

# Piezoelectric velocity transducer

## 786V

### SPECIFICATIONS

<b>Sensitivity, <math>\pm 5\%</math>, 25°C</b>	100 mV/in/sec
<b>Velocity range</b>	50 in/sec peak
<b>Amplitude nonlinearity</b>	$\pm 1\%$ of F.S.
<b>Frequency response:</b>	$\pm 10\%$ 2 - 6,000 Hz $\pm 3$ dB 1 - 12,000 Hz
<b>Resonance frequency, nominal</b>	30 kHz
<b>Transverse sensitivity, max</b>	5% of axial
<b>Power requirement:</b>	
Voltage source	18 - 30 VDC
Current regulating diode	2 - 10 mA
<b>Electrical noise, equiv. in/sec, nominal:</b>	
Broadband 2.5 Hz to 25 kHz	2,050 $\mu$ in/sec rms
Spectral 10 Hz	250 $\mu$ in/sec/ $\sqrt{\text{Hz}}$
100 Hz	12 $\mu$ in/sec/ $\sqrt{\text{Hz}}$
1,000 Hz	5 $\mu$ in/sec/ $\sqrt{\text{Hz}}$
<b>Output impedance, max</b>	200 $\Omega$
<b>Bias output voltage, nominal</b>	12 VDC
<b>Grounding</b>	case isolated, internally shielded
<b>Temperature range</b>	-50° to +120°C
<b>Vibration limit</b>	500 g peak
<b>Shock limit</b>	5,000 g peak
<b>Electromagnetic sensitivity, equiv. in/sec</b>	25 $\mu$ in/sec/gauss
<b>Sealing</b>	hermetic
<b>Relative humidity</b>	100%
<b>Protection rating</b>	IP67
<b>Base strain sensitivity</b>	0.0005 in/sec/ $\mu$ strain
<b>Sensing element design</b>	PZT, shear
<b>Weight</b>	90 grams
<b>Case material</b>	316L stainless steel
<b>Mounting</b>	1/4-28 UNF tapped hole
<b>Output connector</b>	2 pin, MIL-C-5015 style
<b>Mating connector</b>	R6 type
<b>Recommended cabling</b>	J9T2A

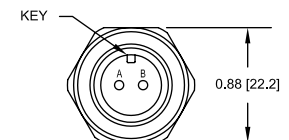
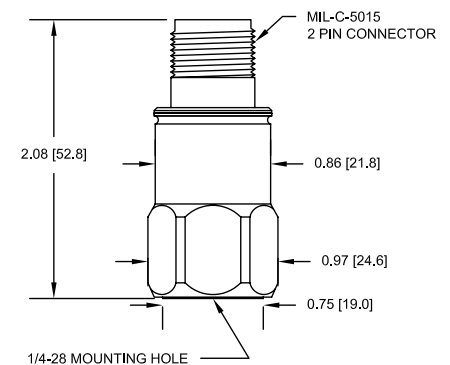
**Accessories supplied:** SF6 mounting stud; calibration data (level 2)

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



### Key features

- Internally integrated to velocity
- High frequency range
- Manufactured in ISO 9001 facility



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