

Piezovelocity transducer

797V



SPECIFICATIONS

Sensitivity, $\pm 10\%$, 25°C		100 mV/in/sec
Velocity range		50 in/sec peak
Amplitude nonlinearity		1%
Frequency response:		
	$\pm 10\%$	2.0 - 3,500 Hz
	± 3 dB	1.6 - 7,000 Hz
Resonance frequency		18 kHz
Transverse sensitivity, max		5% of axial
Temperature response:		
	-50°C	-15%
	+120°C	+10%
Power requirement:		
Voltage source		18 - 30 VDC
Current regulating diode		2 - 10 mA
Electrical noise, equiv. in/sec:		
Broadband	2.5 Hz to 25 kHz	100 μ in/sec
Spectral	10 Hz	10 μ in/sec/ $\sqrt{\text{Hz}}$
	100 Hz	0.8 μ in/sec/ $\sqrt{\text{Hz}}$
	1,000 Hz	0.1 μ in/sec/ $\sqrt{\text{Hz}}$
Output impedance, nominal 4mA supply¹		the greater of 5,000/f or 200 Ω
Bias output voltage		10 VDC
Grounding		case isolated, internally shielded
Temperature range		-50° to +120°C
Vibration limit		250 g peak
Shock limit		2,500 g peak
Electromagnetic sensitivity, equiv. in/sec		50 μ in/sec/gauss
Sealing		hermetic
Base strain sensitivity		0.004 in/sec/ μ strain
Sensing element design		PZT ceramic / shear
Weight		148 grams
Case material		316L stainless steel
Mounting		1/4-28 captive socket head screw
Output connector		2 pin, MIL-C-5015 style
Mating connector		R6 type
Recommended cabling		J9T2A

Notes: ¹ Both calculations are in units of Ohms, f is signal frequency in Hz

Accessories supplied: #12105-01 captive socket head (metric mounting available); calibration data (level 3)

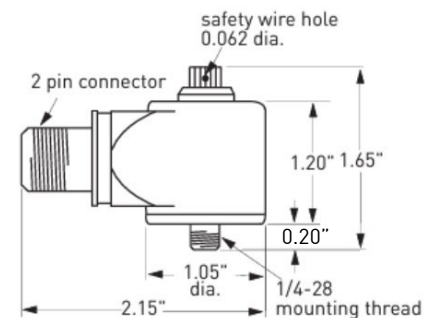
Certifications

All 797V models	797VE
	 Class I, II, III, T4 Div 1 Groups A, B, C, D, E, F, G Div 2 Groups A, B, C, D, F, G



Key features

- Certified version available for use in hazardous areas (model 797VE)
- Manufactured in ISO 9001 facility



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

Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.