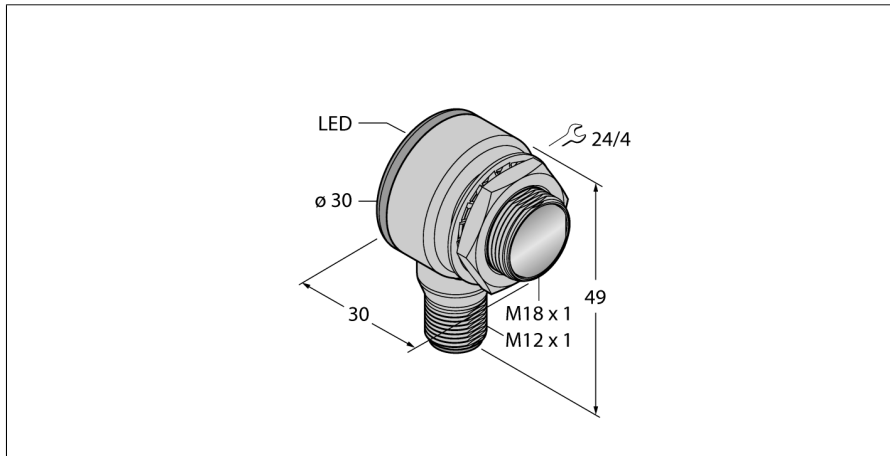
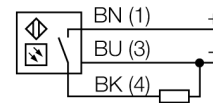


**Photoelectric sensor  
opposed mode sensor (receiver)  
TM18AP6RQ8**



- Male M12 x 1, 5-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40...+70 ° C
- Metal housing
- Operating voltage: 10...30 VDC
- PNP switching output, light operation

**Wiring diagram**

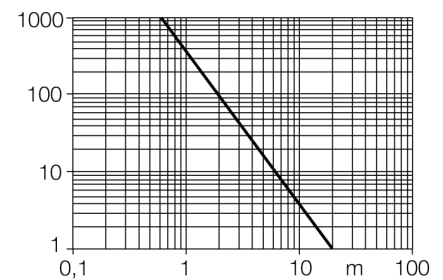


**Functional principle**

Opposed mode sensors consist of an emitter and receiver. They are installed opposite 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. An excellent contrast between light and dark conditions and an extremely high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions.

**Excess gain curve**

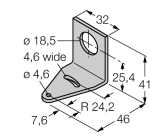
Excess gain in relation to the distance



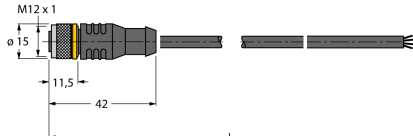
<b>Type code</b>	TM18AP6RQ8
Ident no.	3042009
<b>Operating mode</b>	opposed mode sensor (receiver)
Range	0...20000 mm
Ambient temperature	-40...+70 ° C
<b>Operating voltage</b>	10...30VDC
No-load current I <sub>0</sub>	≤ 25 mA
Short-circuit protection	yes/ cyclic
Reverse polarity protection	yes
Output function	NO, light operation, PNP
Switching frequency	≤ 440 Hz
Readiness delay	≤ 100 ms
<b>Design</b>	cylindrical/threaded, TM18
Dimensions	30 x 30 x 49 mm
Housing material	metal/plastic, CuZn
Lens	plastic, Lexan
Connection	male, M12 x 1
Protection class	IP67 / IP69K
<b>Power-on indication</b>	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

**Photoelectric sensor  
opposed mode sensor (receiver)  
TM18AP6RQ8**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
SMBT18Y	3069554	mounting bracket, rectangular, for sensors with 18 mm thread, 15.3 mm cable feedthrough or M12 x 1 male	
SMB18A	3033200	Mounting bracket, stainless steel, for sensors with 18 mm thread	
SMBAMS18P	3073134	Mounting bracket, stainless steel, for sensors with 18 mm thread	

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	
WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	