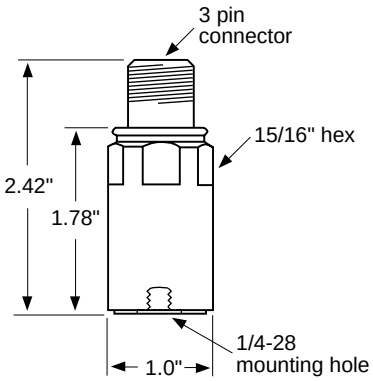
w i l c o x o n

Model 793T-3

General Purpose Accelerometer with Internal Temperature Sensor

FEATURES:

- Senses both acceleration and temperature
- Rugged design
- Hermetic seal
- Ground isolated
- ESD protection
- Miswiring protection



DYNAMIC		
Sensitivity, ±5%, 25°C		100 mV/g
Acceleration Range		80 g peak
Amplitude Nonlinearity		1%
Frequency Response:		
±5%		1.5 - 5,000 Hz
±10%		1.0 - 7,000 Hz
±3 dB		0.5- 15,000 Hz
Resonance Frequency		24 kHz
Transverse Sensitivity, max.		5% of axial
Temperature Response		–50°C –10% +120°C +5%
Temperature Output Sensitivity, ±5%		10 mV/K
Temperature Measurement Range		223 to 390°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 µg
Spectral	10 Hz	8 µg/√Hz
	100 Hz	5 µg/√Hz
	1000 Hz	5 µg/√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.		10 µg/gauss
Sealing		Hermetic
Base Strain Sensitivity		0.0005 g/µstrain
PHYSICAL		
Sensing Element Design		PZT ceramic / compression
Weight		115 grams
Case Material		316L stainless steel
Mounting		1/4-28 tapped hole
Output Connector		3 pin, MIL-C-5015 style
Mating Connector		R6G type
Recommended Cabling		J9T3A

CONNECTOR PIN	FUNCTION	CABLE CONDUCTOR COLOR
SHELL	ground	Shield
A	accelerometer– power & signal	Red
B	accelerometer– temperature / sensor common	Black
C	temperature sensor– power & signal	White

ACCESSORIES SUPPLIED: SF6 mounting stud (International customers specify mounting requirements); Calibration data (level 3).

Due to continued research and development, Wilcoxon Research reserves the right to amend this specification without notice.

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