

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 supply ¹	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

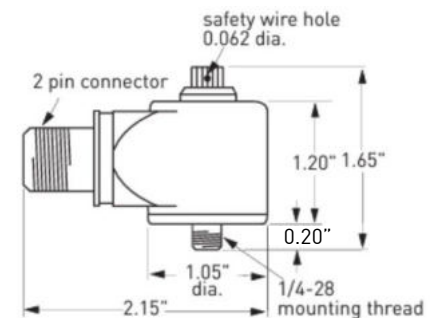
All 797V models	797VE
	 Class I, II, III, T4 Div 1 Groups A, B, C, D, E, F, G Div 2 Groups A, B, C, D, F, G

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



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