

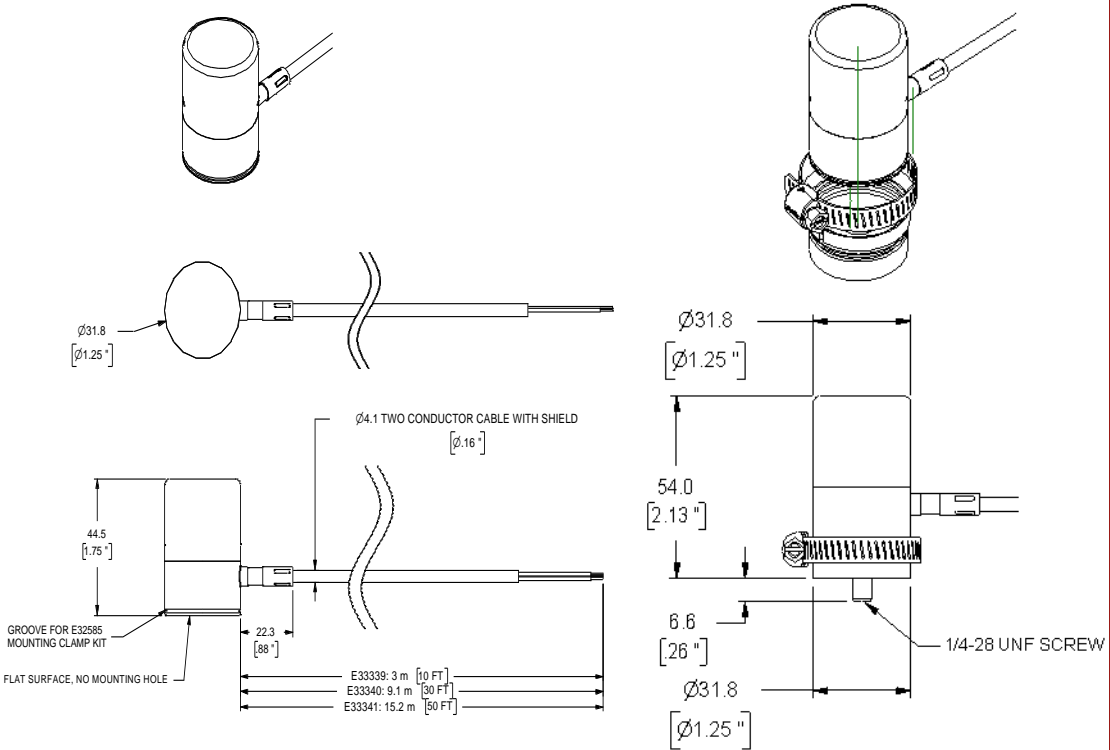
Model 941B VIBRATION SENSOR

The IRD Model 941B Vibration Sensor is a solid state seismic accelerometer for permanent mounting on machinery. It is designed to withstand harsh industrial environments, including high temperatures, splashing fluids, steam and radiation, and is resistant to the constant splashing of coolant on machine tools. The wide frequency and amplitude ranges of the 941B accommodate most types of rotating machines. The small size of the 941B permits installation near bearings and the integral cable eliminates problems often experienced with connectors.



A unique clamp mount simplifies installation on a 1.5 inch (38mm) diameter flat spot, using a 1/4- 28 machine screw. The clamp mount facilitates removal and replacement of the sensor during maintenance operations without affecting the performance of the sensor. The 941B has an internal, low-output impedance amplifier capable of transmitting the vibration signal accurately over cable up to several thousand feet long, making it ideal for large installations with centralized signal processing equipment. The amplifier is protected from electrostatic discharge and radio frequency interference for reliable, trouble-free operation. A DC bias voltage on the output wire permits remote testing of cable continuity and proper operation.

Line Drawings:



941B

Model 941B
VIBRATION SENSOR

GENERAL SPECIFICATIONS	
Frequency Response	10 Hz to 2kHz $\pm 10\%$ @ 70°F (21°C)
Sensitivity	50 mV/g $\pm 10\%$ @ 100 Hz
Dynamic Range	.005 - 100 g peak
Transverse Response	5% average
Grounding	Case connects to cable shield (isolated from internal circuitry)
Power Requirement	+16 to +26 VDC @ 9 mA supply through a 1000 ohm resistor
Output Bias	+10 to +20 volts DC
Construction	Water-tight, dust-tight, corrosion-resistant Stainless steel NEMA 4x case Integral, high temperature, shielded, two-wire, Tefzel-jacketed cable
Temperature Range	-40 to 300° F -40 to 149° C
Weight	9.5 oz (270 g) with 10 ft cable 15.2 oz (430 g) with 30 ft cable 20.8 oz (590 g) with 50 ft cable

Ordering Information for Model 941B	
Part Number	Description
E33339	Model 941B Sensor with 10 foot (3m) integral cable
E33340	Model 941B Sensor with 30 foot (9m) integral cable
E33341	Model 941B Sensor with 50 foot (15m) integral cable
E32585	Mounting Clamp Kit