

Piezoelectric Accelerometer CA 901

SPECIFICATIONS

GENERAL

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 120 Hz)	: 10 pC/g ±5%
Dynamic measuring range (random)	: 0.001 g to 200 g peak
Overload capacity (spikes)	: Up to 500 g peak
Linearity	: ±1% over dynamic measuring range
Transverse sensitivity	: < 5%
Resonance frequency (mounted)	: > 17 kHz nominal
Frequency response	
• 3 to 2800 Hz nominal	: ±5% (lower cutoff frequency is determined by the electronics used)
• 2800 to 3700 Hz	: < 10%
Internal insulation resistance	: Min. 10 ⁹ Ω
Capacitance (nominal)	
• Pole to pole	: 80 pF for transducer + 200 pF/m of cable
• Pole to casing	: 18 pF for transducer + 300 pF/m of cable

ENVIRONMENTAL

Temperature range	
• Continuous	: -54°C to +650°C
• Extreme	: -196°C to +700°C
Shock acceleration	: < 500 g peak (half sine 1 ms) along sensitive axis
Pressure	: 140 bar 23°C, 80 bar 300°C
Corrosion, humidity	: Inconel 600, hermetically welded
Radiations	
• Gamma flux	: 10 ¹¹ erg/g no effect
• Neutron flux	: 10 ¹⁸ n/cm ² no effect
Mounting inside tube	: 4 Allen screws M6, fastening torque 15 Nm
Use in explosive atmospheres:	
• EC type examination certificate	: LCIE 08 ATEX 6017 X II 1 G (Zones 0, 1, 2) Ex ia IIC T6 to T710



For specific parameters of the mode of protection concerned and special conditions for safe use, please refer to the "EC type examination certificate" that is available from Vibro-Meter SA on demand.

CALIBRATION

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