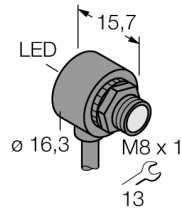


**Photoelectric sensor  
diffuse mode sensor  
miniature sensor  
T8AP6D50**



- 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**

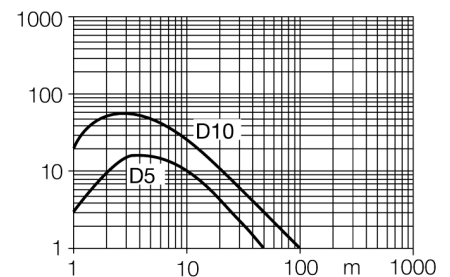


**Functional principle**

Identical to retro-reflective sensors, emitter and receiver circuitry are incorporated in the same housing of the diffuse mode sensors. However, diffuse mode sensors do not detect the interruption of the light beam but the reflection of the target. A target is detected if it reflects a sufficient amount of light back to the receiver. The switching distance of diffuse mode sensors thus largely depends on the reflectivity of the target. This type of sensor is especially suited for detection of transparent objects (diffuse mode sensor with or without background suppression or convergent mode sensors).

**Excess gain curve**

Excess gain in relation to the distance



<b>Type code</b>	T8AP6D50
Ident no.	3066659
<b>Operating mode</b>	diffuse mode sensor
Light type	red
Wavelength	680 nm
Range	0...50 mm
Ambient temperature	-20...+55 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	< 10 % U <sub>s</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	≤ 500 Hz
Readiness delay	≤ 150 ms
<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	3 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  
diffuse mode sensor  
miniature sensor  
T8AP6D50

**Accessories**

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