### VT102 Series

**Dual Output, Piezo Electric Velocity Sensor, Velocity/Temperature, Top Exit Connector/Cable, 100 mV/in/sec, 10 mV/°C**

#### Product Features

**Velocity and Temperature Output in One Sensor**

- High Performance, Dual Output Sensor
- ±50 in/sec, Peak Dynamic Range
- Standard 3 Pin MIL Connection
- Integrates to Velocity in the Sensor

#### Specifications

**Standard**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>VT102 M/VT102</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vibration</td>
<td>100 mV/in/sec</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>±10%</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>90-720,000 CPM</td>
</tr>
<tr>
<td>Dynamic Range (Peak)</td>
<td>±50 in/sec</td>
</tr>
<tr>
<td>Temperature Output</td>
<td>10 mV/°C</td>
</tr>
<tr>
<td>Electrical</td>
<td>&lt;4 Seconds</td>
</tr>
<tr>
<td>Constant Current Excitation</td>
<td>2-10 mA</td>
</tr>
<tr>
<td>Spectral Noise @ 10 Hz</td>
<td>25 µV/Hz</td>
</tr>
<tr>
<td>Spectral Noise @ 100 Hz</td>
<td>2 µV/Hz</td>
</tr>
<tr>
<td>Spectral Noise @ 1000 Hz</td>
<td>0.5 µV/Hz</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>&lt;100 ohm</td>
</tr>
<tr>
<td>Bias Output Voltage</td>
<td>10-14 VDC</td>
</tr>
<tr>
<td>Case Isolation</td>
<td>&gt;10° ohm</td>
</tr>
</tbody>
</table>

**Metric**

- Temperature Range: 37º to 250º F (3º to 121º C)
- Maximum Shock Protection: 5,000 g, peak
- Electrostatic Sensitivity: CE
- Sealing: Welded, Hermetic
- Submersible Depth (VT102-3D): 200 ft (60 m)
- Sensing Element: PZT Ceramic
- Sensing Structure: Shear Mode
- Case Material: 316L Stainless Steel
- Mounting Hole: 1/4-28
- Connector (non-integral): 3 Pin MIL-C-5015
- Resonant Frequency: 1,380,000 CPM (23000 Hz)
- Mounting Torque: 2 to 5 ft. lbs. (2.7 to 6.8 Nm)
- Mounting Hardware: 1/4-28 Stud M6x1 Adapter Stud

#### Ordering Information

**Standard**

- VT102-1D (1/4-28 Stud)
- VT102-2D / VT102-3D (1/4-28 Stud)

**Metric**

- VT102-1D (M6x1 Adapter Stud)
- MT102-2D / MT102-3D (M6x1 Adapter Stud)

**Cable Terminations:** L → Z

**Stock to Order:**

- Stock: CA10

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**Actual Product Size Shown**

**Backed by our Unconditional Lifetime Warranty**

**800-999-5290**