

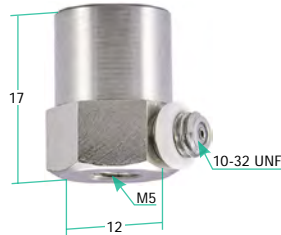
AP2037-1, AP2037-2, AP2037-XX

Purpose:

- Measuring vibration and shock acceleration in diagnostic systems and laboratory tests under strong electromagnetic fields.

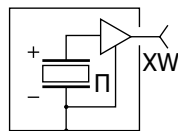
Features:

- High axial sensitivity, self-resonant frequency and shock resistance.
- Low sensitivity to electromagnetic fields.
- Built-in preamplifier.
- Wide range of power supply voltage and current.
- Low level of intrinsic noise.



Parameter	AP2037-1	AP2037-2	AP2037-10	AP2037-50	AP2037-100	AP2037-500
Conversion factor	0.1 mV/(m·s ⁻²)	0.2 mV/(m·s ⁻²)	1 mV/(m·s ⁻²)	5 mV/(m·s ⁻²)	10 mV/(m·s ⁻²)	50 mV/(m·s ⁻²)
Relative coefficient of transverse conversion	< 5 %					
Maximum value of measured vibroacceleration amplitude	50 000 m/s ²	25 000 m/s ²	5 000 m/s ²	1 000 m/s ²	500 m/s ²	100 m/s ²
Maximum shock limit (peak value)	± 10 000 g 1 g = 9.807 m·s ⁻² or 10 m·s ⁻² = 1.02 g					
Operating temperature range	- 55 ... + 125 °C					
Operating frequency range (ripple ± 1 dB)	0.5 ... 15 000 Hz					
Adjustment resonance frequency in axial direction	45 kHz					
Noise level, RMS (1 Hz ÷ 10 kHz)	< 0.05 m/s ²	< 0.025 m/s ²	< 0.005 m/s ²	< 0.006 m/s ²	< 0.0035 m/s ²	< 0.002 m/s ²
Output resistance	< 500 Ω					
Power:						
- voltage	+ (15 ... 30) V	+ (18 ... 30) V	+ (15 ... 30) V	+ (18 ... 30) V		
- current	2 ... 20 mA					
Constant output voltage level	8 ... 13 V					
Temperature influence coefficient	± 0.2 %/°C					
Housing material	stainless steel (titanium alloy) To be determined by customer					
Connector type	side lead AR03 (10-32 UNF)					
Weight (without cable)	13 g					
Supplied accessories	cable AK12B6D1 (classic name AK15), stud AH0110					
Options	T, N TEDS poll technology (Transducer Electronic Data Sheet) – electronic work sheets that automatically define the type of sensor and its technical characteristics according to IEEE P1451.4. Normalized sensitivity (nominal deviation not more than 2 %).					

Electrical circuit of AP2037-XX



Optional accessories:

- measuring amplifiers AP5110, AP5200;
- charge and voltage amplifiers AP5030, AP5210, AP5220, AP5230, AP5240B1, AP5240B1T, AP5240A1B1, AP5250;
- power units AS01, AS07;
- matching devices AG01, AG02;
- calibrators AT01m, AT02, AT04;
- cable AK26;
- cable adapters AR01, AR04;
- wax mastic AW01;
- probe AN01;
- magnet mounting bases AM01, AM03, AM05, AM08;
- insulating stud AH1010.