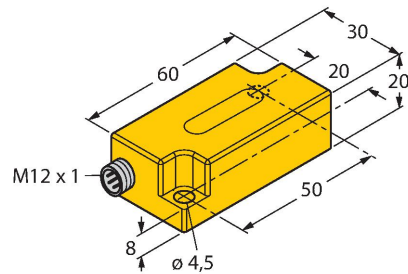


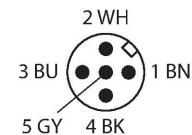
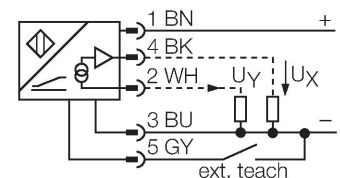
B2N45H-Q20L60-2LU3-H1151/S1248 Inclinometer



Features

- Rectangular, plastic, PC
- Compact housing
- Connection via M12 × 1 male
- Zero point calibration +/- 15°
- Two analog outputs
- Male M12 x 1

Wiring diagram

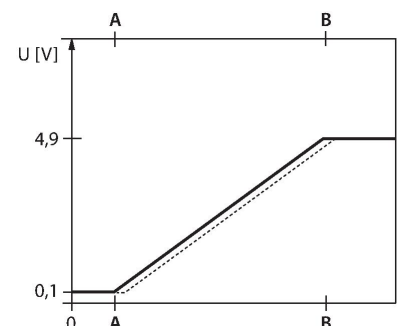


Technical data

Type	B2N45H-Q20L60-2LU3-H1151/S1248
ID	1534059
Remark to product	Level 3 damping, 6Hz filter
Special version	S1248 Corresponds to: Inclinometers: 6 Hz low-pass filter and level 3
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
Mounting conditions	Vertical
Repeatability	≤ 0.2 % of measuring range A - B
Linearity deviation	≤ 0.5 %
Temperature drift	≤ ± 0.04 %/K
Electrical data	
Operating voltage U_s	10...30 VDC
Isolation test voltage	0.5 kV
Short-circuit protection	yes
Wire break/reverse polarity protection	yes/Complete
Output function	5-pin, Analog output
Voltage output	0.1...4.9 V
Load resistance voltage output	≥ 40 kΩ
Current consumption	50...105 mA (voltage-dependent)

Functional principle

The TURCK inclinometers incorporate a micromechanical pendulum, operating on the principle of MEMS technology (Mikro Elektro Mechanic Systems). The pendulum basically consists of two 'plate' electrodes arranged in parallel with a dielectric placed in the middle. When the sensor is inclined, the dielectric in the middle moves, causing the capacitance ratio between both electrodes to change. The downstream electronics evaluates this change in capacitance and generates a corresponding output signal.

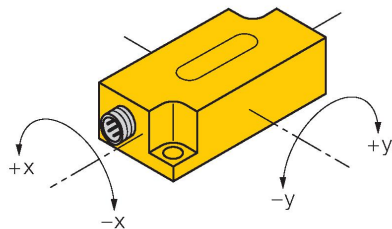


Technical data

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

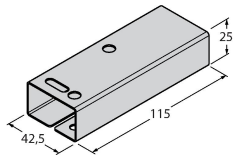
Mounting instructions/Description



Accessories

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



B2N45H-Q20L60-2LU3-H1151/S1248| 02/21/2025 15-08 | technical changes reserved