

# B2N45H-QR20-2LI2X3-H1151

## Inclinometer



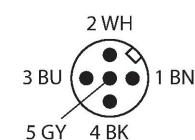
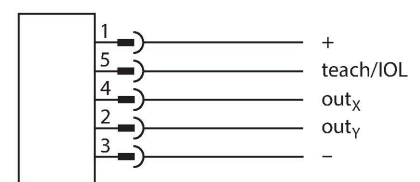
### Technical data

|   |                          |
|---|--------------------------|
| Type                                      | B2N45H-QR20-2LI2X3-H1151 |
| ID  | 100031453                |
| Measuring principle                       | Acceleration             |
| <b>General data</b>                       |                          |
| Resolution                                | 16 bit                   |
| Measuring range                           | -45...45 °               |
| Number of measuring axes                  | 2                        |
| Repeat accuracy                           | ≤ 0.2 % of full scale    |
| Linearity deviation                       | ≤ 0.5 %                  |
| Temperature drift                         | ≤ ± 0.025 %/K            |
| <b>Electrical data</b>                    |                          |
| Operating voltage                         | 15...30 VDC              |
| Residual ripple                           | ≤ 10 % U <sub>ss</sub>   |
| Isolation test voltage                    | ≤ 0.5 kV                 |
| Short-circuit protection                  | yes                      |
| Wire breakage/Reverse polarity protection | yes / yes                |
| Output function                           | 5-pin, Analog output     |
| Current output                            | 4...20 mA                |
| Load resistance voltage output            | ≥ 4.7 kΩ                 |
| Load resistance current output            | ≤ 0.4 kΩ                 |
| Current consumption                       | < 80 mA                  |
| <b>Mechanical data</b>                    |                          |
| Design                                    | Rectangular, QR20        |
| Dimensions                                | 71.6 x 62.6 x 20 mm      |
| Housing material                          | Plastic, Ultem           |
| Electrical connection                     | Connector, M12 × 1       |

### Features

- Rectangular, plastic, Ultem
- Status displayed via LED
- Angle detection along two axes with ±45 ° measuring range
- High protection class IP68/IP69K
- Protected against salt spray and rapid temperature change
- 15...30 VDC
- M12 × 1 male connector, 5-pin
- Analog output 4...20 mA
- The center point of the measuring range can be adjusted using teach adaptor TX1-Q20L60
- Individual parameterization possible with USB-2-IOL-0002

### Wiring diagram



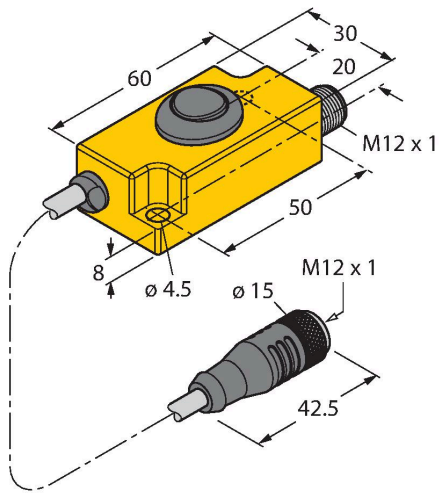
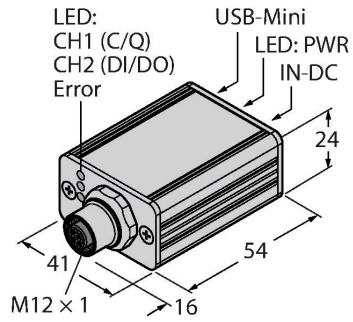
### Functional principle

The inclinometers use an acceleration measuring cell to determine the angle. The Earth's gravity is used as a reference. If the inclinometer changes its angle relative to the Earth's gravity, this is detected by the acceleration measuring cell.



## Accessories

| Dimension drawing | Type           | ID      |   |
|-------------------|----------------|---------|---|
|                   | USB-2-IOL-0002 | 6825482 | IO-Link Master with integrated USB port |



TX1-Q20L60

6967114

Teach adapter for inductive encoders, linear position, angle, ultrasonic and capacitive sensors