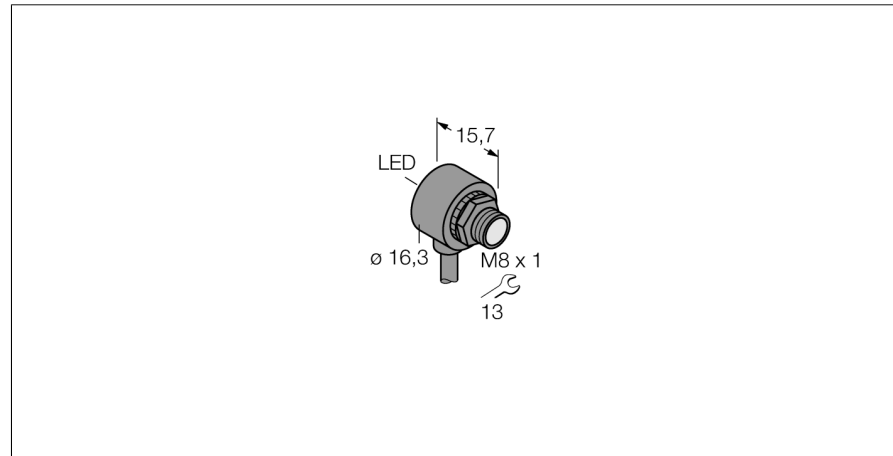
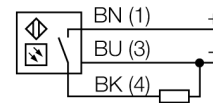


**Photoelectric sensor  
opposed mode sensor (emitter/receiver)  
miniature sensor  
T8AP6R**



- Cable, PVC, 2 m
- Protection class IP67
- Ambient temperature: -20...+55 °C
- Ideal for confined spaces
- Operating voltage: 10...30 VDC
- PNP switching output, light operation

**Wiring diagram**



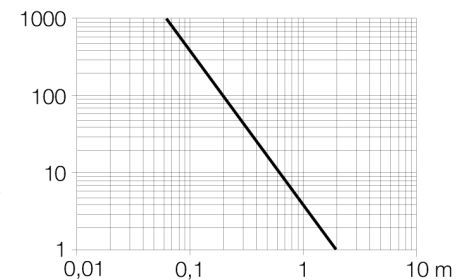
<b>Type code</b>	T8AP6R
Ident no.	3066667
<b>Operating mode</b>	
Range	opposed mode sensor (receiver) 0...2000 mm
Ambient temperature	-20...+55 °C
<b>Operating voltage</b>	
Residual ripple	10...30VDC < 10 % U <sub>n</sub>
DC rated operational current	≤ 50 mA
No-load current I <sub>0</sub>	≤ 25 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO, light operation, PNP
Switching frequency	≤ 666 Hz
Readiness delay	≤ 100 ms
<b>Design</b>	
Dimensions	threaded barrel, T8 15.8 mm
Housing diameter	16.3 mm
Housing material	plastic, ABS, black
Lens	plastic, acrylic
Connection	cable, PVC
Cable length	2 m
Cable cross section	3 x 0.1 mm <sup>2</sup>
Protection class	IP67
<b>Power-on indication</b>	
Switching state	LED green
Error indication	LED red
Alarm display	LED green flashing
	LED red flashing

**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



Photoelectric sensor  
opposed mode sensor (emitter/receiver)  
miniature sensor  
T8AP6R

**Accessories**

Type code	Ident no.	Description	Dimension drawing
SMB8MM	3067363	Mounting bracket, material VA 1.4401, for T8 or T8L series	