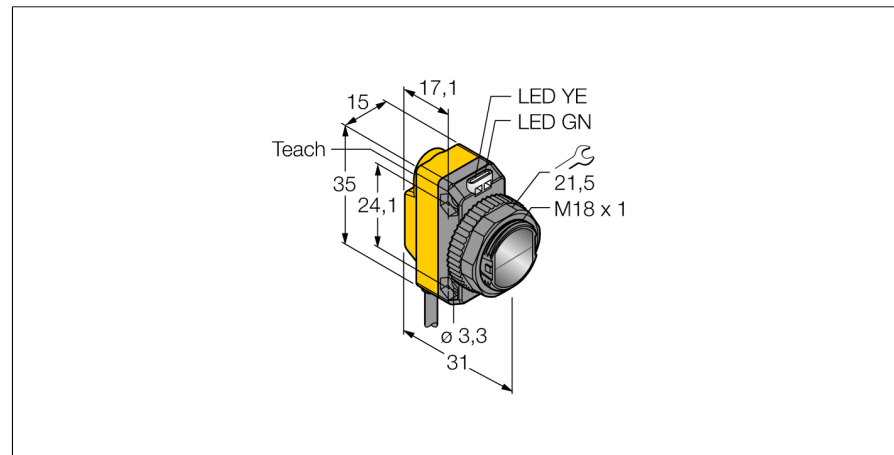
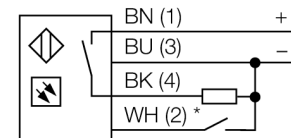


**Photoelectric sensor
diffuse mode sensor
QS18EP6D**



- 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



* external programming

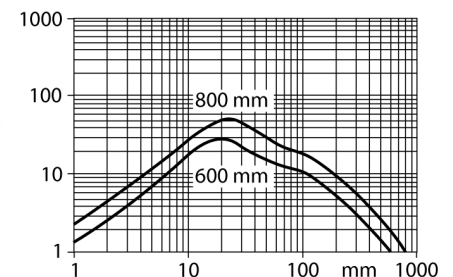
Type designation	QS18EP6D
Ident no.	3069209
Operating mode	Diffuse mode sensor
Light type	IR
Wavelength	940 nm
Range	0...800 mm
Ambient temperature	-20...+70 °C
Operating voltage	10...30 VDC
DC rated operational current	≤ 100 mA
No-load current I ₀	≤ 35 mA
Reverse polarity protection	yes
Output function	NO contact, PNP
Switching frequency	≤ 833 Hz
Approvals	CE, cURus
Design	Rectangular, QS18
Dimensions	31 mm x 15 mm x 35 mm
Housing material	Plastic, ABS
Lens	plastic, acrylic
Electrical connection	Cable, PVC
Cable length	2 m
Cable cross section	4 x 0.5 mm ²
Protection class	IP67
Special features	Pushbutton
	Teach input
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
QS18EP6D

Accessories

Type code	Ident no.	Description	
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	
SMBQS18A	3069721	Mounting bracket, stainless steel, for 18 mm thread	
SMB18SF	3052519	Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable	