

# Safety Magnetic Sensors

## Rectangular Safety Magnetic Sensors

### Types SMS01, SMS02

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- Suitable for applications in safety category 4 in accordance with EN ISO13849-1:2008 when connected to appropriate safety devices
- 1 NO + 1 NC outputs
- Cable output connection
- Rectangular housing
- Multiple Flux coding
- LED indication (SMS02LD only)
- Series resistor on NO contact (SMS02S1 only)

## Product Description

The safety magnetic sensors are particularly addressed to the safety gates that allow the entry to machines with dangerous movements. SMS, when connected to appropriate safety devices, can be in safety category 4 in accordance with EN

ISO13849-1:2008. They are provided with two contacts, 1 NO + 1 NC. The SMS02S1 model has a series resistor on NO contact to avoid reed welding problems. The SMS02LD model has a LED for signalling.

## Ordering Key

**SMS 02 LD**

Safety magnetic sensor \_\_\_\_\_  
 Contact type \_\_\_\_\_  
 Other features \_\_\_\_\_

## Type Selection

Outputs	Operating distance	LED indication	Item code (CE)	Item code (CE, UL)
1 NO + 1 NC	10 mm	No	<b>SMS 01</b>	<b>SMS AP 11 AA 02M</b>
1 NO + 1 NC	20 mm	No	<b>SMS 02</b>	<b>SMS AP 11 AB 02M</b>
1 NO + 1 NC	20 mm	Yes	<b>SMS 02 LD</b>	
1 NO + 1 NC	20 mm	No	<b>SMS 02 S1</b>	

## Output Specifications

<b>Outputs</b>	Category 4 (EN ISO13849-1:2008) 1 NO + 1 NC	<b>Contact ratings (UL versions only)</b> <b>Rating AC</b> Max. switching Voltage Max. switching Current Max. switching Power	120 VAC 0.1 A g.p. 12 VA
<b>Output connection</b> SMS01, SMS02xx  SMSAP11xx02M	Cable Cable (PVC, AWG26, L= 2m 4 X 0,15 mm <sup>2</sup> ) Cable (PVC, AWG24, L= 2m 4 X 0,15 mm <sup>2</sup> )	<b>Rating DC</b> Max. switching Voltage Max. switching Current Max. switching Power	50 VDC 0.25 A 12.5 W
<b>Contact ratings (CE versions only)</b> Max Switching Voltage Max Switching Current Max Switching Power	100 VAC 0.25 A 5 VA	<b>Series resistor (NO contact)</b> SMS02S1	R = 39 Ω, 2 W

## General Specifications

<b>Operating distance ON</b> SMS01, SMSAP11AA02M SMS02xx, SMSAP11AB02M	10 ± 3 mm 20 ± 3 mm	<b>Suitable magnetic unit</b>	CLS CLSD88PM0 (cULus listed)
<b>Release distance OFF</b> SMS01, SMSAP11AA02M SMS02xx, SMSAP11AB02M	15 ± 3 mm 30 ± 5 mm	<b>Misalignment</b>	max ± 4 mm
<b>Reset distance</b> SMS01, SMSAP11AA02M SMS02xx, SMSAP11AB02M	20 ± 3 mm 35 ± 5 mm	<b>Housing</b> Dimensions Material	88 x 25 x 13 mm ABS PBT
		<b>Weight</b>	Approx. 70 g

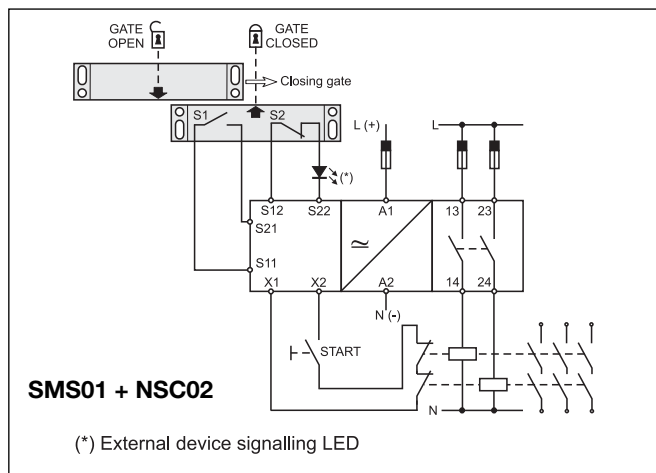


## General Specifications (cont.)

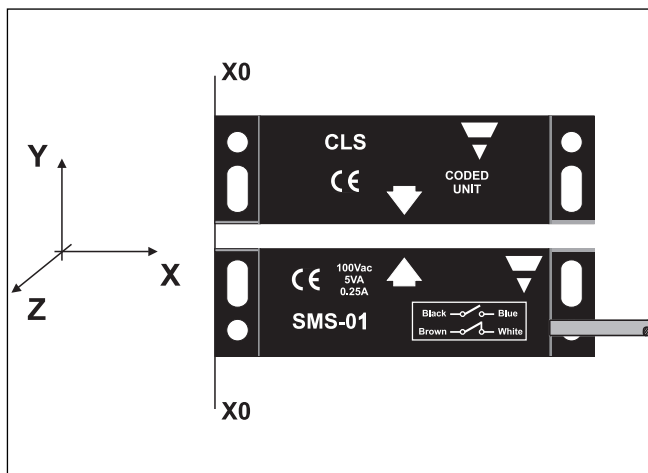
<b>Environment</b>	
Degree of protection	IP 67
Operating temperature	-25 to +70 °C
Storage temperature	-25 to +70 °C
<b>Indication for</b>	
Gate open (SMS02LD)	LED, red

<b>Approvals</b>	SMSAP11xx02M	cULus listed (UL508)
<b>CE-marking</b>		Yes

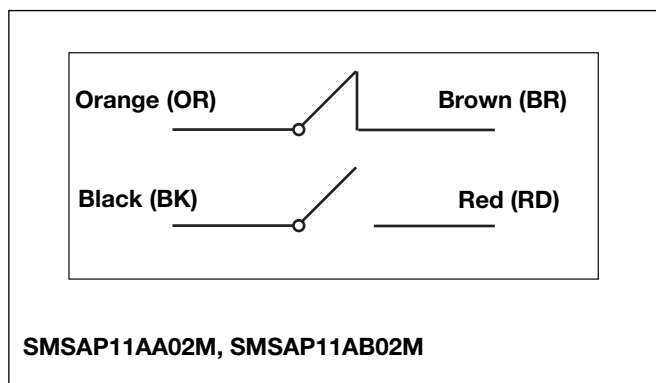
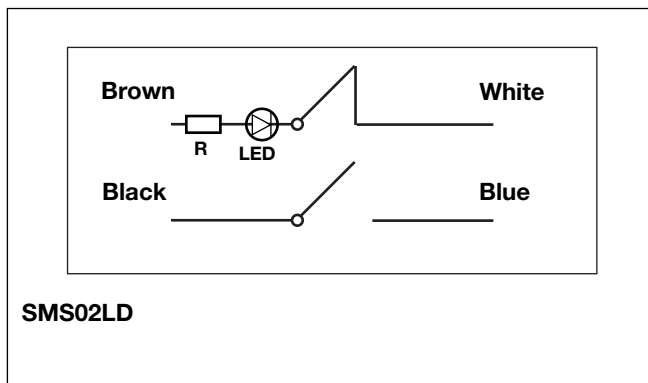
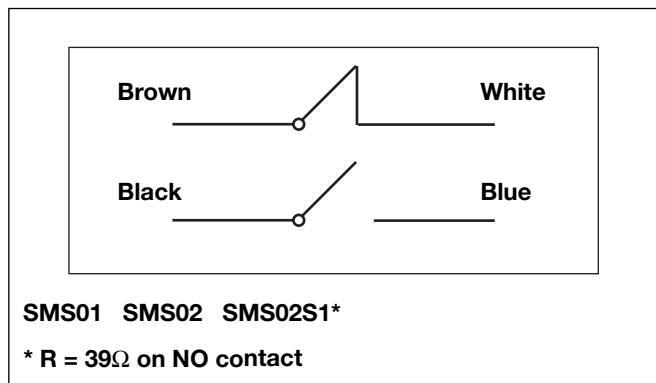
## Application



## Operating Directions



## Wiring Diagrams



## Dimensions

