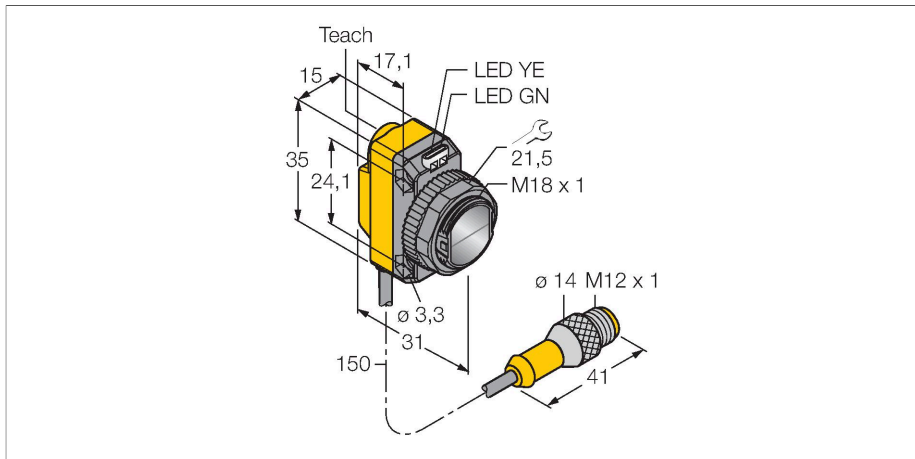


# QS18EP6XLPCQ5

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



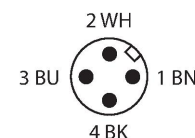
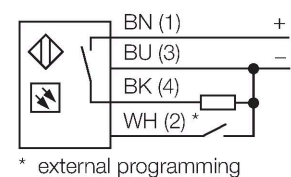
### Technical data

Type	QS18EP6XLPCQ5
ID	3097640
<b>Optical data</b>	
Function	Retroreflective Sensor
Operating mode	Polarized (coaxial)
Reflector included in delivery	no
Light type	Red polarized
Wavelength	625 nm
Range	50...3000 mm
<b>Electrical data</b>	
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
<b>Mechanical data</b>	
Design	Rectangular with thread, QS18
Dimensions	Ø 18 x 31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, PMMA

### Features

- Cable with male end, M12 × 1, 4-pin, PVC, 150 mm
- 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



### Functional principle

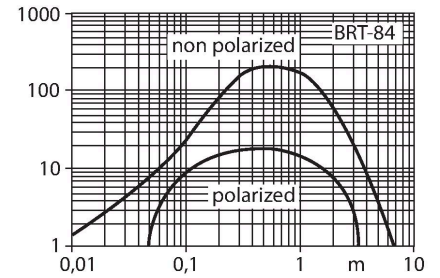
Retroreflective sensors have emitter and receiver incorporated in the same housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. A target is captured when it interrupts this beam. This device is sensitive enough to detect clear film, glass 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

## Technical data

Electrical connection	Cable with connector, M12 × 1, 0.3 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
<b>Tests/approvals</b>	
Approvals	CE, cURus

of three different limit values it is possible 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

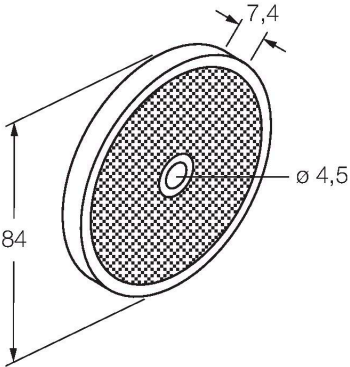
Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable

## Accessories

Dimension drawing	Type	ID	
	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>

Dimension drawing	Type	ID	
	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>

## Accessories

Dimension drawing	Type	ID	
	BRT-84	3058979	Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 ... +60 °C