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Sensing with SIRIUS 3SE Position and Safety Switches

Modular design for all applications

SIRIUS Command

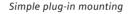
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SIRIUS position switches

Main advantages at a glance

- Reduced variance and stock-keeping costs due to modular design
- Plug-in design and a standardized interface simplify replacement and installation of the actuator heads
- All actuator heads can be rotated in 22.5° increments
- Quick-connect technology for plastic enclosures (31 mm) reduces mounting times by up to 25%
- · Choice of connectors and rollers
- The entire ASIsafe electronics is integrated in a standard enclosure
- LED displays optionally available for all enclosures
- Higher degree of safety with redundant shutdown and additional signaling for versions with 3-pole contact blocks (enclosure dimensions as for 2-pole contact blocks)
- \bullet Versions with increased corrosion protection and for use down to –40 $^{\circ}\text{C}$





- 1 Open cover
- 2 Operate the locking lever
- 3 Replace the actuator head
- 4 Lock and close the cover



The modular design of the standard position switches saves

time and increases flexibility

during installation of a whole

range of switch versions.

Quick-connect technology

- Connect connection cable to terminals of contact block
- 2 Insert through slot into opening for screw connection

Selection of basic switches

| | Contacts | | Plastic enclosure | | Metal enclosure | | |
|---|----------|---------------|-------------------|---------------|-----------------|---------------|---------------|
| | | 31 mm width | 40 mm width | 50 mm width | 31 mm width | 40 mm width | 56 mm width |
| → Safety switch Positive opening operation according to IEC 60947-5-1 | | Sa E | | Mained | | | S S |
| Switching points according to | - | EN 50 047 | EN 50 041 | EN 50 047 | EN 50 047 | EN 50 041 | EN 50 041 |
| Mounting according to | - | EN 50 047 | EN 50 041 | | EN 50 047 | EN 50 041 | |
| Degree of protection | - | IP65 | IP66/IP67 | IP66/IP67 | IP66/IP67 | IP66/IP67 | IP66/IP67 |
| Number of screw connections M20 x 1.5 | - | 1 | 1 | 2 | 1 | 1 | 3 |
| Order number for | 1NO/1NC | 3SE5232-0CC05 | 3SE5132-0CA00 | 3SE5242-0CC05 | 3SE5212-0CC05 | 3SE5112-0CA00 | 3SE5122-0CA00 |
| basic switch with snap-action contacts ¹⁾ | 1NO/2NC | 3SE5232-0LC05 | 3SE5132-0LA00 | 3SE5242-0LC05 | 3SE5212-0LC05 | 3SE5112-0LA00 | 3SE5122-0LA00 |
| Order number for | 1NO/1NC | 3SE5232-0BC05 | 3SE5132-0BA00 | 3SE5242-0BC05 | 3SE5212-0BC05 | 3SE5112-0BA00 | 3SE5122-0BA00 |
| basic switch with slow- action contacts ²⁾ | 1NO/2NC | 3SE5232-0KC05 | 3SE5132-0KA00 | 3SE5242-0KC05 | 3SE5212-0KC05 | 3SE5112-0KA00 | 3SE5122-0KA00 |

SIRIUS position switches: complete units

Our position switches can be ordered in a modular design or as complete units – already fitted with an actuator head. You will find further versions, such as compact switches, non-encapsulated designs or switches for ambient temperatures down to -40° at: siemens.com/industrial-controls/configurators

Plastic or metal enclosure 31 mm wide, according to EN 50 047, with snap-action contacts 1 NO/1NC



| Order number, plastic Order number | | Order number, m | etal | Actuator | SR* | PR** |
|------------------------------------|---------------|-----------------|---------------|----------------------------------|-----|------|
| 3SE5232-0CC05 | \rightarrow | 3SE5212-0CC05 | \rightarrow | Rounded plunger + Teflon plunger | - | - |
| 3SE5232-0HD03 | \rightarrow | 3SE5212-0CD03 | \rightarrow | Roller plunger | - | Χ |
| 3SE5232-0HE10 | \rightarrow | 3SE5212-0CE10 | \rightarrow | Roller lever | - | Χ |
| 3SE5232-0HF10 | \rightarrow | 3SE5212-0CF10 | \rightarrow | Angular roller lever | - | Χ |
| 3SE5232-0HK21 | \rightarrow | 3SE5212-0CK21 | \rightarrow | Twist lever | - | Χ |
| 3SE5232-0HK50 | | 3SE5212-0CK50 | | Twist lever, infin. adj. length | _ | X |

Plastic or metal enclosure 40 mm wide, according to EN 50 041, with snap-action contacts 1 NO/1NC



| Order number, plastic | Order number, metal | Actuator | SR* | PR** |
|-----------------------|---------------------|---|-----|------|
| 3SE5132-0CB01 → | 3SE5112-0CB01 → | Plain plunger, high-grade steel | - | - |
| 3SE5132-0CC03 → | 3SE5112-0CC02 → | Rounded plunger, high-grade steel | Χ | - |
| 3SE5132-0CD05 → | 3SE5112-0CD02 → | Roller plunger | Χ | - |
| 3SE5132-0CE05 → | 3SE5112-0CE01 → | Roller lever | - | Χ |
| 3SE5132-0CF05 → | 3SE5112-0CF01 → | Angular roller lever | - | Χ |
| 3SE5132-0CJ01 → | 3SE5112-0CH01 → | Twist lever | - | Χ |
| 3SE5132-0CJ50 | 3SE5112-0CH50 | Twist lever, infinitely adjustable length | _ | X |
| 3SE5132-0CJ80 | 3SE5112-0CH80 | Rod actuator, aluminum | - | - |
| 3SE5132-0CR01 | 3SE5112-0CR01 | Spring rod | - | _ |

Plastic enclosure 50 mm wide, switching points according to EN 50 047, with snap-action contacts 1 NO/1NC



| Order number, plastic | | Actuator | SR* | PR** |
|-----------------------|---------------|-------------------------------------|-----|------|
| 3SE5242-0CC05 | \rightarrow | Rounded plunger with Teflon plunger | _ | - |
| 3SE5242-0HD03 | \rightarrow | Roller plunger | Χ | - |
| 3SE5242-0HE10 | \rightarrow | Roller lever | _ | Χ |
| 3SE5242-0HK21 | \rightarrow | Twist lever | - | Χ |
| 3SE5242-0HK50 | | Twist lever, adjustable length | _ | X |

Metal enclosure 56 mm wide, switching points according to EN 50 041, with snap-action contacts 1 NO/1NC



| Order number, metal | | Actuator | SR* | PR** |
|---------------------|---------------|---|-----|------|
| 3SE5122-0CC02 | \rightarrow | Rounded plunger, high-grade steel | - | - |
| 3SE5122-0CD02 | \rightarrow | Roller plunger | Χ | - |
| 3SE5122-0CE01 | \rightarrow | Roller lever | - | Χ |
| 3SE5122-0CH01 | \rightarrow | Twist lever | - | Χ |
| 3SE5122-0CH50 | | Twist lever, infinitely adjustable length | - | Χ |

Mechanical safety switches with separate actuators

Safety switches with a separate actuator are used where the position of doors, covers or protective grilles must be monitored for safety reasons. 3SE5 safety switches with a separate actuator without a locking device have the same enclosures as the 3SE5 position switches (modular system).

Safety switches with a locking device are special safety-related devices which prevent an unforeseen or intentional opening of protective doors, protective grilles or other covers for as long as a dangerous situation is present (i.e. follow-on motion of the switched-off machine).

Safety switch with separate actuator, 5 approach directions, without locking device



| Order number, plastic | Order number, metal | Enclosure/contact |
|-----------------------|---------------------|-------------------|
| 3SE5232-0RV40 | 3SE5212-0RV40 | 31 mm/1NC+1NO |
| 3SE5232-0QV40 | 3SE5212-0QV40 | 31 mm/2NC+1NO |
| 3SE5132-0QV20 | 3SE5112-0QV10 | 40 mm/2NC+1NO |
| 3SE5242-0QV40 | - | 50 mm/2NC+1NO |
| - | 3SE5122-0QV10 | 56 mm/2NC+1NO |

Safety switch with separate actuator, 5 approach directions, with locking device, position monitoring. Actuator: 1NO+2NC, magnet:1NO+2NC



| Order number, plastic | Order number, metal | Enclosure width |
|-------------------------------|---------------------|-----------------|
| Spring-actuated lock, with au | | |
| 3SE5322-0SD21 | 3SE5312-0SD11 | |
| Spring-actuated lock, with au | 54 mm | |
| 3SE5322-0SE21 | 3SE5312-0SE11 | 54 111111 |
| Magnetically locked | | |
| 3SE5322-0SB21 | 3SE5312-0SB11 | |

Actuator



| Article No. | Version | Length of actuator |
|---------------|---|--------------------|
| 3SE5000-0AV01 | Standard metal | 75.6 mm |
| 3SE5000-0AW11 | Standard plastic (not for switches with locking device) | 40 mm |
| 3SE5000-0AV02 | With vertical fixing | 53 mm |
| 3SE5000-0AV03 | With transverse fixing | 47 mm |
| 3SE5000-0AV05 | Universal radius actuator | 77 mm |

















Plain plunger

Rounded plunger Roller plunger

Roller lever

Angular roller lever

Spring rod

Twist actuator

Adjustable-length twist lever

Actuators for standard position switch 3SE5 in plastic version 31 mm and 50 mm according to EN 50 047

| | | Order number | | | |
|---|------------------------------------|---------------|---------------------|---------------------------------|--|
| | | | with plastic roller | with high-grade steel roller | |
| Roller plunger | \rightarrow | - | 3SE5000-0AD03 | 3SE5000-0AD04 | |
| Roller lever with | Metal lever → | - | 3SE5000-0AE10 | 3SE5000-0AE11 | |
| Kollet level With | High-grade steel lever → | - | 3SE5000-0AE12 | 3SE5000-0AE13 | |
| Angular raller lover with | Metal lever → | - | 3SE5000-0AF10 | 3SE5000-0AF11 | |
| Angular roller lever with | High-grade steel lever → | - | 3SE5000-0AF12 | 3SE5000-0AF13 | |
| Spring rod with plastic plun (only for switches with snap | 9 | 3SE5000-0AR01 | - | - | |
| Twist actuator + | → | + | 3SE5000-0AK00 + | + | |
| Traint larger 21 mans with | Metal lever | - | 3SE5000-0AA21 | 3SE5000-0AA22 | |
| Twist lever 21 mm with | High-grade steel lever | - | 3SE5000-0AA31 | 3SE5000-0AA32 | |
| Adjustable-length twist | Metal lever, infinitely adjustable | - | 3SE5000-0AA50 | 3SE5000-0AA51 | |
| lever with | Metal lever with grid bores | - | 3SE5000-0AA60 | 3SE5000-0AA61 | |
| Rod actuator in | Aluminum 200 mm | 3SE5000-0AA80 | - | - | |
| Nou actuator III | Plastic 200 mm | 3SE5000-0AA82 | - | - | |

Actuators for standard position switches 3SE5, plastic version, 40 mm, according to EN 50 041

| | | Order number | | | |
|--|------------------------------------|---------------|---------------|---------------------|---------------------------------|
| | | | | with plastic roller | with high-grade steel roller |
| Plain plunger | | \rightarrow | 3SE5000-0AB01 | - | - |
| Roller plunger | | \rightarrow | - | 3SE5000-0AD05 | 3SE5000-0AD06 |
| Rounded plunger | | \rightarrow | 3SE5000-0AC03 | - | - |
| Roller lever with metal lever | | \rightarrow | - | 3SE5000-0AE05 | - |
| Angular roller lever with metal lever | | \rightarrow | - | 3SE5000-0AF05 | - |
| Spring rod with plastic plunger 143 mm (only for switches with snap-action contacts) | | | 3SE5000-0AR01 | - | - |
| Twist actuator + | | \rightarrow | + | 3SE5000-0AH00 + | + |
| Toolah lawan 27 mana wikh | Metal lever | \rightarrow | - | 3SE5000-0AA01 | 3SE5000-0AA02 |
| Twist lever, 27 mm with | High-grade steel lever | \rightarrow | - | 3SE5000-0AA11 | 3SE5000-0AA12 |
| Adjustable-length twist | Metal lever, infinitely adjustable | | - | 3SE5000-0AA50 | 3SE5000-0AA51 |
| lever with | Metal lever with grid bores | \rightarrow | - | 3SE5000-0AA60 | 3SE5000-0AA61 |
| Rod actuator in | Aluminum 200 mm | | 3SE5000-0AA80 | - | - |
| nou actuator III | Plastic 200 mm | | 3SE5000-0AA82 | _ | - |















Plain plunger

Rounded plunger Roller plunger

(with overtravel) (with overtravel)

Roller lever

Angular roller lever

Spring rod

Twist actuator

Adjustable-length twist lever

Actuators for standard position switches 3SE5, metal version, 31 mm, according to EN 50 047

| | | Order number | | |
|--|------------------------------------|---------------|---------------------|---------------------------------|
| | | | with plastic roller | with high-grade steel roller |
| Plain plunger | \rightarrow | 3SE5000-0AB01 | - | - |
| Roller plunger | \rightarrow | - | 3SE5000-0AD03 | 3SE5000-0AD04 |
| Roller lever with | Metal lever → | - | 3SE5000-0AE10 | 3SE5000-0AE11 |
| Koller level Witti | High-grade steel lever → | - | 3SE5000-0AE12 | 3SE5000-0AE13 |
| Angular roller lever with | Metal lever → | - | 3SE5000-0AF10 | 3SE5000-0AF11 |
| Angular roller lever with | High-grade steel lever → | - | 3SE5000-0AF12 | 3SE5000-0AF13 |
| Spring rod with plastic plung (only for switches with snap | • | 3SE5000-0AR01 | - | - |
| Twist actuator + | → | + | 3SE5000-0AK00 + | + |
| Toolah lawan 27 mana wikh | Metal lever | - | 3SE5000-0AA21 | 3SE5000-0AA22 |
| Twist lever, 27 mm with | High-grade steel lever | - | 3SE5000-0AA31 | 3SE5000-0AA32 |
| Adjustable-length twist | Metal lever, infinitely adjustable | - | 3SE5000-0AA50 | 3SE5000-0AA51 |
| lever with | Metal lever with grid bores | - | 3SE5000-0AA60 | 3SE5000-0AA61 |
| Rod actuator in | Aluminum 200 mm | 3SE5000-0AA80 | - | - |
| NOU actuator III | Plastic 200 mm | 3SE5000-0AA82 | - | - |

Actuators for standard position switches 3SE5, metal version, 40 mm and 56 mm, according to EN 50 041

| | | Order number | | |
|--|------------------------------------|---------------|---------------------|---------------------------------|
| | | | with plastic roller | with high-grade steel roller |
| Plain plunger | \rightarrow | 3SE5000-0AB01 | - | - |
| Rounded plunger with over | travel, high-grade steel 💙 | 3SE5000-0AC02 | - | - |
| Roller plunger, with overtra | vel → | - | - | 3SE5000-0AD02 |
| Roller lever with | Metal lever → | - | 3SE5000-0AE01 | 3SE5000-0AE02 |
| Roller lever with | High-grade steel lever → | - | 3SE5000-0AE03 | 3SE5000-0AE04 |
| Angular roller lover with | Metal lever → | - | 3SE5000-0AF01 | 3SE5000-0AF02 |
| Angular roller lever with | High-grade steel lever → | - | 3SE5000-0AF03 | 3SE5000-0AF04 |
| Spring rod with plastic plun (only for switches with sna | • | 3SE5000-0AR01 | - | - |
| Twist actuator + | \rightarrow | + | 3SE5000-0AH00 + | + |
| Twist layer 27 mm with | Metal lever | - | 3SE5000-0AA01 | 3SE5000-0AA02 |
| Twist lever, 27 mm with | High-grade steel lever | - | 3SE5000-0AA11 | 3SE5000-0AA12 |
| Adjustable-length twist | Metal lever, infinitely adjustable | - | 3SE5000-0AA50 | 3SE5000-0AA51 |
| lever with | Metal lever with grid bores | - | 3SE5000-0AA60 | 3SE5000-0AA61 |
| Dad astrotay in | Aluminum 200 mm | 3SE5000-0AA80 | - | - |
| Rod actuator in | Plastic 200 mm | 3SE5000-0AA82 | - | - |

SIRIUS 3SE6 non-contact safety switches

RFID 3SE63 non-contact safety switches and 3SE66/67 magnetically operated switches comply with the highest SIL 3 or Cat. 4 safety requirements for monitoring the positions of movable protective devices. The switch must be connected to a safety relay, e.g. SIRIUS 3SK1/3SK2, or a bus system, e.g. SIMATIC ET 200SP, for evaluation.



Rectangular safety switches 25 mm x 91 mm

Non-contact RFID safety switches

An RFID safety switch consists of a coded RFID switch with an 8-pole M12 connection plug and an identical RFID actuator.



Rectangular safety switch, large 25 mm x 88 mm or small 25 mm x 33 mm

Non-contact magnetically operated safety switch

A magnetically operated switch comprises a coded switching magnet and an identical contact block (sensor unit). The switches use reed contacts as mechanical contacts.

| | Order number | Description |
|------|--|-------------------------------|
| | Magnetically operated switch, contact block 25x88 mm | |
| | 3SE6604-2BA | With cable 3 m, 1NO+1NC |
| | 3SE6604-2BA01 | With M8 plug, 4-pole, 1NO+1NC |
| | Actuator, switching magnet (coded), 25 x 88 mm | |
| | 3SE6704-2BA | |
| TILE | Magnetically operated switch, contact block 25x33 mm | |
| | 3SE6605-3BA | With cable 3 m, 1NO+1NC |
| | Actuator, switching magnet (coded), 25 x 33 mm | |
| | 3SE6704-3BA | |
| | Connection cable | |
| | 3SX5601-3GA05 | 5 m, M8 socket, 4-pole |

Technical information and support are available at www.siemens.com/SIOS or in the Industry Online Support App.





Available for Android and iOs





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