

Introduction

Overview



	Position switches, standard					Safety hinge switches	
Enclosure							
Plastic	✓	✓	✓	—	—	✓	✓
Metal	✓	—	✓	✓	✓	✓	✓
Dimensions (W x H x D) in mm	31 x 68 x 33	50 x 53 x 33	40 x 78 x 38	56 x 78 x 38	56 x 100 x 38	31 x 68 x 33	40 x 78 x 38
Degree of protection	IP65, IP66/IP67	IP66/IP67	IP66/IP67	IP66/IP67	IP66/IP67	IP65, IP66/IP67	IP66/IP67
Standards							
IEC 60947-5-1	Mounting and operating points acc. to EN 50047	Operating points acc. to EN 50047	Mounting and operating points acc. to EN 50041	Operating points acc. to EN 50041	Operating points acc. to EN 50047	Mounting and operating points acc. to EN 50047	Mounting and operating points acc. to EN 50041
Approvals	CE, UL, CSA, CCC		CE, UL, CSA, CCC			CE, UL, CSA, CCC	
Contact blocks							
2 slow-action contacts	1 NO + 1 NC, 2 NC		1 NO + 1 NC, 2 NC	—	—	1 NO + 1 NC	
2 snap-action contacts	1 NO + 1 NC		1 NO + 1 NC	—	—	1 NO + 1 NC	
• Short stroke	1 NO + 1 NC		✓	—	—	✓	
• With 2 x 2 mm contact gap	1 NO + 1 NC		✓	—	—	✓	
3 slow-action contacts	1 NO + 2 NC, 2 NO + 1 NC		1 NO + 2 NC, 2 NO + 1 NC	—	—	1 NO + 2 NC	
• With make-before-break	1 NO + 2 NC		1 NO + 2 NC	—	—	1 NO + 2 NC	
3 snap-action contacts	1 NO + 2 NC		1 NO + 2 NC	—	—	1 NO + 2 NC	
2 x (2 or 3 contacts)	—		—	✓	—	—	
Special features							
LED status display	✓		✓	—	—	✓	
Increased corrosion protection	✓		✓	✓	✓	✓	
Explosion protection (ATEX)	—		✓	✓	✓	✓	
ASIsafe integrated	✓		✓	—	—	✓	
Electrical specifications							
Insulation voltage U_i	400 V		400 V			400 V	
Conventional thermal current I_{the}	6 A/10 A (3-/2-pole)		6 A/10 A (3-/2-pole)			6 A/10 A (3-/2-pole)	
Connections							
Cable entry	1 x M20 x 1.5	2 x M20 x 1.5	1 x M20 x 1.5	3 x M20 x 1.5	1 x M20 x 1.5	1 x M20 x 1.5	1 x M20 x 1.5
M12 connector socket, 4-, 5- or 8-pole	✓	✓	✓	✓	✓	✓	✓
Connector socket, 6-pole + PE	—	—	✓	✓	—	—	—
Actuators							
Rounded plungers and roller plungers	✓		✓			—	
Roller and angular roller levers	✓		✓			—	
Spring rod	✓		✓			—	
Twist levers and rod actuators	✓		✓			—	
Fork lever	—		✓			—	
Hinge switches	—		—			✓	
Page							
Complete units	13/10, 13/27	13/19	13/15, 13/31	13/35	13/39	13/102	13/103
Modular system	13/13, 13/29	13/21	13/17, 13/33	13/37	13/40	—	—
Ambient temperature –40 °C	13/23, 13/42	13/23	13/26, 13/43	13/43	13/43	—	—
ASIsafe	on-line	on-line	on-line	on-line	—	on-line	on-line
ATEX	on-line	on-line	on-line	on-line	on-line	on-line	on-line

✓ Available
— Not available



	Compact design	Open-type	Safety switches with separate actuator		Safety switches with solenoid interlocking	RFID safety switch
Enclosure						
Plastic	—	✓	✓	✓	✓	✓
Metal	✓	—	✓	✓	✓	—
Dimensions (W x H x D) in mm	30 x .. x .., 40 x .. x ..	30 x 48.5 x 20	31 x 68 x 33, 50 x 53 x 33	40 x 78 x 38, 56 x 78 x 38	54 x 185 x 44	25 x 91 x 22
Degree of protection	IP66/IP67	IP10 or IP20	IP65, IP66/IP67	IP66/IP67	IP66/IP67	IP69K
Standards	—	Mounting and operating points acc. to EN 50047	Mounting acc. to EN 50047	Mounting acc. to EN 50041	EN 1088	Category 4 acc. to ISO 13849-1, PL e acc. to ISO 13849-1, SIL 3 acc. to IEC 61508
IEC 60947-5-1	—	—	—	—	—	—
Approvals	CE, UL, CSA	—	CE, TÜV, UL, CSA, CCC		CE, TÜV, UL, CSA, CCC	CE, TÜV
Contact blocks						
2 slow-action contacts	—	1 NO + 1 NC	1 NO + 1 NC	—	—	—
2 snap-action contacts	1 NO + 1 NC	1 NO + 1 NC	—	—	—	—
• Short stroke	—	✓	—	—	—	—
• With 2 x 2 mm contact gap	—	✓	—	—	—	—
3 slow-action contacts	—	1 NO + 2 NC	1 NO + 2 NC	—	—	—
• With make-before-break	—	1 NO + 2 NC	—	—	—	—
3 snap-action contacts	—	1 NO + 2 NC	—	—	—	—
6 slow-action contacts	—	—	—	—	2 x (1 NO + 2 NC)	—
Special features						
LED status display	—	—	✓	—	✓	✓
Increased corrosion protection	—	—	✓	—	✓	✓
Explosion protection (ATEX)	—	—	✓	—	—	—
ASIsafe integrated	—	—	✓	—	✓	—
Electrical specifications						
Insulation voltage U_i	400 V	400 V	400 V	—	400 V	—
Conventional thermal current I_{the}	10 A	6 A	6 A	—	6 A	—
Connections						
Cable entry	—	—	1 x M20 x 1.5, 2 x M20 x 1.5	1 x M20 x 1.5, 3 x M20 x 1.5	3 x M20 x 1.5	—
M12 connector socket, 4-, 5- or 8-pole	✓	—	✓	✓	✓	✓
Molded cables	✓	—	—	—	—	—
AS-Interface	—	—	✓	✓	✓	—
Actuators						
Plungers, twist levers	✓	✓	—	—	—	—
Separate actuators	—	—	✓	—	✓	—
Page						
Complete units	13/46	13/47	13/82	13/85	13/95	—
Modular system	—	—	—	—	—	13/110
ASIsafe	—	—	on-line	on-line	on-line	—
ATEX	—	—	on-line	on-line	—	—

✓ Available
— Not available

Limit Switches

SIRIUS 3SE5 International Limit Switches

General Data

Overview

Position switches in the innovative SIRIUS 3SE5 series are modern in design, compact, modular and simple to connect.

Complete units

Popular versions of the position switches in standard enclosures are available as complete units.



Position switches with plastic and metal enclosures

Modular system

The 3SE5 series features a new modular system comprising different sizes of the basic switch and an actuator which must be ordered separately. Thanks to the modular construction of the switch the user can select the right solution for his application from numerous versions and install it himself in a very short time. The short delivery times of the modules enable fast replacement and thus ensure high plant availability.



Examples of selection options in the modular system

Design

Enclosure sizes

All enclosure versions have an integrated chlorinated rubber diaphragm for high functional safety in cold and aggressive environments.

The 3SE5 switches are available in five different enclosure sizes with 2 or 3 contacts and with the XL enclosure:

- Open-type position switch IP20 or IP10
- Plastic enclosures according to EN 50047 (31 mm wide), IP65, 1 cable entry
- Plastic enclosures (50 mm wide), IP66/IP67, 2 cable entries
- Metal enclosures according to EN 50047, (31 mm wide), IP66/IP67, 1 cable entry
- Plastic and metal enclosures according to EN 50041 (40 mm wide), IP66/IP67, 1 cable entry
- Metal enclosures (56 mm wide), IP66/IP67, 3 cable entries
- XL metal enclosures with 4 to 6 contacts, 56 mm wide, IP66/IP67, 3 cable entries

Various basic switches can be selected for the 3SE5 series:

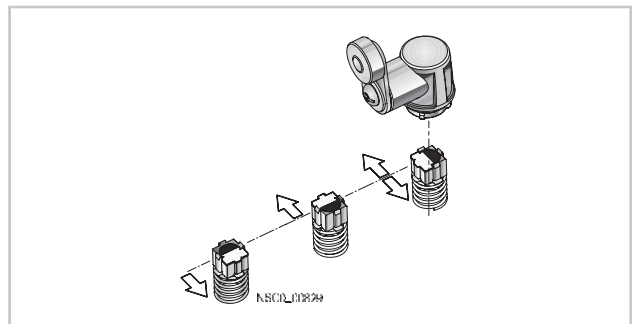
- With contact blocks with two or three contacts (screw terminals) designed as slow-action or snap-action contacts; the slow-action contacts also make-before-break
- Optional LED status display
- With mounted four or five-pole M12 connector socket (available for the wide enclosures as an accessory for self-assembly)
- With 6-pole connector socket + PE on the metal enclosures
- With increased corrosion protection
- Versions for operating temperature to -40° C
- Metal enclosures for explosion protection (ATEX)
- AS-Interface version with integrated ASIsafe electronics for all enclosure designs

Actuator variants

All operating mechanisms can be rotate around the axis in increments of 22.5°. The following actuator variants are available:

- Standard, rounded and roller plungers
- Roller and angular roller levers
- Spring rods
- Twist levers and rod actuators
- Fork levers with twist actuator

The actuator rollers are available with various materials and diameters.



Twist actuators for twist levers and rod actuators, with setting of switching to right, left or right/left (standard for all twist actuators except version for fork levers)

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Optional LED indicators

LED indicators available for all enclosure sizes



The enclosure versions can be supplied with an LED signaling indicator (1 × green + 1 × yellow). This is the first time that optical signaling equipment is also available for small standard enclosures according to EN 50047. The LED signaling indicators are available in all common voltages (24 V DC and 230 V AC).

Additional contacts

Exchangeable two and three-pole switching blocks for all enclosure sizes



The three-pole switching block (2 NC, 1 NO) in snap-action and slow-action is regularly available for all enclosure forms. It offers more switching through redundant shutdowns (2 NC contacts) with simultaneous signaling (1 NO contact). The same installation space is required as for a two-pole switching block.

Contact reliability

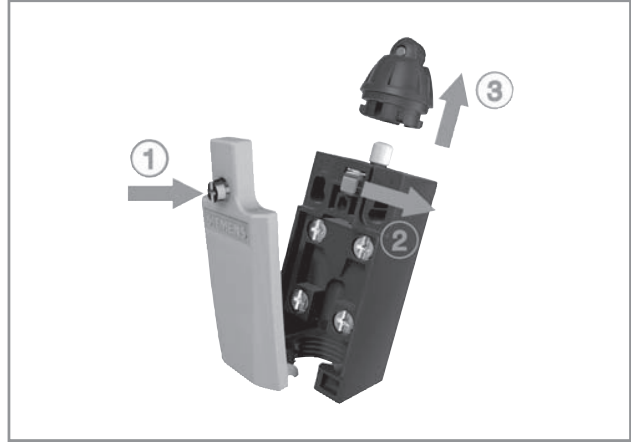
The new contact blocks ensure an extremely high contact stability. This applies even when the devices are switching low voltages and currents, e. g. 1 mA at 5 V DC.

Positive opening ➞

The NC contacts of the switch are forced open mechanically, positively-driven and reliably by the plunger. This is referred to as "positive opening".

Mounting

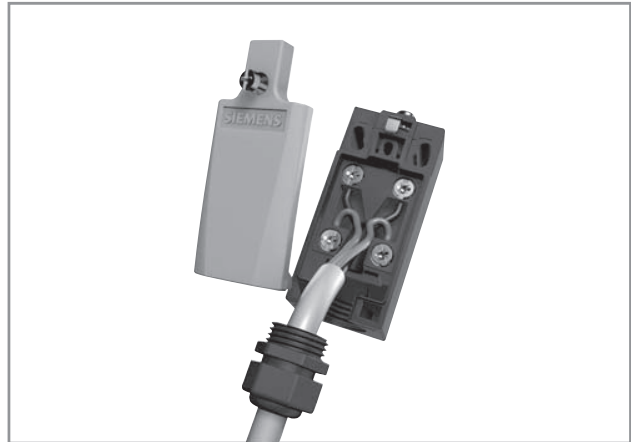
Easy plug-in method – for fast replacement of the actuator head



- (1) Open cover
- (2) Actuate locking lever
- (3) Replace the head (turnable by 16 x 22.5°)
- (4) Lock and close the cover

Fast connection method

For plastic enclosure with a width of 31 mm



These position switches can be wired quickly and easily as an added customer benefit. The connecting cable is first connected to the terminals of the contact block and then guided through a slit into the cable gland opening. The time saved through this new connection method is approx. 20 to 25 %.

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SIRIUS 3SE5 International Limit Switches

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Benefits

The 3SE5 position switches differ from the previous series through the following new characteristics:

- The modular design of the product range allows a number of versions with a smaller number of bearing types for enclosures and operating mechanisms.
- All actuators can be turned around the axis in increments of 22.5° (see picture on page 13/6).
- Rounded and roller plungers according to EN 50041 with 3 mm overtravel (total travel 9 mm) for greater tolerance when switching
- All enclosure sizes – now also including the small enclosure 31 mm wide – are optionally available with an LED signaling indicator (see picture on page 13/7).
- All enclosure versions have an integrated chlorinated rubber diaphragm (high functional safety in cold and aggressive environments).
- All contact blocks are replaceable (see page 13/49).
- The three-pole contact blocks are available for all enclosure sizes (see picture on page 13/7).
- Elements with 1 NO + 2 NC slow-action contacts with make-before-break and 2 NO + 1 NC
- The short-stroke contact block 1 NO + 1 NC improves the precision of the switching operation through a reduced actuation path.
- The contact block with 1 NO + 1 NC snap-action contacts with 2 x 2 mm contact opening is suitable for simultaneous disconnection and signaling, particularly in the elevator industry
- NEW: XL enclosures for accommodating two 2- or 3-pole contact blocks
- The plastic enclosure with a width of 31 mm has simple and fast wiring equipment which makes it possible to save from approx. 20 to 25 % of the time when connecting (see picture on page 13/7).
- The ASIsafe electric component is integrated for the versions with the AS-Interface connection (see on-line); an additional adapter is not required.

Application

With the standard position switches, mechanical positions of moved machine parts are converted into electrical signals. Through their modular and uniform design and large number of versions, the devices can meet practically all requirements in industry.

Devices are available with enclosure versions to suit the particular ambient conditions. Different control tasks can be performed with the best contact blocks suited for the particular purpose. And many different actuator versions are available to match the mechanical configuration of the moved machined parts. Dimensions, fixing points and characteristics are largely in accordance with the EN 50041 or EN 50047 standards.

The devices are suitable for use in any climate.

Standards

IEC 60947-5-1 or EN 60947-5-1.

The protective measure of "total insulation" by the molded-plastic enclosure is guaranteed by the use of molded-plastic screw-lands.

Safety position switches

For controls according to IEC 60204-1 or EN 60204-1 the devices can be used as a safety position switch. To secure position switches against changes in their position, keyed techniques must be employed on installation.

Safety circuits

IEC 60947-5-1 and EN 60947-5-1 require positive opening of the NC contacts, i.e. for the purposes of personal safety, the assured opening of NC contacts is expressly stipulated for the electrical equipment of machines in all safety circuits and marked according to the IEC standard 60947-5-1 with the symbol q .

Category 2 according to ISO 13849-1 (EN 954-1) can be attained with 3SE5 position switches with q , and category 3 or 4 when using an additional position switch, if the corresponding failsafe evaluation units are selected and correctly installed, e.g. the 3TK28 safety relays or matching devices from the ASIsafe, SIMATIC or SINUMERIK product ranges. The operating mechanisms (actuators) must also be connected to the enclosure by keyed techniques. The corresponding operating mechanisms are marked in the catalog with q .

Contacts for each application

- Snap-action contacts: NC and NO contacts switch simultaneously – regardless of the actuating speed ($v_{\min} = 0.01$ m/s) and contact erosion.
- Slow-action contacts: Difference in travel between "NC contact opens" and "NO contact closes"; the switching speed is the same as or proportional to the actuating speed ($v_{\min} = 0.4$ m/s).
- Slow-action contacts with make-before-break: e.g. suitable for adding a second function to a sequence control.

Operating mechanisms for each application

Standard, rounded and roller plungers

- Operation in direction of the plunger axis or in case of roller plunger with bar at right angles to the plunger axis
- The roller plunger is recommended for lateral actuation and relatively long overtravel.

Roller and angular roller levers

- For actuators made of finely ground steel in the form of cams, straight-edges (approach angle 30°) or cam disks

Spring rod

- Can be used for undefined actuations and changing starting conditions
- Starting from any direction is possible

Twist levers and rod actuators

- For a high starting speed ($v = 1.5$ m/s)
- Variety of starting options
- Insensitive to oil, grinding dust and coarse-grained material
- Adjustment of the lever in increments of 10°.
- Can be adjusted with left or right switching

Fork lever

- Switchable in two directions
- Latching actuator
- For reciprocating movements

Limit Switches

SIRIUS 3SE5 International Limit Switches

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Options

On the following pages you will find selection tables for complete units as well as components of the modular system.

- ☐ Complete units
- ☒ Modular system

The difference between units is indicated in the selection and ordering data by gray backgrounds.

Using the modular system you can assemble switch variants which are not available as complete units. Each complete unit can also be supplied as a module.

A basic switch for the modular system comprises an enclosure with a contact block and a cover. Among the basic switches the following versions, for example, can be selected:

- Basic enclosure with teflon plunger
- Version with increased corrosion protection
- Version with 2 LEDs

- Version with M12 connector socket or 6-pole + PE
- Version with M12 connector socket and with 2 LEDs

For the plastic enclosures with a width of 31 and 50 mm the basic switches are designed as complete units with rounded plunger (according to standard).

Online configurator

The online configurator helps you not only to select and order the right position switch but also to create complete product documentation.

- Product data sheets
- Dimensional drawings
- Operating travel diagrams
- CAD data in 2D and 3D model images
- Ordering data
- Product photos

www.siemens.com/sirius/configurators

Complete units

Ordering example

Required:

- Position switch according to EN 50047 in a plastic enclosure
- Contact block with slow-action contacts 1 NO + 1 NC
- Angular roller lever, metal lever and plastic roller

To be ordered:

Version	Complete units ☐
Order No.	
Complete units • Enclosure width 31 mm	
 Angular roller levers With metal lever and plastic roller 13 mm Slow-action contacts 1 NO + 1 NC	3SE5 232-0BF10

Modular system

Ordering example 1

Required:

- Position switch according to EN 50047 in a plastic enclosure
- Contact block with slow-action contacts 1 NO + 1 NC
- Angular roller lever, metal lever and plastic roller

To be ordered separately:

Version	Modular system ☒
Order No.	
Basic switches • Enclosure width 31 mm	
 With teflon plunger Slow-action contacts 1 NO + 1 NC	3SE5 232-0BC05
+	
Operating mechanisms	
 Angular roller levers Metal lever, plastic roller	3SE5 000-0AF10

Ordering example 2

Required:

- Position switch according to EN 50047 in a plastic enclosure
- Contact block with slow-action contacts 1 NO + 1 NC
- Twist lever, high-grade steel lever and plastic roller

To be ordered separately:

Version	Modular system ☒
Order No.	
Basic switches • Enclosure width 31 mm	
 With teflon plunger Slow-action contacts 1 NO + 1 NC	3SE5 232-0BC05
+	
Twist actuators	
 Twist actuators	3SE5 000-0AK00
 Twist levers High-grade steel lever, plastic roller	3SE5 000-0AA31

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 31 mm acc. to EN 50047

Selection and ordering data

Complete units

2 or 3 contacts · Degree of protection IP65 · Cable entry M20 × 1.5¹⁾

Version	Contacts	LEDs	DT	Complete units		PU (UNIT, SET, M)	PS*
				Configurator			
				Order No.	Price per PU		

Complete units²⁾ · Enclosure width 31 mm



Rounded
plungers

Rounded plungers, type B, acc. to EN 50047

With teflon plunger

Slow-action contacts	1 NO + 1 NC	—	⌚ A	3SE5 232-0BC05	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⌚ B	3SE5 232-0CC05	1	1 unit
Snap-action contacts, integrated ³⁾	1 NO + 1 NC	—	⌚ A	3SE5 232-0HC05	1	1 unit
Snap-action contacts • Short stroke, integrated ³⁾	1 NO + 1 NC	—	⌚ B	3SE5 232-0FC05	1	1 unit
Snap-action contacts • 2 × 2 mm contact gap	1 NO + 1 NC	—	⌚ B	3SE5 232-0GC05	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⌚ A	3SE5 232-0KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⌚ A	3SE5 232-0LC05	1	1 unit
Slow-action contacts with make- before-break	1 NO + 2 NC	—	⌚ ▶	3SE5 232-0MC05	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	⌚ A	3SE5 232-0PC05	1	1 unit



With increased
corrosion
protection

With increased corrosion protection

Slow-action contacts	1 NO + 1 NC	—	⌚ B	3SE5 232-0BC05-1CA0	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⌚ B	3SE5 232-0CC05-1CA0	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⌚ B	3SE5 232-0KC05-1CA0	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⌚ B	3SE5 232-0LC05-1CA0	1	1 unit
Slow-action contacts with make- before-break	1 NO + 2 NC	—	⌚ B	3SE5 232-0MC05-1CA0	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	⌚ B	3SE5 232-0PC05-1CA0	1	1 unit

With M12 connector socket, 4-pole (250 V, 4 A)

Slow-action contacts	1 NO + 1 NC	—	⌚ B	3SE5 234-0BC05-1AC4	1	1 unit
Snap-action contacts, integrated ³⁾	1 NO + 1 NC	—	⌚ A	3SE5 234-0HC05-1AC4	1	1 unit
Slow-action contacts	2 NC	—	⌚ B	3SE5 234-0KC05-1AE0	1	1 unit
Snap-action contacts	2 NC	—	⌚ A	3SE5 234-0LC05-1AE0	1	1 unit



With 2 LEDs

With 2 LEDs, yellow/green

Slow-action contacts	1 NO + 2 NC	24 V DC	⌚ B	3SE5 232-1KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	24 V DC	⌚ B	3SE5 232-1LC05	1	1 unit
Slow-action contacts	1 NO + 2 NC	230 V AC	⌚ B	3SE5 232-3KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	230 V AC	⌚ B	3SE5 232-3LC05	1	1 unit

With M12 connector socket, 5-pole (125 V, 4 A) and 2 LEDs

Slow-action contacts	1 NO + 1 NC	24 V DC	⌚ B	3SE5 234-1BC05-1AF3	1	1 unit
Snap-action contacts	1 NO + 1 NC	24 V DC	⌚ B	3SE5 234-1CC05-1AF3	1	1 unit

For online configurator see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ A cable gland with seal must be used with the quick-connect method.

²⁾ Popular versions.

³⁾ Subsequent replacement of contact blocks is not possible.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 31 mm acc. to EN 50047

2 or 3 contacts · Degree of protection IP65 · Cable entry M20 × 1.5¹⁾

Version	Contacts	LEDs	DT	Complete units		PU (UNIT, SET, M)	PS*
				Configurator			
				Order No.	Price per PU		

Complete units²⁾ · Enclosure width 31 mm



Roller plunger

Roller plungers, type C acc. to EN 50047

With plastic roller 10 mm

Slow-action contacts	1 NO + 1 NC —	⊙ B	3SE5 232-0BD03	1	1 unit
Snap-action contacts • Integrated ³⁾	1 NO + 1 NC —	⊙ A	3SE5 232-0HD03	1	1 unit
Snap-action contacts • Short stroke, integrated ³⁾	1 NO + 1 NC —	⊙ B	3SE5 232-0FD03	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊙ B	3SE5 232-0KD03	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊙ ▶	3SE5 232-0LD03	1	1 unit

Actuator head rotated by 90°

Snap-action contacts	1 NO + 2 NC —	⊙ B	3SE5 232-0LD03-1AH0	1	1 unit
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With M12 connector socket, 4-pole (250 V, 4 A)

Snap-action contacts, integrated ³⁾	1 NO + 1 NC —	⊙ B	3SE5 234-0HD03-1AC4	1	1 unit
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Roller plungers with central fixing

Snap-action contacts, integrated ³⁾	1 NO + 1 NC —	⊙ B	3SE5 232-0HD10	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊙ B	3SE5 232-0KD10	1	1 unit



Roller plunger
with central fixing

Roller levers, type E acc. to EN 50047

With metal lever and plastic roller 13 mm

Slow-action contacts	1 NO + 1 NC —	⊙ ▶	3SE5 232-0BE10	1	1 unit
Snap-action contacts, integrated ³⁾	1 NO + 1 NC —	⊙ A	3SE5 232-0HE10	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊙ B	3SE5 232-0KE10	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊙ B	3SE5 232-0LE10	1	1 unit

With M12 connector socket, 4-pole (250 V, 4 A)

Snap-action contacts, integrated ³⁾	1 NO + 1 NC —	⊙ B	3SE5 234-0HE10-1AC4	1	1 unit
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Angular roller levers

With metal lever and plastic roller 13 mm

Slow-action contacts	1 NO + 1 NC —	⊙ ▶	3SE5 232-0BF10	1	1 unit
Snap-action contacts, integrated ³⁾	1 NO + 1 NC —	⊙ ▶	3SE5 232-0HF10	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊙ B	3SE5 232-0KF10	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊙ B	3SE5 232-0LF10	1	1 unit



Angular roller
lever

⚙ For online configurator see www.siemens.com/sirius/configurators.

⊙ Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ A cable gland with seal must be used with the quick-connect method.

²⁾ Popular versions.

³⁾ Subsequent replacement of contact blocks is not possible.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 31 mm acc. to EN 50047

2 or 3 contacts · Degree of protection IP65 · Cable entry M20 × 1.5¹⁾

Version	Contacts	LEDs	DT	Complete units	Configurator	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
Complete units²⁾ · Enclosure width 31 mm									
Spring rods									
Length 142.5 mm, with plastic plunger 50 mm									
Snap-action contacts, integrated ³⁾ 1 NO + 1 NC —									
With M12 connector socket, 4-pole (250 V, 4 A)									
Snap-action contacts, integrated ³⁾ 1 NO + 1 NC —									
Twist levers, type A acc. to EN 50047									
With metal lever 21 mm and plastic roller 19 mm									
Slow-action contacts 1 NO + 1 NC —									
Snap-action contacts, integrated ³⁾ 1 NO + 1 NC —									
Slow-action contacts 1 NO + 2 NC —									
Snap-action contacts 1 NO + 2 NC —									
With M12 connector socket, 4-pole (250 V, 4 A)									
Snap-action contacts, integrated ³⁾ 1 NO + 1 NC —									
With metal lever 35 mm and plastic roller 19 mm									
Snap-action contacts, integrated ³⁾ 1 NO + 1 NC —									
Twist levers, adjustable length									
With metal lever with grid hole and plastic roller 19 mm									
Snap-action contacts, integrated ³⁾ 1 NO + 1 NC —									
With metal lever and plastic roller 19 mm									
Slow-action contacts 1 NO + 1 NC —									
Snap-action contacts, integrated ³⁾ 1 NO + 1 NC —									
Snap-action contacts 1 NO + 2 NC —									
With M12 connector socket, 4-pole (250 V, 4 A)									
Snap-action contacts, integrated ³⁾ 1 NO + 1 NC —									
Rod actuators									
With aluminum rod, length 200 mm									
Snap-action contacts, integrated ³⁾ 1 NO + 1 NC —									
With plastic rod, length 200 mm									
Snap-action contacts, integrated ³⁾ 1 NO + 1 NC —									
With M12 connector socket, 4-pole (250 V, 4 A)									
Snap-action contacts, integrated ³⁾ 1 NO + 1 NC —									



Spring rod



Twist lever



Twist lever, adjustable length



Rod actuator

For online configurator see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ A cable gland with seal must be used with the quick-connect method.

²⁾ Popular versions.

³⁾ Subsequent replacement of contact blocks is not possible.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 13/13.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 31 mm acc. to EN 50047

Modular system

2 or 3 contacts · Degree of protection IP65 · Cable entry M20 × 1.5¹⁾

Version	Contacts	LEDs	DT	Modular system	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	
Basic switches · Enclosure width 31 mm (with rounded plunger²⁾)						
 Basic switch	With teflon plunger					
	Slow-action contacts	1 NO + 1 NC	—	⊕ A	3SE5 232-0BC05	1 1 unit
	Snap-action contacts	1 NO + 1 NC	—	⊕ ▶	3SE5 232-0CC05	1 1 unit
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC	—	⊕ ▶	3SE5 232-0HC05	1 1 unit
	Snap-action contacts • Short stroke, integrated ³⁾	1 NO + 1 NC	—	⊕ B	3SE5 232-0FC05	1 1 unit
	Snap-action contacts • 2 × 2 mm contact gap	1 NO + 1 NC	—	⊕ B	3SE5 232-0GC05	1 1 unit
	Slow-action contacts	1 NO + 2 NC	—	⊕ A	3SE5 232-0KC05	1 1 unit
	Snap-action contacts	1 NO + 2 NC	—	⊕ ▶	3SE5 232-0LC05	1 1 unit
	Slow-action contacts with make-before-break	1 NO + 2 NC	—	⊕ A	3SE5 232-0MC05	1 1 unit
	Slow-action contacts	2 NO + 1 NC	—	⊕ A	3SE5 232-0PC05	1 1 unit
 With increased corrosion protection	With increased corrosion protection⁴⁾					
	Slow-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 232-0BC05-1CA0	1 1 unit
	Snap-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 232-0CC05-1CA0	1 1 unit
	Slow-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 232-0KC05-1CA0	1 1 unit
	Snap-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 232-0LC05-1CA0	1 1 unit
	Slow-action contacts with make-before-break	1 NO + 2 NC	—	⊕ B	3SE5 232-0MC05-1CA0	1 1 unit
	Slow-action contacts	2 NO + 1 NC	—	⊕ B	3SE5 232-0PC05-1CA0	1 1 unit
 With M12 socket	With M12 connector socket, 4-pole (250 V, 4 A)					
	Slow-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 234-0BC05-1AC4	1 1 unit
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC	—	⊕ A	3SE5 234-0HC05-1AC4	1 1 unit
	Slow-action contacts	2 NC	—	⊕ B	3SE5 234-0KC05-1AE0	1 1 unit
	Snap-action contacts	2 NC	—	⊕ A	3SE5 234-0LC05-1AE0	1 1 unit
 With 2 LEDs	With 2 LEDs, yellow/green					
	Slow-action contacts	1 NO + 2 NC	24 V DC	⊕ B	3SE5 232-1KC05	1 1 unit
	Snap-action contacts	1 NO + 2 NC	24 V DC	⊕ B	3SE5 232-1LC05	1 1 unit
	Slow-action contacts	1 NO + 2 NC	230 V AC	⊕ B	3SE5 232-3KC05	1 1 unit
 With M12 socket and 2 LEDs	With M12 connector socket, 5-pole (125 V, 4 A) and 2 LEDs					
	Slow-action contacts	1 NO + 1 NC	24 V DC	⊕ B	3SE5 234-1BC05-1AF3	1 1 unit
	Snap-action contacts	1 NO + 1 NC	24 V DC	⊕ B	3SE5 234-1CC05-1AF3	1 1 unit

⚙ For online configurator see www.siemens.com/sirius/configurators.

⊕ Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator, necessary in safety circuits.

¹⁾ A cable gland with seal must be used with the quick-connect method.

²⁾ For enclosures with widths of 31mm, the basic switch is a complete unit with rounded plungers.

³⁾ Subsequent replacement of contact blocks is not possible.

⁴⁾ Use corresponding high-grade steel lever.

Note:

Selection aid see page 13/9.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 31 mm acc. to EN 50047

Version	Diameter	DT	Modular system		PU (UNIT, SET, M)	PS*
mm			Order No.	Price per PU		
Operating mechanisms						
 Roller plunger	Roller plungers, type C acc. to EN 50047					
	Plastic rollers	10	 ➤	3SE5 000-0AD03	1	1 unit
	High-grade steel rollers	10	 B	3SE5 000-0AD04	1	1 unit
 With central fixing	Roller plungers with central fixing					
	Plastic rollers	10	 B	3SE5 000-0AD10	1	1 unit
	High-grade steel rollers	10	 B	3SE5 000-0AD11	1	1 unit
 Roller lever	Roller levers, type E acc. to EN 50047					
	Metal lever, plastic roller	13	 ➤	3SE5 000-0AE10	1	1 unit
	Metal lever, high-grade steel roller	13	 ➤	3SE5 000-0AE11	1	1 unit
	High-grade steel lever, plastic roller	13	 B	3SE5 000-0AE12	1	1 unit
	High-grade steel lever, high-grade steel roller	13	 B	3SE5 000-0AE13	1	1 unit
 Angular roller lever	Angular roller levers					
	Metal lever, plastic roller	13	 ➤	3SE5 000-0AF10	1	1 unit
	Metal lever, high-grade steel roller	13	 B	3SE5 000-0AF11	1	1 unit
	High-grade steel lever, plastic roller	13	 A	3SE5 000-0AF12	1	1 unit
	High-grade steel lever, high-grade steel roller	13	 B	3SE5 000-0AF13	1	1 unit
 Spring rod	Spring rods (for switches with snap-action contacts only)					
	Plastic plunger and high-grade steel spring:	7				
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		➤	3SE5 000-0AR01	1	1 unit
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)		➤	3SE5 000-0AR03	1	1 unit
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)		B	3SE5 000-0AR04	1	1 unit
	High-grade steel plunger and spring:	7				
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		B	3SE5 000-0AR02	1	1 unit
Twist actuators						
 Twist actuator	Twist actuators, plastic (without lever)					
	Switching right and/or left, adjustable		 ➤	3SE5 000-0AK00	1	1 unit
 Twist lever	Levers for twist actuators					
	Twist levers 21 mm, straight, type A acc. to EN 50047					
	Metal lever, plastic roller	19	 ➤	3SE5 000-0AA21	1	1 unit
	Metal lever, high-grade steel roller	19	 B	3SE5 000-0AA22	1	1 unit
	Metal lever, roller with ball bearing	19	 B	3SE5 000-0AA23	1	1 unit
	Metal lever, plastic roller	30	 B	3SE5 000-0AA25	1	1 unit
	High-grade steel lever, plastic roller	19	 B	3SE5 000-0AA31	1	1 unit
	High-grade steel lever, high-grade steel roller	19	 B	3SE5 000-0AA32	1	1 unit
 Twist levers 30 mm, straight ¹⁾	Twist levers 30 mm, straight¹⁾					
	Metal lever, plastic roller	19	 B	3SE5 000-0AA24	1	1 unit
 Twist levers, adjustable length, with grid hole	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	 ➤	3SE5 000-0AA60	1	1 unit
	Metal lever, high-grade steel roller	19	 ➤	3SE5 000-0AA61	1	1 unit
	Metal lever, plastic roller	50	 B	3SE5 000-0AA67	1	1 unit
	Metal lever, rubber roller	50	 B	3SE5 000-0AA68	1	1 unit
	High-grade steel lever, plastic roller	19	 B	3SE5 000-0AA62	1	1 unit
	High-grade steel lever, high-grade steel roller	19	 B	3SE5 000-0AA63	1	1 unit
	 Rod actuator	Twist levers, adjustable length				
Metal lever, plastic roller		19	A	3SE5 000-0AA50	1	1 unit
Metal lever, high-grade steel roller		19	B	3SE5 000-0AA51	1	1 unit
Metal lever, plastic roller		30	B	3SE5 000-0AA55	1	1 unit
Metal lever, plastic roller		50	B	3SE5 000-0AA57	1	1 unit
Metal lever, rubber roller		50	B	3SE5 000-0AA58	1	1 unit
High-grade steel lever, plastic roller		19	B	3SE5 000-0AA52	1	1 unit
High-grade steel lever, high-grade steel roller		19	B	3SE5 000-0AA53	1	1 unit
Rod actuators						
Aluminum rod, length 200 mm		6	➤	3SE5 000-0AA80	1	1 unit
Spring rod, length 200 mm	6	B	3SE5 000-0AA81	1	1 unit	
Plastic rod, length 200 mm	6	➤	3SE5 000-0AA82	1	1 unit	

➔ Positively driven actuator, necessary in safety circuits.

¹⁾ Can be clinch mounted (turned through 180°, rear of lever).

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 40 mm acc. to EN 50041

Selection and ordering data

Complete units

2 or 3 contacts · Degree of protection IP66/67 · Cable entry M20 x 1.5

Version	Contacts	LEDs	DT	Complete units	Configurator	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
Complete units¹⁾ · Enclosure width 40 mm									
Plain plungers									
 Plain plunger	With high-grade steel plunger								
	Slow-action contacts	1 NO + 1 NC —	⊕ B	3SE5 132-0BB01				1	1 unit
	Snap-action contacts	1 NO + 1 NC —	⊕ B	3SE5 132-0CB01				1	1 unit
	Slow-action contacts	1 NO + 2 NC —	⊕ B	3SE5 132-0KB01				1	1 unit
	Snap-action contacts	1 NO + 2 NC —	⊕ B	3SE5 132-0LB01				1	1 unit
	Slow-action contacts	2 NO + 1 NC —	⊕ B	3SE5 132-0PB01				1	1 unit
Rounded plungers, type B acc. to EN 50041									
 Rounded plunger	With plastic plunger								
	Slow-action contacts	1 NO + 1 NC —	⊕ A	3SE5 132-0BC03				1	1 unit
	Snap-action contacts	1 NO + 1 NC —	⊕ A	3SE5 132-0CC03				1	1 unit
	Slow-action contacts	1 NO + 2 NC —	⊕ B	3SE5 132-0KC03				1	1 unit
	Snap-action contacts	1 NO + 2 NC —	⊕ B	3SE5 132-0LC03				1	1 unit
	Slow-action contacts	2 NO + 1 NC —	⊕ B	3SE5 132-0PC03				1	1 unit
Roller plungers, type C acc. to EN 50041									
 Roller plunger	With plastic roller 13 mm								
	Slow-action contacts	1 NO + 1 NC —	⊕ B	3SE5 132-0BD05				1	1 unit
	Snap-action contacts	1 NO + 1 NC —	⊕ A	3SE5 132-0CD05				1	1 unit
	Slow-action contacts	1 NO + 2 NC —	⊕ B	3SE5 132-0KD05				1	1 unit
	Snap-action contacts	1 NO + 2 NC —	⊕ B	3SE5 132-0LD05				1	1 unit
	Slow-action contacts	2 NO + 1 NC —	⊕ B	3SE5 132-0PD05				1	1 unit
Roller levers									
 Roller lever	With metal lever and plastic roller 22 mm								
	Slow-action contacts	1 NO + 1 NC —	⊕ B	3SE5 132-0BE05				1	1 unit
	Snap-action contacts	1 NO + 1 NC —	⊕ A	3SE5 132-0CE05				1	1 unit
	Slow-action contacts	1 NO + 2 NC —	⊕ B	3SE5 132-0KE05				1	1 unit
	Snap-action contacts	1 NO + 2 NC —	⊕ B	3SE5 132-0LE05				1	1 unit
	Slow-action contacts	2 NO + 1 NC —	⊕ B	3SE5 132-0PE05				1	1 unit
Angular roller levers									
 Angular roller lever	With metal lever and plastic roller 22 mm								
	Slow-action contacts	1 NO + 1 NC —	⊕ B	3SE5 132-0BF05				1	1 unit
	Snap-action contacts	1 NO + 1 NC —	⊕ B	3SE5 132-0CF05				1	1 unit
	Snap-action contacts	1 NO + 2 NC —	⊕ B	3SE5 132-0LF05				1	1 unit
Spring rods									
 Spring rod	Length 142.5 mm, with plastic plunger 50 mm								
	Snap-action contacts	1 NO + 1 NC —	B	3SE5 132-0CR01				1	1 unit
	Snap-action contacts	1 NO + 2 NC —	B	3SE5 132-0LR01				1	1 unit

⚙ For online configurator see www.siemens.com/sirius/configurators.

⊕ Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ Popular versions.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 40 mm acc. to EN 50041

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Complete units	Configurator	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
Complete units¹⁾ · Enclosure width 40 mm									
	Twist levers, type A acc. to EN 50041								
	With metal lever 27 mm and plastic roller 19 mm								
	Slow-action contacts	1 NO + 1 NC —	⤵ A	3SE5 132-0BJ01				1	1 unit
	Snap-action contacts	1 NO + 1 NC —	⤵ ▶	3SE5 132-0CJ01				1	1 unit
	Slow-action contacts	1 NO + 2 NC —	⤵ B	3SE5 132-0KJ01				1	1 unit
	Snap-action contacts	1 NO + 2 NC —	⤵ B	3SE5 132-0LJ01				1	1 unit
	Slow-action contacts	2 NO + 1 NC —	⤵ B	3SE5 132-0PJ01				1	1 unit
	Twist levers, adjustable length								
	With metal lever with grid hole and plastic roller 19 mm								
	Snap-action contacts	1 NO + 1 NC —	⤵ B	3SE5 132-0CJ60				1	1 unit
	With metal lever and plastic roller 19 mm								
	Snap-action contacts	1 NO + 1 NC —	A	3SE5 132-0CJ50				1	1 unit
	Snap-action contacts	1 NO + 2 NC —	B	3SE5 132-0LJ50				1	1 unit
	Rod actuators, type D, acc. to EN 50041								
	With aluminum rod, length 200 mm								
	Snap-action contacts	1 NO + 1 NC —	B	3SE5 132-0CJ80				1	1 unit
	With plastic rod, length 200 mm								
	Snap-action contacts	1 NO + 1 NC —	A	3SE5 132-0CJ82				1	1 unit

For online configurator see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ Popular versions.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 13/17.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 40 mm acc. to EN 50041

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Modular system

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Modular system		PU (UNIT, SET, M)	PS*
				Configurator			
				Order No.	Price per PU		

Basic switches · Enclosure width 40 mm



Basic switch

With M20 × 1.5 connecting thread

Slow-action contacts	1 NO + 1 NC	—	⌚ B	3SE5 132-0BA00	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⌚ A	3SE5 132-0CA00	1	1 unit
• Gold-plated contacts			⌚ B	3SE5 132-0CA00-1AC1	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⌚ B	3SE5 132-0KA00	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⌚ B	3SE5 132-0LA00	1	1 unit
Slow-action contacts with make-before-break	1 NO + 2 NC	—	⌚ B	3SE5 132-0MA00	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	⌚ B	3SE5 132-0PA00	1	1 unit



With increased corrosion protection

With increased corrosion protection¹⁾

Slow-action contacts	1 NO + 1 NC	—	⌚ B	3SE5 132-0BA00-1CA0	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⌚ B	3SE5 132-0CA00-1CA0	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⌚ B	3SE5 132-0KA00-1CA0	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⌚ B	3SE5 132-0LA00-1CA0	1	1 unit
Slow-action contacts with make-before-break	1 NO + 2 NC	—	⌚ B	3SE5 132-0MA00-1CA0	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	⌚ B	3SE5 132-0PA00-1CA0	1	1 unit



With M12 socket

With M12 connector socket, 4-pole (250 V, 4 A)

Slow-action contacts	1 NO + 1 NC	—	⌚ B	3SE5 134-0BA00-1AC4	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⌚ B	3SE5 134-0CA00-1AC4	1	1 unit
Slow-action contacts	2 NC	—	⌚ B	3SE5 134-0KA00-1AE0	1	1 unit
Snap-action contacts	2 NC	—	⌚ B	3SE5 134-0LA00-1AE0	1	1 unit



With 2 LEDs

With 2 LEDs, yellow/green

Slow-action contacts	1 NO + 2 NC	24 V DC	⌚ C	3SE5 132-1KA00	1	1 unit
Snap-action contacts	1 NO + 2 NC	24 V DC	⌚ C	3SE5 132-1LA00	1	1 unit
Slow-action contacts	1 NO + 2 NC	230 V AC	⌚ C	3SE5 132-3KA00	1	1 unit
Snap-action contacts	1 NO + 2 NC	230 V AC	⌚ C	3SE5 132-3LA00	1	1 unit

 For online configurator see www.siemens.com/sirius/configurators.

 Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator, necessary in safety circuits.

¹⁾ Use corresponding high-grade steel lever.

Note:

Selection aid see page 13/9.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 40 mm acc. to EN 50041

Version	Diameter	DT	Modular system		PU (UNIT, SET, M)	PS*
mm			Order No.	Price per PU		
Operating mechanisms						
 Plain plunger	Plain plungers High-grade steel plungers	10	⊕ A	3SE5 000-0AB01	1	1 unit
 Plunger	Rounded plungers, type B acc. to EN 50041 Plastic plungers	10	⊕ B	3SE5 000-0AC03	1	1 unit
	Roller plungers, type C acc. to EN 50041 Plastic plunger, plastic roller	13	⊕ B	3SE5 000-0AD05	1	1 unit
	Plastic plunger, high-grade steel roller	13	⊕ B	3SE5 000-0AD06	1	1 unit
 Roller lever	Roller levers Metal lever with plastic roller, plastic base	22	⊕ B	3SE5 000-0AE05	1	1 unit
 Angular roller lever	Angular roller levers Metal lever with plastic roller, plastic base	22	⊕ B	3SE5 000-0AF05	1	1 unit
 Spring rod	Spring rods (for switches with snap-action contacts only) Plastic plunger and high-grade steel spring: • Length 142.5 mm (spring 50 mm, plunger 50 mm) • Length 76 mm (spring 23.5 mm, plunger 10 mm) • Length 242.5 mm (spring 150 mm, plunger 50 mm) High-grade steel plunger and spring: • Length 142.5 mm (spring 50 mm, plunger 50 mm)	7 7 7 7 7	 B B B B B	 3SE5 000-0AR01 3SE5 000-0AR03 3SE5 000-0AR04 3SE5 000-0AR02	 1 1 1 1 1	 1 unit 1 unit 1 unit 1 unit 1 unit
Twist actuators						
 Twist actuator	Twist actuators , plastic (without lever) • For twist levers and rod actuators, switching right and/or left, adjustable		⊕ B	3SE5 000-0AJ00	1	1 unit
 Twist lever	Levers for twist actuators Twist levers, offset, type A acc. to EN 50041 Metal lever 27 mm, plastic roller Metal lever 27 mm, high-grade steel roller Metal lever 27 mm, roller with ball bearing Metal lever 27 mm, 2 plastic rollers Metal lever 27 mm, plastic roller Metal lever 27 mm, rubber roller High-grade steel lever 27 mm, plastic roller High-grade steel lever 27 mm, high-grade steel roller Metal lever 35 mm, plastic roller	19 19 19 19 30 50 19 19 19	 ⊕ ▶ ⊕ ▶ ⊕ B ⊕ ▶ ⊕ B ⊕ ▶ ⊕ B ⊕ ▶ ⊕ B	 3SE5 000-0AA01 3SE5 000-0AA02 3SE5 000-0AA03 3SE5 000-0AA04 3SE5 000-0AA05 3SE5 000-0AA08 3SE5 000-0AA11 3SE5 000-0AA12 3SE5 000-0AA15	 1 1 1 1 1 1 1 1 1	 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit
 Twist lever, adjustable length	Twist levers 30 mm, straight¹⁾ Metal lever, plastic roller Metal lever, plastic roller	19 30	 ⊕ B ⊕ B	 3SE5 000-0AA24 3SE5 000-0AA26	 1 1	 1 unit 1 unit
 Rod actuator	Twist levers, adjustable length, with grid hole Metal lever, plastic roller Metal lever, high-grade steel roller Metal lever, rubber roller High-grade steel lever, plastic roller High-grade steel lever, high-grade steel roller	19 19 50 19 19	 ⊕ B ⊕ B ⊕ B ⊕ B ⊕ B	 3SE5 000-0AA60 3SE5 000-0AA61 3SE5 000-0AA68 3SE5 000-0AA62 3SE5 000-0AA63	 1 1 1 1 1	 1 unit 1 unit 1 unit 1 unit 1 unit
	Twist levers, adjustable length Metal lever, plastic roller Metal lever, high-grade steel roller Metal lever, plastic roller Metal lever, rubber roller High-grade steel lever, plastic roller High-grade steel lever, high-grade steel roller	19 19 30 50 19 19	 A B B B B B	 3SE5 000-0AA50 3SE5 000-0AA51 3SE5 000-0AA55 3SE5 000-0AA58 3SE5 000-0AA52 3SE5 000-0AA53	 1 1 1 1 1 1	 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit
	Rod actuators, type D acc. to EN 50041 Aluminum rod, length 200 mm Spring rod, length 200 mm Plastic rod, length 200 mm	6 6 6	 B B B	 3SE5 000-0AA80 3SE5 000-0AA81 3SE5 000-0AA82	 1 1 1	 1 unit 1 unit 1 unit

⊕ Positively driven actuator, necessary in safety circuits.

¹⁾ Can be clinch mounted (turned through 180°, rear of lever).

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 50 mm

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Selection and ordering data

Complete units

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry 2 × (M20 × 1.5)

Version	Contacts	LEDs	DT	Complete units	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	

Complete units¹⁾ · Enclosure width 50 mm

 Rounded plunger	Rounded plungers					
	With teflon plunger					
	Slow-action contacts	1 NO + 1 NC	—	➞ ➞	3SE5 242-0BC05	1 1 unit
	Snap-action contacts	1 NO + 1 NC	—	➞ B	3SE5 242-0CC05	1 1 unit
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC	—	➞ ➞	3SE5 242-0HC05	1 1 unit
	Snap-action contacts • Short stroke, integrated ²⁾	1 NO + 1 NC	—	➞ B	3SE5 242-0FC05	1 1 unit
	Snap-action contacts • 2 × 2 mm contact gap	1 NO + 1 NC	—	➞ B	3SE5 242-0GC05	1 1 unit
	Slow-action contacts	1 NO + 2 NC	—	➞ B	3SE5 242-0KC05	1 1 unit
	Snap-action contacts	1 NO + 2 NC	—	➞ B	3SE5 242-0LC05	1 1 unit
	Slow-action contacts with make-before-break	1 NO + 2 NC	—	➞ A	3SE5 242-0MC05	1 1 unit
 With increased corrosion protection	Slow-action contacts	2 NO + 1 NC	—	➞ A	3SE5 242-0PC05	1 1 unit
	With increased corrosion protection					
	Slow-action contacts	1 NO + 1 NC	—	➞ B	3SE5 242-0BC05-1CA0	1 1 unit
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC	—	➞ B	3SE5 242-0HC05-1CA0	1 1 unit
	Slow-action contacts	1 NO + 2 NC	—	➞ B	3SE5 242-0KC05-1CA0	1 1 unit
	Snap-action contacts	1 NO + 2 NC	—	➞ B	3SE5 242-0LC05-1CA0	1 1 unit
 With 2 LEDs	Slow-action contacts with make-before-break	1 NO + 2 NC	—	➞ B	3SE5 242-0MC05-1CA0	1 1 unit
	Slow-action contacts	2 NO + 1 NC	—	➞ B	3SE5 242-0PC05-1CA0	1 1 unit
	With 2 LEDs, yellow/green					
	Slow-action contacts	1 NO + 2 NC	24 V DC	➞ B	3SE5 242-1KC05	1 1 unit
 Roller plunger	Snap-action contacts	1 NO + 2 NC	24 V DC	➞ B	3SE5 242-1LC05	1 1 unit
	Slow-action contacts	1 NO + 2 NC	230 V AC	➞ B	3SE5 242-3KC05	1 1 unit
	Snap-action contacts	1 NO + 2 NC	230 V AC	➞ B	3SE5 242-3LC05	1 1 unit
	Roller plungers					
	With plastic roller 10 mm					
	Slow-action contacts	1 NO + 1 NC	—	➞ ➞	3SE5 242-0BD03	1 1 unit
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC	—	➞ ➞	3SE5 242-0HD03	1 1 unit
	Snap-action contacts	1 NO + 2 NC	—	➞ ➞	3SE5 242-0LD03	1 1 unit

➞ For online configurator see www.siemens.com/sirius/configurators.

➞ Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ Popular versions.

²⁾ Subsequent replacement of contact blocks is not possible.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 50 mm

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry 2 × (M20 × 1.5)

Version	Contacts	LEDs	DT	Complete units	☐	PU (UNIT, SET, M)	PS*
				Configurator			
				Order No.	Price per PU		

Complete units¹⁾ · Enclosure width 50 mm



Roller lever

Roller levers

With metal lever and plastic roller 13 mm

Slow-action contacts	1 NO + 1 NC	—	⤵ B	3SE5 242-0BE10	1	1 unit
Snap-action contacts, integrated ²⁾	1 NO + 1 NC	—	⤵ ▶	3SE5 242-0HE10	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⤵ B	3SE5 242-0LE10	1	1 unit

With M12 connector socket, 4-pole right (250 V, 4 A)

Snap-action contacts	2 NC	—	⤵ B	3SE5 244-0LE10-1AE0	1	1 unit
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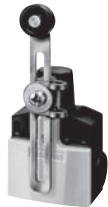


Twist lever

Twist levers

With metal lever 21 mm and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC	—	⤵ B	3SE5 242-0BK21	1	1 unit
Snap-action contacts, integrated ²⁾	1 NO + 1 NC	—	⤵ ▶	3SE5 242-0HK21	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⤵ B	3SE5 242-0LK21	1	1 unit



Twist lever, adjustable length

Twist levers, adjustable length

With metal lever and plastic roller 19 mm

Snap-action contacts, integrated ²⁾	1 NO + 1 NC	—	B	3SE5 242-0HK50	1	1 unit
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For online configurator see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Appendix K.

1) Popular versions.

2) Subsequent replacement of contact blocks is not possible.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 13/21.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 50 mm

Modular system

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry 2 × (M20 × 1.5)

Version	Contacts	LEDs	DT	Modular system	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	

Basic switches · Enclosure width 50 mm (with rounded plunger¹⁾)



Basic switches

With teflon plunger

Slow-action contacts	1 NO + 1 NC	—	⊙ ➤	3SE5 242-0BC05	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊙ B	3SE5 242-0CC05	1	1 unit
Snap-action contacts, integrated ²⁾	1 NO + 1 NC	—	⊙ ➤	3SE5 242-0HC05	1	1 unit
Snap-action contacts • Short stroke, integrated ²⁾	1 NO + 1 NC	—	⊙ B	3SE5 242-0FC05	1	1 unit
Snap-action contacts • 2 × 2 mm contact gap	1 NO + 1 NC	—	⊙ B	3SE5 242-0GC05	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊙ B	3SE5 242-0KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊙ B	3SE5 242-0LC05	1	1 unit
Slow-action contacts with make-before-break	1 NO + 2 NC	—	⊙ A	3SE5 242-0MC05	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	⊙ A	3SE5 242-0PC05	1	1 unit



With increased corrosion protection

With increased corrosion protection³⁾

Slow-action contacts	1 NO + 1 NC	—	⊙ B	3SE5 242-0BC05-1CA0	1	1 unit
Snap-action contacts, integrated ²⁾	1 NO + 1 NC	—	⊙ B	3SE5 242-0HC05-1CA0	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊙ B	3SE5 242-0KC05-1CA0	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊙ B	3SE5 242-0LC05-1CA0	1	1 unit
Slow-action contacts with make-before-break	1 NO + 2 NC	—	⊙ B	3SE5 242-0MC05-1CA0	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	⊙ B	3SE5 242-0PC05-1CA0	1	1 unit



With 2 LEDs

With 2 LEDs, yellow/green

Slow-action contacts	1 NO + 2 NC	24 V DC	⊙ B	3SE5 242-1KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	24 V DC	⊙ B	3SE5 242-1LC05	1	1 unit
Slow-action contacts	1 NO + 2 NC	230 V AC	⊙ B	3SE5 242-3KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	230 V AC	⊙ B	3SE5 242-3LC05	1	1 unit

For online configurator see www.siemens.com/sirius/configurators.

⊙ Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator, necessary in safety circuits.

¹⁾ For enclosures with widths of 50 mm, the basic switch is a complete unit with rounded plungers.

²⁾ Subsequent replacement of contact blocks is not possible.

³⁾ Use corresponding high-grade steel lever.

Note:

Selection aid see page 13/9.

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*
	mm		Order No.	Price per PU	

Operating mechanisms



Roller plungers

Roller plungers, type C acc. to EN 50047

Plastic rollers	10	⊙ A	3SE5 000-0AD03	1	1 unit
High-grade steel rollers	10	⊙ B	3SE5 000-0AD04	1	1 unit



With central fixing

Roller plungers with central fixing

Plastic rollers	10	⊙ B	3SE5 000-0AD10	1	1 unit
High-grade steel rollers	10	⊙ B	3SE5 000-0AD11	1	1 unit

⊙ Positively driven actuator, necessary in safety circuits.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure width 50 mm

Version	Diameter	DT	Modular system		PU (UNIT, SET, M)	PS*
mm			Order No.	Price per PU		
Operating mechanisms						
	Roller levers, type E acc. to EN 50047					
	Metal lever, plastic roller	13	⊙ A	3SE5 000-0AE10	1	1 unit
	Metal lever, high-grade steel roller	13	⊙ B	3SE5 000-0AE11	1	1 unit
	High-grade steel lever, plastic roller	13	⊙ B	3SE5 000-0AE12	1	1 unit
	High-grade steel lever, high-grade steel roller	13	⊙ B	3SE5 000-0AE13	1	1 unit
	Angular roller levers					
	Metal lever, plastic roller	13	⊙ A	3SE5 000-0AF10	1	1 unit
	Metal lever, high-grade steel roller	13	⊙ B	3SE5 000-0AF11	1	1 unit
	High-grade steel lever, plastic roller	13	⊙ A	3SE5 000-0AF12	1	1 unit
	High-grade steel lever, high-grade steel roller	13	⊙ B	3SE5 000-0AF13	1	1 unit
	Spring rods (for switches with snap-action contacts only)					
	Plastic plunger and high-grade steel spring:	7				
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		B	3SE5 000-0AR01	1	1 unit
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)		B	3SE5 000-0AR03	1	1 unit
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)		B	3SE5 000-0AR04	1	1 unit
	High-grade steel plunger and spring:	7				
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		B	3SE5 000-0AR02	1	1 unit
	Twist actuators					
	Twist actuators, plastic (without lever)					
	Switching right and/or left, adjustable		⊙ A	3SE5 000-0AK00	1	1 unit
	Levers for twist actuators					
	Twist levers 21 mm, straight, type A acc. to EN 50047					
	Metal lever, plastic roller	19	⊙ A	3SE5 000-0AA21	1	1 unit
	Metal lever, high-grade steel roller	19	⊙ B	3SE5 000-0AA22	1	1 unit
	Metal lever, roller with ball bearing	19	⊙ B	3SE5 000-0AA23	1	1 unit
	Metal lever, plastic roller	30	⊙ B	3SE5 000-0AA25	1	1 unit
	High-grade steel lever, plastic roller	19	⊙ B	3SE5 000-0AA31	1	1 unit
	High-grade steel lever, high-grade steel roller	19	⊙ B	3SE5 000-0AA32	1	1 unit
	Twist levers 30 mm, straight ¹⁾					
	Metal lever, plastic roller	19	⊙ B	3SE5 000-0AA24	1	1 unit
	Metal lever, plastic roller	30	⊙ B	3SE5 000-0AA26	1	1 unit
	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	⊙ B	3SE5 000-0AA60	1	1 unit
	Metal lever, high-grade steel roller	19	⊙ B	3SE5 000-0AA61	1	1 unit
	Metal lever, plastic roller	50	⊙ B	3SE5 000-0AA67	1	1 unit
	Metal lever, rubber roller	50	⊙ B	3SE5 000-0AA68	1	1 unit
	High-grade steel lever, plastic roller	19	⊙ B	3SE5 000-0AA62	1	1 unit
	High-grade steel lever, high-grade steel roller	19	⊙ B	3SE5 000-0AA63	1	1 unit
	Twist levers, adjustable length					
	Metal lever, plastic roller	19	A	3SE5 000-0AA50	1	1 unit
	Metal lever, high-grade steel roller	19	B	3SE5 000-0AA51	1	1 unit
	Metal lever, plastic roller	30	B	3SE5 000-0AA55	1	1 unit
	Metal lever, plastic roller	50	B	3SE5 000-0AA57	1	1 unit
	Metal lever, rubber roller	50	B	3SE5 000-0AA58	1	1 unit
	High-grade steel lever, plastic roller	19	B	3SE5 000-0AA52	1	1 unit
	High-grade steel lever, high-grade steel roller	19	B	3SE5 000-0AA53	1	1 unit
	Rod actuators					
	Aluminum rod, length 200 mm	6	B	3SE5 000-0AA80	1	1 unit
	Spring rod, length 200 mm	6	B	3SE5 000-0AA81	1	1 unit
	Plastic rod, length 200 mm	6	B	3SE5 000-0AA82	1	1 unit

⊙ Positively driven actuator, necessary in safety circuits.

¹⁾ Can be clinch mounted (turned through 180°, rear of lever).

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Ambient temperature to -40 °C

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12
13

Selection and ordering data

Complete units

2 or 3 contacts · Degree of protection IP65 or IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Complete units	☐	PU (UNIT, SET, M)	PS*	PG
				Configurator				
				Order No.	Price per PU			

Complete units¹⁾ · Enclosure width 31 mm



Roller plunger
with central
fixing

Roller plungers with central fixing

Snap-action contacts 1 NO + 1 NC — B 3SE5 232-0CD10-1AJ0 1 1 unit 41K



Twist lever

Twist levers, type A acc. to EN 50047

With high-grade steel lever 21 mm and plastic roller 19 mm

Snap-action contacts 1 NO + 1 NC — A 3SE5 232-0CK31-1AJ0 1 1 unit 41K



Twist lever,
adjustable
length

Twist levers, adjustable length

With high-grade steel lever with grid hole
and plastic roller 19 mm

Snap-action contacts 1 NO + 1 NC — A 3SE5 232-0CK62-1AJ0 1 1 unit 41K

Snap-action contacts 1 NO + 2 NC — B 3SE5 232-0LK62-1AJ0 1 1 unit 41K

Complete units¹⁾ · Enclosure width 50 mm



Twist lever,
adjustable
length

Twist levers

With metal lever 21 mm and plastic roller 19 mm

Snap-action contacts, integrated²⁾ 1 NO + 1 NC — B 3SE5 242-0HK21-1AJ0 1 1 unit 41K

Twist levers, adjustable length

With high-grade steel lever with grid hole and plastic roller
19 mm

Snap-action contacts, integrated²⁾ 1 NO + 1 NC — B 3SE5 242-0HK62-1AJ0 1 1 unit 41K

For online configurator see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator, necessary in safety circuits.

¹⁾ Popular versions.

²⁾ Subsequent replacement of contact blocks is not possible.

Note:

If the device you require is not available as a complete unit, see "Modular System", see page 13/24.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Ambient temperature to -40 °C

Modular system

2 or 3 contacts · Degree of protection IP65 or IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Modular system	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	
Basic switches · Enclosure width 31 mm (with rounded plunger¹⁾)						
	With teflon plunger					
	Snap-action contacts	1 NO + 1 NC —	⤵ B	3SE5 232-0CC05-1AJ0	1	1 unit
	Slow-action contacts	1 NO + 2 NC —	⤵ B	3SE5 232-0KC05-1AJ0	1	1 unit
	Snap-action contacts	1 NO + 2 NC —	⤵ B	3SE5 232-0LC05-1AJ0	1	1 unit
Basic switches · Enclosure width 50 mm (with rounded plunger¹⁾)						
	With teflon plunger					
	Slow-action contacts	1 NO + 1 NC —	⤵ B	3SE5 242-0BC05-1AJ0	1	1 unit
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC —	⤵ B	3SE5 242-0HC05-1AJ0	1	1 unit

Basic switch

Basic switch

⚙ For online configurator see www.siemens.com/sirius/configurators.

⤵ Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator, necessary in safety circuits.

¹⁾ For enclosures with widths of 31 and 50 mm, the basic switch is a complete unit with rounded plungers.

²⁾ Subsequent replacement of contact blocks is not possible.

Note:

Selection aid [see page 13/9](#).

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Ambient temperature to -40 °C

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*
	mm		Order No.	Price per PU	
Operating mechanisms					
 Roller plunger	Roller plungers, type C acc. to EN 50047				
	Plastic rollers	10	→ B	3SE5 000-0AD03-1AJ0	1 1 unit
 Roller lever	Roller levers, type E acc. to EN 50047				
	Metal lever, plastic roller	13	→ B	3SE5 000-0AE10-1AJ0	1 1 unit
	High-grade steel lever, plastic roller	13	→ B	3SE5 000-0AE12-1AJ0	1 1 unit
 Angular roller lever	Angular roller levers				
	Metal lever, plastic roller	13	→ B	3SE5 000-0AF10-1AJ0	1 1 unit
	High-grade steel lever, plastic roller	13	→ B	3SE5 000-0AF12-1AJ0	1 1 unit
Twist actuators					
 Twist actuator	Twist actuators, plastic (without lever)				
	Switching right and/or left, adjustable		→ B	3SE5 000-0AK00-1AJ0	1 1 unit
Levers for twist actuators					
 Twist lever	Twist levers straight, 21 mm, type A acc. to EN 50047				
	Metal lever, plastic roller	19	→ B	3SE5 000-0AA21-1AJ0	1 1 unit
	High-grade steel lever, plastic roller	19	→ B	3SE5 000-0AA31-1AJ0	1 1 unit
 Twist lever, adjustable length	Twist levers, adjustable length, with grid hole				
	Metal lever, plastic roller	19	→ B	3SE5 000-0AA60-1AJ0	1 1 unit
	High-grade steel lever, plastic roller	19	→ B	3SE5 000-0AA62-1AJ0	1 1 unit

→ Positively driven actuator, necessary in safety circuits.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Ambient temperature to -40 °C

Modular system

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Modular system	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	

Basic switches · Enclosure width 40 mm



With M20 □ 1.5 connecting thread

Snap-action contacts	1 NO + 1 NC	—	⊙ B	3SE5 132-0CA00-1AJ0	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊙ B	3SE5 132-0KA00-1AJ0	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊙ B	3SE5 132-0LA00-1AJ0	1	1 unit

Basic switch

⚙ For online configurator see www.siemens.com/sirius/configurators.

⊙ Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator, necessary in safety circuits.

Note:

Selection aid [see page 13/9](#).

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*
	mm		Order No.	Price per PU	

Operating mechanisms



Rounded plungers, type B acc. to EN 50041

Plastic plunger	10	⊙ B	3SE5 000-0AC03-1AJ0	1	1 unit
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Rounded plunger



Roller plungers, type C acc. to EN 50041

Plastic plunger, plastic roller	13	⊙ B	3SE5 000-0AD05-1AJ0	1	1 unit
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Roller plunger



Roller levers

Metal lever with plastic roller, plastic base	22	⊙ B	3SE5 000-0AE05-1AJ0	1	1 unit
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Roller lever

Twist actuators



Twist actuators, plastic (without lever)

• For twist levers and rod actuators, switching right and/or left, adjustable		⊙ B	3SE5 000-0AJ00-1AJ0	1	1 unit
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Twist actuator



Levers for twist actuators

Twist lever, type A acc. to EN 50041

Metal lever, plastic roller	19	⊙ B	3SE5 000-0AA01-1AJ0	1	1 unit
High-grade steel lever, plastic roller	19	⊙ B	3SE5 000-0AA11-1AJ0	1	1 unit

Twist levers



Twist levers, adjustable length, with grid hole

Metal lever, plastic roller	19	⊙ B	3SE5 000-0AA60-1AJ0	1	1 unit
High-grade steel lever, plastic roller	19	⊙ B	3SE5 000-0AA62-1AJ0	1	1 unit

Twist lever, adjustable length

⊙ Positively driven actuator, necessary in safety circuits.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure width 31 mm acc. to EN 50047

Selection and ordering data

Complete units

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Complete units	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	

Complete units¹⁾ · Enclosure width 31 mm



Rounded plunger

Rounded plungers, type B, acc. to EN 50047

With plunger

Slow-action contacts	1 NO + 1 NC	—	⊕ A	3SE5 212-0BC05	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊕ A	3SE5 212-0CC05	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊕ A	3SE5 212-0KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊕ A	3SE5 212-0LC05	1	1 unit
Slow-action contacts with make-before-break	1 NO + 2 NC	—	⊕ A	3SE5 212-0MC05	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	⊕ A	3SE5 212-0PC05	1	1 unit



With increased corrosion protection

With increased corrosion protection

Slow-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 212-0BC05-1CA0	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 212-0CC05-1CA0	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0KC05-1CA0	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0LC05-1CA0	1	1 unit
Slow-action contacts with make-before-break	1 NO + 2 NC	—	⊕ B	3SE5 212-0MC05-1CA0	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	⊕ B	3SE5 212-0PC05-1CA0	1	1 unit

With M12 connector socket, 5-pole (125 V, 4 A)

Slow-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 214-0BC05-1AC5	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 214-0CC05-1AC5	1	1 unit
Slow-action contacts	2 NC	—	⊕ B	3SE5 214-0KC05-1AE1	1	1 unit
Snap-action contacts	2 NC	—	⊕ B	3SE5 214-0LC05-1AE1	1	1 unit



With 2 LEDs

With 2 LEDs, yellow/green

Slow-action contacts	1 NO + 2 NC	24 V DC	⊕ B	3SE5 212-1KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	24 V DC	⊕ A	3SE5 212-1LC05	1	1 unit
Slow-action contacts	1 NO + 2 NC	230 V AC	⊕ B	3SE5 212-3KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	230 V AC	⊕ B	3SE5 212-3LC05	1	1 unit

With M12 connector socket, 5-pole (125 V, 4 A) and 2 LEDs

Slow-action contacts	1 NO + 1 NC	24 V DC	⊕ B	3SE5 214-1BC05-1AF3	1	1 unit
Snap-action contacts	1 NO + 1 NC	24 V DC	⊕ B	3SE5 214-1CC05-1AF3	1	1 unit



Plain plunger

Plain plungers

With high-grade steel plunger

Slow-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 212-0BB01	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 212-0CB01	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0KB01	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0LB01	1	1 unit



Roller plunger

Roller plungers, type C acc. to EN 50047

With plastic roller 10 mm

Slow-action contacts	1 NO + 1 NC	—	⊕ A	3SE5 212-0BD03	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 212-0CD03	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊕ A	3SE5 212-0KD03	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0LD03	1	1 unit

⚙ For online configurator see www.siemens.com/sirius/configurators.

⊕ Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ Popular versions.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure width 31 mm acc. to EN 50047

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Complete units	☐	PU (UNIT, SET, M)	PS*
				Configurator			
				Order No.		Price per PU	

Complete units¹⁾ · Enclosure width 31 mm



Roller lever

Roller levers, type E acc. to EN 50047

With metal lever and plastic roller 13 mm

Slow-action contacts	1 NO + 1 NC	—	⊕ A	3SE5 212-0BE10	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 212-0CE10	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0KE10	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0LE10	1	1 unit



Angular roller lever

Angular roller levers

With metal lever and plastic roller 13 mm

Slow-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 212-0BF10	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 212-0CF10	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0KF10	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0LF10	1	1 unit



Twist lever

Twist levers, type A acc. to EN 50047

With metal lever 21 mm and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC	—	⊕ A	3SE5 212-0BK21	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊕ A	3SE5 212-0CK21	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0KK21	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0LK21	1	1 unit



Twist lever, adjustable length

Twist levers, adjustable length

With metal lever with grid hole and plastic roller 19 mm

Snap-action contacts	1 NO + 1 NC	—	⊕ A	3SE5 212-0CK60	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0KK60	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0LK60	1	1 unit

With metal lever and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC	—	A	3SE5 212-0BK50	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	B	3SE5 212-0CK50	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	B	3SE5 212-0LK50	1	1 unit

For online configurator see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ Popular versions.

Note:

If the device you require is not available as a complete unit, see "Modular System", see page 13/29.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure width 31 mm acc. to EN 50047

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Modular system

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Modular system	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	

Basic switches · Enclosure width 31 mm (with rounded plunger¹⁾)



Basic switch

With plunger

Slow-action contacts	1 NO + 1 NC	—	⊕ A	3SE5 212-0BC05	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊕ A	3SE5 212-0CC05	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊕ A	3SE5 212-0KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊕ A	3SE5 212-0LC05	1	1 unit
Slow-action contacts with make-before-break	1 NO + 2 NC	—	⊕ A	3SE5 212-0MC05	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	⊕ A	3SE5 212-0PC05	1	1 unit



With increased corrosion protection

With increased corrosion protection²⁾

Slow-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 212-0BC05-1CA0	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 212-0CC05-1CA0	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0KC05-1CA0	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0LC05-1CA0	1	1 unit
Slow-action contacts with make-before-break	1 NO + 2 NC	—	⊕ B	3SE5 212-0MC05-1CA0	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	⊕ B	3SE5 212-0PC05-1CA0	1	1 unit



With M12 socket

With M12 connector socket, 5-pole (125 V, 4 A)

Slow-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 214-0BC05-1AC5	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 214-0CC05-1AC5	1	1 unit
Slow-action contacts	2 NC	—	⊕ B	3SE5 214-0KC05-1AE1	1	1 unit
Snap-action contacts	2 NC	—	⊕ B	3SE5 214-0LC05-1AE1	1	1 unit



With 2 LEDs

With 2 LEDs, yellow/green

Slow-action contacts	1 NO + 2 NC	24 V DC	⊕ B	3SE5 212-1KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	24 V DC	⊕ A	3SE5 212-1LC05	1	1 unit
Slow-action contacts	1 NO + 2 NC	230 V AC	⊕ B	3SE5 212-3KC05	1	1 unit
Snap-action contacts	1 NO + 2 NC	230 V AC	⊕ B	3SE5 212-3LC05	1	1 unit



With M12 socket and 2 LEDs

With M12 connector socket, 5-pole (125 V, 4 A) and 2 LEDs

Slow-action contacts	1 NO + 1 NC	24 V DC	⊕ B	3SE5 214-1BC05-1AF3	1	1 unit
Snap-action contacts	1 NO + 1 NC	24 V DC	⊕ B	3SE5 214-1CC05-1AF3	1	1 unit

⊗ For online configurator see www.siemens.com/sirius/configurators.

⊕ Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator, necessary in safety circuits.

¹⁾ For enclosures with widths of 31mm, the basic switch is a complete unit with rounded plungers.

²⁾ Use corresponding high-grade steel lever.

Note:

Selection aid see page 13/9.

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*
	mm		Order No.	Price per PU	

Operating mechanisms



Plain plunger

Plain plungers

High-grade steel plungers	10	⊕ A	3SE5 000-0AB01	1	1 unit
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Roller plunger

Roller plungers, type C acc. to EN 50047

Plastic rollers	10	⊕ A	3SE5 000-0AD03	1	1 unit
High-grade steel rollers	10	⊕ B	3SE5 000-0AD04	1	1 unit

⊕ Positively driven actuator, necessary in safety circuits.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure width 31 mm acc. to EN 50047

Version	Diameter	DT	Modular system	Price per PU	PU (UNIT, SET, M)	PS*
	mm		Order No.			
Operating mechanisms						
	Roller plungers with central fixing					
	Plastic rollers	10	⊕ B	3SE5 000-0AD10	1	1 unit
	High-grade steel rollers	10	⊕ B	3SE5 000-0AD11	1	1 unit
With central fixing						
	Roller levers, type E acc. to EN 50047					
	Metal lever, plastic roller	13	⊕ A	3SE5 000-0AE10	1	1 unit
	Metal lever, high-grade steel roller	13	⊕ B	3SE5 000-0AE11	1	1 unit
	High-grade steel lever, plastic roller	13	⊕ B	3SE5 000-0AE12	1	1 unit
	High-grade steel lever, high-grade steel roller	13	⊕ B	3SE5 000-0AE13	1	1 unit
	Angular roller levers					
	Metal lever, plastic roller	13	⊕ A	3SE5 000-0AF10	1	1 unit
	Metal lever, high-grade steel roller	13	⊕ B	3SE5 000-0AF11	1	1 unit
	High-grade steel lever, plastic roller	13	⊕ A	3SE5 000-0AF12	1	1 unit
	High-grade steel lever, high-grade steel roller	13	⊕ B	3SE5 000-0AF13	1	1 unit
	Spring rods (for switches with snap-action contacts only)					
	Plastic plunger and high-grade steel spring:	7				
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		B	3SE5 000-0AR01	1	1 unit
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)		B	3SE5 000-0AR03	1	1 unit
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)		B	3SE5 000-0AR04	1	1 unit
	High-grade steel plunger and spring:	7				
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		B	3SE5 000-0AR02	1	1 unit
Twist actuators						
	Twist actuators, plastic (without lever)					
	Switching right and/or left, adjustable		⊕ A	3SE5 000-0AK00	1	1 unit
Levers for twist actuators						
	Twist levers, straight, type A acc. to EN 50047					
	Metal lever 21 mm, plastic roller	19	⊕ A	3SE5 000-0AA21	1	1 unit
	Metal lever 21 mm, high-grade steel roller	19	⊕ B	3SE5 000-0AA22	1	1 unit
	Metal lever 21 mm, roller with ball bearing	19	⊕ B	3SE5 000-0AA23	1	1 unit
	Metal lever 21 mm, plastic roller	30	⊕ B	3SE5 000-0AA25	1	1 unit
	High-grade steel lever 21 mm, plastic roller	19	⊕ B	3SE5 000-0AA31	1	1 unit
	Twist levers 30 mm, straight¹⁾					
	Metal lever, plastic roller	19	⊕ B	3SE5 000-0AA24	1	1 unit
	Metal lever, plastic roller	30	⊕ B	3SE5 000-0AA26	1	1 unit
	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	⊕ B	3SE5 000-0AA60	1	1 unit
	Metal lever, high-grade steel roller	19	⊕ B	3SE5 000-0AA61	1	1 unit
	Metal lever, plastic roller	50	⊕ B	3SE5 000-0AA67	1	1 unit
	Metal lever, rubber roller	50	⊕ B	3SE5 000-0AA68	1	1 unit
	High-grade steel lever, plastic roller	19	⊕ B	3SE5 000-0AA62	1	1 unit
	High-grade steel lever, high-grade steel roller	19	⊕ B	3SE5 000-0AA63	1	1 unit
	Twist levers, adjustable length					
	Twist levers, adjustable length					
	Metal lever, plastic roller	19	A	3SE5 000-0AA50	1	1 unit
	Metal lever, high-grade steel roller	19	B	3SE5 000-0AA51	1	1 unit
	Metal lever, plastic roller	30	B	3SE5 000-0AA55	1	1 unit
	Metal lever, plastic roller	50	B	3SE5 000-0AA57	1	1 unit
	Metal lever, rubber roller	50	B	3SE5 000-0AA58	1	1 unit
	High-grade steel lever, plastic roller	19	B	3SE5 000-0AA52	1	1 unit
	High-grade steel lever, high-grade steel roller	19	B	3SE5 000-0AA53	1	1 unit
	Rod actuators, type D acc. to EN 50041					
	Aluminum rod, length 200 mm	6	B	3SE5 000-0AA80	1	1 unit
	Spring rod, length 200 mm	6	B	3SE5 000-0AA81	1	1 unit
	Plastic rod, length 200 mm	6	B	3SE5 000-0AA82	1	1 unit
	Plastic rod, length 330 mm	6	B	3SE5 000-0AA83	1	1 unit

⊕ Positively driven actuator, necessary in safety circuits.

¹⁾ Can be clinch mounted (turned through 180°, rear of lever).

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure width 40 mm acc. to EN 50041

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Selection and ordering data

Complete units

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Complete units	☐	PU (UNIT, SET, M)	PS*
				Configurator			
				Order No.	Price per PU		

Complete units¹⁾ · Enclosure width 40 mm



Plain plunger

Plain plungers

With high-grade steel plunger

Slow-action contacts	1 NO + 1 NC —	⊕ A	3SE5 112-0BB01	1	1 unit
Snap-action contacts	1 NO + 1 NC —	⊕ A	3SE5 112-0CB01	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊕ ►	3SE5 112-0KB01	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊕ B	3SE5 112-0LB01	1	1 unit



Rounded plunger

Rounded plungers, type B acc. to EN 50041

With high-grade steel plungers, with 3 mm overtravel

Slow-action contacts	1 NO + 1 NC —	⊕ ►	3SE5 112-0BC02	1	1 unit
Snap-action contacts	1 NO + 1 NC —	⊕ ►	3SE5 112-0CC02	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊕ B	3SE5 112-0KC02	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊕ B	3SE5 112-0LC02	1	1 unit



Roller plunger

Roller plungers, type C acc. to EN 50041

With high-grade steel roller 13 mm, with 3 mm overtravel

Slow-action contacts	1 NO + 1 NC —	⊕ ►	3SE5 112-0BD02	1	1 unit
Snap-action contacts	1 NO + 1 NC —	⊕ ►	3SE5 112-0CD02	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊕ ►	3SE5 112-0KD02	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊕ ►	3SE5 112-0LD02	1	1 unit

With M12 connector socket, 5-pole (125 V, 4 A) and 2 LEDs

Snap-action contacts	1 NO + 1 NC 24 V DC	⊕ B	3SE5 114-1CD02-1AF3	1	1 unit
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Roller lever

Roller levers

With metal lever and plastic roller 22 mm

Slow-action contacts	1 NO + 1 NC —	⊕ ►	3SE5 112-0BE01	1	1 unit
Snap-action contacts	1 NO + 1 NC —	⊕ ►	3SE5 112-0CE01	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊕ B	3SE5 112-0KE01	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊕ B	3SE5 112-0LE01	1	1 unit



Angular roller lever

Angular roller levers

With metal lever and plastic roller 22 mm

Slow-action contacts	1 NO + 1 NC —	⊕ B	3SE5 112-0BF01	1	1 unit
Snap-action contacts	1 NO + 1 NC —	⊕ ►	3SE5 112-0CF01	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊕ B	3SE5 112-0LF01	1	1 unit



Spring rod

Spring rods

Length 142.5 mm, with plastic plunger 50 mm

Snap-action contacts	1 NO + 1 NC —	►	3SE5 112-0CR01	1	1 unit
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For online configurator see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ Popular versions.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures

Enclosure width 40 mm acc. to EN 50041

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Complete units		PU (UNIT, SET, M)	PS*
				Configurator			
				Order No.	Price per PU		

Complete units¹⁾ · Enclosure width 40 mm

Twist levers, type A acc. to EN 50041

With metal lever 27 mm and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC	—	⊙ ➤	3SE5 112-0BH01	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊙ ➤	3SE5 112-0CH01	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊙ ➤	3SE5 112-0KH01	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊙ B	3SE5 112-0LH01	1	1 unit

With M12 connector socket, 5-pole (125 V, 4 A)

Snap-action contacts	1 NO + 1 NC	—	⊙ A	3SE5 114-0CH01-1AC5	1	1 unit
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With M12 connector socket, 5-pole (125 V, 4 A) and 2 LEDs

Snap-action contacts	1 NO + 1 NC	24 V DC	⊙ B	3SE5 114-1CH01-1AF3	1	1 unit
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With metal lever 27 mm and high-grade steel roller 19 mm

Slow-action contacts	1 NO + 1 NC	—	⊙ B	3SE5 112-0BH02	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊙ ➤	3SE5 112-0CH02	1	1 unit

With M12 connector socket, 5-pole (125 V, 4 A) and 2 LEDs

Snap-action contacts	1 NO + 1 NC	—	⊙ B	3SE5 114-1CH02-1AF3	1	1 unit
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With metal lever 30 mm and plastic roller 19 mm

Snap-action contacts	1 NO + 1 NC	—	⊙ A	3SE5 112-0CH24	1	1 unit
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Twist levers, adjustable length

With metal lever with grid hole and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC	—	⊙ ➤	3SE5 112-0BH60	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	⊙ ➤	3SE5 112-0CH60	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊙ B	3SE5 112-0LH60	1	1 unit

With metal lever and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC	—	B	3SE5 112-0BH50	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	➤	3SE5 112-0CH50	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	B	3SE5 112-0LH50	1	1 unit

With M12 connector socket, 8-pole (30 V, 2 A) and 2 LEDs

Snap-action contacts	1 NO + 2 NC	24 V DC	B	3SE5 114-1LH50-1AD4	1	1 unit
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With metal lever and high-grade steel roller 19 mm

Snap-action contacts	1 NO + 1 NC	—	B	3SE5 112-0CH51	1	1 unit
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Fork levers, latching

With metal lever and 2 plastic rollers 19 mm

Snap-action contacts	1 NO + 1 NC	—	⊙ B	3SE5 112-0CT11	1	1 unit
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Rod actuators, type D, acc. to EN 50041

With aluminum rod, length 200 mm

Snap-action contacts	1 NO + 1 NC	—	➤	3SE5 112-0CH80	1	1 unit
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With plastic rod, length 200 mm

Snap-action contacts	1 NO + 1 NC	—	B	3SE5 112-0CH82	1	1 unit
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Twist lever



Twist lever, adjustable length, with grid hole



Twist lever, adjustable length



Fork lever



Rod actuator

⚙ For online configurator see www.siemens.com/sirius/configurators.

⊙ Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ Popular versions.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 13/33.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure width 40 mm acc. to EN 50041

Modular system

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Modular system	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	

Basic switches · Enclosure width 40 mm

	With M20 × 1.5 connecting thread					
	Slow-action contacts	1 NO + 1 NC	—	➡	3SE5 112-0BA00	1 1 unit
	Snap-action contacts	1 NO + 1 NC	—	➡	3SE5 112-0CA00	1 1 unit
	• Gold-plated contacts			➡ B	3SE5 112-0CA00-1AC1	1 1 unit
	Slow-action contacts	1 NO + 2 NC	—	➡ A	3SE5 112-0KA00	1 1 unit
	Snap-action contacts	1 NO + 2 NC	—	➡	3SE5 112-0LA00	1 1 unit
	Slow-action contacts with make-before-break	1 NO + 2 NC	—	➡	3SE5 112-0MA00	1 1 unit
	Slow-action contacts	2 NO + 1 NC	—	➡	3SE5 112-0PA00	1 1 unit
	With increased corrosion protection¹⁾					
	Slow-action contacts	1 NO + 1 NC	—	➡ B	3SE5 112-0BA00-1CA0	1 1 unit
	Snap-action contacts	1 NO + 1 NC	—	➡ B	3SE5 112-0CA00-1CA0	1 1 unit
	Slow-action contacts	1 NO + 2 NC	—	➡ B	3SE5 112-0KA00-1CA0	1 1 unit
	Snap-action contacts	1 NO + 2 NC	—	➡ B	3SE5 112-0LA00-1CA0	1 1 unit
	Slow-action contacts with make-before-break	1 NO + 2 NC	—	➡ B	3SE5 112-0MA00-1CA0	1 1 unit
	Slow-action contacts	2 NO + 1 NC	—	➡ B	3SE5 112-0PA00-1CA0	1 1 unit
	With M12 connector socket, 5-pole (125 V, 4 A)					
	Slow-action contacts	1 NO + 1 NC	—	➡ B	3SE5 114-0BA00-1AC5	1 1 unit
	Snap-action contacts	1 NO + 1 NC	—	➡	3SE5 114-0CA00-1AC5	1 1 unit
	Slow-action contacts	2 NC	—	➡ B	3SE5 114-0KA00-1AE1	1 1 unit
	Snap-action contacts	2 NC	—	➡ B	3SE5 114-0LA00-1AE1	1 1 unit
	With connector socket, 6-pole + PE (250 V, 10 A)					
	Slow-action contacts	1 NO + 2 NC	—	➡ B	3SE5 115-0KA00-1AD1	1 1 unit
	Snap-action contacts	1 NO + 2 NC	—	➡	3SE5 115-0LA00-1AD1	1 1 unit
	With connector socket, 6-pole + PE (250 V, 10 A) and quick-release device					
	Snap-action contacts	1 NO + 1 NC	—	➡ B	3SE5 115-0CA00-1AD0	1 1 unit
	With 2 LEDs, yellow/green					
	Slow-action contacts	1 NO + 2 NC	24 V DC	➡ B	3SE5 112-1KA00	1 1 unit
	Snap-action contacts	1 NO + 2 NC	24 V DC	➡	3SE5 112-1LA00	1 1 unit
	Slow-action contacts	1 NO + 2 NC	230 V AC	➡ B	3SE5 112-3KA00	1 1 unit
	Snap-action contacts	1 NO + 2 NC	230 V AC	➡ B	3SE5 112-3LA00	1 1 unit
	With M12 connector socket, 5-pole (125 V, 4 A) and 2 LEDs					
	Slow-action contacts	1 NO + 1 NC	24 V DC	➡ B	3SE5 114-1BA00-1AF3	1 1 unit
	Snap-action contacts	1 NO + 1 NC	24 V DC	➡ B	3SE5 114-1CA00-1AF3	1 1 unit
	With M12 connector socket, 8-pole (30 V, 2 A) and 2 LEDs					
	Snap-action contacts	1 NO + 2 NC	24 V DC	➡ B	3SE5 114-1LA00-1AD4	1 1 unit
	With connector socket, 6-pole + PE (10 A), and 2 LEDs					
	Slow-action contacts	1 NO + 1 NC	24 V DC	➡ B	3SE5 115-1BA00-1AF2	1 1 unit
	Snap-action contacts	1 NO + 1 NC	24 V DC	➡ B	3SE5 115-1CA00-1AF2	1 1 unit
	Snap-action contacts	2 NC	24 V DC	➡ B	3SE5 115-1LA00-1AD2	1 1 unit

For online configurator see www.siemens.com/sirius/configurators.

➡ Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator, necessary in safety circuits.

¹⁾ Use corresponding high-grade steel lever.

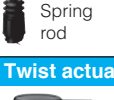
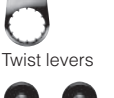
Note:

Selection aid, see page 13/9.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure width 40 mm acc. to EN 50041

Version	Diameter	DT	Modular system		PU (UNIT, SET, M)	PS*
	mm		Order No.	Price per PU		
Operating mechanisms						
	Plain plungers					
	High-grade steel plungers	10	⊙ A	3SE5 000-0AB01	1	1 unit
	Rounded plungers, type B acc. to EN 50041					
	High-grade steel plungers, with 3 mm overtravel	10	⊙ ▶	3SE5 000-0AC02	1	1 unit
	Roller plungers, type C acc. to EN 50041					
	High-grade steel roller, with 3 mm overtravel	13	⊙ ▶	3SE5 000-0AD02	1	1 unit
	Roller levers					
	Metal lever, plastic roller	22	⊙ ▶	3SE5 000-0AE01	1	1 unit
	Metal lever, high-grade steel roller	22	⊙ ▶	3SE5 000-0AE02	1	1 unit
	High-grade steel lever, plastic roller	22	⊙ B	3SE5 000-0AE03	1	1 unit
	High-grade steel lever, high-grade steel roller	22	⊙ B	3SE5 000-0AE04	1	1 unit
	Angular roller levers					
	Metal lever, plastic roller	22	⊙ ▶	3SE5 000-0AF01	1	1 unit
	Metal lever, high-grade steel roller	22	⊙ B	3SE5 000-0AF02	1	1 unit
	High-grade steel lever, plastic roller	22	⊙ B	3SE5 000-0AF03	1	1 unit
	High-grade steel lever, high-grade steel roller	22	⊙ B	3SE5 000-0AF04	1	1 unit
Spring rods (for switches with snap-action contacts only)						
	Plastic plunger and high-grade steel spring:	7				
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		B	3SE5 000-0AR01	1	1 unit
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)		B	3SE5 000-0AR03	1	1 unit
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)		B	3SE5 000-0AR04	1	1 unit
	High-grade steel plunger and spring:	7				
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		B	3SE5 000-0AR02	1	1 unit
Twist actuators						
	Twist actuators, metal (without lever)					
	• For twist levers and rod actuators, switching right and/or left, adjustable	⊙ A	3SE5 000-0AH00	1	1 unit	
	• For fork levers, latching	⊙ ▶	3SE5 000-0AT10	1	1 unit	
	Levers for twist actuators					
	Twist levers, offset, type A acc. to EN 50041					
	Metal lever 27 mm, plastic roller	19	⊙ A	3SE5 000-0AA01	1	1 unit
	Metal lever 27 mm, high-grade steel roller	19	⊙ A	3SE5 000-0AA02	1	1 unit
	Metal lever 27 mm, roller with ball bearing	19	⊙ B	3SE5 000-0AA03	1	1 unit
	Metal lever 27 mm, 2 plastic rollers	19	⊙ B	3SE5 000-0AA04	1	1 unit
	Metal lever 27 mm, plastic roller	30	⊙ B	3SE5 000-0AA05	1	1 unit
	Metal lever 27 mm, rubber roller	50	⊙ B	3SE5 000-0AA08	1	1 unit
	High-grade steel lever 27 mm, plastic roller	19	⊙ B	3SE5 000-0AA11	1	1 unit
	High-grade steel lever 27 mm, high-grade steel roller	19	⊙ B	3SE5 000-0AA12	1	1 unit
	Metal lever 35 mm, plastic roller	19	⊙ B	3SE5 000-0AA15	1	1 unit
	Twist levers 30 mm, straight ¹⁾					
	Metal lever, plastic roller	19	⊙ B	3SE5 000-0AA24	1	1 unit
	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	⊙ B	3SE5 000-0AA60	1	1 unit
	Metal lever, high-grade steel roller	19	⊙ B	3SE5 000-0AA61	1	1 unit
	Metal lever, rubber roller	50	⊙ B	3SE5 000-0AA68	1	1 unit
	High-grade steel lever, plastic roller	19	⊙ B	3SE5 000-0AA62	1	1 unit
	High-grade steel lever, high-grade steel roller	19	⊙ B	3SE5 000-0AA63	1	1 unit
	Twist levers, adjustable length					
	Metal lever, plastic roller	19	A	3SE5 000-0AA50	1	1 unit
	Metal lever, high-grade steel roller	19	B	3SE5 000-0AA51	1	1 unit
	Metal lever, plastic roller	30	B	3SE5 000-0AA55	1	1 unit
	Metal lever, rubber roller	50	B	3SE5 000-0AA58	1	1 unit
	High-grade steel lever, plastic roller	19	B	3SE5 000-0AA52	1	1 unit
	High-grade steel lever, high-grade steel roller	19	B	3SE5 000-0AA53	1	1 unit
	Fork levers (for switches with snap-action contacts only)					
	2 metal levers, 2 plastic rollers	19	⊙ ▶	3SE5 000-0AT01	1	1 unit
	2 metal levers, 2 high-grade steel rollers	19	⊙ B	3SE5 000-0AT02	1	1 unit
	2 high-grade steel levers, 2 plastic rollers	19	⊙ B	3SE5 000-0AT03	1	1 unit
	Rod actuators, type D acc. to EN 50041					
	Aluminum rod, length 200 mm	6	B	3SE5 000-0AA80	1	1 unit
	Spring rod, length 200 mm	6	B	3SE5 000-0AA81	1	1 unit
	Plastic rod, length 200 mm	6	B	3SE5 000-0AA82	1	1 unit

⊙ Positively driven actuator, necessary in safety circuits.

¹⁾ Can be clinch mounted (turned through 180°, rear of lever).

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure width 56 mm

Selection and ordering data

Complete units

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry 3 × (M20 × 1.5)

Version	Contacts	LEDs	DT	Complete units	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	

Complete units¹⁾ · Enclosure width 56 mm



Plain plunger

Plain plungers

With high-grade steel plunger

Slow-action contacts	1 NO + 1 NC —	⊙ B	3SE5 122-0BB01	1	1 unit
Snap-action contacts	1 NO + 1 NC —	⊙ B	3SE5 122-0CB01	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊙ B	3SE5 122-0KB01	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊙ B	3SE5 122-0LB01	1	1 unit
Slow-action contacts	2 NO + 1 NC —	⊙ B	3SE5 122-0PB01	1	1 unit



Rounded plunger

Rounded plungers

With high-grade steel plungers, with 3 mm overtravel

Slow-action contacts	1 NO + 1 NC —	⊙ B	3SE5 122-0BC02	1	1 unit
Snap-action contacts	1 NO + 1 NC —	⊙ ►	3SE5 122-0CC02	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊙ B	3SE5 122-0KC02	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊙ B	3SE5 122-0LC02	1	1 unit
Slow-action contacts	2 NO + 1 NC —	⊙ B	3SE5 122-0PC02	1	1 unit



Roller plunger

Roller plungers

With high-grade steel roller 13 mm, with 3 mm overtravel

Slow-action contacts	1 NO + 1 NC —	⊙ ►	3SE5 122-0BD02	1	1 unit
Snap-action contacts	1 NO + 1 NC —	⊙ ►	3SE5 122-0CD02	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊙ ►	3SE5 122-0KD02	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊙ B	3SE5 122-0LD02	1	1 unit



Roller lever

Roller levers

With metal lever and plastic roller 22 mm

Slow-action contacts	1 NO + 1 NC —	⊙ ►	3SE5 122-0BE01	1	1 unit
Snap-action contacts	1 NO + 1 NC —	⊙ ►	3SE5 122-0CE01	1	1 unit
Slow-action contacts	1 NO + 2 NC —	⊙ ►	3SE5 122-0KE01	1	1 unit
Snap-action contacts	1 NO + 2 NC —	⊙ B	3SE5 122-0LE01	1	1 unit
Slow-action contacts	2 NO + 1 NC —	⊙ B	3SE5 122-0PE01	1	1 unit

With metal lever and high-grade steel roller 22 mm

Snap-action contacts	1 NO + 1 NC —	⊙ B	3SE5 122-0CE02	1	1 unit
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Angular roller lever

Angular roller levers

With metal lever and plastic roller 22 mm

Slow-action contacts	1 NO + 1 NC —	⊙ B	3SE5 122-0BF01	1	1 unit
Snap-action contacts	1 NO + 1 NC —	⊙ ►	3SE5 122-0CF01	1	1 unit
Slow-action contacts	2 NO + 1 NC —	⊙ B	3SE5 122-0PF01	1	1 unit

⚙ For online configurator see www.siemens.com/sirius/configurators.

⊙ Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ Popular versions.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure width 56 mm

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry 3 × (M20 × 1.5)

Version	Contacts	LEDs	DT	Complete units		PU (UNIT, SET, M)	PS*
				Configurator			
				Order No.	Price per PU		

Complete units¹⁾ · Enclosure width 56 mm



Spring rod

Spring rods

Length 142.5 mm, with plastic plunger 50 mm

Snap-action contacts

1 NO + 1 NC —



3SE5 122-0CR01

1

1 unit



Twist lever

Twist levers

With metal lever 27 mm and plastic roller 19 mm

Slow-action contacts

1 NO + 1 NC —



3SE5 122-0BH01

1

1 unit

Snap-action contacts

1 NO + 1 NC —



3SE5 122-0CH01

1

1 unit

Slow-action contacts

1 NO + 2 NC —



3SE5 122-0KH01

1

1 unit

Snap-action contacts

1 NO + 2 NC —



3SE5 122-0LH01

1

1 unit

Slow-action contacts

2 NO + 1 NC —



3SE5 122-0PH01

1

1 unit

With metal lever 27 mm and high-grade steel roller 19 mm

Snap-action contacts

1 NO + 1 NC —



3SE5 122-0CH02

1

1 unit

Snap-action contacts

1 NO + 2 NC —



3SE5 122-0LH02

1

1 unit

Twist levers, adjustable length

With metal lever with grid hole and plastic roller 19 mm

Slow-action contacts

1 NO + 1 NC —



3SE5 122-0BH60

1

1 unit

Snap-action contacts

1 NO + 1 NC —



3SE5 122-0CH60

1

1 unit

Snap-action contacts

1 NO + 2 NC —



3SE5 122-0LH60

1

1 unit

With metal lever and plastic roller 19 mm

Slow-action contacts

1 NO + 1 NC —

3SE5 122-0BH50

1

1 unit

Snap-action contacts

1 NO + 1 NC —



3SE5 122-0CH50

1

1 unit

Snap-action contacts

1 NO + 2 NC —

3SE5 122-0LH50

1

1 unit



Twist lever, adjustable length

Fork levers, latching

With metal lever and 2 plastic rollers 19 mm

Snap-action contacts

1 NO + 1 NC —



3SE5 122-0CT11

1

1 unit



Fork lever

Rod actuators

With aluminum rod, length 200 mm

Snap-action contacts

1 NO + 1 NC —

3SE5 122-0CH80

1

1 unit

With plastic rod, length 200 mm

Snap-action contacts

1 NO + 1 NC —

3SE5 122-0CH82

1

1 unit



Rod actuator

For online configurator see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ Popular versions.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 13/37.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure width 56 mm

Modular system

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry 3 × (M20 × 1.5)

Version	Contacts	LEDs	DT	Modular system	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	

Basic switches · Enclosure width 56 mm



Basic switch



With increased corrosion protection



With 2 LEDs

With 3 x M20 x 1.5 connecting thread

Slow-action contacts	1 NO + 1 NC	—	➡	3SE5 122-0BA00	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	➡	3SE5 122-0CA00	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	➡ B	3SE5 122-0KA00	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	➡ A	3SE5 122-0LA00	1	1 unit
Slow-action contacts with make-before-break	1 NO + 2 NC	—	➡ A	3SE5 122-0MA00	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	➡	3SE5 122-0PA00	1	1 unit

With increased corrosion protection¹⁾

Slow-action contacts	1 NO + 1 NC	—	➡ B	3SE5 122-0BA00-1CA0	1	1 unit
Snap-action contacts	1 NO + 1 NC	—	➡ B	3SE5 122-0CA00-1CA0	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	➡ B	3SE5 122-0KA00-1CA0	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	➡ B	3SE5 122-0LA00-1CA0	1	1 unit
Slow-action contacts with make-before-break	1 NO + 2 NC	—	➡ B	3SE5 122-0MA00-1CA0	1	1 unit
Slow-action contacts	2 NO + 1 NC	—	➡ B	3SE5 122-0PA00-1CA0	1	1 unit

With 2 LEDs, yellow/green

Slow-action contacts	1 NO + 2 NC	24 V DC	➡ B	3SE5 122-1KA00	1	1 unit
Snap-action contacts	1 NO + 2 NC	24 V DC	➡ B	3SE5 122-1LA00	1	1 unit
Slow-action contacts	1 NO + 2 NC	230 V AC	➡ B	3SE5 122-3KA00	1	1 unit
Snap-action contacts	1 NO + 2 NC	230 V AC	➡ B	3SE5 122-3LA00	1	1 unit

For online configurator see www.siemens.com/sirius/configurators.

➡ Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator, necessary in safety circuits.

¹⁾ Use corresponding high-grade steel lever.

Note:

Selection aid see page 13/9.

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*
	mm		Order No.	Price per PU	

Operating mechanisms



Rounded plunger, roller plunger



Roller lever



Angular roller lever



Spring rod

Plain plungers

High-grade steel plungers	10	➡ A	3SE5 000-0AB01	1	1 unit
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Rounded plungers, type B acc. to EN 50041

High-grade steel plungers, with 3 mm overtravel	10	➡ B	3SE5 000-0AC02	1	1 unit
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Roller plungers, type C acc. to EN 50041

High-grade steel roller, with 3 mm overtravel	13	➡ B	3SE5 000-0AD02	1	1 unit
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Roller levers

Metal lever, plastic roller	22	➡ A	3SE5 000-0AE01	1	1 unit
Metal lever, high-grade steel roller	22	➡ B	3SE5 000-0AE02	1	1 unit
High-grade steel lever, plastic roller	22	➡ B	3SE5 000-0AE03	1	1 unit
High-grade steel lever, high-grade steel roller	22	➡ B	3SE5 000-0AE04	1	1 unit

Angular roller levers

Metal lever, plastic roller	22	➡ A	3SE5 000-0AF01	1	1 unit
Metal lever, high-grade steel roller	22	➡ B	3SE5 000-0AF02	1	1 unit
High-grade steel lever, plastic roller	22	➡ B	3SE5 000-0AF03	1	1 unit
High-grade steel lever, high-grade steel roller	22	➡ B	3SE5 000-0AF04	1	1 unit

Spring rods (for switches with snap-action contacts only)

Plastic plunger and high-grade steel spring:	7				
• Length 142.5 mm (spring 50 mm, plunger 50 mm)		B	3SE5 000-0AR01	1	1 unit
• Length 76 mm (spring 23.5 mm, plunger 10 mm)		B	3SE5 000-0AR03	1	1 unit
• Length 242.5 mm (spring 150 mm, plunger 50 mm)		B	3SE5 000-0AR04	1	1 unit
High-grade steel plunger and spring:	7				
• Length 142.5 mm (spring 50 mm, plunger 50 mm)		B	3SE5 000-0AR02	1	1 unit

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure width 56 mm

Version	Diameter	DT	Modular system		PU (UNIT, SET, M)	PS*	
mm			Order No.	Price per PU			
Twist actuators							
	Twist actuators, metal (without lever)						
	• For twist levers and rod actuators, switching right and/or left, adjustable	⤴ A	3SE5 000-0AH00		1	1 unit	
	• For fork levers, latching	⤴ B	3SE5 000-0AT10		1	1 unit	
Levers for twist actuators							
	Twist levers 27 mm, offset, type A acc. to EN 50041						
	Metal lever, plastic roller	19	⤴ A	3SE5 000-0AA01		1	1 unit
	Metal lever, high-grade steel roller	19	⤴ A	3SE5 000-0AA02		1	1 unit
	Metal lever, roller with ball bearing	19	⤴ B	3SE5 000-0AA03		1	1 unit
	Metal lever, 2 plastic rollers	19	⤴ B	3SE5 000-0AA04		1	1 unit
	Metal lever, plastic roller	30	⤴ B	3SE5 000-0AA05		1	1 unit
	Metal lever, plastic roller	50	⤴ B	3SE5 000-0AA07		1	1 unit
	Metal lever, rubber roller	50	⤴ B	3SE5 000-0AA08		1	1 unit
	High-grade steel lever, plastic roller	19	⤴ B	3SE5 000-0AA11		1	1 unit
	High-grade steel lever, high-grade steel roller	19	⤴ B	3SE5 000-0AA12		1	1 unit
	Twist levers 35 mm, offset						
	Metal lever, plastic roller	19	⤴ B	3SE5 000-0AA15		1	1 unit
Twist levers 30 mm, straight ¹⁾							
Metal lever, plastic roller	19	⤴ B	3SE5 000-0AA24		1	1 unit	
Metal lever, plastic roller	30	⤴ B	3SE5 000-0AA26		1	1 unit	
	Twist levers, adjustable length, with grid hole						
	Metal lever, plastic roller	19	⤴ B	3SE5 000-0AA60		1	1 unit
	Metal lever, high-grade steel roller	19	⤴ B	3SE5 000-0AA61		1	1 unit
	Metal lever, plastic roller	50	⤴ B	3SE5 000-0AA67		1	1 unit
	Metal lever, rubber roller	50	⤴ B	3SE5 000-0AA68		1	1 unit
	High-grade steel lever, plastic roller	19	⤴ B	3SE5 000-0AA62		1	1 unit
	High-grade steel lever, high-grade steel roller	19	⤴ B	3SE5 000-0AA63		1	1 unit
	Twist levers, adjustable length						
	Metal lever, plastic roller	19	A	3SE5 000-0AA50		1	1 unit
	Metal lever, high-grade steel roller	19	B	3SE5 000-0AA51		1	1 unit
Metal lever, plastic roller	30	B	3SE5 000-0AA55		1	1 unit	
Metal lever, plastic roller	50	B	3SE5 000-0AA57		1	1 unit	
Metal lever, rubber roller	50	B	3SE5 000-0AA58		1	1 unit	
High-grade steel lever, plastic roller	19	B	3SE5 000-0AA52		1	1 unit	
High-grade steel lever, high-grade steel roller	19	B	3SE5 000-0AA53		1	1 unit	
	Fork levers (for switches with snap-action contacts only)						
	2 metal levers, 2 plastic rollers	19	⤴ B	3SE5 000-0AT01		1	1 unit
	2 metal levers, 2 high-grade steel rollers	19	⤴ B	3SE5 000-0AT02		1	1 unit
	2 high-grade steel levers, 2 plastic rollers	19	⤴ B	3SE5 000-0AT03		1	1 unit
	2 high-grade steel levers, 2 high-grade steel rollers	19	⤴ B	3SE5 000-0AT04		1	1 unit
Rod actuators, type D acc. to EN 50041							
	Aluminum rod, length 200 mm	6	B	3SE5 000-0AA80		1	1 unit
	Spring rod, length 200 mm	6	B	3SE5 000-0AA81		1	1 unit
	Plastic rod, length 200 mm	6	B	3SE5 000-0AA82		1	1 unit

⊙ Positively driven actuator, necessary in safety circuits.

¹⁾ Can be clinch mounted (turned through 180°, rear of lever).

Limit Switches

SIRIUS 3SE5 International Limit Switches

Metal enclosures
Enclosure width 56 mm, XL

Selection and ordering data

Complete units

4 or 5 contacts · Degree of protection IP66/IP67 · Cable entry 3 × (M20 × 1.5)

Version	Contacts	LEDs	DT	Complete units	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	

Complete units¹⁾ · Enclosure width 56 mm, XL



Plain plunger

Plain plungers

With high-grade steel plunger

Snap-action contacts 2 × (1 NO + 1 NC) — ⊕ B 3SE5 162-0CB01 1 1 unit



Rounded plunger

Rounded plungers

With high-grade steel plungers, with 3 mm overtravel

Slow-action contacts 1 NO + 1 NC and — ⊕ B 3SE5 162-0EC02 1 1 unit
 Slow-action contacts with make-before-break 1 NO + 2 NC
 2 mm travel difference



Roller plunger

Roller plungers

With high-grade steel roller 13 mm, with 3 mm overtravel

Slow-action contacts 2 × (1 NO + 1 NC) — ⊕ B 3SE5 162-0BD02 1 1 unit
 Snap-action contacts 2 × (1 NO + 1 NC) — ⊕ A 3SE5 162-0CD02 1 1 unit



Roller lever

Roller levers

With metal lever and plastic roller 22 mm

Slow-action contacts 2 × (1 NO + 1 NC) — ⊕ B 3SE5 162-0BE01 1 1 unit
 Snap-action contacts 2 × (1 NO + 1 NC) — ⊕ A 3SE5 162-0CE01 1 1 unit

With metal lever and high-grade steel roller 22 mm

Snap-action contacts 2 × (1 NO + 1 NC) — ⊕ B 3SE5 162-0CE02 1 1 unit



Angular roller lever

Angular roller levers

With metal lever and plastic roller 22 mm

Snap-action contacts 2 × (1 NO + 1 NC) — ⊕ B 3SE5 162-0CF01 1 1 unit



Twist lever

Twist levers

With metal lever 27 mm and plastic roller 19 mm

Snap-action contacts 2 × (1 NO + 1 NC) — ⊕ A 3SE5 162-0CH01 1 1 unit

⚙ For online configurator see www.siemens.com/sirius/configurators.

⊕ Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ Popular versions.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 13/40.

Limit Switches

SIRIUS 3SE5 International Limit Switches

Metal enclosures
Enclosure width 56 mm, XL

Modular system

4 or 6 contacts · Degree of protection IP66/IP67 · Cable entry 3 × (M20 × 1.5)

Version	Contacts	LEDs	DT	Modular system	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	

Basic switches · Enclosure width 56 mm, XL



Basic switch

With 3 x M20 x 1.5 connecting thread

Slow-action contacts	2 × (1 NO + 1 NC)	—	⊕ ▶	3SE5 162-0BA00	1	1 unit
Snap-action contacts	2 × (1 NO + 1 NC)	—	⊕ A	3SE5 162-0CA00	1	1 unit
Slow-action contacts with make-before-break	2 × (1 NO + 2 NC)	—	⊕ A	3SE5 162-0DA00	1	1 unit

With increased corrosion protection¹⁾

Slow-action contacts	2 × (1 NO + 1 NC)	—	⊕ B	3SE5 162-0BA00-1CA0	1	1 unit
Snap-action contacts	2 × (1 NO + 1 NC)	—	⊕ B	3SE5 162-0CA00-1CA0	1	1 unit
Slow-action contacts with make-before-break	2 × (1 NO + 2 NC)	—	⊕ B	3SE5 162-0DA00-1CA0	1	1 unit

For online configurator see www.siemens.com/sirius/configurators.

⊕ Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator, necessary in safety circuits.

¹⁾ Use corresponding high-grade steel lever.

Note:

Selection aid see page 13/9.

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*
	mm		Order No.	Price per PU	

Operating mechanisms



Plain plunger

Plain plungers

High-grade steel plungers	10	⊕ A	3SE5 000-0AB01	1	1 unit
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Rounded plunger

Rounded plungers, type B acc. to EN 50041

High-grade steel plungers, with 3 mm overtravel	10	⊕ B	3SE5 000-0AC02	1	1 unit
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Roller plunger

Roller plungers, type C acc. to EN 50041

High-grade steel roller, with 3 mm overtravel	13	⊕ B	3SE5 000-0AD02	1	1 unit
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Roller lever

Roller levers

Metal lever, plastic roller	22	⊕ A	3SE5 000-0AE01	1	1 unit
Metal lever, high-grade steel roller	22	⊕ B	3SE5 000-0AE02	1	1 unit
High-grade steel lever, plastic roller	22	⊕ B	3SE5 000-0AE03	1	1 unit
High-grade steel lever, high-grade steel roller	22	⊕ B	3SE5 000-0AE04	1	1 unit



Angular roller lever

Angular roller levers

Metal lever, plastic roller	22	⊕ A	3SE5 000-0AF01	1	1 unit
Metal lever, high-grade steel roller	22	⊕ B	3SE5 000-0AF02	1	1 unit
High-grade steel lever, plastic roller	22	⊕ B	3SE5 000-0AF03	1	1 unit
High-grade steel lever, high-grade steel roller	22	⊕ B	3SE5 000-0AF04	1	1 unit



Spring rod

Spring rods (for switches with snap-action contacts only)

Plastic plunger and high-grade steel spring:	7				
• Length 142.5 mm (spring 50 mm, plunger 50 mm)		B	3SE5 000-0AR01	1	1 unit
• Length 76 mm (spring 23.5 mm, plunger 10 mm)		B	3SE5 000-0AR03	1	1 unit
• Length 242.5 mm (spring 150 mm, plunger 50 mm)		B	3SE5 000-0AR04	1	1 unit
High-grade steel plunger and spring:	7				
• Length 142.5 mm (spring 50 mm, plunger 50 mm)		B	3SE5 000-0AR02	1	1 unit

⊕ Positively driven actuator, necessary in safety circuits.

Limit Switches

SIRIUS 3SE5 International Limit Switches

Metal enclosures
Enclosure width 56mm and 56mm, XL

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2
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12
13

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*
	mm		Order No.	Price per PU	
Twist actuators					
	Twist actuators, metal (without lever)				
	• For twist levers and rod actuators, switching right and/or left, adjustable	⤵ A	3SE5 000-0AH00	1	1 unit
	• For fork levers, latching	⤵ B	3SE5 000-0AT10	1	1 unit
Levers for twist actuators					
	Twist levers 27 mm, offset, type A acc. to EN 50041				
	Metal lever, plastic roller	⤵ A	3SE5 000-0AA01	1	1 unit
	Metal lever, high-grade steel roller	⤵ A	3SE5 000-0AA02	1	1 unit
	Metal lever, roller with ball bearing	⤵ B	3SE5 000-0AA03	1	1 unit
	Metal lever, 2 plastic rollers	⤵ B	3SE5 000-0AA04	1	1 unit
	Metal lever, plastic roller	⤵ B	3SE5 000-0AA05	1	1 unit
	Metal lever, plastic roller	⤵ B	3SE5 000-0AA07	1	1 unit
	Metal lever, rubber roller	⤵ B	3SE5 000-0AA08	1	1 unit
	High-grade steel lever, plastic roller	⤵ B	3SE5 000-0AA11	1	1 unit
	High-grade steel lever, high-grade steel roller	⤵ B	3SE5 000-0AA12	1	1 unit
	Twist levers 35 mm, offset				
	Metal lever, plastic roller	⤵ B	3SE5 000-0AA15	1	1 unit
	Twist levers 30 mm, straight¹⁾				
	Metal lever, plastic roller	⤵ B	3SE5 000-0AA24	1	1 unit
	Metal lever, plastic roller	⤵ B	3SE5 000-0AA26	1	1 unit
	Twist levers, adjustable length, with grid hole				
	Metal lever, plastic roller	⤵ B	3SE5 000-0AA60	1	1 unit
	Metal lever, high-grade steel roller	⤵ B	3SE5 000-0AA61	1	1 unit
	Metal lever, plastic roller	⤵ B	3SE5 000-0AA67	1	1 unit
	Metal lever, rubber roller	⤵ B	3SE5 000-0AA68	1	1 unit
	High-grade steel lever, plastic roller	⤵ B	3SE5 000-0AA62	1	1 unit
	High-grade steel lever, high-grade steel roller	⤵ B	3SE5 000-0AA63	1	1 unit
	Twist levers, adjustable length				
	Metal lever, plastic roller	A	3SE5 000-0AA50	1	1 unit
	Metal lever, high-grade steel roller	B	3SE5 000-0AA51	1	1 unit
	Metal lever, plastic roller	30	3SE5 000-0AA55	1	1 unit
	Metal lever, plastic roller	50	3SE5 000-0AA57	1	1 unit
	Metal lever, rubber roller	50	3SE5 000-0AA58	1	1 unit
	High-grade steel lever, plastic roller	19	3SE5 000-0AA52	1	1 unit
	High-grade steel lever, high-grade steel roller	19	3SE5 000-0AA53	1	1 unit
	Fork levers (for switches with snap-action contacts only)				
	2 metal levers, 2 plastic rollers	⤵ B	3SE5 000-0AT01	1	1 unit
	2 metal levers, 2 high-grade steel rollers	⤵ B	3SE5 000-0AT02	1	1 unit
	2 high-grade steel levers, 2 plastic rollers	⤵ B	3SE5 000-0AT03	1	1 unit
	2 high-grade steel levers, 2 high-grade steel rollers	⤵ B	3SE5 000-0AT04	1	1 unit
	Rod actuators, type D acc. to EN 50041				
	Aluminum rod, length 200 mm	B	3SE5 000-0AA80	1	1 unit
	Spring rod, length 200 mm	B	3SE5 000-0AA81	1	1 unit
	Plastic rod, length 200 mm	B	3SE5 000-0AA82	1	1 unit
	Plastic rod, length 330 mm	B	3SE5 000-0AA83²⁾	1	1 unit

⤵ Positively driven actuator, necessary in safety circuits.

¹⁾ Can be clinch mounted (turned through 180°, rear of lever).

²⁾ For Enclosure width 56mm XL only.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Ambient temperature to -40 °C

Selection and ordering data

Modular system

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Modular system		PU (UNIT, SET, M)	PS*
				Configurator			
				Order No.	Price per PU		

Basic switches · Enclosure width 31 mm (with rounded plunger¹⁾)



Basic switch

With plunger

Snap-action contacts	1 NO + 1 NC	—	⊕ B	3SE5 212-0CC05-1AJ0	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0KC05-1AJ0	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⊕ B	3SE5 212-0LC05-1AJ0	1	1 unit

For online configurator see www.siemens.com/sirius/configurators.

⊕ Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator, necessary in safety circuits.

¹⁾ For enclosures with widths of 31 mm, the basic switch is a complete unit with rounded plungers.

Note:

Selection aid [see page 13/9](#).

Version	Diameter	DT	Modular system		PU (UNIT, SET, M)	PS*
	mm		Order No.	Price per PU		

Operating mechanisms



Roller plunger

Roller plungers, type C acc. to EN 50047

Plastic rollers	10	⊕ B	3SE5 000-0AD03-1AJ0	1	1 unit
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Roller lever

Roller levers, type E acc. to EN 50047

Metal lever, plastic roller	13	⊕ B	3SE5 000-0AE10-1AJ0	1	1 unit
High-grade steel lever, plastic roller	13	⊕ B	3SE5 000-0AE12-1AJ0	1	1 unit



Angular roller lever

Angular roller levers

Metal lever, plastic roller	13	⊕ B	3SE5 000-0AF10-1AJ0	1	1 unit
High-grade steel lever, plastic roller	13	⊕ B	3SE5 000-0AF12-1AJ0	1	1 unit

Twist actuators



Twist actuator

Twist actuators, plastic (without lever)

Switching right and/or left, adjustable		⊕ B	3SE5 000-0AK00-1AJ0	1	1 unit
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Levers for twist actuators

Twist lever straight, 21 mm, type A acc. to EN 50047

Metal lever, plastic roller	19	⊕ B	3SE5 000-0AA21-1AJ0	1	1 unit
High-grade steel lever, plastic roller	19	⊕ B	3SE5 000-0AA31-1AJ0	1	1 unit



Twist lever

Twist levers, adjustable length, with grid hole

Metal lever, plastic roller	19	⊕ B	3SE5 000-0AA60-1AJ0	1	1 unit
High-grade steel lever, plastic roller	19	⊕ B	3SE5 000-0AA62-1AJ0	1	1 unit



Twist lever, adjustable length

⊕ Positively driven actuator, necessary in safety circuits.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Ambient temperature to -40 °C

Complete units

2 or 3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Complete units	Configurator	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
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Complete units · Enclosure width 40 mm



Rounded plunger

Rounded plungers, type B acc. to EN 50041

With high-grade steel plungers, with 3 mm overtravel

Snap-action contacts	1 NO + 1 NC	—	⤵ B	3SE5 112-0CC02-1AJ0	1	1 unit
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Twist lever, adjustable length

Twist levers, adjustable length

With high-grade steel lever with grid hole and plastic roller 19 mm

Snap-action contacts	1 NO + 1 NC	—	⤵ B	3SE5 112-0CH62-1AJ0	1	1 unit
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For online configurator see www.siemens.com/sirius/configurators.

⤵ Positive opening according to IEC 60947-5-1, Appendix K or positively driven actuator, necessary in safety circuits.

Note:

If the device you require is not available as a complete unit, see "Modular System".

Modular system

2, 3 or 4 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Contacts	LEDs	DT	Modular system	Configurator	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
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Basic switches · Enclosure width 40 mm



Basic switch

With M20 □ 1.5 connecting thread

Snap-action contacts	1 NO + 1 NC	—	⤵ B	3SE5 112-0CA00-1AJ0	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⤵ B	3SE5 112-0KA00-1AJ0	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⤵ B	3SE5 112-0LA00-1AJ0	1	1 unit

Basic switches · Enclosure width 56 mm



Basic switch

With 3 x M20 x 1.5 connecting thread

Snap-action contacts	1 NO + 1 NC	—	⤵ B	3SE5 122-0CA00-1AJ0	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	⤵ B	3SE5 122-0KA00-1AJ0	1	1 unit
Snap-action contacts	1 NO + 2 NC	—	⤵ B	3SE5 122-0LA00-1AJ0	1	1 unit

Basic switches · Enclosure width 56 mm, XL



Basic switch

With 3 x M20 x 1.5 connecting thread

Slow-action contacts	2 × (1 NO + 1 NC)	—	⤵ B	3SE5 162-0BA00-1AJ0	1	1 unit
Snap-action contacts	2 × (1 NO + 1 NC)	—	⤵ B	3SE5 162-0CA00-1AJ0	1	1 unit

For online configurator see www.siemens.com/sirius/configurators.

⤵ Positive opening according to IEC 60947-5-1, Appendix K or positively driven actuator, necessary in safety circuits.

Note:

Selection aid [see page 13/9](#).

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures

Ambient temperature to -40 °C

Version		Diameter	DT	Modular system		PU (UNIT, SET, M)	PS*
		mm		Order No.	Price per PU		
Operating mechanisms							
	Rounded plungers, type B acc. to EN 50041						
	High-grade steel plungers, with 3 mm overtravel	10	 B	3SE5 000-0AC02-1AJ0		1	1 unit
Rounded plunger							
	Roller plungers, type C acc. to EN 50041						
	High-grade steel roller, with 3 mm overtravel	10	 B	3SE5 000-0AD02-1AJ0		1	1 unit
Roller plunger							
	Roller levers						
	Metal lever, plastic roller	13	 B	3SE5 000-0AE01-1AJ0		1	1 unit
	High-grade steel lever, plastic roller	13	 B	3SE5 000-0AE03-1AJ0		1	1 unit
	Roller lever						
	Angular roller levers						
	Metal lever, plastic roller	13	 B	3SE5 000-0AF01-1AJ0		1	1 unit
	High-grade steel lever, plastic roller	13	 B	3SE5 000-0AF03-1AJ0		1	1 unit
	Angular roller lever						
Twist actuators							
	Twist actuators, metal (without lever)						
	Switching right and/or left, adjustable		 B	3SE5 000-0AH00-1AJ0		1	1 unit
Twist actuator							
	Levers for twist actuators						
	Twist levers, type A acc. to EN 50041						
	Metal lever, plastic roller	19	 B	3SE5 000-0AA01-1AJ0		1	1 unit
	High-grade steel lever, plastic roller	19	 B	3SE5 000-0AA11-1AJ0		1	1 unit
Twist lever							
	Twist levers, adjustable length, with grid hole						
	Metal lever, plastic roller	19	 B	3SE5 000-0AA60-1AJ0		1	1 unit
	High-grade steel lever, plastic roller	19	 B	3SE5 000-0AA62-1AJ0		1	1 unit
	Twist lever, adjustable length						

⤵ Positively driven actuator, necessary in safety circuits.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Compact design

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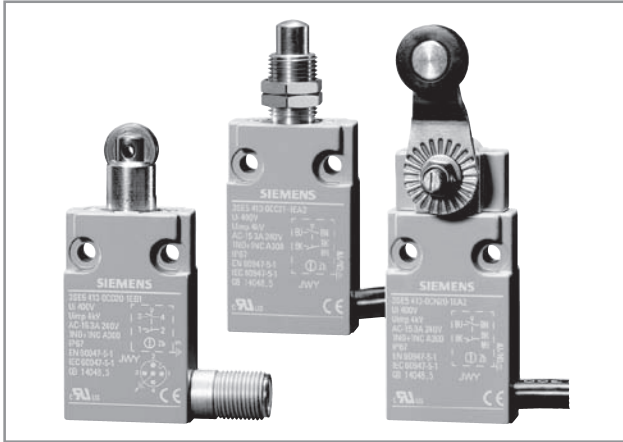
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Overview



Compact design in width 30 mm

Particularly in harsh environments or on equipment with limited space, the small 3SE5 4 position switches in compact design with a depth of 16 mm and a weight of only 80 g (without cable) are ideal. Above all the versions with molded cable can be mounted in the most confined places.

3SE5 4 compact position switches are available in two different widths as complete units:

- The 3SE5 413 series complies with the EU standard and features a 30 mm wide enclosure with drilled holes at a distance of 20 mm.
- The 3SE5 423 series meets the requirements of the US market and features a 40 mm wide enclosure with drilled holes at a spacing of 25 mm.

Both the enclosure and the twist actuator are made of metal and comply with the high IP67 degree of protection. Following actuators are available:

- Rounded plungers
- Rounded plungers with central fixing
- Rounded plungers with external seal
- Roller plungers
- Roller plunger with central fixing
- Twist levers

The contact block is designed with snap-action contacts 1 NO + 1 NC. The NC contact complies with the requirements for positive opening acc. to IEC 60947-5-1.

Use in safety circuits up to Category 4 according to EN ISO 13849-1.

Connection:

- With molded cable, 2 m or 5 m long
- With M12 connector socket

Benefits

- Very compact yet with the same rating as the 3SE51 standard switches, for notable space savings in confined installation conditions
- Various actuator versions available
- Actuator heads rotatable in increments of 90°
- Time is saved when mounting the fully assembled unit
- With metal enclosure of degree of protection IP67, ideal for use in rough industrial environments
- Insensitive to electromagnetic interference

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Compact design

Selection and ordering data

2 snap-action contacts 1 NO + 1 NC · Degree of protection IP67 · With connecting cable or M12 connector socket

Operating mechanism	Enclosure width	DT	Configurator	PU (UNIT, SET, M)	PS*
	mm		Order No. Price per PU		
Complete units · Enclosure width 30 or 40 mm					
Rounded plungers					
 Rounded plunger	• Standard mounting				
	- With 2 m cable 5 x 0.75 mm ²	30	⊙ A	3SE5 413-0CC20-1EA2	1 1 unit
		40	⊙ ▶	3SE5 423-0CC20-1EA2	1 1 unit
	- With 5 m cable 5 x 0.75 mm ²	30	⊙ B	3SE5 413-0CC20-1EA5	1 1 unit
	- With M12 connector socket	30	⊙ A	3SE5 413-0CC20-1EB1	1 1 unit
		40	⊙ A	3SE5 423-0CC20-1EB1	1 1 unit
 With central fixing	• With central fixing M12 x 1				
	- With 2 m cable 5 x 0.75 mm ²	30	⊙ ▶	3SE5 413-0CC21-1EA2	1 1 unit
		40	⊙ A	3SE5 423-0CC21-1EA2	1 1 unit
 With external seal	• With external seal				
	- With 2 m cable 5 x 0.75 mm ²	30	⊙ A	3SE5 413-0CC22-1EA2	1 1 unit
		40	⊙ A	3SE5 423-0CC22-1EA2	1 1 unit
Roller plungers					
 Roller plunger	• Standard mounting				
	- With 2 m cable 5 x 0.75 mm ²	30	⊙ ▶	3SE5 413-0CD20-1EA2	1 1 unit
		40	⊙ ▶	3SE5 423-0CD20-1EA2	1 1 unit
	- With 5 m cable 5 x 0.75 mm ²	30	⊙ B	3SE5 413-0CD20-1EA5	1 1 unit
	- With M12 connector socket	30	⊙ A	3SE5 413-0CD20-1EB1	1 1 unit
		40	⊙ A	3SE5 423-0CD20-1EB1	1 1 unit
 With plug	• With central fixing M12 x 1				
	- With 2 m cable 5 x 0.75 mm ²	30	⊙ A	3SE5 413-0CD21-1EA2	1 1 unit
		40	⊙ A	3SE5 423-0CD21-1EA2	1 1 unit
 With plug, enclosure width 40 mm	• Actuator head rotated 90°				
	- With 2 m cable 5 x 0.75 mm ²	30	⊙ A	3SE5 413-0CD23-1EA2	1 1 unit
Twist levers					
 Twist lever	• Standard mounting				
	- With 2 m cable 5 x 0.75 mm ²	30	⊙ ▶	3SE5 413-0CN20-1EA2	1 1 unit
		40	⊙ A	3SE5 423-0CN20-1EA2	1 1 unit
	- With 5 m cable 5 x 0.75 mm ²	30	⊙ A	3SE5 413-0CN20-1EA5	1 1 unit
	- With M12 connector socket	30	⊙ A	3SE5 413-0CN20-1EB1	1 1 unit
		40	⊙ A	3SE5 423-0CN20-1EB1	1 1 unit

⚙ For online configurator see www.siemens.com/sirius/configurators.

⊙ Positive opening according to IEC 60947-5-1, Appendix K.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, open-type design

Overview



Open-type design

Their compact design makes these switches particularly suitable for use in confined conditions. The fixing dimensions and operating points are according to EN 50047.

The switches are equipped with two or three contacts in slow-action or snap-action versions. The stroke is 6 mm.

The empty enclosure can be equipped with all switch block versions (see page 13/49).

Selection and ordering data

2 or 3 contacts · Degree of protection IP20 (2 contacts), IP10 (3 contacts)

Version	Contacts	DT	Configurator	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
Plastic enclosures • Enclosure width 30 mm							
With teflon plunger, Ø 6 mm							
	Slow-action contacts	1 NO + 1 NC	➡	3SE5 250-0BC05		1	1 unit
	Snap-action contacts	1 NO + 1 NC	➡	3SE5 250-0CC05		1	1 unit
	Slow-action contacts	1 NO + 2 NC	➡	3SE5 250-0KC05		1	1 unit
	Snap-action contacts	1 NO + 2 NC	➡	3SE5 250-0LC05		1	1 unit
	Slow-action contacts with make-before-break	1 NO + 2 NC	➡ A	3SE5 250-0MC05		1	1 unit
	Slow-action contacts	2 NO + 1 NC	➡	3SE5 250-0PC05		1	1 unit
	Empty enclosures without contact block	—	➡ B	3SE5 250-0AC05		1	1 unit
	Contact blocks with 2 contacts for open-type design¹⁾						
	• Slow-action contacts	1 NO + 1 NC	➡ B	3SE5 050-0BA00		1	1 unit
	• Snap-action contacts	1 NO + 1 NC					
	- Standard		➡ B	3SE5 050-0CA00		1	1 unit
	- 2 × 2 mm switching interval		➡ B	3SE5 050-0GA00		1	1 unit
	- Short stroke		➡ B	3SE5 050-0NA00		1	1 unit

➡ For online configurator see www.siemens.com/sirius/configurators

➡ Positive opening according to IEC 60947-5-1, Appendix K.

¹⁾ Contact blocks with 3 contacts see page 13/49.

Limit Switches

SIRIUS 3SE5 International Limit Switches

Accessories

Selection and ordering data

Version		DT	Order No.	List Price \$ per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Plug-in connections for M20 × 1.5 connecting threads								
		3SY3 131	Connector sockets (6-pole+PE), for M20x1.5 B For max. 250 V, 10 A With 0.75 mm ² connecting cable, plastic, degree of protection IP65, ambient temperature –40 to +90 °C		1	1 unit	102	0.030
		3SY3 136	Cable boxes (6-pole + PE) ¹⁾ A With terminal compartment, can be pre-assembled, plastic, degree of protection IP65		1	1 unit	102	0.065
		3SY3 127	Connector sockets (4-pole), M12, for M20 × 1.5, fixed B For max 250 V, 4 A, U _{imp} = 2500 V With four 0.25 mm ² connecting cables, plastic, degree of protection IP67, ambient temperature –40 to +85 °C		1	1 unit	102	0.010
		3RX8 000	Cable boxes (4-pole), M12, with terminal compartment, can be pre-assembled A Angular cable boxes (4-pole), M12, with terminal compartment, can be pre-assembled A		1	1 unit	574	0.015
		3SY3 127	Connector sockets (5-pole), M12, for M20 × 1.5, fixed B For max 125 V, 4 A, U _{imp} = 1500 V With five 0.25 mm ² connecting cables, plastic, degree of protection IP67, ambient temperature –40 to +85 °C		1	1 unit	102	0.010
		3RX8 000	Cable boxes (5-pole), M12, with terminal compartment, can be pre-assembled A Angular cable boxes (5-pole), M12, with terminal compartment, can be pre-assembled A		1	1 unit	574	0.016
		3SY3 127	Connector sockets (8-pole), M12, for M20 × 1.5, fixed, metal version B For max 30 V, 2 A, U _{imp} = 800 V With eight 0.25 mm ² connecting cables, metal, degree of protection IP67, ambient temperature –40 to +85 °C		1	1 unit	102	0.025
		3RX8 000	Cable boxes (8-pole), M12 A With 5 m PUR cable, 8 × 0.25 mm ² , IP67		1	1 unit	574	0.335
Adaptors for 3SE. (with M 16)								
		3SX1997	metal M16 x 1.5 to 1/2" NPT ▶	3SX1997	1	1 unit		0.022
Adaptors for 3SE2 (with M 20)								
		3SX9918	plastic M20 x 1.5 wire gland ▶	3SB3901-0CK	1	1 unit		0.011
		3SX1998	metal M20 x 1.5 to 1/2" NPT ▶	3SX1998	1	1 unit		0.022
		3SX9926	plastic M20 x 1.5 to 1/2" NPT	3SX9918	1	1 unit		0.012
			plastic cable gland, M20 x 1.5	3SX9926	1	1 unit		0.010
Adaptors for 3SE. (with M 25)								
		3SX1999	metal M 25 x 1.5 to 1/2" NPT ▶	3SX1999	1	1 unit		0.022

¹⁾ For wiring, a crimping tool is necessary, max. conductor cross-section 1 mm².

Limit Switches

SIRIUS 3SE5 International Limit Switches

Accessories and spare parts

Version	Color/ contacts	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
Optional accessories for 3SE52						
	Protective caps, rubber, for rounded plungers acc. to EN 50047, 3SE5 ...-..C05	Black	A	3SE5 000-0AC30	1	1 unit
Spare parts for 3SE51, 3SE52						
	Empty enclosures, plastic	Turquoise				
	Enclosure width 31 mm		B	3SE5 232-0AC05	1	1 unit
	• With increased corrosion protection		B	3SE5 232-0AC05-1CA0	1	1 unit
	Enclosure width 50 mm		B	3SE5 242-0AC05	1	1 unit
	• With increased corrosion protection		B	3SE5 242-0AC05-1CA0	1	1 unit
Empty enclosures, metal						
	Enclosure width 31 mm		B	3SE5 212-0AC05	1	1 unit
	• With increased corrosion protection		B	3SE5 212-0AC05-1CA0	1	1 unit
	Enclosure width 40 mm		B	3SE5 112-0AA00	1	1 unit
	• With increased corrosion protection		B	3SE5 112-0AA00-1CA0	1	1 unit
	Enclosure width 56 mm		B	3SE5 122-0AA00	1	1 unit
	• With increased corrosion protection		B	3SE5 122-0AA00-1CA0	1	1 unit
	Enclosure width 56 mm, XL ¹⁾		B	3SE5 162-0AA00	1	1 unit
Contact blocks with 2 contacts²⁾						
	• Slow-action contacts	1 NO + 1 NC	➡ ➡	3SE5 000-0BA00	1	1 unit
	• Snap-action contacts	1 NO + 1 NC				
	- Standard		➡ B	3SE5 000-0CA00	1	1 unit
	- Gold-plated contacts		➡ B	3SE5 000-0CA00-1AC1	1	1 unit
	- 2 x 2 mm switching interval		➡ B	3SE5 000-0GA00	1	1 unit
	- Short stroke		➡ B	3SE5 000-0NA00	1	1 unit
Contact blocks with 3 contacts						
	• Slow-action contacts	1 NO + 2 NC	➡ B	3SE5 000-0KA00	1	1 unit
	• Snap-action contacts	1 NO + 2 NC	➡ B	3SE5 000-0LA00	1	1 unit
	• Slow-action contacts with make-before-break	1 NO + 2 NC	➡ A	3SE5 000-0MA00	1	1 unit
	• Slow-action contacts	2 NO + 1 NC	A	3SE5 000-0PA00	1	1 unit
Contact blocks for enclosure XL¹⁾						
	• Slow-action contacts	1 NO + 1 NC	➡ B	3SE5 060-0BA00	1	1 unit
	• Snap-action contacts	1 NO + 1 NC	➡ B	3SE5 060-0CA00	1	1 unit
	• Slow-action contacts with make-before-break	1 NO + 2 NC	➡ B	3SE5 060-0MA00	1	1 unit

➡ Positive opening according to IEC 60947-5-1, Appendix K.

1) Equip XL enclosures only with contact combinations according to pages 12/11, 12/42 and 12/43.

2) Unsuitable for open-type position switches; see page 13/47.

Limit Switches

SIRIUS 3SE5 International Limit Switches

Accessories and spare parts

Version	Rated voltage LED	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
V						
Spare parts for 3SE51, 3SE52						
 31 mm, turquoise with LED	Covers for plastic enclosures, width 31 mm					
	• Turquoise with LED	24 DC	B	3SE5 230-1AA00	1	1 unit
		230 AC	B	3SE5 230-3AA00	1	1 unit
	• Yellow	—	B	3SE5 230-0AA00-1AG0	1	1 unit
	• Yellow with LED	24 DC	B	3SE5 230-1AA00-1AG0	1	1 unit
		230 AC	B	3SE5 230-3AA00-1AG0	1	1 unit
 40 mm, yellow with LED	Covers for plastic enclosures, width 40 mm					
	• Turquoise with LED	24 DC	B	3SE5 130-1AA00	1	1 unit
		230 AC	B	3SE5 130-3AA00	1	1 unit
	• Yellow	—	B	3SE5 130-0AA00-1AG0	1	1 unit
	• Yellow with LED	24 DC	B	3SE5 130-1AA00-1AG0	1	1 unit
		230 AC	B	3SE5 130-3AA00-1AG0	1	1 unit
 50 mm, turquoise with LED	Covers for plastic enclosures, width 50 mm					
	• Turquoise with LED	24 DC	B	3SE5 240-1AA00	1	1 unit
		230 AC	B	3SE5 240-3AA00	1	1 unit
	• Yellow	—	B	3SE5 240-0AA00-1AG0	1	1 unit
	• Yellow with LED	24 DC	B	3SE5 240-1AA00-1AG0	1	1 unit
		230 AC	B	3SE5 240-3AA00-1AG0	1	1 unit
 31 mm, turquoise with LED	Covers for metal enclosures, width 31 mm					
	• Turquoise with LED	24 DC	B	3SE5 210-1AA00	1	1 unit
		230 AC	B	3SE5 210-3AA00	1	1 unit
	• Yellow	—	B	3SE5 210-0AA00-1AG0	1	1 unit
	• Yellow with LED	24 DC	B	3SE5 210-1AA00-1AG0	1	1 unit
		230 AC	B	3SE5 210-3AA00-1AG0	1	1 unit
 40 mm, yellow with LED	Covers for metal enclosures, width 40 mm					
	• Turquoise with LED	24 DC	B	3SE5 110-1AA00	1	1 unit
		230 AC	B	3SE5 110-3AA00	1	1 unit
	• Yellow	—	B	3SE5 110-0AA00-1AG0	1	1 unit
	• Yellow with LED	24 DC	B	3SE5 110-1AA00-1AG0	1	1 unit
		230 AC	B	3SE5 110-3AA00-1AG0	1	1 unit
 56 mm, yellow with LED	Covers for metal enclosures, width 56 mm					
	• Turquoise with LED	24 DC	B	3SE5 120-1AA00	1	1 unit
		230 AC	B	3SE5 120-3AA00	1	1 unit
	• Yellow	—	B	3SE5 120-0AA00-1AG0	1	1 unit
	• Yellow with LED	24 DC	B	3SE5 120-1AA00-1AG0	1	1 unit
		230 AC	B	3SE5 120-3AA00-1AG0	1	1 unit
	Covers for XL metal enclosures, width 56 mm					
	• Yellow	—	B	3SE5 160-0AA00-1AG0	1	1 unit

Technical specifications

Type		3SE5 1..., 3SE5 2..	3SE5 41.	3SE5 42.
General data				
Standards		IEC 60947-5-1, EN 60947-5-1		
Rated insulation voltage U_i	V	400	400	
Pollution degree acc. to IEC 60664-1		Class 3	Class 3	
Rated impulse withstand voltage U_{imp}	kV	6	4	
Rated operational voltage U_e	V	400 V AC, over 300 V AC only for equal potential ¹⁾		300 AC
Conventional thermal current I_{th}	A	10	6	10
Rated operational current I_e		2-pole	3-pole	2-pole
• With alternating current 50/60 Hz		I_e /AC-15	I_e /AC-15	I_e /AC-15
- At 24 V	A	6	6	6
- At 120 V	A	6	3	6
- At 240 V	A	3	1.5	3
• For direct current		I_e /DC-13	I_e /DC-13	I_e /DC-13
- At 24 V	A	3	3	3
- At 125 V	A	0.55	0.55	0.55
- At 250 V	A	0.27	0.27	0.27
Short-circuit protection²⁾				
• With DIAZED fuse links, gG operational class	A	6		
• With miniature circuit breaker, Char. C	A	1	2	1
Mechanical endurance				
• Basic switches		15 × 10 ⁶ operating cycles	30 × 10 ⁶ operating cycles	30 × 10 ⁶ operating cycles
• With spring rod, 3SE5 ...-R..		10 × 10 ⁶ operating cycles	—	—
• With fork lever 3SE5 1...-T..		1 × 10 ⁶ operating cycles	—	—
Electrical endurance				
• With 3RH.1, 3RT contactors in size S00, S0		10 × 10 ⁶ operating cycles	10 × 10 ⁶ operating cycles	5 × 10 ⁶ operating cycles
• For utilization category AC-15 when switching off I_e /AC-15 at 240 V		0.1 × 10 ⁶ operating cycles	—	—
• With utilization category DC-12/DC-13		For direct current depending on the loading of the switch		
Switching frequency		6000 operating cycles/h	1800 operating cycles/h	
With 3RH.1, 3RT contactors in size S00, S0				
Switching accuracy	mm	0.05		
For repeated switching, measured at the plunger of the contact block				
• With twist actuators		1°		
Rated data acc. to  and 				
• Rated voltage	V	300		
• Uninterrupted current	A	6		
• Switching capacity		Heavy duty, A 300 / B 300 / Q 300	A 300 / Q 300	

¹⁾ For slow-action contacts 1 NO + 2 NC with make-before-break and 2 NO + 1 NC the following applies: over 250 V AC only equal potential

²⁾ Without any welds according to IEC 60947-5-1.

Type		3SE5 23.	3SE5 13	3SE5 24.	3SE5 21.	3SE5 11.	3SE5 12., 3SE5 16.	3SE5 4..	3SE5 25.
Enclosure									
Enclosure									
• Material		Ultramid A3X2G7			Zinc diecasting GD Zn Al4 Cu1				—
• Width	mm	31	40	50	31	40	56	30 / 40	30
Degree of protection acc. to IEC 60529		IP65		IP66/IP67 ¹⁾				IP67	IP20, IP10
Ambient temperature									
• During operation	°C	–25 ... +85						–25 ... +85	–25 ... +85
• In operation, switch with LEDs	°C	–25 ... +70						—	—
• Storage, transport	°C	–40 ... +90						–40 ... +90	–40 ... +90
Mounting position		Any							
Connection									
Cable entry		1 × (M20 × 1.5)		2 × (M20 × 1.5)	1 × (M20 × 1.5)		3 × (M20 × 1.5)	—	—
Conductor cross-sections ²⁾									
• Solid	mm²	2 × (0.5 ... 0.75), 1 × (0.5 ... 1.5)							
• Finely stranded with end sleeve	mm²	2 × (0.5 ... 1.5)							
Tightening torque, contact block		Nm							
Protective conductor connection inside enclosure		—			M3.5		—	—	—

¹⁾ For twist actuators with spring rod and rod actuators: IP65/IP67.

²⁾ For the maximum number of connectable conductors for the respective contact block see operating instructions.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure widths 31 mm and 50 mm

Configuration

Actuation and operating travel (angle) for enclosure width 31 mm and 50 mm

Operation by bar (standard) ⊙ Operating point acc. to EN 50047 (snap-action) * Operating point on return (snap-action) → Positive opening acc. to EN 60947-5-1 → Direction of operation v _{max} Max. actuating speed ■ Contact closed □ Contact open		Slow-action contacts 1 NO + 1 NC Ident. No. 11		1 NO + 2 NC Ident. No. 12		Snap-action contacts 1 NO + 1 NC Ident. No. 11		1 NO + 2 NC Ident. No. 12					
Rounded plungers, type B 3SE5 2...-C05 v _{max} = 1 m/s Minimum force required in direction of operation: 18 N		Actuation along plunger axis -BC05 Ident. No. 11		-KC05 Ident. No. 12		-CC05, -HC05 Ident. No. 11		-FC05 Short stroke		-GC05 Switching interval 2 x 2 mm		-LC05 Ident. No. 12	
Angular roller levers 3SE5 2...-F1 v _{max} = 1 m/s Minimum force required in direction of operation: 9 N		Actuation along plunger axis -BF10 Ident. No. 11		-KF10 Ident. No. 12		-HF10 Ident. No. 11		-FC05 + head¹⁾ Short stroke		-GC05 + head¹⁾ Switching interval 2 x 2 mm		-LF10 Ident. No. 12	
Operation by bar (standard) ⊙ Operating point acc. to EN 50047 (snap-action) * Operating point on return (snap-action) → Positive opening acc. to EN 60947-5-1 → Direction of operation v _{max} Max. actuating speed		Slow-action contacts ■ Contact closed □ Contact open				Snap-action contacts ■ Contact closed □ Contact open							
Roller plungers 3SE5 2...-D03, -D04 Form C v _{max} = 1 m/s Minimum force required in direction of operation: 18 N		Central fixing 3SE5 2...-D10, -D11 v _{max} = 1 m/s Minimum force required in direction of operation: 18 N		Lateral actuation 3SE5 2...-BD03 Ident. No. 11		Lateral actuation 3SE5 2...-HD03, -HD10 Ident. No. 11		Lateral actuation 3SE5 2...-FC05 + head¹⁾ Ident. No. 11		Lateral actuation 3SE5 2...-LD03 Ident. No. 12			

¹⁾ The basic switch and actuator head/actuator head must be ordered separately.

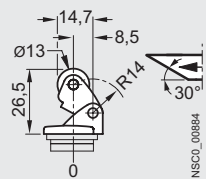
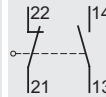
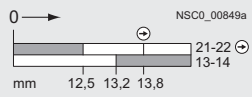
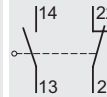
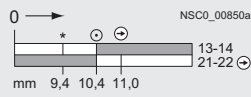
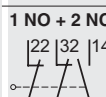
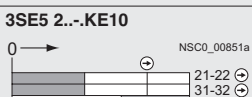
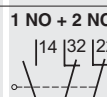
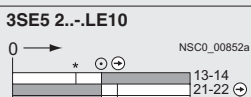
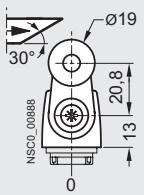
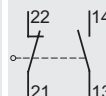
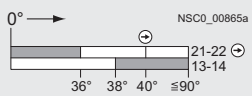
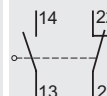
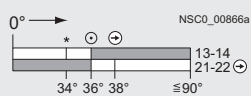
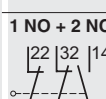
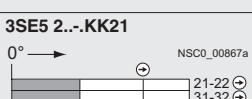
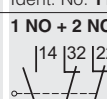
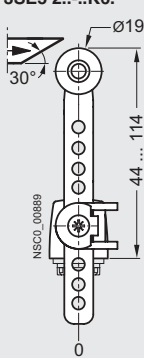
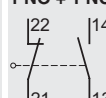
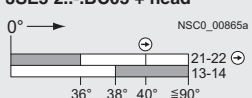
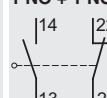
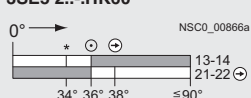
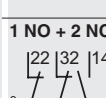
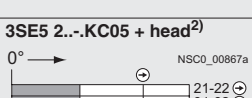
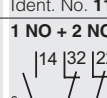
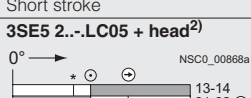
Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure widths 31 mm and 50 mm

Configuration

Actuation and operating travel (angle) for enclosure width 31 mm and 50 mm

⊙ Operating point acc. to EN 50047 (snap-action) * Operating point on return (snap-action) → Positive opening acc. to EN 60947-5-1 → Direction of operation v_{max} Max. actuating speed	■ Contact closed □ Contact open	■ Contact closed □ Contact open
Roller levers, type E	Lateral actuation	Lateral actuation
3SE5 2...-E1.  v_{max} = 1 m/s Minimum force required in direction of operation: 9 N	1 NO + 1 NC  Ident. No. 11 3SE5 2...-BE10  Ident. No. 11	1 NO + 1 NC  Ident. No. 11 3SE5 2...-HE10  Ident. No. 11
	1 NO + 2 NC  Ident. No. 12 3SE5 2...-KE10  Ident. No. 12	1 NO + 2 NC  Ident. No. 12 3SE5 2...-LE10  Ident. No. 12
Twist levers¹⁾, type A	Deflection in direction of rotation	Deflection in direction of rotation
3SE5 2...-K2.  v_{max} = 1.5 m/s Minimum torque in direction of operation: 0.25 Nm	1 NO + 1 NC  Ident. No. 11 3SE5 2...-BK21  Ident. No. 11	1 NO + 1 NC  Ident. No. 11 3SE5 2...-HK21  Ident. No. 11
	1 NO + 2 NC  Ident. No. 12 3SE5 2...-KK21  Ident. No. 12	1 NO + 2 NC  Ident. No. 12 3SE5 2...-LK21  Ident. No. 12
Twist levers¹⁾, adjustable length	Deflection in direction of rotation	Deflection in direction of rotation
3SE5 2...-K6.  v_{max} = 1.5 m/s Minimum torque in direction of operation: 0.25 Nm	1 NO + 1 NC  Ident. No. 11 3SE5 2...-BC05 + head²⁾  Ident. No. 11	1 NO + 1 NC  Ident. No. 11 3SE5 2...-HK60  Ident. No. 11
	1 NO + 2 NC  Ident. No. 12 3SE5 2...-KC05 + head²⁾  Ident. No. 12	1 NO + 2 NC  Ident. No. 12 3SE5 2...-LC05 + head²⁾  Ident. No. 12

¹⁾ Adjustment of the lever in increments of 10°, maximum deflection 90°.

²⁾ The basic switch and actuator head must be ordered separately.

Limit Switches

SIRIUS 3SE5 International Limit Switches

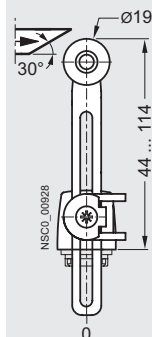
3SE5, plastic enclosures
Enclosure widths 31 mm and 50 mm

Operation by bar (standard)

- Operating point acc. to EN 50041/47 (snap-action)
- * Operating point on return (snap-action)
- ⊕ Positive opening acc. to EN 60947-5-1
- Direction of operation
- v_{max} Max. actuating speed

Twist levers¹⁾, adjustable length

3SE5 2...-K5.

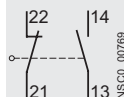


$v_{max} = 1.5 \text{ m/s}$
Minimum torque
in direction of operation: 0.25 Nm

Slow-action contacts

- Contact closed
- Contact open

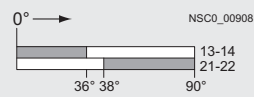
1 NO + 1 NC



Ident. No. 11

Deflection in direction of rotation

3SE5 2...-BK50

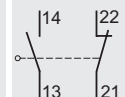


Ident. No. 11

Snap-action contacts

- Contact closed
- Contact open

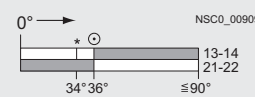
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Ident. No. 11

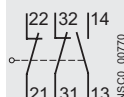
Deflection in direction of rotation

3SE5 2...-HK50



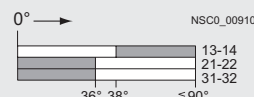
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1 NO + 2 NC



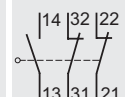
Ident. No. 12

3SE5 2...-KC05 + head²⁾



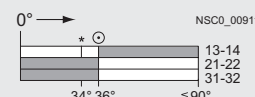
Ident. No. 12

1 NO + 2 NC



Ident. No. 12

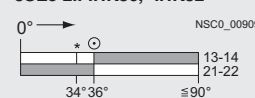
3SE5 2...-FC05 + head²⁾



Ident. No. 11

Deflection in direction of rotation

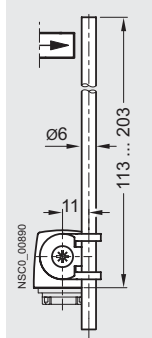
3SE5 2...-HK80, -HK82



Ident. No. 11

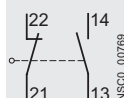
Rod actuators¹⁾, type D

3SE5 2...-K8.



$v_{max} = 1.5 \text{ m/s}$
Minimum torque
in direction of operation: 0.25 Nm

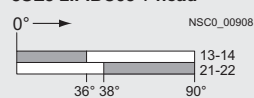
1 NO + 1 NC



Ident. No. 11

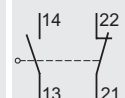
Deflection in direction of rotation

3SE5 2...-BC05 + head²⁾



Ident. No. 11

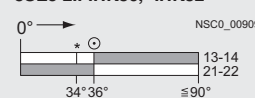
1 NO + 1 NC



Ident. No. 11

Deflection in direction of rotation

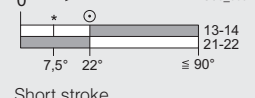
3SE5 2...-FC05 + head²⁾



Ident. No. 11

Deflection in direction of rotation

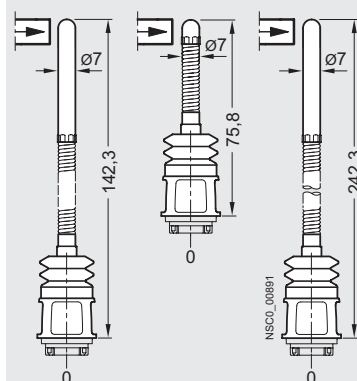
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Ident. No. 12

Spring rods

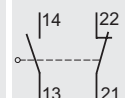
3SE5 2...-R0.



$v_{max} = 1 \text{ m/s}$
Minimum force required
in direction of operation: 9 N

The spring rods can be used only with snap-action contacts.

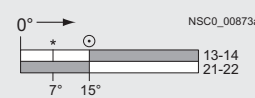
1 NO + 1 NC



Ident. No. 11

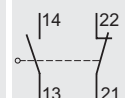
Deflection of spring rod

3SE5 2...-HR01



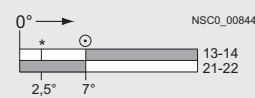
Ident. No. 11

1 NO + 1 NC



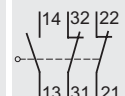
Ident. No. 11

3SE5 2...-FC05 + head²⁾



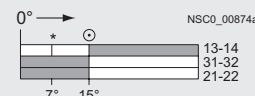
Ident. No. 11

1 NO + 2 NC



Ident. No. 12

3SE5 2...-LC05 + head²⁾



Ident. No. 12

¹⁾ Adjustment of the lever in increments of 10°, maximum deflection 90°.

²⁾ The basic switch and actuator head must be ordered separately.

Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, metal enclosures
Enclosure widths 40 mm and 56 mm

1
2
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11
12
13

Configuration

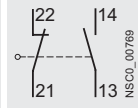
Actuation and operating travel (angle) for enclosure width 40 mm and 56 mm

Operation by bar (standard)

- Operating point acc. to EN 50041 (snap-action)
- * Operating point on return (snap-action)
- Positive opening acc. to EN 60947-5-1
- Direction of operation
- v_{max} Max. actuating speed
- Contact closed
- Contact open

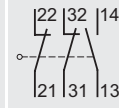
Slow-action contacts

1 NO + 1 NC



Ident. No. 11

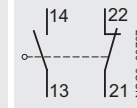
1 NO + 2 NC



Ident. No. 12

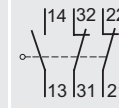
Snap-action contacts

1 NO + 1 NC



Ident. No. 11

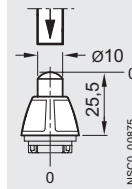
1 NO + 2 NC



Ident. No. 12

Rounded plungers, type B

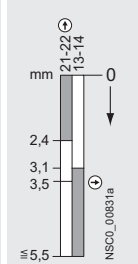
3SE5 1...-C02



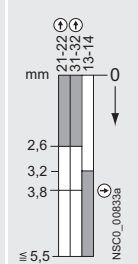
$v_{max} = 1.5 \text{ m/s}$
Minimum force required
in direction of operation: 18 N

Actuation along plunger axis

3SE5 1...-BC02

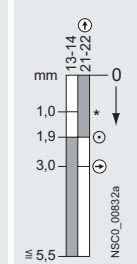


3SE5 1...-KC02

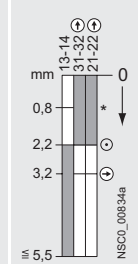


Actuation along plunger axis

3SE5 1...-CC02

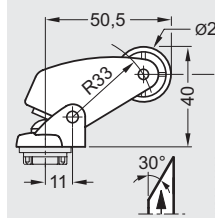


3SE5 1...-LC02



Angular roller levers

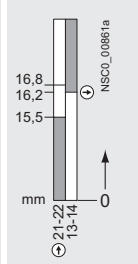
3SE5 112...F0.



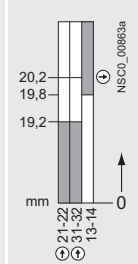
$v_{max} = 2.5 \text{ m/s}$
Minimum force required
in direction of operation: 9 N

Actuation along plunger axis

3SE5 1...-BF01

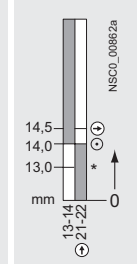


3SE5 1...-KA00 + head¹⁾

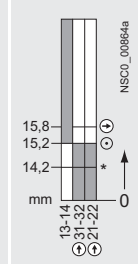


Actuation along plunger axis

3SE5 1...-CF01



3SE5 1...-LF01



Operation by bar (standard)

- Operating point acc. to EN 50041 (snap-action)
- * Operating point on return (snap-action)
- Positive opening acc. to EN 60947-5-1
- Direction of operation
- v_{max} Max. actuating speed
- Contact closed
- Contact open

Slow-action contacts

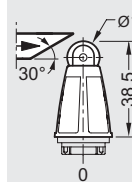
- Contact closed
- Contact open

Snap-action contacts

- Contact closed
- Contact open

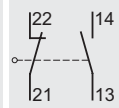
Roller plungers, type C

3SE5 1...-D02



$v_{max} = 1 \text{ m/s}$
Minimum force required
in direction of operation: 18 N

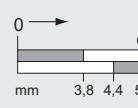
1 NO + 1 NC



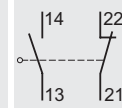
Ident. No. 11

Lateral actuation

3SE5 1...-BD02



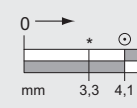
1 NO + 1 NC



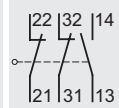
Ident. No. 11

Lateral actuation

3SE5 1...-CD02

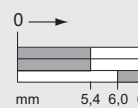


1 NO + 2 NC

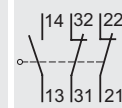


Ident. No. 12

3SE5 1...-KD02

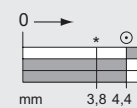


1 NO + 2 NC



Ident. No. 12

3SE5 1...-LD02



¹⁾ The basic switch and actuator head must be ordered separately.

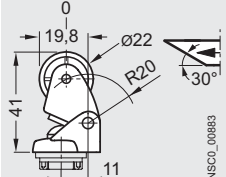
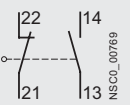
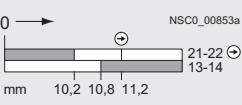
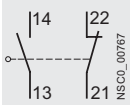
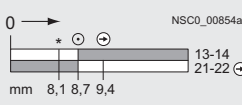
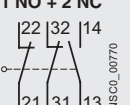
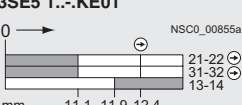
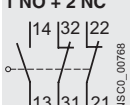
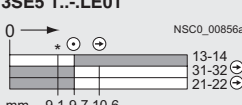
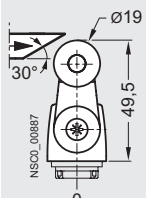
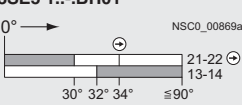
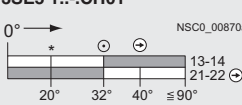
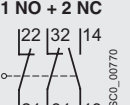
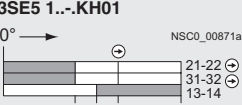
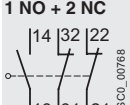
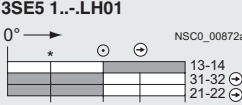
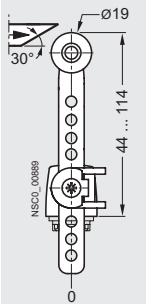
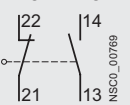
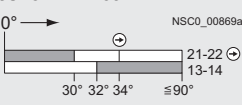
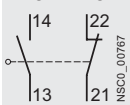
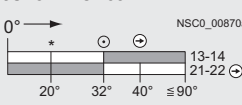
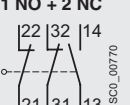
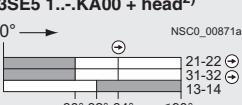
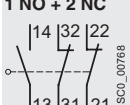
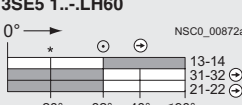
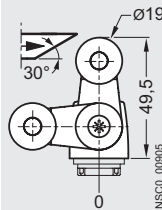
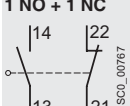
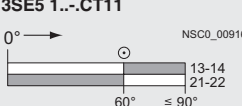
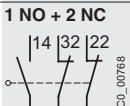
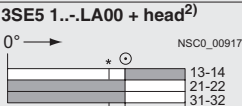
Limit Switches

SIRIUS 3SE5 International Limit Switches

3SE5, plastic enclosures
Enclosure widths 31 mm and 50 mm

Configuration

Actuation and operating travel (angle) for enclosure width 40 mm and 56 mm

Operation by bar (standard)		Slow-action contacts		Snap-action contacts	
- Operating point acc. to EN 50041 (snap-action) * Operating point on return (snap-action) - Positive opening acc. to EN 60947-5-1 → Direction of operation v_{max} Max. actuating speed		- Contact closed - Contact open		- Contact closed - Contact open	
Roller levers		Lateral actuation		Lateral actuation	
3SE5 1...-E0.  $v_{max} = 2.5 \text{ m/s}$ Minimum force required in direction of operation: 9 N		1 NO + 1 NC  Ident. No. 11	3SE5 1...-BE01  mm 10,2 10,8 11,2	1 NO + 1 NC  Ident. No. 11	3SE5 1...-CE01  mm 8,1 8,7 9,4
		1 NO + 2 NC  Ident. No. 12	3SE5 1...-KE01  mm 11,1 11,9 12,4	1 NO + 2 NC  Ident. No. 12	3SE5 1...-LE01  mm 9,1 9,7 10,6
Twist levers ¹⁾ , type A		Deflection in direction of rotation		Deflection in direction of rotation	
3SE5 1...-H0.  $v_{max} = 1.5 \text{ m/s}$ Minimum torque in direction of operation: 0.25 Nm		1 NO + 1 NC  Ident. No. 11	3SE5 1...-BH01  0° 30° 32° 34° ≤90°	1 NO + 1 NC  Ident. No. 11	3SE5 1...-CH01  0° 20° 32° 40° ≤90°
		1 NO + 2 NC  Ident. No. 12	3SE5 1...-KH01  0° 30° 32° 34° ≤90°	1 NO + 2 NC  Ident. No. 12	3SE5 1...-LH01  0° 20° 32° 40° ≤90°
Twist levers ¹⁾ , adjustable length		Deflection in direction of rotation		Deflection in direction of rotation	
3SE5 1...-H6.  $v_{max} = 1.5 \text{ m/s}$ Minimum torque in direction of operation: 0.25 Nm		1 NO + 1 NC  Ident. No. 11	3SE5 1...-BH60  0° 30° 32° 34° ≤90°	1 NO + 1 NC  Ident. No. 11	3SE5 1...-CH60  0° 20° 32° 40° ≤90°
		1 NO + 2 NC  Ident. No. 12	3SE5 1...-KA00 + head²⁾  0° 30° 32° 34° ≤90°	1 NO + 2 NC  Ident. No. 12	3SE5 1...-LH60  0° 20° 32° 40° ≤90°
Fork levers ¹⁾		The fork levers can be used only with snap-action contacts.		Deflection in direction of rotation	
3SE5 1...-T1.  $v_{max} = 1.5 \text{ m/s}$ Minimum torque in direction of operation: 0.25 Nm				1 NO + 1 NC  Ident. No. 11	3SE5 1...-CT11  0° 60° ≤90°
				1 NO + 2 NC  Ident. No. 12	3SE5 1...-LA00 + head²⁾  0° 55° 60° ≤90°

¹⁾ Adjustment of the lever in increments of 10°, maximum deflection 90°.

²⁾ The basic switch and actuator head must be ordered separately.

Limit Switches

SIRIUS 3SE5 International Limit Switches

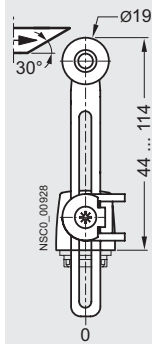
3SE5, metal enclosures
Enclosure widths 40 mm and 56 mm

Operation by bar (standard)

- Operating point acc. to EN 50041/47 (snap-action)
- * Operating point on return (snap-action)
- ➔ Positive opening acc. to EN 60947-5-1
- Direction of operation
- v_{ma} Max. actuating speed

Twist levers¹⁾, adjustable length

3SE5 1...-H5.

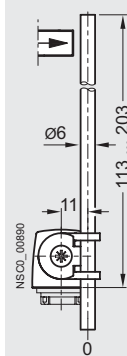


$v_{max} = 1.5 \text{ m/s}$

Minimum torque
in direction of operation: 0.25 Nm

Rod actuators¹⁾, type D

3SE5 1...-H8.

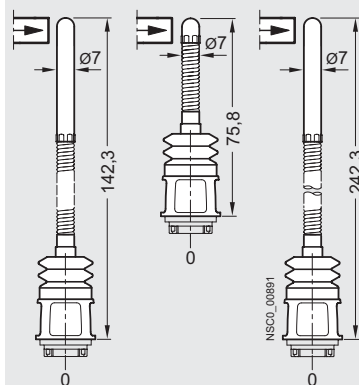


$v_{max} = 1.5 \text{ m/s}$

Minimum torque
in direction of operation: 0.25 Nm

Spring rods

3SE5 1...-R0.



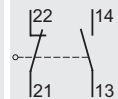
$v_{max} = 1 \text{ m/s}$

Minimum force required
in direction of operation: 9 N

Slow-action contacts

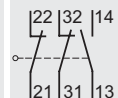
- Contact closed
- Contact open

1 NO + 1 NC



Ident. No. 11

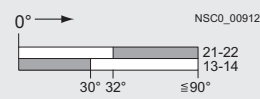
1 NO + 2 NC



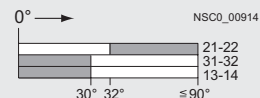
Ident. No. 12

Deflection in direction of rotation

3SE5 1...-BH50



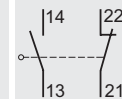
3SE5 1...-KA00 + head²⁾



Snap-action contacts

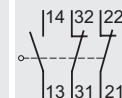
- Contact closed
- Contact open

1 NO + 1 NC



Ident. No. 11

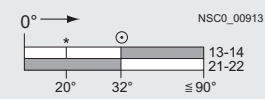
1 NO + 2 NC



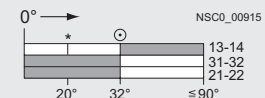
Ident. No. 12

Deflection in direction of rotation

3SE5 1...-CH50, -CH51

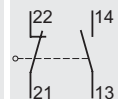


3SE5 1...-LH50



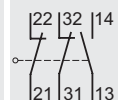
Deflection in direction of rotation

1 NO + 1 NC



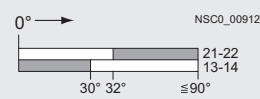
Ident. No. 11

1 NO + 2 NC

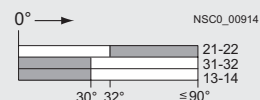


Ident. No. 12

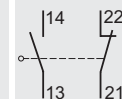
3SE5 1...-BA00 + head²⁾



3SE5 1...-KA00 + head²⁾

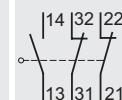


1 NO + 1 NC



Ident. No. 11

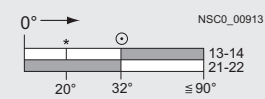
1 NO + 2 NC



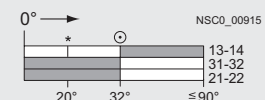
Ident. No. 12

Deflection in direction of rotation

3SE5 1...-CH80, -CH82

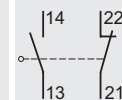


3SE5 1...-LA00 + head²⁾



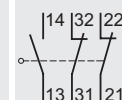
The spring rods can be used only with snap-action contacts.

1 NO + 1 NC



Ident. No. 11

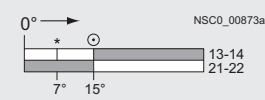
1 NO + 2 NC



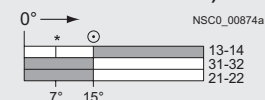
Ident. No. 12

Deflection of spring rod

3SE5 1...-CR01



3SE5 1...-LA00 + head²⁾



¹⁾ Adjustment of the lever in increments of 10°, maximum deflection 90°.

²⁾ The basic switch and actuator head must be ordered separately.

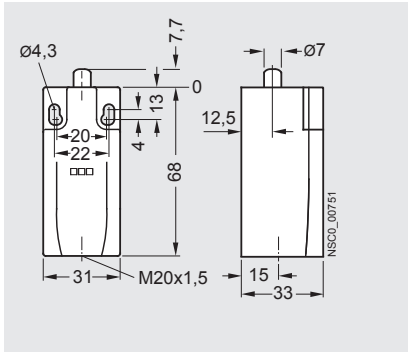
Limit Switches

SIRIUS 3SE5 International Limit Switches

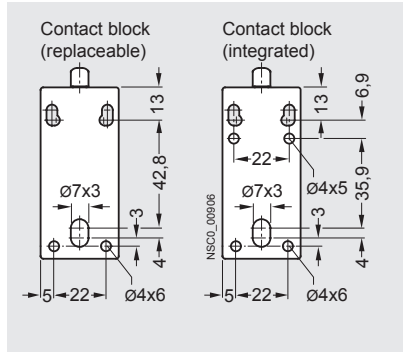
Dimensional drawings

Dimensions of the basic switches

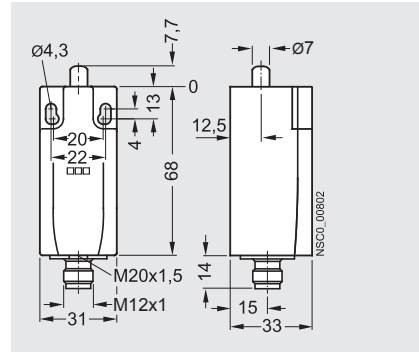
Enclosure width 31 mm, EN 50047,
with M20 × 1.5 connecting thread
3SE5 232, 3SE5 212



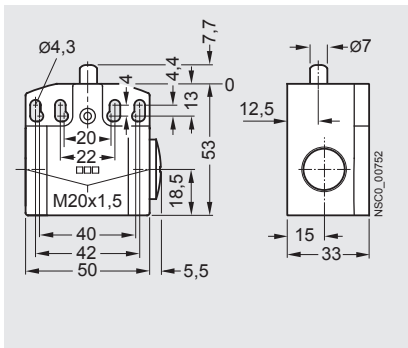
Enclosure width 31 mm, EN 50047,
rear with fixing holes
3SE5 232, 3SE5 212



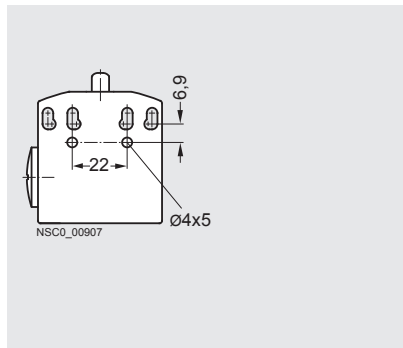
Enclosure width 31 mm, EN 50047,
with M12 connector socket
3SE5 234, 3SE5 212



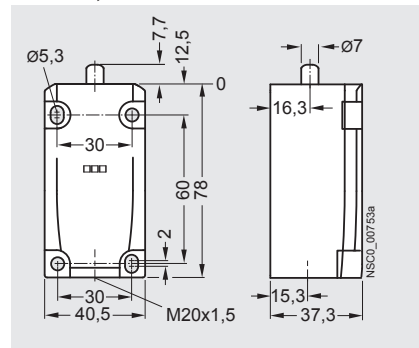
Enclosure width 50 mm,
with M20 × 1.5 connecting thread
3SE5 242



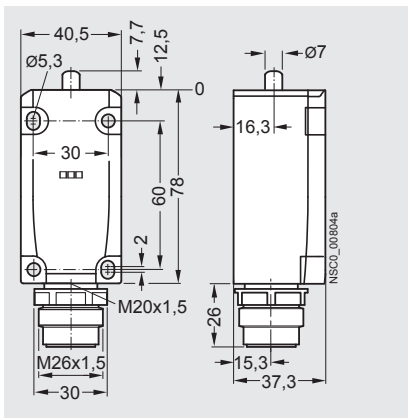
Enclosure width 50 mm,
rear with fixing holes
3SE5 242



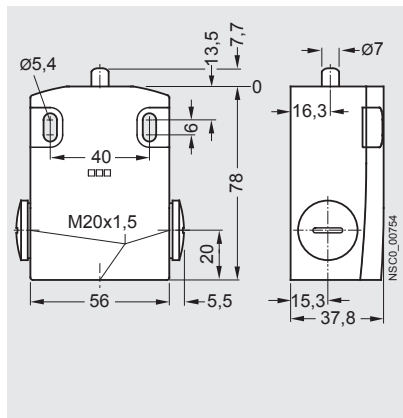
Enclosure width 40 mm, EN 50041,
with M20 × 1.5 connecting thread
3SE5 112, 3SE5 132



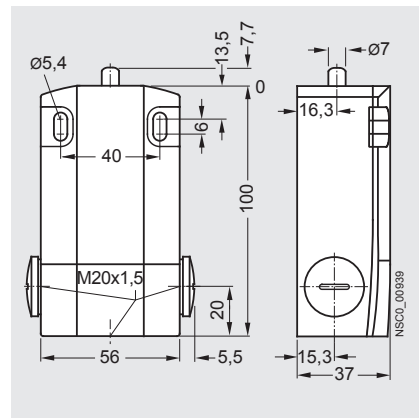
Enclosure width 40 mm, EN 50041,
with 6-pole connector socket
3SE5 115



Enclosure width 56 mm,
with M20 × 1.5 connecting thread
3SE5 122



XL enclosure, width 56 mm,
with M20 × 1.5 connecting thread
3SE5 162



Operating mechanisms for basic switches,
[see pages 13/59 and 13/60.](#)

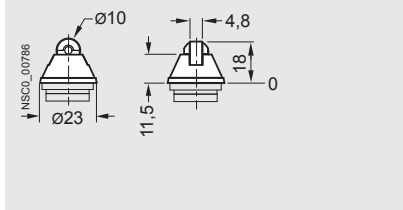
Limit Switches

SIRIUS 3SE5 International Limit Switches

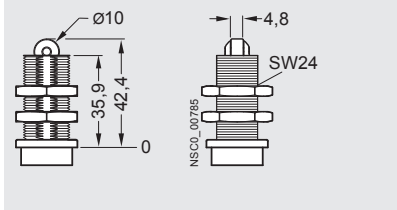
3SE5, open-type design

Operating mechanisms for enclosure width 31 mm and 50 mm

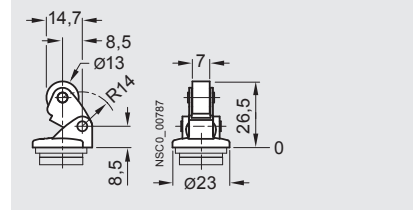
Roller plunger, type C acc. to EN 50047



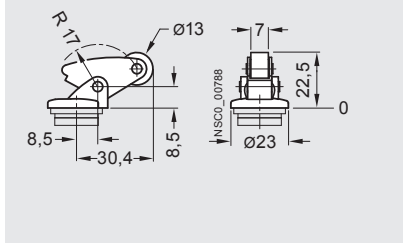
Roller plunger with central fixing



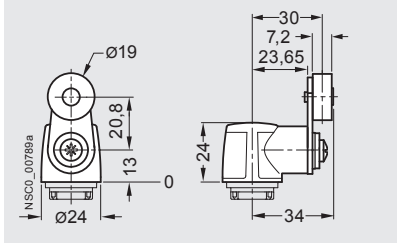
Roller lever, type E acc. to EN 50047



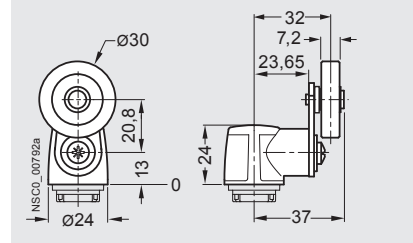
Angular roller lever



Twist lever, type A acc. to EN 50047

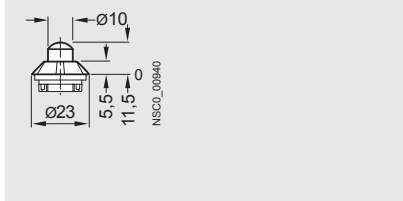


Twist lever, roller 30 mm

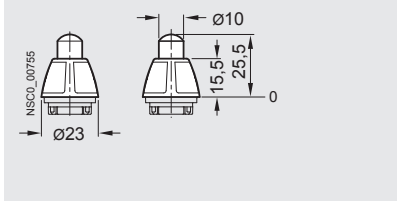


Operating mechanism for enclosure width 40 mm and 56 mm

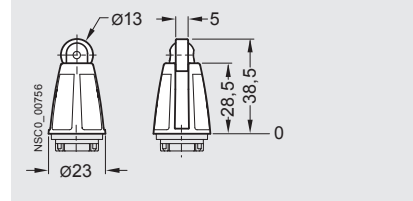
Plain plunger



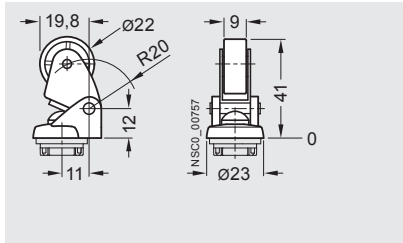
Rounded plunger, type B acc. to EN 50041



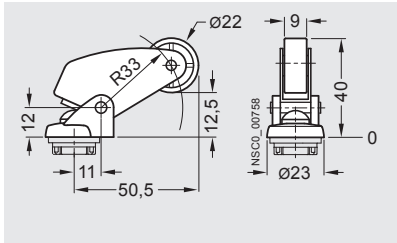
Roller plunger, type C acc. to EN 50041



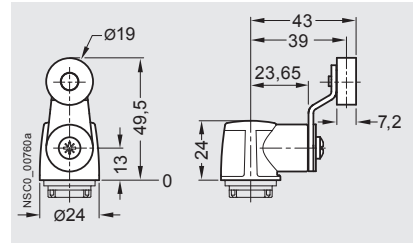
Roller lever



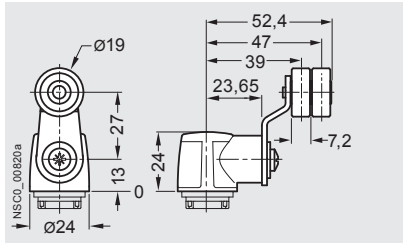
Angular roller lever



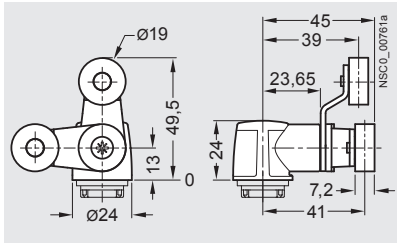
Twist lever, type A acc. to EN 50041



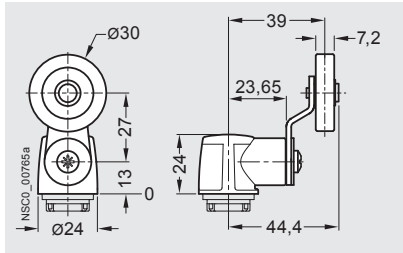
Twist lever, 2 rollers 19 mm



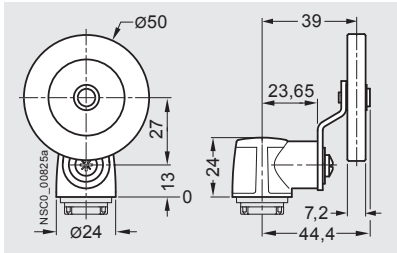
Fork lever, roller 19 mm



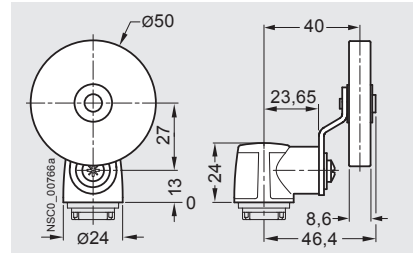
Twist lever, roller 30 mm



Twist lever, roller 50 mm



Twist lever, rubber roller 50 mm



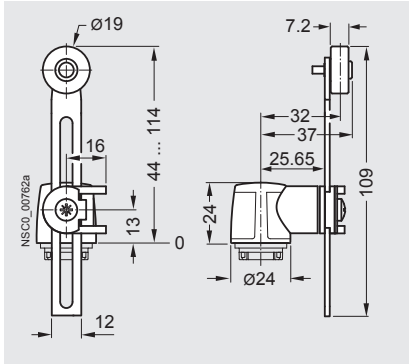
Limit Switches

SIRIUS 3SE5 International Limit Switches

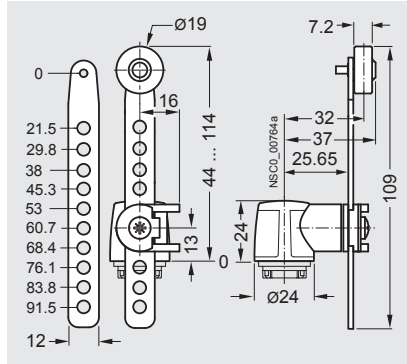
Dimensional drawings

Operating mechanisms for all enclosure widths

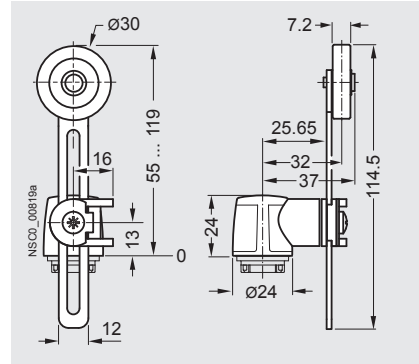
Twist lever, adjustable length, roller 19 mm



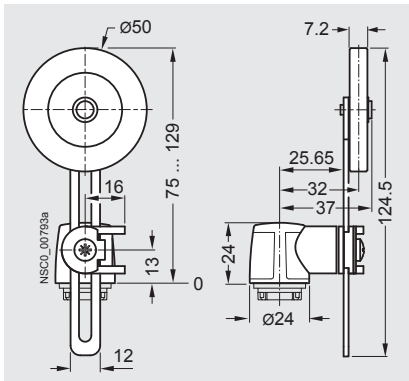
Twist lever, adjustable length, with grid hole, roller 19 mm



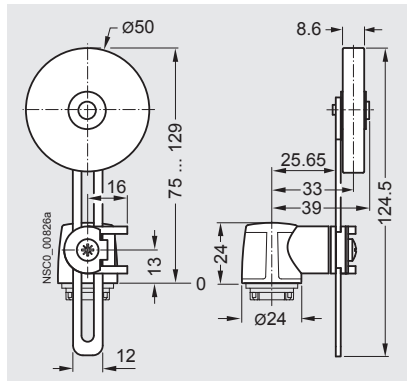
Twist lever, adjustable length, roller 30 mm



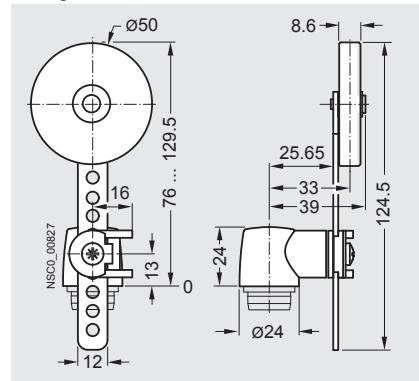
Twist lever, adjustable length, roller 50 mm



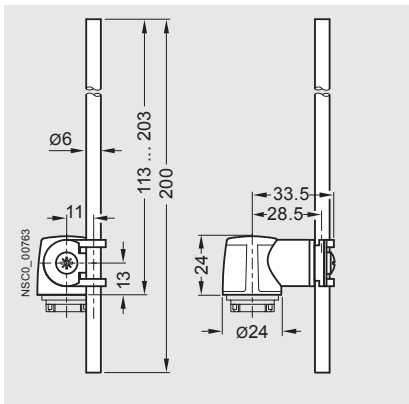
Twist lever, adjustable length, rubber roller 50 mm



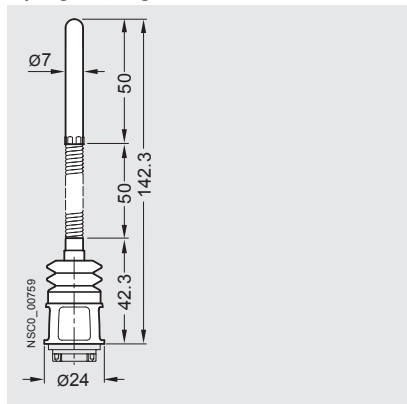
Twist lever, adjustable length, with grid hole, rubber roller 50 mm



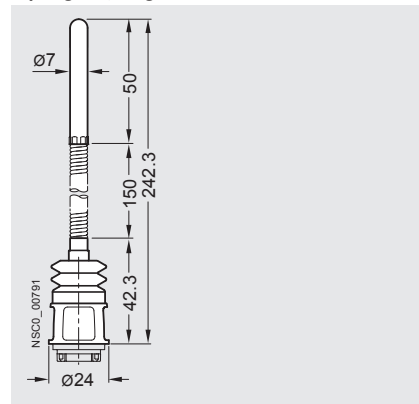
Rod actuator



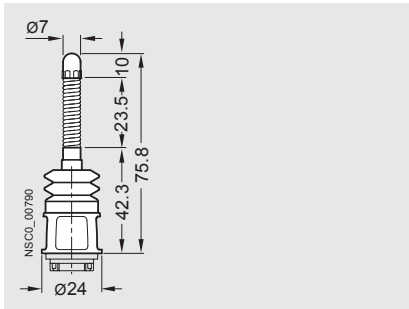
Spring rod, length 142.5 mm



Spring rod, length 242.5 mm



Spring rod, length 76 mm



Limit Switches

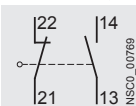
SIRIUS 3SE5 International Limit Switches

Dimensional drawings

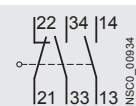
Circuit diagrams

Enclosure widths 31, 40, 50 and 56 mm

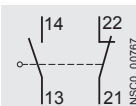
Slow-action contacts
1 NO + 1 NC
3SE5 ...-B..., -R...



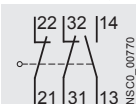
Slow-action contacts
2 NO + 1 NC
3SE5 ...-P...



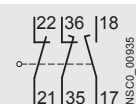
Snap-action contacts
1 NO + 1 NC
3SE5 ...-C..., -F..., -G..., -H..., -N...



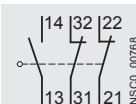
Slow-action contacts
1 NO + 2 NC
3SE5 ...-K..., -Q...



Slow-action contacts
1 NO + 2 NC with make-before-break, 3SE5 ...-M...

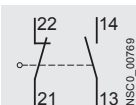


Snap-action contacts
1 NO + 2 NC
3SE5 ...-L...

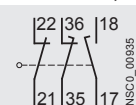


XL enclosures, width 56 mm

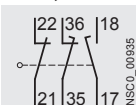
Slow-action contacts
2 x (1 NO + 1 NC)
3SE5 162-0B...



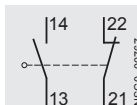
Slow-action contacts
2 x (1 NO + 2 NC) with make-before-break, 3SE5 162-0D...



For slow-action contacts
1 NO + 2 NC with make-before-break, 1 NO + 1 NC, 3SE5 162-0E...

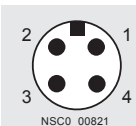


Snap-action contacts
2 x (1 NO + 1 NC)
3SE5 162-0C...

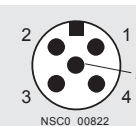


3SE5 connector assignment

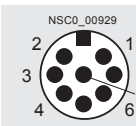
M12 connector socket, 4-pole
3SY3 127



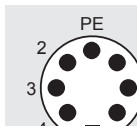
M12 connector socket, 5-pole
3SY3 128



M12 connector socket, 8-pole
3SY3 134



Connector sockets, 6-pole + PE
3SY3 131



Order No.	Connector sockets	Contacts	LEDs	Connections									
	Type	Version	Version	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	PE	
M12 connector sockets (4-, 5- or 8-pole)													
3SE5..4-0.....1AC4	3SY3 127	1 NO + 1 NC	—	21	22	13	14	—	—	—	—	—	
3SE5..4-0.....1AC5	3SY3 128	1 NO + 1 NC	—	21	22	13	14	PE	—	—	—	—	
3SE5..4-0.....1AE0	3SY3 127	2 NC	—	21	22	31	32	—	—	—	—	—	
3SE5..4-0.....1AE1	3SY3 128	2 NC	—	21	22	31	32	PE	—	—	—	—	
3SE5..4-1C....1AF3	3SY3 128	1 NO + 1 NC snap action	2 LEDs	21	22	13 / LED gn	14 / LED ye	Ground LED	—	—	—	—	
3SE5..4-1B....1AF3	3SY3 128	1 NO + 1 NC slow-action	2 LEDs	21	22	14 / LED gn	13 / LED ye	Ground LED	—	—	—	—	
3SE5..4-1L....1AD4	3SY3 134	1 NO + 2 NC snap action	2 LEDs	21	22	13 / LED gn	14 / LED ye	31	32	Ground LED	PE	—	
3SE5..4-1K....1AD4	3SY3 134	1 NO + 2 NC slow-action	2 LEDs	21	22	14 / LED gn	13 / LED ye	31	32	Ground LED	PE	—	
Connector sockets, 6-pole + PE													
3SE5..5-0.....1AD0	3SY3 131	1 NO + 1 NC	—	21	22	13	14	—	—	—	—	—	✓
3SE5..5-0.....1AD1	3SY3 131	1 NO + 2 NC	—	21	22	13	14	31	32	—	—	—	✓
3SE5..5-C....1AF2	3SY3 131	1 NO + 1 NC snap action	2 LEDs	21	22	13 / LED gn	14 / LED ye	—	Ground LED	—	—	—	✓
3SE5..5-B....1AF2	3SY3 131	1 NO + 1 NC slow-action	2 LEDs	21	22	14 / LED gn	13 / LED ye	—	Ground LED	—	—	—	✓
3SE5..5-L....1AD2	3SY3 131	2 NC snap-action	2 LEDs	21	22	31	32	13 / LED gn	Ground LED	—	—	—	✓
3SE5..5-K....1AD2	3SY3 131	2 NC slow-action	2 LEDs	21	22	31	32	14 / LED gn	Ground LED	—	—	—	✓

gn Green
ye Yellow

✓ Connected
— Not available

Limit Switches

3SE03 North American Limit Switches

General Information

Features

Modular plug-in



Prewired receptacle with pin connector



Prewired cable



Features

- UL Listed, CSA Certified.
- UL File: E47512
- All Metal Captive Screws.
- Keyed, Four-Directional Head.
- Steel-Reinforced Diaphragm Seal Between Operational Head And Switch Body.
- Permanent Instructions for Adjusting Operational Head.
- Modular, Plug-In Housing
 1. Heavy-Duty, Bifurcated, Plug-In Prongs.
 2. Ample Receptacle Wiring Space with 1/2 - NPT threaded conduit opening.
 3. Stepped Terminals On Single Pole; Deep Center Trough On Double Pole.
- NEMA Type 6P Submersible
 1. Completely Sealed With Epoxy.
 2. SOOW-A Cable or Prewired Receptacle With Pin Connector.
 3. Factory wired cable features a 350 pound pullput capacity.
- Rotary heads are field convertible CW, CCW, or both without special tools.

Design

Modular Plug-In Housing

These heavy duty plug-in limit switches may be provided as complete devices using a composite catalog number; or, separately as components; operating head, plug-in module and base receptacle.

Example:

Complete Switch:

3SE03-AR1

Single Pole, Double Throw contacts with Side Rotary, Momentary Head

Components

3SE03-SA^①

Single Pole, Double Throw Plug-in Module

3SE03-DR1

Side Rotary Head, Momentary

3SE03-RA^①

Standard, Single Pole Receptacle, 1 NO + 1 NC

Since components may be interchanged, operating heads, plug-in modules and receptacles may be combined to satisfy most of your everyday limit switch requirements. This leads to less inventory with greater flexibility.

Operating heads include side rotary; plain and roller plunger; and, wobble. A variety of levers are available.

The zinc die-cast housing has an epoxy finish to protect against corrosion. All screws on the module and head are captive.

NEMA Type 6P Submersible

These heavy duty prewired, factory sealed switches meet the demanding enclosure requirements of UL (NEMA) Type 3, 4, 4X, 6P, 12, and 13. They are intended for wet environments where the integrity of the threaded conduit and switch body seals must be assured.

The switch body cavity including threaded conduit entry is completely sealed with epoxy. An 8 foot, 5 or 9 conductor SOOW-A cable; or 5 or 9 pin prewired receptacle with pin connector is provided as standard.

Switches are provided as complete devices using composite catalog numbers; or, separately as components; operating head and switch body.

UL (NEMA) Type 6P switches are designed to provide a degree of protection against the entry of water during prolonged submersion at limited depths (tested with a 6 foot head of water for 24 hours).

Both the Modular Plug-in and the (NEMA) Type 6P Submersible styles provide 60 Amp make and 6 Amp break—120V AC and 10 Amp continuous current for 120, 240, 480 and 600V AC. The circuit contact configuration depends on the device selected and the application criteria.

Switches are available with momentary or maintained operating heads; and, single pole, double pole or center neutral (modular, plug-in only) contact configurations.

3SE03 limit switches offer a new standard of reliability and quality in automatic control circuits under heavy duty applications.

^① Plug-in module and receptacle are keyed.

Limit Switches

3SE03 North American Limit Switches

Modular, plug-in and
NEMA type 6P submersible

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Technical data

Type	Modular, Plug-in and NEMA Type 6P Submersible					
Mechanical life	Side rotary: 13×10^6 make-break operations minimum					
Electrical life	All others: 10×10^6 make-break operations minimum Single Pole: 1×10^6 operations typical at full load Double Pole: 1×10^5 operations typical at full load					
Switching frequency	8×10^3 make-break operations per hour (maximum)					
Operating point accuracy	Side operated: 0.0012 in. (modular, plug-in housing)					
Cable entry	Side rotary: 0.0014 in. (modular plug-in). Top operated: 0.0003 in. (modular, plug-in housing) 1/2 in.-NPT, Prewired Cable or Prewired Receptacle with Pin Connector					
Ambient temperature	Without Cable: -10° to $+121^\circ\text{C}$, 14° to 250°F					
Degree of protection	With Cable: -10° to $+105^\circ\text{C}$, 14° to 221°F NEMA Type 1, 3, 3S, 4, 4X, 6, 6P, 13; IP67					
Conductor size	22–12 AWG (modular, plug-in housing), single or stranded wire 5 or 9 conductor, 16 AWG yellow jacketed type SOOW-A cable (prewired cable) 5 or 9 pin, 0.87 in. (22 mm) diameter receptacle (prewired receptacle with pin connector)					
Mounting	Any position					
Tightening Torque	Switch body screws: 25–30 lb-in. Operating head screws: 14–18 lb-in.					
NEMA rating	DC, NEMA R300		AC, NEMA A600			
Maximum current at	125V	250V	120V	240V	480V	600V
Make Break	0.22A 0.22A	0.11A 0.11A	60A 6A	30A 3A	15A 1.5A	12A 1.2A
Max. volt-ampere						
Make Break	28VA 28VA	28VA 28VA	7200VA 720VA	7200VA 720VA	7200VA 720VA	7200VA 720VA
Rated thermal current	DC, 1A		AC, 10A			
Rated operating voltage	DC, 300V		AC, 600V			

Operating temperature ¹⁾ ²⁾

Temperature rating	Operation		Temperature range	
	Type	Return	Without cable	With cable
1	Side rotary ³⁾	Momentary CW only or CCW only	10°F to 200°F -12°C to 94°C	10°F to 200°F -12°C to 94°C
2	Center neutral Side rotary Side plunger Two-sided plunger Roller side plunger ⁴⁾	Momentary CW or CCW Maintained Momentary Maintained Momentary	14°F to 200°F -10°C to 94°C	14°F to 200°F -10°C to 94°C
3	Top plunger Top roller plunger ⁴⁾ Wobble head	Momentary Momentary Momentary	14°F to 250°F -10°C to 121°C	14°F to 221°F -10°C to 105°C

1) Temperature ranges below $+32^\circ\text{F}$ (0°C) are based on absence of freezing moisture or water.

2) For temperature rating of specific switch, refer to page 13/70, Operating Heads.

3) For CW only or CCW only operation, upper temperature limit increases to 250°F (121°C) without cable, and 221°F (105°C) with pre-wired cable.

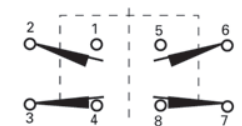
4) Roller direction can be converted in the field.

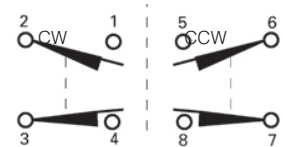
Limit Switches

3SE03 North American Limit Switches

Modular, plug-in metal housing

Complete switches without lever - threaded cable entry:

 Plug-In module type		Standard single pole 1 NO + 1 NC (3SE03-SA)		Standard double pole 2 NO + 2 NC (3SE03-SB)			
 Receptacle type surface mount		Single pole (3SE03-RA) 		Double pole (3SE03-RB) 			
Operating head type		Composite catalog number consisting of head, module and receptacle					
		DT	Catalog Number	List Price \$ 1 unit	DT	Catalog Number	List Price \$ 1 unit
 Side rotary CW and CCW operation convertible to CW only or CCW only	Standard momentary (3SE03-DR1)	▶	3SE03-AR1 ①		▶	3SE03-BR1 ①	
	Standard maintained (3SE03-DM1)	▶	3SE03-AM1		▶	3SE03-BM1	
	Low torqued momentary (3SE03-DL1)	▶	3SE03-AL1 ②			3SE03-BL1 ②	
 Plain side plunger	Momentary (3SE03-DS1)	▶	3SE03-AS1		▶	3SE03-BS1	
 Roller side plunger	Momentary (3SE03-DS3)	▶	3SE03-AS3			3SE03-BS3	
 Two-sided plunger	Maintained (3SE03-DH1)		3SE03-AH1			3SE03-BH1	
 Plain top plunger	Momentary (3SE03-DT1)	▶	3SE03-AT1			3SE03-BT1	
 Roller top plunger	Momentary (3SE03-DT3)		3SE03-AT3		▶	3SE03-BT3	
 Wobble head (without lever)	Momentary (3SE03-DW1)	▶	3SE03-AW1		▶	3SE03-BW1	

			Plug-In module type			Center neutral Double pole 2 NO + 2 NC (3SE03-SN)		
			Receptacle type surface mount			Center neutral (3SE03-RB) 		
Operating head type						Composite catalog number consisting of head, module and receptacle		
						DT	Catalog Number	List Price \$ 1 unit
	Side rotary (momentary)	Center	(3SE03-DN1)	▶	3SE03-NN1①			
		Neutral	(3SE03-DN2)	▶	3SE03-NN2②			

① 5° pretravel to operate contacts.

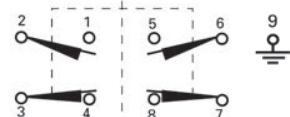
② 15° pretravel to operate contacts.

Limit Switches

3SE03 North American Limit Switches

NEMA type 6P submersible, prewired cable

Complete switches without lever - prewired cable:

 Switch body type—prewired cable with 8 foot cable	Single pole 1 NO + 1 NC (3SE03-SA6P) Cable color code 1 - White 2 - Black 3 - Red 4 - Orange 5 - Green 	Double pole 2 NO + 2 NC (3SE03-SB6P) Cable color code 1 - White 6 - Pink 2 - Black 7 - Yellow 3 - Red 8 - Blue 4 - Orange 9 - Green 5 - Brown 
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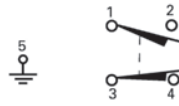
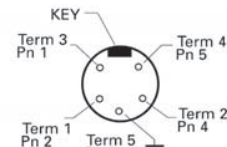
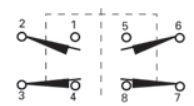
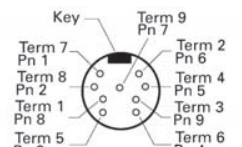
Operating head type		Composite catalog number consisting of head and switch body				
		DT	Catalog Number	List Price \$ 1 unit	Catalog Number	List Price \$ 1 unit
 Side rotary CW and CCW operation convertible to CW only or CCW only	Standard momentary (3SE03-DR1)	▶	3SE03-AR16P		3SE03-BR16P	
	Standard maintained (3SE03-DM1)		3SE03-AM16P		3SE03-BM16P	
	Low torqued momentary (3SE03-DL1)		3SE03-AL16P		3SE03-BL16P	
 Plain side plunger	Momentary (3SE03-DS1)		3SE03-AS16P		3SE03-BS16P	
 Roller side plunger	Momentary (3SE03-DS3)		3SE03-AS36P		3SE03-BS36P	
 Two-sided plunger	Maintained (3SE03-DH1)		3SE03-AH16P		Not available	
 Plain top plunger	Momentary (3SE03-DT1)		3SE03-AT16P		3SE03-BT16P	
 Roller top plunger	Momentary (3SE03-DT3)		3SE03-AT36P		3SE03-BT36P	
 Wobble head (without lever)	Momentary (3SE03-DW1)		3SE03-AW16P		3SE03-BW16P	

Limit Switches

3SE03 North American Limit Switches

**NEMA type 6P submersible,
prewired receptacle**

Complete switches without lever - prewired receptacle with pin connector:

 Switch Body Type—prewired receptacle with pin connector	Single pole 1 NO + 1 NC (3SE03-SA6PC)  	Double pole 2 NO + 2 NC (3SE03-SB6PC)  
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Operating head type		Composite catalog number consisting of head and switch body				
		DT	Catalog Number	List Price \$ 1 unit	Catalog Number	List Price \$ 1 unit
 Side rotary CW and CCW operation convertible to CW only or CCW only	Standard momentary (3SE03-DR1)	▶	3SE03-AR16PC		3SE03-BR16PC	
	Standard maintained (3SE03-DM1)		3SE03-AM16PC		3SE03-BM16PC	
	Low torqued momentary (3SE03-DL1)		3SE03-AL16PC		3SE03-BL16PC	
 Plain side plunger	Momentary (3SE03-DS1)		3SE03-AS16PC		3SE03-BS16PC	
 Roller side plunger	Momentary (3SE03-DS3)		3SE03-AS36PC		3SE03-BS36PC	
 Two-sided plunger	Maintained (3SE03-DH1)		3SE03-AH16PC		Not available	
 Plain top plunger	Momentary (3SE03-DT1)		3SE03-AT16PC		3SE03-BT16PC	
 Roller top plunger	Momentary (3SE03-DT3)		3SE03-AT36PC		3SE03-BT36PC	
 Wobble head (without lever)	Momentary (3SE03-DW1)		3SE03-AW16PC		3SE03-BW16PC	

Limit Switches

3SE03 North American Limit Switches

Modular, plug-in and
NEMA type 6P submersible

Components:

 Plug-in module	Plug-in module		DT	Catalog Number	List Price \$ 1 unit
	Standard single pole 1 NO + 1 NC		▶	3SE03-SA	
	Standard double pole 2 NO + 2 NC		▶	3SE03-SB	
	Center neutral 2 NO + 2 NC ^①		▶	3SE03-SN	
 Receptacle	Receptacle for plug-in module			Catalog Number	List Price \$ 1 unit
	Single pole 1 NO + 1 NC (5 terminals)		▶	3SE03-RA	
	Single pole 2 NO + 2 NC (9 terminals)			3SE03-RB	

Switch body—NEMA type 6P submersible:

 Prewired cable	Prewired cable 8 foot length				Prewired receptacle with pin connector		
	Switch body	DT	Catalog Number	List Price \$ 1 unit	DT	Catalog Number	List Price \$ 1 unit
	Single pole 1 NO + 1 NC	▶	3SE03-SA6P			—	—
	Single pole 2 NO + 2 NC	▶	3SE03-SB6P			—	—
 Prewired receptacle	Single pole 1 NO + 1 NC		—	—	▶	3SE03-SA6PC	
	Single pole 2 NO + 2 NC		—	—	▶	3SE03-SB6PC	

Operating heads^②:

 		Nominal operating data								
Operating head type		Total travel	Pretravel	Operating force	Release position	Minimum return force	Operating temp range ^④	DT	Catalog Number	List Price \$ 1 unit
 Side rotary^⑤	Standard momentary ^⑥	90°	5°	3 lb-in.	2°	4.5 oz-in.	1	▶	3SE03-DR1	
	Low torqued momentary ^⑥	90°	15°	1.5 lb-in.	6°	2.5 oz-in.	1	▶	3SE03-DL1	
	Standard maintained	90°	50°	3 lb-in.	50°	—	2	▶	3SE03-DM1	
 Plain side plunger	Momentary	0.25 in.	0.065 in.	4 lbs	0.03 in.	8 oz.	2	▶	3SE03-DS1	
 Roller side plunger	Momentary ^⑦	0.25 in.	0.065 in.	4 lbs	0.03 in.	8 oz.	2	▶	3SE03-DS3	
 Two-sided plunger	Maintained	0.32 in.	0.2 in.	5 lbs	0.13 in.	5 lbs	2	▶	3SE03-DH1	
 Plain top plunger	Momentary	0.28 in.	0.04 in.	4 lbs	0.02 in.	8 oz.	3	▶	3SE03-DT1	
 Roller top plunger	Momentary	0.28 in.	0.04 in.	4 lbs	0.02 in.	8 oz.	3	▶	3SE03-DT3	
 Wobble head^{⑧⑨}	Momentary	15°	10°	2 lb-in.	6°	2.4 oz-in.	3	▶	3SE03-DW1	
 Center neutral^⑨	Momentary	90°	5°	1.8 lb-in.	2°	2.5 oz-in.	2	▶	3SE03-DN1	
		90°	15°	1.8 lb-in.	2°	2.5 oz-in.	2	▶	3SE03-DN2	

^① For use with 3SE03-DN1, -DN2 operating heads and 3SE03-RB receptacle only.

^② For use with modular, Plug-in and NEMA Type 6P.

^③

^④ Refer to "Operating Temperature", Catalog page 13/118 for Temperature Ranges.

^⑤ Without Operating Levers.

^⑥ CW and CCW operation. Convertible to CW or CCW operation only.

^⑦ Convertible—Horizontal to Vertical.

^⑧ Requires Lever.

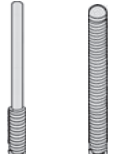
^⑨ For use with 3SE03-SN plug-in module only.

Limit Switches

3SE03 North American Limit Switches

Modular, plug-in metal housing

Levers for plug-in and non-plug-in versions—most widely used

Description	Length ^①	Roller mounted on side of lever	Roller material	Roller diameter	Roller face width	Max required ^② return torque (oz-in.)	DT	Catalog Number	List Price \$ 1 unit
	1.5 (38)	Front	Nylatron	0.75 (19)	0.31 (8)	0.53	▶	3SX03-KL200	
	1.5 (38)	Front	Cast aluminum	0.75 (19)	0.31 (8)	1.10	▶	3SX03-KL355	
	1.5 (38)	Back	Cast aluminum	0.75 (19)	0.31 (8)	1.10	▶	3SX03-KL579	
	1.5 (38)	Back / back	Nylatron	0.75 (19)	0.31	–	▶	3SX03-KL204	
	1–3.5 (25–89)	Front	Nylatron	0.75 (19)	0.31 (8)	1.90 ^⑤	▶	3SX03-KL201	
	1–3.5 (25–89)	Front	Metal	0.75 (19)	0.31 (8)	3.40 ^⑤	▶	3SX03-KL538	
	9 (229)	–	Stainless steel	–	–	7.00 ^⑤	▶	3SX03-KL220	
	Adjustable spring rod	–	Nylon	–	–	3.50 ^⑤	▶	3SX03-KL556	
	6 (152)	–	Nylatron	–	–	0.40	▶	3SX03-KL142	
	Levers								
	Rod	–	–	Nylon	–	–	–	▶	3SX03-KW2
	Coil spring	–	–	Coil spring	–	–	–	▶	3SX03-KW4
	For plunger actuated switches wobble actuators	⑥							

Levers for plug-in and non-plug-in versions:

Operator	Length ^①	Roller			Max required ^② return torque (oz-in.)	Catalog Number			List Price \$ 1 unit
		Type	Diameter	Face (width)		Stainless steel	DT	Cast aluminum	
	0.87 (22)	Metal	0.75 (19)	0.31 (8)	0.62	–		3SX03-KL39	
	1.37 (35)	Metal	0.75 (19)	0.31 (8)	0.95	–	▶	3SX03-KL40	
	1.50 (38)	Nylatron	0.75 (19)	1.00 (25)	0.92	–	▶	3SX03-KL337	
		Ball bearing	0.69 (17)	0.25 (6)	0.77	–		3SX03-KL531	
		Without roller	–	–	0.32	–		3SX03-KL32	
	2.00 (51)	Nylatron	0.75 (19)	0.31 (8)	0.71	–	▶	3SX03-KL546	
		Nylatron	0.75 (19)	1.00 (25)	1.45	–		3SX03-KL572	
		Metal	0.75 (19)	0.31 (8)	1.5	–	▶	3SX03-KL549	
	250 (64)	Ball bearing	0.69 (17)	0.25 (6)	1.1	–		3SX03-KL552	
		Nylatron	0.75 (19)	0.31 (8)	1.0	–		3SX03-KL547	
Cast aluminum		Nylatron	0.75 (19)	1.00 (25)	1.8	–		3SX03-KL573	
		Nylatron	1.5 (38)	0.28 (7)	1.4	–		3SX03-KL575	
		Metal	0.75 (19)	0.31 (8)	2.0	–		3SX03-KL550	
		Ball bearing	0.69 (17)	0.25 (6)	1.5	–	▶	3SX03-KL553	
	3.00 (76)	Nylatron	0.75 (19)	0.31 (8)	1.3	–	▶	3SX03-KL548	
		Nylatron	0.75 (19)	1.00 (25)	2.3	–	▶	3SX03-KL574	
		Nylatron	1.5 (38)	0.28 (7)	1.8	–	▶	3SX03-KL576	
		Metal	0.75 (19)	0.31 (8)	2.5	–	▶	3SX03-KL551	
		Ball bearing	0.69 (17)	0.25 (6)	1.8	–		3SX03-KL554	

All dimensions shown in inches and (millimeters). For reference purposes only. Not to be used for design or construction purposes.

- ① Roller lever: Length from the operating shaft axis to the roller axis.
All other: Length from the operating shaft axis to the tip.

② Caution—When selecting lever, required return torque should not exceed minimum return torque in operating head.

- ③ Cap screw accommodates 3/64 inch Allen wrench.
④ By re-assembling lever minimum can be reduced another 0.50 (13).

⑤ Applies when lever extended to maximum dimension.

⑥ See dimensions page 13/76.

Limit Switches

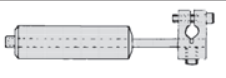
3SE03 North American Limit Switches

Modular, plug-in and
NEMA type 6P submersible

Levers for plug-in and non-plug-in versions—most widely used

Operator		Length ^① Inches (mm)	Roller			Min. required return torque oz-in ^⑤	Catalog Number			
			Type	Diameter In. (mm)	Face width in. (mm)		DT	Stainless steel	Cast aluminum	List Price \$ 1 unit
Roller levers										
	Roller on reverse side	1.50 (38)	Nylatron Nylatron Ball bearing	0.75 (19) 1.5 (38) 0.69 (17)	0.31 (8) 0.28 (7) 0.25 (6)	0.53 0.96 0.77	▶ — —	— — —	3SX03-KL310 3SX03-KL536 3SX03-KL580	
	Offset lever (Inboard roller shown)	1.50 (38) Inboard roller	Nylatron	0.75 (19)	0.31 (8)	0.65	▶	3SX03-KL24	—	
			Metal	0.75 (19)	0.31 (8)	1.20	▶	3SX03-KL25	—	
			Ball bearing	0.69 (17)	0.25 (6)	0.90	—	3SX03-KL26	—	
		1.50 (38) outboard roller	Nylatron	0.75 (19)	0.31 (8)	0.65	▶	3SX03-KL27	—	
			Metal	0.75 (19)	0.31 (8)	1.20		3SX03-KL28	—	
			Ball bearing	0.69 (17)	0.25 (6)	0.90		3SX03-KL29	—	
	Bantam lever	0.69 (18)	Metal	0.88 (22)	0.19 (5)	0.45	▶	3SX03-KL532		
	Precision adjustment	1.50 (38) ^②	Nylatron	0.75 (19)	0.31 (8)	0.65	▶	3SX03-KL340		
			Metal	0.75 (19)	0.31 (8)	1.20		3SX03-KL465		
			Ball bearing	0.69 (17)	0.25 (6)	0.90		3SX03-KL535		
	Adjustable roller	1–3.75 (25–95) ^③	Nylatron	0.75 (19)	0.5 (13)	1.90 ^④	▶ ▶ ▶	3SX03-KL599		
		1–3.75 (25–95) ^③	Nylatron	0.75 (19)	1 (25)	3.10 ^④		3SX03-KL537		
		1.62–3.75 (41–95) ^③	Nylatron	1.5 (38)	0.28 (7)	2.50 ^④		3SX03-KL443		
		0.50–3.75 (13–95)	Large nylatron	4 (102)	0.11 (3)	4.50 ^④		3SX03-KL598		
		1–3.75 (25–95) ^③	Ball bearing	0.69 (17)	0.25 (6)	2.50 ^④		3SX03-KL539		
		0.50–3.75 (13–95)	Without roller	—	—	1.20 ^④		3SX03-KL31		
	Fork lever _ both rollers one side	1.50 (38)	Nylatron	0.75 (19)	1 (25)	—	▶ ▶	3SX03-KL543		
			Metal	0.75 (19)	0.31 (8)	—		3SX03-KL544		
			Ball bearing	0.69 (17)	0.25 (6)	—		3SX03-KL545		
	Fork lever _ both rollers outside, one side	1.50 (38)	Nylatron	0.75 (19)	0.31 (8)	—	▶	3SX03-KL203		
			Metal	0.75 (19)	0.31 (8)	—		3SX03-KL541		
			Ball bearing	0.69 (17)	0.25 (6)	—		3SX03-KL542		

Levers for plug-in and non-plug-in versions:

Operator	Length ^① Inches (mm)	Description Inches (mm)	Min. required return force oz-in. ^⑤	DT	Catalog Number	List Price \$ 1 unit
	Adjustable rod	5.50 (140) Max.	Nylon Rod—0.19 (5) Dia.	0.40 ^④	▶	3SX03-KL399
		5.50 (140) Max.	Metal Rod—0.12 (3) Dia.	0.92 ^④	▶	3SX03-KL202
		8.75 (222) Max.	Metal Rod (Square)—0.12 (3) Max.	2.20 ^④	▶	3SX03-KL581
		12 (305) Max.	Steel (Formable) Rod—0.12 (3) Dia.	5.00 ^④	▶	3SX03-KL226
		—	Clamp Only—0.19 (5) Hole	—	▶	3SX03-KL35
		—	Clamp Only—0.12 (3) Hole	—	▶	3SX03-KL36
	Spring rod	11.62 (295)	Metal rod	2.80		3SX03-KL421
	Adjustable wire	12.12 (308) max.	Nylon covered wire	1.50 ^④	▶	3SX03-KL533
	Adjustable wide roller lever	3.9 (99)	0.75 (19) Dia. Nylatron Roller 0.19 (30) Dia. Rod	4.50 ^④	▶	3SX03-KL37
Wobble head operators						
See dimensions page 13/76	Stainless steel rod	—	Rod diameter - 0.06 (2)	—	▶	3SX03-KW3

① Length from operating shaft axis to the roller axis.

② Maximum dimensions, precision adjustable to lesser dimensions.

③ By re-assembling lever minimum can be reduced by 1/2 in.

④ Applies when lever extended to maximum dimension.

⑤ Caution—When selecting lever, required return torque should not exceed minimum return force in operating head.

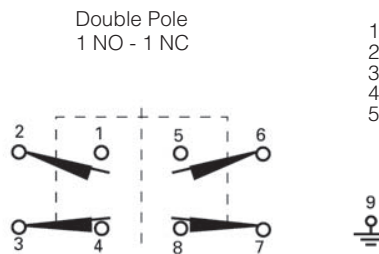
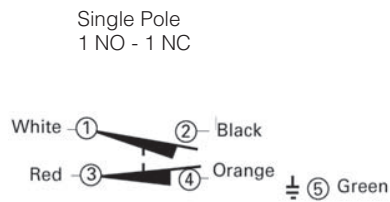
All dimensions shown in inches and (millimeters). For reference purposes only. Not to be used for design or construction purposes.

Limit Switches

3SE03 North American Limit Switches

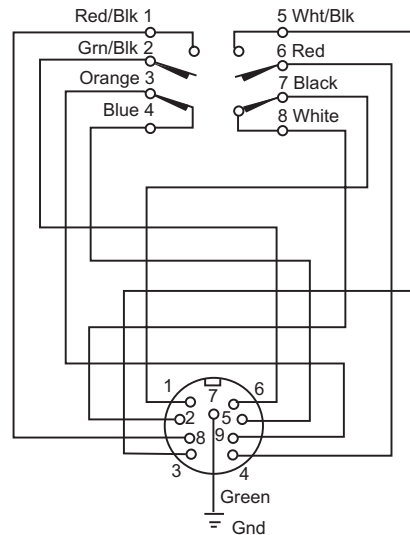
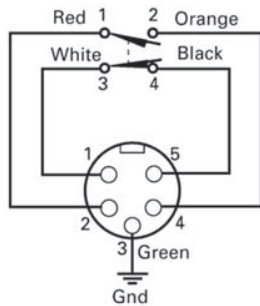
Modular, plug-in and
NEMA type 6P submersible

Wiring diagrams



Cable color code
1 - White 6 - Pink
2 - Black 7 - Yellow
3 - Red 8 - Blue
4 - Orange 9 - Green
5 - Brown
Pre-wired cable

Modular, plug-in and prewired cable



Prewired receptacle with pin connector

Typical connector cable (supplied by user)

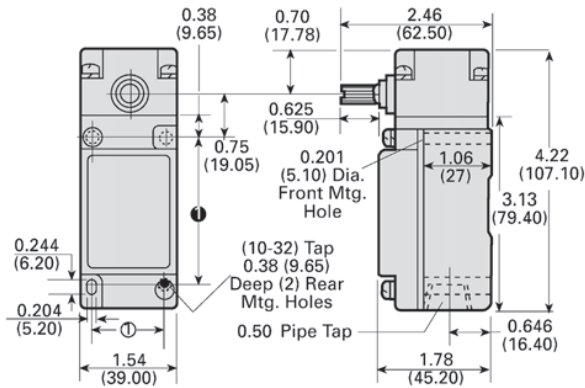
Cable length ft.	Manufacturers part number			
	Daniel Woodhead Brad Harrison	Cooper Crouse-Hinds	Molex (Industrial Interface)	Lumberg USA
5 Pin connector cable				
3	105000A01F030	5000111-3_	14541	RK50-77/1M
6	105000A01F060	5000111-4_	14542	RK50-77/2M
12	105000A01F120	5000111-5_	14544	RK50-77/4M
9 Pin connector cable				
3	309000A01F030	X8990-3	—	—
6	309000A01F060	X8990-4	—	—
12	309000A01F120	X8990-5	—	—

Limit Switches

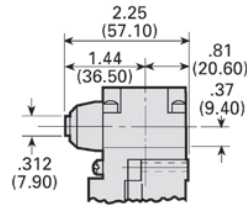
3SE03 North American Limit Switches

Modular, plug-in and
NEMA type 6P submersible

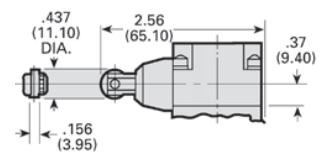
Dimension drawings



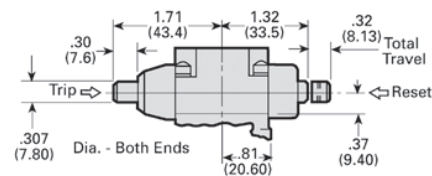
Plain side plunger



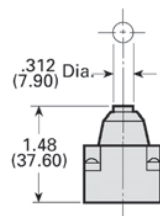
Roller side plunger



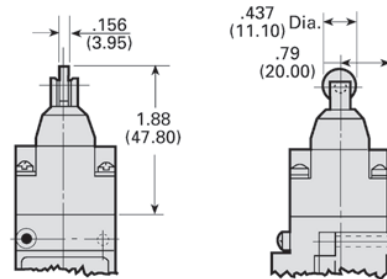
Two side plungers



Plain top plunger



Roller top plunger



Rotary lever operators

	Catalog Number	Dimensions						Catalog Number	Dimensions					
		A	B	C	D	E	F		A	B	C	D	E	F
	3SX03-KL200	1.50 (38.1)	0.75 (19.0)	0.32 (8.1)	0.44 (11.2)	0.20 (5.1)	0.24 (6.1)	3SX03-KL554	3.00 (76.2)	0.688 (17.5)	0.25 (6.4)	0.42 (10.7)	0.12 (3.0)	0.18 (4.6)
	3SX03-KL355	1.50 (38.1)	0.75 (19.0)	0.32 (8.1)	0.44 (11.2)	0.20 (5.1)	0.24 (6.1)	3SX03-KL572	2.00 (50.8)	0.75 (19.0)	1.00 (25.4)	0.42 (10.7)	0.90 (22.9)	0.90 (22.9)
	3SX03-KL377	1.50 (38.1)	0.75 (19.0)	1.00 (25.4)	0.44 (11.2)	0.90 (22.9)	0.90 (22.9)	3SX03-KL573	2.50 (63.5)	0.75 (19.0)	1.00 (25.4)	0.42 (10.7)	0.90 (22.9)	0.90 (22.9)
	3SX03-KL531	1.50 (38.1)	0.688 (17.5)	0.25 (6.4)	0.44 (11.2)	0.12 (3.0)	0.18 (4.6)	3SX03-KL574	3.00 (76.2)	0.75 (19.0)	1.00 (25.4)	0.42 (10.7)	0.90 (22.9)	0.90 (22.9)
	3SX03-KL546	2.00 (50.8)	0.75 (19.0)	0.32 (8.1)	0.42 (10.7)	0.20 (5.1)	0.24 (6.1)	3SX03-KL575	2.50 (63.5)	1.50 (38.1)	0.29 (7.4)	0.42 (10.7)	0.18 (4.6)	0.24 (6.1)
	3SX03-KL547	2.50 (63.5)	0.75 (19.0)	0.32 (8.1)	0.42 (10.7)	0.20 (5.1)	0.24 (6.1)	3SX03-KL576	3.00 (76.2)	1.50 (38.1)	0.29 (7.4)	0.42 (10.7)	0.18 (4.6)	0.24 (6.1)
	3SX03-KL548	3.00 (76.2)	0.75 (19.0)	0.32 (8.1)	0.42 (10.7)	0.20 (5.1)	0.24 (6.1)	With rollers on reverse side						
	3SX03-KL549	2.00 (50.8)	0.75 (19.0)	0.32 (8.1)	0.42 (10.7)	0.20 (5.1)	0.24 (6.1)	3SX03-KL310	1.50 (38.1)	0.75 (19.0)	0.32 (8.1)	0.44 (11.2)	0.34 (8.6)	0.38 (9.7)
	3SX03-KL550	2.50 (63.5)	0.75 (19.0)	0.32 (8.1)	0.42 (10.7)	0.20 (5.1)	0.24 (6.1)	3SX03-KL536	1.50 (38.1)	1.50 (38.1)	0.28 (7.1)	0.44 (11.2)	0.30 (7.6)	0.38 (9.7)
	3SX03-KL551	3.00 (76.2)	0.75 (19.0)	0.32 (8.1)	0.42 (10.7)	0.20 (5.1)	0.24 (6.1)	3SX03-KL579	1.50 (38.1)	0.75 (19.0)	0.32 (8.1)	0.44 (11.2)	0.34 (8.6)	0.38 (9.7)
	3SX03-KL552	2.00 (50.8)	0.688 (17.5)	0.25 (6.4)	0.42 (10.7)	0.12 (3.0)	0.18 (4.6)	3SX03-KL580	1.50 (38.1)	0.688 (17.5)	0.25 (6.4)	0.44 (11.2)	0.25 (6.4)	0.31 (7.9)
	3SX03-KL553	2.50 (63.5)	0.688 (17.5)	0.25 (6.4)	0.42 (10.7)	0.12 (3.0)	0.18 (4.6)							

All dimensions shown in inches and (millimeters). For reference purpose only. Not to be used for design or construction purposes.

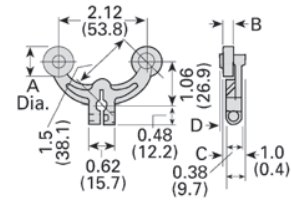
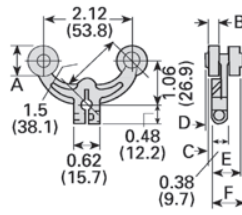
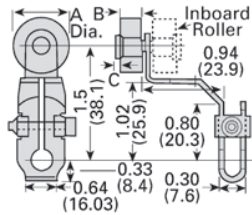
① Can accommodate both U.S. 1.16 (29.4) x 2.34 (59.5) and DIN 1.18 (30.0) x 2.36 (60.0) mounting dimensions.

Limit Switches

3SE03 North American Limit Switches

Modular, plug-in and
NEMA type 6P submersible

Dimension drawings



Offset roller levers

Catalog Number	Dimensions		
	A	B	C
Outboard roller			
3SX03-KL27	0.75 (19)	0.32 (8)	0.03 (1)
3SX03-KL28	0.75 (19)	0.32 (8)	0.03 (1)
3SX03-KL29	0.69 (18)	0.25 (6)	0.04 (1)
3SX03-KL30	0.75 (19)	1.0 (25)	—
Inboard roller			
3SX03-KL24	0.75 (19)	0.32 (8)	0.03 (1)
3SX03-KL25	0.75 (19)	0.32 (8)	0.03 (1)
3SX03-KL26	0.69 (18)	0.25 (6)	0.04 (1)

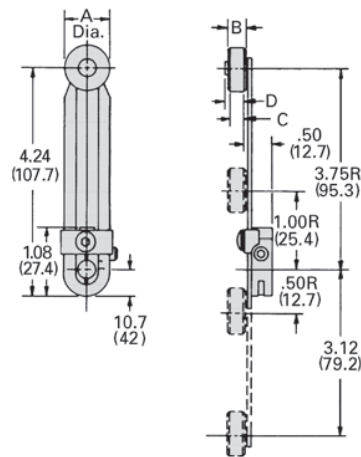
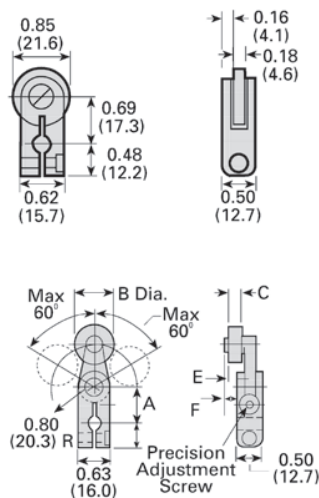
Fork lever, one roller inside, one roller outside

Catalog Number	Dimensions					
	A	B	C	D	E	F
3SX03-KL203	0.75 (19)	0.32 (8)	0.16 (4)	0.20 (5)	0.73 (19)	0.77 (20)
3SX03-KL541	0.75 (19)	0.32 (8)	0.16 (4)	0.20 (5)	0.73 (19)	0.77 (20)
3SX03-KL542	0.69 (18)	0.25 (6)	0.08 (2)	0.14 (4)	0.64 (16)	0.70 (18)

Fork lever - Both rollers on one side

Catalog Number	Dimensions			
	A	B	C	D
3SX03-KL204	0.75 (19)	0.32 (8)	0.16 (4)	0.20 (5)
3SX03-KL543	0.75 (19)	1.0 (25)	0.86 (22)	0.86 (22)
3SX03-KL544	0.75 (19)	0.32 (8)	0.16 (4)	0.20 (5)
3SX03-KL545	0.69 (18)	0.25 (6)	0.08 (2)	0.1 (3)

Bantam roller lever



Precision adjustment roller lever

Catalog Number	Dimensions					
	A	B	C	D	E	F
3SX03-KL340	0.69 (18)	0.75 (19)	0.32 (8)	0.48 (12)	0.24 (6)	0.28 (7)
3SX03-KL465	0.69 (18)	0.75 (19)	0.32 (8)	0.48 (12)	0.24 (6)	0.28 (7)
3SX03-KL535	0.69 (18)	0.69 (18)	0.25 (6)	0.48 (12)	0.16 (4)	0.22 (6)

Adjustable roller lever

Catalog Number	Dimensions			
	A	B	C	D
3SX03-KL201	0.75 (19)	0.32 (8)	0.29 (7)	0.33 (8)
3SX03-KL443	1.5 (38)	0.29 (7)	0.26 (7)	0.32 (8)
3SX03-KL537	0.75 (19)	0.32 (8)	0.29 (7)	0.33 (8)
3SX03-KL538	0.69 (18)	0.25 (6)	0.21 (5)	0.27 (7)
3SX03-KL539	0.69 (18)	0.25 (6)	0.21 (5)	0.27 (7)
3SX03-KL598	0.39 (10)	0.11 (3)	0.11 (3)	0.19 (5)
3SX03-KL599	0.75 (19)	0.5 (13)	0.46 (12)	0.47 (12)

All dimensions shown in inches and (millimeters). For reference purposes only. Not to be used for design or construction purposes.

Limit Switches

3SE03 North American Limit Switches

Modular, plug-in and
NEMA type 6P submersible

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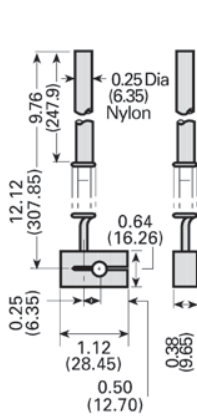
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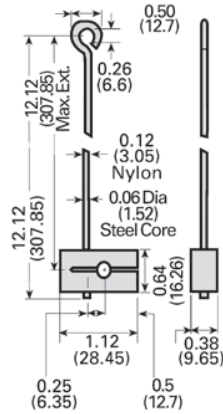
13

Dimension drawings

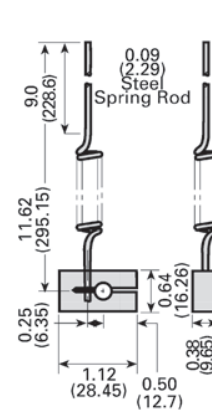
Nylon Spring Rod Actuator
3SX03-KL556



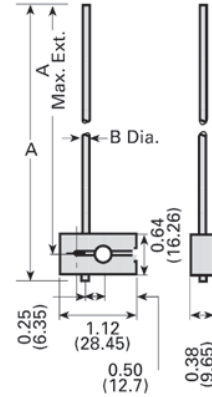
Nylon Covered Wire Actuator
3SX03-KL533



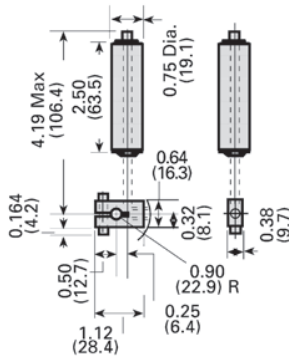
Stainless Steel Spring Actuator
3SX03-KL421



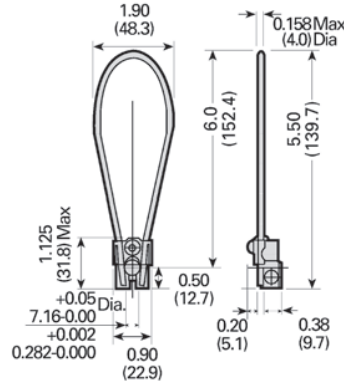
Adjustable Rod Actuator



Adjustable Wire Roller Actuator
3SX03-KL37



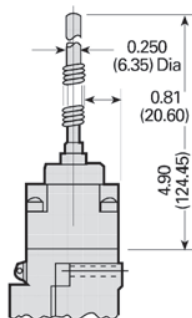
Nylatron Loop Actuator
3SX03-KL142



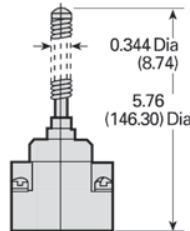
Adjustable rod actuators

Catalog Number	Material	Dimensions	
		A	B
3SX03-KL202	Steel-Round	5.50 (140)	0.120 (3)
3SX03-KL581	Steel-Square	8.75 (222)	0.125 (3)
3SX03-KL399	Nylon	5.50 (140)	0.190 (5)
3SX03-KL220	Stainless Steel	9.00 (229)	0.190 (5)
3SX03-KL226	Plated Steel	12.0 (305)	0.120 (3)

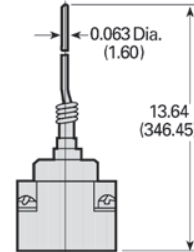
Wobble head with nylon head
3SE03-DW1
3SX03-KW2



Wobble head with coil spring
3SE03-DW1
3SX03-KW4



Wobble head with stainless steel rod
3SE03-DW1
3SX03-KW3



All dimensions shown in inches and (millimeters). For reference purposes only. Not to be used for design or construction purposes.

Limit Switches

3SE03 North American Limit Switches

3SE03 Metal enclosure

Description

Features

- NEMA 1 Enclosed Aluminum Die Cast Housing
- Screw Terminals
- Booted versions for added protection
- 1/2" Conduit Entrance
- NEMA A600, R300 Contacts
- UL Recognized
- CSA Certified
- INO/INC Snap-action contacts (form c)

Application

These switches are designed for accurate repeatability. Their compact size makes them ideal for use in space-restricted areas.

Typical applications include overhead, folding and elevator doors, sliding gates and other automated equipment.

Overall dimensions

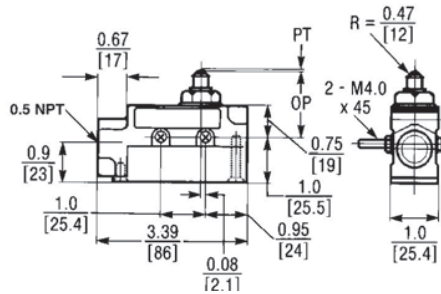
Specifications ①

DT

Catalog Number

List Price \$ 1 unit

Plunger actuator

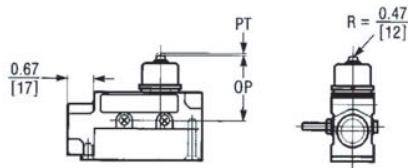


OF Max. - 8.82 - 12.3 oz.
(250 - 350 g)
RF Min. 4.02 oz. (114 g)
PT Max. - 0.016 in. (0.4 mm)
OT Min. - 0.217 in. (5.5 mm)
MD Max. - 0.002 in. (0.05 mm)
OP - 1.504 in. (38.2 mm)



3SE03 - EB05

Booted plunger

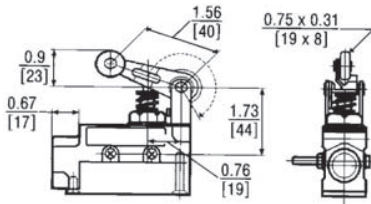


OF Max. - 28.22 oz. (800 g)
RF Min. 8.46 oz. (240 g)
PT Max. - 0.079 in. (2.0 mm)
OT Min. - 0.197 in. (5.0 mm)
MD Max. - 0.004 in. (0.1 mm)
OP - 1.803 in. (45.8 mm)



3SE03 - EB06

Roller lever

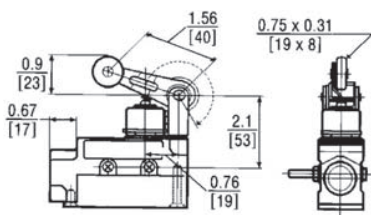


OF Max. - 20.1 oz. (570 g)
RF Min. 6.0 oz. (170 g)
PT Max. - 0.157 in. (4.0 mm)
OT Min. - 0.236 in. (6.0 mm)
MD Max. - 0.016 in. (0.4 mm)



3SE03 - EB32

Booted roller lever



OF Max. - 22.57 oz. (640 g)
RF Min. 8.11 oz. (230 g)
PT Max. - 0.197 in. (5.0 mm)
OT Min. - 0.236 in. (6.0 mm)
MD Max. - 0.016 in. (0.4 mm)



3SE03 - EB33

① OF = Operating Force
RF = Return Force
PT = Pretravel
OT = Operating Travel
MD = Movement Differential
OP = Operating Position

Limit Switches

3SE03 North American Limit Switches

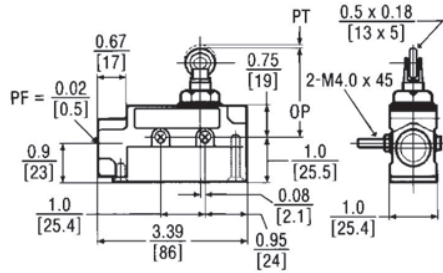
3SE03 Metal enclosure

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Dimension drawings

Overall dimensions

Roller plunger

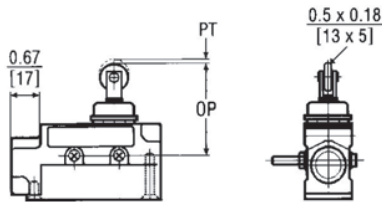


OF Max. - 9.92 - 12.3 oz.
(250 - 350 g)
RF Min. 4.02 oz. (114 g)
PT Max. - 0.02 in. (0.5 mm)
OT Min. - 0.142 in. (3.6 mm)
MD Max. - 0.002 in. (0.05 mm)
OP - 1.957 in. (49.7 mm)



3SE03 - EB07

Booted roller plunger



OF Max. - 17.64 oz. (500 g)
RF Min. 3.53 oz. (100 g)
PT Max. - 0.039 in. (1.0 mm)
OT Min. - 0.138 in. (3.5 mm)
MD Max. - 0.006 in. (0.12 mm)
OP - 1.957 in. (49.7 mm)



3SE03 - EB08

Technical data

Mechanical Life	3,000,000 operations maximum							
Electrical Life	500,000 operations minimum							
Operating Speed	0.01 m/second to 1m/second							
Cable Entry	1/2" NPT							
Temperature Range	-15° to 80° (5° to 176°F)							
Degree of Protection	NEMA 1							
Mounting	Any Position							
NEMA Rating	A600, R300							
Rated Voltage (V) ¹⁾²⁾	Non-Inductive Load (A)			Inductive load (A)			Inrush current (A)	
	Resistive load		Lamp load	Inductive load		Motor load		
	NC-NO	NO	NC	NC-NO	NO	NC	NO	NC
125 VAC	15	3	1.5	15	5	2.5	30 maximum	15 maximum
250 VAC	15	2.5	1.25	15	3	1.5		
500 VAC	3	1.5	0.75	2.5	1.5	0.75		
8 VDC	15	3	1.5	15	5	2.5		
14 VDC	15	3	1.5	10	5	2.5		
30 VDC	6 (2)	3	1.5	5	5	2.5		
125 VDC	0.4	0.4	0.4	0.05	0.05	0.05		
250 VDC	0.2	0.2	0.2	0.03	0.03	0.03		

1) Inductive load has power factor of 0.04 minimum (AC) and a time of 7m/second (DC)

2) Lamp load has an inrush current of 6 times steady-state current.

Mechanical Safety

3SE7 Cable-Operated Switches

General Information

Application

Cable-operated switches are used for monitoring or for EMERGENCY-STOP facilities on particularly endangered system sections. They are available with metal enclosures.

As the effective range of a cable-operated switch is limited by the length of the pull-wire, large systems can also be protected.

Cable-operated switches (requiring pulling at both ends) and conveyor belt unbalance track-ers are used primarily for monitoring very long belt systems.

Specifications

Switches with latching for implementation in EMERGENCY-STOP equipment correspond to the EN 418 standard.

Principle of operation

The switch contacts of the cable-operated switches and the conveyor belt unbalance protection devices are positive opening.

Cable-operated switches with one-side operation are held in free position by the pre-tension force on the turnbuckle.

- In the 3SE7 140, -150 and -160 cable-operated switches, both switching contacts are available for cable-break/cable pull signaling. The NO contact is used, for example, for signaling purposes.

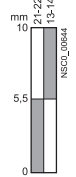
For switches with latching, with a pretensioned cable, the locking must be deactivated beforehand in order to return the switch to its free position.

Technical data

Type	3SE7 120	3SE7 150	3SE7 140	3SE7 141	3SE7 160	3SE7 310
Standards	IEC 60947-5-1, EN 60947-5-1; IEC 60204-1, EN 60204-1; EN ISO 13850					
Certifications	UL / CSA					
Electrical design	Contacts electrically isolated from each other					
Electrical loading						
• at AC-15	AC 400 V, 6A			AC 250 V, 2A	AC 400 V, 6A	
• minimum	AC/DC 24 V, 10 mA					
Short circuit protection	6 A (Slow acting)					
Mechanical endurance	> 1 x 10 ⁶ operating cycles					
Contact material	Fine silver					
Actuation	By pulling or breaking of a rope (cable)					
Rope length, maximum	10 m	25 m	50 m	75 m ¹⁾	2 x 50 m	–
Spacing between rope supports, maximum	2.5 m	3 m	5 m	5 m	5 m	–
Enclosure	GDAL alloy, coated (color), dark black RAL 9005					
Cover	Shock-resistant thermoplastic					
Degree of protection acc. To IEC 60529	IP65			IP67	1P65	
Ambient temperature	-25C to +70C					
Mounting	Designed for M 5					
Mounting space	30 mm and 40 mm					
Cable entry	2x(M20x1.5)	2x(M20x1.5)	1x(M16x1.5)	3x(M20x1.5)	2x(M25x1.5)	
Type of connection	M3.5 screw connection; Self-lifting pressure plate terminals					

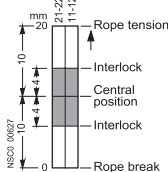
Travel diagrams

3SE7 120-2DD01



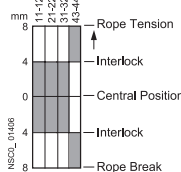
Central position

3SE7 140-1.F00



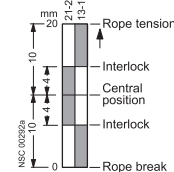
Central position

3SE7 141-1EG10



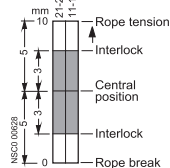
Central position

3SE7 140-1.D0.



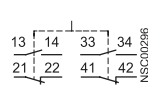
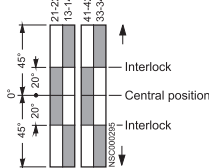
Central position

3SE7 120-1BF00, 3SE7 150-1BF00



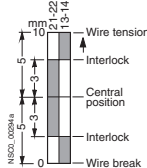
Central position

3SE7 160-1AE, 3SE7 310-1AE



Central position

3SE7 150-1.D00, 3SE7 150-2DD00



Central position

1) 75 m cable length possible provided the ambient temperature range is strictly observed, otherwise, 50 m.

Mechanical Safety

SIRIUS 3SE7 Cable-Operated Switches

Selection

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Selection and ordering data

Version	Wire length	Contacts	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
m							
Cable-operated switches							
	Metal enclosures, IP65 (cover made of molded plastic)	10					
	Metal enclosures, IP65 (cover made of molded plastic), with alignment window	25					
	Metal enclosures, IP65 (cover made of molded plastic), with alignment window, with LED, red, 24 V DC	25					
	Metal enclosures, IP65 (cover made of molded plastic)	50					
	Metal enclosures, IP67 (cover made of molded plastic), with EMERGENCY-STOP mushroom, with rotate-to-unlatch mechanism	75					
	Metal enclosures, IP65 with actuation on both sides	2 x 75					

➞ Positive opening according to IEC 60947-5-1, Appendix K.

Mechanical Safety

SIRIUS 3SE7 Cable-Operated Switches

Selection

Version	Contacts	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
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Conveyor belt unbalance trackers



3SE7 310-1AE00

Metal enclosures, IP65

- With latching and button reset
- In addition with LED, red, 24 V DC

2 NO + 2 NC



B

3SE7 310-1AE00

1 1 unit

2 NO + 2 NC



B

3SE7 310-1AE04

1 1 unit

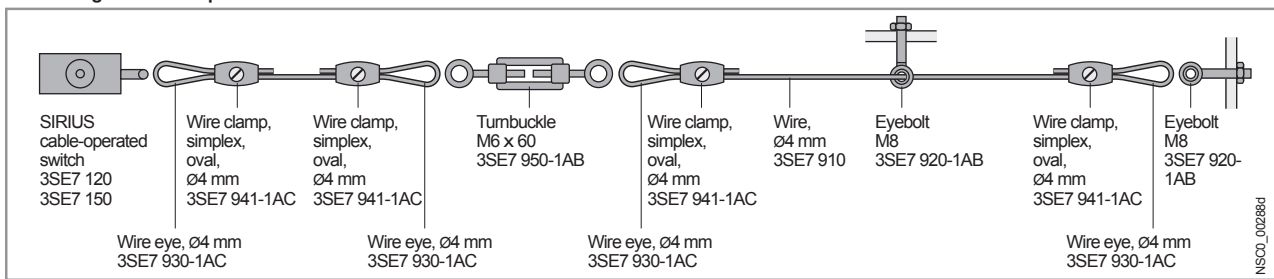
⊕ Positive opening according to IEC 60947-5-1, Appendix K.

Product Category: SFTY

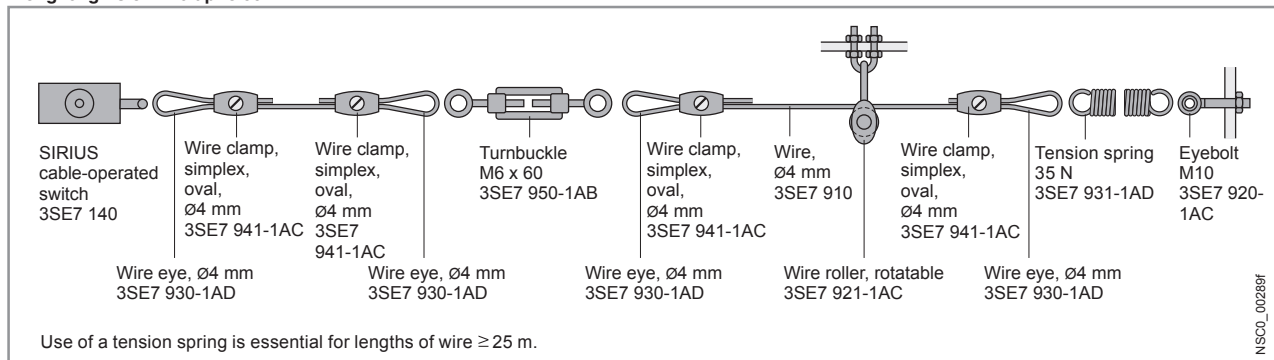
Accessories

Configuration of the cable-operated switches

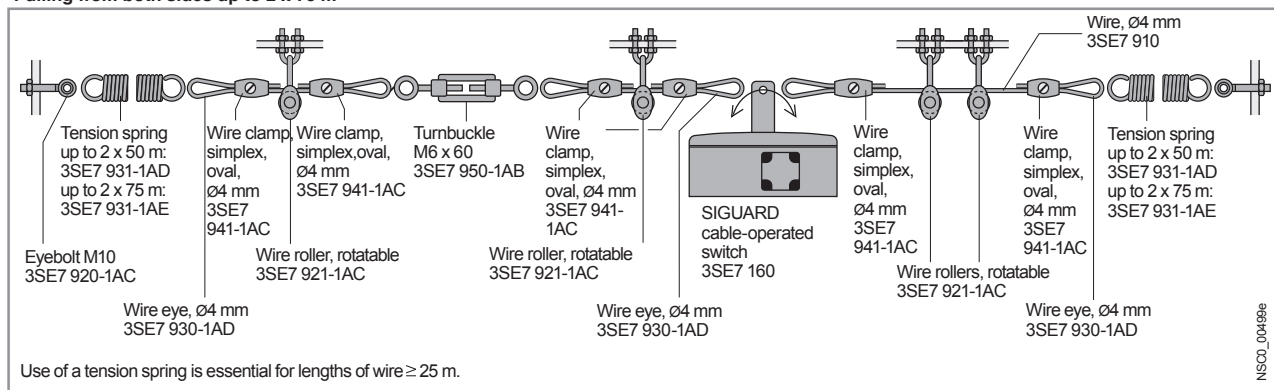
Short lengths of wire up to 25 m



Long lengths of wire up to 50 m



Pulling from both sides up to 2 x 75 m



Note:

Large temperature fluctuations require corresponding compensation springs. For reliable connection the PVC sheath must be

removed from the clamping area of the steel trip-wire. Wire supports must be used at the recommended intervals.

Mechanical Safety

SIRIUS 3SE7 Cable-Operated Switches

Accessories

Version	Wire length/ diameter	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
Trip-wire with fixing						
	Steel wires , with red plastic sheath, Ø 4 mm ¹⁾	10 m	A	3SE7 910-3AA	1	1 unit
		15 m	A	3SE7 910-3AB	1	1 unit
		20 m	▶	3SE7 910-3AC	1	1 unit
		50 m	A	3SE7 910-3AH	1	1 unit
	Wire clamps , galvanized white					
	• Oval	2 × Ø 4 mm	A	3SE7 941-1AC	1	1 unit
	• Simplex (1 set = 4 units)	2 × Ø 4 mm	▶	3SE7 943-1AC	1	4 units
	• Duplex (1 set = 4 units)	2 × Ø 4 mm	A	3SE7 944-1AC	1	4 units
	• Single (1 set = 4 units)	2 × Ø 4 mm	A	3SE7 942-1AA	1	4 units
	Tension springs (zinc-plated) to maintain the counter tension					
	• 13 N		A	3SE7 931-1AB	1	1 unit
	• 35 N, for trip-wires up to 50 m		▶	3SE7 931-1AD	1	1 unit
	• > 35 N, for trip-wires up to 2 × 75 m		▶	3SE7 931-1AE	1	1 unit
	Wire rollers for changing the direction of the wire, Ø 4 mm rotatable		A	3SE7 921-1AC	1	1 unit
	Fixtures for the wire rollers (incl. fixing nuts)		▶	3SE7 921-1AA	1	1 unit
	Wire eyes for changes in wire direction and improved power transmission at the fixing points (1 set = 4 units)	Ø 4 mm	▶	3SE7 930-1AD	1	4 units
	Eyebolts for fixing the wire					
	• Including M8 nut		A	3SE7 920-1AB	1	1 unit
	• Including M10 nut		▶	3SE7 920-1AC	1	1 unit
	Turnbuckles for precise adjustment of the pretension					
	• M6 x 60		A	3SE7 950-1AB	1	1 unit
	• M6 x 110		A	3SE7 950-1AD	1	1 unit
Spare parts						
	LED lamps , red 24 V DC 25 mm diameter; for M20 x 1.5 connection		D	3SX3 235	1	1 unit

¹⁾ Diameter including casing; the diameter of the steel wire is 3.2 mm.

3SE Mechanical Safety

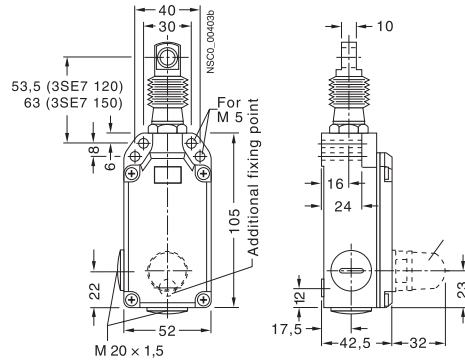
Cable-Operated Switches

3SE7, metal enclosures

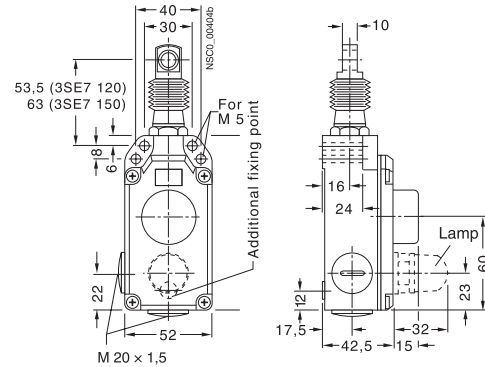
Dimension drawings

Metal enclosure

3SE7 120-2DD.., 3SE7 150-2DD..
without latching

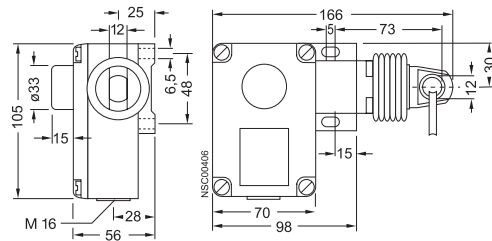


3SE7 120-1B..., 3SE7 150-1B...
with latching and button reset

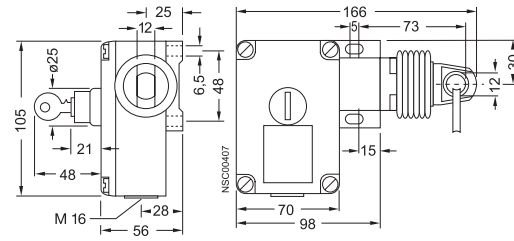


Metal enclosure

3SE7 140-1B...
with latching and button reset

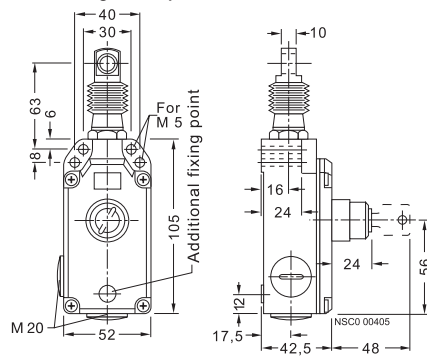


3SE7 140-1ECD.
with latching and key reset

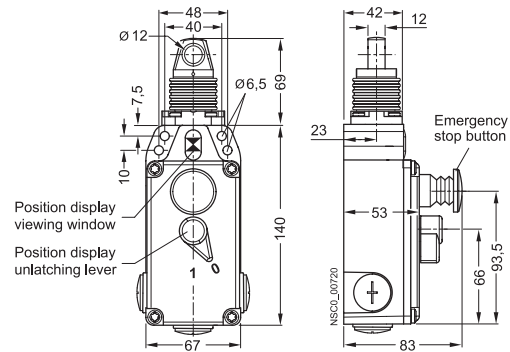


Metal enclosure

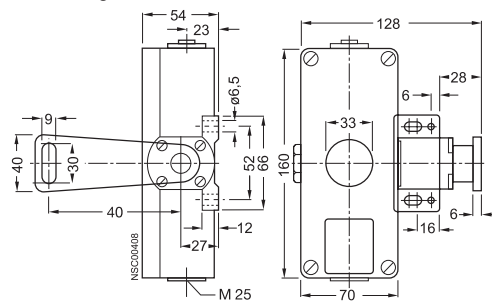
3SE7 150-1CD..
with latching and key reset



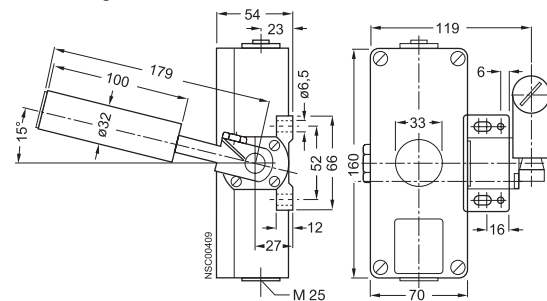
3SE7 141-1EG10.
with EMERGENCY STOP and Lockout release



3SE7 160-1AE..
with latching and button reset



3SE7 310-1AE.. conveyor belt unbalance protection device
with latching and button reset



Overview

Position switches with separate actuator are used where the position of doors, covers or protective grills must be monitored for safety reasons.

3SE5 position switches with separate actuator have the same enclosures as the standard switches (modular system).



Position switches with head for separate actuator

Design

Enclosure sizes

The 3SE5 switches are available in various enclosure sizes:

- Plastic enclosures according to EN 50047, 31 mm wide, IP65, 1 cable entry
 - Metal enclosures according to EN 50047, 31 mm wide, IP66/IP67, 1 cable entry
 - Plastic and metal enclosures according to EN 50041, 40 mm wide, IP66/IP67, 1 cable entry
 - Plastic enclosures, 50 mm wide, IP66/IP67, 2 cable entries
 - Metal enclosures, 56 mm wide, IP66/IP67, 3 cable entries
- Also available is a switch in the 3SE2 series which has arisen in this form according to general market requirements:
- Molded-plastic enclosures outside of the standards, enclosure width 52 mm, IP67

Enclosure versions

Various basic versions can be selected for the enclosures of the 3SE5 series:

- Available with two- or three-pole contact blocks designed as slow-action contacts
- Optional LED status display
- With mounted four- or five-pole M12 connector socket (available for the wide enclosures as an accessory for self-assembly)
- With 6-pole connector socket + PE on the metal enclosures
- Similarly with a combination of connector socket and LED indicators
- Metal enclosures for explosion protection (ATEX) ([see online](#))
- AS-Interface version with integrated ASIsafe electronics for all enclosure designs ([see online](#))

For a description of the basic switches, [see page 13/6](#).

Operation

The actuator head is included in the scope of supply. For actuation from four directions it can be adjusted through $4 \times 90^\circ$. The switches can also be approached from above.

The twist actuators of the 3SE2 243 and 3SE2 257 switches with special enclosures cannot be changed. The switches can be approached from the two broad sides and from above.

The actuators are not included in the scope of supply of the position switch and must be ordered separately from various versions to suit the application ([see page 13/86](#)).

The actuator is encoded. Simple overruling by hand or auxiliary devices is impossible.

Radius actuators

The position switches with radius actuators are particularly suitable for rotatable protective devices. The movable actuation key allows even small radii to be approached. Damage to the switch and the actuator due to inaccurate approach is prevented.

Locking devices

A high-grade steel blocking insert for attaching up to eight padlocks is available for even more safety ([see page 13/86](#)).



Blocking insert with padlock

Dust protection

A rubber cap to protect the twist actuator from contamination is available for operation in dusty environments ([see page 13/86](#)).

Contact reliability

The new contact blocks ensure an extremely high contact stability. This applies even when the devices are switching low voltages and currents, e.g. 1 mA at 5 V DC.

Positive opening ➡

The NC contacts of the switch are forced open mechanically, positively-driven and reliably by the plunger. This is referred to as "positive opening".

Limit Switches

SIRIUS 3SE5 Interlock Switches

**3SE5, plastic enclosures
with separate actuator**

Selection and ordering data

Complete units

2 or 3 contacts · 5 directions of approach · Degree of protection IP65 or IP66/IP67 · Cable entry M20 × 1.5

Version ¹⁾	Contacts	LEDs	DT	Complete units		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
				Order No.	List Price \$ per PU				kg
Enclosure width 31 mm to EN 50047									
	5 directions of approach								
	Slow-action contacts	1 NO + 1 NC --	⊙ ➤		3SE5 232-0RV40	1	1 unit	102	0.150
	Slow-action contacts	1 NO + 2 NC --	⊙ ➤		3SE5 232-0QV40	1	1 unit	102	0.155
	With increased minimum pull-out force 30 N								
	Slow-action contacts	1 NO + 1 NC --	⊙ B		3SE5 232-0QV40-1AA1	1	1 unit	102	0.150
	With M12 connector socket, 4-pole (250 V, 4 A)								
	Slow-action contacts	1 NO + 1 NC --	⊙ B		3SE5 234-0RV40-1AC4	1	1 unit	102	0.165
	Slow-action contacts	1 NO + 2 NC --	⊙ B		3SE5 234-0QV40-1AE0	1	1 unit	102	0.170
	With 2 LEDs, yellow/green								
	Slow-action contacts	1 NO + 1 NC 24 V DC	⊙ B		3SE5 232-1RV40	1	1 unit	102	0.155
	Slow-action contacts	1 NO + 1 NC 230 V AC	⊙ B		3SE5 232-3RV40	1	1 unit	102	0.110
	With M12 connector socket, 5-pole (125 V, 4 A) and 2 LEDs								
	Slow-action contacts	1 NO + 1 NC 24 V DC	⊙ C		3SE5 234-1RV40-1AF3	1	1 unit	102	0.175
Enclosure width 50 mm									
	5 directions of approach								
	Slow-action contacts	1 NO + 2 NC --	⊙ B		3SE5 242-0QV40	1	1 unit	102	0.110
	With increased minimum pull-out force 30 N								
	Slow-action contacts	1 NO + 1 NC --	⊙ B		3SE5 242-0RV40-1AA1	1	1 unit	102	0.110
	With 2 LEDs, yellow/green								
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊙ B		3SE5 242-1QV40	1	1 unit	102	0.120
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊙ C		3SE5 242-3QV40	1	1 unit	102	0.120

⊙ Positive opening according to IEC 60947-1, Appendix K.

1) Supplied without actuator. Please order separately (see page 13/86).

For 1/2" NPT adaptors and cable glands, see page 13/48.

Mechanical Safety

SIRIUS 3SE5 Interlock Switches

3SE5, plastic enclosures
Enclosure width 40 mm acc. to EN 50041

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Selection and ordering data

Complete units

2 or 3 contacts · 5 directions of approach · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version ¹⁾	Contacts	LEDs	DT	Complete units		PU (UNIT, SET, M)	PS*
				Configurator			
				Order No.	Price per PU		

Enclosure width 40 mm acc. to EN 50041



With separate
actuator



With 2 LEDs

5 directions of approach

Slow-action contacts	1 NO + 2 NC	—	→	B	3SE5 132-0QV20	1	1 unit
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With 2 LEDs, yellow/green

Slow-action contacts	1 NO + 2 NC	24 V DC	→	C	3SE5 132-1QV20	1	1 unit
Slow-action contacts	1 NO + 2 NC	230 V AC	→	C	3SE5 132-3QV20	1	1 unit

For online configurator see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Appendix K.

1) Supplied without actuator. Please order separately (see page 13/86).

Limit Switches

SIRIUS 3SE5 Interlock Switches

3SE5, metal enclosures
Enclosure width 31 mm acc. to EN 50047

Selection and ordering data

Complete units

2 or 3 contacts · 5 directions of approach · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version ¹⁾	Contacts	LEDs	DT	Complete units	PU (UNIT, SET, M)	PS*
				Configurator		
				Order No.	Price per PU	

Enclosure width 31 mm acc. to EN 50047



With separate actuator

5 directions of approach

Slow-action contacts	1 NO + 1 NC	—	➡ A	3SE5 212-0RV40	1	1 unit
Slow-action contacts	1 NO + 2 NC	—	➡ B	3SE5 212-0QV40	1	1 unit



With 2 LEDs

With 2 LEDs, yellow/green

Slow-action contacts	1 NO + 1 NC	24 V DC	➡ B	3SE5 212-1RV40	1	1 unit
Slow-action contacts	1 NO + 1 NC	230 V AC	➡ B	3SE5 212-3RV40	1	1 unit

⚙ For online configurator see www.siemens.com/sirius/configurators.

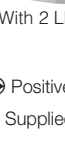
➡ Positive opening according to IEC 60947-5-1, Appendix K.

1) Supplied without actuator. Please order separately (see page 13/86).

Selection and ordering data

Complete units

2 or 3 contacts · 5 directions of approach · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version ¹⁾	Contacts	LEDs	DT	Complete units	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
				Order No.	List Price \$ per PU			kg
Enclosure width 40 mm to EN 50041								
 With separate actuator	5 directions of approach							
	Slow-action contacts	1 NO + 2 NC --	➞ ▶	3SE5 112-0QV10		1	1 unit	102 0.360
	With increased minimum pull-out force 30 N							
 With M12 socket	Slow-action contacts	1 NO + 2 NC --	➞ B	3SE5 112-0QV10-1AA7		1	1 unit	102 0.360
	With M12 connector socket, 5-pole (125 V, 4 A)							
	Slow-action contacts	1 NO + 1 NC --	➞ C	3SE5 114-0RV10-1AC5		1	1 unit	102 0.360
 With 2 LEDs	Slow-action contacts	2 NC --	➞ C	3SE5 114-0QV10-1AE1		1	1 unit	102 0.360
	With connector socket, 6-pole + PE (250 V, 10 A)							
	Slow-action contacts	1 NO + 2 NC --	➞ C	3SE5 115-0QV10-1AD1		1	1 unit	102 0.380
 With 2 LEDs	With 2 LEDs, yellow/green							
	Slow-action contacts	1 NO + 2 NC 24 V DC	➞ B	3SE5 112-1QV10		1	1 unit	102 0.370
	Slow-action contacts	1 NO + 2 NC 230 V AC	➞ C	3SE5 112-3QV10		1	1 unit	102 0.370
 With 2 LEDs	With M12 connector socket, 5-pole (125 V, 4 A) and 2 LEDs							
	Slow-action contacts	1 NO + 1 NC 24 V DC	➞ C	3SE5 114-1RV10-1AF3		1	1 unit	102 0.360
	With connector socket, 6-pole + PE (10 A) and 2 LEDs							
 With 2 LEDs	Slow-action contacts	1 NO + 1 NC 24 V DC	➞ C	3SE5 115-1RV10-1AF2		1	1 unit	102 0.380
Enclosure width 56 mm								
 With separate actuator	5 directions of approach							
	Slow-action contacts	1 NO + 2 NC --	➞ ▶	3SE5 122-0QV10		1	1 unit	102 0.360
	With increased minimum pull-out force 30 N							
 With 2 LEDs	Slow-action contacts	1 NO + 2 NC --	➞ B	3SE5 122-0QV10-1AA7		1	1 unit	102 0.360
	With 2 LEDs, yellow/green							
	Slow-action contacts	1 NO + 2 NC 24 V DC	➞ ▶	3SE5 122-1QV10		1	1 unit	102 0.370
 With 2 LEDs	Slow-action contacts	1 NO + 2 NC 230 V AC	➞ C	3SE5 122-3QV10		1	1 unit	102 0.370

➞ Positive opening according to IEC 60947-1, Appendix K.

1) Supplied without actuator. Please order separately (see page 13/86).

For 1/2" NPT adaptors and cable glands, see page 13/48.

Limit Switches

SIRIUS 3SE5 Interlock Switches

3SE5, metal and plastic enclosures
Accessories

Selection and ordering data

Version	DT	Order No.	List Price \$ per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Actuators for 3SE5							
 3SE5 000-0AV01		Standard actuators, length 75.6 mm	A	3SE5 000-0AV01	1	1 unit	102 0.040
 3SE5 000-0AV02		With vertical fixing, length 53 mm	▶	3SE5 000-0AV02	1	1 unit	102 0.070
 3SE5 000-0AV03		With transverse fixing, length 47 mm	▶	3SE5 000-0AV03	1	1 unit	102 0.070
 3SE5 000-0AV06		Radius actuators, length 51 mm	▶	3SE5 000-0AV04	1	1 unit	102 0.070
		• Direction of approach from the left	▶	3SE5 000-0AV06	1	1 unit	102 0.070
		• Direction of approach from the right	▶	3SE5 000-0AV05	1	1 unit	102 0.090
 3SE5 000-0AV05		Universal radius actuators, length 77 mm					
 3SE5 000-0AV07		Universal radius actuators, heavy-duty	A	3SE5 000-0AV07-1AK2	1	1 unit	102 0.120
		• Length 67 mm	A	3SE5 000-0AV07	1	1 unit	102 0.090
		• Length 77 mm					
Optional accessories for 3SE5							
 3SE5 000-0AV08-1AA2		Protective caps made of black rubber for the actuator head, to protect the actuator openings from contamination	B	3SE5 000-0AV08-1AA2	1	1 unit	102 0.010
		Not to be used for 3SE5 2.. plastic enclosures.					
 3SE5 000-0AV08-1AA3		Blocking inserts , high-grade steel, for actuator head, for up to 8 padlocks	B	3SE5 000-0AV08-1AA3	1	1 unit	102 0.065
Connections for 3SE5, 3SE2							
 3SY3 127		Connector sockets (4-pole), M12, fixed for M20 x 1.5 For max. 250 V, 4 A With 0.25 mm ² connecting cable, plastic, degree of protection IP67, ambient temperature -40 to +85 °C	B	3SY3 127	1	1 unit	102 0.010
 3RX8 000		Cable boxes (4-pole), M12 With terminal compartment, can be pre-assembled	A	3RX8 000-0CB45	1	1 unit	574 0.015
		Angular cable boxes (4-pole), M12 With terminal compartment, can be pre-assembled	A	3RX8 000-0CC45	1	1 unit	574 0.015
 3SX9 926		Connector sockets (5-pole), M12, fixed for M20 x 1.5 For max. 125 V, 4 A With 0.25 mm ² connecting cable, plastic, degree of protection IP67, ambient temperature -40 to +85 °C	B	3SY3 128	1	1 unit	102 0.010
		Cable boxes (5-pole), M12 With terminal compartment, can be pre-assembled	A	3RX8 000-0CB55	1	1 unit	574 0.016
		Angular cable boxes (5-pole), M12 With terminal compartment, can be pre-assembled	A	3RX8 000-0CC55	1	1 unit	574 0.016
		Cable glands M20 x 1.5 Plastic	A	3SX9 926	1	1 unit	102 0.010

Mechanical Safety

3SE2 Interlock Switches

3SE2, plastic enclosures
with separate actuator

Selection and ordering data

1 contact · 3 contacts · Moving double-break contacts ¹⁾²⁾

Actuation	Enclosure width	Length of actuator	DT	3SE. position switches with 3 slow-action contacts		3SE. position switches with 1 slow-action contact	Wght. apprx.
				 Ident. No. 12 acc. to EN 50 013		 Ident. No. 01 acc. to EN 50 013	
				Order No.	List Price \$ 1 unit	Order No.	List Price \$ 1 unit
	mm	mm			kg		kg
Molded plastic enclosure IP 67							
3SE2 243-0XX Top and side entry¹⁾							
 M20 x 1.5 connecting thread - Extraction force 5 N 52 - Extraction force 30 N 52 - With automatic ejection 52 M16 x 1.5 connecting thread - Extraction force 5 N 52 - Extraction force 30 N 52 - With automatic ejection 52				→ 3SE2 243-0XX40 0.140 → 3SE2 243-0XX 0.140 → 3SE2 243-0XX30 0.140 → 3SE2 243-0XX48 0.140 → 3SE2 243-0XX18 0.140 → 3SE2 243-0XX38 0.140	→ 3SE2 257-6XX40 0.120 → 3SE2 257-6XX 0.120 → 3SE2 257-6XX30 0.120 → 3SE2 257-6XX48 0.140 → 3SE2 257-6XX18 0.140 → 3SE2 257-6XX38 0.140		
Actuators							
 Standard actuator ($r_{min.} = 150$ mm)				3SX3 218 0.020			
 Radius actuator (universal) ($r_{min.} = 45$ mm)				3SX3 228 0.025			
 Ball catch (up to 100 N)				3SX3 217 0.035			
 Actuator with dust protector and slit cover (1 set)				3SX3 234 0.035			
Radius actuator				3SX3 256 0.020			
Accessories							
Slit cover only for 3SX3234 (1 set = 3 units)				3SX3 233 0.005			

For operation, operating speed and travel, see Page 13/92.

→ Positive opening acc. to IEC 60 947-5-1, Appendix K, and DIN VDE 0660 Part 200.

1) Supplied without actuator.

2) For conduit thread adaptors, see page 13/48.

Limit Switches

SIRIUS 3SE5 Interlock Switches

Technical data

Benefits

The 3SE5 position switches with separate actuator differ from the previous series through the following new characteristics:

- All enclosure sizes with increased corrosion protection
- All enclosure sizes are optionally available with a LED signaling indicator.
- The three-pole contact block 1 NO + 2 NC is available for all enclosure sizes.
- The plastic enclosure has simple and fast wiring equipment which makes it possible to save from approx. 20 to 25 % of the time when connecting.
- The ASIsafe electric component is integrated for the versions with the AS-Interface connection ([see online](#)); an adapter is not required.

Application

Position switches with separate actuator are used where the position of doors, covers or protective grills must be monitored for safety reasons.

The position switch can only be operated with the matching coded actuator. Simple overruling by hand or auxiliary devices is impossible.

Devices are available with enclosure versions to suit the particular ambient conditions. Different control tasks can be performed with the best contact blocks suited for the particular purpose. Dimensions, fixing points of the enclosure are in

accordance with EN 50041 or EN 50047 standards. The devices are suitable for use in any climate.

Standards

IEC 60947-5-1 or EN 60947-5-1.

The protective measure of "total insulation" by the molded-plastic enclosure is guaranteed by the use of molded-plastic screw-glands.

Safety position switches

For controls according to IEC 60204-1 or EN 60204-1 the devices can be used as a safety position switch. To secure position switches against changes in their position, keyed techniques must be employed on installation.

Safety circuits

IEC 60947-5-1 and EN 60947-5-1 require positive opening of the NC contacts, i.e. for the purposes of personal safety, the assured opening of NC contacts is expressly stipulated for the electrical equipment of machines in all safety circuits and marked according to the IEC standard 60947-5-1 with the symbol ☞.

Category 3 according to ISO 13849-1 (EN 954-1) can be attained with a position switch with a separate actuator if the corresponding failsafe evaluation units are selected and correctly installed, e.g. the 3TK28 safety relays or matching units from the ASIsafe, SIMATIC or SINUMERIK product ranges.

Category 4 can be achieved when using an additional position switch.

Technical specifications

Type		3SE5 1...-V.., 3SE5 2...-V..	3SE2 257-XX..	3SE2 243-XX..	
General data					
Standards		IEC 60947-5-1, EN 60947-5-1			
Rated insulation voltage U_i	V	400	500		
Pollution degree acc. to IEC 60664-1		Class 3	Class 3		
Rated impulse withstand voltage U_{imp}	kV	6			
Rated operational voltage U_e	V	400 AC; over 300 V AC only equal potential	500 AC; over 380 V AC only equal potential		
Conventional thermal current I_{th}	A	6	10		
Rated operational current I_e		2-pole	3-pole	1-pole	3-pole
• With alternating current 50/60 Hz		$I_e/AC-15$	$I_e/AC-15$	$I_e/AC-12$	$I_e/AC-15$
- At 24 V	A	6	6	10	10
- At 120 V	A	6	3	10	10
- At 240 V	A	3	1.5	10	10
- At 400 V	A	—	—	10	4
- At 500 V	A	—	—	10	4
				3	3
• For direct current		$I_e/DC-13$	$I_e/DC-13$	$I_e/DC-12$	$I_e/DC-13$
- At 24 V	A	3	3	10	10
- At 125 V	A	0.55	0.55	—	—
- At 250 V	A	0.27	0.27	—	—
- At 110 V	A	—	—	4	1
- At 220 V	A	—	—	1	0.4
- At 440 V	A	—	—	0.5	0.2
Short-circuit protection ¹⁾					
• With DIAZED fuse links, gG operational class	A	6	6		
• With fuse links, quick		—	10		
• With miniature circuit breaker, Char. C	A	1	2	—	
Mechanical endurance		1 ×10 ⁶ operating cycles			
Electrical endurance					
• With 3RH.1, 3RT contactors in size S00, S0		10 ×10 ⁶ operating cycles	> 1 × 10 ⁶ operating cycles		
• For utilization category AC-15 when switching off $I_e/AC-15$ at 240 V		0.1 ×10 ⁶ operating cycles	0.5 ×10 ⁶ operating cycles		
Switching frequency		6000 operating cycles/h			
With 3RH.1, 3RT contactors in size S00, S0					
Minimum pull-out force for positive opening	N	20	10	30	

Configuration

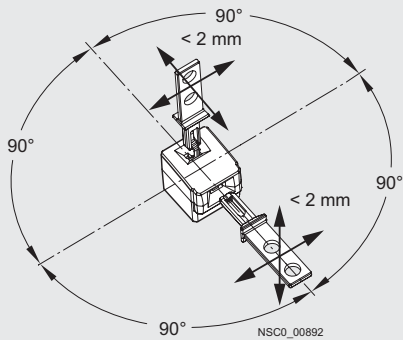
Operation and operating travel of actuators

Operation by a separate actuator  Positive opening acc. to EN 60947-5-1 v_{max} Max. actuating speed  Direction of operation	Contact blocks Terminal designation acc. to EN 50013	Nominal travel  Contact closed  Contact open Actuator in actuator head: NC is closed
--	--	--

Separate actuators

Standard actuators

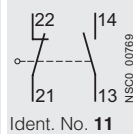
Axial and lateral actuation ($4 \times 90^\circ$)



Minimum force required in operating direction 30 N (on retraction)

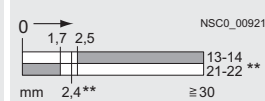
Slow-action contacts

1 NO + 1 NC



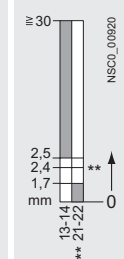
Lateral actuation

3SE5 ...-RV..

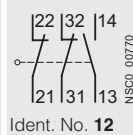


Axial actuation

3SE5 ...-RV..



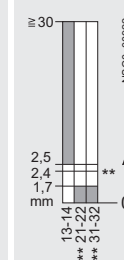
1 NO + 2 NC



3SE5 ...-QV..

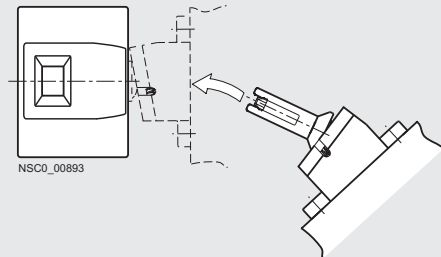


3SE5 ...-QV..



Radius actuators (all directions of approach)

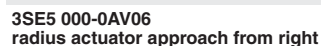
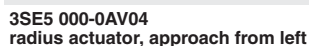
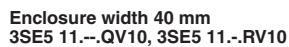
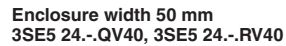
Example: direction of approach from the left



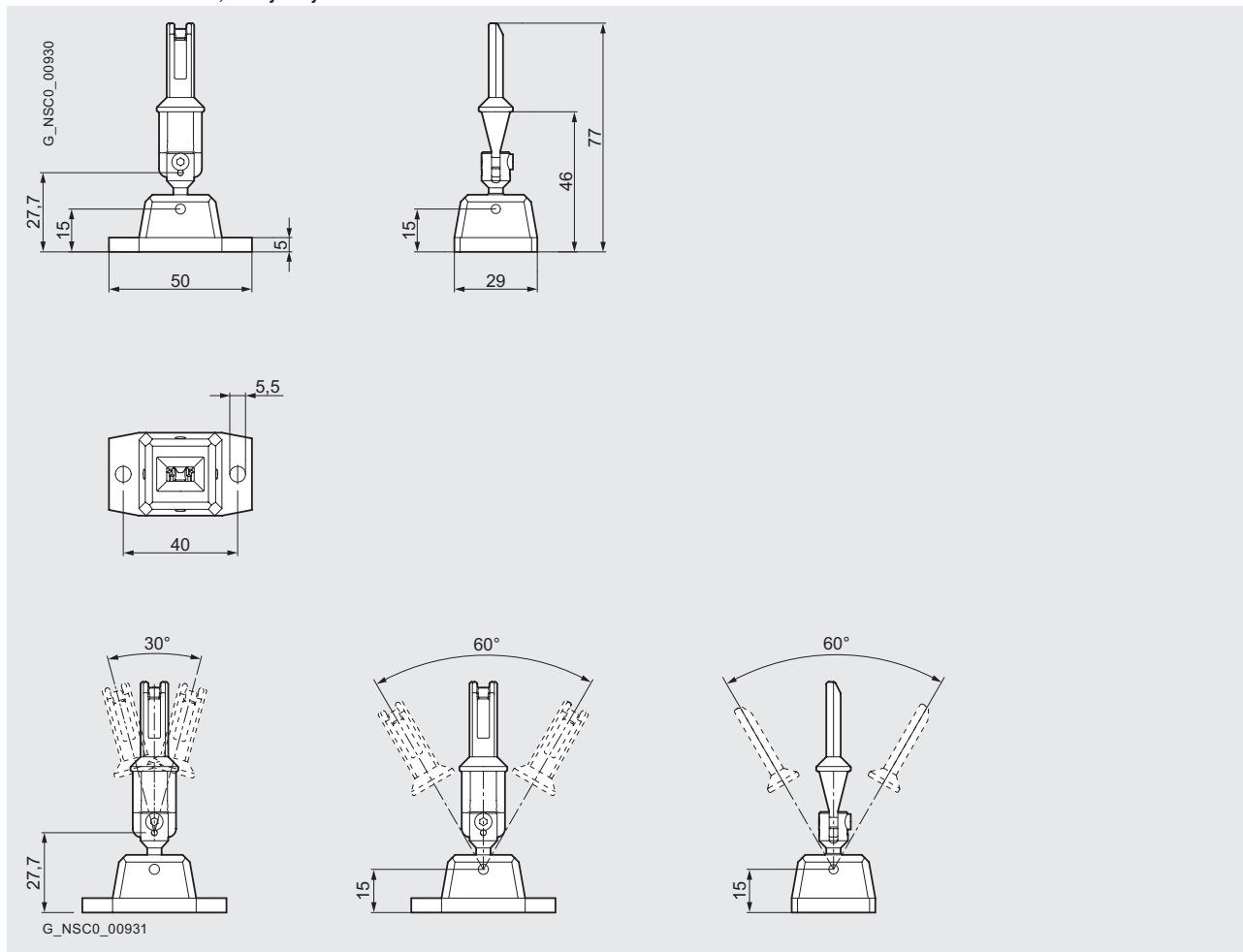
For connector assignment, see page 13/61.

3SE5 with separate actuator Metal and plastic enclosures

Enclosure width 31 mm
3SE5 23.-.QV40, 3SE5 23.-.RV40



3SE5 000-0AV07
universal radius actuator, heavy duty



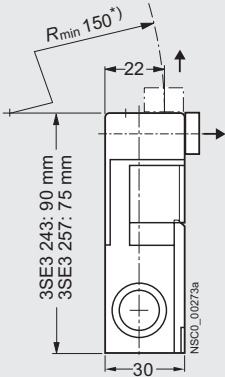
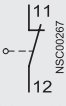
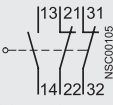
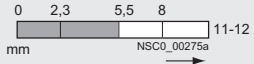
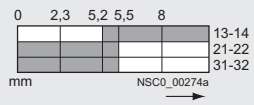
Limit Switches

SIRIUS 3SE5 Interlock Switches

3SE2 with separate actuator
Plastic enclosures

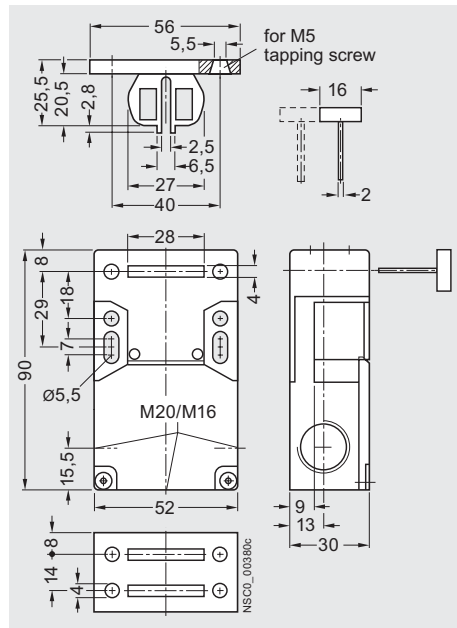
Configuration

Operation and operating travel of actuators

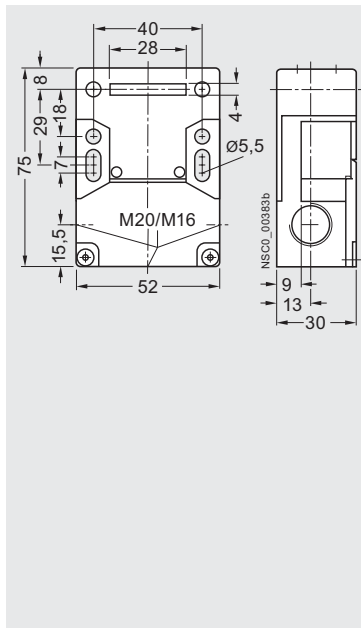
Operation by a separate actuator v_{max} Max. actuating speed $\rightarrow$ Direction of operation Radius actuation: for all directions of approach	Contact blocks Terminal designation acc. to EN 50013	Nominal travel  Contact closed Contact open Actuator in actuator head: NC is closed	Minimum force required in operating direction on retraction
Separate actuators Standard and radius actuators Axial and lateral actuation  *) Radius actuator: $R_{min} > 38$ mm.	Slow-action contacts 1 NC  Ident. No. 01 1 NO + 2 NC  Ident. No. 12	Lateral actuation 3SE2 257--XX..  30 N or 5 N 3SE2 243--XX..  30 N or 5 N	

Dimensional drawings

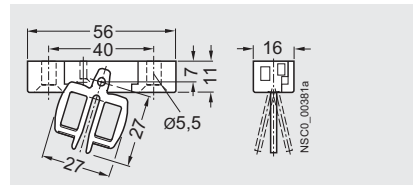
3SE2 243, lateral and front-end actuation, with 3SX3 218 standard actuator



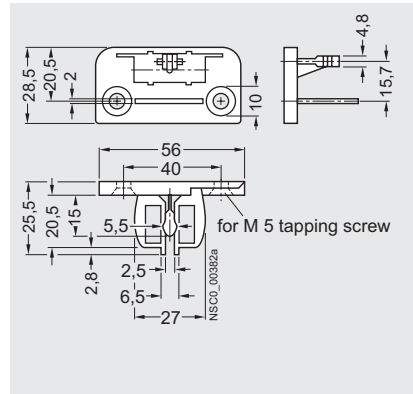
3SE2 257, lateral and front-end actuation



3SX3 228 universal radius actuator



3SX3 217 actuator with ball locating



Overview

The position switches with solenoid interlocking are exceptional, technically safe devices which restrict and prevent an unforeseen or intentional opening of protective doors, protective grilles or other covers as long as a dangerous situation is present (i. e. follow-on motion of the shutdown machine).



The safety position switches with solenoid interlocking are comprised of a switch part with electromechanical interlock and a mechanical actuator which has to be ordered separately.

They are rugged protective devices that enable the greatest possible safety for man and machine.

The position switches with solenoid interlocking are offered in plastic or metal enclosures.
Dimensions (W × H × D):

- 3SE5 3: 54 mm × 185 mm × 43.5 mm,
- 3SE2 8: 90 mm × 100 mm (+ head 41.3 mm) × 45 mm.

Operation

The actuator head is included in the scope of supply. For actuation from four directions it can be adjusted through 4 × 90°. The 3SE5 3 switches can also be approached from above.

The actuators are not included in the scope of supply of the position switch and must be ordered separately from a choice of six versions to suit the application (see page 13/97).

Actuation data:

- Maximum actuating speed $v_{\max} = 1.5 \text{ m/s}$
- Minimum actuating speed $v_{\min} = 0.4 \text{ mm/s}$
- Minimum force in the direction of actuation $F_{\min} = 30 \text{ N}$

The actuator is encoded. Simple overruling by hand or auxiliary devices is impossible.

Radius actuators

The position switches with radius actuators are particularly suitable for rotatable protective devices. The movable actuation key allows even small radii to be approached. Damage to the switch and the actuator due to inaccurate approach is prevented.

Locking devices

A high-grade steel locking device for attaching up to eight padlocks is available for even more safety (see page 13/97).

Dust protection

A rubber cap to protect the actuator head from contamination is available for operation in dusty environments (see page 13/97).

Solenoid interlocking

There are two versions for locking the actuator:

- Spring-actuated lock (closed-circuit principle) with various release mechanisms
- Magnetic field lock (open-circuit principle)

The spring-actuated switch is equipped with an auxiliary release for emergency situations or setup mode. Available as options:

- Escape release or
- Emergency release

Contact blocks

The position switches with solenoid interlocking have one contact block each for:

- Monitoring the actuator or the position of the protective door
- Monitoring the position of the solenoid

The mechanical design of the switch corresponds to the requirements of the failsafe principle according to EN 1088.

Optical signaling equipment

The position switches with solenoid interlocking are available with an optional optical signaling device.

The signaling device indicates the switch position of the lock and the protective device optically by means of 2 LEDs on the front.

Protective device	Interlock	Display	Meaning
Closed	Released	 ¹⁾  ²⁾	Actuator free to be pulled
Closed	Closed	 ²⁾	Actuator locked
Open	Open	 ¹⁾	Actuator pulled

Note:

The voltage of the LEDs at the monitored contacts must be the same as the operational voltage of the solenoid (same potential).

¹⁾ Yellow LED.

²⁾ Green LED.

Limit Switches

SIRIUS 3SE5 Interlock Switches

3SE5 / 3SE2 with solenoid locking

General data

Benefits

The new generation of 3SE5 3 position switches offers:

- More safety through higher locking forces:
 - 1300 N with plastic enclosure
 - 2600 N with metal enclosure
- Various release mechanisms: lock release, escape release and emergency release
- Two contact blocks each with three contacts as standard equipment, hence fewer versions needed
- Same dimensions for all enclosure variants: Plastic, metal or with integrated ASIsafe
- An extensive range of actuators
- An optional LED status display 24 V DC, 115 V AC or 230 V AC for all switch variants

Application

The position switches with solenoid interlocking are exceptional, technically safe devices which restrict and prevent an unforeseen or intentional opening of protective doors, protective grilles or other covers as long as a dangerous situation is present (i.e. follow-on motion of the shutdown machine).

The safety position switches with solenoid interlocking have the following functions:

- Enabling the machine or process with closed and locked protective device
- Locking the machine or process with opened protective device
- Position monitoring of the protective device and solenoid

Standards

The switches comply with the standards IEC 60947-1 (Low-Voltage Controlgear, General) and IEC 60947-5-1 (Electromechanical Control Devices).

The mechanical design of the switch corresponds to the requirements of the failsafe principle according to EN 1088.

Approvals

The switches are approved for use with locking devices according to EN 1088 and EN 292, Parts 1 and 2.

3SE5 3 position switches with solenoid interlocking bear the VDE test mark for tested according to GS-ET19 (Test Principles of the German Trade Association for Locking Devices with Electromagnetic Interlocks).

The 3SE2 8 metal-enclosed position switches with solenoid interlocking have been awarded a test certificate from the BIA (Berufsgenossenschaftliches Institut für Arbeitssicherheit).

Category 3 according to ISO 13849-1 (EN 954-1) can be attained with a position switch with solenoid interlocking if the corresponding failsafe evaluation units are selected and correctly installed, e. g. the 3TK28 safety relays or matching units from the ASIsafe, SIMATIC or SINUMERIK product ranges.

Category 4 can be achieved when using an additional position switch.

They are approved according to UL 508, UL 50 and UL 746-C.

Solenoid interlocking

The separate actuator operates in a similar way to the coding of a key and protects against manipulation. It transmits the locking force to the protective device and helps to monitor its position.

There are two versions of locking:

Spring-actuated lock (closed-circuit principle)

- In the standard version, the position switch locks by means of spring force and releases by means of electromagnetic force. In the case of voltage failure, it reliably prevents the protective device from opening when machine parts are still moving.
- The switch is equipped with an auxiliary release for emergency situations or setup mode.
- An auxiliary release which can be secured with a lock to prevent misuse is available as a version.

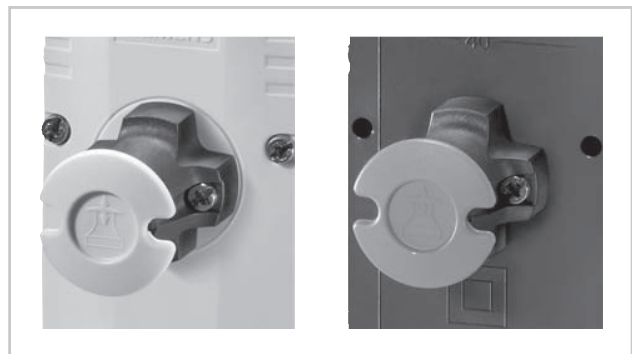


Auxiliary release

Auxiliary release with lock

The new 3SE5 3 position switches are also available with an escape release or an emergency release.

- Personnel working inside the hazard zone can use the escape release feature to manually release the interlock without tools from the escape side (hazardous area side) so that they can exit the hazard area. An intentional act (in this case pulling the gray actuator) is required to release the locking mechanism and restore the normal operating state.
- The emergency release enables someone in an emergency situation to manually release the interlock without tools from the access side (outside the hazardous area). Releasing the lock and restoring the normal operating state must require effort which is comparable to repair activity, in this case disassembly of the red actuator and resetting the mechanical lock.



Escape release from the front

Emergency release from the back

Magnetic field lock (open-circuit principle)

- The second version offers locking by means of electromagnetic force and release by means of spring force. This version has an advantage when it is necessary to quickly access the machine after a power failure occurs, or in the case of very short overtravel times.

Mechanical Safety

SIRIUS 3SE5 Interlock Switches

**3SE5, plastic enclosures
with locking force up to 1200 N**

Selection and ordering data

6 slow-action contacts · 5 directions of approach · Cable entry 3 × M20 × 1.5 · Degree of protection IP66/IP67
Locking force 1300 N (1000 N according to GS-ET 19)

Interlock ¹⁾	LEDs	Solenoid Rated opera- tional voltage	DT	Complete units Position monitoring: Actuators: 1 NO + 2 NC Solenoid: 1 NO + 2 NC Order No.	Price \$ per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
1300 N locking force · Enclosure width 54 mm									
 3SE5 312-0SD2.	Spring-actuated locks								
	• With auxiliary release	--	24 DC	⊙ A	3SE5 322-0SD21	1	1 unit	102	0.590
		--	115 AC	⊙ B	3SE5 322-0SD22	1	1 unit	102	0.590
		--	230 AC	⊙ B	3SE5 322-0SD23	1	1 unit	102	0.590
		Yellow/Green	24 DC	⊙ A	3SE5 322-1SD21	1	1 unit	102	0.590
		Yellow/Green	115 AC	⊙ B	3SE5 322-2SD22	1	1 unit	102	0.590
 3SE5 312-0SE2.		Yellow/Green	230 AC	⊙ B	3SE5 322-3SD23	1	1 unit	102	0.590
	• With auxiliary release	--	24 DC	⊙ ▶	3SE5 322-0SE21	1	1 unit	102	0.745
	With lock	--	115 AC	⊙ B	3SE5 322-0SE22	1	1 unit	102	0.745
		--	230 AC	⊙ B	3SE5 322-0SE23	1	1 unit	102	0.745
		Yellow/Green	24 DC	⊙ B	3SE5 322-1SE21	1	1 unit	102	0.745
		Yellow/Green	115 AC	⊙ B	3SE5 322-2SE22	1	1 unit	102	0.745
 3SE5 312-0SF2.		Yellow/Green	230 AC	⊙ B	3SE5 322-3SE23	1	1 unit	102	0.745
	• With escape release from the front	--	24 DC	⊙ B	3SE5 322-0SF21	1	1 unit	102	0.590
		--	115 AC	⊙ B	3SE5 322-0SF22	1	1 unit	102	0.590
		--	230 AC	⊙ B	3SE5 322-0SF23	1	1 unit	102	0.590
		Yellow/Green	24 DC	⊙ B	3SE5 322-1SF21	1	1 unit	102	0.590
		Yellow/Green	115 AC	⊙ B	3SE5 322-2SF22	1	1 unit	102	0.590
 3SE5 312-0SG2.		Yellow/Green	230 AC	⊙ B	3SE5 322-3SF23	1	1 unit	102	0.590
	• With escape release from the front and emergency release from back	--	24 DC	⊙ B	3SE5 322-0SL21	1	1 unit	102	0.590
	• For ambient temperature -- up to to -40 °C	--	24 DC	⊙ B	3SE5 322-0SL21-1AJ0	1	1 unit	102	0.590
	• With escape release from the back and auxiliary release from the front	--	24 DC	⊙ B	3SE5 322-0SG21	1	1 unit	102	0.590
		--	115 AC	⊙ B	3SE5 322-0SG22	1	1 unit	102	0.590
		--	230 AC	⊙ B	3SE5 322-0SG23	1	1 unit	102	0.590
 3SE5 312-0SJ2.		Yellow/Green	24 DC	⊙ ▶	3SE5 322-1SG21	1	1 unit	102	0.590
		Yellow/Green	115 AC	⊙ B	3SE5 322-2SG22	1	1 unit	102	0.590
		Yellow/Green	230 AC	⊙ B	3SE5 322-3SG23	1	1 unit	102	0.590
	• With escape release from the back and auxiliary release with lock from the front	--	24 DC	⊙ B	3SE5 322-0SH21	1	1 unit	102	0.745
	• With emergency release from the back and auxiliary release from the front	--	24 DC	⊙ B	3SE5 322-0SJ21	1	1 unit	102	0.745
		--	115 AC	⊙ B	3SE5 322-0SJ22	1	1 unit	102	0.745
 3SE5 312-0SB2.		--	230 AC	⊙ B	3SE5 322-0SJ23	1	1 unit	102	0.745
		Yellow/Green	24 DC	⊙ B	3SE5 322-1SJ21	1	1 unit	102	0.745
		Yellow/Green	115 AC	⊙ B	3SE5 322-2SJ22	1	1 unit	102	0.745
		Yellow/Green	230 AC	⊙ B	3SE5 322-3SJ23	1	1 unit	102	0.745
	Magnetic field locks	--	24 DC	⊙ ▶	3SE5 322-0SB21	1	1 unit	102	0.590
		--	115 AC	⊙ B	3SE5 322-0SB22	1	1 unit	102	0.590
		--	230 AC	⊙ B	3SE5 322-0SB23	1	1 unit	102	0.590
		Yellow/Green	24 DC	⊙ A	3SE5 322-1SB21	1	1 unit	102	0.590
		Yellow/Green	115 AC	⊙ B	3SE5 322-2SB22	1	1 unit	102	0.590
		Yellow/Green	230 AC	⊙ B	3SE5 322-3SB23	1	1 unit	102	0.590

⊙ Positive opening according to IEC 60947-5-1, Appendix K.

1) Supplied without actuator. Please order separately (see page 13/97).

For 1/2" NPT adaptors and cable glands, see page 13/48.

Limit Switches

SIRIUS 3SE5 Interlock Switches

**3SE5, metal enclosures
with locking force up to 2000 N**

Selection and ordering data

6 slow-action contacts · 5 directions of approach · Cable entry 3 × M20 × 1.5 · Degree of protection IP66/IP67
Locking force 2600 N (2000 N according to GS-ET 19)

Interlock ¹⁾	LEDs	Solenoid Rated opera- tional voltage	DT	Complete units Position monitoring: ☐ Actuators: 1 NO + 2 NC Solenoid: 1 NO + 2 NC	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
V				Order No.	Price \$ per PU			kg	
2600 N locking force · Enclosure width 54 mm									
	Spring-actuated locks								
	• With auxiliary release	--	24 DC	⊕ ▶	3SE5 312-0SD11	1	1 unit	102	1.030
		--	115 AC	⊕ ▶	3SE5 312-0SD12	1	1 unit	102	1.030
		--	230 AC	⊕ B	3SE5 312-0SD13	1	1 unit	102	1.030
	Yellow/Green	24 DC	⊕ B	3SE5 312-1SD11	1	1 unit	102	1.040	
	Yellow/Green	115 AC	⊕ ▶	3SE5 312-2SD12	1	1 unit	102	1.040	
	Yellow/Green	230 AC	⊕ B	3SE5 312-3SD13	1	1 unit	102	1.040	
	• With auxiliary release With lock	--	24 DC	⊕ B	3SE5 312-0SE11	1	1 unit	102	1.180
		--	115 AC	⊕ B	3SE5 312-0SE12	1	1 unit	102	1.180
		--	230 AC	⊕ B	3SE5 312-0SE13	1	1 unit	102	1.180
		--	48 AC/DC	⊕ C	3SE5 312-0SE14	1	1 unit	102	1.180
	Yellow/Green	24 DC	⊕ B	3SE5 312-1SE11	1	1 unit	102	1.180	
	Yellow/Green	115 AC	⊕ B	3SE5 312-2SE12	1	1 unit	102	1.180	
	Yellow/Green	230 AC	⊕ B	3SE5 312-3SE13	1	1 unit	102	1.180	
	• With escape release from the front	--	24 DC	⊕ B	3SE5 312-0SF11	1	1 unit	102	1.180
		--	115 AC	⊕ B	3SE5 312-0SF12	1	1 unit	102	1.180
		--	230 AC	⊕ B	3SE5 312-0SF13	1	1 unit	102	1.180
	Yellow/Green	24 DC	⊕ B	3SE5 312-1SF11	1	1 unit	102	1.180	
	Yellow/Green	115 AC	⊕ B	3SE5 312-2SF12	1	1 unit	102	1.180	
	Yellow/Green	230 AC	⊕ B	3SE5 312-3SF13	1	1 unit	102	1.180	
	• With escape release from the back and auxiliary release from the front	--	24 DC	⊕ B	3SE5 312-0SG11	1	1 unit	102	1.175
		--	115 AC	⊕ B	3SE5 312-0SG12	1	1 unit	102	1.175
		--	230 AC	⊕ B	3SE5 312-0SG13	1	1 unit	102	1.175
	Yellow/Green	24 DC	⊕ ▶	3SE5 312-1SG11	1	1 unit	102	1.180	
	Yellow/Green	115 AC	⊕ B	3SE5 312-2SG12	1	1 unit	102	1.180	
	Yellow/Green	230 AC	⊕ B	3SE5 312-3SG13	1	1 unit	102	1.180	
	• With escape release from the back and auxiliary release with lock from the front	--	24 DC	⊕ B	3SE5 312-0SH11	1	1 unit	102	1.180
	• With emergency release from the back and auxiliary release from the front	--	24 DC	⊕ B	3SE5 312-0SJ11	1	1 unit	102	1.180
		--	115 AC	⊕ B	3SE5 312-0SJ12	1	1 unit	102	1.180
		--	230 AC	⊕ B	3SE5 312-0SJ13	1	1 unit	102	1.180
	Yellow/Green	24 DC	⊕ B	3SE5 312-1SJ11	1	1 unit	102	1.180	
	Yellow/Green	115 AC	⊕ B	3SE5 312-2SJ12	1	1 unit	102	1.180	
	Yellow/Green	230 AC	⊕ B	3SE5 312-3SJ13	1	1 unit	102	1.180	
	Magnetic field locks	--	24 DC	⊕ ▶	3SE5 312-0SB11	1	1 unit	102	1.030
		--	115 AC	⊕ B	3SE5 312-0SB12	1	1 unit	102	1.030
		--	230 AC	⊕ B	3SE5 312-0SB13	1	1 unit	102	1.030
	Yellow/Green	24 DC	⊕ B	3SE5 312-1SB11	1	1 unit	102	1.040	
	Yellow/Green	115 AC	⊕ B	3SE5 312-2SB12	1	1 unit	102	1.040	
	Yellow/Green	230 AC	⊕ B	3SE5 312-3SB13	1	1 unit	102	1.040	

⊙ Positive opening according to IEC 60947-5-1, Appendix K.

1) Supplied without actuator. Please order separately (see page 13/97).

For 1/2" NPT adaptors and cable glands, see page 13/48.

Mechanical Safety

SIRIUS 3SE5 Interlock Switches

3SE5, metal and plastic enclosures Accessories

1
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Selection and ordering data

Version	DT	Order No.	List Price \$ per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Actuators for 3SE5 ¹⁾							
 3SE5 000-0AV01		Standard actuators, length 75.6 mm	A	3SE5 000-0AV01	1	1 unit	102 0.040
 3SE5 000-0AV02		With vertical fixing, length 53 mm	A	3SE5 000-0AV02	1	1 unit	102 0.070
 3SE5 000-0AV03		With transverse fixing, length 47 mm	A	3SE5 000-0AV03	1	1 unit	102 0.070
 3SE5 000-0AV04		Radius actuators, length 51 mm • Direction of approach from the left • Direction of approach from the right	A A	3SE5 000-0AV04 3SE5 000-0AV06	1 1	1 unit 1 unit	102 0.070 102 0.070
 3SE5 000-0AV05		Universal radius actuators, • Length 77 mm • Length 77 mm, tab rotated 90°	A A	3SE5 000-0AV05 3SE5 000-0AV05-1AA6	1 1	1 unit 1 unit	102 0.090 102 0.090
 3SE5 000-0AV07		Universal radius actuators, heavy-duty • Length 67 mm • Length 77 mm	A A	3SE5 000-0AV07-1AK2 3SE5 000-0AV07	1 1	1 unit 1 unit	102 0.120 102 0.090
Optional accessories for 3SE5							
 3SE5 000-0AV08-1AA2		Protective caps made of black rubber for the actuator head, to protect the actuator openings from contamination	B	3SE5 000-0AV08-1AA2	1	1 unit	102 0.010
 3SE5 000-0AV08-1AA3		Blocking inserts , high-grade steel, for actuator head, for up to 8 padlocks	B	3SE5 000-0AV08-1AA3	1	1 unit	102 0.065
Connections for 3SE5, 3SE2							
 3SY3 127		Connector sockets (4-pole), M12, fixed for M20 x 1.5 For max. 250 V, 4 A With 0.25 mm ² connecting cable, plastic, degree of protection IP67, ambient temperature -40 to +85 °C	B	3SY3 127	1	1 unit	102 0.010
 3RX8 000		Cable boxes (4-pole), M12, non-adjustable With terminal compartment, can be pre-assembled	A	3RX8 000-0CB45	1	1 unit	574 0.015
		Angular cable boxes (4-pole), M12 With terminal compartment, can be pre-assembled	A	3RX8 000-0CC45	1	1 unit	574 0.015
 3SX9 926		Connector sockets (5-pole), M12 for M20 x 1.5 For max. 125 V, 4 A With 0.25 mm ² connecting cable, plastic, degree of protection IP67, ambient temperature -40 to +85 °C	B	3SY3 128	1	1 unit	102 0.010
		Cable boxes (5-pole), M12 With terminal compartment, can be pre-assembled	A	3RX8 000-0CB55	1	1 unit	574 0.016
		Angular cable boxes (5-pole), M12 With terminal compartment, can be pre-assembled	A	3RX8 000-0CC55	1	1 unit	574 0.016
		Cable glands M20 x 1.5 Plastic	A	3SX9 926	1	1 unit	102 0.010

1) See page 13/90 for dimensions drawings.

Limit Switches

SIRIUS 3SE5 Interlock Switches

3SE5 / 3SE2 with solenoid locking

Technical specifications

Type		3SE5 322	3SE5 312	3SE2 83, 3SE2 84
General data				
Standards		IEC 60947-5-1, EN 60947-5-1		
Rated insulation voltage U_i	V	250		
Degree of pollution acc. to EN 60664-1		Class 3		
Rated impulse withstand voltage U_{imp}	kV	4		6
Rated operational voltage U_e				
• DC	V	24		24
• AC 50/60 Hz	V	230		110 ... 130 230
Conventional thermal current I_{th}	A	6		10
Rated operational current I_e				
• With alternating current 50/60 Hz		I_e / AC-15 or B300		I_e / AC-12 I_e / AC-15
- At 24 V	A	6		10 4
- At 120 V	A	3		10 4
- At 230 V	A	1.5		10 4
• For direct current		I_e / DC-13 or Q300		I_e / DC-12 I_e / DC-13
- At 24 V	A	3		10 3
- At 60 V		--		5 1.5
- At 110 V		--		2.5 0.7
- At 125 V	A	0.55		-- --
- At 220 V		--		1 0.3
- At 250 V	A	0.27		-- --
Magnet				
• Locking force, max.	N	1300	2600	1820
• Locking force acc. to GS-ET 19	N	1000	2000	1400
• Power consumption at U_c	W	3.5		5.2
Short-circuit protection¹⁾				
• With DIAZED fuse links, operational class gG	A	6		6
• Characteristic quick		--		10
• With miniature circuit breaker, Char. C	A	0.5		--
Mechanical endurance		1 × 10 ⁶ operating cycles		1 × 10 ⁶ operating cycles
Electrical endurance				
• With 3RH11, 3RT10 16 to 3RT10 26 contactors		1 × 10 ⁶ operating cycles		1 × 10 ⁶ operating cycles
• For AC-15 utilization category		1 × 10 ⁵ operating cycles, when interrupting I_e / AC-15 at 230 V		0.5 × 10 ⁶ operating cycles, when interrupting I_e / AC-15 at 230 V
• For DC-13 utilization category		With DC current the contact endurance depends not only on the breaking current but also on the voltage, the circuit inductance and the speed of switching. No generally valid information can be given.		
Switching frequency With 3RH11, 3RT10 16 to 3RT10 26 contactors		6 × 10 ³ operating cycles/h		
Shock resistance acc. to IEC 60068-2-27		30 g/11 ms		--

Type		3SE5 322	3SE5 312	3SE2 83, 3SE2 84
Enclosure				
Enclosure material		Ultramid A3X2G7	Zinc diecasting GD Zn Al4 Cu1	Aluminum (GD - AlSi 12)
Degree of protection	acc. to EN 60529	IP66/IP67		IP67
Ambient temperature				
• During operation	°C	-25 ... +60		-30 ... +70
• During storage, transport	°C	-40 ... +80		--
Mounting position		Any		
Connection				
Cable entry		M 20 × 1.5		M 20 × 1.5
Conductor cross-sections				
• Solid	mm²	1 × (0.5 ... 1.5)		2 × 2.5
• Finely stranded with end sleeve	mm²	2 × (0.5 ... 0.75)		2 × 1.5
Protective conductor connection		--	M3.5	
Inside enclosure				

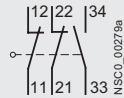
¹⁾ Without any welds according to IEC 60947-5-1.

Schematics

3SE5

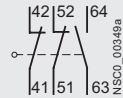
Monitoring the actuator:

Slow-action contacts 1 NO + 2 NC



Monitoring the solenoid:

Slow-action contacts 1 NO + 2 NC



Configuration

Operation and operating travel of actuators

Operation by a separate actuator

- ⊕ Positive opening acc. to EN 60947-5-1
- V_{max} Max. actuating speed
- Direction of operation

Contact blocks

Terminal designation acc. to EN 50013

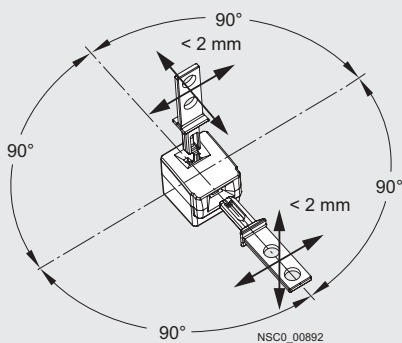
Nominal travel

- Contact closed
- Contact open
- Actuator in actuator head: NC is closed

Separate actuators with solenoid interlocking

Standard actuators

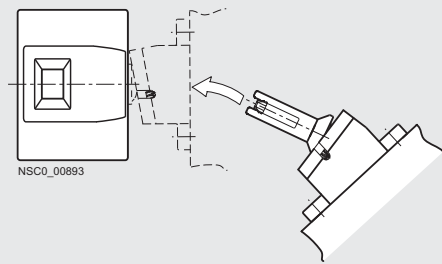
Axial and lateral actuation ($4 \times 90^\circ$)



Minimum force required in operating direction 30 N (on retraction)

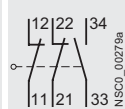
Radius actuators (all directions of approach)

Example: Direction of approach from the left



Slow-action contacts

1 NO + 2 NC



Ident. No. 12

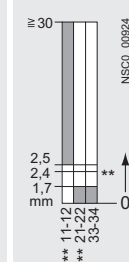
Lateral actuation

3SE5 3...-S...



Axial actuation

3SE5 3...-S...



For connector socket assignment, see page 13/61.

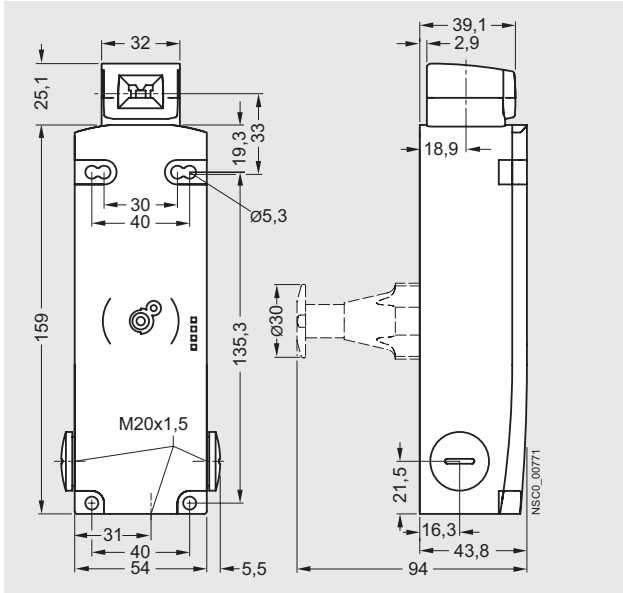
Limit Switches

SIRIUS 3SE5 Interlock Switches

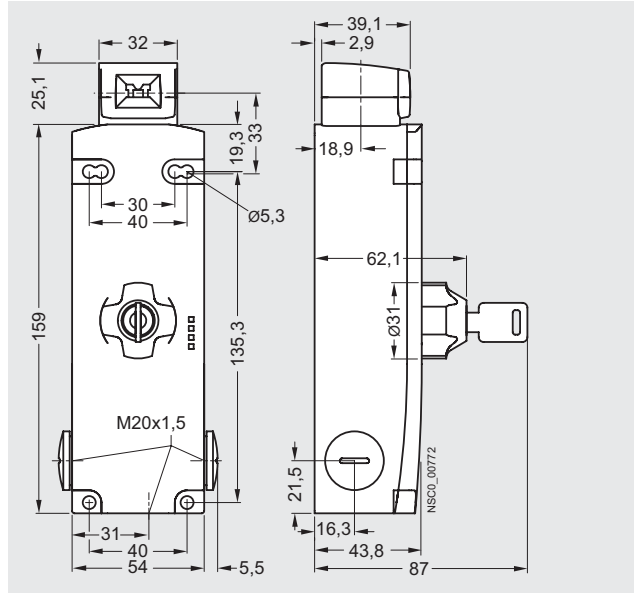
3SE5 with solenoid locking
Metal and plastic enclosures

Dimensional drawings

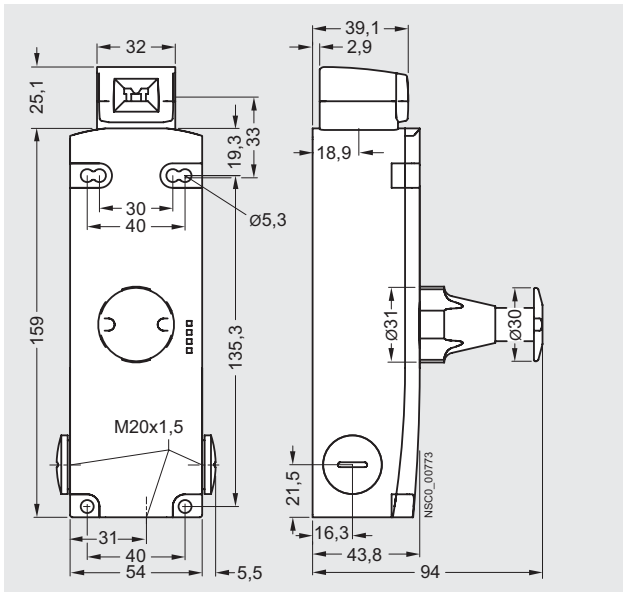
Spring-actuated lock, with auxiliary release
3SE5 322-SD2., 3SE5 322-SG2., 3SE5 322-SJ2.,
3SE5 312-SD1., 3SE5 312-SG1., 3SE5 312-SJ1.,



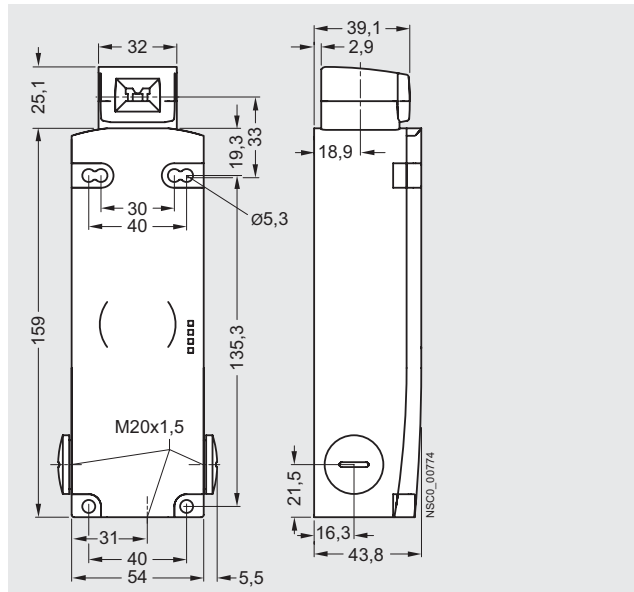
Spring-actuated lock, with auxiliary release with lock
3SE5 322-SE2.,
3SE5 312-SE1.



Spring-actuated lock, with escape release
3SE5 322-SF2.,
3SE5 312-SF1.



Magnetic field lock
3SE5 322-SB2.,
3SE5 312-SB1.



The plastic enclosures have knock-out openings behind the connecting thread; they are delivered therefore without protective caps.
For actuators see page 13/90.

Overview

3SE5 hinge switches have the same enclosures as the standard switches (modular system).



Hinge switches

Design

Enclosure sizes

The 3SE5 switches are available as complete units in two enclosure sizes:

- Plastic enclosures according to EN 50047, 31 mm wide, IP65, 1 cable entry
- Metal enclosures according to EN 50047, 31 mm wide, IP66/IP67, 1 cable entry
- Plastic and metal enclosures according to EN 50041, 40 mm wide, IP66/IP67, 1 cable entry

Enclosure versions

Various basic versions can be selected for the enclosures:

- Available with two or three-pole contact blocks designed as snap-action contacts
- Metal enclosures for explosion protection (ATEX) ([see online](#))
- AS-Interface version with integrated ASIsafe electronics for all enclosure designs ([see online](#))

For a description of the basic switches, [see page 13/6](#).

Operating mechanism

The hinge switches are provided for mounting on hinges. The actuator head is included in the scope of supply. There are two versions:

- Operating mechanism with hollow shaft, inner diameter 8 mm, outer 12 mm
- Operating mechanism with solid shaft, diameter 10 mm

Benefits

The 3SE5 hinge switches differ from the previous series through the following new characteristics:

- All actuators can be turned around the axis in increments of 22.5° ([see picture on page 13/6](#)).
- The new three-pole contact block 1 NO + 2 NC is available for all enclosure sizes ([see picture on page 13/7](#)).
- The plastic enclosure with a width of 31 mm has simple and fast wiring equipment which makes it possible to save from approx. 20 to 25 % of the time when connecting ([see picture on page 13/7](#)).
- The ASIsafe electric component is integrated for the versions with the AS-Interface connection ([see online](#)); an additional adapter is not required.

Application

The hinge switches are used in those areas where the position of swiveling protective devices such as doors or flaps must be monitored. With these switches, the position of the doors and hinge switches is converted into electric signals. The switches allow shutdown and signaling without delay in the event of a small opening angle through the snap-action contacts with an operating angle of 10°.

Devices are available with enclosure versions to suit the particular ambient conditions. Different control tasks can be performed with the best contact blocks suited for the particular purpose. Dimensions and fixing points of the enclosures are in accordance with EN 50041 or EN 50047 standards.

The devices are suitable for use in any climate.

Standards

IEC 60947-5-1 or EN 60947-5-1.

The protective measure of "total insulation" by the molded-plastic enclosure is guaranteed by the use of molded-plastic screw-glands.

Safety position switches

For controls according to IEC 60204-1 or EN 60204-1 the devices can be used as a safety position switch. To secure position switches against changes in their position, keyed techniques must be employed on installation.

Safety circuits

IEC 60947-5-1 and EN 60947-5-1 require positive opening of the NC contacts, i.e. for the purposes of personal safety, the assured opening of NC contacts is expressly stipulated for the electrical equipment of machines in all safety circuits and marked according to IEC 60947-5-1 with the symbol .

Category 4 according to EN 954-1 can be attained with the 3SE5 hinge switches with  if the corresponding failsafe evaluation units are selected and correctly installed, e.g. the 3TK28 safety relays or matching devices from the ASIsafe, SIMATIC or SINUMERIK product ranges.

Mechanical Safety

SIRIUS 3SE5 Hinge Switches

3SE5, plastic enclosures
Enclosure width 31 mm / 40 mm

Selection and ordering data

Complete units

2 or 3 contacts · Degree of protection IP65 (31 mm) or IP67/IP68 (40 mm) · Cable entry M20 × 1.5

Version	Snap-action contacts	DT	Complete units	☐	PU (UNIT, SET, M)	PS*
			Configurator			
			Order No.	Price per PU		

Plastic enclosures · Enclosure width 31 mm acc. to EN 50047



With hollow shaft

With hollow shaft

Operating angle 10°

1 NO + 1 NC



B

3SE5 232-0HU21

1

1 unit

Operating angle 10°

1 NO + 2 NC



B

3SE5 232-0LU21

1

1 unit



With solid shaft

With solid shaft

Operating angle 10°

1 NO + 1 NC



B

3SE5 232-0HU22

1

1 unit

Operating angle 10°

1 NO + 2 NC



B

3SE5 232-0LU22

1

1 unit

Plastic enclosures · Enclosure width 40 mm acc. to EN 50041



With hollow shaft

With hollow shaft

Operating angle 10°

1 NO + 2 NC



B

3SE5 132-0LU21

1

1 unit



With solid shaft

With solid shaft

Operating angle 10°

1 NO + 2 NC



B

3SE5 132-0LU22

1

1 unit

For online configurator see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Appendix K.

Spare parts

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
---------	----	-----------	-----------------	-------------------------	-----

Actuator heads



With hollow shaft

With hollow shaft

Operating angle 10°

B

3SE5 000-0AU21

1

1 unit



With solid shaft

With solid shaft

Operating angle 10°

B

3SE5 000-0AU22

1

1 unit

Note:

The respective actuators are included in the scope of supply for the complete units.

Mechanical Safety

SIRIUS 3SE5 Hinge Switches

3SE5, metal enclosures
Enclosure width 31 mm / 40 mm

Selection and ordering data

Complete units

3 contacts · Degree of protection IP66/IP67 · Cable entry M20 × 1.5

Version	Snap-action contacts	DT	Complete units	☐ PU (UNIT, SET, M)
			Configurator	
			Order No.	Price per PU

Metal enclosures · Enclosure width 31 mm acc. to EN 50047



With hollow shaft

With hollow shaft

Operating angle 10°

1 NO + 2 NC



B

3SE5 212-0LU21

1



With solid shaft

With solid shaft

Operating angle 10°

1 NO + 2 NC



B

3SE5 212-0LU22

1

Metal enclosures · Enclosure width 40 mm acc. to EN 50041



With hollow shaft

With hollow shaft

Operating angle 10°

1 NO + 2 NC



B

3SE5 112-0LU21

1



With solid shaft

With solid shaft

Operating angle 10°

1 NO + 2 NC



B

3SE5 112-0LU22

1

For online configurator see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Appendix K.

Spare parts

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
---------	----	-----------	--------------	-------------------	-----

Actuator heads



With hollow shaft

With hollow shaft

Operating angle 10°

B

3SE5 000-0AU21

1

1 unit



With solid shaft

With solid shaft

Operating angle 10°

B

3SE5 000-0AU22

1

1 unit

Note:

The respective actuators are included in the scope of supply for the complete units.

3SE2 Hinge Switches

3SE2, plastic enclosures with integrated hinge

Overview

The 3SE2 283 hinge switches are particularly suitable for use in doors and flaps of machines that must be closed to ensure the safety of operating personnel. Their thin profile and compact design allow them to be directly mounted on a hinged protective cover and the stable frame.

Benefits

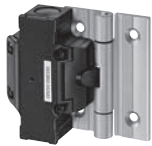
- Easy mounting through use of versions with integrated hinge
- Versions with small operating angle of 4°
- Protection against personal injury provided by positively driven NC contacts according to IEC 60947-5-1
- Simultaneous shutdown and reporting by 1 NO + 2 NC contacts

Selection and ordering data

3 contacts · Degree of protection IP65 · Cable entry 2 × (M20 × 1.5)

Version	Slow-action contacts	DT	Complete units	☐	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
			Order No.	List Price \$ per PU				kg

Plastic enclosures with integrated hinge



3SE2 283

With mounted hinges
(delivered with additional hinge and fixing accessories)

- Aluminum hinge

- Operating angle 4°	1 NO + 2 NC	⊙ A
- Operating angle 4°	3 NC	⊙ A
- Operating angle 8°	1 NO + 2 NC	⊙ D
- Operating angle 8°	3 NC	⊙ C

- High-grade steel hinge

- Operating angle 4°	1 NO + 2 NC	⊙ A
- Operating angle 4°	3 NC	⊙ C

3SE2 283-0GA43	1	1 unit	102	0.425
3SE2 283-6GA43	1	1 unit	102	0.425
3SE2 283-0GA53	1	1 unit	102	0.420
3SE2 283-6GA53	1	1 unit	102	0.420
3SE2 283-0GA44	1	1 unit	102	0.800
3SE2 283-6GA44	1	1 unit	102	0.800

⊙ Positive opening according to IEC 60947-5-1, Appendix K.

Accessories/spare parts

Version	DT	Order No.	List Price \$ per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
							kg

Accessories



3SX3 225

Additional hinges
(delivered with fixing accessories)

- Made of aluminum
- Made of high-grade steel

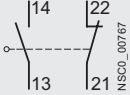
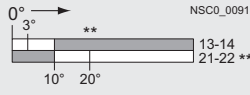
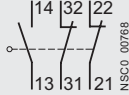
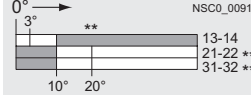
⊙ D	3SX3 225
⊙ D	3SX3 231

1	1 unit	102	0.160
1	1 unit	102	0.330

For 1/2" NPT adaptors and cable glands, see page 13/48.

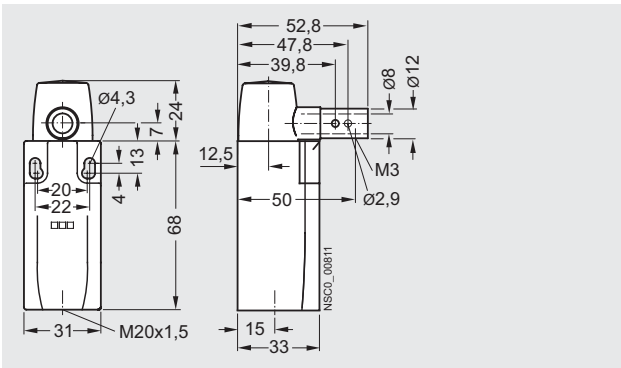
Configuration

Contact blocks and operating travel of actuators

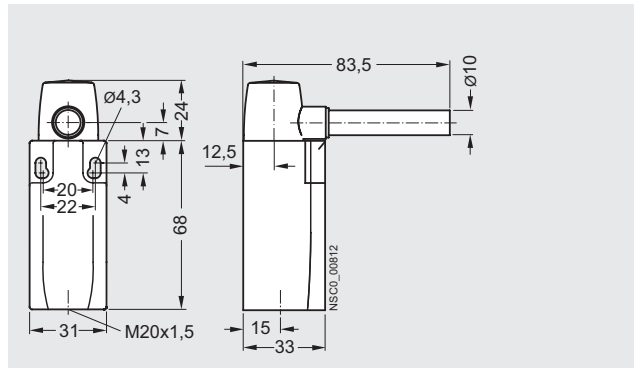
Contact blocks	Nominal travel	Contact blocks	Nominal travel
Terminal designation acc. to EN 50013	■ Contact closed □ Contact open	Terminal designation acc. to EN 50013	
Hinge switches		Snap-action contacts	
1 NO + 1 NC  Ident. No. 11	3SE5 ...-0HU2.  13-14 21-22 **	1 NO + 2 NC  Ident. No. 12	3SE5 ...-0LU2.  13-14 21-22 ** 31-32 **

Dimensional drawings

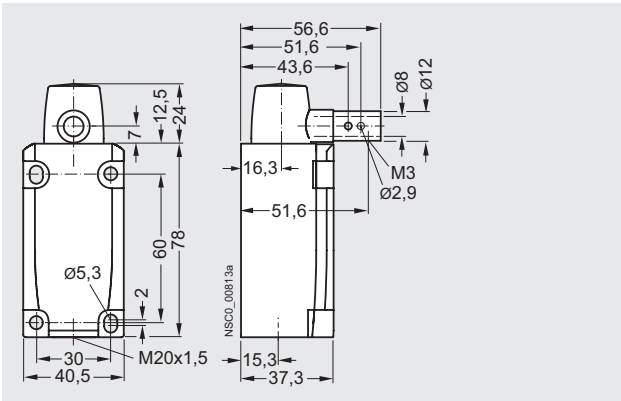
Enclosure width 31 mm
with hollow shaft
3SE5 212-0.U21, 3SE5 232-0.U21



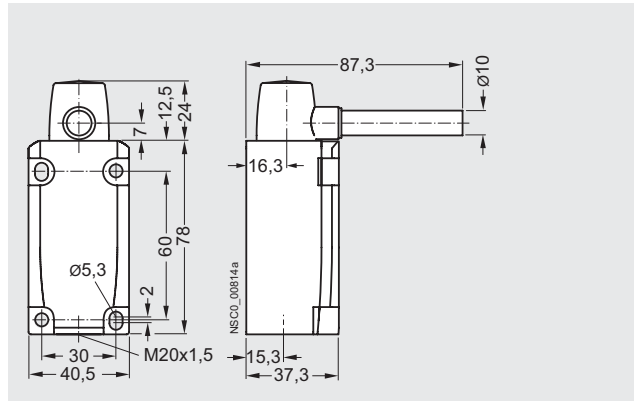
Enclosure width 31 mm
with solid shaft
3SE5 212-0.U22, 3SE5 232-0.U22



Enclosure width 40 mm
with hollow shaft
3SE5 112-0.U21, 3SE5 132-0.U21



Enclosure width 40 mm
with solid shaft
3SE5 112-0.U22, 3SE5 132-0.U22



3SE2 Hinge Switches

3SE2, plastic enclosures
with integrated hinge

Overview

The hinge switches are used for monitoring and protecting hinged protective devices such as doors and flaps.

Characteristics

- Special design, with 2 × M20 × 1.5 connecting thread
- Degree of protection IP65
- 3 contacts
- Operating angle of 4° or 8°

Design

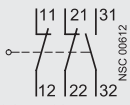
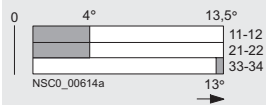
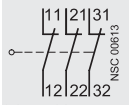
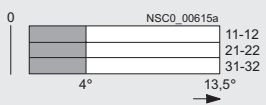
The 3SE2 283 hinge switch has an integrated electromechanical contact block that is actuated when the hinged protective cover is opened. If the cover is opened by 4° or 8°, the NC contact is positively opened by a direct (not spring-action) mechanism. These positively driven contacts guarantee interruption of the electric circuit and stopping of the machine. The NO contact is closed when the cover is moved by 13.5°.

Technical specifications

Type		3SE2 283
Rated insulation voltage U_i	V	250
Conventional thermal current I_{th}	A	2.5
Rated operational current I_e		
• At AC-15, 120 V	A	4.2
• At AC-15, 250 V	A	2
• At DC-13, 24 V	A	1
Min. make-break capacity		> 5 V/1 mA
Short-circuit protection		
• Operational class gG	A	2
Mechanical endurance		> 1 × 10 ⁶ operating cycles
Switching frequency		1200 operating cycles/hour
Positive opening		2 mm after opening point
Enclosure material		Plastic
Degree of protection		IP65
Ambient temperature	°C	-25 ... +65
Shock resistance		30 g/18 ms
Resistance to vibrations		20 g/10 ... 200 Hz
Cable entry		2 × (M20 × 1.5)
Screw terminals		0.5 ... 1.5 mm ² /AWG 15

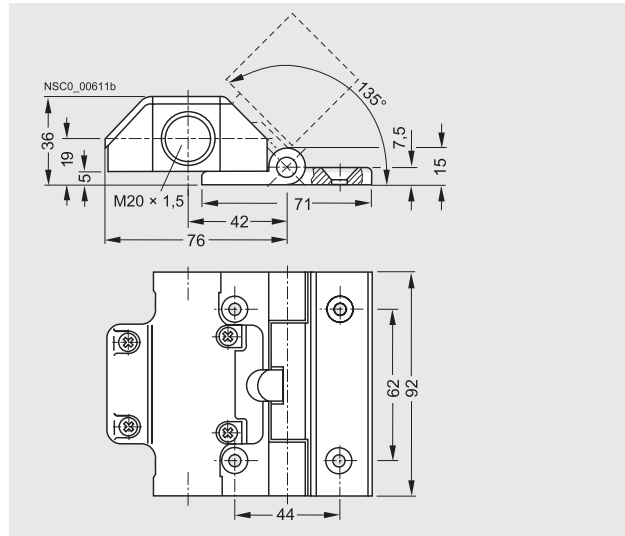
Configuration

Contact blocks and operating travel of actuators (operating angle 4°)

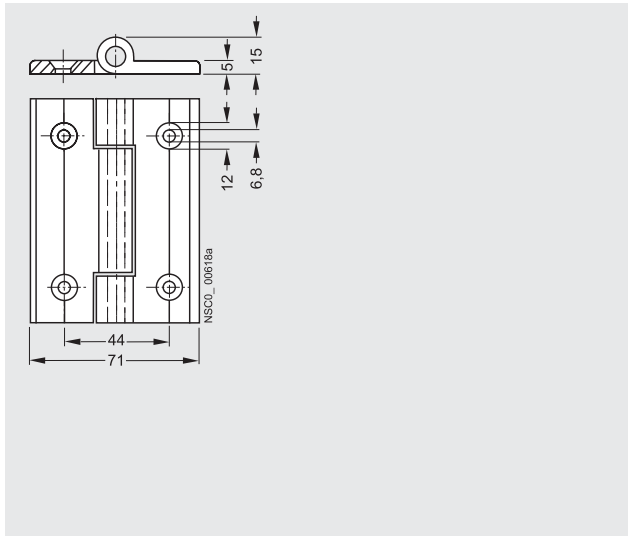
Contact blocks	Nominal travel	Contact blocks	Nominal travel
Terminal designation acc. to EN 50013	Contact closed Contact open	Terminal designation acc. to EN 50013	
Hinge switches		Slow-action contacts	
1 NO + 2 NC  Ident. No. 12	3SE2 283-0GA4.  NSC0_00614a	3 NC  Ident. No. 03	3SE2 283-6GA4.  NSC0_00615a

Dimensional drawings

3SE2 283-.GA.3 hinge switch with hinge



3SX3 225 additional hinge



Overview



Non-contact RFID safety switches with maximum tamper resistance

3SE63 RFID contactless safety switches meet the highest safety requirements, SIL3 or Cat. 4, for monitoring the positions of movable protective devices.

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

The switch is available in several versions:

- Family coded with M12 plug or with additional 18 N magnetic catch as an option
- Individually coded, programmable once, with M12 plug or with additional 18 N magnetic catch as an option
- Individually coded, programmable more than once (an unlimited number of times), with M12 plug or version with additional 18 N magnetic catch

The actuator is therefore available in two versions:

- Standard
- With 18 N magnetic catch

The magnetic catch keeps doors and hinge switches closed with permanent magnets.

Optional accessories

- Covers for sealing mounting holes, also suitable for tamper-proofing screw fixings
- Spacers (approx. 3 mm high) to facilitate cleaning under the installation surface when using pressure washers, for example

Mounting and maintenance

Reduction in the number of versions, because

- switches can be mounted on right or left sides
- the actuator can be mounted on all sides

Quick and easy mounting by thanks to universal mounting holes

- Standard gauge/holes for 3SE6 magnetically operated switch
- Fine adjustment thanks to slotted holes

Little adjustment or maintenance required

- Threshold indication by LED on the switch for quick and easy adjustment during installation and maintenance
- Molded switch allows it to be used as an end stop for small and medium-sized doors

Note:

Keep metal parts and cuttings away from the vicinity of the switch

Minimum distance between two switches 100 mm

Coding

Family coded

These safety switches are delivered ready to use, i.e. no programming is necessary.

Individually coded, programmable once

The assignment of safety switch and actuator thus created is irreversible.

The actuator is programmed simply by routine during startup, thus permanently preventing any form of tampering by means of a replacement actuator.

Individually coded, programmable several times

The procedure for programming a new actuator can be repeated an unlimited number of times. When a new actuator is programmed the previous code becomes invalid. A protected coding process allows new actuators to be programmed for service purposes.

After this, a ten-minute lockout provides enhanced tamper protection. The green LED flashes until the lockout time has ended and the new actuator has been detected. If the operational voltage is interrupted during this time, the ten-minute guard time is restarted.

Programming procedure for individual coding

1. Apply operational voltage to safety sensor
2. Move actuator into detecting range: red LED lights up, yellow LED flashes (1 Hz)
3. After 10 s it changes to a shorter flashing frequency (3 Hz). In this state switch off operational voltage.
4. After the next time the operational voltage is switched on, the actuator is detected again to activate the programmed actuator code. The activated code is thus stored permanently.

Diagnostics

The RFID safety switch indicates its operating state including faults by means of the LED indicator in the switch and the short-circuit resistant diagnostic output. The signals can then be used for central displays or non-safety-related control tasks.

There are two diagnostics functions:

- Crossover monitoring
- Open-circuit monitoring
- External voltage monitoring
- Ambient temperature too high
- Wrong or defective actuator
- Switching interval threshold identification with LED indication

The signal combination "diagnostics output switched off" and "safety outputs still switched on" can be used to move the machine into a controlled stop position.

Any crossover or a fault that is not currently compromising the safe operation of a safety switch results in the disconnection of the safety channels after a 30 minute delay. However, the diagnostics output switches off instantaneously.

Mechanical Safety

SIRIUS 3SE6 RFID Non-Contact Safety Switches

General data

Mode of operation of the diagnostics LEDs

The safety switch indicates not only its operating state, but also faults by means of LEDs in three colors at the ends of the RFID switch.

- The green LED indicates readiness for operation when the control supply voltage is connected.
- The yellow LED indicates that there is an actuator in detecting range. If the actuator is in the switching interval threshold, this is indicated by flashing. This flashing can be used to identify a change in the distance between sensor and actuator at an early stage (e.g. as a result of the sagging of a protective door). The installation should be tested before the distance increases further, the safety outputs switch off and the machine stops.
- The red LED indicates the individual causes of the fault by means of defined flashing frequencies.

Benefits

- Maximum tamper resistance by means of individual coding of switches and actuators at the highest safety level
- Plastic enclosure with integrated connector
- 2 electronic short-circuit proof safety outputs, each 250 mA
- Integrated crossover, open circuit and external voltage monitoring, with series circuit as far as the control cabinet
- Safety and diagnostics signals can be connected in series
- Series connection of safety circuits in Cat. 4 / PL e / SIL 3
- LED status indication including switching interval threshold indication for quick and easy adjustment during installation and maintenance
- Short-circuit proof conventional diagnostics output
- Optional version with magnetic catch for interlocking hatches or small doors even when de-energized

- Highly rugged thanks to the use of tested enclosure materials, resistant to aggressive cleaning products, with a degree of protection of up to IP69K
- Fine adjustment thanks to slotted holes
- Little adjustment or maintenance required
- Molded switch allows it to be used as an end stop for small and medium-sized doors

Application

RFID contactless safety switches are designed for use in safety circuits, and are used to monitor the positions of movable protective devices. They monitor the positions of rotating, laterally sliding or removable protective devices using the coded electronic actuator.

Their high degree of protection (IP69K) and the use of cleaning product-resistant materials means that these switches are optimized for use under extreme environmental conditions.

Their electronic operating principle makes these switches ideal for metalworking machinery.

The switches have a larger switching interval and switching displacement than mechanical switches, improve the mounting tolerance of the protective door, and offer a wide range of diagnostics options.

The RFID switches can be connected to all standard evaluation units, e. g. a PLC, 3TK28 safety evaluation units (in which the built-in crossover monitoring function can be deactivated), or the 3RK3 modular safety system.

The following safety categories can be achieved in safety circuits:

- Category 4 according to EN ISO 13849-1 (EN 954-1)
- PL e according to EN ISO 13849-1
- SIL 3 according to IEC 61508

Technical specifications

Type	3SE6 3	
General data		
Standards	IEC 60947-5-3, IEC 61508, EN ISO 13849-1	
Enclosure material	Fiber-glass strengthened ther- moplast, self-extin- guishing	
Degree of protection	IP69K	
Ambient temperature		
• During operation	°C	-25 ... +70
• During storage, transport	°C	-25 ... +85
Shock resistance	30 g/11 ms	
Vibration resistance	10 ... 55 Hz amplitude 1 mm	
Electrical specifications		
Rated insulation voltage U_i	V	32
Pollution degree acc. to IEC 60664-1		3
Rated impulse withstand voltage U_{imp}	V	800
Rated conditional short-circuit current	A	100
Rated operational voltage U_e (PELV acc. to IEC 60204-1)	V DC	24 –15/+10 %
Protection class	II	
Overvoltage category	III	
Rated operational current I_e	A	0.6
Smallest operational current I_m	mA	0.5
No-load supply current I_0	mA	35

Type	3SE6 3	
Inputs/outputs		
Safety inputs X1/X2		
• Input voltage	V DC	24 – 15/+10 %
• Power consumption per input	mA	5
Safety outputs OSSD1/OSSD2		
		p operation
• Max. rated operational current I_e	A	0.25
• Rated operational current I_e /DC-12/DC-13 at U_e	A	0.25
• Voltage drop U_e	V	< 1
• Switching frequency	Hz	1
• Response time, max.	ms	100
• Risk time, max.	ms	200
• Recovery, max.	s	5
Diagnostics output		
		p operation
• Max. rated operational current $I_{e2\max}$	A	0.05
• Rated operational current I_e /DC-12/DC-13 at U_e	A	0.05
• Voltage drop U_e	V	< 2
• Operational current	mA	150
• Conductor capacity, max.	nF	50

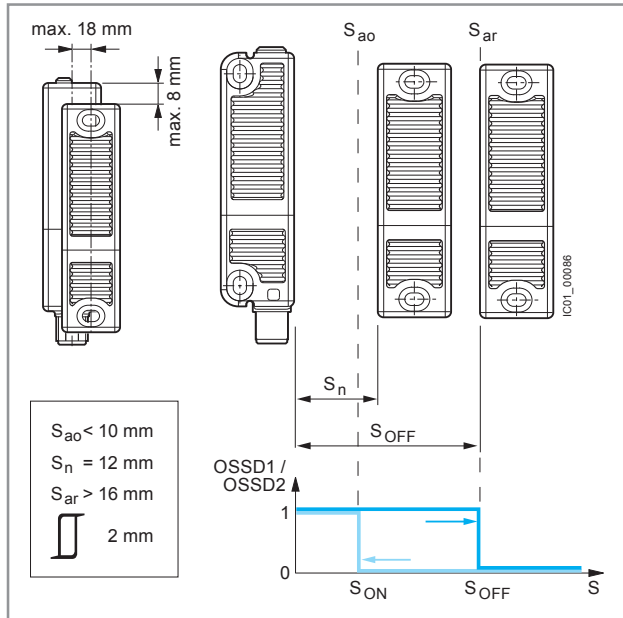
Mechanical Safety

SIRIUS 3SE6 RFID Non-Contact Safety Switches

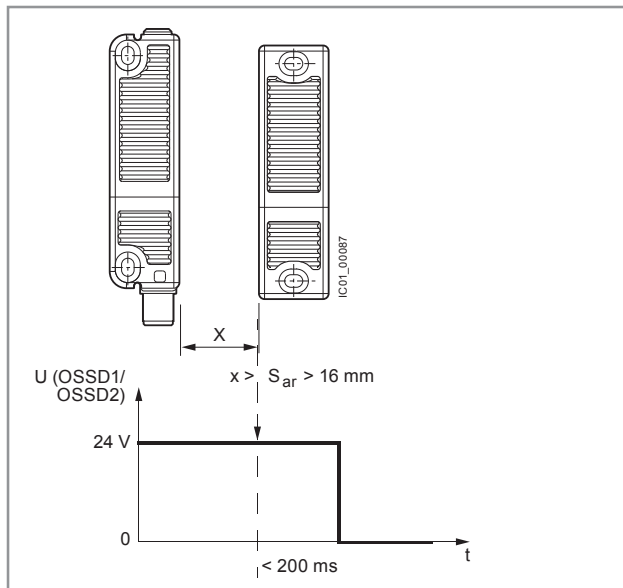
Technical data

Directions of approach and switching interval

The side area permits a maximum height offset of the switch and actuator of ± 8 mm (e.g. mounting tolerance or due to sagging of the protective door). The transverse offset also equals max. ± 8 mm.

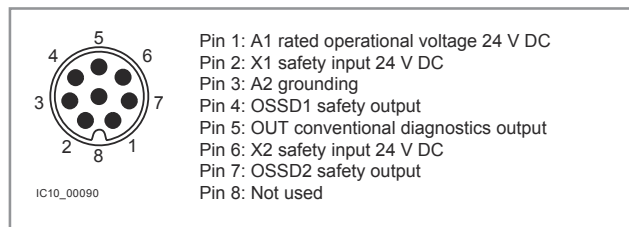


Switching interval: output signal with hysteresis



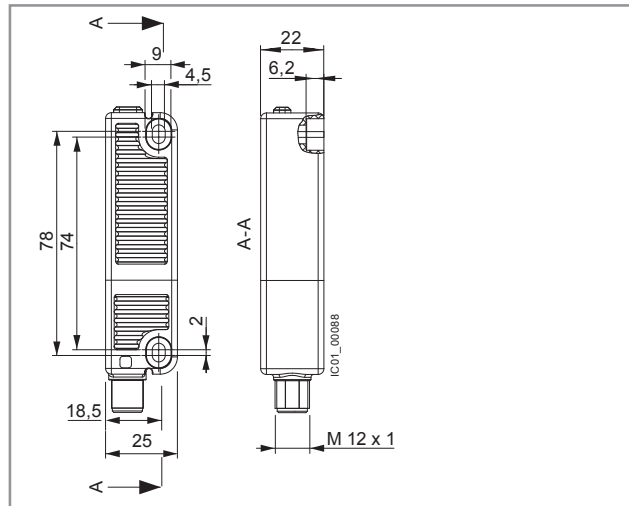
Switching interval: Output signal

Connector assignment

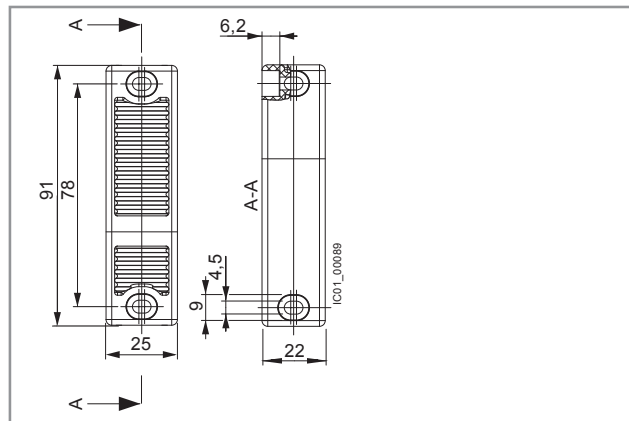


Dimensional drawings

RFID switches 3SE6 315



RFID actuator 3SE6 310



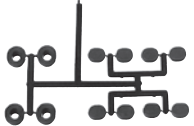
Mechanical Safety

SIRIUS 3SE6 RFID Non-Contact Safety Switches

Selection

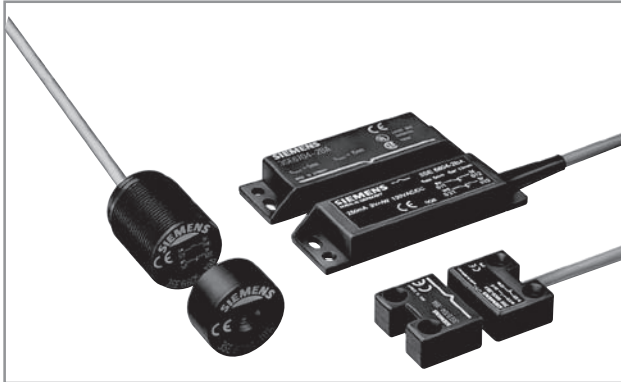
Selection and ordering data

With M12 connector, 8-pole

Version/coding	Latching / length	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*
Rectangular safety switches 91 mm x 25 mm						
 3SE6 315	RFID safety switches					
	• Family coded	None	▶ 3SE6 315-0BB01		1	1 unit
		With 18 N magnetic catch	▶ 3SE6 315-1BB01		1	1 unit
	• Individually coded, programmable several times	None	▶ 3SE6 315-0BB02		1	1 unit
		With 18 N magnetic catch	▶ 3SE6 315-1BB02		1	1 unit
	• Individually coded, programmable once	None	▶ 3SE6 315-0BB03		1	1 unit
		With 18 N magnetic catch	▶ 3SE6 315-1BB03		1	1 unit
 3SE6 310	RFID actuators					
	• Standard	None	▶ 3SE6 310-0BC01		1	1 unit
		With 18 N magnetic catch	▶ 3SE6 310-1BC01		1	1 unit
Optional accessories						
 3SX5 600-1G	Covers and spacers		A	3SX5 600-1G	1	1 unit
	One pack (1 unit) contains 8 covers and 4 spacers					
 3SX5 601-2GA	Connecting cables, 8-pole, with 1 straight M12 socket		A	3SX5 601-2GA03	1	1 unit
	Rated voltage 30 V	Length 5 m	A	3SX5 601-2GA05	1	1 unit
	Rated current 2 A	Length 10 m	A	3SX5 601-2GA10	1	1 unit

For monitoring units see Chapter 14, "Industrial Communication"

Overview

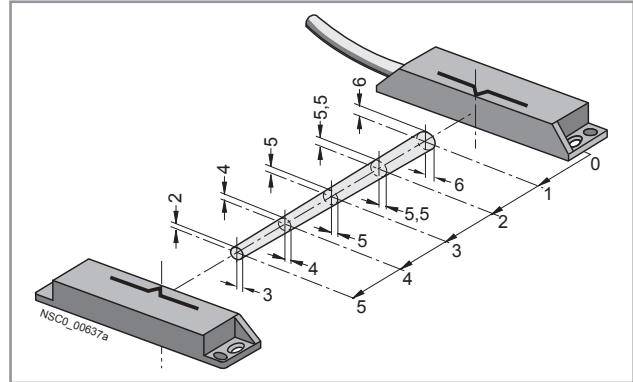


Switching magnets and contact blocks

A magnetically operated switch is comprised of a coded switching magnet and a contact block (sensor unit). Evaluation requires a safety relay or connection to a bus system.

3SE6 806 safety relays

Up to six protective devices (sensors) can be connected to the safety relay.



Enabling range (example)

The device has six current-sourcing semiconductor outputs (Y1 ... Y6) which signal the state of the connected protective devices.

The 3SE6 806 safety relay has two floating enabling circuits (safe circuits) as NO contact circuits and one floating signaling circuit as a NC circuit. The number of enabling circuits can be increased by adding one or more 3TK28 30 expansion modules.

Application

SIRIUS 3SE6 magnetically operated switches are designed for mounting on movable protective guards (hoods, hinge switches, doors, etc.). Evaluation can be performed by means of a safety relay or through connection to a bus system.

The 3SE6 6 non-contact, magnetically operated safety switches stand out due to their enclosed design with degree of protection IP67. They are particularly suitable therefore for areas exposed to contamination, cleaning or disinfecting.

A magnetic monitoring system comprises one or more magnetically operated switches and an evaluation unit, e.g. a safety relay. When contact blocks 1 NO + 1 NC are used the 3SE6 806 safety relay provides a high degree of protection against manipulation and can be installed in safety circuits up to Category 3 according to ISO 13849-1 (EN 954-1).

Combination of monitoring units and magnetically operated switches

Monitoring units		Magnetically operated switches (contact block + switching magnet)					Achievable category (EN 954-1)/ Performance level (EN ISO 13849-1)
		1 NO + 1 NC	2 NC	1 NO + 2 NC			
		3SE6 605-1BA	3SE6 605-2BA	3SE6 605-3BA	3SE6 604-2BA	3SE6 606-3BA	
		3SE6 704-1BA	3SE6 704-2BA	3SE6 704-3BA	3SE6 704-2BA	3SE6 704-3BA	
Relay outputs							
SIRIUS safety relays, 6-fold	3SE6 806-2CD00						Cat. 3
SIRIUS safety relays	3TK28 20 3TK28 26	— ✓	— ✓	— ✓	✓ ✓	— ✓	Cat. 4/e Cat. 4/e
Solid-state outputs							
SIRIUS safety relays	3TK28 40 3TK28 41, 3TK28 42, 3TK28 45	— —	— —	— —	✓ ✓	— —	Cat. 3/d Cat. 4/e
SIRIUS safety relays with contactor relay	3TK28 50, 3TK28 51, 3TK28 52 3TK28 53	— —	— —	— —	✓ ✓	— —	Cat. 3/d Cat. 4/e
ASIsafe compact safety modules	3RK1 205, 3RK1 405	—	—	—	✓	—	Cat. 4
SIMATIC S7-31xF-2 DP or SIMATIC ET 200M	SM 326 F, 24 DI, 24 V DC, SM 326 F, 8 DI, NAMUR	✓	✓	✓	✓	✓	Cat. 4
SIMATIC ET 200S PROFIsafe	4/8 F-DI / 3 F-DO, 24 V DC 4/8 F DI, 24 V DC	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	Cat. 3 Cat. 4
SIMATIC ET 200eco	4/8 F DI, 24 V DC	✓	✓	✓	✓	✓	Cat. 4
SIMATIC ET 200pro	8/16 F-DI, 24 V DC, 4/8 F-DI / 4 F-DO 2 A, 24 V DC, F-Switch	✓	✓	✓	✓	✓	Cat. 4
Modular Safety System	3RK3	✓	✓	✓	✓	✓	Cat. 4/e

✓ Suitable magnetically operated switch

Mechanical Safety

3SE6 Magnetic Monitoring Systems

Selection

Selection and ordering data

		Design	Size	S _{an} ... S _{ab}	Contacts	DT	Order No.	List Price \$ 1 unit	Weight approx. kg
			mm	mm					
Round sensor unit. IP67									
	3SE6 704-1BA	Switching magnet (coded)	M 30				3SE6 704-1BA		0.035
	3SE6 605-1BA	Switch block with 3 m cable	M 30	5 to 15	1 NO + 1 NC		3SE6 605-1BA		0.166
		Switch block with M12, 4-pole male receptacle ¹⁾	M 30	5 to 15	1 NO + 1 NC	▶	3SE6 605-1BA02		0.130
Rectangular sensor unit. IP67									
	3SE6 605-2BA, 3SE6 704-2BA	Switching magnet (coded)	25 x 88			▶	3SE6 704-2BA		0.027
		Switch block with 1 m cable	25 x 88	5 to 15	1 NO + 1 NC 2 NC	▶	3SE6 605-2BA		0.165
		Switch block with M8 male receptacle	25 x 88	5 to 15	1 NO + 1 NC 2 NC		3SE6 604-2BA		0.165
							3SE6 605-2BA01		0.040
							3SE6 604-2BA01		0.130
		Switching magnet (coded)	25 x 33				3SE6 704-3BA		0.014
		Switch block with 3 m cable	25 x 33	4 to 14	1 NO + 1 NC		3SE6 605-3BA		0.151
		Switch block with 3 m cable	25 x 33	4 to 14	1 NO + 2 NC		3SE6 606-3BA		0.151
Accessories									
	3SX3 260	Spacer for rectangular sensor unit	25 x 88				3SX3 260		0.015
	3SX3 261	Spacer for rectangular sensor unit	25 x 33				3SX3 261		0.010
		Rated control supply voltage	Width	Enable circuits/ signal. circuits	Max. number of connectable sensors		Order No.	List Price \$ 1 unit	Weight approx. kg
		DC V	mm						
Monitoring units									
	3SE6 806-2CD00	24		2 NO / 1 NC	6 1 NO + 1 NC		3SE6 806-2CD00		0.200

1) Pin 1 (S21) + Pin 2 (S22) = Normally Closed; Pin 3 (S13) + Pin 4 (S14) = Normally Open
Typical 4-pole Female Plugs with black 5 meter cable include: 3RX1542 (right-angle) or 3RX1513 (straight plug).

Technical specifications

Magnet Switches

Type	3SE6 60.-1BA 3SE6 60.-2BA	3SE6 60.-3BA
Form	M30, 25 mm x 88 mm	25 mm x 33 mm
Standards	DIN EN 50947-5-3 ³⁾	
Sensing type	Magnetic	
Rated voltage	AC/DC 100 V, 120 V	DC 24 V
Rated current	400 mA	100 mA
Performance	10 VA/W	1 W
Max. switching frequency	5 Hz	
Max. sensing distance $S_{an} \dots S_{ab}$	5 ... 15 mm	4 ... 14 mm
Housing material	Fiber-glass strengthened with glass fiber	
Degree of protection acc. to IEC 60529	IP67	
Permissible ambient temperature	- Operating: -25 to +70 °C - Storage: -25 to +70 °C	
Shock resistance	10 g/11ms	
Vibration resistance	10 ... 55 Hz, 1 mm amplitude	
Conductor	Cable LiYY 4 x 0.25 mm ² 3 m length	
Receptacle, male	M12, M8	-
Cable length (max for connecting to monitoring unit)	1000 m	100 m

Magnet Switch Monitoring Unit

Type	3SE6 806-2CD00
Standards	EN ISO 13849-1, EN 1088
Rated control supply voltage U_c	DC 24 V
Rated control supply voltage tolerance	0.85 ... 1.2 x U_s
Rated power (without signal outputs Y1 ... Y6)	3 W
Maximum load current	- Signaling circuit Y1 ... Y6: 20 mA - Signaling circuit 31, 32: 2 A
Inputs	6 sensors (1 NO or 1 NC)
Outputs	6 signaling outputs 1 relay output 2 enabling circuits
Response time	- Automatic start: 150 ms typical - Manual start: 25 ms typical
Release time	20 ms max.
Recovery time	350 ms
Degree of protection to IEC 60529	IP20
Switching capacity ¹⁾	Release circuits (13, 14 and 23, 24) Continuous current, I_{th} : 6 A Rated operational current, I_e ²⁾ : - AC-15 @ 203 V: 6 A - DC-13: - 24 V: 6 A - 115 V: 0.2 A - 230 V: 0.1 A
Short circuit protection	DIAZED - Fuse type: 6 A - Duty class: 10 A - gL(gC) - Quick response
Permissible ambient temperature, T_u	- Operating: -25 to +45 °C - Storage: -25 to +70 °C

1) Utilization category per DIN VDE 0660, Part 200, IEC 60947-5-1
2) With all release circuits loaded

3) In combination with monitoring unit or AS-Interface.

Mechanical Safety

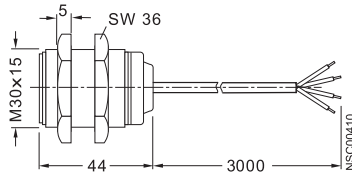
3SE6 Magnetic Monitoring Systems

Dimensional drawings

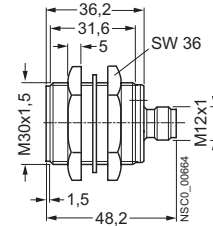
Dimension drawings

Round sensor units

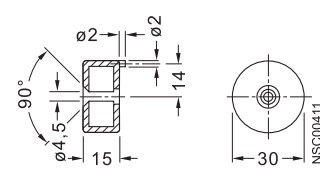
Switch block 3SE6 605-1BA



Switch block 3SE6 605-1BA02

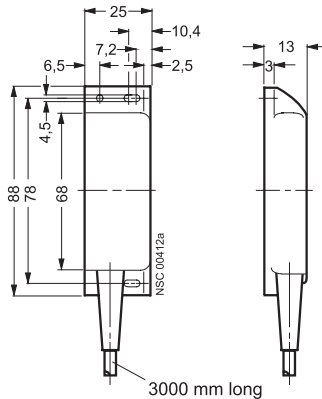


Coded switching magnet 3SE6 704-1BA



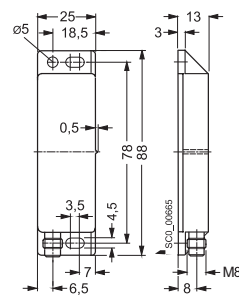
Rectangular sensor units

Switch block 3SE6 605-2BA

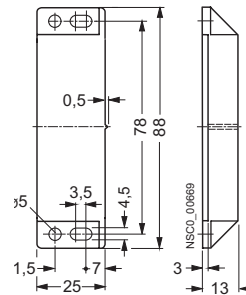


3000 mm long
Switching magnet without lead

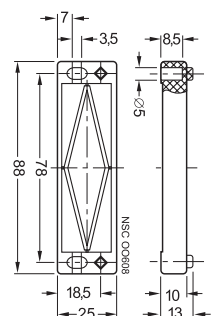
Switch block
3SE6 60.-2BA0.



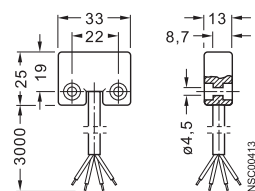
Switch block
3SE7 704-2BA



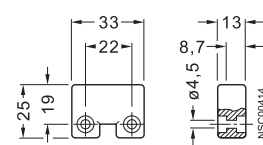
3SX3 260 spacer



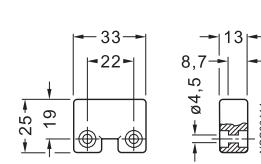
Switch block 3SE6 605-3BA



Coded switching magnet
3SE6 704-3BA

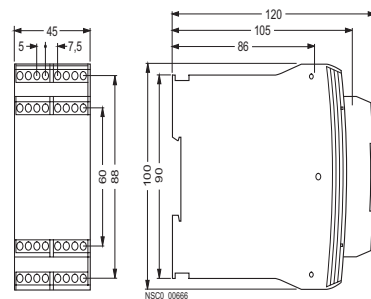


3SX3 261 spacer



Monitoring unit

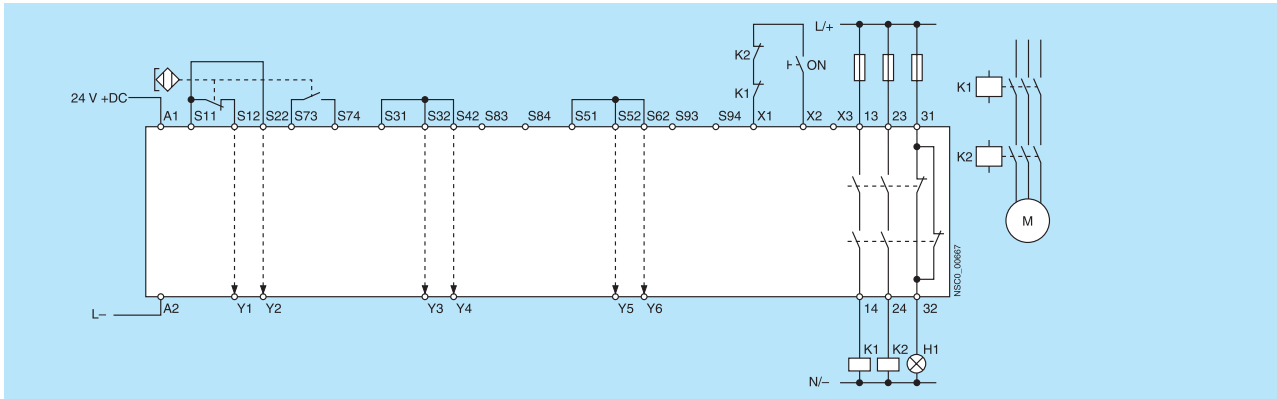
Magnet Switch Monitor 3SE6 806-2CD00



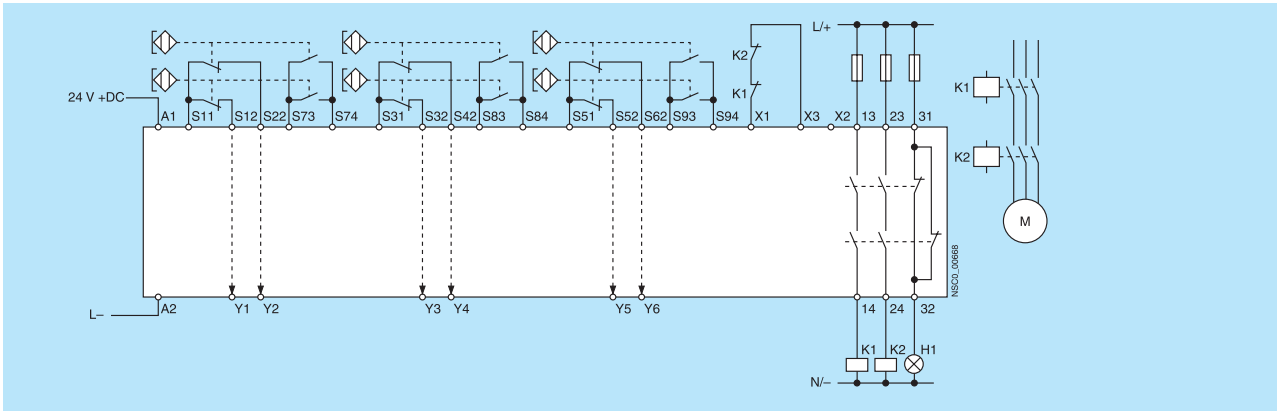
Circuit diagrams

Connection example

Single Channel Control, Manual Start, Category 3 to EN ISO 13849-1



Six Channel Control. Automatic Start, Category 3 to EN ISO 13849-1

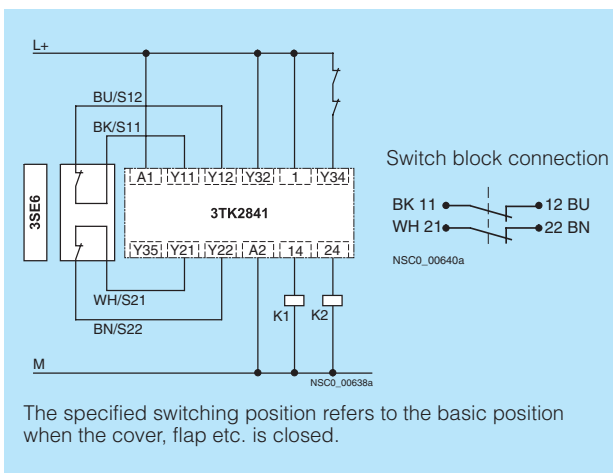


Terminal Assignments

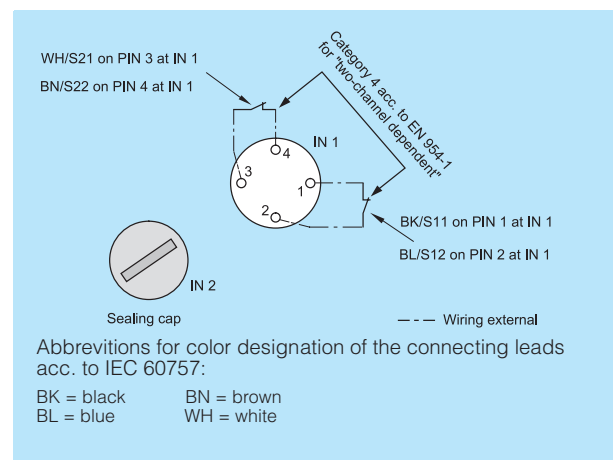
Power	A1+, L+	U _s
	A2-, L-	24 V DC
Sensors	S11, S12	Channel 1, NC contact
	S11, S22	Channel 2, NC contact
	S31, S32	Channel 3, NC contact
	S31, S42	Channel 4, NC contact
	S51, S52	Channel 5, NC contact
	S51, S62	Channel 6, NC contact

Sensors	S73, S74	Channel 1+2, NO contact (parallel)
(Cont.)	S83, S84	Channel 3+4, NO contact (parallel)
	S93, S94	Channel 5+6, NO contact (parallel)
Outputs	13, 14	Release circuit 1 (safety NO contact)
	23, 24	Release circuit 2 (safety NO contact)
	31, 32	Floating signaling circuit
	Y1 to Y6	Status of Channels 1 through 6

3SE6 604-2BA magnetically operated switch with 3TK28 safety relay, Category 4 to EN ISO 13849-1



3SE6 604-2BA magnetically operated switch on AS-Interface Safety at Work, safe K45F or K60F compact module, Category 4 to EN ISO 13849-1



Mechanical Safety

3SB3 Two-Hand Control

Selection

Application

Two-hand operation consoles are required for use with machines and systems that have hazardous areas, in order to direct both hands of the operator to one position.

Operation consoles are primarily used on presses, stamping machines, printing presses and paper converting machines, in the chemical industry and in the rubber and plastics industries.

Specifications

Two-hand operation consoles fulfill the requirements laid down in DIN 24 980 and EN 574.

Construction

Equipment

All consoles are pre-equipped with SIGNUM 3SB3 control devices. The metal version is also available as an unequipped empty enclosure.

The plastic version can be retrofitted with up to 8 command points, in line with the customer's requirements. The surface of the console has premachined breaking points for this purpose.

Installation

The two-hand operation consoles can be mounted either on the stand available or directly on the machine by means of the holes in the rear panel.

Principle of operation

The control command is given by pressing the two operating elements simultaneously (within

0.5 s of each other) and must be maintained for as long as a hazard exists.

Selection and ordering data

	Design	DT	Order No.	List Price \$ 1 unit	Weight approx. kg
	SIGUARD two-hand operation console Degree of protection IP 65, acc. to DIN 24 980 (EN 574), Standard equipment with 2 black operating elements (mushroom button 3SB30 00-1GA11, Ø 40 mm, 1 NO + 1 NC) and a red EMERGENCY-STOP mushroom button 3SB30 00-1HA20, latching Ø 40 mm, 2 NC				
	• Metal version - with standard equipment - with standard equipment and 4 additional holes for control devices 22.5 mm - empty enclosure, unequipped • Plastic version - with standard equipment and predetermined breaking points for 8 further command points 22.5 mm - with cable inlet holes for metric screwed cable glands		3SB38 63-4BB 3SB38 63-4BA 3SB38 63-4BC 3SB38 63-1BB3	4.800 4.800 4.800 2.300	
	Stand for SIGUARD two-hand operation consoles • with cable inlet holes for metric screwed cable glands		3SB39 01-0AQ3	4.500	

3SB38 63-4BB

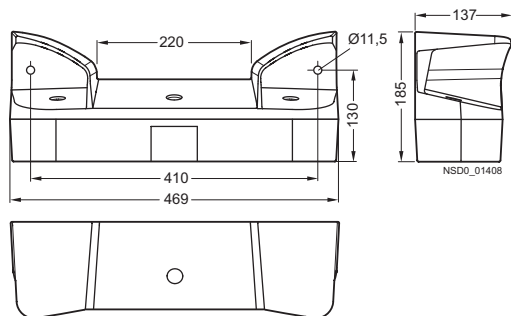


3SB39 01-0AQ

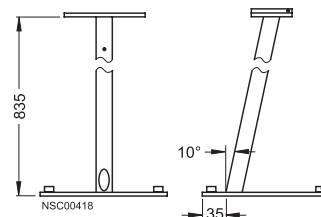


Dimension drawings

3SB38 63-4 operator panel with metal enclosure



3SB39 01-0AQ stand



Note:

Also available with AS-Interface connection, contact your local Siemens representative.