

Piezo Electric Velocity Sensor, Side Exit Connector/Cable, 100 mV/in/sec

Section I - Vibration Sensors

Actual Product Size Shown



Product Features

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

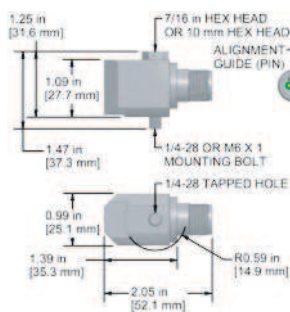
1,5 - 7000 Hz (90 - 420,000 CPM) Frequency Response

- ± 50 in/sec, Peak Dynamic Range
- 2 Pin MIL Connection
- Integrates to Velocity in the Sensor

VE102-1D

2 Pin Connector

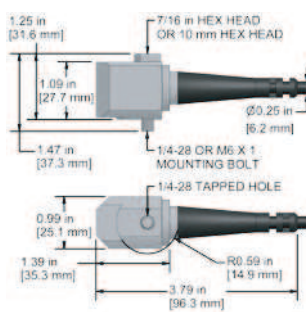
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



VE102-2D

Integral Cable

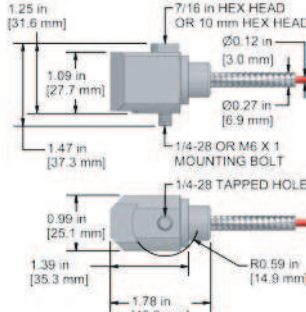
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



VE102-3D

Armored Integral Cable

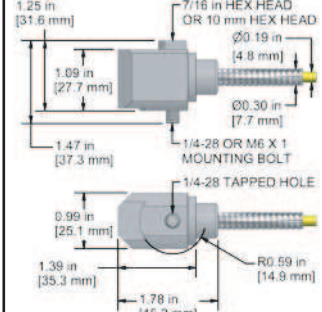
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



VE102-6D

Heavy Duty Armored Integral Cable

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



Specifications	Standard	Metric
Part Number	VE102	M/VE102
Sensitivity ($\pm 10\%$)	100mV/in/sec	4mV/mm/sec
Frequency Response (± 3 dB)	90-420,000 CPM	1,5-7000 Hz
Frequency Response ($\pm 10\%$)	120-240,000 CPM	2,0-4000 Hz
Dynamic Range (Peak)	± 50 in/sec	± 1270 mm/sec
Electrical		
Settling Time	<4 seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	25 μ IPS/ \sqrt Hz	
Spectral Noise @ 100 Hz	2 μ IPS/ \sqrt Hz	
Spectral Noise @ 1000 Hz	0.5 μ IPS/ \sqrt Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁸ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-58 to 250°F	-50 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	IP68	
Submersible Depth (VE102-2D/3D)	200 ft.	60 m
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	5.1 oz	145 grams
Case Material	316L Stainless Steel	
Mounting Hole	1/4-28	
Connector (non-integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,320,000 CPM	22000 Hz
Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Mounting Hardware	1/4-28 Captive Bolt	M6x1 Captive Bolt
Calibration Certificate	CA10	

Ordering Information

Standard	VE102-1D (1/4-28 Captive Bolt)	VE102-2D - / (1/4-28 Captive Bolt)	VE102-3D - / (1/4-28 Captive Bolt)	VE102-6D - / (1/4-28 Captive Bolt)
Metric	M/VE102-1D (M6x1 Captive Bolt)	M/VE102-2D - / (M6x1 Captive Bolt)	M/VE102-3D - / (M6x1 Captive Bolt)	M/VE102-6D - / (M6x1 Captive Bolt)



Backed by our Unconditional Lifetime Warranty

