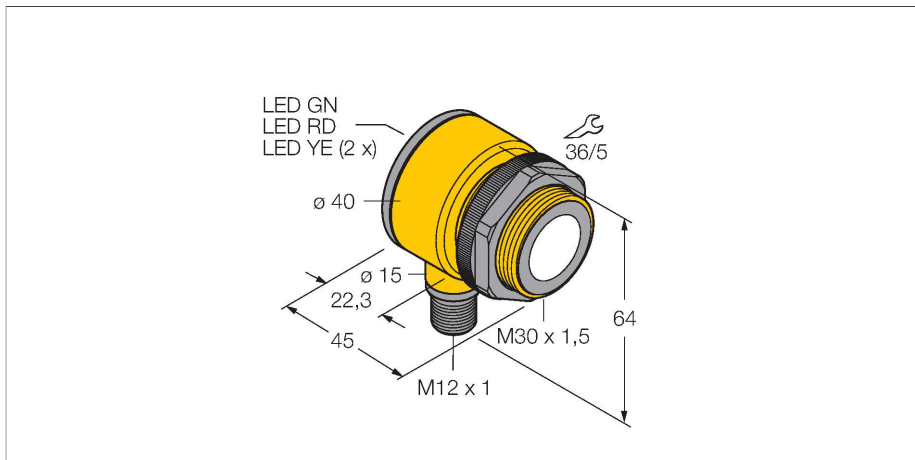


T30UDPBQ

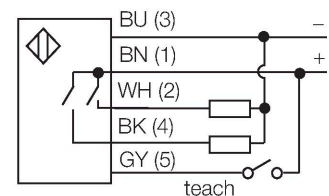
Ultrasonic sensor – diffuse mode sensor



Features

- Compact design
- Connection via male M12 x 1
- Operating voltage 12...24 VDC
- Two PNP transistor outputs
- Two independent switching ranges adjustable via button or control line

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

Type	T30UDPBQ
ID	3055551
Ultrasonic data	
Function	Proximity switch
Range	300...2000 mm
Ultrasound frequency	128 kHz
Repeatability	≤ ± 0.75 mm
Temperature drift	≤ 0.17 % of full scale/K
Electrical data	
Operating voltage	12...24 VDC
DC rated operational current	≤ 150 mA
No-load current	≤ 50 mA
Response time typical	< 96 ms
Output function	2 normally open contact, PNP
Switching frequency	≤ 10 Hz
Hysteresis	≤ 2.5 mm
Voltage drop at I _o	≤ 1.5 V
Short-circuit protection	yes / Cyclic
Reverse polarity protection	Complete
Wire breakage protection	yes
Mechanical data	
Design	Tube, T30U
Radiation direction	straight
Dimensions	Ø 40 x 45 mm
Housing material	Plastic, PBT
Transducer material	Plastic, Epoxyd resin and PU foam

Technical data


Electrical connection	Connector, M12 × 1, PVC
Ambient temperature	-20...+70 °C
Relative humidity	100 %
Protection class	IP67
Power-on indication	LED
Switching state	LED, Yellow
Object detected	LED
Tests/approvals	
MTTF	246 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE

Accessories

<p>SMB30A</p>	<p>3032723</p> <p>Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread</p>	<p>SMB30FAM10</p>	<p>3011185</p> <p>Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm</p>
<p>SMB30SC</p>	<p>3052521</p> <p>Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable</p>		

Accessories

Dimension drawing	Type	ID	
	<p>RKC4.5T-2/TEL</p>	<p>6625016</p>	<p>Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com</p>

Dimension drawing	Type	ID	
	WKC4.5T-2/TEL	6625028	Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com