

# VE101 Series

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

SECTION 1 - ACCELEROMETERS

VE101 Series



Actual Product Size Shown

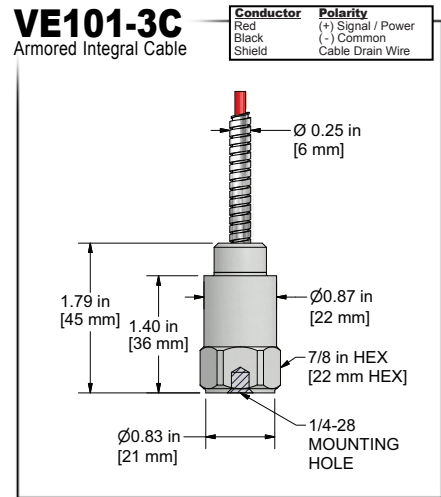
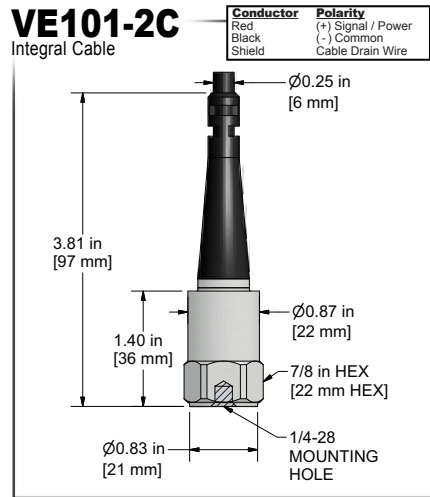
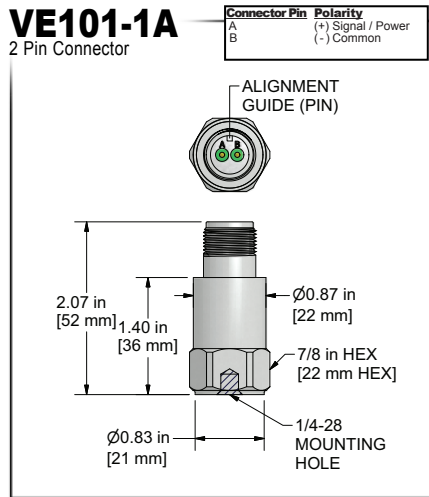


## Product Features

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

**1,5 - 12000 Hz (90 - 720,000 CPM) Frequency Response**

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



Specifications	Standard	Metric
Part Number	VE101	M/VE101
Sensitivity ( $\pm 10\%$ )	100mV/in/sec	4mV/mm/sec
Frequency Response ( $\pm 3dB$ )	90-900,000 CPM	1,5-12000 Hz
Frequency Response ( $\pm 10\%$ )	120-270,000 CPM	2,0-4500 Hz
Dynamic Range (Peak)	$\pm 50$ in/sec	$\pm 1270$ mm/sec
<b>Electrical</b>		
Settling Time	<4 Seconds	
Voltage Source	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	53 $\mu$ IPS/ $\sqrt{Hz}$	
Spectral Noise @ 100 Hz	2 $\mu$ IPS/ $\sqrt{Hz}$	
Spectral Noise @ 1000 Hz	0.7 $\mu$ IPS/ $\sqrt{Hz}$	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 <sup>8</sup> ohm	

Specifications	Standard	Metric
<b>Environmental</b>		
Temperature Range	-58 to 250°F	-50 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Submersible Depth (VE101-2C)	500 ft.	152 m
<b>Physical</b>		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	3.2 oz	90 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,500,000 CPM	25000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate	CA10	

## Ordering Information

Standard	VE101-1A	VE101-2C	VE101-3C
	(1/4-28 Stud)	(1/4-28 Stud)	(1/4-28 Stud)
		- / [ ] - [ ]	- / [ ] - [ ] - [ ]
		(length in feet) (termination)	(armor length in feet) (cable length in feet) (termination)
Metric	M/VE101-1A	M/VE101-2C	M/VE101-3C
	(M6x1 Adapter Stud)	(M6x1 Adapter Stud)	(M6x1 Adapter Stud)
		- / [ ] - [ ]	- / [ ] - [ ] - [ ]
		(length in feet) (termination)	(armor length in feet) (cable length in feet) (termination)
		[ ] M - [ ]	[ ] M - [ ]
		(length in meters) (termination)	(armor length in meters) (cable length in meters) (termination)

Cable Termination Options: **E** **F** **Z**

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VIBRATION ANALYSIS HARDWARE

- LEFT CLICK & DRAG TO ROTATE MODEL
- RIGHT CLICK & DRAG TO ZOOM
- HOLD BOTH MOUSE BUTTONS TO PAN



2 Pin Connector

Integral Cable

Armored Integral Cable



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