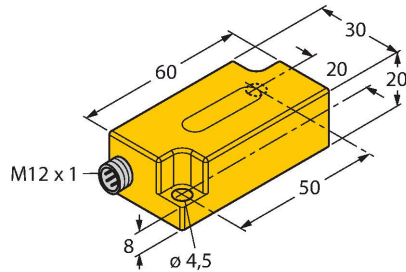


B2N85H-Q20L60-2LU3-H1151/S97

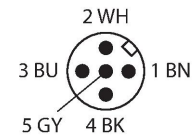
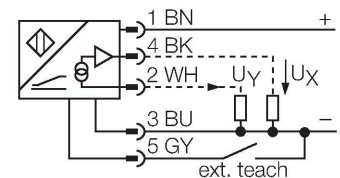
Inclinometer – With Increased Temperature Range



Features

- Plastic, PC
- Zero point calibration $\pm 15^\circ$
- Two analog outputs
- M12 x 1 male connector

Wiring diagram



Functional principle

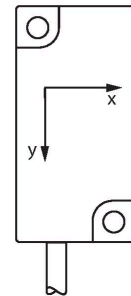
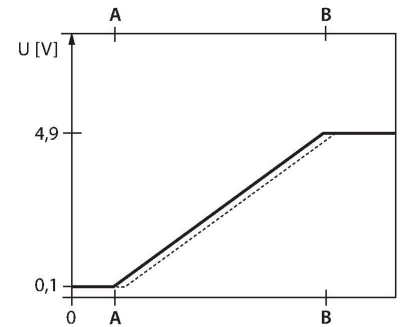
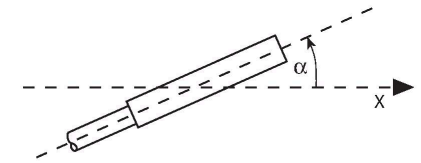
Inclination is determined by a wear-free semiconducting sensor element.

Technical data

Type	B2N85H-Q20L60-2LU3-H1151/S97
ID	1534050
Measuring principle	Acceleration
General data	
Measuring range	$-85 \dots 85^\circ$
Measuring range x-axis	$-85 \dots 85^\circ$
Measuring range y-axis	$-85 \dots 85^\circ$
Number of measuring axes	2
Repeatability	$\leq 0.2\%$ of measuring range A - B
Linearity deviation	$\leq 1\%$
Temperature drift	$\leq \pm 0.02\%/K$
	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	5-pin, Analog output
Voltage output	0.1...4.9 V
Load resistance voltage output	$\geq 40\text{ k}\Omega$
Response time	0.1 s

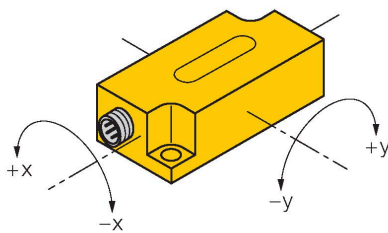
Technical data

	time for the output signal to achieve 90% of full scale if the angle changes from -85° to +85°
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	-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



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.

Accessories

GUARD-Q20L60

A9684

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

