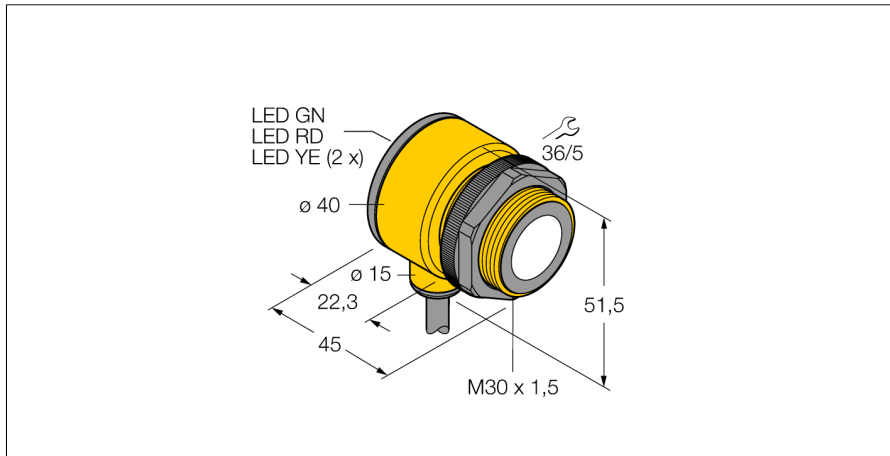
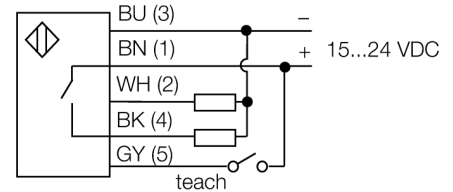


**Ultrasonic sensor  
diffuse mode sensor  
T30UIPA**



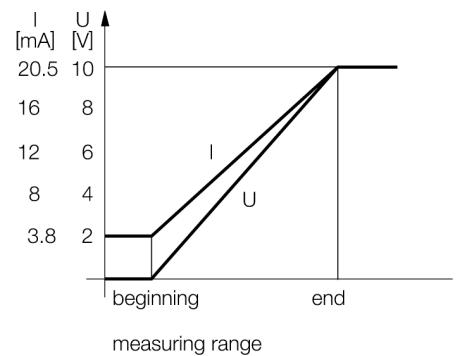
- **Blind zone: 15 cm**
- **Range: 100 cm**
- **Compact design**
- **Cable, 2 m**
- **Operating voltage 15...24 VDC**
- **PNP transistor output and analog output for current**
- **Measuring range adjustable via teach-in**

**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.



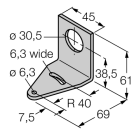
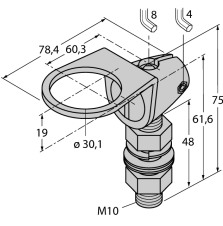
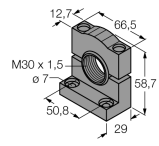
<b>Type designation</b>	T30UIPA
Ident no.	3055974
<b>Operating mode</b>	Diffuse mode ultrasonic sensor
Range	15...100cm
Ultrasound frequency	230 kHz
Repeatability	≥ ± 0.375 mm
<b>Operating voltage</b>	15... 24VDC
DC rated operational current	≤ 100 mA
No-load current I <sub>0</sub>	≤ 50 mA
Output function	NO contact, PNP/Analog output
Current output	4...20mA
Switching frequency	20 Hz
Hysteresis	≤ 2.5 mm
Voltage drop at I <sub>0</sub>	≤ 1.5 V
Short-circuit protection	yes/ cyclic
Reverse polarity protection	complete
Wire breakage protection	yes
<b>Construction</b>	Threaded barrel, T30
Radiation direction	straight
Dimensions	45 x Ø40 mm
Housing material	Plastic, Polyester
Transducer material	Plastic, Epoxyd resin and PU foam
Electrical connection	cable, 2
Protection class	IP67
Ambient temperature	-20...+70 °C
MTTF2	246 years
MTTF note	acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE
<b>Power-on indication</b>	LED
Switching state	LED yellow
Object detected	LED, red

Ultrasonic sensor  
diffuse mode sensor  
T30UIPA

**TURCK**

Industrial  
Automation

**Accessories**

Type code	Ident no.	Description	
SMB30A	3032723	Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread	 <p>Technical drawing of the SMB30A mounting bracket. Dimensions include: top width 45, hole diameter <math>\varnothing 30,5</math>, hole offset 6,3 wide, hole diameter <math>\varnothing 6,3</math>, hole depth 38,5, hole offset 6,1, bottom width 7,5, and radius R 40.</p>
SMB30FAM10	3011185	Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm	 <p>Technical drawing of the SMB30FAM10 mounting bracket. Dimensions include: top width 78,4, hole diameter <math>\varnothing 60,3</math>, hole offset 19, hole diameter <math>\varnothing 30,1</math>, hole depth 48, total height 75, and thread length 61,6. The thread is labeled M10.</p>
SMB30SC	3052521	Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable	 <p>Technical drawing of the SMB30SC mounting bracket. Dimensions include: top width 12,7, hole diameter <math>\varnothing 66,5</math>, hole offset 58,7, hole diameter <math>\varnothing 7</math>, hole depth 50,8, and bottom width 29. The thread is labeled M30 x 1,5.</p>