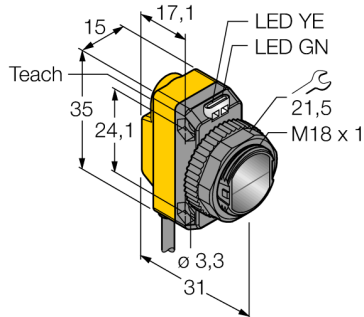
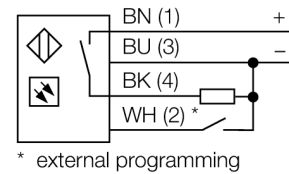


**Photoelectric sensor
diffuse mode sensor
QS18EP6D**



- Cable, PVC, 2 m, 4-wire
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via teach button
- Operating voltage: 10...30 VDC
- PNP switching output
- Light or dark operation

Wiring diagram

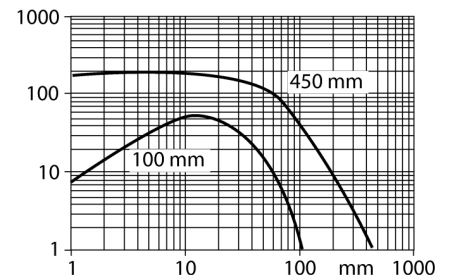


Functional principle

Identical to retro-reflective sensors, emitter and receiver circuitry are incorporated in the same housing of the diffuse mode sensors. However, diffuse mode sensors do not detect the interruption of the light beam but the reflection of the target. A target is detected if it reflects sufficient light back to the receiver. The switching distance of diffuse mode sensors thus largely depends on the reflectivity of the target. This type of sensor is especially suited for detection of transparent objects (diffuse mode sensor with or without background suppression or convergent mode sensors).

Excess gain curve

Excess gain in relation to the distance



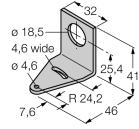
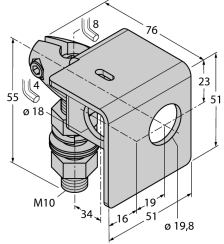
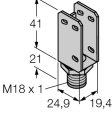
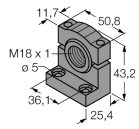
Type code	QS18EP6D
Ident no.	3069209
Operating mode	diffuse mode sensor
Light type	IR
Wavelength	940 nm
Range	0...800 mm
Ambient temperature	-20...+70 °C
Operating voltage	10...30VDC
DC rated operational current	≤ 100 mA
No-load current I ₀	≤ 35 mA
Reverse polarity protection	yes
Output function	NO contact, PNP
Switching frequency	≤ 833 Hz
Design	rectangular, QS18
Dimensions	31 x 15 x 35 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	cable, PVC
Cable length	2 m
Cable cross section	4 x 0.5 mm ²
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

Photoelectric sensor
diffuse mode sensor
QS18EP6D

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, stainless steel, for sensors with 18 mm thread	 <p>Technical drawing of the SMB18A mounting bracket. Dimensions include: overall width 32 mm, hole diameter $\phi 18.5$ mm, hole offset 4.6 mm from the left edge, hole diameter $\phi 4.6$ mm, hole offset 25.4 mm from the top edge, hole offset 41 mm from the right edge, hole offset 7.6 mm from the bottom edge, and a radius of R 24.2 mm.</p>
SMB18AFAM10	3012558	Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm	 <p>Technical drawing of the SMB18AFAM10 mounting bracket. Dimensions include: overall width 76 mm, hole diameter $\phi 18$ mm, hole offset 55 mm from the left edge, hole offset 4 mm from the top edge, hole offset 8 mm from the right edge, hole offset 23 mm from the bottom edge, hole offset 19 mm from the right edge, hole offset 16 mm from the bottom edge, hole offset 34 mm from the left edge, hole offset 19.8 mm from the bottom edge, and a hole diameter of $\phi 19.8$ mm.</p>
SMBQS18A	3069721	Mounting bracket, stainless steel, for 18 mm thread	 <p>Technical drawing of the SMBQS18A mounting bracket. Dimensions include: overall width 41 mm, hole diameter $\phi 18$ mm, hole offset 21 mm from the left edge, hole offset 24.9 mm from the bottom edge, and a hole diameter of $\phi 19.4$ mm.</p>
SMB18SF	3052519	Mounting bracket, PTB black steel, for sensors with 18 mm thread	 <p>Technical drawing of the SMB18SF mounting bracket. Dimensions include: overall width 50.8 mm, hole diameter $\phi 18$ mm, hole offset 11.7 mm from the left edge, hole offset 43.2 mm from the bottom edge, hole offset 36.1 mm from the left edge, and a hole diameter of $\phi 25.4$ mm.</p>