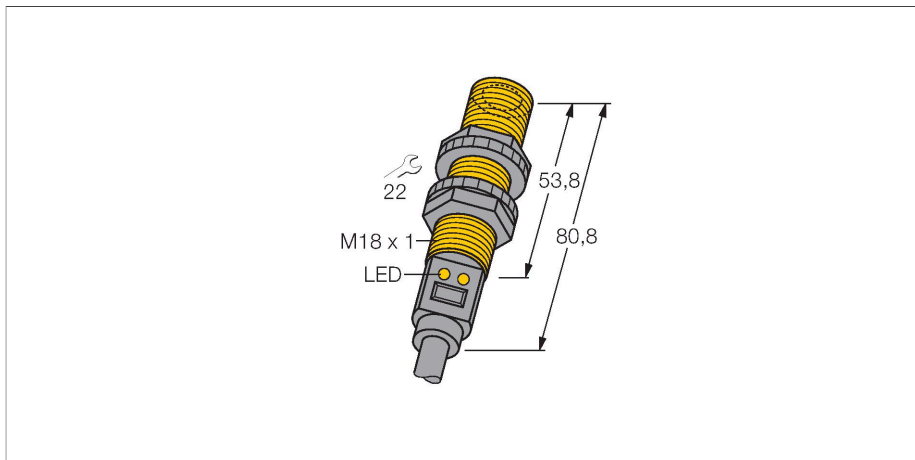


S18UBA W/30

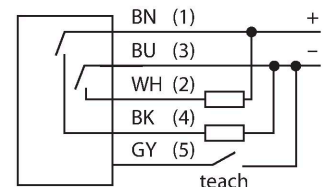
Ultrasonic sensor – diffuse mode sensor



Features

- Compact design
- Cable, 2 m
- Temperature compensation
- Very small blind zone
- Switching range adjustable via teach-in
- Adjustable to retroreflective mode

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.

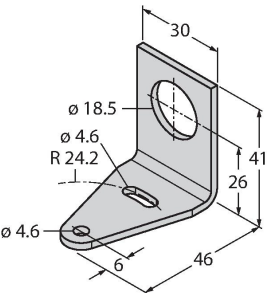
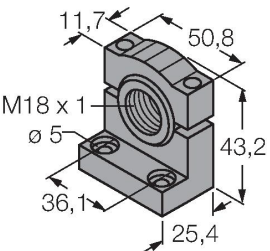
Technical data

Type	S18UBA W/30
ID	3002713
Ultrasonic data	
Function	Proximity switch
Range	30...300 mm
Ultrasound frequency	300 kHz
Repeatability	$\leq \pm 0.25$ mm
Temperature drift	± 0.3 % of full scale
Edge lengths of the nominal actuator	50 mm
Electrical data	
Operating voltage	10...30 VDC
No-load current	≤ 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	Tube, S18U
Radiation direction	straight
Dimensions	$\varnothing 18 \times 80.8$ mm
Housing material	Plastic, ABS/Polycarbonate
Transducer material	Plastic, Epoxyd resin and PU foam
Electrical connection	Cable, 2 m, PVC

Technical data

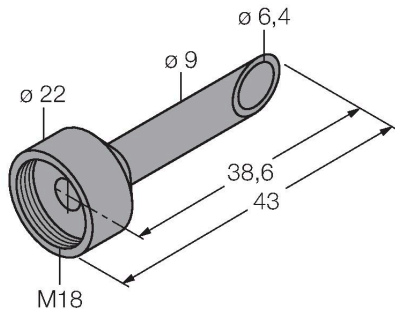
Ambient temperature	-20...+60 °C
Storage temperature	-40...+80 °C
Relative humidity	100 %
Protection class	IP67
Power-on indication	LED
Switching state	LED
Object detected	LED, Green
Tests/approvals	
MTTF	53 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus

Accessories

<p>SMB18A</p> 	<p>3033200</p> <p>Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread</p>	<p>SMB18FM</p> <p>3079421</p> <p>mounting bracket, black, M22 x1.5 mm, male thread, female thread M18 x 1, for sensors with 18 mm thread</p>
<p>SMB18SF</p> 	<p>3052519</p> <p>Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable</p>	

Accessories

Dimension drawing	Type	ID	
	UWG18-6.4	3076952	Ultrasonic focussing-adapter for QS18U and S18U, internal diameter 6.4 mm



UWG18-5.0

3077342

Ultrasonic focussing-adapter for QS18U and S18U, internal diameter 5.0 mm

