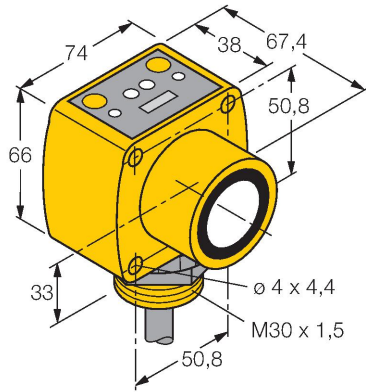


QT50ULB

Ultrasonic Sensor – diffuse mode sensor

With Analog Output



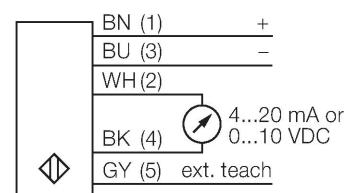
Technical data

Type	QT50ULB
ID	3002726
Ultrasonic data	
Function	Proximity switch
Range	200...8000 mm
Ultrasound frequency	75 kHz
Repeatability	≤ ± 1 mm
Temperature drift	≤ 0.02 % of full scale/K
Edge lengths of the nominal actuator	500 mm
Electrical data	
Operating voltage	10...30 VDC
Load resistance	≤ 500 Ω
Response time typical	< 100 ms
Readiness delay	≤ 1500 ms
Output function	Analog output
Current output	4...20 mA
Voltage output	0...10 V
Hysteresis	≤ 5 mm
Short-circuit protection	yes
Mechanical data	
Design	Rectangular, QT50U
Radiation direction	straight
Dimensions	67.4 x 74 x 84.2 mm
Housing material	Plastic, PBT
Transducer material	Plastic, Epoxyd resin and PU foam

Features

- LED indicates signal intensity
- Cable, PVC, 2 m, 5-wire
- Temperature compensation selectable via DIP switch
- Current or voltage output selectable via DIP switch
- Response time between 100 ms and 2300 ms, adjustable via DIP switch
- Blind zone: 20 cm
- Range: 800 cm

Wiring diagram

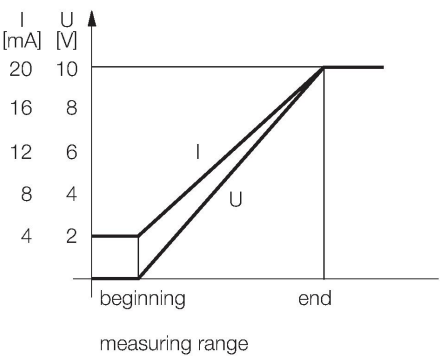


Functional principle

Ultrasonic sensors detect a multitude of objects contactless and wear-free with ultrasonic waves. Regardless of whether the object is transparent or opaque, metallic or non-metallic, liquid, solid or powdery. Even environmental conditions such as spray, dust or rain hardly affect their function.

Technical data

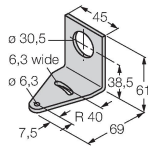
Electrical connection	Cable, 2 m, PVC
Ambient temperature	-20...+70 °C
Storage temperature	-40...+90 °C
Relative humidity	100 %
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED
Object detected	LED, Red
Tests/approvals	
MTTF	131 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE



Accessories

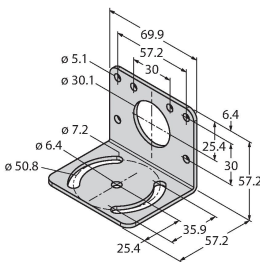
SMB30A 3032723

Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread



SMB30MM 3027162

Mounting bracket, rectangular, stainless steel, for sensors with 30 mm thread, wide holes for accurate alignment



SMB30SC 3052521

Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

