

# Piezovelocity transducer



## 797V

### SPECIFICATIONS

<b>Sensitivity, <math>\pm 10\%</math>, 25°C</b>		100 mV/in/sec
<b>Velocity range</b>		50 in/sec peak
<b>Amplitude nonlinearity</b>		1%
<b>Frequency response:</b>	$\pm 10\%$	2.0 - 3,500 Hz
	$\pm 3$ dB	1.6 - 7,000 Hz
<b>Resonance frequency</b>		18 kHz
<b>Transverse sensitivity, max</b>		5% of axial
<b>Temperature response:</b>	-50°C	-15%
	+120°C	+10%
<b>Power requirement:</b>		
Voltage source		18 - 30 VDC
Current regulating diode		2 - 10 mA
<b>Electrical noise, equiv. in/sec:</b>		
Broadband	2.5 Hz to 25 kHz	100 $\mu$ in/sec
Spectral	10 Hz	10 $\mu$ in/sec/ $\sqrt{\text{Hz}}$
	100 Hz	0.8 $\mu$ in/sec/ $\sqrt{\text{Hz}}$
	1,000 Hz	0.1 $\mu$ in/sec/ $\sqrt{\text{Hz}}$
<b>Output impedance, 4-20 mA supply</b>		the greater of: 200 $\Omega$ or 5,000/f
<b>Bias output voltage</b>		10 VDC
<b>Grounding</b>		case isolated, internally shielded
<b>Temperature range</b>		-50° to +120°C
<b>Vibration limit</b>		250 g peak
<b>Shock limit</b>		2,500 g peak
<b>Electromagnetic sensitivity, equiv. in/sec</b>		50 $\mu$ in/sec/gauss
<b>Sealing</b>		hermetic
<b>Base strain sensitivity</b>		0.004 in/sec/ $\mu$ strain
<b>Sensing element design</b>		PZT ceramic / shear
<b>Weight</b>		148 grams
<b>Case material</b>		316L stainless steel
<b>Mounting</b>		1/4-28 captive socket head screw
<b>Output connector</b>		2 pin, MIL-C-5015 style
<b>Mating connector</b>		R6 type
<b>Recommended cabling</b>		J9T2A

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

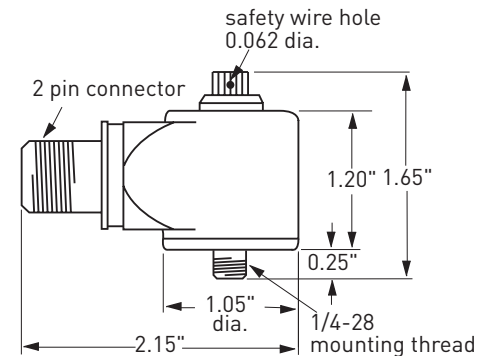
### Certifications

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.