

# Q25SN6RE Photoelectric Sensor – Opposed Mode Sensor (Receiver)



### Technical data

Turpo	Q25SN6RE
Type ID no.	3037092
-	3037.092
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter/receiver pair
Range	020000 mm
Electrical data	
Operating voltage	1030 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Connection programmable, NPN
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Response time typical	< 3 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Rectangular, Q25
Dimensions	Ø 18 x 30 x 25 x 50.2 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Polycarbonate
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.5 mm <sup>2</sup>
Ambient temperature	-40+70 °C
Protection class	IP69
Special features	Chemical-resistant



### Features

- Cable, 2 m
- Protection class IP67 Ambient temperature: -40...+70 °C
- Selectable light/dark operation or light oper-
- ation with alarm function
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

### 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 extremly 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



#### Technical data

	Encapsulated Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, UL, CSA



#### Accessories

SMB18SF

M18 x 1 ø 5->

36

11,7



50,8

25,4

43,2

3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

3052519 Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable

#### SMB18AFAM10



### 3012558

Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm