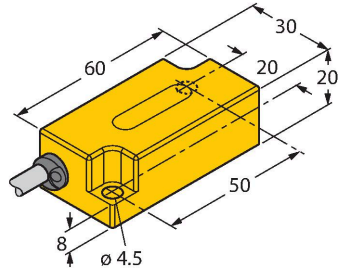


B2N60H-Q20L60-2LU3/S97

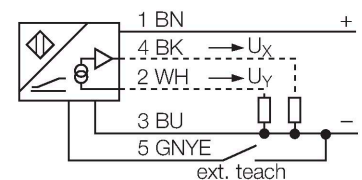
Inclinometer – With Increased Temperature Range



Features

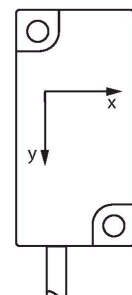
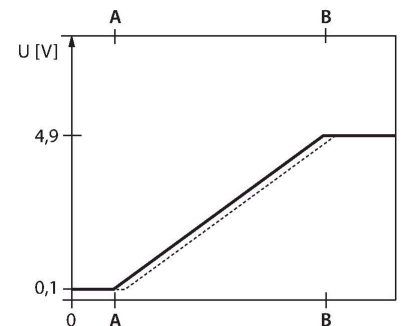
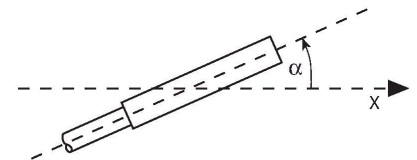
- Plastic, PC
- Zero point calibration $\pm 15^\circ$
- Two analog outputs
- Cable connection

Wiring diagram



Functional principle

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



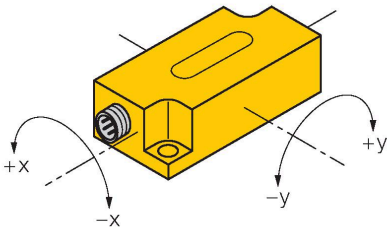
Technical data

Type	B2N60H-Q20L60-2LU3/S97
ID	1534060
Measuring principle	Acceleration
General data	
Measuring range	$-60 \dots 60^\circ$
Measuring range x-axis	$-60 \dots 60^\circ$
Measuring range y-axis	$-60 \dots 60^\circ$
Number of measuring axes	2
Repeatability	$\leq 0.2\%$ of measuring range [A - B]
Linearity deviation	$\leq 0.5\%$
Temperature drift	$\leq \pm 0.025\%/K$ for temperature range between $-40^\circ C$ and $+85^\circ C$
Resolution	$\leq 0.14^\circ$
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	$-48 \dots 48$ VDC [$U_{b,max.}$]
Output function	4-wire, Analog output
Voltage output	0.1...4.9 V
Load resistance voltage output	$\geq 40\text{ k}\Omega$
Response time	0.1 s

Technical data

	time for the output signal to achieve 90% of full scale if the angle changes from -60° to +60°
Current consumption	50 mA
Mechanical data	
Design	Rectangular, Q20L60
Dimensions	60 x 30 x 20 mm
Housing material	Plastic, PC
Active area material	PBT-GF20-V0
Electrical connection	Cable
Cable quality	Ø 5.5 mm, Lif32Y32Y, TPE, 2 m
	Low temp. flexible and E-chain capable
Core cross-section	5 x 0.34 mm ²
Environmental conditions	
Ambient temperature	-40...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68 IP69K
MTTF	203 years

Mounting instructions

Mounting instructions/Description	
	Width active area B 30 mm
	<p>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.</p>

Accessories

SG-Q20L60

6901100

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

