

vibro-meter
certified by

CP 104

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
- Sensitivity
190 pC/bar

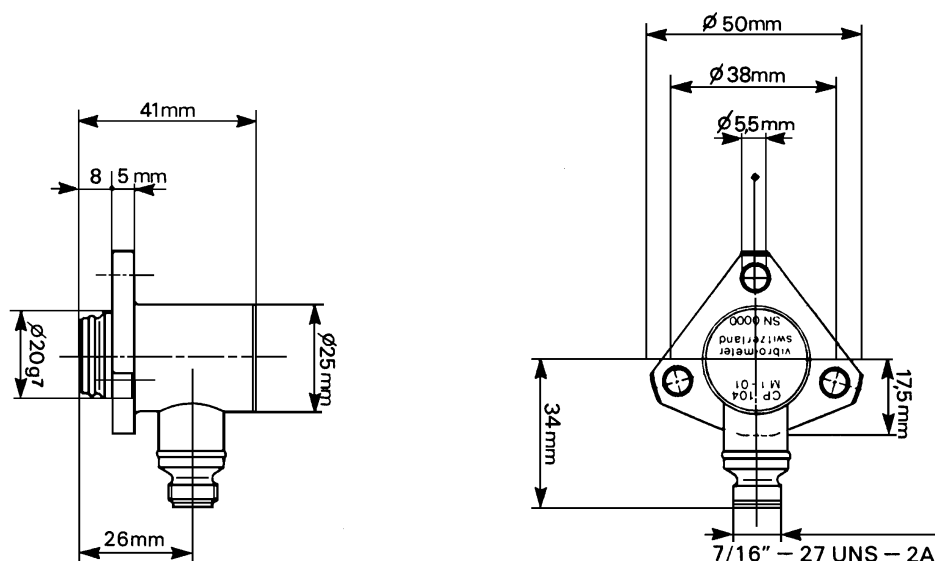
WEIGHT: 150 g


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.

Mechanical Diagram : _____


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 cut-off 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

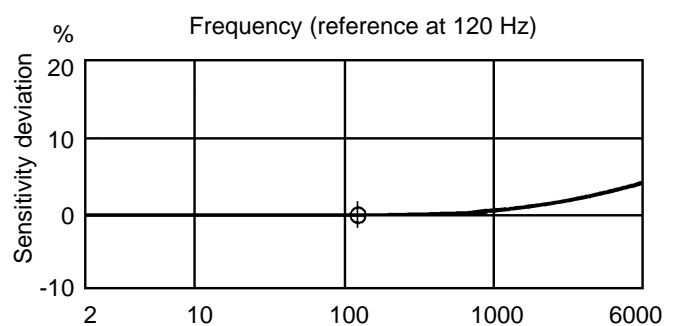
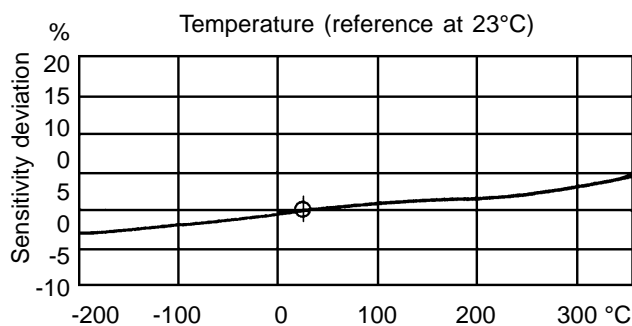
ENVIRONMENTAL
Temperature range : -196°C to +350°C
Shock acceleration : <2000 g peak (half sine, 1 ms) along sensitive axis
Corrosion, humidity : Inconel 600, hermetically welded

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). No subsequent calibration necessary.

Typical Responses



Accessories :

- Connectors
- Cables
- Electronics

Ordering Information :

To order please specify:

- Type and designation : CP 104 Piezoelectric Pressure Transducer
- Ordering No. : **143-104-000-1**



Due to the continual development of products, Vibro-Meter reserves the right to modify these specifications without forewarning.



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