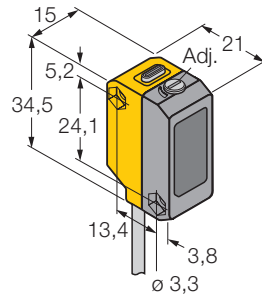


photoelectric sensor

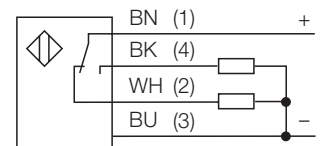
diffuse mode sensor with adjustable background suppression

QS18VP6LAF



- Operating voltage 10...30 VDC
- indication of insufficient excess gain
- LED visible from all sides
- laser class 1
- cut-off point adjustable via adjusting screw
- Cut-off area 30...150 mm
- light/dark operation
- cable, 2m

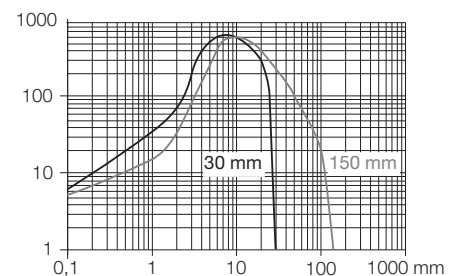
Wiring diagram



Functional principle

Diffuse mode sensors with background suppression operate with a single emitter and two receiver elements, one for close range and one for long-range. The target position and the photoelectric structure of the sensor determine which of the receiving elements receives the most light. The optics before the receiver is modified with the adjusting screw shifting this way the boundary between close and long-range. This modification determines whether the reflecting object is within or outside the measuring range.

Excess gain curve of the closest and most remote cut-off point



Type	QS18VP6LAF
Ident-No.	3073188
Operating mode	diffuse mode sensor with adjustable background suppression
Light type	red
Wavelength	650 nm
Laser class	1 (EN 60825, IEC 60825)
Beam diameter	1 mm
Max. sensing range [mm]	1... 150 mm
Ambient temperature	-10...+ 50 °C
Operating voltage	10... 30VDC
DC rated operational current	≤ 100 mA
No-load current I_0	≤ 15 mA
Short-circuit protection	yes / cyclic
Reverse polarity protection	yes
Output function	normally open / normally closed, pnp
Switching frequency	≤ 700 Hz
Readiness delay	≤ 100 ms
Housing	rectangular, QS18
Dimensions	21.1 x 15 x 34.5 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