

B2NF45H-QR20-2LI2X3-H1151

Dynamic Inclinometer



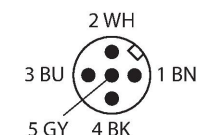
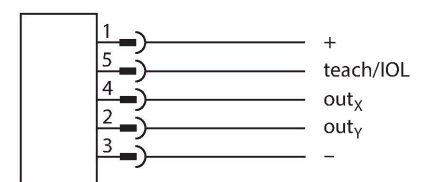
Technical data

Type	B2NF45H-QR20-2LI2X3-H1151
ID	100031517
Measuring principle	Combination of gyroscopes and accelerometers
General data	
Resolution	16 bit
Measuring range	-45...45 °
Number of measuring axes	2
Repeat accuracy	≤ 0.12 % of full scale
Linearity deviation	≤ 0.4 %
Temperature drift	≤ ± 0.025 %/K
Electrical data	
Operating voltage	15...30 VDC
Residual ripple	≤ 10 % U _{ss}
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	yes / yes
Output function	5-pin, Analog output
Current output	4...20 mA
Load resistance voltage output	≥ 4.7 kΩ
Load resistance current output	≤ 0.4 kΩ
Current consumption	< 80 mA
Mechanical data	
Design	Rectangular, QR20
Dimensions	71.6 x 62.6 x 20 mm
Housing material	Plastic, Ultem
Electrical connection	Connector, M12 × 1

Features

- Rectangular, plastic, Ultem
- Status displayed via LED
- Angle detection along two axes with ±45 ° measuring range
- High protection class IP68/IP69K
- Protected against salt spray and rapid temperature change
- 15...30 VDC
- M12 × 1 male connector, 5-pin
- Analog output 4...20 mA
- The center point of the measuring range can be adjusted using teach adaptor TX1-Q20L60
- Individual parameterization possible with USB-2-IOL-0002

Wiring diagram

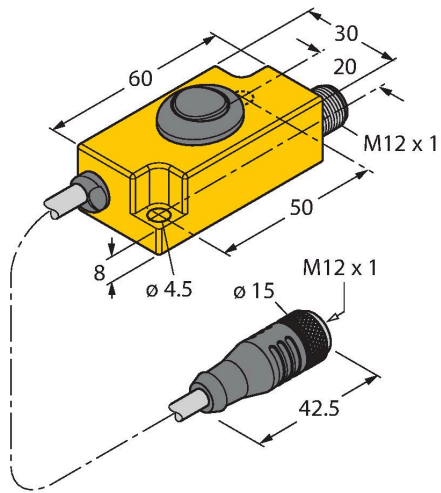
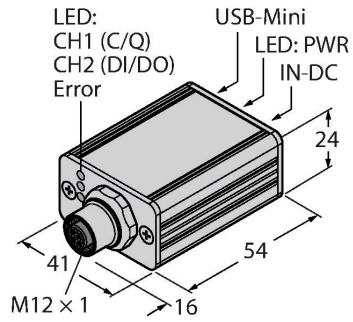


Functional principle

The dynamic inclinometers use an acceleration measuring cell and a gyroscope sensor to determine angles. Influences caused by vibrations or interfering acceleration are minimized by applying an intelligent fusion algorithm to the acceleration data and the rotation rate values. This enables the sensor

Accessories

Dimension drawing	Type	ID	
	USB-2-IOL-0002	6825482	IO-Link Master with integrated USB port



TX1-Q20L60

6967114

Teach adapter for inductive encoders, linear position, angle, ultrasonic and capacitive sensors