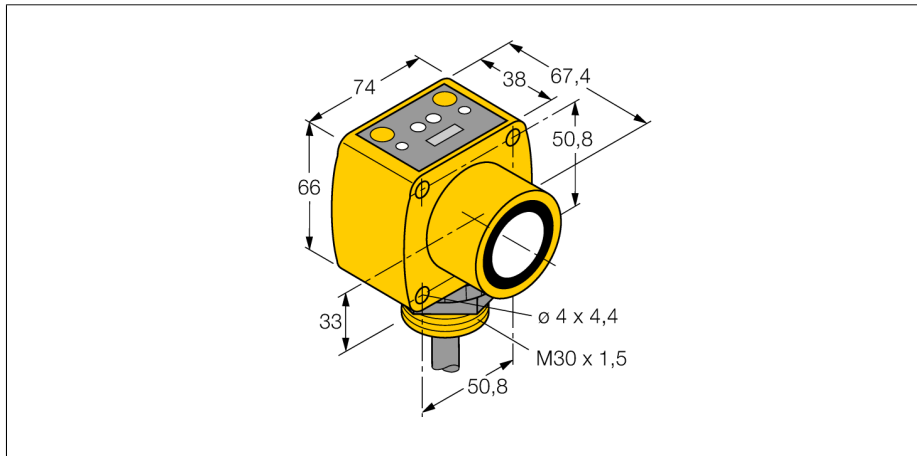


**ultrasonic sensor
diffuse mode sensor
QT50ULB**

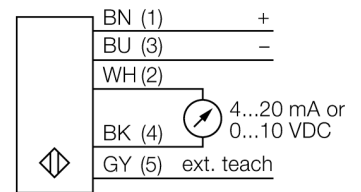
TURCK

Industrial
Automation



- signal strength indication via LED
- temperature compensation selectable via DIP switch
- Current or voltage output selectable via DIP switch
- Response time (100 ... 2300 ms) adjustable via DIP switch

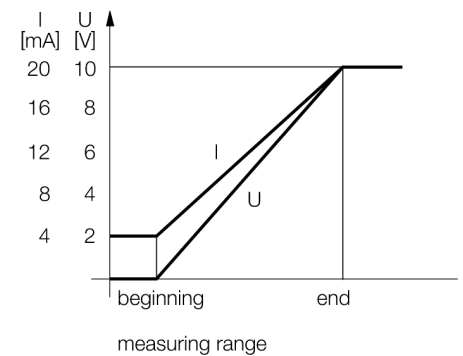
Wiring diagram



Type code	QT50ULB
Ident no.	3002726
Design	rectangular, QT50U
Housing material	Plastic, ABS
Connection	cable, 2
Protection class	IP67
Ambient temperature	-20...+70 °C
Operating voltage	LED
Switching state	•
Operating voltage	10...30VDC
Load resistance	≤ 500 Ω
Current output	4...20mA
Voltage output	0...10V
Hysteresis	≤ 5 mm
Short-circuit protection	yes
Range	20...800 cm
Ultrasound frequency	75 kHz
Repeatability	≥ ± 1 mm
Edge lengths of the nominal actuator	500 mm

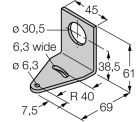
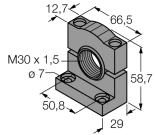
Functional principle

Ultrasonic sensors use ultrasonic waves for non-contact and wear-free detection of many objects. Regardless of whether the object is transparent or opaque, metallic or non-metallic, or of liquid, solid or powdery consistency. Even environmental conditions such as spray, dust or rain hardly affect their function.



ultrasonic sensor
diffuse mode sensor
QT50ULB

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB30A	3032723	Mounting bracket, stainless steel, for sensors with 30 mm thread	 <p>Technical drawing of the SMB30A mounting bracket. It is a stainless steel L-shaped bracket. Dimensions shown: top horizontal edge is 45 mm, vertical edge is 61 mm, and the bottom horizontal edge is 69 mm. A circular hole has a diameter of 30.5 mm and a width of 6.3 mm. A smaller hole has a diameter of 6.3 mm. The bottom edge has a radius of R 40 mm and a distance of 7.5 mm from the corner to the start of the radius.</p>
SMB30MM	3027162	Mounting bracket, rectangular, stainless steel, for sensors with 30 mm thread, wide holes for accurate alignment	 <p>Technical drawing of the SMB30MM and SMB30SC mounting brackets. It is a rectangular stainless steel bracket. Dimensions shown: top edge is 66.5 mm, right edge is 56.7 mm, and bottom edge is 29 mm. A circular hole has a diameter of 30 mm and a width of 12.7 mm. The distance from the left edge to the hole is 50.8 mm. The distance from the bottom edge to the hole is 7 mm. The hole is labeled M30 x 1.5.</p>
SMB30SC	3052521	Mounting bracket, PBT black; for 30 mm thread; with 4 screws M5 x 0.8	