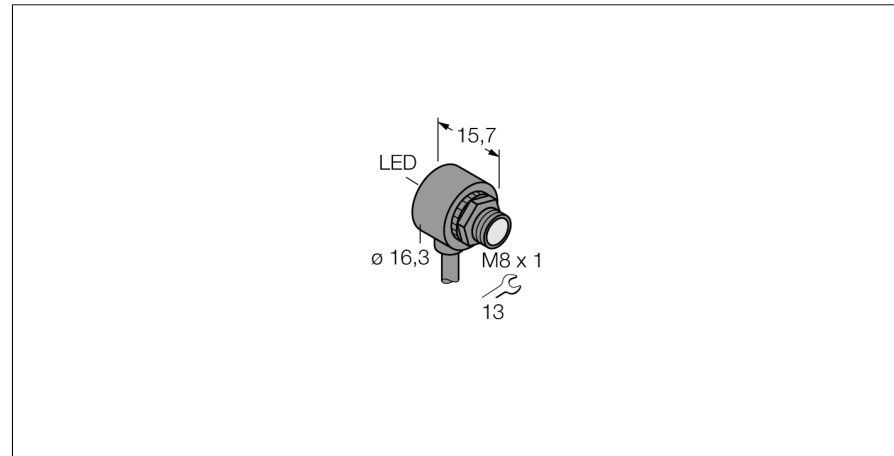
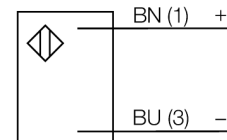


**Photoelectric sensor  
opposed mode sensor (emitter)  
miniature sensor  
T86EV**



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

**Wiring diagram**

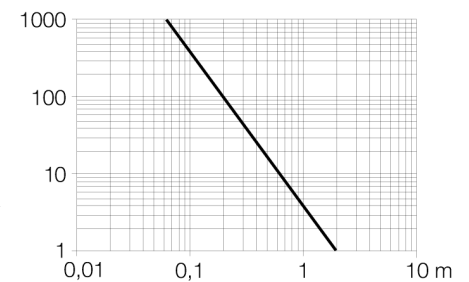


**Functional principle**

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>	T86EV
Ident no.	3066671
<b>Operating mode</b>	opposed mode sensor (emitter)
Light type	red
Wavelength	660 nm
Range	0...2000 mm
Ambient temperature	-20...+55 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	< 10 % U <sub>ss</sub>
DC rated operational current	≤ 50 mA
No-load current I <sub>0</sub>	≤ 25 mA
Short-circuit protection	yes
Reverse polarity protection	yes
<b>Design</b>	threaded barrel, T8
Dimensions	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	2 x 0.1 mm <sup>2</sup>
Protection class	IP67
<b>Power-on indication</b>	LED green
Switching state	LED red
Error indication	LED green flashing
Alarm display	LED red flashing

Photoelectric sensor  
opposed mode sensor (emitter)  
miniature sensor  
T86EV

**Accessories**

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