

VE102 Series

Piezo Velocity Sensor, Side Exit 2 Pin Connector, 100 mV/in/sec, $\pm 10\%$



VIBRATION ANALYSIS HARDWARE



Product Features

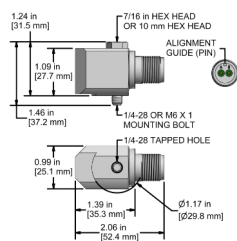
100 mV/in/sec (4 mV/mm/sec) Sensitivity

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

VE102-1D

2 Pin Connector

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

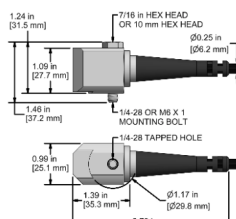


Stock Product

VE102-2D

Integral Cable

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

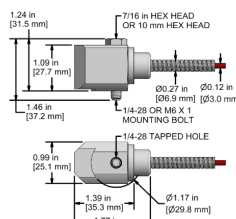


Built To Order

VE102-3D

Armored Integral Cable

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

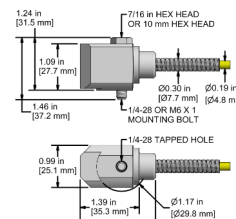


Built To Order

VE102-6D

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	VE102	M/VE102	Environmental		
Sensitivity ($\pm 10\%$)	100 mV/in/sec		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (± 3 dB)	90-420,000 CPM	1,5-7000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 50 in/sec. pk *Vsource ≥ 22 V, 12Vbias		Electromagnetic Sensitivity	CE	
Transverse Sensitivity	$\leq 5\%$		Sealing	Welded, Hermetic	
Electrical			Submersible Depth	200 ft.	60 m
Settling Time	<4 seconds		Physical		
Voltage Source	18-30 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	25 μ IPS/ $\sqrt{\text{Hz}}$		Weight	5.1 oz	145 grams
Spectral Noise @ 100 Hz	2 μ IPS/ $\sqrt{\text{Hz}}$		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	0.5 μ IPS/ $\sqrt{\text{Hz}}$		Connector (Non-Integral)	2 Pin MIL-C-5015	
Output Impedance	<100 ohm		Resonant Frequency	1,320,000 CPM	22000 Hz
Bias Output Voltage	10-14 VDC		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Case Isolation	>10 ⁸ ohm		Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate	CA10	

Typical Frequency Response

