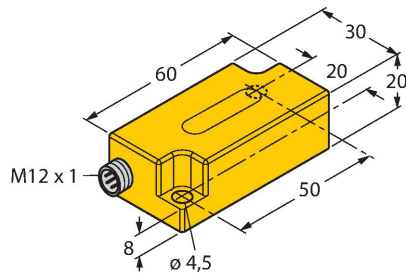


B2N45H-Q20L60-2LU3-H1151/S1248

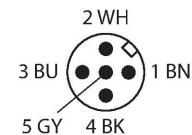
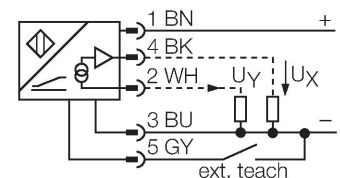
Inclinometer



Features

- Rectangular, plastic, PC
- Compact housing
- Connection via M12 × 1 male
- Zero point calibration $\pm 15^\circ$
- Two analog outputs
- Male M12 x 1

Wiring diagram



Technical data

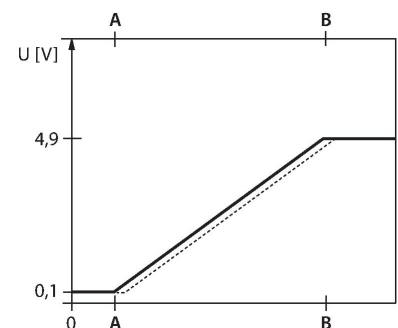
Type	B2N45H-Q20L60-2LU3-H1151/S1248
Ident. no.	1534059
Remark to product	Level 3 damping, 6Hz filter
Special version	S1248 corresponds to: Inclinometers: 6 Hz low-pass filter and level 3
Measuring range	$-45 \dots 45^\circ$
Measuring range x-axis	$-45 \dots 45^\circ$
Measuring range y-axis	$-45 \dots 45^\circ$
Number of measuring axes	2
Mounting conditions	Vertical
Repeatability	$\leq 0.2\%$ of measuring range A - B
Linearity deviation	$\leq 0.5\%$
Temperature drift	$\leq \pm 0.04\% / K$
Ambient temperature	$-30 \dots +70^\circ C$
Operating voltage	10...30 VDC
Isolation test voltage	$\leq 0.5 kV$
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	yes / Complete
Output function	5-pin, Analog output
Voltage output	0.1...4.9 V
Load resistance voltage output	$\geq 40 k\Omega$
Current consumption	50...105 mA (voltage-dependent)
Design	Rectangular, Q20L60
Dimensions	60 x 30 x 20 mm

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.

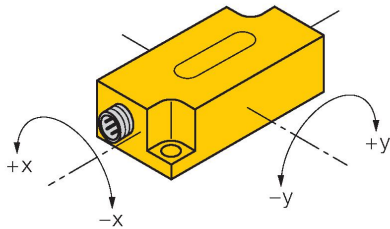


Technical data

Housing material	Plastic, PC
Electrical connection	Connector, M12 × 1
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

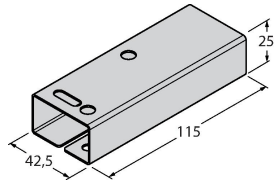
Mounting instructions/Description



Accessories

GUARD-Q20L60

A9684



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