

Q25AW3RE Photoelectric Sensor – Opposed Mode Sensor (Receiver)



Technical data

Туре	Q25AW3RE
ID no.	3037096
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter/receiver pair
Range	020000 mm
Electrical data	
Operating voltage	20250 VAC
AC rated operational current	≤ 200 mA
Output function	Light operation, Relay output
Switching frequency	≤ 40 Hz
Readiness delay	≤ 100 ms
Response time typical	< 16 ms
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	3
Core cross-section	0.5 mm ²
Ambient temperature	-40+70 °C
Protection class	IP69
Special features	Chemical-resistant Encapsulated Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow



Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
 Selectable light/dark operation or light operation with alarm function

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

ED
E, UL, CSA

Accessories



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



SMB18AFAM10

3012558

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





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