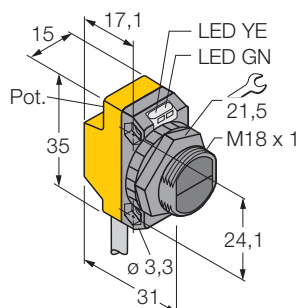


photoelectric sensor
retro-reflective laser sensor
QS18VP6LLP

TURCK

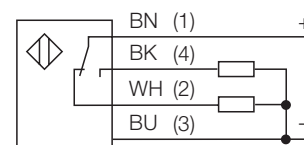
Industrial
Automation



- Operating voltage 10...30 VDC
- indication of insufficient excess gain
- LED visible from all sides
- polarisation filter
- micro-prismatic reflector BRT-51X51BM included in scope of supply
- adhesive reflector foil BRT-TVHG-2X2 included in scope of supply
- sensitivity adjustable via potentiometer
- light/dark operation
- cable, 2m

Type	QS18VP6LLP
Ident-No.	3073241
Operating mode	retro-reflective sensor with polarisation filter
Light type	red
Wavelength	650 nm
Laser class	1 (EN 60825, IEC 60825)
Beam diameter	4 at 10000 mm
Max. sensing range [mm]	100... 10000 mm
Ambient temperature	-10...+ 50 °C
Operating voltage	10... 30VDC
DC rated operational current	≤ 100 mA
No-load current I_0	≤ 32 mA
Short-circuit protection	yes / cyclic
Reverse polarity protection	yes
Output function	normally open / normally closed, pnp
Switching frequency	≤ 700 Hz
Readiness delay	≤ 200 ms
Housing	rectangular, QS18
Dimensions	31 x 15 x 35 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	cables
Cable length	2 m
Cable cross section:	4 x 0.35mm ²
Degree of protection	IP67
Operating voltage display	LED green
Display switch state	LED yellow
Error indication	LED green flashing
Excess gain indication	LED yellow flashing

Wiring diagram



Functional principle

Retro-reflective sensors incorporate emitter and receiver in a single 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)

