

# Piezoelectric velocity sensor

## 893V

### SPECIFICATIONS

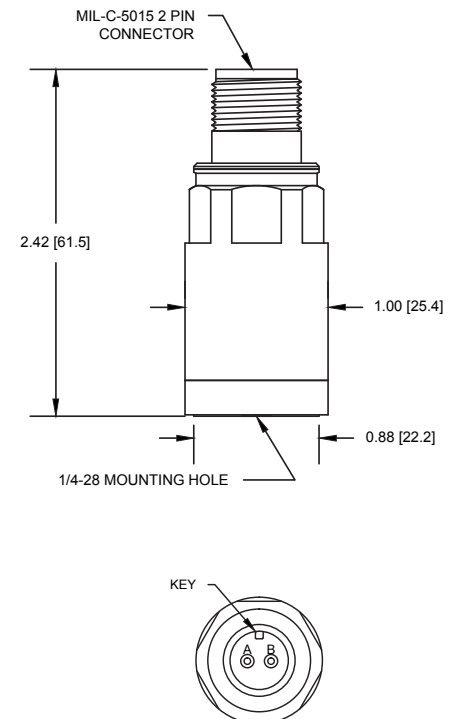
<b>Sensitivity, <math>\pm 5\%</math>, 25°C</b>		100 mV/in/sec
<b>Velocity range</b>		50 in/sec peak
<b>Amplitude nonlinearity</b>		2%
<b>Frequency response:</b>	$\pm 10\%$	6.0 - 2,500 Hz
	$\pm 3$ dB	4.5 - 5,000 Hz
<b>Transverse sensitivity, max</b>		5% of axial
<b>Resonance frequency, nominal</b>		15 kHz
<b>Typical deviation</b>		$\pm 5\%$ over operating temp. range
<b>Electrical noise, equiv. in/sec:</b>		
<b>Broadband</b>	<b>2.5 Hz to 25 kHz</b>	150 $\mu$ in/sec
<b>Spectral</b>	<b>10 Hz</b>	25 $\mu$ in/sec/ $\sqrt{\text{Hz}}$
	<b>100 Hz</b>	1.5 $\mu$ in/sec/ $\sqrt{\text{Hz}}$
	<b>1,000 Hz</b>	1.0 $\mu$ in/sec/ $\sqrt{\text{Hz}}$
<b>Input supply current</b>		2 - 10 mA
<b>Supply voltage for current source</b>		22 - 28 VDC
<b>Output impedance, max</b>		80 $\Omega$
<b>Bias output voltage, nominal</b>		12 VDC
<b>Grounding</b>		case isolated, internally shielded
<b>Reversed polarity</b>		protected
<b>Temperature range</b>		-50° to +120°C
<b>Vibration limit</b>		250 g peak
<b>Shock limit, max</b>		5,000 g peak
<b>Electromagnetic sensitivity, equiv. in/sec</b>		50 $\mu$ in/sec/gauss
<b>Sealing</b>		hermetic
<b>Base strain sensitivity, max</b>		0.005 in/sec/ $\mu$ strain
<b>Weight</b>		145 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>		MIL-C-5015 style
<b>Recommended cabling</b>		shielded, twisted pair

**Accessories supplied:** 1/4-28 UNF to M8 adaptor stud; calibration data



### Key features

- Efficiently designed with fewer components for more reliable measurements
- 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.