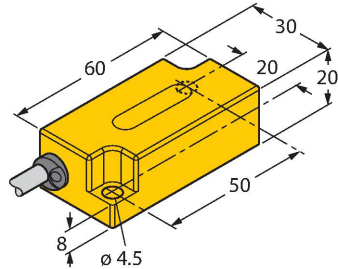


B2N60H-Q20L60-2LU3/S97

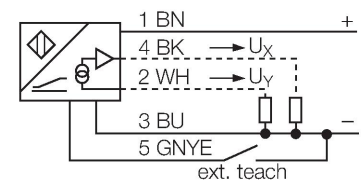
Inclinometer – With Increased Temperature Range



Features

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

Wiring diagram

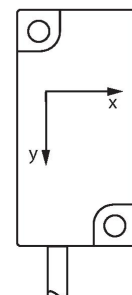
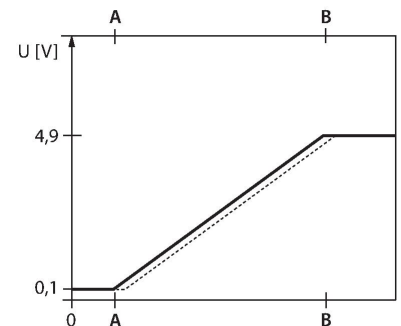
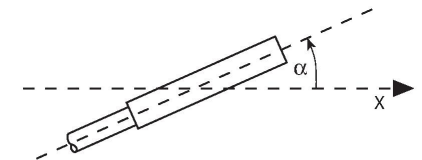


Technical data

Type	B2N60H-Q20L60-2LU3/S97
Ident. no.	1534060
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	$\leq 0.14^\circ$
Ambient temperature	$-40 \dots +70^\circ C$
Operating voltage	$10 \dots 30\text{ VDC}$
Isolation test voltage	$\leq 0.5\text{ kV}$
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	no / yes
Surge protection	$-48 \dots 48\text{ VDC}$ [$U_{b,max.}$]
Output function	4-wire, Analog output
Voltage output	$0.1 \dots 4.9\text{ V}$
Load resistance voltage output	$\geq 40\text{ k}\Omega$
Response time	0.1 s
	time for the output signal to achieve 90% of full scale if the angle changes from -60° to $+60^\circ$

Functional principle

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

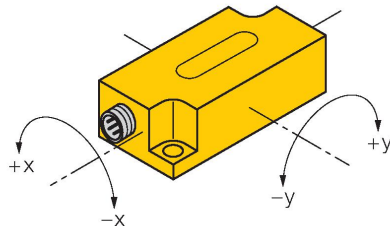


Technical data

Current consumption	50 mA
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
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

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.

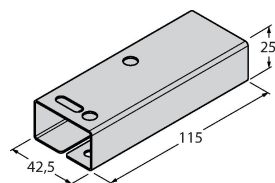
Teach-GND is pressed for 6 s to reset the axis zero points. The outputs are switched to 0 V as confirmation.

Once the teach button is released, the sensor returns to normal operation.

Accessories

SG-Q20L60

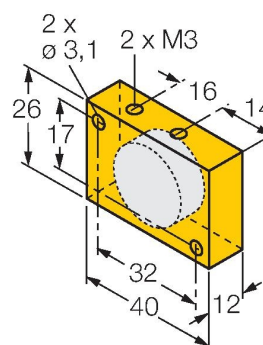
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Protective housing for Q20L60 inclinometers for protecting against mechanical impact; material: Stainless steel

DM-Q12

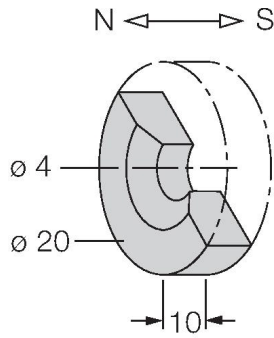
6900367



Actuator, rectangular, plastic, attainable switching distance 58 mm on BIM-(E)M12 magnetic field sensors or 49 mm on BIM-EG08 magnetic field sensors; for Q25L linear position sensors: recommended distance between the sensor and magnet: 3...5 mm

DMR20-10-4

6900214



Actuation magnet; Ø 20 mm (Ø 4 mm), h: 10 mm; attainable switching distance 59 mm on BIM-(E)M12 magnetic field sensors or 50 mm on BIM-EG08 magnetic field sensors; for Q25L linear position sensors: recommended distance between the sensor and magnet: 3...4 mm