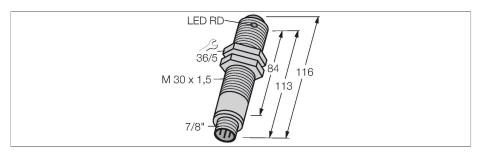


# SM2A30SRLNCQDC Photoelectric Sensor – Opposed Mode Sensor (Receiver)



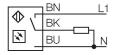
#### Technical data

Туре	SM2A30SRLNCQDC	
ID no.	3035913	
Optical data		
Function	Opposed mode sensor	
Operating mode	Receiver	
Range	0150000 mm	
Electrical data		
Operating voltage	24240 VAC	
AC rated operational current	≤ 200 mA	
Output function	Dark operation, Relay output	
Switching frequency	≤ 40 Hz	
Readiness delay	≤ 0 ms	
Response time typical	< 10 ms	
Mechanical data		
Design	Threaded barrel, SM30	
Dimensions	Ø 30 x 116 mm	
Housing material	Metal, Stainless steel	
Lens	plastic, Acrylic	
Electrical connection	Connectors, 7/8", PVC	
Number of cores	3	
Core cross-section	0.5 mm <sup>2</sup>	
Ambient temperature	-40+70 °C	
Protection class	IP67	
Special features	Chemical-resistant Encapsulated Resistant to chemicals	
Power-on indication	LED, Green	
Switching state	LED, Yellow	
Excess gain indication	LED	
Tests/approvals		
Approvals	CE, cURus, CSA	

### **Features**

- ■7/8" connector, 3-pin
- Protection class IP67
- ■Ambient temperature: -40...+70 °C
- Modulation frequency C, requires transmitters with the same frequency
- Operating voltage: 24...240 VAC
- Semiconductor relay output, SPST, dark operation

# Wiring diagram





## Functional principle

Opposed mode sensors consist of an emitter and a receiver. They are installed opposite to each other whereby the emitted light aims 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 objects. The excellent light/dark contrast and the very high excess gain are typical for this function mode and enable operation over large distances and under difficult conditions. Excess gain curve

Excess gain in relation to distance



# Accessories

Dimension drawing	Туре	ID no.	
	SM30CC-306	3045133	Connecting cable, PVC jacket, 2 m, 7/8" female connector, straight, 3-pin