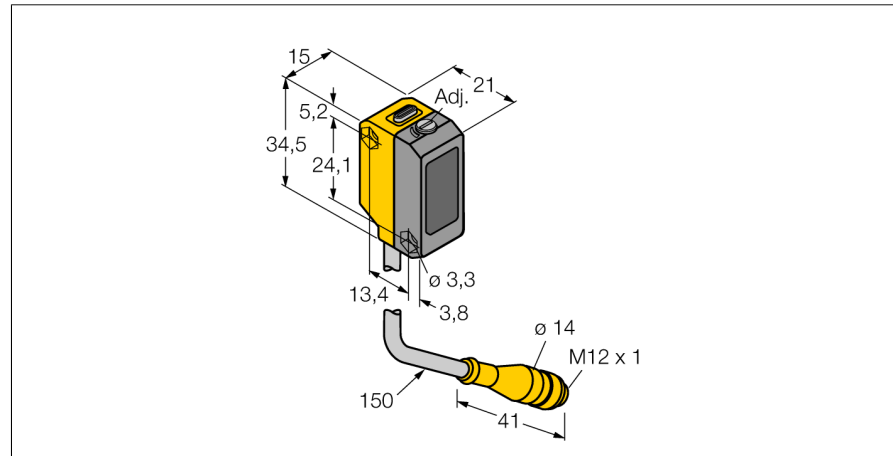
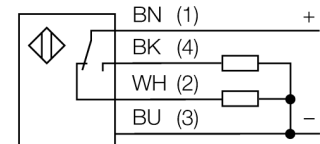


**Photoelectric sensor  
diffuse mode sensor with adjustable foreground suppression  
QS18VP6AFF200Q5**

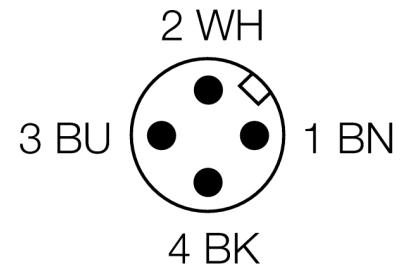


- Cable with male end, M12 x 1, 4-pin, PVC, 150 mm
- Protection class IP67
- LED all-round visible
- Cut-off point adjusted via potentiometer

**Wiring diagram**



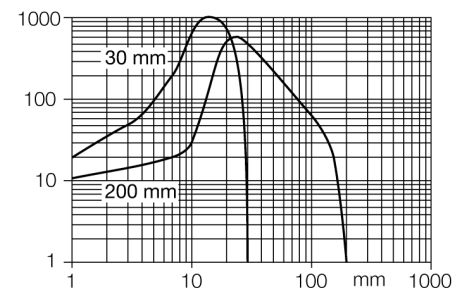
<b>Type code</b>	QS18VP6AFF200Q5
Ident no.	3011474
<b>Operating mode</b>	Diffuse mode sensor with adjustable foreground suppression
Light type	red
Wavelength	660 nm
Range	30...200 mm
Ambient temperature	-20...+55 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	< 10 % U <sub>s</sub>
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC , PNP
Switching frequency	≤ 700 Hz
Readiness delay	≤ 200 ms
<b>Design</b>	rectangular, QS18
Dimensions	21.1 x 15 x 34.5 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	cable with connector, PVC, M12 x 1
Cable length	0.15 m
Protection class	IP67
MTTF	268 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Power-on indication</b>	LED green
Switching state	LED yellow
Error indication	LED green flashing
Excess gain indication	LED yellow flashing



**Functional principle**

Diffuse mode sensors with foreground and background suppression operate with a single emitter and two receiver elements, one for close range and one for far range. The target position and the photoelectric structure of the sensor determine which receiver element gets the most light. The optics in front of the receiver is modified with the adjusting screw until the boundary between close and far range is shifted. This operation determines whether the reflecting object is in or outside the measuring range.

Excess gain curves relating to the nearest and farthest cut-off point



**Photoelectric sensor  
diffuse mode sensor with adjustable foreground suppression  
QS18VP6AFF200Q5**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, stainless steel, for sensors with 18 mm thread	
SMBQS18A	3069721	Mounting bracket, stainless steel, for 18 mm thread	
SMBQS18AF	3067467	Mounting bracket, stainless steel, for 18 mm thread	

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
WKC4.5T-2/TEL	6625028	Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	
RKC4.5T-2/TEL	6625016	Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	