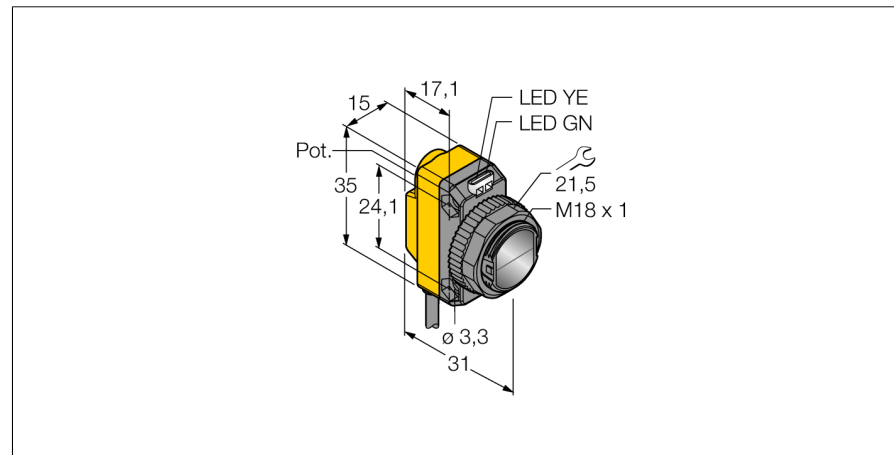
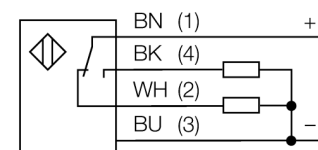


Photoelectric sensor
Retroreflective laser sensor with polarizing filter
QS18VP6LLP



- Cable, PVC, 2 m
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via potentiometer
- Microprism reflector and self-adhesive reflector foil included in delivery

Wiring diagram



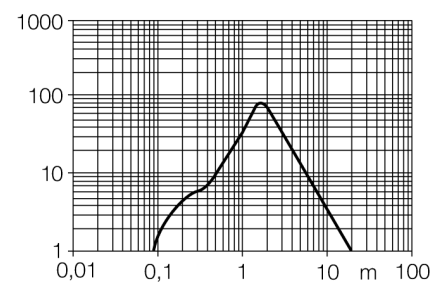
Type code	QS18VP6LLP
Ident no.	3073241
Operating mode	Retroreflective laser sensor (triangulation) with polarizing filter
Light type	red
Wavelength	650 nm
Laser class	△ 1
Beam diameter	4 at 10000 mm
Range	100...10000 mm
Ambient temperature	-10...+50 °C
Operating voltage	10...30VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC , PNP
Switching frequency	≤ 700 Hz
Readiness delay	≤ 200 ms
Design	rectangular, QS18
Dimensions	31 x 15 x 35 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	cable, PVC
Cable length	2 m
Cable cross section	4 x 0.35 mm ²
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Excess gain indication	LED yellow flashing

Functional principle

Retro-reflective sensors incorporate emitter and receiver in the same compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors incorporate some of the advantages of opposed mode sensors (good contrast and high excess gain). Further it is merely required to install and wire a single device. A smaller sensing range and susceptibility of devices without polarisation filter can be of disadvantage when shiny objects have to be detected.

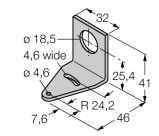
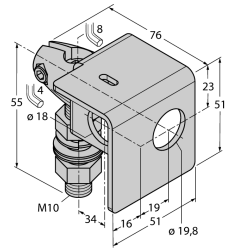
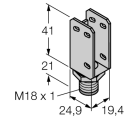
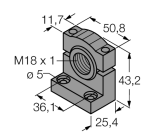
Excess gain curve

Excess gain in relation to the distance (reflector type BRT-51X51BM)

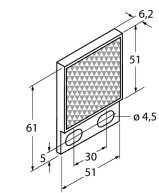


**Photoelectric sensor
Retroreflective laser sensor with polarizing filter
QS18VP6LLP**

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	

Function accessories

Type code	Ident no.	Description	Dimension drawing
BRT-51X51BM	3071791	Rectangular reflector, reflection coefficient 2.0, material acrylic, ambient temperature -20 ... +60 °C, microprism geometry	

Photoelectric sensor
Retroreflective laser sensor with polarizing filter
QS18VP6LLP

Function accessories

Type code	Ident no.	Description	Dimension drawing
BRT-TVHG-2X2	3057260	Rectangular reflective foil, reflection coefficient 0.8, ambient temperature -20 ... +60 °C, 4 sheets	