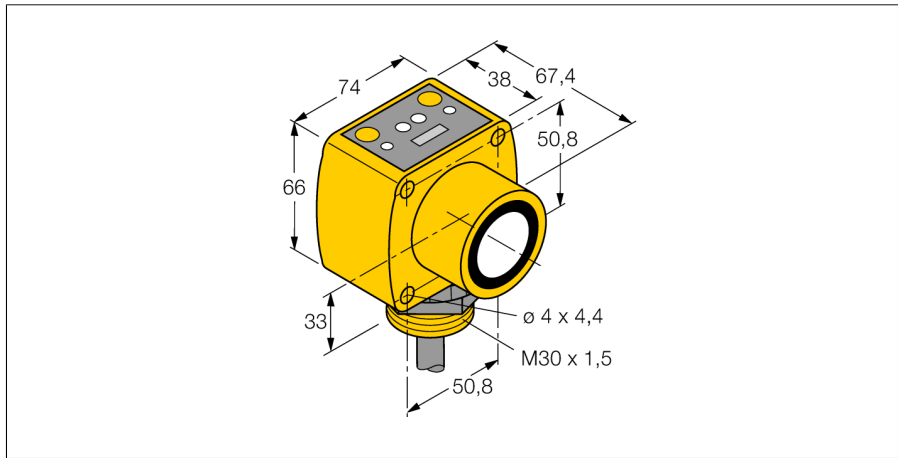
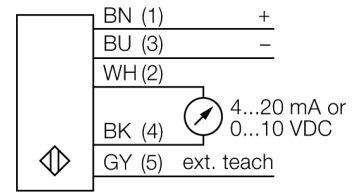


**Ultrasonic sensor
diffuse mode sensor
QT50ULB**



- LED indicates signal intensity
- Temperature compensation selectable via DIP switch
- Current or voltage output selectable via DIP switch
- Response time (100 ... 2300 ms) adjustable via DIP switch

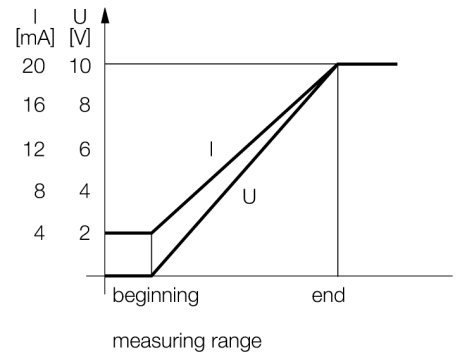
Wiring diagram



Type code	QT50ULB
Ident no.	3002726
Design	rectangular, QT50U
Housing material	plastic, ABS
Connection	cable, 2
Protection class	IP67
Ambient temperature	-20...+70 °C
MTTF	131 years
MTTF note	acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED
Switching state	LED
Operating voltage	10...30VDC
Load resistance	≤ 500 Ω
Current output	4...20mA
Voltage output	0...10V
Hysteresis	≤ 5 mm
Short-circuit protection	yes
Operating mode	diffuse mode ultrasonic sensor
Range	20...800 cm
Ultrasound frequency	75 kHz
Repeatability	≥ ± 1 mm
Edge lengths of the nominal actuator	500 mm

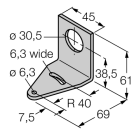
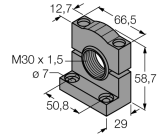
Functional principle

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.



**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. Dimensions include: top width 45, hole diameter $\varnothing 30,5$, hole offset 6,3, hole width 6,3, hole diameter $\varnothing 6,3$, hole offset 7,5, hole diameter $\varnothing 38,5$, hole offset 61, and a radius of R 40.</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. Dimensions include: top width 12,7, hole diameter $\varnothing 7$, hole diameter M30 x 1,5, hole offset 50,8, hole diameter $\varnothing 66,5$, hole offset 56,7, and a width of 29.</p>
SMB30SC	3052521	Mounting bracket, PBT black; for 30 mm thread; with 4 screws M5 x 0.8	