QS18EP6XLPCQ7
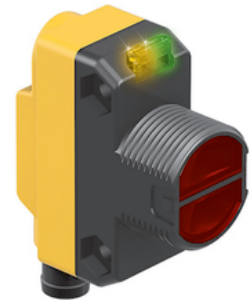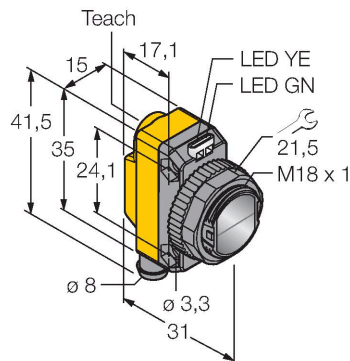## Photoelectric Sensor –   Retroreflective Sensor with Polarizing Filter for Clear Object Detection
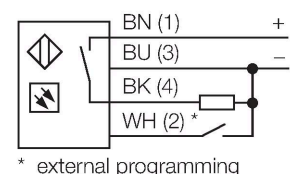

Technical data

Type	QS18EP6XLPCQ7
ID no.	3800691
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized (coaxial)
Reflector included in delivery	no
Light type	Red polarized
Wavelength	625 nm
Range	50…3000 mm
Electrical data	
Operating voltage	10…30 VDC
DC rated operational current	≤ 100 mA
No-load current	≤ 35 mA
Reverse polarity protection	yes
Output function	NO contact, PNP
Switching frequency	≤ 833 Hz
Readiness delay	≤ 100 ms
Response time typical	< 0.4 ms
Setting option	Push Button Remote Teach
Mechanical data	
Design	Rectangular with thread, QS18
Dimensions	Ø 18 x 31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, PMMA

Features

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

Wiring diagram

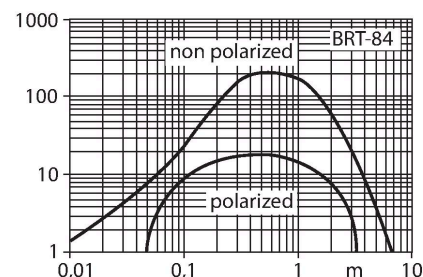*   external programming

Functional principle

Retroreflective sensors have emitter and receiver incorporated in the same housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. A target is captured when it interrupts this beam. This device is sensitive enough to detect clear film, glass bottles and other transparent objects. The blind zone is reduced through the coaxial optics. The built-in polarizing filter also provides for the detection of high-gloss objects. With the help of three different limit values it is possible

Technical data

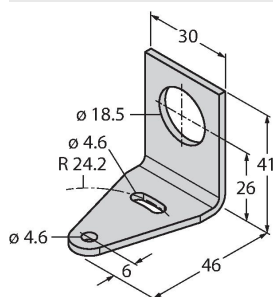|	
Electrical connection	Cable with connector, M8 × 1, 0.15 m, PVC
Number of cores	4
Ambient temperature	-40…+70 °C
Protection class	IP67
Special features	Clear object detection keep/defer
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, cURus

it can react to objects that differ in their transparency. The devices are self-regulating to reduce influences by dirt and dust.

Excess gain curve
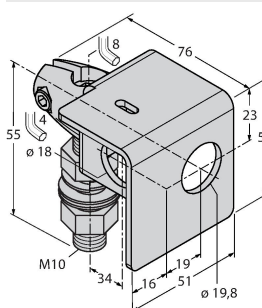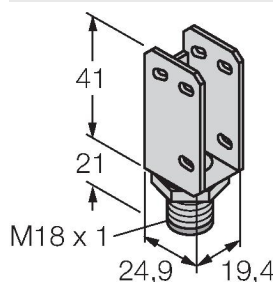Excess gain in relation to the distance (LP-type)

Accessories

SMB18A	3033200

Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

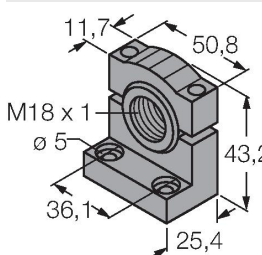| SMB18AFAM10	3012558

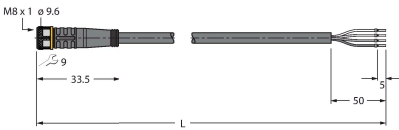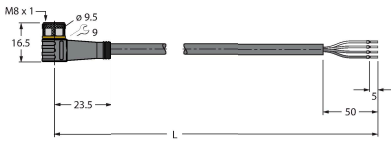Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm

SMBQS18A	3069721

Mounting bracket, stainless steel, for 18 mm thread

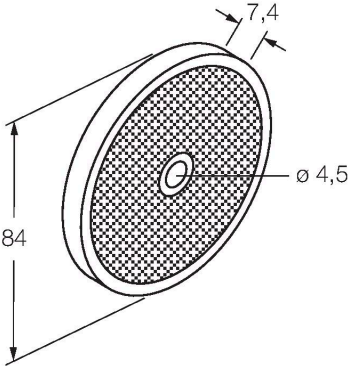| SMB18SF	3052519

Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable

Accessories

Dimension drawing	Type	ID no.	
	PKG4M-2/TEL	6625061	Connection cable, female M8, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	PKW4M-2/TEL	6625067	Connection cable, female M8, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com

Accessories

Dimension drawing	Type	ID no.	
	BRT-84	3058979	Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 … +60 °C