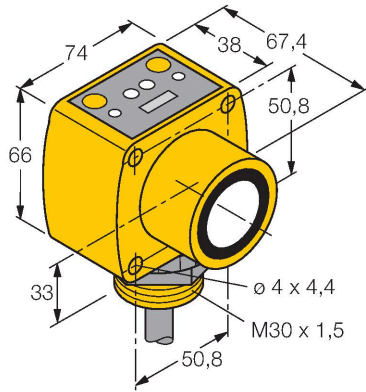


# QT50UDB

## Ultrasonic Sensor – diffuse mode sensor With Switching Outputs



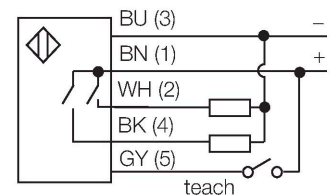
### Technical data

Type	QT50UDB
ID	3002722
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 U <sub>B</sub>	10...30 VDC
Response time typical	< 100 ms
Readiness delay	≤ 1500 ms
Output function	2 x NO contact, PNP
Switching frequency	≤ 5 Hz
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
Electrical connection	Cable, 2 m, PVC
Ambient temperature	-20...+70 °C

### Features

- LED indicates signal intensity
- Cable, PVC, 2 m, 5-wire
- Temperature compensation selectable via DIP switch
- Two switching ranges, separately adjustable via teach-in
- Pump function 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.

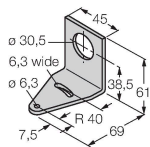
Technical data

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

Accessories

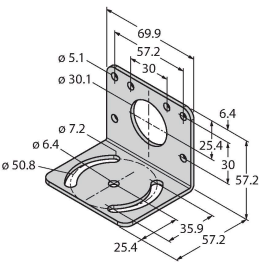
SMB30A3032723

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



SMB30MM3027162

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



SMB30SC3052521

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

