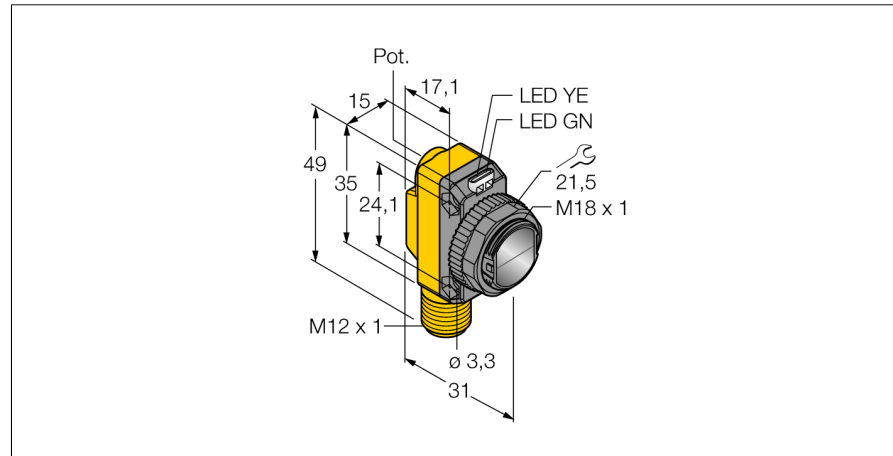
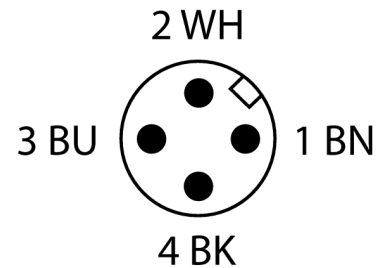
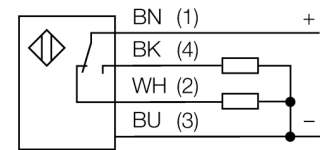


**Photoelectric sensor
retroreflective sensor with polarizing filter
QS18VP6LPQ8**



- Male M12 x 1, 4-pin
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via potentiometer
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

Wiring Diagram



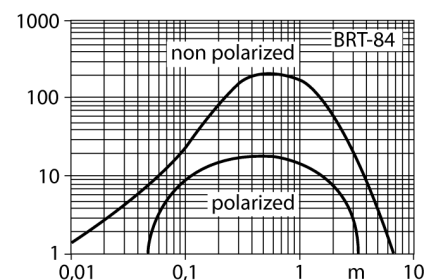
Type designation	QS18VP6LPQ8
Ident no.	3066452
Operating mode	Retroreflective sensor with polarizing filter
Reflector included in delivery	no
Light type	Red polarized
Wavelength	660 nm
Range	50...3500 mm
Ambient temperature	-20...+70 °C
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _s
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC, PNP
Switching frequency	≤ 800 Hz
Readiness delay	≤ 200 ms
Approvals	CE, cURus
Design	Rectangular, QS18
Dimensions	31 mm x 15 mm x 35 mm
Housing material	Plastic, ABS
Lens	plastic, acrylic
Electrical connection	Connector, M12 x 1
Protection class	IP67
MTTF	39 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Excess gain indication	LED yellow flashing

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.

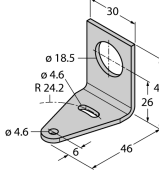
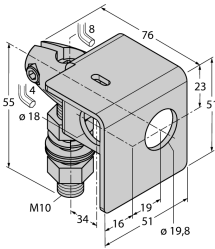
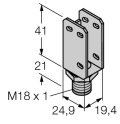
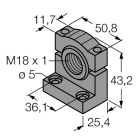
Excess gain curve

Excess gain in relation to the distance (polarized)

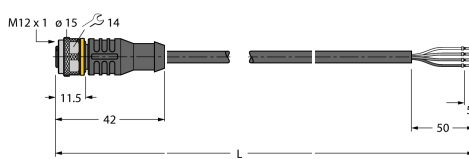


**Photoelectric sensor
retroreflective sensor with polarizing filter
QS18VP6LPQ8**

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	

Wiring accessories

Type code	Ident no.	Description	
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 www.turck.com	

**Photoelectric sensor
retroreflective sensor with polarizing filter
QS18VP6LPQ8**

Wiring accessories

Type code	Ident no.	Description	
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 www.turck.com	

Function accessories

Type code	Ident no.	Description	
BRT-84	3058979	Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 ... +60 °C	