

vibro-meter
certified by

CE 136

Piezoelectric Accelerometer Type CE 136

CHARACTERISTICS

- Vibration monitoring of turbines, turbocompressors, etc.
- Integrally attached electronics
- Long distance signal transmission
- High sensitivity
- Broad frequency band
- CENELEC and CSA approved

FEATURES

2-wire system with current modulation output

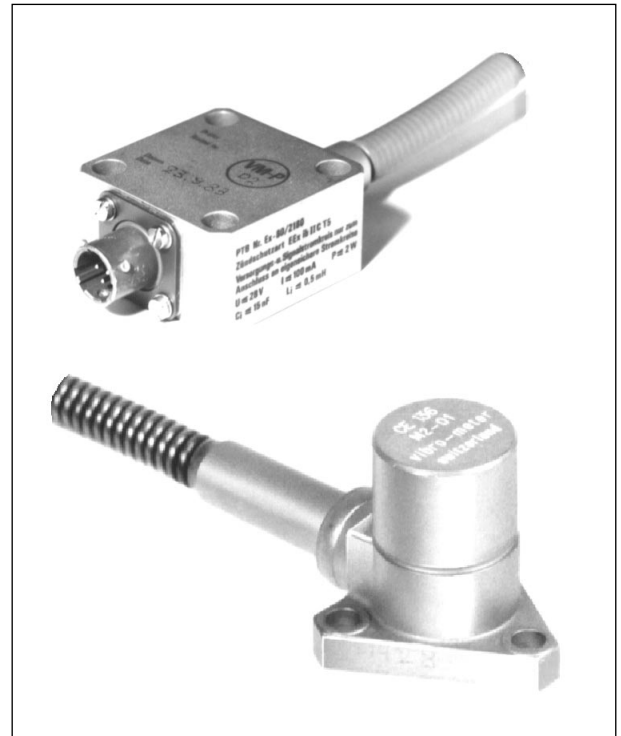
Internal case isolation

Frequency response : 3 Hz to 7000 Hz

Sensitivity : 10 μ A/g

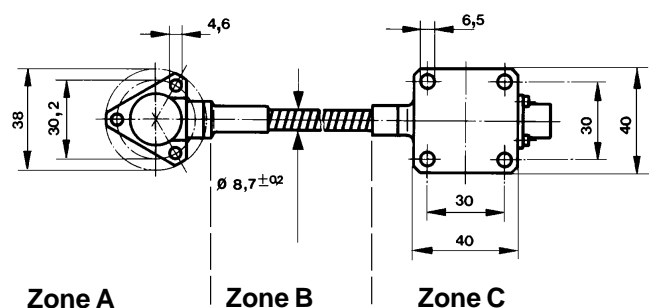
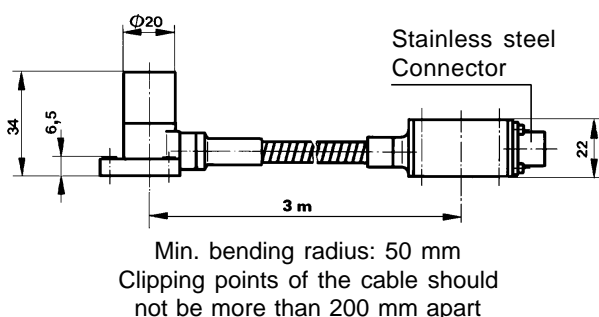
Temperature : -54°C to +260°C

WEIGHT : 500 g



DESCRIPTION

The CE 136 accelerometer is equipped with a centre mounted symmetrical compression mode polycrystalline element. The attached electronics eliminates the need for connectors in the high impedance zone. The hermetic integral cable between the transducer and the electronics casing is protected by a braided steel tube. The electronics provides a charge-to-current conversion. The modulated current output signal allows the use of a 2-wire cable for trouble-free transmission over long distances. The system is fully protected against cooling fluids, lubricants, water, steam, etc.



Input power requirements :

Zero signal current 3...8 mA, 12...18 VDC

Signal transmission :

2-wire system with modulated current output

Signal processing :

Galvanic separation unit

OPERATING (at +23°C ± 5°C)

Sensitivity (at 120 Hz) :

10 µA/g ±5%

Dynamic measuring range (random) :

0.0001 g to 200 g peak

Overload capacity (spikes) :

Up to 2000 g peak

Resonant frequency (mounted) :

>25 kHz

Transverse sensitivity :

≤5%

Linearity :

≤1% over dynamic measuring range

Frequency response :

±5% between 3 Hz and 7000 Hz

ENVIRONMENTAL

Temperature range :

Transducer and BOA cable : -54°C to +260°C
 Converter : -30°C to +100°C

Shock acceleration :

<2000 g peak (half sine 1 ms)

Explosive atmosphere :

Available in intrinsically safe version for use in hazardous locations according to :

CENELEC standard: PTB No. Ex-80/2180, EEx ib IIC T5 and

CSA standard: LR 62075, class I, groups A, B, C, D, Div. 1

Corrosion, humidity :

Inconel 600, stainless steel, hermetically welded

Base strain sensitivity :

≤10⁻³ g/µε

MOUNTING

Transducer : 3 Allen screws M4x16, with 3 spring lock washers M4. Fastening torque 4.5 Nm

Integral electronics: 4 Allen screws M6x35, with 4 spring lock washers M6. Fastening torque 15 Nm

CONNECTION :

Bayonet connector Type MS 3112 E8-3P (stainless steel) or threaded connector Type MIL-C-83723, series III T, size 0803 N (stainless steel).

CALIBRATION :

Dynamic calibration at factory for 5 g peak and 120 Hz (+23°C). No subsequent calibration necessary.

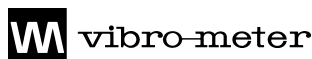
Ordering Information :

To order please specify:

- Type and designation : CE 136 Piezoelectric accelerometer
- Ordering No. : Standard **444-136-000-2**
- : Exi **444-136-000-1**
- : Exi with threaded connector **444-136-000-4**



Due to the continual development of our products we reserve the right to modify the specifications without forewarning.



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