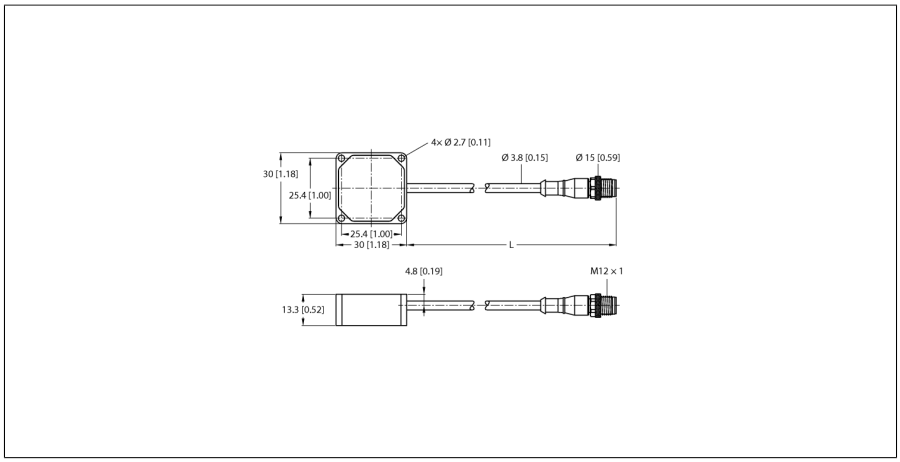
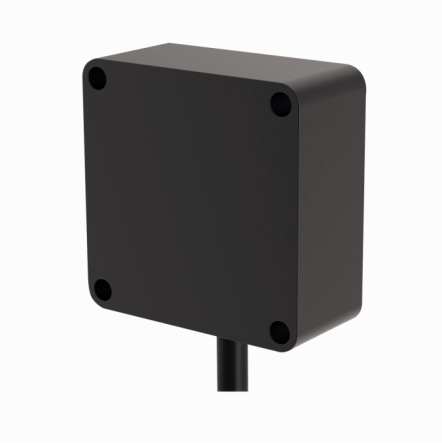
Vibration & Temperature Sensor With Serial Interface Modbus RTU QM30VT2

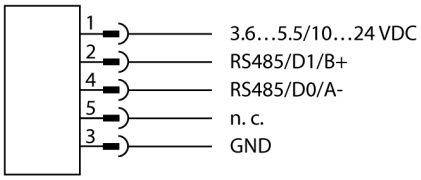




Type	QM30VT2
ID	3806276
Wireless data	
Function	Vibration sensor
Device type	Sensor
I/O data	
Communication protocol	Modbus RTU RS485
Electrical data	
Operating voltage	10…24 VDC
Mechanical data	
Design	Rectangular, QM30VT
Housing material	Aluminium, AL, Black-finished
Electrical connection	Cable with connector, M12 × 1, 2.09 m
Antenna connection	No radio participant
Ambient temperature	-40…+105 °C
Protection class	IP67
Tests/approvals	

- For detecting temperature and vibration values
- Robust aluminum housing
- Protection class IP67
- PVC cable, 2.09 m, with M12 × 1 male connector, 5-pin
- Shock resistant up to 400 g
- BWA-BK-022 mounting plate kit included in delivery
- Temperature measuring range: -40… 105 °C
- Resolution: 1 °C
- Accuracy: ± 3 °C
- Vibration measuring range: 0…46 mm/s RMS
- Frequency range: 10…4000 Hz
- Accuracy: ± 10 % at 25 °C
- Operating voltage: 10…24 VDC or 3.6… 5.5 VDC
- RS485 interface, supports Modbus RTU

Wiring Diagram



Functional principle

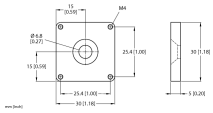
This sturdy sensor in a metal housing was developed to monitor vibrations and the temperature of moving machine parts. The data can be transferred to a controller via the RS485 in-

Edition • 2023-11-01T00:33:27+01:00

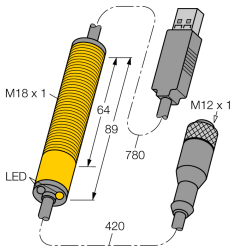
terface, thus enabling an imminent failure of the machine to be identified at an early stage and corrective action to be taken. The rugged housing is IP67-rated and allows the detection of vibrations on two axes. The sensor can be mounted or stuck on the machine with the relevant accessories.

Edition • 2023-11-01T00:33:27+01:00

Accessories

Type code	Ident no.		Dimension drawing
BWA-BK-022	3810633	Mounting plate kit for QM30VT sensors, aluminum, screw set and self-adhesive foil included	

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	

Edition • 2023-11-01T00:33:27+01:00