

## PRODUCT INFORMATION



### MIL544M Seismic Velocity Sensor – Permanent Mounted

Part Number M97120

The Mechanalysis model MIL544M vibration sensor is a rugged industrial vibration measuring sensor ideal for continuous machinery protection. In production for over 35 years it continues to be the World's most widely used velocity sensor. The sensor can be mounted horizontal or vertical permanently on a flat surface at the bearing housing or other critical points on a machine. It provides reliable continuous performance under a variety of adverse environmental conditions. India alone has more than 6000 in daily use.

The inductive seismic velocity transducer operates with a moving coil in a permanent magnetic field with eddy-current damping. Its high output and low impedance, good frequency response makes the MIL544M suitable for all types of machinery protection.

The sensor's case insulates the signal coil from the housing to eliminate false monitor alarms often encountered from ground loops and power surges. The sensor's hard anodized aluminium housing is IP65, waterproof, dustproof and approved for use in Division 2 hazardous areas and operates up to 260°C.



#### Optional accessories:

Magnetic shield (reduce sensitivity to AC magnetic field by 100:1)  
Straight cable connector rated for continuous operation at 121°C  
Right-angle connector rated for continuous operation at 121°C  
Mounting Block (XY) for Model 544M Velocity Sensors  
Mounting Bracket MS (XY) for Sensor  
Mounting Bracket AL (XY) for Sensor

Qty	Part Number
1	M10449
1	M43660
1	M14797
1	M60014
1	M60019
1	M60020

### Specifications

#### Performance

Frequency Response: - 14 to 1,000 Hz within  $\pm 8\%$  10Hz - 20% (average) at 21°C  
Sensitivity: - 42.52 mV/mm/sec  $\pm 10\%$   
Impedance: - R=2k ohms, L = 0.7 H at 21°C  
Maximum Amplitude: - 3175 microns Pk - Pk to 70 Hz; 30 g above 70 Hz  
Transverse Response: - Less than 5% (average) 10 to 1,000 Hz  
Isolation: - Signal insulated from case

#### Mounting

Orientation: - Any (horizontal & vertical best)  
Mounting: - (4) holes 7.15mm Dia. on 2 x 2 centres  
Grounding: - Case and signal ground isolated  
Connector: - 2-pin Mil Spec

#### Environmental

Operating range: - -40°C to 260°C  
Housing: - IP65, Waterproof, Dustproof

#### Weight & Dimensions

Weight: - 0.7Kg  
Dimensions: - 63.5mm (W) x 63.5mm (L) x 123.8(H) overall  
Dimensions: - 63.5mm (W) x 63.5mm (L) Square base

Mechanalysis (India) Ltd. continuously improves products; it therefore retains the right to change the above specification without notice