

Model 942

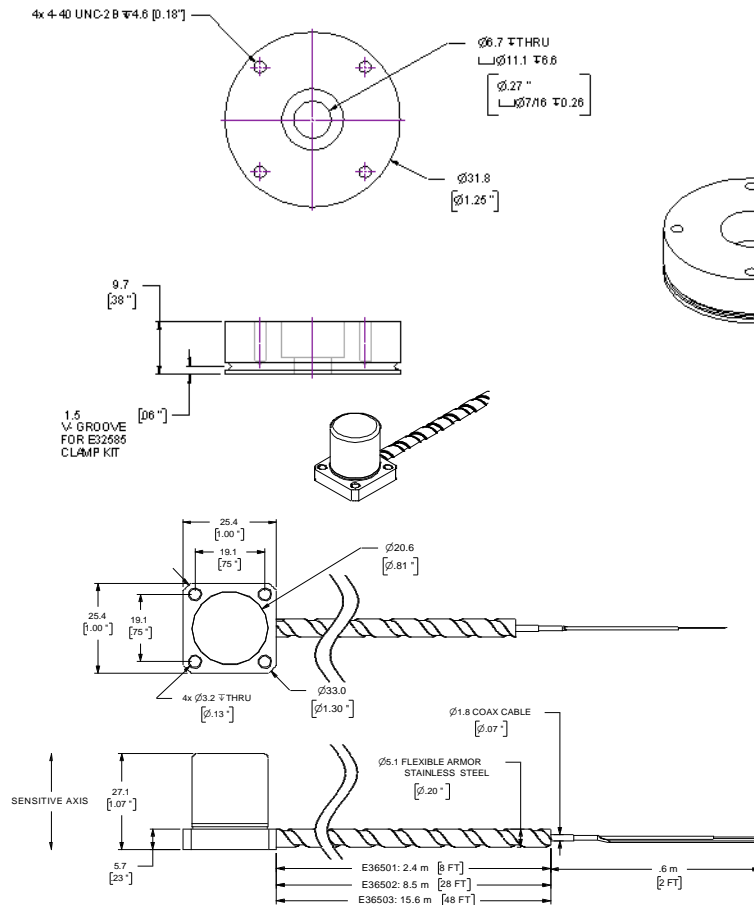
ACCELEROMETER

The IRD Model 942 is a solid state seismic accelerometer for permanent mounting on machinery. It is designed to withstand harsh industrial environments, including high temperatures and splashing fluids. The 942's wide frequency and amplitude ranges accommodate most types of rotating machines. The small size of the 942 permits installation near bearings, and the integral armored cable eliminates problems often experienced with connectors.

The 942 has an internal, low impedance amplifier capable of transmitting a vibration signal accurately over cable up to several thousand feet long, ideal for large installations with centralized signal processing equipment. A DC bias voltage on the output permits remote testing of cable continuity and proper operation. The 942 can be mounted directly on the machine or to an optional mounting plate which fastens to the machine with a ¼- 28 screw.



Line Drawings:



942

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GENERAL SPECIFICATIONS	
Frequency Response	5 Hz to 2 kHz \pm 10% @ 70°F (21°C)
Sensitivity	100 mV/g \pm 10% @ 100Hz
Magnetic Field Sensitivity	100 μ g/Gauss
Output Impedance	100 Ohms
Dynamic Range	.001-75 g peak
Resonant Frequency	22 kHz, mounted, nominal
Transverse Response	5%, average
Grounding	Case isolated from circuit
Power Requirement	+16 to +26 VDC 1 to 4 mA constant current Diode
Output Bias	+10 to +18 VDC
Case Material	300-series stainless steel
Environmental Protection	Class I, II, III, Division I, Groups A, B, C, D, E, F, G Hazardous indoor or outdoor location, with safety barrier
Temperature Range	-40 to 300° F -40 to 149° C

Ordering Information for Model 942	
Part Number	Description
E36501	Model 942 Sensor with 10 foot (3m) integral cable
E36502	Model 942 Sensor with 30 foot (9m) integral cable
E36503	Model 942 Sensor with 50 foot (15m) integral cable
E34948	Mounting Plate
E32585	Clamp Mount Kit (also order Mounting Plate)

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