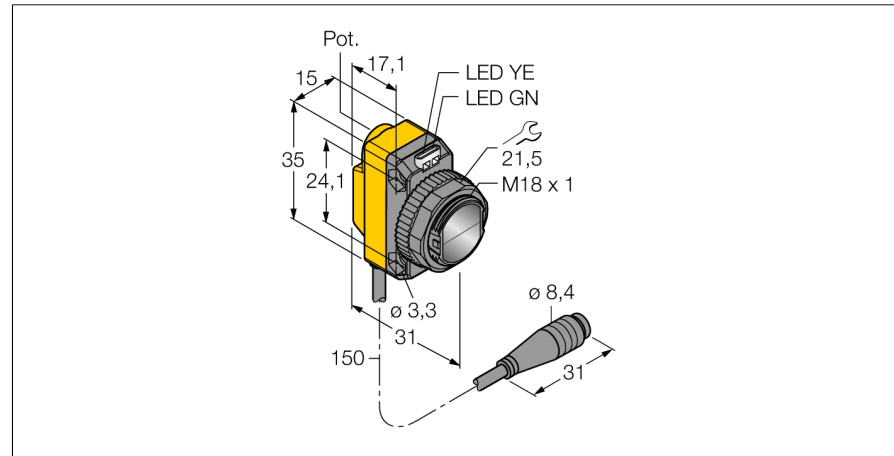
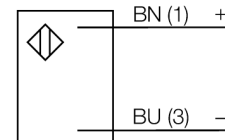


**Photoelectric sensor  
opposed mode sensor (emitter)  
QS186EQ**

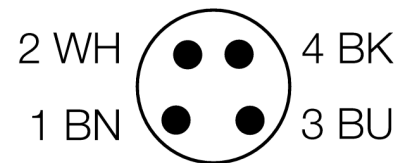


- Cable with male end, 4-pin, PVC, 150 mm, 8 mm
- Protection class IP67
- LED all-round visible
- Operating voltage: 10...30 VDC

**Wiring diagram**



<b>Type code</b>	QS186EQ
Ident no.	3061619
<b>Operating mode</b>	opposed mode sensor (emitter)
Light type	IR
Wavelength	940 nm
Range	0...30000 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
Readiness delay	≤ 100 ms
<b>Design</b>	rectangular, QS18
Dimensions	31 x 15 x 35 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	cable with connector, PVC, M8 x 1
Cable length	0.15 m
Protection class	IP67
MTTF	530 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Power-on indication</b>	LED green

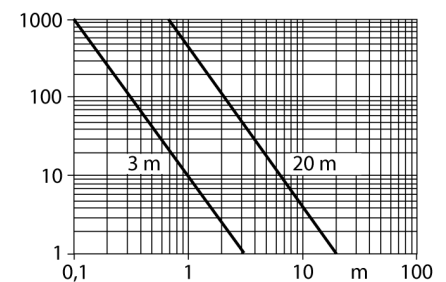


**Functional principle**

Opposed mode sensors consist of an emitter and receiver. They are installed opposite to each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. The excellent light/dark contrast and the high excess gain allow operation over larger distances and under difficult conditions.

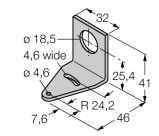
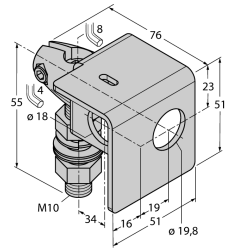
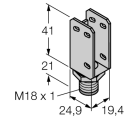
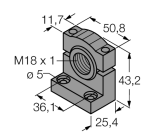
**Excess gain curve**

Excess gain in relation to the distance (type 6EB/RB)

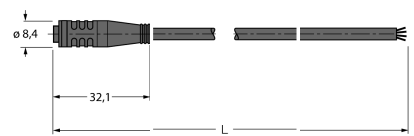


**Photoelectric sensor  
opposed mode sensor (emitter)  
QS186EQ**

**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  
opposed mode sensor (emitter)  
QS186EQ**

**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	