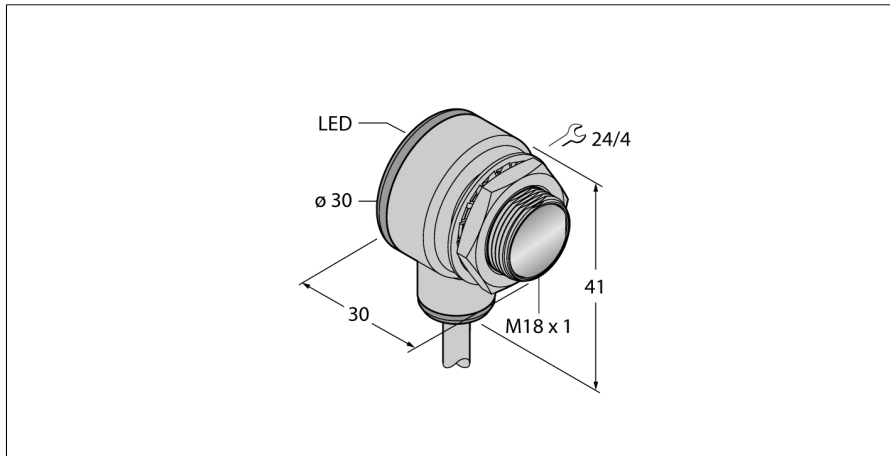
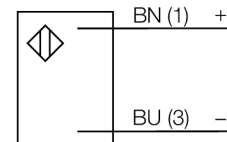


**Photoelectric sensor  
opposed mode sensor (emitter)  
TM186E**



- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Metal housing
- Operating voltage: 10...30 VDC

**Wiring diagram**

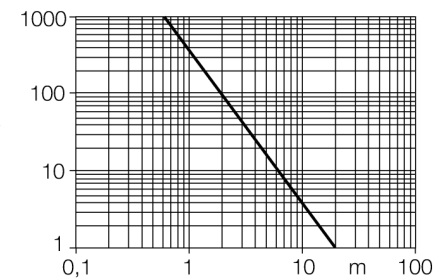


**Functional principle**

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**

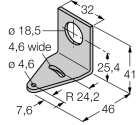
Excess gain in relation to the distance



<b>Type code</b>	TM186E
Ident no.	3042006
<b>Operating mode</b>	opposed mode sensor (emitter)
Light type	red
Wavelength	625 nm
Range	0...20000 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>	≤ 20 mA
<b>Design</b>	cylindrical/threaded, TM18
Dimensions	30 x 30 x 41 mm
Housing material	metal/plastic, CuZn
Lens	plastic, Lexan
Connection	cable
Cable length	2 m
Cable cross section	2 x 0.5 mm <sup>2</sup>
Protection class	IP67
<b>Power-on indication</b>	LED green

**Photoelectric sensor  
opposed mode sensor (emitter)  
TM186E**

**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	 <p>Technical drawing of the SMBT18Y mounting bracket. Dimensions include: top width 32, hole diameter <math>\phi 18,5</math>, hole offset 4,6 wide, hole diameter <math>\phi 4,6</math>, hole offset 25,4, hole diameter <math>\phi 7,6</math>, and radius R 24,2.</p>
SMB18A	3033200	Mounting bracket, stainless steel, for sensors with 18 mm thread	
SMBAMS18P	3073134	Mounting bracket, stainless steel, for sensors with 18 mm thread	

