

SA6200A IPT™ SEISMIC ACCELEROMETER SENSOR

Installation Manual



The SA6200A can sense a wide range of vibration frequencies, and is ideal for use on a variety of machines. A built-in amplifier provides a high level, low impedance output for connection to a signal conditioner for 4-20 mA output or to a vibration monitor. The SA6200A consists of a temperature stabilized piezo-electric sensor and amplifier, packaged in a stainless steel case to operate continually in a wet, corrosive environment of up to 120°C (248°F). The sensing circuit is electrically isolated to 500Vrms.

Features

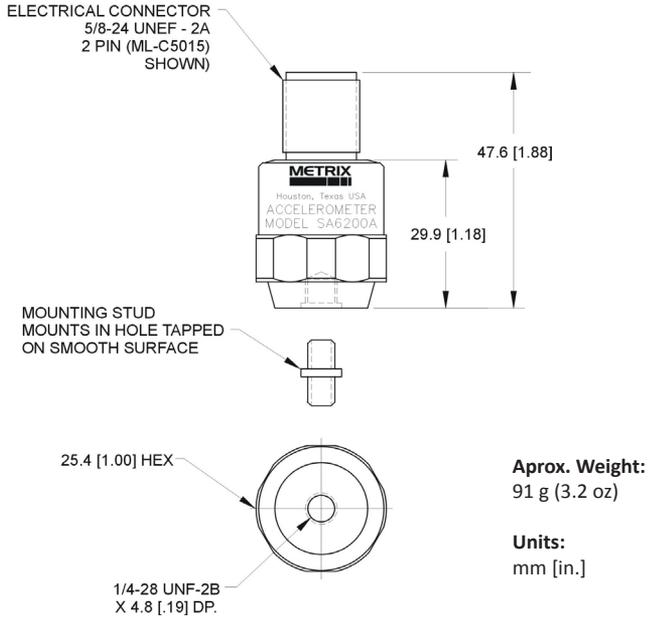
- Wide Frequency Response
- Hermetic S.S. Case
- Polarity Indifferent

Applications

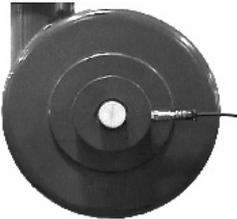
- Motors
- Gear Boxes
- Paper Machines
- Process Pumps
- Large Fans
- Rotor Blade Pass Sensing
- Turbocharger Engine Vibration
- Cooling Tower Fans

IPT™ (Independent Polarity Terminal) is a registered trademark of Metrix Instrument Co.

OUTLINE & DIMENSIONS



TYPICAL MOUNTING



ATEX/IECEx Special Conditions for Safe Use:

To ensure temperature classification and safety, the power supply should adhere to the following:

$$U_i \leq 30V, I_i \leq 100mA, P_i \leq 0.75W, C_i \leq 12nF, L_i=0$$

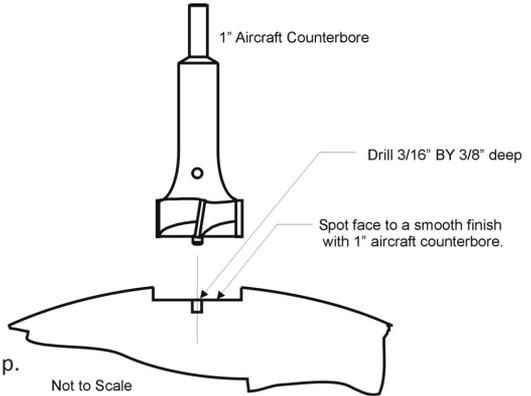
Ambient Operating Temperature: -54°C to +121°C (T3)

The mounting of the apparatus into an installation must be carried out in such a way that metallic body of the accelerometer is reliably connected to the system earth.

STUD MOUNTING THE SA6200A ACCELEROMETER

Installation Procedure

1. Center punch hole location.
2. Drill 3/16" diameter by 1/2" deep hole on punch mark.
3. Remove metal shavings.
4. Using the 3/16" hole as a guide, spot face to the depth required for a flat mounting surface.
5. Drill out the center hole using the 7/32" (#3) drill bit.
6. Tap hole with 1/4-28 UNF tapered tap.
7. Remove tap and metal shavings.
8. Continue tapping 1/4-28 UNF bottom tap.
9. Remove tap, deburr and metal shavings.
10. Apply a light oil to accelerometer stud and mating surface.
11. Install accelerometer, torque between 18 and 22 in/lbs.



5. 3/32" Allen Wrench.
6. Cutting fluid, Tap Magic or equal.
7. Torque wrench calibrated in inch pounds.
8. 1/4"-28 UNF taper and bottom tap.
9. 7/8" crow foot attachment.
10. Tap handle.
11. Small ball peen hammer.
12. Center punch.
13. Light Oil.

Tools needed

1. Half inch variable speed Drill Motor.
2. 3/16" (#12) drill bit.
3. 7/32" (#3) drill bit.
4. 1" Aircraft Counterbore with 3/16" pilot.

ENVIRONMENTAL INFORMATION



This electronic equipment was manufactured according to high quality standards to ensure safe and reliable operation when used as intended. Due to its nature, this equipment may contain small quantities of substances known to be hazardous to the environment or to human health if released into the environment. For this reason, Waste Electrical and Electronic Equipment (commonly known as WEEE) should never be disposed of in the public waste stream. The "Crossed-Out Waste Bin" label affixed to this product is a reminder to dispose of this product in accordance with local WEEE regulations. If you have questions about the disposal process, please contact Metrix Customer Service.

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