Integrated Vibration Sensor

Brand: Rodcont
Model: GVS420-020-M10-00

Product Overview

The Rodcont GVS420-020-M10-00 is an integrated, loop-powered vibration sensor designed for online condition monitoring of rotating and reciprocating machinery. The sensor performs absolute vibration velocity measurement and is intended for permanent installation on bearing housings or machine casings. The device integrates an inertial vibration sensing element with a precision signal conditioning circuit, providing a standard 4–20 mA analog output for direct connection to PLC, DCS, and industrial monitoring systems.

Key Features

- Integrated vibration sensor with signal conditioning
- Absolute vibration velocity measurement
- 2-wire loop-powered design
- Standard 4–20 mA output
- Stainless steel cylindrical housing
- Thread-mounted installation

Technical Specifications

Electrical	
Power Supply	DC 12–28 V (2-wire loop-powered)
Output Signal	4–20 mA
Maximum Load	≤ 500 Ω
Measurement	
Measurement Type	Absolute vibration velocity
Measuring Range	0–20 mm/s
Frequency Response	10 Hz – 1000 Hz
Accuracy	±5 % of full scale
Resolution	0.01 mm or 1 µm
Shock Resistance	
Mechanical	
Housing Material	Stainless steel (304)
Mounting Thread	M10 × 1.5
Dimensions	Ø29 × 78 mm
Weight	
Protection Class	IP54 / IP65
Environmental	
Operating Temperature	–40 °C to +85 °C

Electrical Connection

The sensor operates as a 2-wire loop-powered device. Power supply and signal transmission share the same two conductors. The analog input device must be connected in series within the current loop. Maximum allowable loop resistance is 500 Ω.

Wire Identification:
Brown: +24 VDC / 4–20 mA signal
Blue: 0 VDC / signal return

Handling & Storage

Avoid strong mechanical impacts. During transportation and storage, keep the sensor in protective packaging.