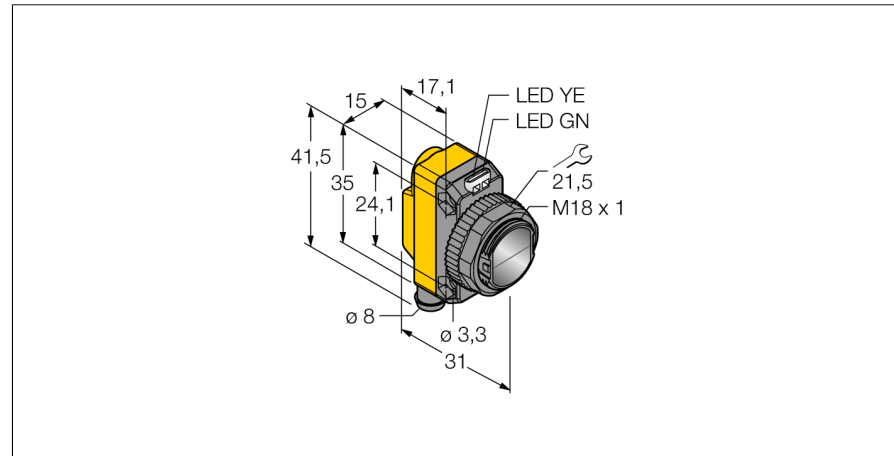


**Photoelectric sensor  
retroreflective sensor with polarizing filter  
QS18VP6LPQ7**

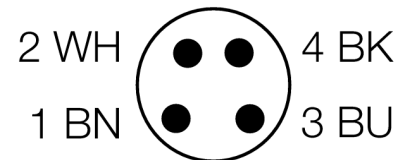


- Male connector, M8 x 1, 4-pin
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via potentiometer

**Wiring diagram**



<b>Type code</b>	QS18VP6LPQ7
Ident no.	3066430
<b>Operating mode</b>	retro-reflective sensor with polarisation filter
Light type	red
Wavelength	660 nm
Range	50...3500 mm
Ambient temperature	-20...+70 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	< 10 % U <sub>s</sub>
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
<b>Design</b>	rectangular, QS18
Dimensions	31 x 15 x 35 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	male, Ø 8 mm
Protection class	IP67
<b>Power-on indication</b>	LED green
Switching state	LED yellow
Error indication	LED green flashing
Excess gain indication	LED yellow flashing

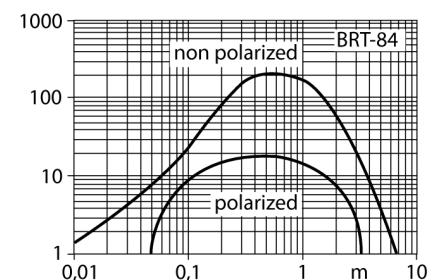


**Functional principle**

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.

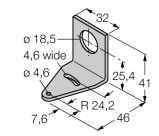
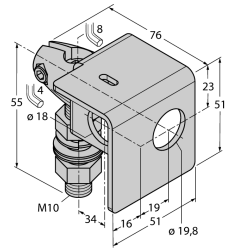
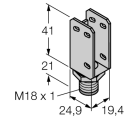
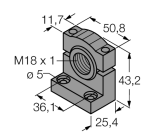
**Excess gain curve**

Excess gain in relation to the distance (polarized)

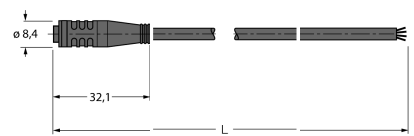


**Photoelectric sensor  
retroreflective sensor with polarizing filter  
QS18VP6LPQ7**

**Accessories**

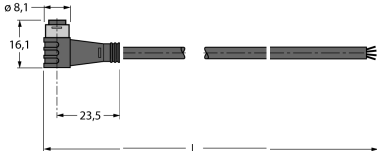
Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, stainless steel, for sensors with 18 mm thread	
SMB18AFAM10	3012558	Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm	
SMBQS18A	3069721	Mounting bracket, stainless steel, for 18 mm thread	
SMB18SF	3052519	Mounting bracket, PTB black steel, for sensors with 18 mm thread	

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
PKG4S-2/TEL	6627370	Connection cable, female Ø 8 mm, straight, 4-pin, snap-on type, cable length: 2 m; sheath material: PVC, sheath color: black, cULus approved, RoHS conform, protection class IP67	

**Photoelectric sensor  
retroreflective sensor with polarizing filter  
QS18VP6LPQ7**

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
PKW4S-2/TEL	6627373	Connection cable, female Ø 8 mm, straight, 4-pin, snap-on type, cable length: 2 m; sheath material: PVC, sheath color: black, cULus approved, RoHS conform, protection class IP67	

**Function accessories**

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