

VE136 Series

Piezo Electric Velocity Sensor, Side Exit Connector/Cable, 500 mV/in/sec

SECTION 1 - VIBRATION SENSORS
Piezo Electric Velocity Accelerometers

Actual Product Size Shown



Product Features

500 mV/in/sec, (20 mV/mm/sec) Sensitivity

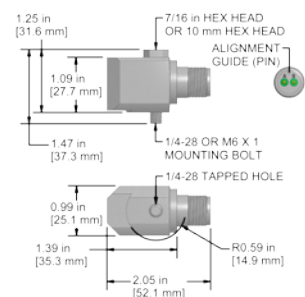
1,0 - 7,000 Hz (60 - 420,000 CPM) Frequency Response

- ± 10 in/sec, Peak Dynamic Range
- 2 Pin MIL Connection
- Integrates to Velocity in the Sensor

VE136-1A

2 Pin Connector

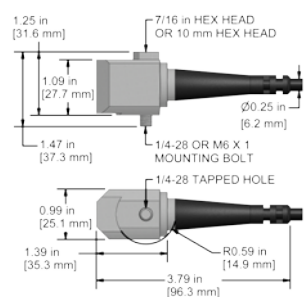
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



VE136-2C

Integral Cable

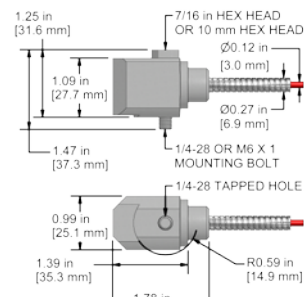
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



VE136-3C

Armored Integral Cable

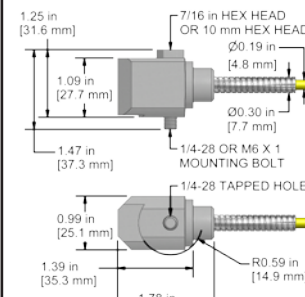
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



VE136-6C

Heavy Duty Armored Integral Cable

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



Specifications	Standard	Metric
Part Number	VE136	M/VE136
Sensitivity ($\pm 10\%$)	500 mV/in/sec	20 mV/mm/sec
Frequency Response ($\pm 3dB$)	60-420,000 CPM	1,0-7,000 Hz
Frequency Response ($\pm 10\%$)	120-240,000 CPM	2,0-4,000 Hz
Dynamic Range (Peak)	± 10 in/sec	± 254 mm/sec
Electrical		
Settling Time	<4 seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	200 μ IPS/ \sqrt{Hz}	
Spectral Noise @ 100 Hz	6 μ IPS/ \sqrt{Hz}	
Spectral Noise @ 1000 Hz	0.7 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 (VE136-2C/3C)	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	1/4-28	
Connector (non-integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,320,000 CPM	22,000 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	VE136-1A	VE136-2C - /	VE136-3C - /	VE136-6C - /
	(1/4-28 Captive Bolt) Stock Product	(1/4-28 Captive Bolt) Build To Order	(1/4-28 Captive Bolt) Build To Order	(1/4-28 Captive Bolt) Build To Order
		(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)	(maximum armor length 20 ft.) (cable length in feet) (termination)
Metric	M/VE136-1A (M6x1 Captive Bolt) Stock Product	M/VE136-2C - / (M6x1 Captive Bolt) Build To Order	M/VE136-3C - / (M6x1 Captive Bolt) Build To Order	M/VE136-6C - / (M6x1 Captive Bolt) Build To Order
		(length in meters) (termination)	(maximum armor length 30 m) (cable length in meters) (termination)	(maximum armor length 6 m) (cable length in meters) (termination)

Cable Termination Options: E F L Z

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VE135 Series

Piezo Electric Velocity Sensor, Top Exit Connector/Cable, 500 mV/in/sec

SECTION 1 - VIBRATION SENSORS
Piezo Electric Velocity Accelerometers



Actual Product Size Shown



Product Features

500 mV/in/sec, (20 mV/mm/sec) Sensitivity

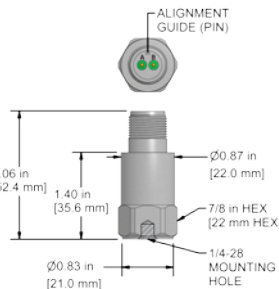
1,0 - 10000 Hz (60 -600,000 CPM) Frequency Response

- ± 10 in/sec, Peak Dynamic Range
- 2 Pin MIL Connection
- Integrates to Velocity in the Sensor

VE135-1A

2 Pin Connector

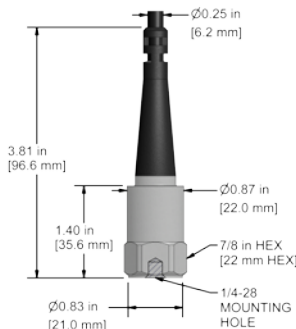
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



VE135-2C

Integral Cable

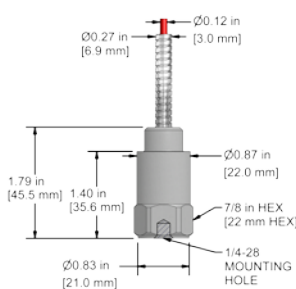
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



VE135-3C

Armored Integral Cable

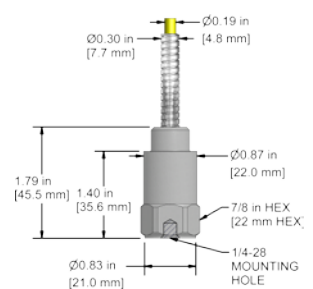
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



VE135-6C

Heavy Duty Armored Integral Cable

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



Specifications	Standard	Metric
Part Number	VE135	M/VE135
Sensitivity ($\pm 10\%$)	500 mV/in/sec	20 mV/mm/sec
Frequency Response ($\pm 3dB$)	60-600,000 CPM	1,0-10000 Hz
Frequency Response ($\pm 10\%$)	120-300,000 CPM	2,0-5000 Hz
Dynamic Range (Peak)	± 10 in/sec	± 254 mm/sec
Electrical		
Settling Time	<4 Seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	200 μ IPS/ \sqrt{Hz}	
Spectral Noise @ 100 Hz	6 μ IPS/ \sqrt{Hz}	
Spectral Noise @ 1000 Hz	0.7 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 (VE135-2C/3C)	200 ft.	60 m
Physical		
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	1,320,000 CPM	22000 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	VE135-1A (1/4-28 Stud)	VE135-2C - / (1/4-28 Stud)	VE135-3C - / (1/4-28 Stud)	VE135-6C - / (1/4-28 Stud)
		(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)	(maximum armor length 20 ft.) (cable length in feet) (termination)
Metric	M/VE135-1A (M6x1 Adapter Stud)	M/VE135-2C - / (M6x1 Adapter Stud)	M/VE135-3C - / (M6x1 Adapter Stud)	M/VE135-6C - / (M6x1 Adapter Stud)
		(length in meters) (termination)	(maximum armor length 30 m) (cable length in meters) (termination)	(maximum armor length 6 m) (cable length in meters) (termination)

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



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