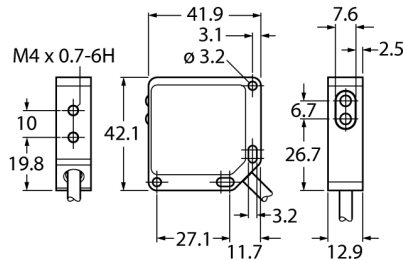


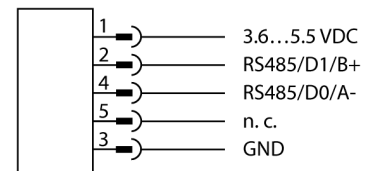
# Vibration & Temperature Sensor With Serial Interface For Connecting to a DX80 Radio Node QM42VT1QP



- 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: 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 400 g
- Serial interface to connect a DX80 radio participant
- BWA-BK-005 mounting plate kit included in delivery

|                         |                                       |
|-------------------------|---------------------------------------|
| Type                    | QM42VT1QP                             |
| ID                      | 3802369                               |
| Wireless data           |                                       |
| Function                | Vibration sensor                      |
| Device type             | Sensor                                |
| I/O data                |                                       |
| Communication protocol  | 1-wire-serial                         |
| Electrical data         |                                       |
| Operating voltage $U_s$ | 3.6...5.5 VDC                         |
| Power-on indication     | LED, Yellow                           |
| Mechanical data         |                                       |
| Design                  | Rectangular, QM42VT                   |
| Housing material        | Die-cast zinc, ZN                     |
| 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         |                                       |

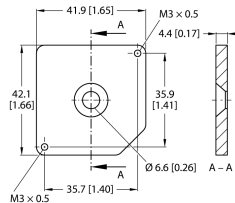
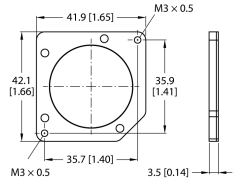
## Wiring Diagram



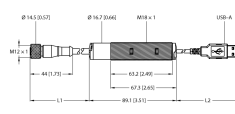
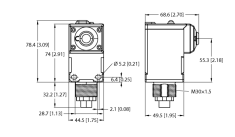
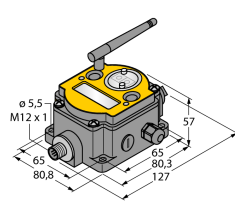
## Functional principle

This sensor is especially designed for supply via FlexPower node. It features a lower power consumption and a short warm-up period.

## 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-USB1WIRE-001 | 3079714   | Converter cable, for connecting serial sensors in the M12FT...4Q, QM42VT1, K50UX1RA etc. series to the PC, supports baud rates 9600, 19200 and 38400 Bd, USB 2.0 Type A male connector to female connector, M12 x 1, 5-pin, supply: 5 V supply via USB for powering 1 sensor, total length: 1 m |  |
| DX80N2Q45VT      | 3088439   | Q45 wireless sensor, internal battery supply, protection class IP67, serial interface to connect a vibration and temperature sensor                                                                                                                                                             |  |
| DX80N2X1S-P6     | 3018657   | DX80 FlexPower nodes, internal battery supply, external antenna, protection class IP67, serial interface to connect a sensor                                                                                                                                                                    |  |

## Function accessories

| Type code    | Ident no. |                                                                                                                                                                        | Dimension drawing |
|--------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| DX80N2Q45U   | 3800203   | Q45 wireless sensor, internal battery supply, protection class IP67, serial interface to connect various sensors                                                       |                   |
| DX80N2X6S-P6 | 3095667   | DX80 nodes, 10...30 DC power supply, external antenna, protection class IP67, serial interface to connect a sensor                                                     |                   |
| DX80DR2M-H6  | 3014392   | DX80 Data Radio, internal battery supply, external antenna, protection class IP67, serial interface to connect a sensor, RS485 interface to communicate via Modbus RTU |                   |