

B2N10H-Q20L60-2LI2-H1151

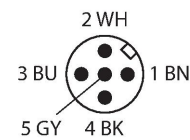
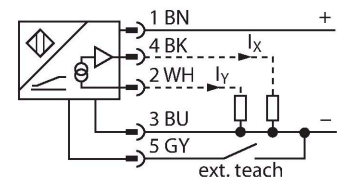
Inclinometer



Features

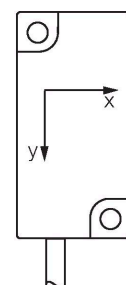
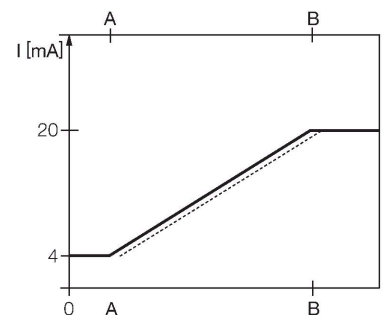
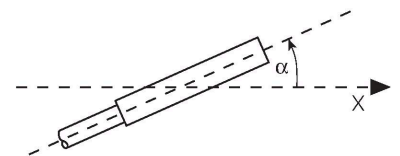
- Plastic, PC
- Zero point calibration $\pm 5^\circ$
- Two analog outputs
- M12 x 1 male connector

Wiring diagram



Functional principle

Inclination is determined by a wear-free semiconducting sensor element.



Technical data

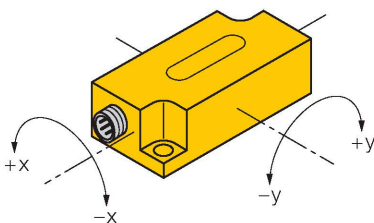
| | |
|---|---|
| Type | B2N10H-Q20L60-2LI2-H1151 |
| ID | 1534012 |
| Measuring principle | Acceleration |
| General data | |
| Measuring range | $-10 \dots 10^\circ$ |
| Measuring range x-axis | $-10 \dots 10^\circ$ |
| Measuring range y-axis | $-10 \dots 10^\circ$ |
| Number of measuring axes | 2 |
| Repeatability | $\leq 0.2\%$ of measuring range $ A - B $ |
| Linearity deviation | $\leq 1\%$ |
| Temperature drift | $\leq \pm 0.05\%/K$ |
| Resolution | $\leq 0.04^\circ$ |
| Electrical data | |
| Operating voltage | 10...30 VDC |
| Isolation test voltage | ≤ 0.5 kV |
| Short-circuit protection | yes |
| Wire breakage/Reverse polarity protection | no / yes |
| Output function | 5-pin, Analog output |
| Current output | 4...20 mA |
| Load resistance current output | ≤ 0.2 k Ω |
| Response time | 0.1 s |
| | time for the output signal to achieve 90% full scale if the angle changes from -10° to $+10^\circ$ |
| Current consumption | 50 mA |
| Mechanical data | |
| Design | Rectangular, Q20L60 |

Technical data

| | |
|---------------------------------|---|
| Dimensions | 60 x 30 x 20 mm |
| Housing material | Plastic, PC |
| Electrical connection | Connector, M12 × 1 |
| Environmental conditions | |
| Ambient temperature | -30...+70 °C |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP68 IP69K |
| MTTF | 203 years acc. to SN 29500 (Ed. 99) 40 °C |

Mounting instructions

Mounting instructions/Description



Teaching

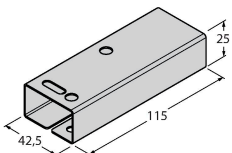
The zero point can be adjusted with teach adapter TX1-Q20L60. Teach-GND is pressed for approx. 1 s to do this. The outputs are switched to 20 mA as confirmation. Teach-GND is pressed for 6 s to reset the axis zero points. The outputs are switched to 4mA as confirmation. Once the teach button is released, the sensor returns to normal operation.

Accessories

GUARD-Q20L60

A9684

Protective housing for Q20L60 inclinometers for protecting against mechanical impact; material: Stainless steel



Accessories

| Dimension drawing | Type | ID | |
|-------------------|------------|---------|---|
| | TX1-Q20L60 | 6967114 | Teach adapter for inductive encoders, linear position, angle, ultrasonic and capacitive sensors |