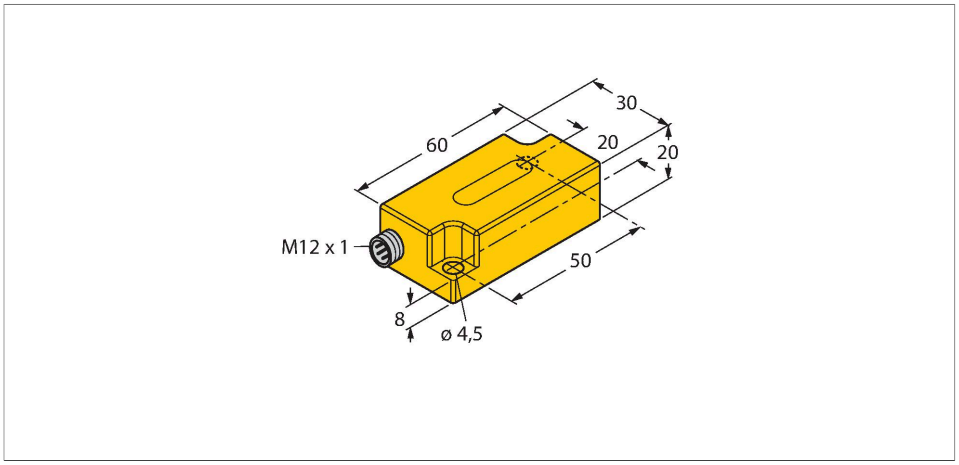
B2N45H-Q20L60-2LU3-H1151
Inclinometer



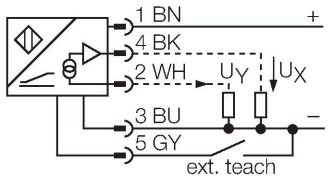
Technical data

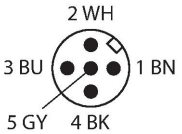
Type	B2N45H-Q20L60-2LU3-H1151
ID	1534007
Measuring principle	Acceleration
General data	
Measuring range	-45…45 °
Measuring range x-axis	-45…45 °
Measuring range y-axis	-45…45 °
Number of measuring axes	2
Repeatability	≤ 0.2 % of measuring range |A - B|
Linearity deviation	≤ 0.5 %
Temperature drift	≤ ± 0.04 %/K
Resolution	≤ 0.1 °
Electrical data	
Operating voltage U_B	10…30 VDC
Isolation test voltage	0.5 kV
Short-circuit protection	yes
Wire break/reverse polarity protection	no/yes
Surge protection	-48…48 VDC [$U_{b\,max.}$]
Output function	5-pin, Analog output
Voltage output	0.1…4.9 V
Load resistance voltage output	≥ 40 kΩ
Response time	0.1 s
	time for the output signal to achieve 90% full scale if the angle changes from -45° to +45°

Features

- Plastic, PC
- Zero point calibration +/- 15°
- Two analog outputs
- M12 x 1 male connector

Wiring diagram





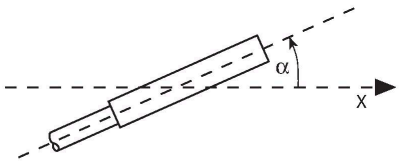
Functional principle

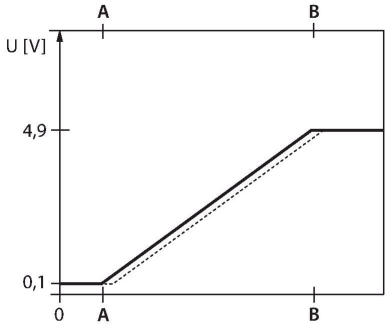
Inclination is determined by a wear-free semiconducting sensor element.

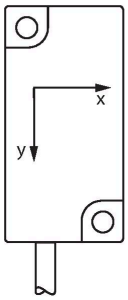
B2N45H-Q20L60-2LU3-H1151| 02/21/2025 15-07 | technical changes reserved

Technical data

Current consumption	50 mA
Mechanical data	
Design	Rectangular, Q20L60
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

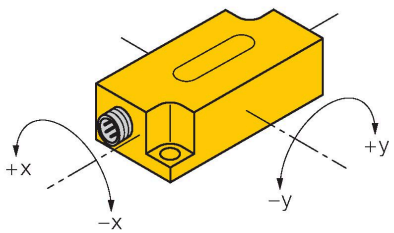






Mounting instructions

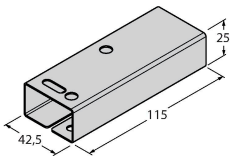
Mounting instructions/Description



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 5 V as confirmation.
Teach-GND is pressed for 6 s to reset the axis zero points. The outputs are switched to 0 V as confirmation.
Once the teach button is released, the sensor returns to normal operation.

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Accessories

GUARD-Q20L60	A9684
	Protective housing for Q20L60 inclinometers for protecting against mechanical impact; material: Stainless steel

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