

vibro-meter  
certified by

**CA 136**

## Piezoelectric Accelerometer Type CA 136

### CHARACTERISTICS

- Vibration monitoring  
e.g. low amplitude and analytical applications
- High sensitivity
- ARINC No 554 fixation
- Differential output
- Hermetically welded
- CENELEC & CSA certified

### FEATURES

- Internal case isolation
- Frequency response:  
0.5 Hz to 6,000 Hz
- Sensitivity:  
100 pC/g

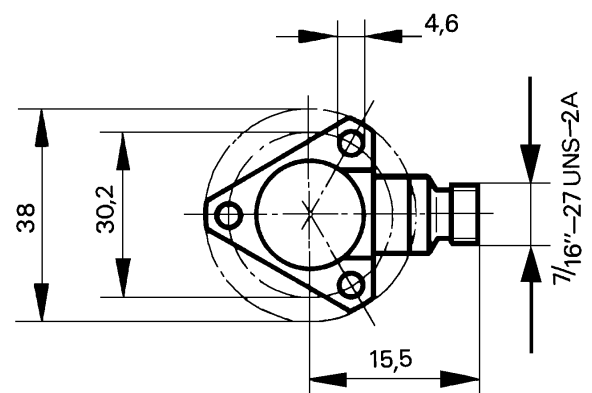
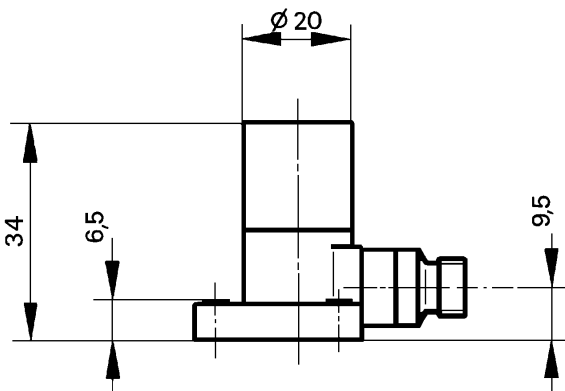
### WEIGHT

100 g



### DESCRIPTION

The CA 136 accelerometer is equipped with a centre mounted compression mode polycrystalline measuring element, which has internal case isolation. The transducer is designed for monitoring and measurement of vibration, when high instrument sensitivity is required. The accelerometer is hermetically welded and shows low base strain sensitivity.



**Input power requirements :**

None

**Signal transmission :**

2 pole system insulated from casing, charge output

**Signal processing :**

Charge amplifier

**OPERATING (at 23°C ±5°C) :**

**Sensitivity (at 120 Hz) :**

100 pC/g ±5%

**Dynamic measuring range (random) :**

0.0001 g to 1,000 g peak

**Overload capacity (spikes) :**

Up to 2,000 g peak

**Linearity :**

<1% between 0.0001 g and 100 g peak, max. 2% between 100 g and 1,000 g peak

**Transverse sensitivity :**

<5%

**Resonant frequency (mounted) :**

35 kHz nominal

**Frequency response :**

±5% between 0.5 Hz and 6,000 Hz (lower cut off frequency is determined by electronics used)

<10% between 6 kHz and 10 kHz

**Temperature error :**

<-4% between -54°C and +23°C

<±5% between +23°C and +200°C

<+12% between +200°C and +260°C

**Internal insulation resistance :**

Min. 10<sup>9</sup> ohms

**Capacitance :**

6,000 pF nominal, pole to pole, 32 pF nom., pole to casing

**ENVIRONMENTAL**

**Temperature range :**

-54°C to +260°C

**Short term survival temperature :**

-70°C to +280°C

**Shock acceleration :**

<2,000 g peak (half sine 1 ms) along sensitive axis

**Explosive atmosphere :**

Certified for use in hazardous area, according to standards:

CENELEC : LCIE N° 93.C6024X EEx ib IIC T6...T2.

CSA : LR 104613-5.

**Corrosion, humidity :**

Inconel 600, hermetically welded

**Base strain sensitivity :**

0.001 g/µε

**Mounting :**

3 Allen screws M4 x 16 with spring lock washers M4, screw torque 4,5 Nm. No need for el. insulation of mounting surface.

**CALIBRATION :**

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

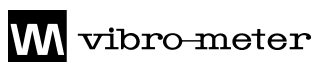
**Ordering Information :** \_\_\_\_\_

To order please specify:

- Type and designation : CA 136 Piezoelectric accelerometer
- Ordering No. : 144-136-000-2



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



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Vibro-Meter is a member of the  
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