

# Model 580 VIBRATION SENSOR

The Model 580 is a solid-state, seismic velocity sensor for permanent installation on industrial machinery. It has no moving parts. The water-proof case provides an exceptionally long, trouble-free service life under adverse conditions, such as in mills, refineries, power plants, and mines. The broad frequency range – 120 to 120,000 CPM – makes this sensor suitable for nearly any machine.

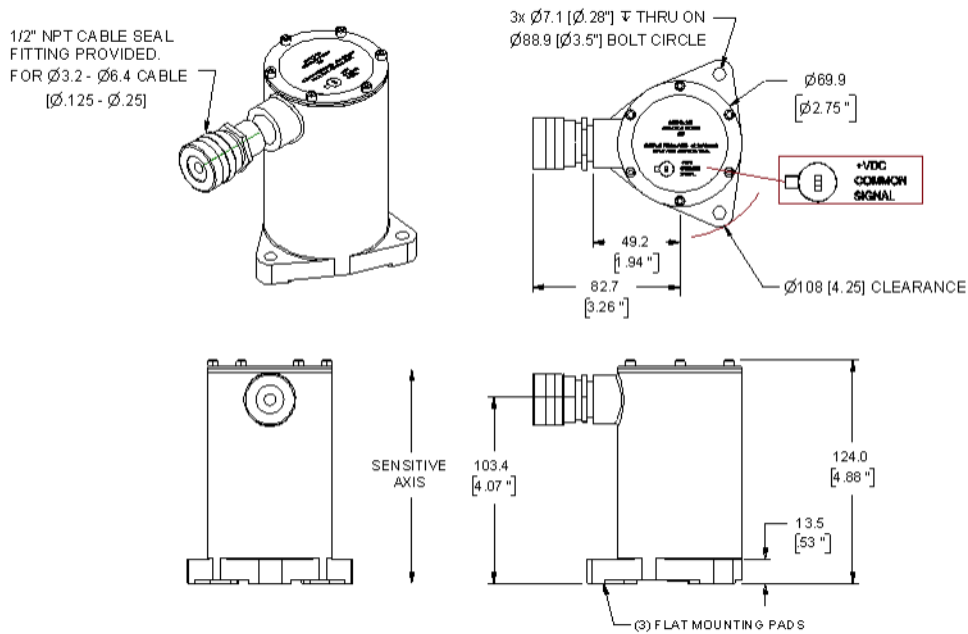
The cast stainless steel housing is designed to withstand mechanical abuse and is resistant to most chemicals. Electrical connections to the sensor are located within the housing and protected from the environment. A threaded boss is provided on the case for cable installation through conduit or a sealing gland.

The case is electrically insulated from the internal components, so the Model 580 sensor can be used on insulated-bearing machines or where good electrical grounding is not practical. The Model 580 sensor can be used in hazardous areas (see specifications).



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## Line Drawing:





# Model 580 VIBRATION SENSOR

GENERAL SPECIFICATIONS	
Frequency Range	2 to 2,000 Hz within $\pm 10\%$ @ 70° F (21° C)
Sensitivity	1080 mV/in/s (42.52 mV/mm/s)
Magnetic Field Sensitivity	.00015 in/s equivalent @ 60Hz (.0038 mm/s equivalent)
Useable Amplitude	0-6 in/s (0-152 mm/s)
Shock	500g peak maximum
Output Impedance	10 $\Omega$
Mounting	Three (3) holes for ¼ in. (6 mm) diameter bolts, 120 degrees apart on 3 ½ in. (89 mm) diameter circle. Footprint is 4 ¼ in. (108mm) diameter circle.
Construction	Type 316 stainless steel case; Neoprene cover gasket, stainless steel hardware
Connector	Internal 3-screw barrier strip AWG 14 to 20 wire
Cable Entry	½ NPT threaded boss in case. One (1) compression-type rubber seal fitting included for use with cable up to .250 in (64 mm) diameter. Seal fitting not for use in radiation or corrosive environments.
Grounding	Case isolated from signal ground

GENERAL SPECIFICATIONS—cont.	
Power Input	+18 to +26 VDC @ 10 mA
Housing	Waterproof to 30psi
Radiation	10 <sup>7</sup> RAD total dose
Withstand Voltage	400 VDC or peak AC max, case to circuit
Approvals	INTRINSICALLY SAFE: Class I, II, III; Groups A,B,C,D,E,G when used with safety barriers NON-INCENDIVE: Class I,II,III: Groups A,B,C,D,G; Division 2 (without safety barrier)
Weight	5.8 lbs (2.5 kg)
Temperature Range	Operating: -40° F to 200° F (-40°C to 93°C)

Ordering Information for Model 580	
Part Number	Description
E28852	Model 580 Vibration Pickup Sensor

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