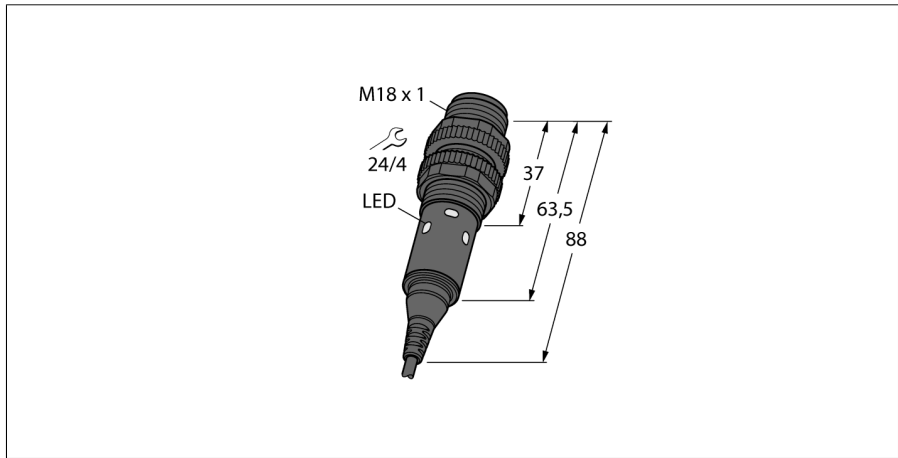
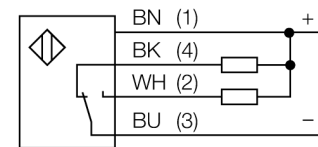


**Photoelectric sensor  
opposed mode sensor (receiver)  
S18-2VNRL-2M**



- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Selectable light/dark operation or light operation with alarm function
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

**Wiring diagram**



<b>Type code</b>	S18-2VNRL-2M
Ident no.	3042180
<b>Operating mode</b>	opposed mode sensor (receiver)
Light type	red
Wavelength	624 nm
Range	0...25000 mm
Ambient temperature	-40...+70 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	< 10 % U <sub>s</sub>
No-load current I <sub>0</sub>	≤ 8 mA
Short-circuit protection	yes/ cyclic
Reverse polarity protection	yes
Output function	changover contact, NPN
Readiness delay	≤ 100 ms
Response time	< 2.5 ms
<b>Design</b>	cylindrical/threaded, S18
Dimensions	88 mm
Housing diameter	18 mm
Housing material	plastic, ABS
Connection	cable
Cable length	2 m
Cable cross section	4 x 0.5 mm <sup>2</sup>
Protection class	IP67
<b>Power-on indication</b>	LED green
Switching state	LED yellow

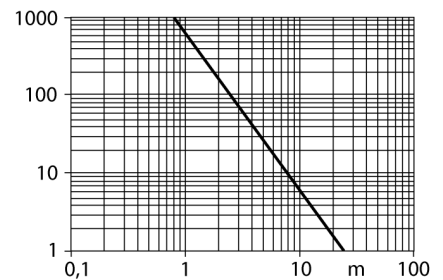
**Functional principle**

Opposed mode sensors consist of an emitter and a receiver. They are installed opposite to each other whereby the emitted light aims 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 objects. The excellent light/dark contrast and the very high excess gain are typical for this function mode and enable operation over large distances and under difficult conditions.

**Excess gain curve**

Excess gain in relation to distance

**Excess gain curve**



**Photoelectric sensor  
opposed mode sensor (receiver)  
S18-2VNRL-2M**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BST-18N	6947215	Fixing clamp for threaded barrel devices, without dead-stop; material: PA6	

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
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>	
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>	