

## SMS – Safety switch with separated actuator



SMS 4xxx



SMS 3xxx



### Applications

- Access protection for operators of machines with dangerous machine parts which move after switching off
- Locking of a machine or an automatic process when the guard is open
- Position monitoring of movable guards in accordance with EN 60947-5-3

### Features

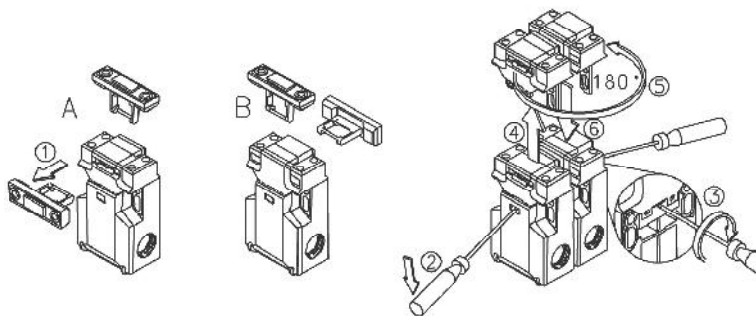
- Flexible use with 2 horizontal or 2 vertical actuating directions
- Protection against simple bypassing in accordance with EN 14119 through multiple coding of the actuator
- Long service life thanks to dust- and water-proof housing and a broad operating temperature range of up to 80 °C.
- Increased extraction force up to 30 N
- Easy installation with adjustment via slots and final fixing via round holes

### Function

The mechanical safety switches in the SMS 2000, SMS 3000 and SMS 4000 series are suitable for the reliable position monitoring of movable guards (EN 60947-5-3).

If the associated guard on the machine is opened, the hazardous machine movement is switched off.

The machine is shut down in a hazardous situation by an analysis of the contacts carried out by a suitable basic device in the **safe** RELAY or by one of the **samos**<sup>®</sup> or **samos**<sup>®</sup>PRO safety systems.



Simple installation and wiring in each application.

# SMS – Safety switch with separated actuator



SMS 2xxx



## Applications

- Access protection for operators of machines with dangerous machine parts which move after switching off
- Locking of a machine or an automatic process when the guard is open
- Position monitoring of guard and guard locking

## Features

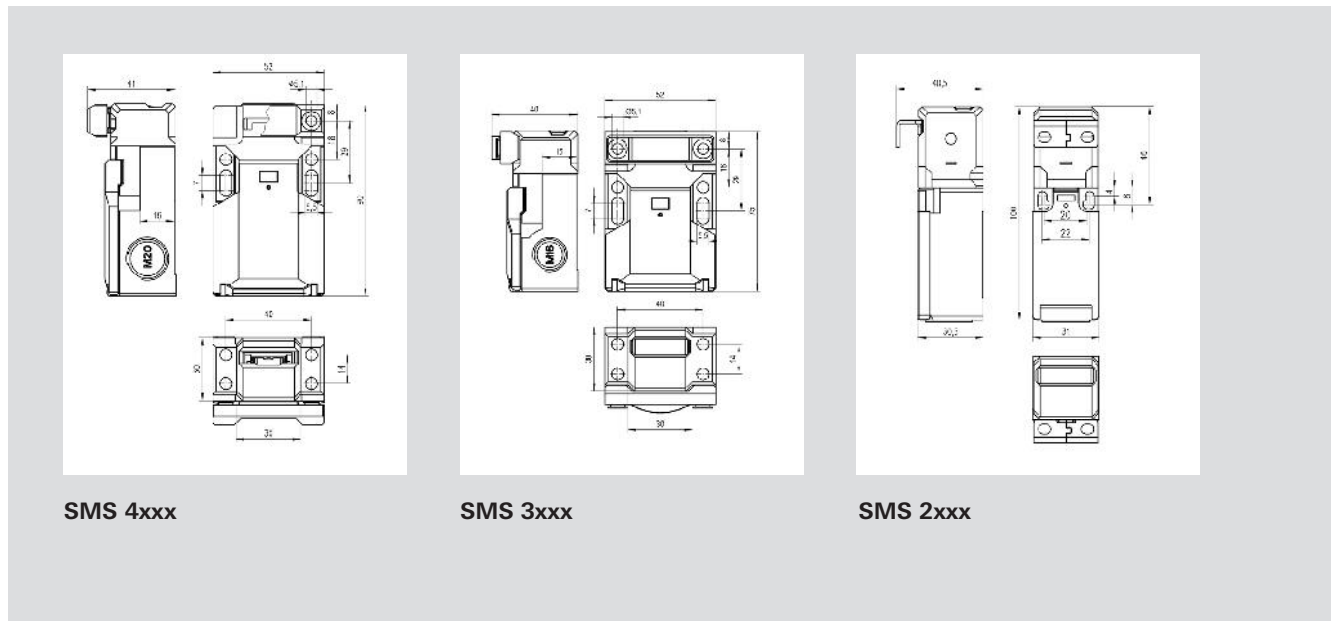
- Flexible use with 4 horizontal or 4 vertical actuating directions
- Slim design for installation on profile systems and where there are difficult space constraints
- Protection against simple bypassing in accordance with EN 1088 through multiple coding of the actuator
- Long service life thanks to dust- and water-proof housing and a broad operating temperature range of up to 80 °C
- Increased extraction force up to 50 N

## Technical data

Function	
according EN 14119	Safety switch with separated actuator
Power supply circuit	
Max. continuous thermal current $I_{th}$	5 A (contact assignment 1 NC or 2 NC/1 NO) 10 A (contact assignment 1 NC/1 NO or 2 NC)
Application category	AC-15: 230 V, 1.5 A (contact assignment 1 NC or 2 NC/1 NO) AC-15: 230 V, 3 A (contact assignment 1 NC/1 NO or 2 NC)
Mechanical life	$1 \times 10^6$
Short-circuit protection	SMS 2xxx / SMS 3xxx lead fuse 6 A class gL/gG SMS 4xxx lead fuse 10 A class gL/gG
Mechanical data	
Approach speed	$\leq 0,2$ m/s
Extraction force	SMS 2xxx 10 N (increased extraction force 50 N) SMS 3xxx / SMS 4xxx 10 N (increased extraction force 30 N)
Dimensions (L x W x H)	SMS 2xxx 100 x 31 x 30,5 mm SMS 3xxx 75 x 52 x 33 mm SMS 4xxx 90 x 52 x 33,5 mm
Mounting	2 x M5
Cable entry point	SMS 2xxx 1 x M20 x 1.5 SMS 3xxx 3 x M16 x 1.5 SMS 4xxx 3 x M20 x 1.5
General data	
Ambient temperature	-30 - +80 °C
Wire ranges screw terminals	1 x 0.5 - 1.5 mm <sup>2</sup>
Protection degree according to EN 60529	IP 65
Weight	0,15 kg
Standards	EN 60947-1, EN 60947-5-1, EN ISO 13849-1, EN 62061
Approvals	TÜV, UL, c-CSA-us

# SMS – Safety switch with separated actuator

## Dimensions diagramm



## Overview of devices | part numbers safety switch

Type	Actuator*	Contact assignment	Extraction force	Part no.	Std. pack
SMS 3010	Standard actuator	1NC	10 N	R1.320.3010.0	1
SMS 3210	Actuator for increased force	1NC	30 N	R1.320.3210.0	1
SMS 3110	Radius actuator	1NC	10 N	R1.320.3110.0	1
SMS 4040	Standard actuator	1NC/1NO	10 N	R1.320.4040.0	1
SMS 4240	Actuator for increased force	1NC/1NO	30 N	R1.320.4240.0	1
SMS 4140	Radius actuator	1NC/1NO	10 N	R1.320.4140.0	1
SMS 4020	Standard actuator	2NC	10 N	R1.320.4020.0	1
SMS 4220	Actuator for increased force	2NC	30 N	R1.320.4220.0	1
SMS 4120	Radius actuator	2NC	10 N	R1.320.4120.0	1
SMS 4070	Standard actuator	2NC/1NO	10 N	R1.320.4070.0	1
SMS 4270	Actuator for increased force	2NC/1NO	30 N	R1.320.4270.0	1
SMS 4170	Radius actuator	2NC/1NO	10 N	R1.320.4170.0	1
SMS 2040	Standard actuator 2	1NC/1NO	10 N	R1.320.2040.0	1
SMS 2240	Actuator for increased force	1NC/1NO	50 N	R1.320.2240.0	1
SMS 2020	Standard actuator 2	2NC	10 N	R1.320.2020.0	1
SMS 2220	Actuator for increased force	2NC	50 N	R1.320.2220.0	1
SMS 2070	Standard actuator 2	2NC/1NO	10 N	R1.320.2070.0	1
SMS 2270	Actuator for increased force	2NC/1NO	50 N	R1.320.2270.0	1

\* The relevant actuator is included in the scope of delivery

# SMS – Actuator



**SMS 9001**  
(SMS 3xxx / SMS 4xxx included in the scope of delivery)



**SMS 9002**

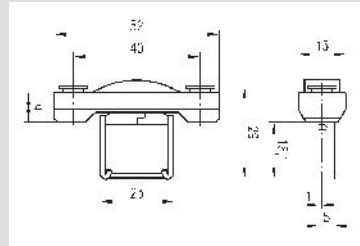


**SMS 9003**

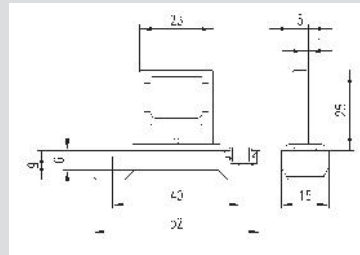


**SMS 9004**  
(SMS 2xxx included in the scope of delivery)

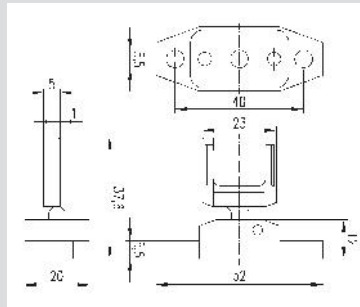
## Dimensions diagramm



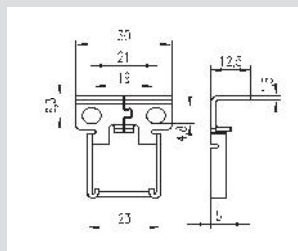
**SMS 9001**



**SMS 9002**



**SMS 9003**



**SMS 9004**

sensor PRO

## Overview of devices | part numbers Actuator

Type	Actuator	Part no.	Std. pack
SMS 9001	Standard actuator	R1.320.9001.0	1
SMS 9002	Actuator for increased force	R1.320.9002.0	1
SMS 9003	Radius actuator	R1.320.9003.0	1
SMS 9004	Standard actuator 2	R1.320.9004.0	1