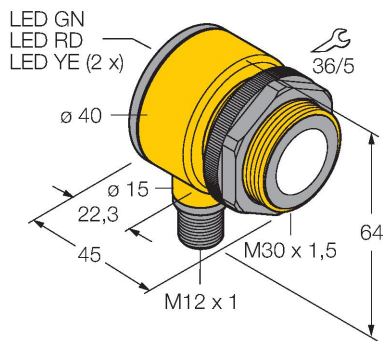


T30UINAQ

Ultrasonic Sensor – diffuse mode sensor

With Analog Output



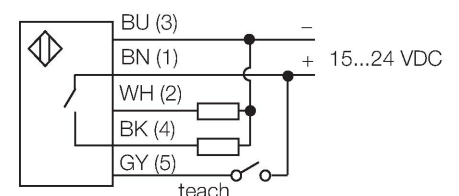
Technical data

Type	T30UINAQ
ID	3055978
Ultrasonic data	
Function	Proximity switch
Range	150...1000 mm
Ultrasound frequency	228 kHz
Repeatability	≤ ± 0.375 mm
Temperature drift	≤ 0.2 % of full scale/K
Electrical data	
Operating voltage	15...24 VDC
Response time typical	< 48 ms
Output function	NO contact, PNP/Analog output
Current output	4...20 mA
Switching frequency	≤ 20 Hz
Hysteresis	≤ 2.5 mm
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
Electrical connection	Connector, M12 x 1, PVC
Ambient temperature	-20...+70 °C
Relative humidity	100 %
Protection class	IP67

Features

- Compact design
- Connection via male M12 x 1
- Operating voltage 15...24 VDC
- PNP transistor output and analog output for current
- Measuring range adjustable via teach-in
- Blind zone: 15 cm
- Range: 100 cm

Wiring diagram

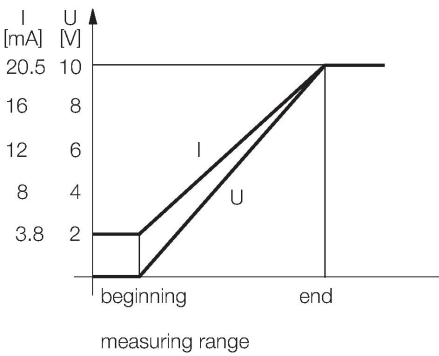


Functional principle

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

Power-on indication	LED
Switching state	LED, Yellow
Object detected	LED, Red
Tests/approvals	
MTTF	246 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE



Accessories

SMB30A

3032723

Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

Technical drawing of the SMB30A mounting bracket. It is a rectangular stainless steel bracket for sensors with a 30mm thread. Dimensions include: width 45mm, height 61mm, mounting hole diameter 30.5mm, bracket thickness 6.3mm, and a 6.3mm wide base. A 7.5mm hole is located 69mm from the bottom edge. A radius of R 40 is indicated.

SMB30FAM10

3011185

Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

Technical drawing of the SMB30FAM10 mounting bracket. It is a stainless steel bracket for M10 x 1.5 thread sensors. Dimensions include: mounting hole diameter 30.1mm, bracket thickness 6.3mm, and a 6.3mm wide base. A 7.5mm hole is located 69mm from the bottom edge. A radius of R 40 is indicated.

SMB30SC

3052521

Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

Technical drawing of the SMB30SC mounting bracket. It is a PBT black, rotatable bracket for sensors with a 30mm thread. Dimensions include: width 66.5mm, height 58.7mm, mounting hole diameter 30mm, bracket thickness 7mm, and a 7mm wide base. A 7.5mm hole is located 69mm from the bottom edge. A radius of R 40 is indicated.

Accessories

Dimension drawing	Type	ID	
	WKC4.5T-2/TEL	6625028	Connection cable, M12 female connector, angled, 5-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.5T-2/TEL	6625016	Connection cable, M12 female connector, straight, 5-pin, cable length: 2 m, jacket material: PVC, black; cULus approval

Dimension drawing	Type	ID	
	RKS4.5T-2/TEL	6626361	Connection cable, M12 female connector, straight, 5-pin, cable length: 2 m, jacket material: PVC, black; shielded; cULus approval
	WKS4.5T-2/TEL	6626364	Connection cable, M12 female connector, angled, 5-pin, cable length: 2 m, jacket material: PVC, black; shielded; cULus approval