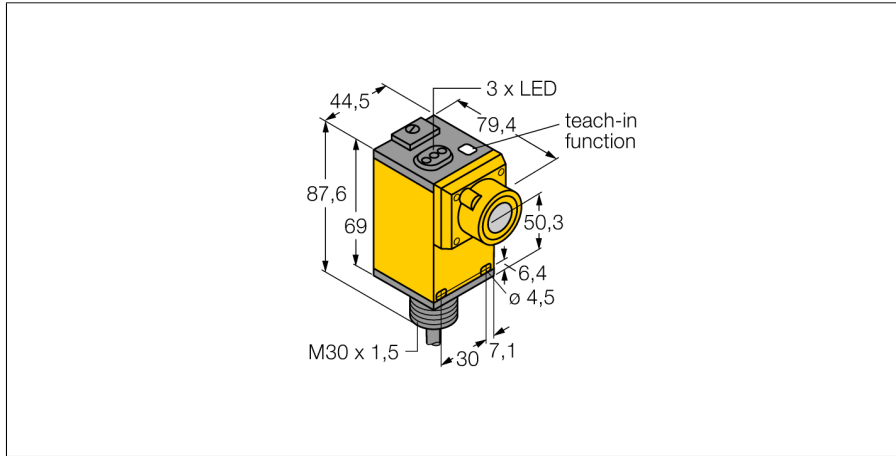
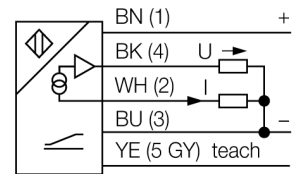


**ultrasonic sensor  
diffuse mode sensor  
Q45ULIU64BCR**



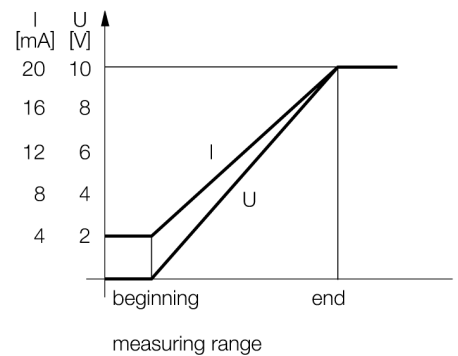
- Measuring range adjustable via teach button or control line
- Response time, adjustable
- Analog output can be used for voltage or current
- Teach-in function
- Convertible output curves
- Aperture angle of sonic cone 12 °

**Wiring diagram**



**Functional principle**

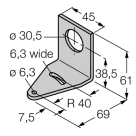
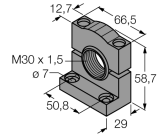
Ultrasonic sensors detect a multitude of objects contactless and wear-free with ultrasonic waves. Regardless of whether the object is transparent or opaque, metallic or non-metallic, liquid, solid or powdery. Even environmental conditions such as spray, dust or rain hardly affect their function.



<b>Type code</b>	Q45ULIU64BCR
Ident no.	3047555
<b>Design</b>	rectangular, Q45
Housing material	plastic, PBT
Connection	cable, 2
Protection class	IP67
Ambient temperature	-25...+70 °C
MTTF	50 years
MTTF note	acc. to SN 29500 (Ed. 99) 40 °C
<b>Operating voltage</b>	12...24VDC
Load resistance	≤ 500 Ω
Current output	4...20mA
Voltage output	0...10V
Short-circuit protection	yes/ cyclic
Reverse polarity protection	complete
<b>Operating mode</b>	diffuse mode ultrasonic sensor
Range	25...300 cm
Ultrasound frequency	120 kHz
Repeatability	≥ ± 1 mm

ultrasonic sensor  
diffuse mode sensor  
Q45ULIU64BCR

**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 <math>\phi 30,5</math>, hole offset 6,3 wide, bottom hole diameter <math>\phi 6,3</math>, hole offset 38,5, bottom hole diameter 7,5, bottom hole offset 69, and a radius R 40.</p>
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 30 mm thread; with 4 screws M5 x 0.8	 <p>Technical drawing of the SMB30SC mounting bracket. Dimensions include: top width 12,7, top hole diameter <math>\phi 7</math>, top hole offset 66,5, bottom hole diameter <math>M30 \times 1,5</math>, bottom hole offset 56,7, bottom hole diameter 50,8, and bottom hole offset 29.</p>