

General description

INNLABS' INN-205 quartz accelerometers were developed for **commercial applications** such as strap-down inertial navigation, orientation, and stabilization systems. Excellent performance of these accelerometers is achieved owing to proven quartz flexure technology. The **INN-205** accelerometers can be supplied with integrated Bias and Scale Factor temperature models upon customer request. In addition to acceleration the **INN-205** accelerometers also measure speed, distance, and obliquity.



Implementation of the latest advances in technology enables us to set lower price compared to other analogue accelerometers. Another substantial advantage is the fact that INNLABS does not require export licenses, so the purchasing process is very fast and hassle-free. These factors make **INN-205** the №1 accelerometer on the middle-accuracy accelerometers market today.

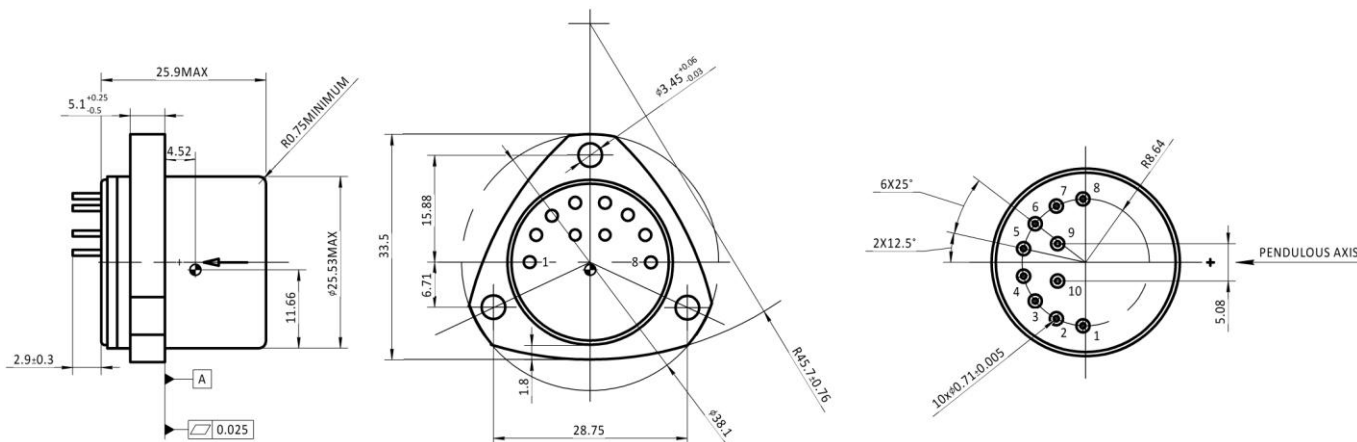
Features

- Tactical performance **1500µg** Bias Repeatability
- Temperature stability
- Analog output
- Compact design
- **INNLABS does not require export licenses**

Applications

- Inertial Navigation Systems for helicopters, manned and unmanned (UAV) aircrafts
- Navigation / orientation / gyrocompassing systems for naval vessels, ships, submarines, ROV, AUV
- Orientation systems for oil drilling industry

Accelerometer dimensions drawing (mm):



Technical Parameters

| Parameters | Units | Values |
|-------------------------|-------------------|-------------------------------------|
| Input Range | g | ±10 |
| Bias | mg | <20 |
| One Year Repeatability | µg | <1500 |
| Temperature Sensitivity | µg/ degC | <200 |
| Scale Factor | mA/g | 1.0 ... 1.4 |
| One Year Repeatability | ppm | <1500 |
| Temperature Sensitivity | ppm/degC | <200 |
| Axis Misalignment | µrad | <2000 |
| One Year Repeatability | µrad | <100 |
| Non-linearity | µg/g ² | <100 |
| Operating Temperature | degC | -50 ... +85 |
| Vibration | g, Hz | 8 g @ 20 ... 2000 Hz |
| Shock | g | 70, 11ms |
| Resolution | µg | <5 |
| Bandwidth | Hz | 800 |
| Current per Supply | mA | <16 |
| Power @ ±15 VDC | mW | <480 |
| Electrical Interface | | Power/Signal/Ground/ Temp Sensor |
| Input Voltage | VDC | ±12 ... ±18 |
| Temperature sensor | | Yes |
| Size | mm | Ø 38.1 x 26 |
| Weight | g | <80 |
| Case Material | | Stainless Steel |

Connector PIN description:

| PIN | Signal | PIN | Signal |
|-----|----------------|-----|---------------------------|
| 1 | Signal out | 6 | Temperature sensor output |
| 2 | Current torque | 7 | Voltage self test |
| 3 | -12 to -18 VDC | 8 | Signal and power return |
| 4 | +12 to +18 VDC | 9 | - 9VDC |
| 5 | NC | 10 | + 9VDC |

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