**Sensor for measuring acceleration.**

Type. **MA82.05.02**

MA82.05.2 are high-sensitivity vibration sensors. Built-in electronic amplifier in the sensor reduces the sensitivity of the sensor to electromagnetic interference. MA82.05.2 sensors are two-axis sensors with two measuring ranges. The sensor output signal is proportional to the supply voltage, it should be supplied with stabilized voltage. The sensors have different versions of mounting, neodymium magnet, screw or thread. It is adapted to work indoors and outdoors. The sensor works with the systems AV32 and AL32F, AL132F.


Connections M12:

1 – OUT X (brown)

2 – OUT Y (white)

3 – Uz + 5.00V(blue)

4 – GNDA (black)

5 – range switching
to GND – 1.7m/s2
to Uz – 5m/s2

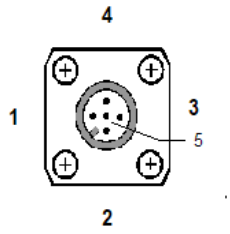


**Fig. 1 View of the sensor.**

We can attach a **cable adapter** with a socket to the accelerometer:
M12 PIN5 socket - SF12 PIN5 plug or M12 PIN5 plug.
Red marking - measuring range 1.7m / s2.
No designation - measuring range 5m / s2.

**Technical data:**

- Measurement ranges: 1.7m/s2 or 5m/s2
- Non-linearity: +/- 1% FS
- Frequency response 3dB factory set: from 0.5Hz to 220Hz[1]).
- Supply voltage: min 3.0V, max 6.0V.
- Supply current: <1.1mA
- Working temperature: -40°C to 80°C
- Maximum stroke level <1000g
- Weight about 50 grams.
- Tightness: IP67
- Dimensions: 20x20x62mm. (without magnet, screws)
- Connection plug: type M12 5PIN
- Connecting cable from 0.5m to 40m (ordered separately).

**Mounting:**

- [M20] neodymium magnet, diameter 20mm./5mm
- [M32] neodymium magnet, diameter 32mm./7mm
- [S5] outer bolt from M5.
- External thread length L = 1.5M.
- [G5] internal thread from M5.
- Internal thread length L = 1.2M.

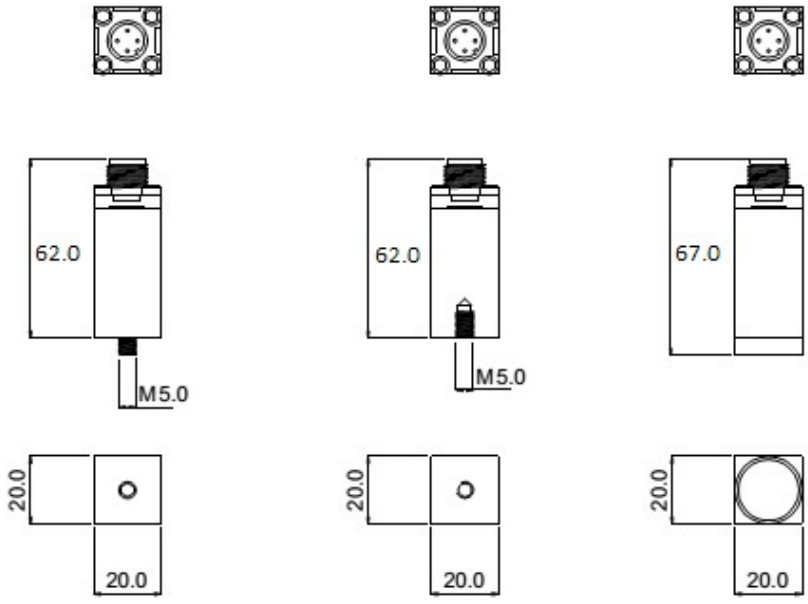


***Fig.* 4 Fixings and maximum dimensions of the sensor**

[1]) Possibility of a different upper frequency of the internal filter in the range of 60-1500Hz.