



Dynamic Transducers and Systems

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OG3085C

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OPERATING GUIDE

MODEL 3085C HIGH TEMPERATURE CHARGE MODE

DIFFERENTIAL ACCELEROMETER



This manual includes:

- 1) Supplemental operating guide Model 3085C**
- 2) Outline/Installation Drawing Model 3085C**



SUPPLEMENTAL OPERATING GUIDE

MODEL 3085C HIGH TEMPERATURE CHARGE MODE ACCELEROMETER

INTRODUCTION

Model 3085C is a charge mode accelerometer designed to measure vibration of surfaces at temperatures up to 500°F. This accelerometer uses an ultra stable piezoelectric crystal in its self-generating seismic element.

Model 3085C 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 127-3085C.

Model 3085C is packaged in a hermetically sealed 304L housing and features a transverse mounted glass-to-metal sealed connector (2-pin, 7/16-27 UNS-2A shell). The unit is installed by use of (3) 8-32 x 1/2 inch long socket head cap screws, (supplied). The mounting screws thread into 3 matching threaded holes which must be provided in the mounting surface.

INSTALLATION

To mount Model 3085C, it is necessary to drill and tap 3 equally spaced 8-32 mounting ports on a 1.188 dia. bolt circle. For best high frequency response, the contact area of the accelerometer must be selected or prepared to be flat to .001 TIR. The holes must be drilled perpendicular to the mounting surface to within 2 degrees of angular error.

After drilling and tapping, clean the area to remove all traces of cutting oil and machining chips.

Spread a thin layer of silicone grease on the three contact surfaces of the 3085C. Locate the accel. over the tapped holes and engage the three mounting screws through the holes in the flange and into the tapped holes. Thread the mounting screws into the tapped holes and torque to 15 pound inches.

Inspect the mating surfaces to ensure that the accelerometer is snugged down tightly in intimate contact with the test surface at all three contact points.

If the surfaces appear to be meeting squarely, the accelerometer is ready for connection of the cable.

INTERCONNECTION

The recommended cable assy for the 3085C is the Dytran Model 6838A10. This cable is a 10 feet long with a 2-pin 7/16-27 UNS-2B plug on one end. The opposite end is terminated cable with no connector.

Connect the cable to the 3085C and connect the other end of the cable to the charge amplifier. Apply lock wire if applicable.

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.

SPECIFICATIONS

Refer to performance specification sheet.