

Model 544

VELOCITY TRANSDUCER

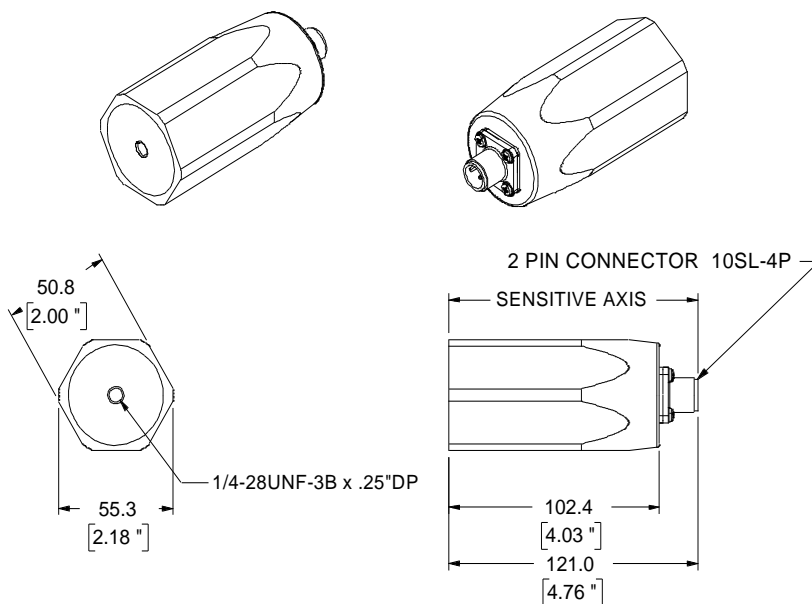
The IRD Balancing Model 544 vibration sensor is a seismic velocity transducer with a moving coil in a permanent magnetic field.

The Model 544 is suitable for a wide variety of manual and continuous monitoring applications due to its high output, low impedance, wide frequency response, and rugged construction.

The anodized aluminium housing is waterproof, dustproof, and acceptable for use in Division 2 hazardous areas. A variety of accessories are available.



Line Drawing:



Installation:

1. The sensitive axis may be oriented in any direction.
2. The mounting surface must be flat and smooth (minimum diameter = 2 3/8 in).
3. The mounting stud axis must be perpendicular to the mounting surface.
4. Hand-tighten only.
5. Connector pin A is both signal and housing ground; connector pin B is signal.

544

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GENERAL SPECIFICATIONS		Ordering Information for the Model 544	
Frequency Response	14 to 1,000 Hz within $\pm 8\%$ @ 70°F (21°C)	Part Number	Description
Sensitivity	1080 $\pm 10\%$ mV/in/s (42.52 mV/mm/s)	E04526	Model 544 Vibration Sensor
Maximum Amplitude	125 mils pk-pk to 70 Hz 30 g above 70 Hz	E09199	Pickup Isolator to electrically isolate the sensor case from the machine
Impedance	R=2 k Ω L= 0.7H @ 70° F (21° C)	E10449	Magnetic Shield (reduces sensitivity to magnetic fields by 100:1)
Magnetic Field Sensitivity	0.15 in/s/Gauss	E04224	Explosion-proof enclosure (for installation in Division 1, Class 1, group D, or Class II, Groups E,F,G hazardous areas)
Damping Factor	0.7 (critical) @ 70° F (21° C)	E04332	Magnetic Holder, 65lb holding force
Transverse Response	Less than 5% (average) between 10 and 1000 Hz	E01103	Aluminum Probe, 9-inch
Housing	Waterproof and Dustproof	E04521 (12') E04690 (25') E04691 (50')	Instrument interconnect cables for IRD Models 220/230/236/246/260/290/330 and 350, 3-pin connectors
Connector	2-pin (10SL-4P)	E20433 (12') E30219 (25')	Instrument interconnect cables for IRD Models 220/230/236/246/260/290/330 and 350, 9-pin circular twist-on connectors
Grounding	Case and signal ground common		
Mounting	1/4" - 28 tapped hole, 1/4" depth		
Mounting Orientation	Any		
Weight	1.3 lbs. (0.59 kg)		
Temperature Range	-40 to 500° F (-40° to 260° C)		

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