

vibro-meter  
certified by



**Yekan**  
تولید، تامین و کالیبراسیون  
تجهیزات مانیتورینگ ارتعاش  
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**CA 201**

## Piezoelectric Accelerometer Type CA 201

### CHARACTERISTICS

- Industrial vibration monitoring
- High sensitivity
- Differential output
- Hermetically welded
- CENELEC approved
- Internal case insulation
- Integral cable

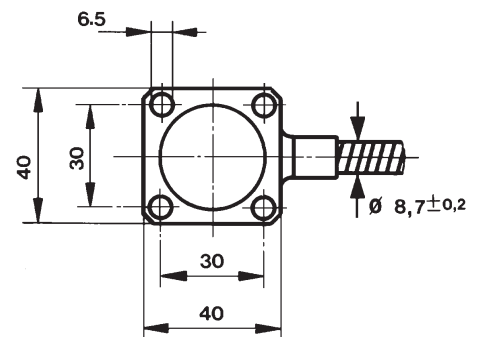
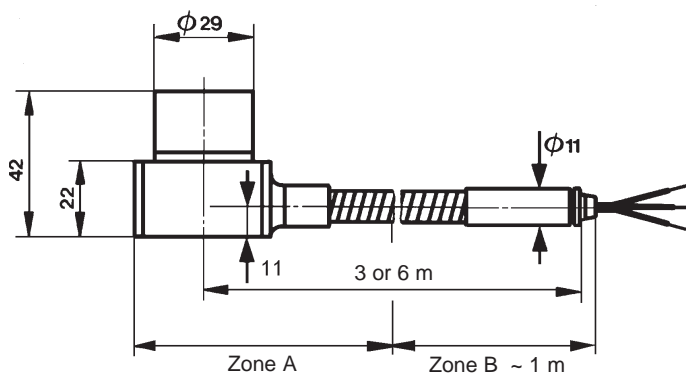


### DESCRIPTION

The CA 201 accelerometer is equipped with a symmetrical shear mode polycrystalline measuring element, which has internal case insulation. The transducer is designed for heavy-duty industrial monitoring

and measurement of vibration. The accelerometer is fitted with an integral cable protected by a stainless steel flexible tube welded to the case. The CA 201 accelerometer is available in CENELEC approved versions and has a high sensitivity.

### Mechanical Drawing :



Min. bending radius: 50 mm.  
Clipping points of the cable should  
be no more than 100 to 200 mm apart.

## GENERAL

**Input power requirements :**

None

**Signal transmission :**

2 pole system insulated from casing, charge output

**Signal processing :**

Charge amplifier

**OPERATING TEMPERATURE** (at 23°C ±5°C)**Sensitivity** (at 120 Hz) :

100 pC/g ±5%

**Dynamic measuring range** (random) :

0.0001 g to 200 g peak

**Overload capacity** (spikes) :

Up to 250 g peak

**Linearity :**

≤1% between 0.0001 g and 20 g peak, max. 2% between 20g and 200 g peak

**Transverse sensitivity :**

≤5%

**Resonant frequency** (mounted) :

11 kHz nominal

**Frequency response :**

±5% between 0.5 Hz and 3000 Hz (lower cut off frequency is determined by conditioner used) ≤10% between 3 kHz and 4.5 kHz

**Internal insulation resistance :**Min. 10<sup>8</sup> ohms**Capacitance :**

3300 pF nominal pole to pole, 1200 pF nominal pole to casing (for 6 m integral cable)

**Calibration :**Dynamic calibration at factory at 5 g peak and 120 Hz (+23°C).  
No subsequent calibration necessary.**Accessories :**JB 105 / JB 116      Junction box  
IPC                      Signal conditioner**Ordering Information :**

To order please specify:

- Type and designation	: CA 201 Piezoelectric accelerometer	
- Ordering No.	: With integral cable 3 m	<b>144-201-000-2</b>
	With integral cable 6 m	<b>144-201-000-4</b>
	Ex i with integral cable 3 m	<b>144-201-000-1</b>



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

## ENVIRONMENTAL

**Temperature range**

- Zone A	: -54°C to +260°C
- Zone B	: -54°C to + 125°C (+100°C Ex i version) (+260°C for cable)

**Temperature error :**

Typically 0.1% per °C between 23°C and 125°C, typically +25% at 250°C

**Shock acceleration :**

≤500 g peak (half sine 1 ms)

**Explosive atmosphere :**Available in CENELEC approved version, PTB conformance  
certificat No Ex-80/2183 EEx ib IIC T5**Corrosion, humidity :**

Stainless austenitic steel, hermetically welded

**Base strain sensitivity :**≤10<sup>-5</sup>g/με

## MECHANICAL

**Cable :**

2 pole twisted and shielded

**Cable weight :**

122 g/m

**Mounting :**4 Allen screws M6x35 with M6 spring lock washers, screw  
torque 15 Nm. No need for electrical insulation of mounting  
surface**WEIGHT :**

600 g with 3 m BOA-steeltube protected cable



vibro-meter

**Head Office**

**Vibro-Meter SA**, Rte de Moncor 4,  
P.O. Box 1071, CH-1701 Fribourg, Switzerland

Phone : +41 26-407 11 11  
Fax Industrial & Marine : +41 26-407 13 01  
Fax Aerospace : +41 26-402 36 62  
Fax Instrumentation : +41 26-407 13 75  
E-mail : vmsa@vibro-meter.ch  
Internet : www.vibro-meter.com  
www.meggitt.com

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