

# VE101 Series

Piezo Velocity Sensor, Top Exit 2 Pin Connector, 100 mV/in/sec, ±10%



VIBRATION ANALYSIS HARDWARE



## Product Features

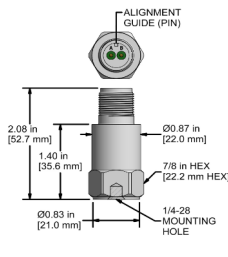
100 mV/in/sec (4 mV/mm/sec) Sensitivity

- ▶ ±50 in/sec, (±270 mm/sec) Peak Dynamic Range
- ▶ 2 Pin MIL Connection or Integral Option
- ▶ Integrates to Velocity in the Sensor

### VE101-1D

2 Pin Connector

Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common

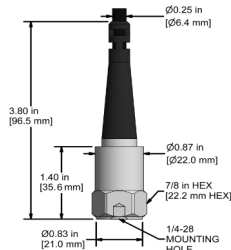


Stock Product

### VE101-2D

Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

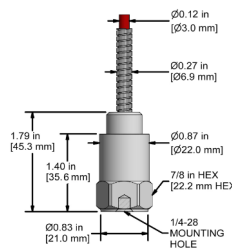


Built To Order

### VE101-3D

Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

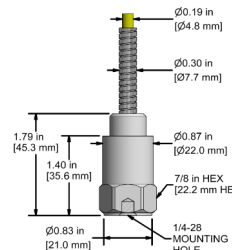


Built To Order

### VE101-6D

Heavy Duty Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	VE101	M/ or M8/VE101	<b>Environmental</b>		
Sensitivity (±10%)	100 mV/in/sec		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (±3dB)	90-720,000 CPM	1,5-12000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	120-270,000 CPM	2,0-4500 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	± 50 in/sec. pk		Sealing	Welded, Hermetic	
Transverse Sensitivity	<5%		Submersible Depth	200 ft.	60 m
<b>Electrical</b>			<b>Physical</b>		
Settling Time	<4 Seconds		Sensing Element	PZT Ceramic	
Voltage Source	18-30 VDC		Sensing Structure	Shear Mode	
Constant Current Excitation	2-10 mA		Weight	3.2 oz	90 grams
Spectral Noise @ 10 Hz	25 µIPS/√Hz		Case Material	316L Stainless Steel	
Spectral Noise @ 100 Hz	2 µIPS/√Hz		Mounting Thread	1/4-28 Blind Tapped Hole	
Spectral Noise @ 1000 Hz	0.5 µIPS/√Hz		Connector (Non-Integral)	2 Pin MIL-C-5015	
Output Impedance	<100 ohm		Resonant Frequency	1,380,000 CPM	23000 Hz
Bias Output Voltage	10-14 VDC		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Case Isolation	>10 <sup>8</sup> ohm		Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
			Calibration Certificate	CA10	

## Typical Frequency Response

