Vibro Meter Vibro Meter Series Service Manual

143-104-000-101

1. Description

Vibro Meter 143-104-000-101

3. Product Information

Vibro Meter 143-104-000-101

DESCRIPTION

The use of VC2 type single crystal material in the CP

104 compression mode dynamic pressure transducer

provides an extremely stable instrument.

The transducer is designed for long-term monitoring

or development testing.

The CP 104 pressure transducer may be operated with

either softline or hardline cables depending on the required temperature.

Piezoelectric Pressure

Transducer

Type CP 104

CHARACTERISTICS

High-temperature capability -196°C to +400°C

Acceleration compensated

Operational in primary circuit of ABWR

Proven reliability

Will meet IEEE 323-1974

FEATURES

- Internal case insulation

- VC2 type crystal element

- Frequency response:

2 Hz to 6000 Hz

www.autronexa.com

- Sensitivity

190 pC/bar

WEIGHT: 150 g

Input power requirements : None

Signal transmission : 2 pole system insulated from

casing, charge output

Signal processing : Charge converter

OPERATING (at 23 °C ± 5°C)

Sensitivity (at 2 Hz) : 190 pC/bar nominal

Dynamic measuring range

(random) : 0.00005 bar to 20 bar nominal

Overload capacity (spikes) : Up to 100 bar

Linearity : ±1% over dynamic measuring range

Acceleration sensitivity : ≤0,1 pC/g (≤0.0005 bar/g)

Resonant frequency : >30 kHz

Frequency response : 2 to 6000 Hz ±5% (lower cutoff frequency is determined by

the electronics used)

Internal insulation resist. : Min. 109 Ω (107 Ω at 300°C)

Capacitance : 85 pF nominal pole/pole

30 pF nominal pole/ground

ENVIRONMENTAL

Temperature range : -196°C to +350°C

Shock acceleration : <2000 g peak (half sine, 1 ms)

along sensitive axis

Corrosion, humidity : Inconel 600, hermetically

welded

Radiations

- Gamma flux : 1011 erg/g no effect

- Neutron flux : 1018 n/cm2 no effect

Mounting : 3 Allen screws M5

Fastening torque 10 Nm

CALIBRATION : Dynamic calibration at factory

at 1 bar peak and 2 Hz (23°C).