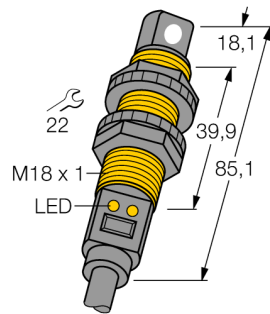


Ultrasonic Sensor diffuse mode sensor With Switching Output S18UBAR W/30



Type	S18UBAR W/30
ID	3002716

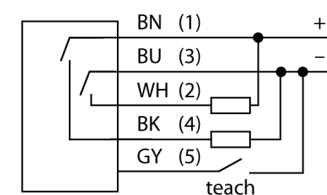
Ultrasonic data	
Function	Proximity switch
Range	30...300 mm
Ultrasound frequency	300 kHz
Repeatability	$\leq \pm 0.25$ mm
Temperature drift	$\pm 0.3\%$ of full scale
Edge lengths of the nominal actuator	50 mm

Electrical data	
Operating voltage U_a	10...30 VDC
No-load current I_0	≤ 100 mA
Response time typical	< 5 ms
Readiness delay	≤ 300 ms
Output function	NO contact, PNP
Switching frequency	≤ 100 Hz
Short-circuit protection	yes
Reverse polarity protection	Complete
Wire breakage protection	yes

Mechanical data	
Design	Right Angled Barrel, S18U
Radiation direction	side
Dimensions	$\varnothing 18 \times 85.1$ mm
Housing material	Plastic, ABS/Polycarbonate
Transducer material	Plastic, Epoxyd resin and PU foam
Electrical connection	Cable, 9 m, PVC
Ambient temperature	-20...+60 °C
Storage temperature	-40...+80 °C
Protection class	IP67
Power-on indication	LED
Switching state	LED
Object detected	LED, Green

- Compact design
- Cable, 2 m
- Temperature compensation
- Very small blind zone
- Switching range adjustable via teach-in
- Adjustable to retroreflective mode
- Blind zone: 3 cm
- Range: 30 cm

Wiring Diagram

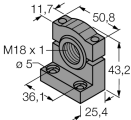


Functional principle

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.

Tests/approvals	
MTTF	53 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus

Accessories

Type code	Ident no.		Dimension drawing
SMB18A	3033200	Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread	
SMB18FM	3079421	mounting bracket, black, M22 x1.5 mm, male thread, female thread M18 x 1, for sensors with 18 mm thread	
SMB18SF	3052519	Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable	