

T30UIPB

Ultrasonic Sensor – diffuse mode sensor

With Analog Output



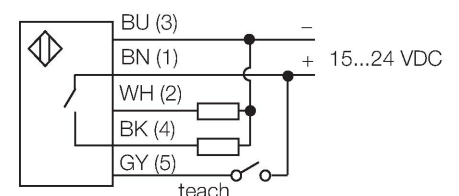
Technical data

Type	T30UIPB
ID	3055980
Ultrasonic data	
Function	Proximity switch
Range	300...2000 mm
Ultrasound frequency	128 kHz
Repeatability	≤ ± 0.75 mm
Temperature drift	≤ 0.2 % of full scale/K
Electrical data	
Operating voltage U_B	15...24 VDC
DC rated operating current I_a	≤ 100 mA
No-load current	≤ 50 mA
Response time typical	< 96 ms
Output function	NO contact, PNP/Analog output
Current output	4...20 mA
Switching frequency	≤ 20 Hz
Hysteresis	≤ 2.5 mm
Voltage drop at I_a	≤ 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

Features

- Compact design
- Cable, 2 m
- Operating voltage 15...24 VDC
- PNP transistor output and analog output for current
- Measuring range adjustable via teach-in
- Blind zone: 30 cm
- Range: 200 cm

Wiring diagram

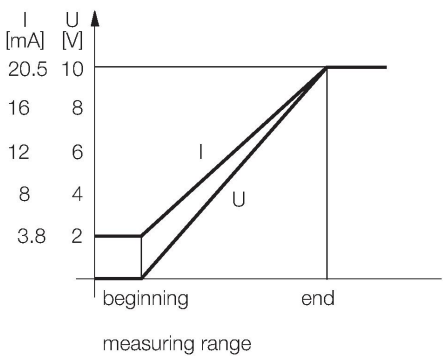


Functional principle

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

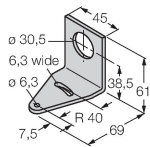
Housing material	Plastic, PBT
Transducer material	Plastic, Epoxyd resin and PU foam
Electrical connection	Cable, 2 m, PVC
Ambient temperature	-20...+70 °C
Relative humidity	100 %
Protection class	IP67
Power-on indication	LED
Switching state	LED, Yellow
Object detected	LED, Red
Tests/approvals	
MTTF	246 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE



Accessories

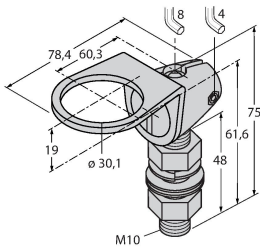
SMB30A 3032723

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



SMB30FAM10 3011185

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



SMB30SC 3052521

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

