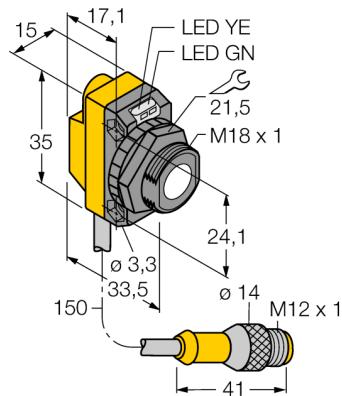


Ultrasonic Sensor diffuse mode sensor With Switching Output QS18UNAEQPMA



Type	QS18UNAEQPMA
ID	3073171

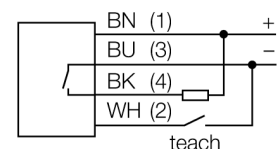
Ultrasonic data	
Function	Proximity switch
Range	50...500 mm
Ultrasound frequency	300 kHz
Repeatability	$\leq \pm 0.7$ mm
Edge lengths of the nominal actuator	50 mm

Electrical data	
Operating voltage U_o	12...30 VDC
No-load current I_o	≤ 25 mA
Response time typical	< 15 ms
Readiness delay	≤ 300 ms
Output function	NO contact, NPN
Switching frequency	≤ 33 Hz
Hysteresis	≤ 1.4 mm
Short-circuit protection	yes
Reverse polarity protection	Complete
Wire breakage protection	yes

Mechanical data	
Design	Rectangular with thread, QS18U
Radiation direction	straight
Housing material	Plastic, ABS
Transducer material	Plastic, Epoxyd resin and PU foam
Electrical connection	Cable with connector, M12 $\times$ 1, 0.15 m, PVC
Ambient temperature	-20...+60 °C
Storage temperature	-40...+85 °C
Protection class	IP68
Power-on indication	LED, Green
Switching state	LED, Yellow
Object detected	LED, Green

- Operating voltage 12...30 VDC
- Compact design
- Pigtail with male M12 $\times$ 1
- Switching range adjustable via teach-connection
- Adjustable to retroreflective mode
- Blind zone: 5 cm
- Range: 50 cm

Wiring Diagram



Functional principle

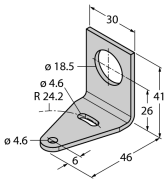
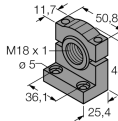
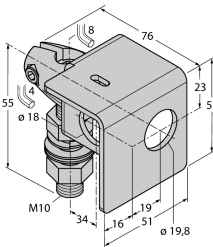
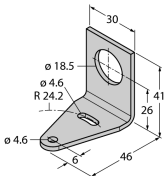
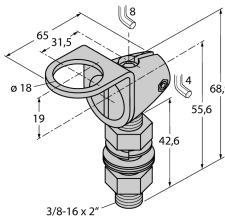
Ultrasonic sensors detect a multitude of objects contactless and wear-free with ultrasonic waves. Regardless of whether the object is transparent or opaque, metallic or non-metallic, liquid, solid or powdery. Even environmental conditions such as spray, dust or rain hardly affect their function.

Tests/approvals

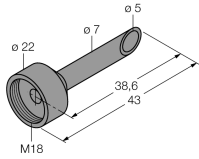
Approvals

CE

Accessories

Type code	Ident no.	Dimension drawing
SMB18A	3033200	Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread 
SMB18SF	3052519	Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable 
SMB18AFAM10	3012558	Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm 
SMB18A	3470200	Mounting bracket, stainless steel, for sensors with 18 mm thread 
SMB18FA	3074004	Mounting bracket, material VA 1.4401, for 18 mm thread, 3/8" - 16 x 2" thread 
SMB18FM	3079421	mounting bracket, black, M22 x1.5 mm, male thread, female thread M18 x 1, for sensors with 18 mm thread
SMB18UR	3052517	Mounting bracket, for wall mounting, stainless steel 300, 2-piece, rotatable, 18 mm bore hole, srew set included

Function accessories

Type code	Ident no.		Dimension drawing
UWG18-5.0	3077342	Ultrasonic focussing-adapter for QS18U and S18U, internal diameter 5.0 mm	
UWG18-6.4	3076952	Ultrasonic focussing-adapter for QS18U and S18U, internal diameter 6.4 mm	