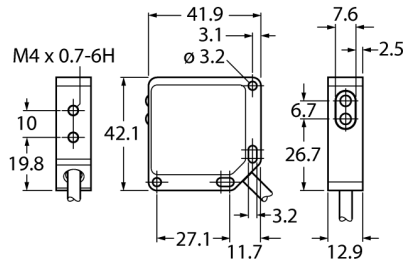


# Vibration & Temperature Sensor

## Synchronous Serial Interface

### Modbus RTU

### QM42VT2QP



- For detecting temperature and vibration values
- Sturdy zinc case
- Protection class IP67
- M12 x 1 cable with male end, PVC, 150 mm, 5-pin
- Operating voltage: 10...24 VDC or 3.6...5.5 VDC
- Temperature measuring range: -40...105 °C
- Resolution: 1 °C
- Accuracy:  $\pm 3$  °C
- Vibration measuring range: 0...65 mm/s RMS
- Frequency range: 10...1000 Hz
- Accuracy:  $\pm 10$  % at 25 °C
- Shock resistant up to 400g
- RS485 interface, supports Modbus RTU
- BWA-BK-005 mounting plate kit included in delivery

Type	QM42VT2QP
ID	3800955

Wireless data	
Function	Vibration sensor
Device type	Sensor

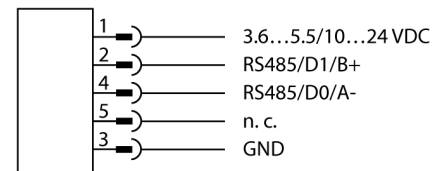
I/O data	
Communication protocol	Modbus RTU
	RS485

Electrical data	
Operating voltage	10...24 VDC
Power-on indication	LED, Yellow

Mechanical data	
Design	Rectangular, QM42VT
Housing material	Die-cast zinc, ZN, Black
Electrical connection	Cable with connector, M12 x 1, 0.15 m
Antenna connection	No radio participant
Ambient temperature	-40...+85 °C
Protection class	IP67

Tests/approvals	
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#### Wiring Diagram



#### Functional principle

This sturdy sensor in a metal housing was developed to monitor vibrations and the temperature of moving machine parts. The data can be transferred to a controller via the RS485 interface, thus enabling an imminent failure of the machine to be identified at an early stage and corrective action to be taken. The rugged housing is IP67-rated and allows the detection of vibrations on two axes. The sensor can be mounted or stuck on the machine with the relevant accessories.

## Accessories

Type code	Ident no.		Dimension drawing
BWA-BK-005	3800831	Mounting plate kit contains SMB42FLAT stainless steel bracket, screw set and 1x thermoconductive adhesive tape, recommended for carrying out high-frequency measurements or when mounting on uneven surfaces	
BWA-BK-001	3095664	Mounting plate kit contains SMB42FLM12 magnetic bracket and two screws	
BWA-HW-057	3094931	Thermoconductive adhesive tape, set of 3, 0.5 mm thickness	

## Function accessories

Type code	Ident no.		Dimension drawing
BWA-HW-006	3081325	Converter cable, RS485 to USB 2.0 converter, female connector, M12 × 1, 5-pin, male connector, USB type A, length 1 m; supplies the connected device with 10 V. An external power supply via a Y-splitter (6634679) is recommended for the connected device	