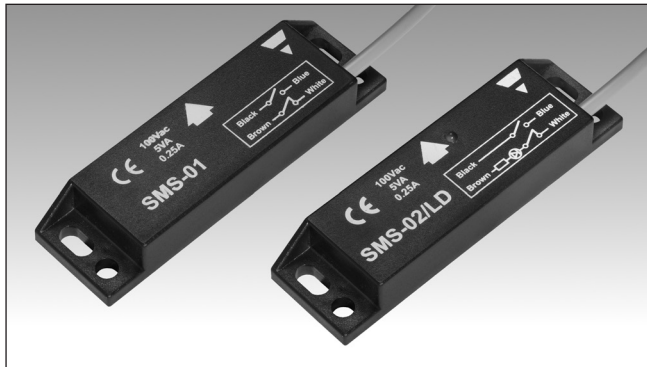


# Safety Magnetic Sensors

## Rectangular Safety Magnetic Sensors

### Types SMS01, SMS02

CARLO GAVAZZI



- Suitable for applications in safety category 4 in accordance with EN ISO13849-1:2015 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)
- In compliance with CEI EN 60947-5-3:2000

## 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 ISO13849-1:2015. 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<br>(EN ISO13849-1:2015)<br>1 NO + 1 NC                                                                         | <b>Contact ratings<br/>(UL versions only)</b><br><b>Rating AC</b><br>Max. switching Voltage<br>Max. switching Current<br>Max. switching Power | 120 VAC<br>0.1 A g.p.<br>12 VA |
| <b>Output connection</b><br>SMS01, SMS02xx<br><br>SMSAP11xx02M                                                         | Cable<br>Cable (PVC, AWG26,<br>L= 2m 4 X 0,15 mm <sup>2</sup> )<br>Cable (PVC, AWG24,<br>L= 2m 4 X 0,15 mm <sup>2</sup> ) | <b>Rating DC</b><br>Max. switching Voltage<br>Max. switching Current<br>Max. switching Power                                                  | 50 VDC<br>0.25 A<br>12.5 W     |
| <b>Contact ratings<br/>(CE versions only)</b><br>Max Switching Voltage<br>Max Switching Current<br>Max Switching Power | 100 VAC<br>0.25 A<br>5 VA                                                                                                 | <b>Series resistor (NO contact)</b><br>SMS02S1                                                                                                | R = 39 Ω, 2 W                  |

## General Specifications

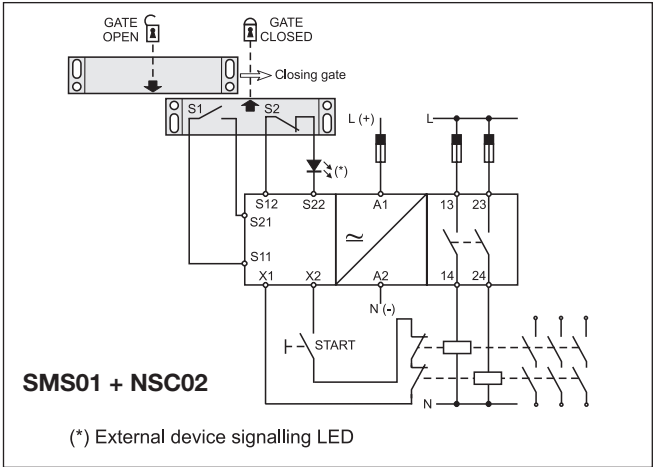
|                                                                              |                        |                                                                            |                                 |
|------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------|---------------------------------|
| <b>Operating distance ON</b><br>SMS01, SMSAP11AA02M<br>SMS02xx, SMSAP11AB02M | 10 ± 3 mm<br>20 ± 3 mm | <b>Suitable magnetic unit</b>                                              | CLS<br>CLSD88PM0 (cULus listed) |
| <b>Release distance OFF</b><br>SMS01, SMSAP11AA02M<br>SMS02xx, SMSAP11AB02M  | 15 ± 3 mm<br>30 ± 5 mm | <b>Misalignment</b>                                                        | max ± 4 mm                      |
| <b>Reset distance</b><br>SMS01, SMSAP11AA02M<br>SMS02xx, SMSAP11AB02M        | 20 ± 3 mm<br>35 ± 5 mm | <b>Housing</b><br>Dimensions<br>Material<br>SMS01, SMS02xx<br>SMSAP11xx02M | 88 x 25 x 13 mm<br>ABS<br>PBT   |
|                                                                              |                        | <b>Weight</b>                                                              | Approx. 70 g                    |



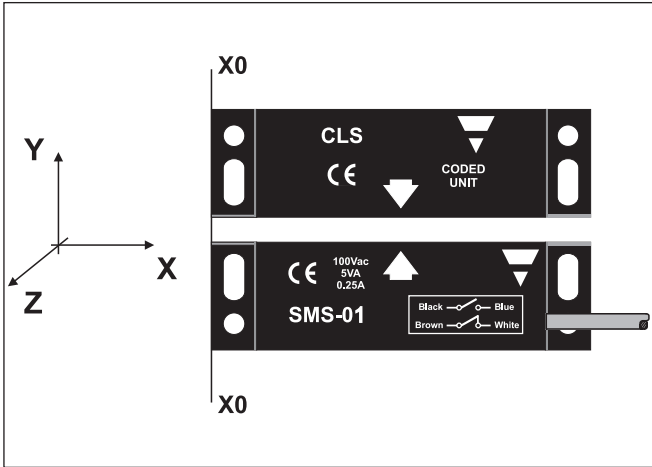
General Specifications (cont.)

|                       |               |                   |                      |  |
|-----------------------|---------------|-------------------|----------------------|--|
| <b>Environment</b>    |               | <b>Approvals</b>  |                      |  |
| Degree of protection  | IP 67         | SMSAP11xx02M      | cULus listed (UL508) |  |
| Operating temperature | -25 to +70 °C | <b>CE-marking</b> | Yes                  |  |
| Storage temperature   | -25 to +70 °C |                   |                      |  |
| <b>Indication for</b> |               |                   |                      |  |
| Gate open (SMS02LD)   | LED, red      |                   |                      |  |

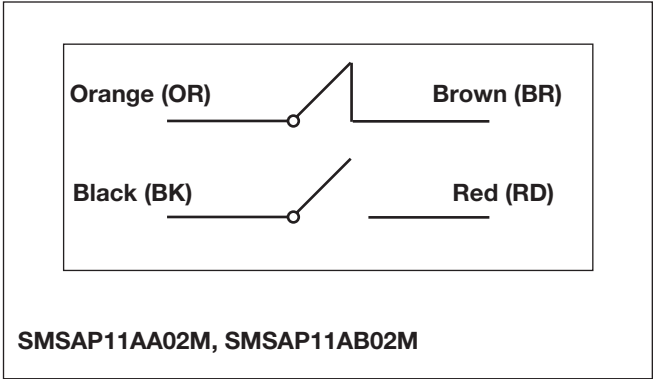
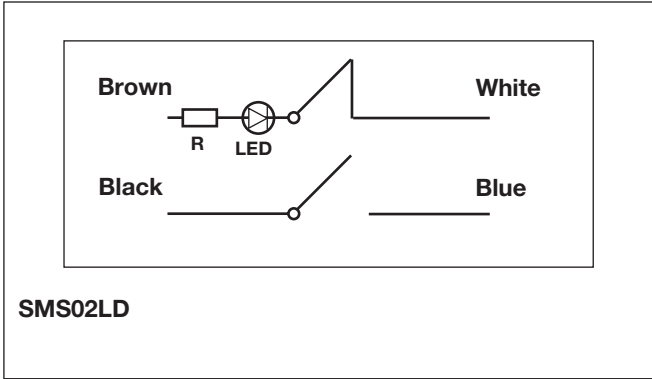
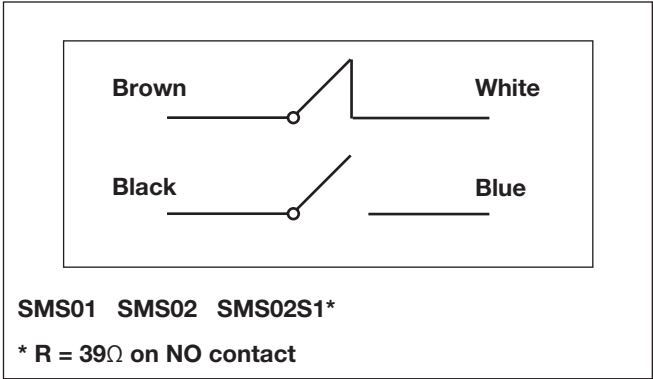
Application



Operating Directions



Wiring Diagrams



## Dimensions

