Mechanalysis (India) Ltd
www.mechanalysisindia.com
Category: Sensors

PRODUCT SPECIFICATION

Inductive Velocity Sensor: On-Line, Round Base Top Connector

Model No: MIL544B

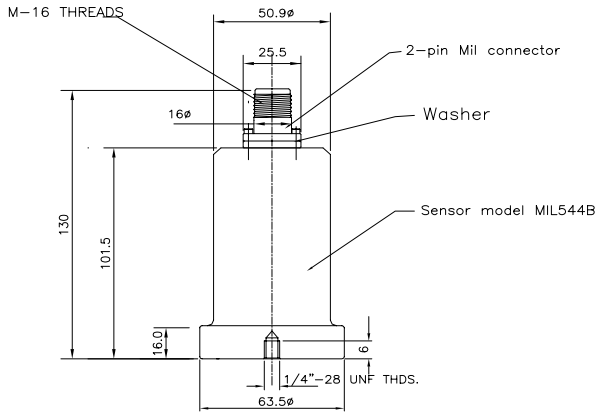
Part Number: M120083

The Mechanalysis model MIL544B inductive vibration sensor is an industrial vibration measuring sensor where a smaller mounting foot print is required for continuous on-line machinery protection, especially at the steam end of turbines (up to 260°C) and generator bearings. 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 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.

The MIL544B inductive seismic velocity sensor has a high output and low impedance, good frequency response makes the suitable for all types of machinery protection. The sensor's case insulates the signal from the housing to eliminate false 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. Calibrated to traceable National Standards, the sensor is supplied with a full frequency calibration test certificate. It can be serviced at MIL's National Service Centre.

Optional accessories:	**Qty**	**Part Number**
Magnetic shield (reduce sensitivity to AC magnetic field by 100:1)	1	M10449
Straight cable connector rated for continuous operation at 121°C	1	M43660
Right-angle connector rated for continuous operation at 121°C	1	M14797
Sensor Mounting Pad, 63mm ϕ, Mild Steel for MIL544B	1	M60016
Sensor Mounting Pad, 63mm ϕ, Stainless Steel for MIL544B	1	M60017
Mounting Block (XY) for Model 544M Velocity Sensors	1	M60014
Mounting Bracket MS (XY) for Sensor	1	M60019
Mounting Bracket AL (XY) for Sensor	1	M60020

Dimensions



Specifications

Technical Performance	
Frequency Response:	14 to 1,000 Hz within ± 8% 10Hz -20% (average) at 21°C
Sensitivity:	42.52 mV/mm/sec ± 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:	< 5% (average) 10 to 1,000 Hz
Isolation	Signal insulated from case

Mounting	
Orientation:	Any (horizontal & vertical best)
Mounting:	¼" -28 UNF Single Stud
Grounding:	Case and signal ground isolated
Connector	2-pin Mil Spec

Environmental	
Operating range:	-40°C to 260°C
Housing:	IP65
Classification	Class 1 Div 2

Weight & Dimensions	
Weight:	0.65Kg
Dimensions	Base 63.5mm (Diam) 123.8 (H) overall
Construction:	Aluminium, hard anodised

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

The Vibration People of Mechanalysis (India) Ltd can be contacted at any one of the following Branches

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