

# VT202 Series

Dual Output Piezo Velocity Sensor, Velocity & Temperature Output, Top Exit 3 Pin Connector, 100 mV/in/sec, 10 mV/°C, ±10%



VIBRATION ANALYSIS HARDWARE



## Product Features

Velocity and Temperature Output in One Sensor

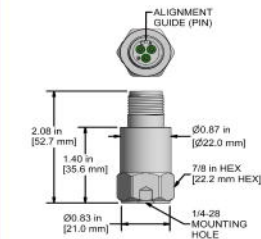
High Performance, Dual Output Sensor

- ▶ ±50 in/sec, Peak Dynamic Range
  - ▶ Integrates to Velocity in the Sensor
  - ▶ 3 Pin MIL Connection or Integral Cable
- Note: Integral Cable Options are only for Permanent Monitoring Applications

### VT202-1A

3 Pin Connector

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

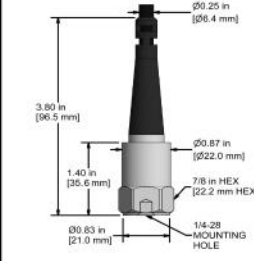


Stock Product

### VT202-2A

Integral Cable

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

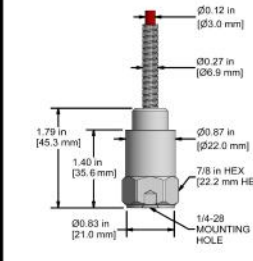


Built To Order

### VT202-3A

Armored Integral Cable

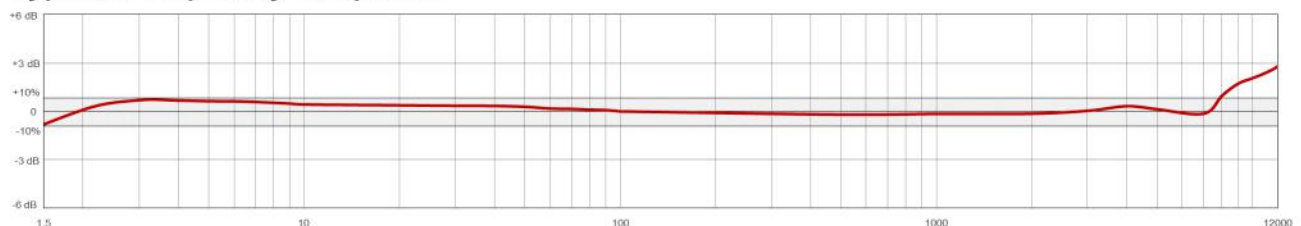
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
White	(+) Temperature Voltage
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	VT202	M/VT102	<b>Environmental</b>		
Sensitivity (±10%)		100 mV/in/sec	Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	90 to 720,000 CPM	1.5 to 12000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	120 to 270,000 CPM	2.0 to 4500 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range		± 50 in/sec. pk	Sealing	Welded, Hermetic	
<b>Electrical</b>			Submersible Depth	200 ft.	60 m
Settling Time		<4 Secondsq	<b>Physical</b>		
Voltage Source (IEPE)		18-30 VDC	Sensing Element	PZT Ceramic	
Constant Current Excitation		2-10 mA	Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz		25 μ IPS/√Hz	Weight	3.2 oz	90 grams
Spectral Noise @ 100 Hz		2 μ IPS/√Hz	Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz		0.5 μ IPS/√Hz	Mounting Thread	1/4-28 Blind Tapped Hole	
Output Impedance		<100 ohm	Connector (Non-Integral)	3 Pin MIL-C-5015	
Bias Output Voltage		10-14 VDC	Resonant Frequency	1,380,000 CPM	23000 Hz
Case Isolation		>10 <sup>8</sup>	Mounting Torque	2 to 5 ft. lbs	2,7 to 6,8 NM
			Mounting Hardware Supplied	1/4-28 Stud	M6x1 Adapter Stud
			Calibration Certificate	CA10	

## Typical Frequency Response



Backed by our Unconditional Lifetime Warranty

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# VT204 Series

Dual Output Piezo Velocity Sensor, Velocity & Temperature Output, Side Exit 3 Pin Connector, 100 mV/in/sec, 10 mV/°C, ±10%



VIBRATION ANALYSIS HARDWARE



## Product Features

Velocity and Temperature Output in One Sensor

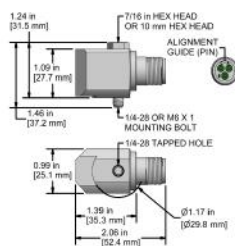
High Performance, Dual Output Sensor

- ▶ ±50 in/sec, Peak Dynamic Range
  - ▶ Integrates to Velocity in the Sensor
  - ▶ 3 Pin MIL Connection or Integral Cable
- Note: Integral Cable Options are only for Permanent Monitoring Applications

### VT204-1A

3 Pin Connector

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

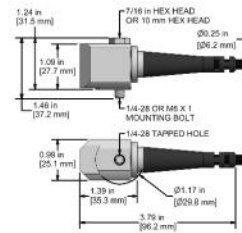


Stock Product

### VT204-2A

Integral Cable

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

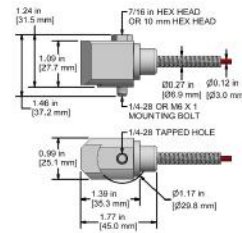


Built To Order

### VT204-3A

Armored Integral Cable

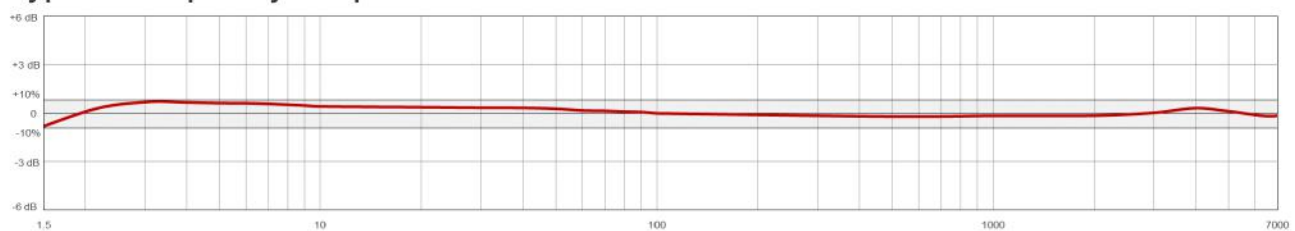
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
White	(+) Temperature Voltage
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	VT204	M/VT204	<b>Environmental</b>		
Sensitivity (±10%)	100 mV/in/sec		Operating Temperature Range	-58 to 250°F	-50 to 121°C
Frequency Response (±3dB)	90-420,000 CPM	1.5-7000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	120-240,000 CPM	2,0-4000 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	± 50 in/sec. pk		Sealing	Welded, Hermetic	
<b>Electrical</b>			Submersible Depth	200 ft.	60 m
Settling Time	<4 Seconds		<b>Physical</b>		
Voltage Source (IEPE)	18-30 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	25 µg/√Hz		Weight	5.6 oz	159 grams
Spectral Noise @ 100 Hz	2 µg/√Hz		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	0.5 µg/√Hz		Connector (Non-Integral)	3 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 <sup>8</sup> ohm		Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate	CA10	

## Typical Frequency Response



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