SMI30AN6RYCQ
– Opposed Mode Sensor (Receiver)

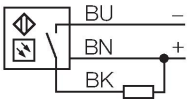
Technical data

Type	SMI30AN6RYCQ
ID no.	3035280
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Range	0…60000 mm
Electrical data	
Operating voltage	10…30 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	NO contact, light operation, NPN
Readiness delay	≤ 0 ms
Response time typical	< 1 ms
Overcurrent release	> 220 mA
Dimensions	Ø 30 mm
Housing material	Plastic, Thermoplastic material
Lens	Acrylic
Electrical connection	Connectors, 7/8", PVC
Number of cores	3
Ambient temperature	-40…+70 °C
Protection class	IP67
Special features	Encapsulated
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	

Features

- Selectable light/dark operation or light operation with alarm function
- Operating voltage: 10…30 VDC
- NPN switching output, light operation

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