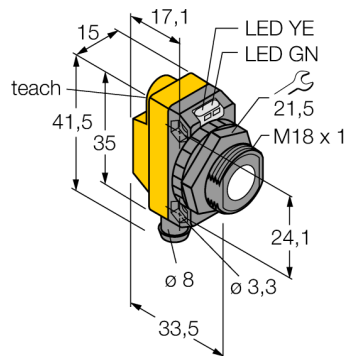


Ultrasonic Sensor

diffuse mode sensor

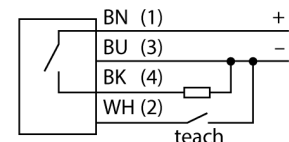
With Switching Output

QS18UPAEQ7



- Operating voltage 12...30 VDC
- Compact design
- Male, 8 mm
- 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.

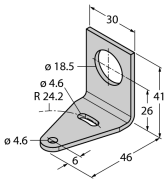
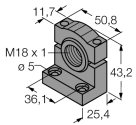
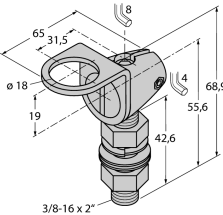
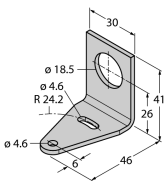
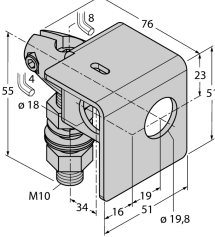
Type	QS18UPAEQ7
ID	3073167
Ultrasonic data	
Function	Proximity switch
Range	50...500 mm
Ultrasound frequency	300 kHz
Repeatability	≤ ± 0.7 mm
Edge lengths of the nominal actuator	50 mm
Electrical data	
Operating voltage U_s	12...30 VDC
No-load current I_0	≤ 25 mA
Response time typical	< 15 ms
Readiness delay	≤ 300 ms
Output function	NO contact, PNP
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	Connector, M12 × 1, 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

Tests/approvals

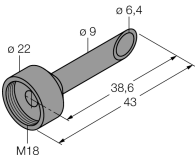
Approvals

CE

Accessories

Type code	Ident no.		Dimension drawing
SMB18A	3470200	Mounting bracket, stainless steel, for sensors with 18 mm thread	
SMB18SF	3052519	Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable	
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, screw set included	
SMB18A	3033200	Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread	
SMB18AFAM10	3012558	Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm	

Function accessories

Type code	Ident no.		Dimension drawing
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	