



Product Specifications Acceleration Sensor AS-477

Features

- High sensitivity
- Suitable for slowly rotating machinery
- Robust design
- M12 plug
- Constant current supplied



The accompanying safety instructions for installation, commissioning and disposal must be adhered with!

Applications

The sensor is suitable for the recording of high and low frequency signals. Typical applications are, for example, the monitoring of transmissions or cooling fans in wind turbines, heavy-duty and planetary gears or large fans..

Product description

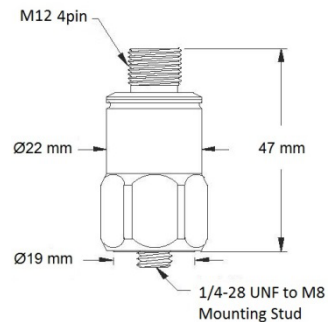
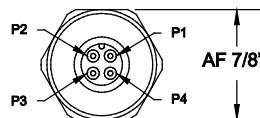
Scope of delivery

Sensor AS-477
1 x threaded bolt 1/4"-28 UNF to M8 (AC-3360)
Documentation

Connection

Plug connection (M12 male)

- Pin 1: + (SIG)
- Pin 2: - (0V / GND)
- Pin 3: not connected
- Pin 4: not connected



Technical Data

The following performance data apply, to the extent that nothing else is indicated, under standard conditions (Ambient temperature = 25 °C, Constant current = 4 mA).

Dynamic

Sensitivity, nom. (at 100 Hz):	500 mV/g ± 5 %
Frequency response:	0,2 Hz .. 14 kHz: ± 3 dB 0,7 Hz .. 5 kHz: ± 5 %
Measurement range:	10 g Peak
Resonance frequency:	min. 25 kHz, typically 30 kHz
Amplitude linearity:	< 1 %
Cross sensitivity:	< 5 %

Electric

Maximum output voltage:	30 V
Constant current supply (secure against reverse polarity):	2 mA .. 10 mA
Broadband noise (2.5 Hz .. 25 kHz):	250 μ g
Spectral noise:	10 HZ: 2,5 μ g / \sqrt Hz 100 HZ: 1,5 μ g / \sqrt Hz 1000 HZ: 1,5 μ g / \sqrt Hz
Output resistance:	< 300 Ω
Bias voltage, typically:	12,5 VDC
Across entire temperature range:	10 V - 14 V
Grounding:	Housing isolated against sensor electronic

Surroundings

Operating temperature range:	-50 °C ... +120 °C
Storage temperature range in original packaging:	-20 °C ... +70 °C
Overload capacity:	Constant, sinusoidal: 500 g Schock: 5.000 g
Housing design:	Hermetically sealed stainless steel housing
Degree of protection acc. EN 60529:	IP67 / IP68

Physical values

Measurement principle:	Piezoelectric principle, shear type
Weight:	90 g
Housing material:	316 L stainless steel
Thread,:	1/4" - 28 UNF
Mounting torque:	3,5 Nm (width across flats: 7/8" / 22,2 mm)
Connection:	M12 plug (male, 4-pole)

Order code:

AS-477

Accessories:

AC-1403: double-wired connection cable with straight plug (M12)

AC-1404: double-wired connection cable with angled plug (M12)

AC-3360: threaded bolt, 1/4" - 28 UNF to M8

AC-3361: threaded bolt, 1/4" - 28 UNF to 1/4" - 28 UNF