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OPERATING GUIDE
MODEL 3088C HIGH TEMPERATURE
CHARGE MODE ACCELEROMETER



This manual includes:

- 1) Specifications, Model 3088C**
- 2) Supplemental operating guide Model 3088C**
- 3) Outline/Installation Drawing Model 3088C**

SUPPLEMENTAL OPERATING GUIDE

MODEL 3088C HIGH TEMPERATURE CHARGE MODE ACCELEROMETER

INTRODUCTION

Model 3088C is a charge mode accelerometer designed to measure vibration of surfaces at temperatures up to 600°F. This accelerometer uses an ultra stable piezoelectric crystal in its self-generating seismic element.

Model 3088C may be used with various charge amplifiers of the vibration type (as opposed to the DC coupled electrostatic types.)

DESCRIPTION

Refer to Outline/Installation drawing 127-3088C.

Model 3088C is packaged in a hermetically sealed stainless steel housing and features a transverse mounted glass-to-metal sealed connector. The unit is installed by use of a 10-32 mounting stud.

INSTALLATION

To install Model 3088C, is necessary to prepare (or find) a flat mounting area of approximately 0.5 inch diameter. Ideally, the mounting surface should be flat to .001 in. TIR. The flat mounting surface ensures intimate contact between accelerometer base and mounting surface for best high frequency transmissibility, thus accuracy.

At the center of the mounting area, drill and tap a 10-32 mounting hole. Clean the area to remove all traces of machining chips, burrs, etc.

Next, thread the Mod. 6200 mounting stud into the base of the 3088C. The stud should enter easily and thread in up to the raised collar of the stud by hand. This collar prevents the stud from bottoming inside the tapped hole in the 3088C where it could possibly cause stresses in the base structure which could, in turn, cause anomalous behavior of the accelerometer at higher frequencies.

After seating the stud, spread a light coating of silicone grease, or other lubricant, on either of the mating surfaces and thread the accelerometer/stud combination into the tapped hole by hand, until the accelerometer base seats against the mounting surface. Check to see that the mating surfaces are meeting properly, i.e., that they are meeting flush and that there is not an angle formed between the two surfaces indicating that they are not co-planar. If this condition is observed, torquing the accelerometer down will strain the base causing possible poor frequency response and even erroneous reference sensitivity. Inspect the perpendicularity of the tapped hole.

If the hand tight meeting between the two surfaces is satisfactory, torque the 3088C to the mating surface with 15 to 20 lb-inches of torque, preferably measuring the torque with a torque wrench torquing on the hex surface only.

Proper torque will ensure the best high frequency performance from the instrument as well as repeatability of sensitivity when mounting and remounting. Excessive torque could damage the ground isolation base.

Connect the cable (typically Models 6010AXX or 6011AXX) to the accelerometer snugging up the threaded lock ring tightly by hand.

MAINTENANCE AND REPAIR

Should you experience a problem with your system, contact the Dytran factory for technical assistance in analyzing and trouble shooting the problem. If the product must be returned for evaluation and/or repair, you will be given an RMA (returned materials authorization) number and instructions for returning the instrument to the factory. Do not return the instrument without first obtaining this authorization to return.