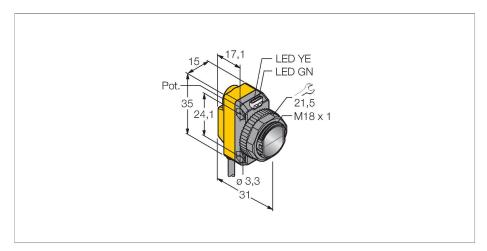


# QS18VP6LV/W30 Photoelectric Sensor – Retroreflective Sensor



#### Technical data

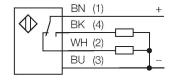
Туре	QS18VP6LV/W30
ID	3061638
Optical data	
Function	Retroreflective Sensor
Operating mode	Unpolarized
Reflector included in delivery	no
Light type	Red
Wavelength	630 nm
Range	06500 mm
Electrical data	
Operating voltage	1030 VDC
Residual ripple	< 10 % U <sub>ss</sub>
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC, PNP
Current output	100 mA
Switching frequency	≤ 800 Hz
Readiness delay	≤ 100 ms
Response time typical	< 0.6 ms
Setting option	Potentiometer
Mechanical data	
Design	Rectangular with thread, QS18
Dimensions	Ø 18 x 31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC



#### **Features**

- ■Cable, PVC, 9 m
- ■Protection class IP67
- ■LED all-round visible
- Sensitivity adjusted via potentiometer
- Operating voltage: 10...30 VDC
- ■PNP switching output, changeover

## Wiring diagram



# Functional principle

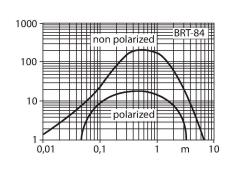
Retroreflective sensors have emitter and receiver circuitry incorporated in the same housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. A target is detected when it interrupts this beam. Retroreflective sensors feature some of the advantages of opposed mode sensors, such as good contrast and high excess gain. Furthermore, only one device has to be installed and wired. Devices without polarizing filter have a smaller sensing range and are more susceptible to disturbances caused by shiny objects.

Excess gain curve Excess gain in relation to the distance (unpolarized)



## Technical data

Number of cores	4
Core cross-section	0.35 mm <sup>2</sup>
Ambient temperature	-20+70 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED, yellow, flashing
Tests/approvals	
Approvals	CE, cURus

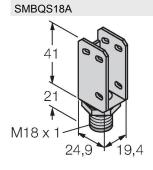


## Accessories

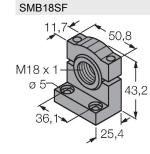
SMB18A 3033200 Mounting bracket, rectangular, mm thread

stainless steel, for sensors with 18 ø 18.5

SMB18AFAM10 3012558 Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm 3052519



3069721 Mounting bracket, stainless steel, for 18 mm thread



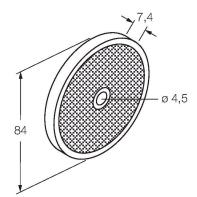
Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable



# Accessories

Dimension drawing Type ID

BRT-84 3058979 Round reflector, reflection coefficient



Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 ... +60 °C