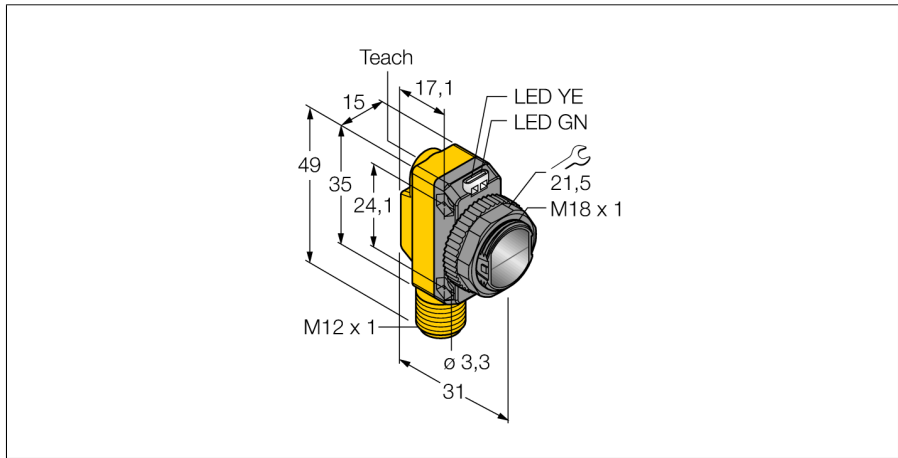
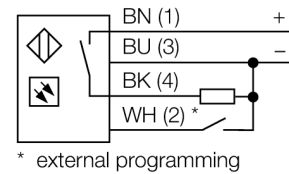


**Photoelectric sensor  
diffuse mode sensor  
QS18EP6DQ8**



- Male M12 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**



**Type code** QS18EP6DQ8  
**Ident no.** 3071995

**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<sub>0</sub>** ≤ 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** male, M12 x 1  
**Protection class** IP67

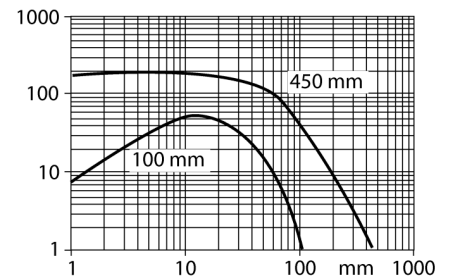
**Power-on indication** LED green  
**Switching state** LED yellow  
**Error indication** LED green flashing  
**Alarm display** LED yellow flashing

**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

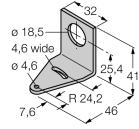
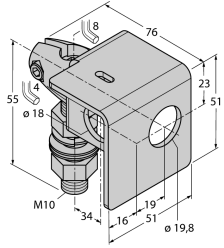
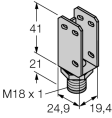
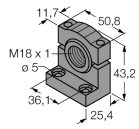


Photoelectric sensor  
diffuse mode sensor  
QS18EP6DQ8

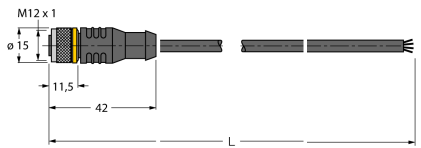
**TURCK**

Industrial  
Automation

**Accessories**

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, 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	
SMBQS18A	3069721	Mounting bracket, stainless steel, for 18 mm thread	
SMB18SF	3052519	Mounting bracket, PTB black steel, for sensors with 18 mm thread	

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	

**Photoelectric sensor  
diffuse mode sensor  
QS18EP6DQ8**

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	