	2 - 7,000 Hz
± 3 dB	1 - 12,000 Hz
Resonance frequency.....	26 kHz
Transverse sensitivity, max.....	5 % of axial
Temperature response:	
-50° C.....	-5%
+120° C.....	+5%
Temperature output sensitivity, $\pm 5\%$	10 mV/°K
Temperature measurement range	223 to 393 K (-50 to 120° C)

Electrical

Temperature sensor

Power requirement:	
Voltage source	18 - 30 VDC
Current regulating diode	2 - 4 mA
Grounding.....	case isolated, internally shielded

Accelerometer

Power requirement:	
Voltage source	18 - 30 VDC
Current regulating diode	2 - 10 mA
Electrical noise, equiv. g:	
Broadband 2.5 Hz to 25 kHz	600 μ g
Spectral	
10 Hz	8 μ g/√Hz
100 Hz	5 μ g/√Hz
1000 Hz	5 μ g/√Hz
Output impedance, max	100 Ω
Bias output voltage	12 VDC
Grounding.....	case isolated, internally shielded

Environmental

Temperature range	-50 to 120° C
Vibration limit.....	500 g peak
Shock limit	5,000 g peak
Electromagnetic sensitivity, equiv. g.....	30 μ g/gauss
Seal	hermetic
Base strain sensitivity.....	0.002 g/ μ strain

Physical

Sensing element design.....	PZT, shear
Weight.....	135 g
Case material.....	316L stainless steel
Mounting	1/4-28 captive socket head screw
Output connector	3 pin, MIL-C-5015 style
Mating connector	R6G type
Recommended cabling	J9T3A

Connections

Function	Connector pin
ground	shell
accelerometer, power / signal	A
accelerometer / temperature common	B
temperature sensor, power / signal	C

Meggitt Sensing Systems
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Accessories supplied: #12105-01 captive screw (international customers specify mounting requirements); calibration data level 3).

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