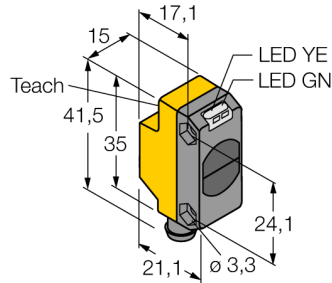
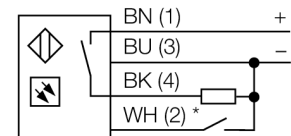


**Photoelectric sensor
diffuse mode sensor
QS18EP6DBQ7**

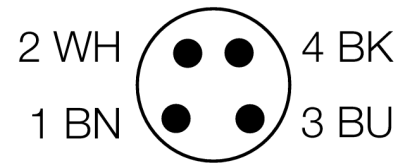


- Male M8 x 1, 4-pin
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via teach button
- Operating voltage: 10...30 VDC
- PNP switching output
- Light or dark operation

Wiring diagram



* external programming



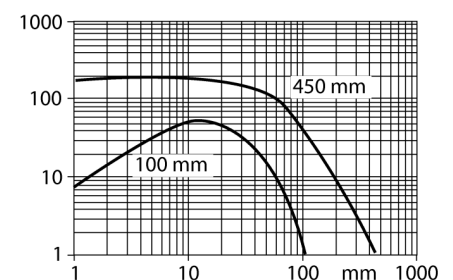
Type code	QS18EP6DBQ7
Ident no.	3072003
Operating mode	diffuse mode sensor
Light type	IR
Wavelength	940 nm
Range	0...500 mm
Ambient temperature	-20...+70 °C
Operating voltage	10...30VDC
DC rated operational current	≤ 100 mA
No-load current I ₀	≤ 35 mA
Reverse polarity protection	yes
Output function	NO contact, PNP
Switching frequency	≤ 833 Hz
Design	rectangular, QS18
Dimensions	21.1 x 15 x 35 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	male, M8 x 1
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

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



**Photoelectric sensor
diffuse mode sensor
QS18EP6DBQ7**

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, stainless steel, for sensors with 18 mm thread	
SMBQS18A	3069721	Mounting bracket, stainless steel, for 18 mm thread	
SMBQS18AF	3067467	Mounting bracket, stainless steel, for 18 mm thread	

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
WKC4.5T-2/TEL	6625028	Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	
RKC4.5T-2/TEL	6625016	Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	