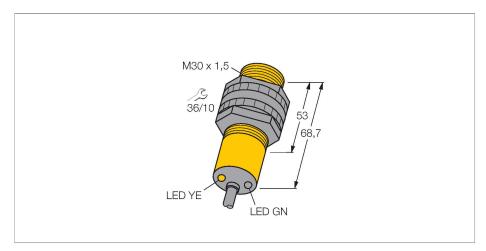
S30SN6R Photoelectric Sensor - Opposed Mode Sensor (Receiver)



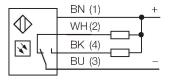
Technical data

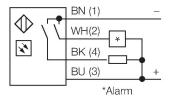
ID no. 3032338	Туре	S30SN6R
Function Opposed mode sensor Operating mode Receiver Range 060000 mm Electrical data Operating voltage 1030 VDC No-load current ≤ 25 mA Short-circuit protection yes / Cyclic Reverse polarity protection yes Output function Connection programmable, NPN Switching frequency ≤ 160 Hz Readiness delay ≤ 100 ms Response time typical <3 ms Overcurrent release > 220 mA Mechanical data Design Threaded barrel, S30 Dimensions Ø 30 x 68.7 mm Housing material Plastic, Thermoplastic material Lens plastic, Acrylic Electrical connection Cable, 2 m, PVC Number of cores 4 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	ID no.	3032338
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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	Range	060000 mm
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	Electrical data	
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	Operating voltage	1030 VDC
Reverse polarity protection yes Output function Connection programmable, NPN Switching frequency ≤ 160 Hz Readiness delay ≤ 100 ms Response time typical < 3 ms	No-load current	≤ 25 mA
Output function Connection programmable, NPN Switching frequency ≤ 160 Hz Readiness delay ≤ 100 ms Response time typical < 3 ms	Short-circuit protection	yes / Cyclic
Switching frequency ≤ 160 Hz Readiness delay ≤ 100 ms Response time typical < 3 ms	Reverse polarity protection	yes
Readiness delay ≤ 100 ms Response time typical < 3 ms	Output function	Connection programmable, NPN
Response time typical <3 ms Overcurrent release > 220 mA Mechanical data Design Threaded barrel, S30 Dimensions Ø 30 x 68.7 mm Housing material Plastic, Thermoplastic material Lens plastic, Acrylic Electrical connection Cable, 2 m, PVC Number of cores 4 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Switching frequency	≤ 160 Hz
Overcurrent release > 220 mA Mechanical data Threaded barrel, S30 Dimensions Ø 30 x 68.7 mm Housing material Plastic, Thermoplastic material Lens plastic, Acrylic Electrical connection Cable, 2 m, PVC Number of cores 4 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Readiness delay	≤ 100 ms
Mechanical dataDesignThreaded barrel, S30DimensionsØ 30 x 68.7 mmHousing materialPlastic, Thermoplastic materialLensplastic, AcrylicElectrical connectionCable, 2 m, PVCNumber of cores4Core cross-section0.5 mm²Ambient temperature-40+70 °CProtection classIP67	Response time typical	< 3 ms
Design Threaded barrel, S30 Dimensions Ø 30 x 68.7 mm Housing material Lens plastic, Thermoplastic material Lens plastic, Acrylic Electrical connection Cable, 2 m, PVC Number of cores 4 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class	Overcurrent release	> 220 mA
Dimensions Ø 30 x 68.7 mm Housing material Plastic, Thermoplastic material Lens plastic, Acrylic Electrical connection Cable, 2 m, PVC Number of cores 4 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Mechanical data	
Housing material Lens plastic, Thermoplastic material plastic, Acrylic Electrical connection Cable, 2 m, PVC Number of cores 4 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Design	Threaded barrel, S30
Lens plastic, Acrylic Electrical connection Cable, 2 m, PVC Number of cores 4 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Dimensions	Ø 30 x 68.7 mm
Electrical connection Cable, 2 m, PVC Number of cores 4 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Housing material	Plastic, Thermoplastic material
Number of cores 4 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Lens	plastic, Acrylic
Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Electrical connection	Cable, 2 m, PVC
Ambient temperature -40+70 °C Protection class IP67	Number of cores	4
Protection class IP67	Core cross-section	0.5 mm²
	Ambient temperature	-40+70 °C
Special features Encapsulated	Protection class	IP67
	Special features	Encapsulated

Features

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

Wiring diagram

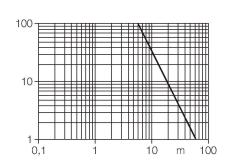




Functional principle

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

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

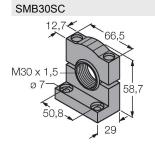
Accessories

SMB30A
ø 30,5 6,3 wide ø 6,3 7,5 R 40 69

3032723 Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

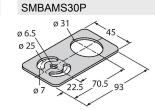


3011185 Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm



Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

3052521



Mounting bracket, stainless steel, for sensors with 30 mm thread

3073135