

Position and safety switches

**NEW**

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Article No.

3RA1943-2C
3RA1943-2B
3RA1953-2B
3RA1953-2N



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Or directly in the Internet, e. g.
www.siemens.com/product?3RA1943-2C

	Price groups PG 41K, 42A, 42D		<u>Shock and vibration test according to railway standard</u>
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12/22	- Enclosure width 40 mm according to EN 50041	12/91	- 3SE5, plastic enclosures NEW
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	<u>With tumbler</u>		<u>Magnet</u>
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	SIRIUS 3SE5, 3SE2 mechanical safety hinge switches		Conversion tool, e.g. from 3SE2 to 3SE5, see www.siemens.com/sirius/conversion-tool
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12/78	- 3SE5, plastic enclosures		SIRIUS 3SE5 mechanical safety switches with tumbler
	SIRIUS 3SE5 mechanical safety switches with tumbler	12/79	- 3SE5, plastic enclosures NEW
12/79	- 3SE5, plastic enclosures NEW		SIRIUS 3SE5 mechanical safety hinge switches
	SIRIUS 3SE5 mechanical safety hinge switches	12/80	- 3SE5, plastic enclosures
12/80	- 3SE5, plastic enclosures		

Position and Safety Switches

Introduction

Overview



	Position switches, standard					Compact design	Open-type
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	30 x 50 x 16 40 x 50 x 16	30 x 48.5 x 20
Degree of protection	IP65, IP66/IP67	IP66/IP67	IP66/IP67	IP66/IP67	IP66/IP67	IP66/IP67	IP10 or IP20
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 50041	--	Mounting and operating points acc. to EN 50047
Approvals	CE, TÜV, UL, CSA, CCC,					CE, UL, CSA, CCC	CE, TÜV, UL, CSA, CCC
Contact blocks							
2 slow-action contacts	1 NO + 1 NC, 2 NC		1 NO + 1 NC, 2 NC		2 x (1 NO + 1 NC)	--	1 NO + 1 NC
2 snap-action contacts	1 NO + 1 NC		1 NO + 1 NC		2 x (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; 2 NO + 1 NC
• With make-before-break	1 NO + 2 NC		1 NO + 2 NC		2 x (1 NO + 2 NC)	--	1 NO + 2 NC
3 snap-action contacts	1 NO + 2 NC		1 NO + 2 NC		--	--	1 NO + 2 NC
Special features							
LED status display	✓		✓		--	--	--
Increased corrosion protection	✓		✓		✓	--	--
ASIsafe integrated	✓		✓		--	--	--
Electrical specifications							
Insulation voltage U_i	400 V		400 V			400 V	400 V
Conventional thermal current I_{th}	6 A/10 A (3-/2-pole)		6 A/10 A (3-/2-pole)			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	✓	✓	✓	✓	✓	✓	--
Connector socket, 6-pole + PE	--	--	✓	✓	--	--	--
Molded cables	--	--	--	--	--	✓	--
Actuators							
Rounded plungers and roller plungers	✓		✓		✓	--	--
Roller levers and angular roller levers	✓		✓		✓	--	--
Spring rod	✓		✓		--	--	--
Twist levers and rod actuators	✓		✓		✓	--	--
Fork lever	--		✓		--	--	--
Hinge switches	--		--		--	--	--
Plungers, twist levers	--		--		✓	✓	✓
Page							
Complete units	12/16, 12/30	12/26	12/22, 12/34	12/38	12/42	12/45	12/47
Modular system	12/20, 12/32	12/28	12/24, 12/36	12/40	12/43	--	--
Ambient temperature -40 °C	12/78, 12/81	12/81	12/84	12/87	12/88	--	--
ASIsafe	12/94, 12/96	12/94	12/98	12/98	--	--	--

✓ Available -- Not available



3SE5232,
3SE5212, 3SF12.4

3SE5132, 3SE5112,
3SF11.4

3SE5232,
3SE5242,
3SF12.4

3SE5112,
3SE5122,
3SF11.4

3SE5322,
3SE5312,
3SF13.4

	Safety hinge switches		Safety switches with separate actuator		Safety switches with tumbler
Enclosure					
Plastic	✓	✓	✓	✓	✓
Metal	✓	✓	✓	✓	✓
Dimensions (W x H x D) in mm	31 × 68 × 33	40 × 78 × 38	31 × 68 × 33, 50 × 53 × 33	40 × 78 × 38, 56 × 78 × 38	54 × 185 × 44
Degree of protection	IP65, IP66/IP67	IP66/IP67	IP65, IP66/IP67	IP66/IP67	IP66/IP67, IP69K
Standards					
IEC 60947-5-1	Mounting and operating points acc. to EN 50047	Mounting and operating points acc. to EN 50041	Mounting acc. to EN 50047	Mounting acc. to EN 50041	EN ISO 14119
Approvals	CE, TÜV, UL, CSA, CCC		CE, TÜV, UL, CSA, CCC		CE, TÜV, UL, CSA, CCC
Contact blocks/outputs					
2 slow-action contacts	--	--	1 NO + 1 NC; 2 NC	--	--
2 snap-action contacts	1 NO + 1 NC	--	--	--	--
• Short stroke	--	--	--	--	--
• With 2 × 2 mm contact gap	--	--	--	--	--
3 slow-action contacts	--	--	1 NO + 2 NC	--	2 × (1 NO + 2 NC)
• With make-before-break	--	--	--	--	--
3 snap-action contacts	1 NO + 2 NC	--	--	--	--
Electronic safety outputs	--	--	--	--	--
Special features					
LED status display	✓	--	✓	--	✓
Increased corrosion protection	✓	--	✓	--	✓
ASIsafe integrated	✓	--	✓	--	✓
Electrical specifications					
Insulation voltage U_i	400 V	--	400 V	--	400 V
Conventional thermal current I_{th}	6 A/10 A (3-/2-pole)	--	6 A	--	6 A
Connections					
Cable entry	1 × M20 × 1.5	1 × M20 × 1.5	1 × M20 × 1.5, 2 × M20 × 1.5	1 × M20 × 1.5, 3 × M20 × 1.5	3 × M20 × 1.5
M12 connector socket, 4-, 5- or 8-pole	✓	--	✓	✓	✓
Molded cables	--	--	--	--	--
AS-Interface	--	--	✓	✓	✓
Actuators					
Plungers, twist levers	--	--	--	--	--
Separate actuators	--	--	✓	✓	✓
Hinge switches	✓	--	--	--	--
Page					
Complete units	12/74	12/74	12/56, 12/59	12/57, 12/60	12/67 ... 12/69
Modular system	--	--	--	--	--
Ambient temperature -40 °C	12/80	--	12/90	--	12/91
ASIsafe	12/107	12/108	12/101	12/102	12/105, 12/106

✓ Available

-- Not available

Position and Safety Switches

Introduction



	Safety switches, solenoid	Safety switches, solenoid supplementary range in new design ¹⁾	RFID safety switches ¹⁾
Enclosure			
Plastic	✓	✓	✓
Metal	--	--	--
Dimensions (W x H x D) in mm	M30; 25 x 88; 25 x 33	25 x 88; 26 x 36	25 x 91 x 22
Degree of protection	IP67	IP67	IP69K
Standards	IEC 60947-5-3 Category 4 acc. to ISO 13849-1, PL e acc. to ISO 13849-1, SIL 3 acc. to IEC 61508	IEC 60947-5-3	Category 4 acc. to ISO 13849-1, PL e acc. to ISO 13849-1, SIL 3 acc. to IEC 61508
Approvals	CE, TÜV, UL, CSA, CCC	CE, TÜV, UL, CSA,	CE, TÜV, UL, CSA
Contact blocks/outputs			
Reed contacts	1 NO + 1 NC 2 NC 1 NO + 1 NC (+ 1 NC signaling contact)	1 NO + 1 NC (+ 1 NC signaling contact) 2 NC 2 NC (+ 1 NC signaling contact)	
Special features			
LED status display	--	✓	✓
Increased corrosion protection	--	--	✓
ASIsafe integrated	--	--	--
Electrical specifications			
Insulation voltage U_i	100 V AC/DC 24 V DC	75 V DC 50 V AC	--
Conventional thermal current I_{th}	250 mA 400 mA	250 mA	--
Connections			
M8 plug, 4-pole	✓	✓	--
8 mm Ø, latching connection, plug, 6-pole	--	✓	--
M12 plug, 4-pole	✓	--	✓
Molded cables	✓	✓	--
AS-Interface	--	--	--
Actuators			
RFID	--	--	✓
Switching magnet	✓	✓	--
Page	12/109	12/109	12/115

✓ Available

-- Not available

¹⁾ CCC not required for voltages < 36 V.Note:

Safety characteristics, see page 16/6.

Overview

More information

Homepage, see www.siemens.com/sirius-detecting
 Industry Mall, see www.siemens.com/product?3SE
 Configurator, see www.siemens.com/sirius/configurators
 System Manual, see <https://support.industry.siemens.com/cs/ww/en/view/43920150>
 Conversion tool, see www.siemens.com/sirius/conversion-tool

The innovative SIRIUS 3SE5 position switches are modern in design, compact, modular and simple to connect. They save time and increase flexibility during installation of a whole range of switch variants. In principle it is possible to combine any enclosure with any operating mechanism, paying due consideration to the EN 50041 and EN 50047 standards where necessary.

Complete units

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



3SE5 position switches with plastic and metal enclosures

Modular system

The 3SE5 series is the modular system comprising different sizes of the basic switch and an actuator which must be ordered separately. Thanks to the modular design 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.

Simple plug-in mounting enables fast replacement of the actuator heads.



Examples of selection options in the modular system

Design

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

Enclosure sizes

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
- 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
- XL metal enclosures with 4 to 6 contacts, 56 mm wide, IP66/IP67, 3 cable entries

Enclosure versions

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

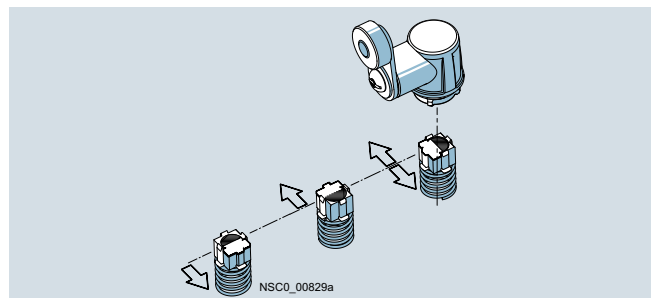
- With contact blocks with two or three contacts (screw terminals) designed as slow-action or snap-action contacts; the slow-action contacts also with make-before-break
- Optional LED status display
- With mounted four- or five-pole M12 connector socket (available for the wide enclosures as an accessory for self-assembly)
- With 6-pole connector socket + PE on the metal enclosures
- Versions with increased corrosion protection
- Versions for operating temperatures down to -40 °C
- AS-Interface version with integrated ASIsafe electronics for all enclosure designs (see page 12/92)

Actuator variants

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

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

The actuator rollers are available with various materials and diameters.



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

SIRIUS 3SE5 Mechanical Position Switches

General data

Cover design

The mechanical position switches have a turquoise cover and the mechanical safety switches have a yellow cover.



On request the switches can be delivered ex works with a yellow cover. The cover has no effect on the mode of operation. Both versions can be used in safety applications (see also page 12/18).

Diverse contact types

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



The three-pole contact block with snap-action or slow-action contacts is regularly available for all enclosure forms. The same installation space is required as for a two-pole block. The version with 1 NO + 2 NC offers, for example, more safety through redundant shutdowns (2 NC contacts) with simultaneous signaling (NO contact). The three-pole blocks are also available with make-before-break and with 2 NO + 1 NC.

Contact reliability

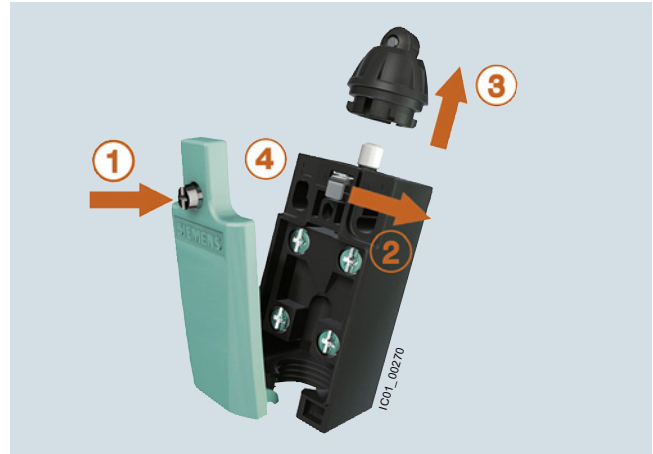
The contact blocks ensure an extremely high contact stability. This applies even when the devices are switching low voltages and currents, e.g. 1 mA at 5 V DC.

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

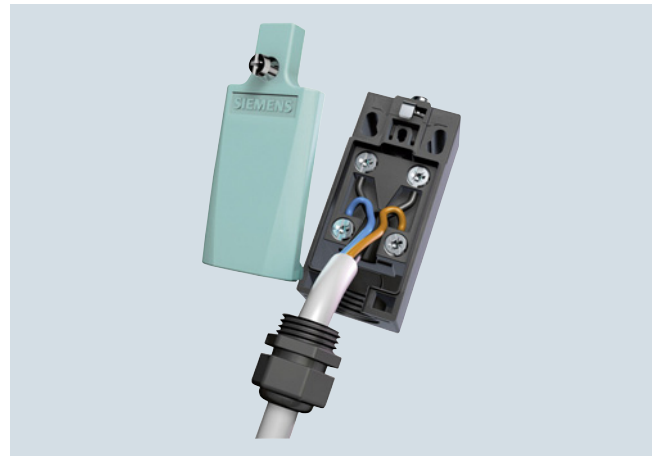
Easy plug-in method for fast replacement of the actuator heads



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

Quick-connect technology

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%.

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

Optional LED indicators

LED indicators are available for all enclosure sizes except for XL. The enclosures are supplied with an LED signaling indicator (1 x green + 1 x yellow). This is the first time that optical signaling equipment is also available for small standard enclosures according to EN 50047. The LEDs are implemented in 24 V DC and 230 V AC.

Article No. scheme

Product versions		Article number												
SIRIUS position and safety switches		3	S	E	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Series		5												
Standard	EN 50041 EN 50047 with tumbler	1	2	3										
Enclosure material and width	e.g. 1 = metal, narrow				<input type="checkbox"/>									
Connection	Cable entry, connector socket					2	4/5							
LEDs	None 24 V DC 115 V AC 230 V AC									0	1	2	3	
Version of contacts	e.g. C = snap-action 1 NO + 1 NC									<input type="checkbox"/>				
Version of operating mechanism	e.g. C02 = rounded plunger										<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Example		3	S	E	5	1	1	2	-	0	C	C	0	2

Note:

The Article No. scheme shows an overview of product versions for better understanding of the logic behind the article numbers.

For your orders please use the article numbers quoted in the selection and ordering data.

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, page 12/6).
- 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, page 12/6).
- All enclosure variants have an integrated chlorinated rubber diaphragm for high functional safety in cold and aggressive environments.
- All contact blocks are replaceable (see page 12/49).
- The three-pole contact blocks are available for all enclosure sizes (see picture, page 12/6).
- 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 shutdown and signaling, particularly in the elevator industry.
- XL metal 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 approx. 20 to 25% of the time when connecting (see picture, page 12/6).

Application

With the standard position switches, mechanical positions of moving machine parts are converted into electrical signals. Through their modular and uniform design and large number of variants, the devices can comply with 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 variants are available to match the mechanical configuration of the moving machine 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/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/EN 60204-1, the devices can be used as a safety position switch. They comply with the standard EN ISO 14119. A TÜV certificate is available. To secure position switches against changes in their position, keyed techniques must be employed on installation.

Safety circuits

The IEC/EN 60947-5-1 standard requires positive opening of the NC contacts. In other words, 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 in accordance with the standard IEC 60947-5-1 with the symbol ☞.

Category 2 according to EN ISO 13849-1 can be attained with 3SE5 position switches with ☞, and category 3 or 4 when using an additional position switch, if the corresponding fail-safe evaluation units are selected and correctly connected. Example: 3SK or 3TK28 safety relays or the corresponding devices from the ASIsafe, SIMATIC or SINUMERIK programs. The operating mechanisms (actuators) must also be connected to the enclosure by keyed techniques. The corresponding operating mechanisms are marked in the catalog with ☞.

SIRIUS 3SE5 Mechanical Position Switches

General data

Contacts for every 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 every application

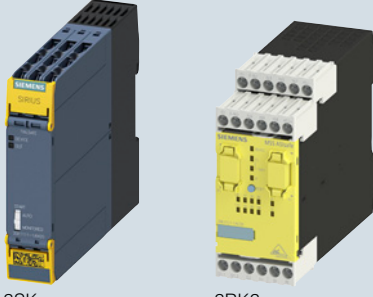





Standard, rounded and roller plungers

- 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 levers and angular roller levers

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

Monitoring with fail-safe evaluation units from the 3SK and 3RK3 series

Safe evaluation units	Maximum achievable safety level according to type of switch				
	Compact	Standard	Hinge	Separate actuator	Tumbler
 <p>3SK 3RK3</p>	 <p>3SE54</p>	 <p>3SE51 / 3SE52</p>	 <p>3SE51 / 3SE52</p>	 <p>3SE51 / 3SE52</p>	 <p>3SE53</p>
Use of only one position/safety switch					
Monitoring with 1 contact: 1 x NC contact	SIL 1 / PL c				
Monitoring with 2 contacts: 2 x NC contact or 1 x NC contact + 1 x NO contact	SIL 1 / PL c	SIL 2 / PL d			
Use of a second position/safety switch					
Standard switch	SIL 3 / PL e				
Safety switch / hinge switch	SIL 3 / PL e				
Safety switches with separate actuator	SIL 3 / PL e				
Safety switches with tumbler	SIL 3 / PL e				

Note:

Taking account of certain fault exclusions (e.g. actuator breakage), use of just one hinge switch or a switch with separate actuator with or without tumbler up to SIL 2 or PL d is possible as described in the table.

Since the machine manufacturer must provide proof of fault exclusion, the component manufacturer is unable to carry out a definitive assessment of the measures taken.

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 speeds ($v = 1.5$ 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

For more information, see <https://support.industry.siemens.com/cs/ww/en/view/35443942>.

The maximum achievable SIL or PL always depends on other assumptions as well. Factors to be taken into account include the DC (declaration), the CCF, and the number of actuations.

For information on the safe evaluation units and an introduction to safety systems, see from page 11/1.

Technical specifications

Type		3SE51.. ¹⁾ , 3SE52.. ¹⁾	3SE541.	3SE542.
General data				
Standards		IEC/EN 60947-5-1, EN ISO 14119		
Rated insulation voltage U_i	V	400 ²⁾	400	
Degree of pollution 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 AC; over 300 AC only for equal potential ³⁾	300 AC	
Conventional thermal current I_{th}	A	10	10	
Rated operational current I_e				
• With alternating current 50/60 Hz		I_e / AC-15	I_e / AC-15	
- At 24 V	A	6	6	
- At 120 V	A	6	6	
- At 240 V	A	6	3	
- At 400 V	A	4	--	
• For direct current		I_e / DC-13	I_e / DC-13	
- At 24 V	A	3	3	
- At 125 V	A	0.55	0.55	
- At 250 V	A	0.27	0.27	
- At 400 V	A	0.12	--	
Short-circuit protection⁴⁾				
• With DIAZED fuse links, utilization category gG	A	6	10	
• With miniature circuit breaker, C char. ($I_{K < 400A}$)	A	1	3	
Mechanical endurance				
• Basic switch		15 × 10 ⁶ operating cycles	10 × 10 ⁶ operating cycles	10 × 10 ⁶ operating cycles
• With spring rod, 3SE5...-R..		10 × 10 ⁶ operating cycles	--	--
• With fork lever, 3SE51...-T..		1 × 10 ⁶ operating cycles	--	--
Electrical endurance				
• With 3RH.1, 3RT contactors in size S00, S0		10 × 10 ⁶ operating cycles	500 000 switching cycles	500 000 switching cycles
• For utilization category AC-15 when switching off I_e /AC-15 at 240 V		100 000 operating cycles	100 000 switching cycles	100 000 switching cycles
• With utilization category DC-12/DC-13		For direct current depending on the loading of the switch		
Switching frequency				
With 3RH.1, 3RT contactors in size S00, S0		6 000 operating cycles/h	1 800 operating cycles/h	
Switching accuracy				
• For repeated switching, measured at the plunger of the contact block	mm	0.05	0.05	
• With twist actuators		1°	1°	
Rated data according to \mathcal{E}, \mathcal{S} and \mathcal{A}				
• Rated voltage	V	300	300	
• Uninterrupted current	A	6	10	
• Switching capacity		Heavy duty, A 300 / B 300 / Q 300	A 300 / Q 300	

¹⁾ Special versions, see data sheet.

²⁾ For slow-action contacts 1 NO + 2 NC with make-before-break ("M") and 2 NO + 1 NC ("P") the following applies: 250 V.

³⁾ For slow-action contacts 1 NO + 2 NC with make-before-break ("M") and 2 NO + 1 NC ("P") the following applies: Over 250 V AC same potential only.

⁴⁾ Without any welds according to IEC 60947-5-1.

Type		3SE523.	3SE513.	3SE524.	3SE521.	3SE511.	3SE512., 3SE516.	3SE54..	3SE525.	
Enclosure										
Enclosure		Plastic P66			Zinc die-casting			Zn/Al	--	
• Material								30 / 40	30	
• Width	mm	31	40	50	31	40	56			
Degree of protection acc. to IEC 60529		IP65	IP66/IP67 ¹⁾					IP67	IP20, IP10	
Ambient temperature										
• During operation	°C	-25 ... +85; -40...+85 for 3SE5*-1AJ0 and 3SE5*-1AY0 versions							-25 ... +85	-25 ... +85
• In operation, switch with LEDs	°C	-25 ... +60							--	--
• Storage, transport	°C	-40 ... +90							-40 ... +90	-40 ... +90
Mounting position		Any								
Connection										
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)	--	--	--	--	
Conductor cross-sections										
• Solid	mm ²	1 x (0.5 ... 1.5), 2 x (0.5 ... 0.75)								
• Finely stranded with end sleeve	mm ²	1 x (0.5 ... 1.5), 2 x (0.5 ... 0.75)								
• AWG cables, solid or stranded	AWG	1 x (AWG 20 ... 16), 2 x (AWG 20 ... 18)								
Tightening torque , contact block	Nm	0.8 ... 1.0								
Protective conductor connection inside enclosure		--	M3.5			--	--	--	--	

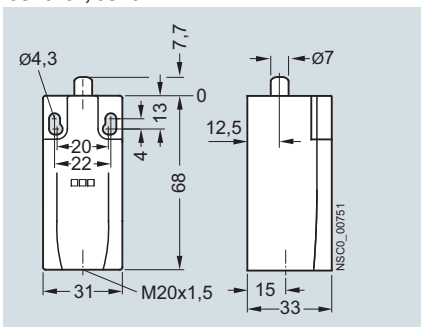
¹⁾ For actuator heads with spring rod and rod actuators: IP65/IP67.

SIRIUS 3SE5 Mechanical Position Switches

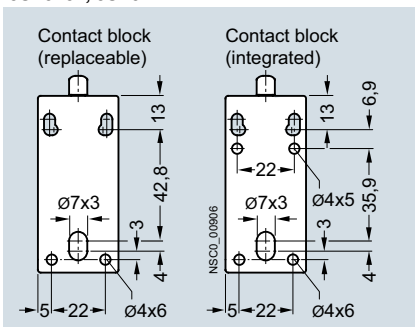
General data

Dimensions of the basic switches

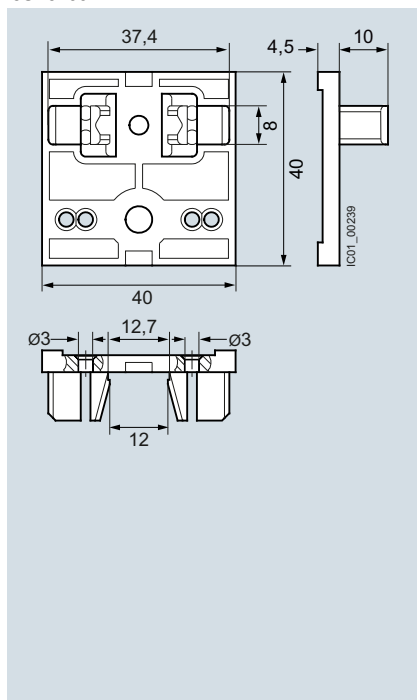
Enclosure width 31 mm, EN 50047, with connecting thread M20 x 1.5 3SE5232, 3SE5212



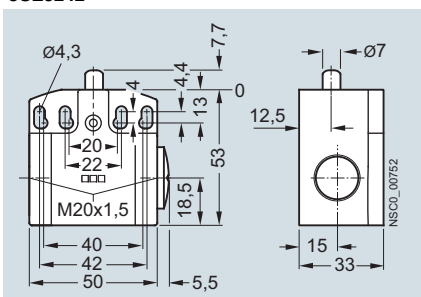
Enclosure width 31 mm, EN 50047, rear side with fixing drill holes 3SE5232, 3SE5212



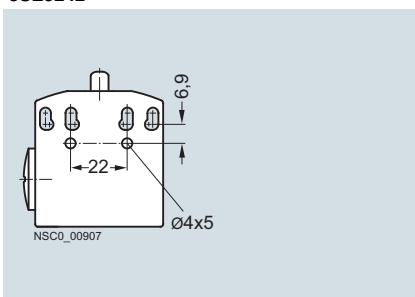
Mounting plate for 3SE5232, 3SE5212 position switch 3SX5100-1A



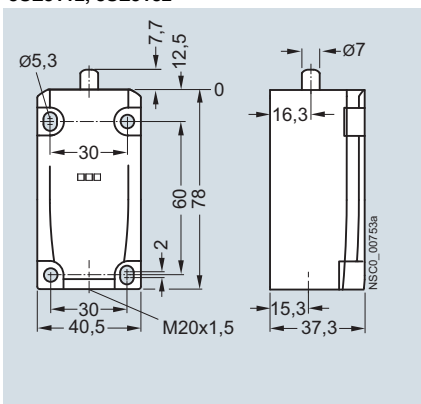
Enclosure width 50 mm, with M20 x 1.5 connecting thread 3SE5242



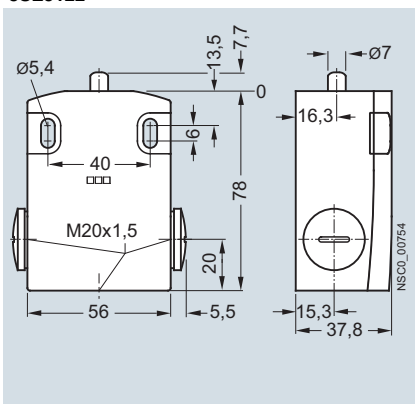
Enclosure width 50 mm, rear side with fixing drill holes 3SE5242



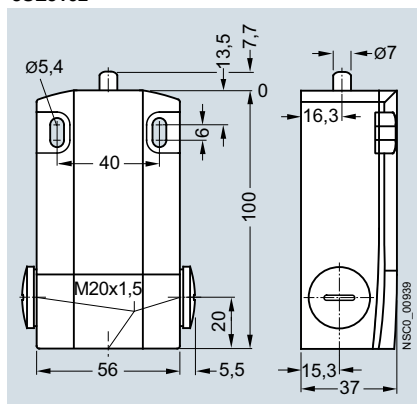
Enclosure width 40 mm, EN 50041, with M20 x 1.5 connecting thread 3SE5112, 3SE5132



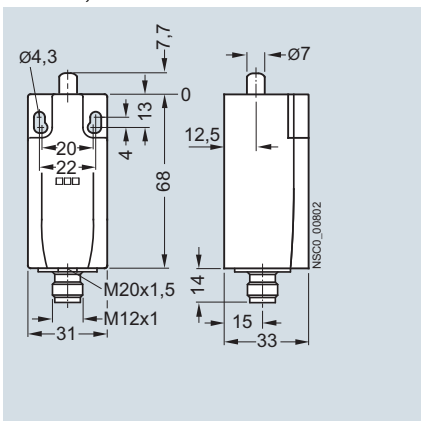
Enclosure width 56 mm, with M20 x 1.5 connecting thread 3SE5122



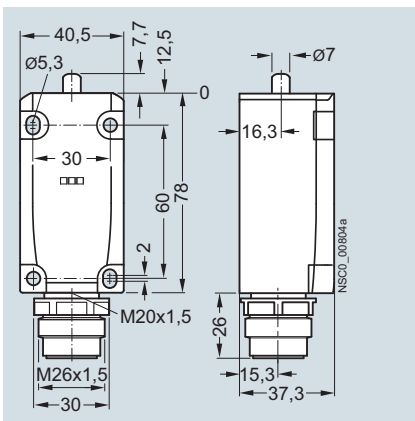
XL enclosure, width 56 mm, with M20 x 1.5 connecting thread 3SE5162



Enclosure width 31 mm, EN 50047, with M12 connector socket 3SE5234, 3SE5214

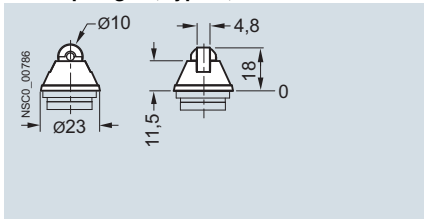


Enclosure width 40 mm, EN 50041, with 6-pole connector socket 3SE5115

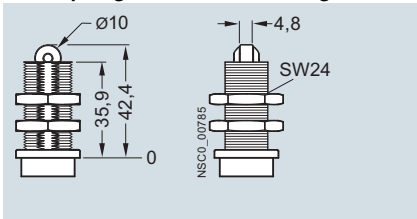


Operating mechanisms for enclosure width 31 mm and 50 mm

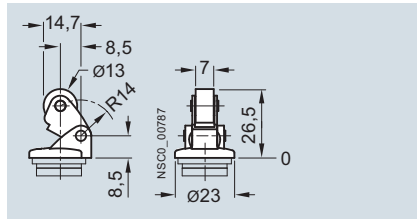
Roller plungers, type C, acc. to EN 50047



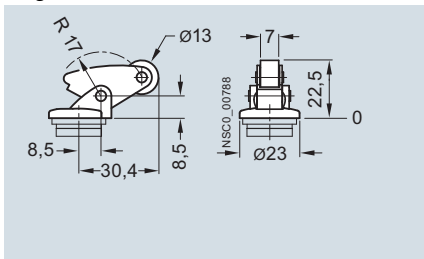
Roller plungers with central fixing



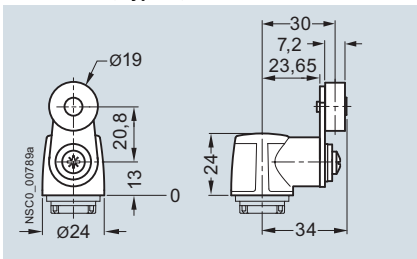
Roller levers, type E, acc. to EN 50047



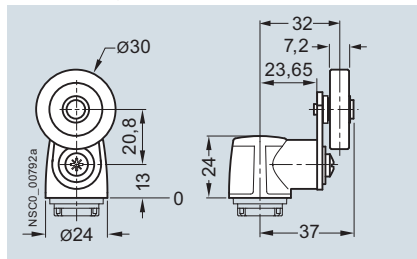
Angular roller levers



Twist levers, type A, acc. to EN 50047

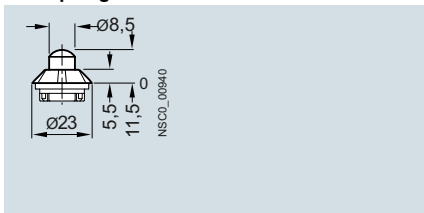


Twist levers, roller 30 mm

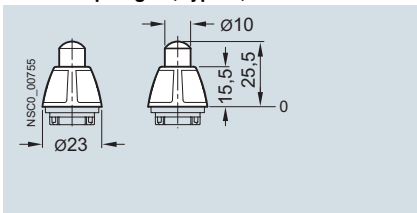


Operating mechanisms for enclosure width 40 mm and 56 mm

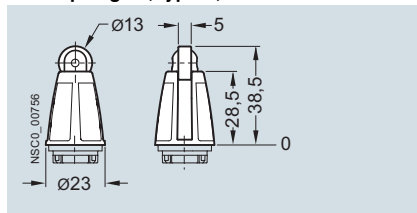
Plain plungers



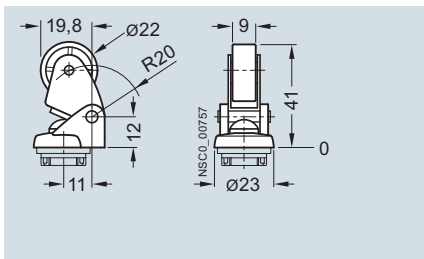
Rounded plungers, type B, acc. to EN 50041



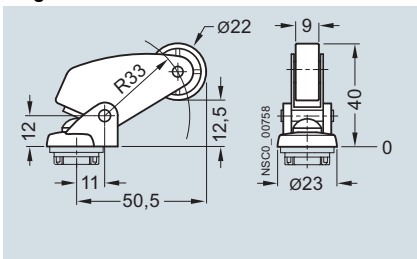
Roller plungers, type C, acc. to EN 50041



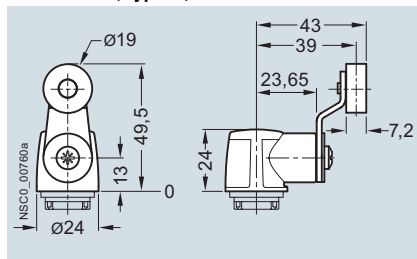
Roller levers



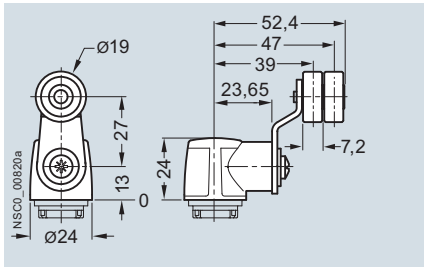
Angular roller levers



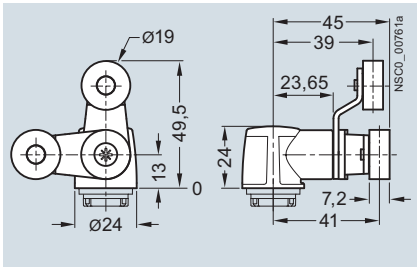
Twist levers, type A, acc. to EN 50041



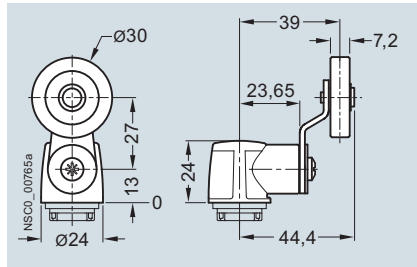
Twist levers, 2 rollers 19 mm



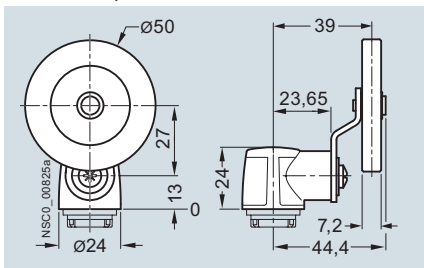
Fork levers, roller 19 mm



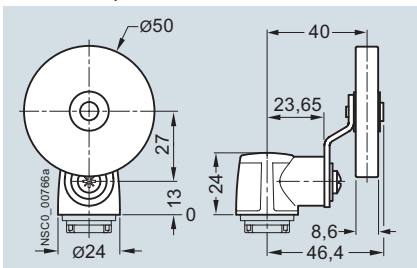
Twist levers, roller 30 mm



Twist levers, roller 50 mm



Twist levers, rubber roller 50 mm

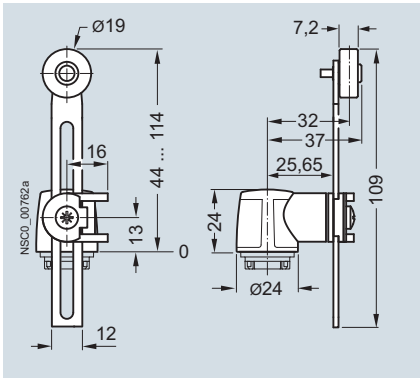


SIRIUS 3SE5 Mechanical Position Switches

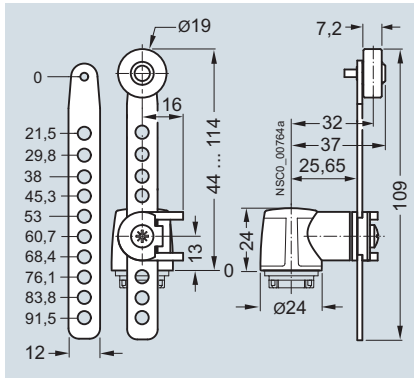
General data

Operating mechanisms for all enclosure widths

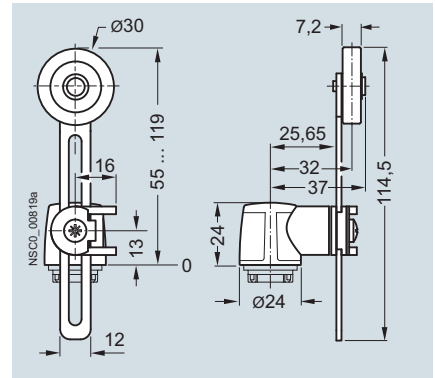
Twist lever, adjustable length, roller 19 mm



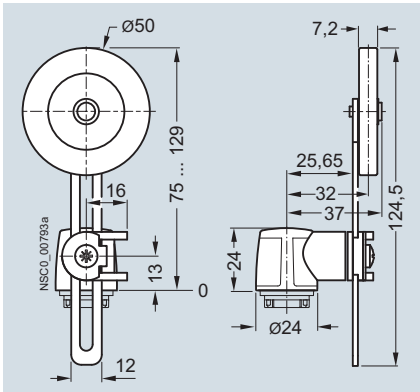
Twist lever, adjustable length, with grid hole, roller 19 mm



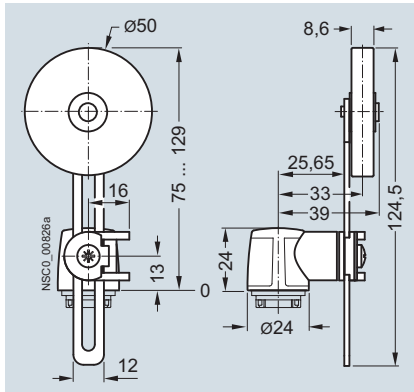
Twist lever, adjustable length, roller 30 mm



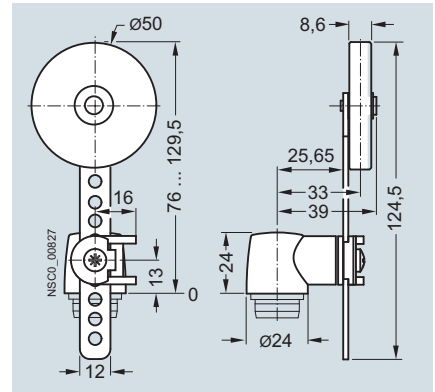
Twist lever, adjustable length, roller 50 mm



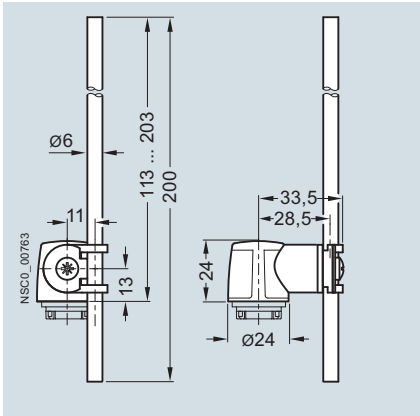
Twist lever, adjustable length, rubber roller 50 mm



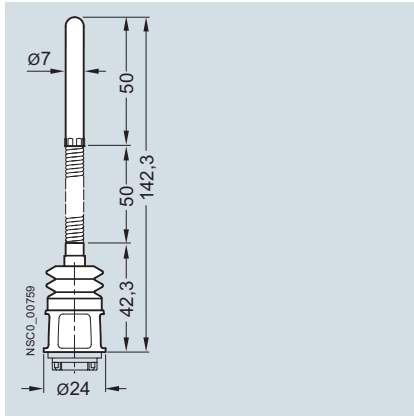
Twist lever, adjustable length, with grid hole, rubber roller 50 mm



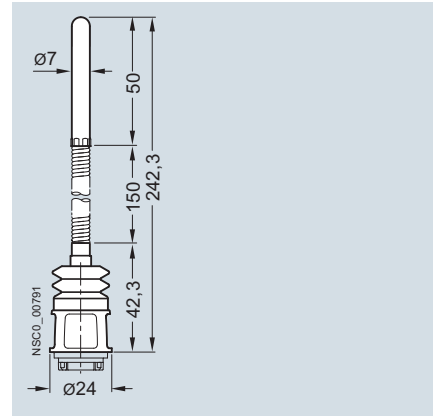
Rod actuator



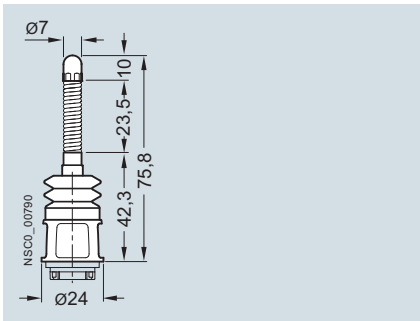
Spring rod, length 142.5 mm



Spring rod, length 242.5 mm

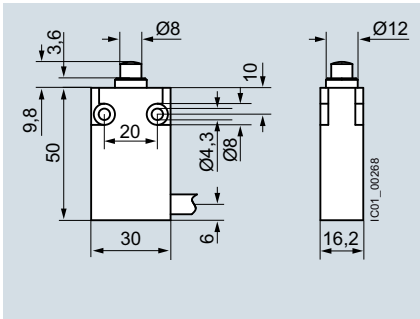


Spring rod, length 76 mm

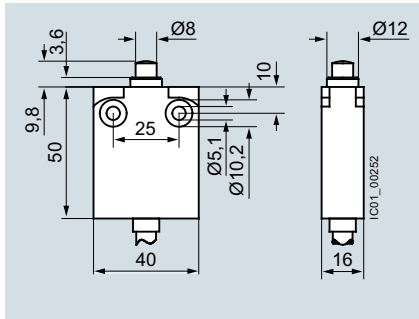


Dimensions of the switches in compact design

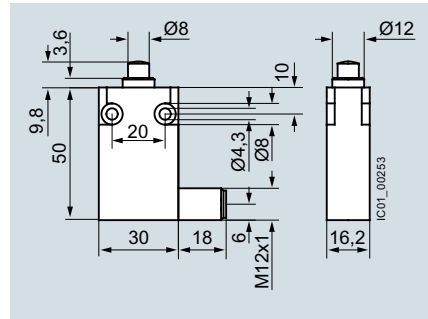
**Rounded plunger, enclosure width 30 mm, with connecting cable
3SE5413-0CC20-1EA2**



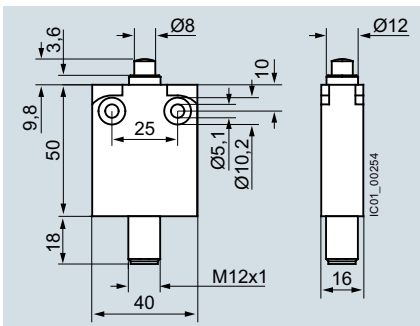
**Rounded plunger, enclosure width 40 mm, with connecting cable
3SE5423-0CC20-1EA2**



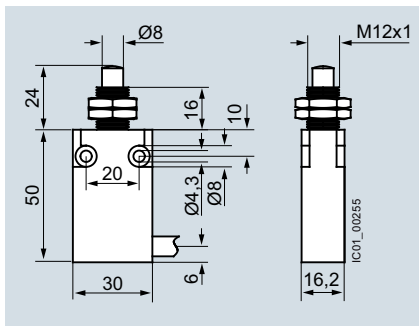
**Rounded plunger, enclosure width 30 mm, with M12 connector socket
3SE5413-0CC20-1EB1**



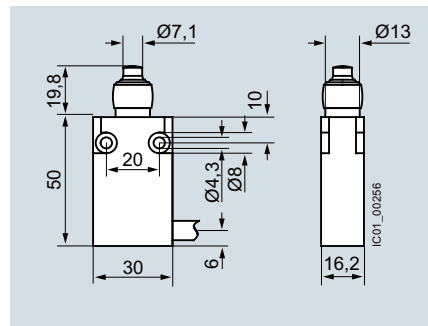
**Rounded plunger, enclosure width 40 mm, with M12 connector socket
3SE5423-0CC20-1EB1**



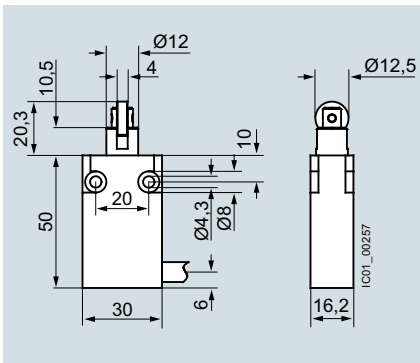
**Rounded plunger, enclosure width 30 mm, with central fixing
3SE5413-0CC21-1EA2**



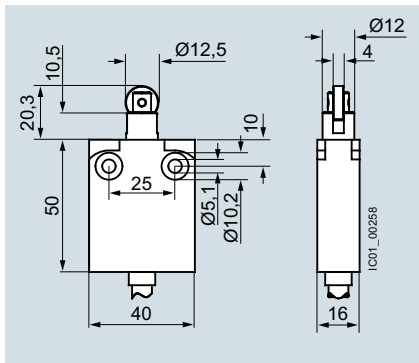
**Rounded plunger, enclosure width 30 mm, with external seal
3SE5413-0CC22-1EA2**



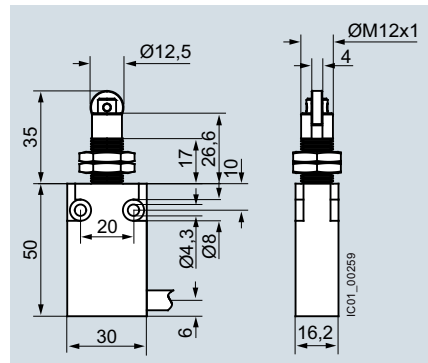
**Roller plunger, enclosure width 30 mm, with connecting cable
3SE5413-0CD20-1EA2**



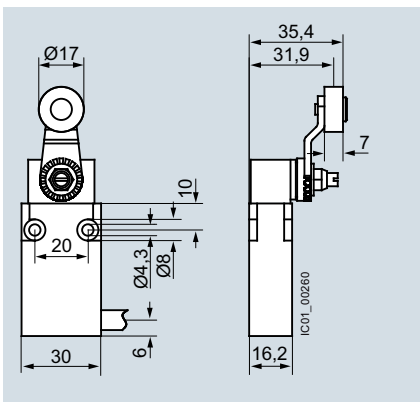
**Roller plunger, enclosure width 40 mm, with connecting cable
3SE5423-0CD20-1EA2**



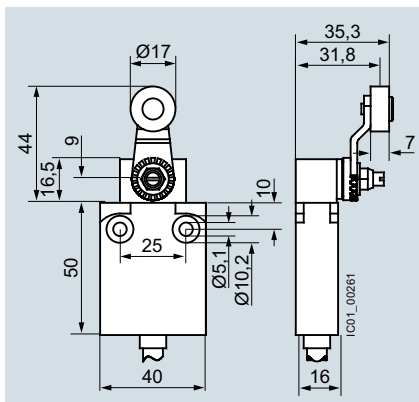
**Roller plunger, enclosure width 30 mm, with central fixing
3SE5413-0CD21-1EA2**



**Twist lever, enclosure width 30 mm, with connecting cable
3SE5413-0CN20-1EA2**



**Twist lever, enclosure width 40 mm, with connecting cable
3SE5423-0CN20-1EA2**



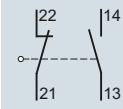
SIRIUS 3SE5 Mechanical Position Switches

General data

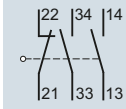
Circuit diagrams

Enclosure widths 31, 40, 50 and 56 mm

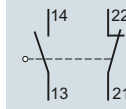
Slow-action contacts
1 NO + 1 NC
3SE5...-B..., -R...



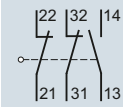
Slow-action contacts
2 NO + 1 NC
3SE5...-P...



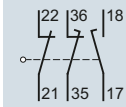
Snap-action contacts
1 NO + 1 NC
3SE5...-C..., -F..., -G..., -H..., -N...



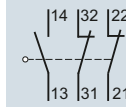
Slow-action contacts
1 NO + 2 NC
3SE5...-K..., -Q...



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

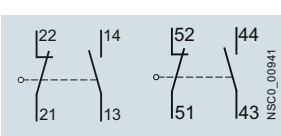


Snap-action contacts
1 NO + 2 NC
3SE5...-L...

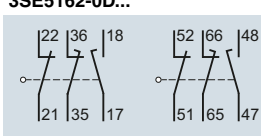


XL enclosures, width 56 mm

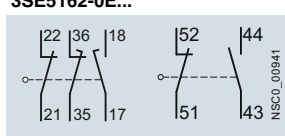
Slow-action contacts
2 x (1 NO + 1 NC)
3SE5162-0B...



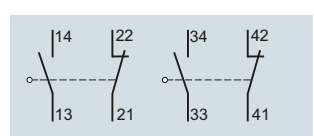
Slow-action contacts
2 x (1 NO + 2 NC) with make-before-break, 3SE5162-0D...



Slow-action contacts
1 NO + 2 NC with make-before-break, 1 NO + 1 NC
3SE5162-0E...

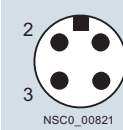


Snap-action contacts
2 x (1 NO + 1 NC)
3SE5162-0C...

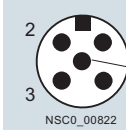


3SE5 connector assignment

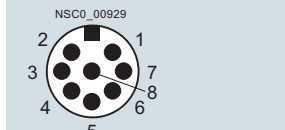
M12 connector socket, 4-pole
3SY3127



M12 connector sockets, 5-pole
3SY3128



M12 connector sockets, 8-pole
3SY3134



Connector sockets, 6-pole + PE
3SY3131



Article No.	Connector sockets Type	Contacts Version	LEDs Version	Connections								
				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	3SY3127	1 NO + 1 NC	--	21	22	13	14	--	--	--	--	--
3SE5..4-0.....-1AC5	3SY3128	1 NO + 1 NC	--	21	22	13	14	PE	--	--	--	--
3SE5..4-0.....-1AE0	3SY3127	2 NC	--	21	22	31	32	--	--	--	--	--
3SE5..4-0.....-1AE1	3SY3128	2 NC	--	21	22	31	32	PE	--	--	--	--
3SE5..4-1C...-1AF3	3SY3128	1 NO + 1 NC snap-action	2 LEDs	21	22	13 / LED gn	14 / LED ye	Ground LED	--	--	--	--
3SE5..4-1B...-1AF3	3SY3128	1 NO + 1 NC slow-action	2 LEDs	21	22	14 / LED gn	13 / LED ye	Ground LED	--	--	--	--
3SE5..4-1L...-1AD4	3SY3134	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	3SY3134	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	3SY3131	1 NO + 1 NC	--	21	22	13	14	--	--	--	--	✓
3SE5..5-0.....-1AD1	3SY3131	1 NO + 2 NC	--	21	22	13	14	31	32	--	--	✓
3SE5..5-.C...-1AF2	3SY3131	1 NO + 1 NC snap-action	2 LEDs	21	22	13 / LED gn	14 / LED ye	--	Ground LED	--	--	✓
3SE5..5-.B...-1AF2	3SY3131	1 NO + 1 NC slow-action	2 LEDs	21	22	14 / LED gn	13 / LED ye	--	Ground LED	--	--	✓
3SE5..5-.L...-1AD2	3SY3131	2 NC snap-action	2 LEDs	21	22	31	32	13 / LED gn	Ground LED	--	--	✓
3SE5..5-.K...-1AD2	3SY3131	2 NC slow-action	2 LEDs	21	22	31	32	14 / LED gn	Ground LED	--	--	✓

gn Green
ye Yellow

✓ Connected
-- Not available

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 differences between the units are indicated in the selection and ordering data by the symbols shown on orange 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 M12 connector socket and/or with 2 LEDs
- Version with M12 connector socket or 6-pole + PE

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

Support functions

The 3SE5/3SF1 position and safety switches can also be ordered using an online configurator.

This also enables a complete documentation to be prepared:

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

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

To be ordered:

Version	Complete units
	<input type="checkbox"/>
Article No.	

Complete units • Enclosure width 31 mm



Angular roller lever

With metal lever and plastic roller 13 mm

Slow-action contacts
1 NO + 1 NC

3SE5232-0BF10

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
	<input checked="" type="checkbox"/>
Article No.	

Basic switches • Enclosure width 31 mm



With teflon plunger

Slow-action contacts
1 NO + 1 NC

3SE5232-0BC05

+

Operating mechanisms



Angular roller levers

Metal lever,
plastic roller

3SE5000-0AF10

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 levers, high-grade steel lever and plastic roller

To be ordered separately:

Version	Modular system
	<input checked="" type="checkbox"/>
Article No.	

Basic switches • Enclosure width 31 mm



With teflon plunger

Slow-action contacts
1 NO + 1 NC

3SE5232-0BC05

+

Twist actuators



Twist actuators

High-grade steel lever,
plastic roller

3SE5000-0AK00



Twist levers

High-grade steel lever,
plastic roller

3SE5000-0AA31

SIRIUS 3SE5 Mechanical Position Switches






3SE5, Plastic Enclosures

Enclosure width 31 mm acc. to EN 50047

Selection and ordering data

Complete units for installation in control cabinets

2 contacts · Degree of protection IP40 · Cable entry by means of a locking plug with Ø 6 mm

Version	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Complete units¹⁾ · Enclosure width 31 mm							
	Control cabinet type, IP40, rounded plungers, type B, acc. to EN 50047						
	Flat cover						
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ 5	3SE5232-0HC05-1AB1	1	1 unit	41K
3SE5232-0HC05-1AB1							
	Flat cover						
	With mounting plate and screws for attachment profile						
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ 5	3SE5232-0HC05-1AB2	1	1 unit	41K
3SE5232-0HC05-1AB2							
	Standard cover						
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ 5	3SE5232-0HC05-1AB3	1	1 unit	41K
3SE5232-0HC05-1AB3							
	Standard cover						
	With mounting plate and screws for attachment profile						
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ 5	3SE5232-0HC05-1AB4	1	1 unit	41K
3SE5232-0HC05-1AB4							
Accessories							
	Mounting plate						
	Suitable for 3SE523. and 3SE521. position switches with a width of 31 mm						
3SX5100-1A	--	--	5	3SX5100-1A	1	1 unit	41K

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






¹⁾ The control cabinet types are not basic switches for the modular system.²⁾ Subsequent replacement of contact blocks is not possible.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, Plastic Enclosures

Enclosure width 31 mm acc. to EN 50047

Complete units2 or 3 contacts · Degree of protection IP65 · Cable entry M20 × 1.5¹⁾

Version	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU		
Complete units²⁾ · Enclosure width 31 mm							
Rounded plungers, type B, acc. to EN 50047							
With teflon plunger							
	Slow-action contacts	1 NO + 1 NC --	⊕ ▶	3SE5232-0BC05	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5232-0CC05	1	1 unit	41K
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ ▶	3SE5232-0HC05	1	1 unit	41K
	Snap-action contacts • Short stroke, integrated ³⁾	1 NO + 1 NC --	⊕ 5	3SE5232-0FC05	1	1 unit	41K
	Snap-action contacts • 2 × 2 mm contact gap	1 NO + 1 NC --	⊕ 5	3SE5232-0GC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ ▶	3SE5232-0KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ ▶	3SE5232-0LC05	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 2	3SE5232-0MC05	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 2	3SE5232-0PC05	1	1 unit	41K
With increased corrosion protection							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5232-0BC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5232-0CC05-1CA0	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0KC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0LC05-1CA0	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5232-0MC05-1CA0	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5232-0PC05-1CA0	1	1 unit	41K
With M12 connector socket, 4-pole (250 V, 4 A)							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5234-0BC05-1AC4	1	1 unit	41K
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ 2	3SE5234-0HC05-1AC4	1	1 unit	41K
	Slow-action contacts	2 NC --	⊕ 5	3SE5234-0KC05-1AE0	1	1 unit	41K
	Snap-action contacts	2 NC --	⊕ 2	3SE5234-0LC05-1AE0	1	1 unit	41K
With 2 LEDs, yellow/green							
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5232-1KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5232-1LC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5232-3KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5232-3LC05	1	1 unit	41K
With M12 connector socket, 5-pole (125 V, 4 A), and 2 LEDs							
	Slow-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5234-1BC05-1AF3	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5234-1CC05-1AF3	1	1 unit	41K

⊕ 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.

SIRIUS 3SE5 Mechanical Position 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	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU		
Complete units²⁾ · Enclosure width 31 mm							
Roller plungers, type C, acc. to EN 50047							
With plastic roller 10 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5232-0BD03	1	1 unit	41K
	Snap-action contacts • integrated ³⁾	1 NO + 1 NC --	⊕ ▶	3SE5232-0HD03	1	1 unit	41K
	Snap-action contacts • Short stroke, integrated ³⁾	1 NO + 1 NC --	⊕ 5	3SE5232-0FD03	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0KD03	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0LD03	1	1 unit	41K
	Actuator head rotated by 90°						
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0LD03-1AH0	1	1 unit	41K
With M12 connector socket, 4-pole (250 V, 4 A)							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ 5	3SE5234-0HD03-1AC4	1	1 unit	41K
With yellow cover							
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0LD03-1AG0	1	1 unit	41K
							
3SE5232-0LD03-1AG0							
Roller plungers with central fixing							
With plastic roller 10 mm							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ 5	3SE5232-0HD10	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0KD10	1	1 unit	41K
3SE5232-0HD10							
Roller levers, type E acc. to EN 50047							
With metal lever and plastic roller 13 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 2	3SE5232-0BE10	1	1 unit	41K
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ ▶	3SE5232-0HE10	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0KE10	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0LE10	1	1 unit	41K
With increased corrosion protection, with high-grade steel lever and plastic roller 13 mm							
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5232-0CE12-1CA0	1	1 unit	41K
With M12 connector socket, 4-pole (250 V, 4 A)							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ 5	3SE5234-0HE10-1AC4	1	1 unit	41K
With high-grade steel lever and plastic roller 13 mm							
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0LE12	1	1 unit	41K
Angular roller lever							
With metal lever and plastic roller 13 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5232-0BF10	1	1 unit	41K
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ 2	3SE5232-0HF10	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0KF10	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0LF10	1	1 unit	41K
3SE5232-0BF10							

⊕ 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.

SIRIUS 3SE5 Mechanical Position 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	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Complete units²⁾ · Enclosure width 31 mm							
Spring rod							
Length 142.5 mm, with plastic plunger 50 mm							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	2	3SE5232-0HR01	1	1 unit	41K
With M12 connector socket, 4-pole (250 V, 4 A)							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	5	3SE5234-0HR01-1AC4	1	1 unit	41K
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 --	⊕ 2	3SE5232-0BK21	1	1 unit	41K
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ 5	3SE5232-0HK21	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0KK21	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0LK21	1	1 unit	41K
With M12 connector socket, 4-pole (250 V, 4 A)							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ 5	3SE5234-0HK21-1AC4	1	1 unit	41K
With metal lever 35 mm and plastic roller 19 mm							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ 5	3SE5232-0HK15	1	1 unit	41K
Twist levers, adjustable length							
With metal lever with grid hole and plastic roller 19 mm							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ 2	3SE5232-0HK60	1	1 unit	41K
With metal lever and plastic roller 19 mm							
	Slow-action contacts	1 NO + 1 NC --	5	3SE5232-0BK50	1	1 unit	41K
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	▶	3SE5232-0HK50	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	5	3SE5232-0LK50	1	1 unit	41K
With M12 connector socket, 4-pole (250 V, 4 A)							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	5	3SE5234-0HK50-1AC4	1	1 unit	41K
Rod actuator							
With aluminum rod, length 200 mm							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	5	3SE5232-0HK80	1	1 unit	41K
With plastic rod, length 200 mm							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	5	3SE5232-0HK82	1	1 unit	41K
With M12 connector socket, 4-pole (250 V, 4 A)							
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	5	3SE5234-0HK82-1AC4	1	1 unit	41K

⊕ 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 12/20](#).






SIRIUS 3SE5 Mechanical Position 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	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU		
Basic switches · Enclosure width 31 mm (with rounded plunger²⁾)							
 3SE5232-0BC05	Teflon plungers						
	Slow-action contacts	1 NO + 1 NC --	⊕ ▶	3SE5232-0BC05	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5232-0CC05	1	1 unit	41K
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ ▶	3SE5232-0HC05	1	1 unit	41K
	Snap-action contacts • Short stroke, integrated ³⁾	1 NO + 1 NC --	⊕ 5	3SE5232-0FC05	1	1 unit	41K
	Snap-action contacts • 2 × 2 mm contact gap	1 NO + 1 NC --	⊕ 5	3SE5232-0GC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ ▶	3SE5232-0KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ ▶	3SE5232-0LC05	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 2	3SE5232-0MC05	1	1 unit	41K
Slow-action contacts	2 NO + 1 NC --	⊕ 2	3SE5232-0PC05	1	1 unit	41K	
 3SE5232-0BC05-1CA0	Increased corrosion protection⁴⁾						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5232-0BC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5232-0CC05-1CA0	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0KC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0LC05-1CA0	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5232-0MC05-1CA0	1	1 unit	41K
Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5232-0PC05-1CA0	1	1 unit	41K	
 3SE5234-0HC05-1AC4	M12 connector socket, 4-pole (250 V, 4 A)						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5234-0BC05-1AC4	1	1 unit	41K
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊕ 2	3SE5234-0HC05-1AC4	1	1 unit	41K
	Slow-action contacts	2 NC --	⊕ 5	3SE5234-0KC05-1AE0	1	1 unit	41K
	Snap-action contacts	2 NC --	⊕ 2	3SE5234-0LC05-1AE0	1	1 unit	41K
 3SE5232-1KC05	2 LEDs yellow/green						
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5232-1KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5232-1LC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5232-3KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5232-3LC05	1	1 unit	41K
 3SE5234-1BC05-1AF3	M12 connector socket, 5-pole (125 V, 4 A), and 2 LEDs						
	Slow-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5234-1BC05-1AF3	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5234-1CC05-1AF3	1	1 unit	41K

⊕ 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 31 mm, 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:

For the selection aid, see page 12/15.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, Plastic Enclosures

Enclosure width 31 mm acc. to EN 50047

Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG	
	mm	d	Article No.	Price per PU			
Operating mechanisms							
	Roller plungers, type C, acc. to EN 50047						
	Plastic rollers	10	↻ 2	3SE5000-0AD03	1	1 unit 41K	
	High-grade steel rollers	10	↻ 5	3SE5000-0AD04	1	1 unit 41K	
3SE5000-0AD03							
	Roller plungers with central fixing						
	Plastic rollers	10	↻ 2	3SE5000-0AD10	1	1 unit 41K	
	High-grade steel rollers	10	↻ 5	3SE5000-0AD11	1	1 unit 41K	
3SE5000-0AD10							
	Roller levers, type E, acc. to EN 50047						
	Metal lever, plastic roller	13	↻ 2	3SE5000-0AE10	1	1 unit 41K	
	Metal lever, high-grade steel roller	13	↻ 5	3SE5000-0AE11	1	1 unit 41K	
	High-grade steel lever, plastic roller	13	↻ 5	3SE5000-0AE12	1	1 unit 41K	
3SE5000-0AE10	High-grade steel lever, high-grade steel roller	13	↻ 5	3SE5000-0AE13	1	1 unit 41K	
	Angular roller levers						
	Metal lever, plastic roller	13	↻ 2	3SE5000-0AF10	1	1 unit 41K	
	Metal lever, high-grade steel roller	13	↻ 5	3SE5000-0AF11	1	1 unit 41K	
	High-grade steel lever, plastic roller	13	↻ 2	3SE5000-0AF12	1	1 unit 41K	
3SE5000-0AF10	High-grade steel lever, high-grade steel roller	13	↻ 5	3SE5000-0AF13	1	1 unit 41K	
	Spring rods (for switches with snap-action contacts only)						
	Plunger made of plastic, spring of high-grade steel:	7					
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		5	3SE5000-0AR01	1	1 unit 41K	
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)		5	3SE5000-0AR03	1	1 unit 41K	
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)		5	3SE5000-0AR04	1	1 unit 41K	
	Plunger and spring made of high-grade steel:	7					
• Length 142.5 mm (spring 50 mm, plunger 50 mm)		5	3SE5000-0AR02	1	1 unit 41K		
3SE5000-0AR01							
Twist actuators							
	Twist actuators, for 31/50 mm, EN 50047						
	Switching right and/or left, adjustable		↻ 2	3SE5000-0AK00	1	1 unit 41K	
3SE5000-0AK00							
	Levers						
	Twist levers 21 mm, straight, type A acc. to EN 50047						
	Metal lever, plastic roller	19	↻ 2	3SE5000-0AA21	1	1 unit 41K	
	Metal lever, high-grade steel roller	19	↻ 5	3SE5000-0AA22	1	1 unit 41K	
	Metal lever, high-grade steel roller with ball bearing	19	↻ 5	3SE5000-0AA23	1	1 unit 41K	
	Metal lever, plastic roller	30	↻ 5	3SE5000-0AA25	1	1 unit 41K	
	High-grade steel lever, plastic roller	19	↻ 5	3SE5000-0AA31	1	1 unit 41K	
3SE5000-0AA21	High-grade steel lever, high-grade steel roller	19	↻ 5	3SE5000-0AA32	1	1 unit 41K	
	Twist levers 30 mm, straight						
	Metal lever, plastic roller	19	↻ 5	3SE5000-0AA24	1	1 unit 41K	
	Metal lever, plastic roller	30	↻ 5	3SE5000-0AA26	1	1 unit 41K	
	Twist levers, adjustable length, with grid hole						
	Metal lever, plastic roller	19	↻ 5	3SE5000-0AA60	1	1 unit 41K	
	Metal lever, high-grade steel roller	19	↻ 5	3SE5000-0AA61	1	1 unit 41K	
	Metal lever, plastic roller	50	↻ 5	3SE5000-0AA67	1	1 unit 41K	
	Metal lever, rubber roller	50	↻ 5	3SE5000-0AA68	1	1 unit 41K	
	High-grade steel lever, plastic roller	19	↻ 5	3SE5000-0AA62	1	1 unit 41K	
	3SE5000-0AA60	High-grade steel lever, high-grade steel roller	19	↻ 5	3SE5000-0AA63	1	1 unit 41K
3SE5000-0AA50							
	Twist levers, adjustable length						
	Metal lever, plastic roller	19	2	3SE5000-0AA50	1	1 unit 41K	
	Metal lever, high-grade steel roller	19	5	3SE5000-0AA51	1	1 unit 41K	
	Metal lever, plastic roller	30	5	3SE5000-0AA55	1	1 unit 41K	
	Metal lever, plastic roller	50	5	3SE5000-0AA57	1	1 unit 41K	
	Metal lever, rubber roller	50	5	3SE5000-0AA58	1	1 unit 41K	
	High-grade steel lever, plastic roller	19	5	3SE5000-0AA52	1	1 unit 41K	
	3SE5000-0AA60	High-grade steel lever, high-grade steel roller	19	5	3SE5000-0AA53	1	1 unit 41K
	3SE5000-0AA50						
	Rod actuator						
	Aluminum rod, length 200 mm	6	5	3SE5000-0AA80	1	1 unit 41K	
	Spring rod, length 200 mm	6	5	3SE5000-0AA81	1	1 unit 41K	
	Plastic rod, length 200 mm	6	5	3SE5000-0AA82	1	1 unit 41K	
3SE5000-0AA80							

↻ Positively driven actuator, necessary in safety circuits.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

SIRIUS 3SE5 Mechanical Position 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 × 1.5

Version	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Complete units¹⁾ · Enclosure width 40 mm							
Plain plungers							
With high-grade steel plunger							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0BB01	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0CB01	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0KB01	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0LB01	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5132-0PB01	1	1 unit	41K
Rounded plungers, type B, acc. to EN 50041							
With plastic plunger							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0BC03	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5132-0CC03	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0KC03	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0LC03	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5132-0PC03	1	1 unit	41K
Roller plungers, type C, acc. to EN 50041							
With plastic roller 13 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0BD05	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5132-0CD05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0KD05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0LD05	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5132-0PD05	1	1 unit	41K
Roller levers							
With metal lever and plastic roller 22 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0BE05	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5132-0CE05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0KE05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0LE05	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5132-0PE05	1	1 unit	41K
Angular roller lever							
With metal lever and plastic roller 22 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0BF05	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0CF05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0LF05	1	1 unit	41K
Spring rod							
Length 142.5 mm, with plastic plunger 50 mm							
	Snap-action contacts	1 NO + 1 NC --	5	3SE5132-0CR01	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	5	3SE5132-0LR01	1	1 unit	41K

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





1) Popular versions.

SIRIUS 3SE5 Mechanical Position 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	SD	Complete units	<input type="checkbox"/>	PU (UNIT, SET, M)	PS*	PG
				Article 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 --	⊕ 2	3SE5132-0BJ01		1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5132-0CJ01		1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0KJ01		1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0LJ01		1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5132-0PJ01		1	1 unit	41K
3SE5132-0BJ01								
Twist levers, adjustable length								
With metal lever with grid hole and plastic roller 19 mm								
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0CJ60		1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0LJ60		1	1 unit	41K
3SE5132-0CJ60								
With metal lever and plastic roller 19 mm								
	Snap-action contacts	1 NO + 1 NC --	2	3SE5132-0CJ50		1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	5	3SE5132-0LJ50		1	1 unit	41K
3SE5132-0CJ50								
Rod actuators, type D, acc. to EN 50041								
With aluminum rod, length 200 mm								
	Snap-action contacts	1 NO + 1 NC --	5	3SE5132-0CJ80		1	1 unit	41K
With plastic rod, length 200 mm								
	Snap-action contacts	1 NO + 1 NC --	2	3SE5132-0CJ82		1	1 unit	41K
3SE5132-0CJ80								

⊕ 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 12/24](#).





SIRIUS 3SE5 Mechanical Position Switches

3SE5, Plastic 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	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Basic switches • Enclosure width 40 mm							
	Connecting thread M20 × 1.5						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0BA00	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0CA00	1	1 unit	41K
	• Gold-plated contacts		⊕ 5	3SE5132-0CA00-1AC1	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0KA00	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0LA00	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5132-0MA00	1	1 unit	41K
Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5132-0PA00	1	1 unit	41K	
	Increased corrosion protection¹⁾						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0BA00-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-0CA00-1CA0	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0KA00-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0LA00-1CA0	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5132-0MA00-1CA0	1	1 unit	41K
Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5132-0PA00-1CA0	1	1 unit	41K	
	M12 connector socket, 4-pole (250 V, 4 A)						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5134-0BA00-1AC4	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5134-0CA00-1AC4	1	1 unit	41K
	Slow-action contacts	2 NC --	⊕ 5	3SE5134-0KA00-1AE0	1	1 unit	41K
Snap-action contacts	2 NC --	⊕ 5	3SE5134-0LA00-1AE0	1	1 unit	41K	
	2 LEDs, yellow/green						
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5132-1KA00	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5132-1LA00	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5132-3KA00	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5132-3LA00	1	1 unit	41K	

⊕ 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:

For the selection aid, see page 12/15.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, Plastic Enclosures

Enclosure width 40 mm acc. to EN 50041

Version	Diameter	SD	Modular system		PU (UNIT, SET, M)	PS*	PG
	mm	d	Article No.	Price per PU			
Operating mechanisms							
 3SE5000-0AB01	Plain plungers High-grade steel plunger	10	⊕ 2	3SE5000-0AB01		1	1 unit 41K
 3SE5000-0AC03 3SE5000-0AD05	Rounded plungers, type B, acc. to EN 50041 Plastic plungers	10	⊕ 5	3SE5000-0AC03		1	1 unit 41K
	Roller plungers, type C, acc. to EN 50041 Plastic plunger, plastic roller	13	⊕ 5	3SE5000-0AD05		1	1 unit 41K
	Plastic plunger, high-grade steel roller	13	⊕ 5	3SE5000-0AD06		1	1 unit 41K
 3SE5000-0AE05	Roller levers Metal lever with plastic roller, plastic base	22	⊕ 5	3SE5000-0AE05		1	1 unit 41K
 3SE5000-0AF05	Angular roller levers Metal lever with plastic roller, plastic base	22	⊕ 5	3SE5000-0AF05		1	1 unit 41K
 3SE5000-0AR01	Spring rods (for switches with snap-action contacts only) Plunger made of plastic, spring of high-grade steel: • 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) Plunger and spring made of high-grade steel: • Length 142.5 mm (spring 50 mm, plunger 50 mm)	7	5	3SE5000-0AR01		1	1 unit 41K
				3SE5000-0AR03		1	1 unit 41K
				3SE5000-0AR04		1	1 unit 41K
				3SE5000-0AR02		1	1 unit 41K
Twist actuators							
 3SE5000-0AJ00	Twist actuators , for 40 mm, EN 50041 • For twist levers and rod actuators, switching right and/or left, adjustable		⊕ 2	3SE5000-0AH00		1	1 unit 41K
	Levers						
	Twist levers, offset, type A, acc. to EN 50041						
	Metal lever 27 mm, plastic roller	19	⊕ 2	3SE5000-0AA01		1	1 unit 41K
	Metal lever 27 mm, high-grade steel roller	19	⊕ 2	3SE5000-0AA02		1	1 unit 41K
	Metal lever 27 mm, high-grade steel roller with ball bearing	19	⊕ 5	3SE5000-0AA03		1	1 unit 41K
	Metal lever 27 mm, 2 plastic rollers	19	⊕ 5	3SE5000-0AA04		1	1 unit 41K
	Metal lever 27 mm, plastic roller	30	⊕ 5	3SE5000-0AA05		1	1 unit 41K
	Metal lever 27 mm, rubber roller	50	⊕ 5	3SE5000-0AA08		1	1 unit 41K
	High-grade steel lever 27 mm, plastic roller	19	⊕ 5	3SE5000-0AA11		1	1 unit 41K
	High-grade steel lever 27 mm, high-grade steel roller	19	⊕ 5	3SE5000-0AA12		1	1 unit 41K
	Metal lever 35 mm, plastic roller	19	⊕ 5	3SE5000-0AA15		1	1 unit 41K
	High-grade steel lever 35 mm, plastic roller	19	⊕ 5	3SE5000-0AA16		1	1 unit 41K
	Twist levers 30 mm, straight						
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA24		1	1 unit 41K
	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA26		1	1 unit 41K
	Twist levers, adjustable length, with grid hole						
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA60		1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA61		1	1 unit 41K
	Metal lever, rubber roller	50	⊕ 5	3SE5000-0AA68		1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA62		1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA63		1	1 unit 41K
	Twist levers, adjustable length						
	Metal lever, plastic roller	19	2	3SE5000-0AA50		1	1 unit 41K
	Metal lever, high-grade steel roller	19	5	3SE5000-0AA51		1	1 unit 41K
	Metal lever, plastic roller	30	5	3SE5000-0AA55		1	1 unit 41K
	Metal lever, rubber roller	50	5	3SE5000-0AA58		1	1 unit 41K
	High-grade steel lever, plastic roller	19	5	3SE5000-0AA52		1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	5	3SE5000-0AA53		1	1 unit 41K
	Rod actuators, type D, acc. to EN 50041						
	Aluminum rod, length 200 mm	6	5	3SE5000-0AA80		1	1 unit 41K
	Spring rod, length 200 mm	6	5	3SE5000-0AA81		1	1 unit 41K
	Plastic rod, length 200 mm	6	5	3SE5000-0AA82		1	1 unit 41K

⊕ Positively driven actuator, necessary in safety circuits.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

SIRIUS 3SE5 Mechanical Position Switches


3SE5, Plastic Enclosures

Enclosure width 50 mm

Selection and ordering data

Complete units

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

Version	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU		
Complete units¹⁾ · Enclosure width 50 mm							
Rounded plungers							
With teflon plunger							
 3SE5242-0BC05	Slow-action contacts	1 NO + 1 NC --	⊕ 2	3SE5242-0BC05		1	1 unit 41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5242-0CC05		1	1 unit 41K
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ ▶	3SE5242-0HC05		1	1 unit 41K
	Snap-action contacts • Short stroke, integrated ²⁾	1 NO + 1 NC --	⊕ 5	3SE5242-0FC05		1	1 unit 41K
	Snap-action contacts • 2 × 2 mm contact gap	1 NO + 1 NC --	⊕ 5	3SE5242-0GC05		1	1 unit 41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0KC05		1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0LC05		1	1 unit 41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5242-0MC05		1	1 unit 41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 2	3SE5242-0PC05		1	1 unit 41K
	With increased corrosion protection						
 3SE5242-0BC05-1CA0	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5242-0BC05-1CA0		1	1 unit 41K
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ 5	3SE5242-0HC05-1CA0		1	1 unit 41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0KC05-1CA0		1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0LC05-1CA0		1	1 unit 41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5242-0MC05-1CA0		1	1 unit 41K
Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5242-0PC05-1CA0		1	1 unit 41K	
With 2 LEDs, yellow/green							
 3SE5242-1KC05	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5242-1KC05		1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5242-1LC05		1	1 unit 41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5242-3KC05		1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5242-3LC05		1	1 unit 41K
Roller plunger							
With plastic roller 10 mm							
 3SE5242-0BD03	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5242-0BD03		1	1 unit 41K
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ 5	3SE5242-0HD03		1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0LD03		1	1 unit 41K

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

1) Popular versions.




2) Subsequent replacement of contact blocks is not possible.

SIRIUS 3SE5 Mechanical Position 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	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Complete units¹⁾ · Enclosure width 50 mm							
	Roller levers						
With metal lever and plastic roller 13 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5242-0BE10	1	1 unit	41K
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ 2	3SE5242-0HE10	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0LE10	1	1 unit	41K
With M12 connector socket, 4-pole right (250 V, 4 A)							
3SE5242-0BE10	Snap-action contacts	2 NC --	⊕ 5	3SE5244-0LE10-1AE0	1	1 unit	41K
	Twist levers						
With metal lever 21 mm and plastic roller 19 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5242-0BK21	1	1 unit	41K
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ 5	3SE5242-0HK21	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0LK21	1	1 unit	41K
3SE5242-0BK21	Twist levers, adjustable length						
With metal lever and plastic roller 19 mm							
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	5	3SE5242-0HK50	1	1 unit	41K
3SE5242-0HK50							

⊕ 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 12/28](#).

SIRIUS 3SE5 Mechanical Position 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	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU		

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



3SE5242-0BC05

Teflon plungers

Slow-action contacts	1 NO + 1 NC --	⊕ 2	3SE5242-0BC05	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5242-0CC05	1	1 unit	41K
Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ ▶	3SE5242-0HC05	1	1 unit	41K
Snap-action contacts • Short stroke, integrated ²⁾	1 NO + 1 NC --	⊕ 5	3SE5242-0FC05	1	1 unit	41K
Snap-action contacts • 2 × 2 mm contact gap	1 NO + 1 NC --	⊕ 5	3SE5242-0GC05	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0KC05	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0LC05	1	1 unit	41K
Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5242-0MC05	1	1 unit	41K
Slow-action contacts	2 NO + 1 NC --	⊕ 2	3SE5242-0PC05	1	1 unit	41K



3SE5242-0BC05-1CA0

Increased corrosion protection³⁾

Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5242-0BC05-1CA0	1	1 unit	41K
Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ 5	3SE5242-0HC05-1CA0	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0KC05-1CA0	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0LC05-1CA0	1	1 unit	41K
Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5242-0MC05-1CA0	1	1 unit	41K
Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5242-0PC05-1CA0	1	1 unit	41K



3SE5242-1KC05

2 LEDs yellow/green

Slow-action contacts	1 NO + 2 NC	24 V DC ⊕ 5	3SE5242-1KC05	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC	24 V DC ⊕ 5	3SE5242-1LC05	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC	230 V AC ⊕ 5	3SE5242-3KC05	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC	230 V AC ⊕ 5	3SE5242-3LC05	1	1 unit	41K

⊕ 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:

For the selection aid, see page 12/15.

Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm	d	Article No.	Price per PU		

Operating mechanisms



3SE5000-0AD03

Roller plungers, type C, acc. to EN 50047

Plastic rollers	10	⊕ 2	3SE5000-0AD03	1	1 unit	41K
High-grade steel rollers	10	⊕ 5	3SE5000-0AD04	1	1 unit	41K



3SE5000-0AD10

Roller plungers with central fixing










Plastic rollers	10	⊕ 2	3SE5000-0AD10	1	1 unit	41K
High-grade steel rollers	10	⊕ 5	3SE5000-0AD11	1	1 unit	41K

⊕ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, Plastic Enclosures

Enclosure width 50 mm

Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG	
	mm	d	Article No.	Price per PU			
Operating mechanisms							
	Roller levers, type E, acc. to EN 50047						
	Metal lever, plastic roller	13	⊕ 2	3SE5000-0AE10	1	1 unit 41K	
	Metal lever, high-grade steel roller	13	⊕ 5	3SE5000-0AE11	1	1 unit 41K	
	High-grade steel lever, plastic roller	13	⊕ 5	3SE5000-0AE12	1	1 unit 41K	
3SE5000-0AE10	High-grade steel lever, high-grade steel roller	13	⊕ 5	3SE5000-0AE13	1	1 unit 41K	
	Angular roller levers						
	Metal lever, plastic roller	13	⊕ 2	3SE5000-0AF10	1	1 unit 41K	
	Metal lever, high-grade steel roller	13	⊕ 5	3SE5000-0AF11	1	1 unit 41K	
	High-grade steel lever, plastic roller	13	⊕ 2	3SE5000-0AF12	1	1 unit 41K	
3SE5000-0AF10	High-grade steel lever, high-grade steel roller	13	⊕ 5	3SE5000-0AF13	1	1 unit 41K	
	Spring rods (for switches with snap-action contacts only)						
	Plunger made of plastic, spring of high-grade steel:	7					
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		5	3SE5000-0AR01	1	1 unit 41K	
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)		5	3SE5000-0AR03	1	1 unit 41K	
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)		5	3SE5000-0AR04	1	1 unit 41K	
3SE5000-0AR01	Plunger and spring made of high-grade steel:	7					
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		5	3SE5000-0AR02	1	1 unit 41K	
Twist actuators							
	Twist actuators, for 31/50 mm, EN 50047						
	Switching right and/or left, adjustable		⊕ 2	3SE5000-0AK00	1	1 unit 41K	
3SE5000-0AK00	Levers						
	Twist levers 21 mm, straight, type A acc. to EN 50047						
	Metal lever, plastic roller	19	⊕ 2	3SE5000-0AA21	1	1 unit 41K	
	Metal lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA22	1	1 unit 41K	
	Metal lever, high-grade steel roller with ball bearing	19	⊕ 5	3SE5000-0AA23	1	1 unit 41K	
3SE5000-0AA21	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA25	1	1 unit 41K	
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA31	1	1 unit 41K	
	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA32	1	1 unit 41K	
	Twist levers 30 mm, straight						
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA24	1	1 unit 41K	
	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA26	1	1 unit 41K	
	Twist levers, adjustable length, with grid hole						
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA60	1	1 unit 41K	
	Metal lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA61	1	1 unit 41K	
	Metal lever, plastic roller	50	⊕ 5	3SE5000-0AA67	1	1 unit 41K	
	Metal lever, rubber roller	50	⊕ 5	3SE5000-0AA68	1	1 unit 41K	
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA62	1	1 unit 41K	
3SE5000-0AA60 3SE5000-0AA24	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA63	1	1 unit 41K	
	Twist levers, adjustable length						
	Metal lever, plastic roller	19	2	3SE5000-0AA50	1	1 unit 41K	
	Metal lever, high-grade steel roller	19	5	3SE5000-0AA51	1	1 unit 41K	
	Metal lever, plastic roller	30	5	3SE5000-0AA55	1	1 unit 41K	
	Metal lever, plastic roller	50	5	3SE5000-0AA57	1	1 unit 41K	
	Metal lever, rubber roller	50	5	3SE5000-0AA58	1	1 unit 41K	
	3SE5000-0AA50	High-grade steel lever, plastic roller	19	5	3SE5000-0AA52	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	5	3SE5000-0AA53	1	1 unit 41K	
	Rod actuator						
	Aluminum rod, length 200 mm	6	5	3SE5000-0AA80	1	1 unit 41K	
	Spring rod, length 200 mm	6	5	3SE5000-0AA81	1	1 unit 41K	
	Plastic rod, length 200 mm	6	5	3SE5000-0AA82	1	1 unit 41K	

⊕ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position 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	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		

Complete units¹⁾ · Enclosure width 31 mm

Rounded plungers, type B, acc. to EN 50047							
With plunger							
	Slow-action contacts	1 NO + 1 NC --	⊕ 2	3SE5212-0BC05	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5212-0CC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 2	3SE5212-0LC05	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 2	3SE5212-0MC05	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5212-0PC05	1	1 unit	41K
With increased corrosion protection							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0BC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0CC05-1CA0	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0LC05-1CA0	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5212-0MC05-1CA0	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5212-0PC05-1CA0	1	1 unit	41K
With M12 connector socket, 5-pole (125 V, 4 A)							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5214-0BC05-1AC5	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5214-0CC05-1AC5	1	1 unit	41K
	Slow-action contacts	2 NC --	⊕ 5	3SE5214-0KC05-1AE1	1	1 unit	41K
	Snap-action contacts	2 NC --	⊕ 5	3SE5214-0LC05-1AE1	1	1 unit	41K
With 2 LEDs, yellow/green							
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5212-1KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊕ 2	3SE5212-1LC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5212-3KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5212-3LC05	1	1 unit	41K
With M12 connector socket, 5-pole (125 V, 4 A), and 2 LEDs							
	Slow-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5214-1BC05-1AF3	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5214-1CC05-1AF3	1	1 unit	41K
Plain plungers							
With high-grade steel plunger							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0BB01	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0CB01	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KB01	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0LB01	1	1 unit	41K
Roller plungers, type C, acc. to EN 50047							
With plastic roller 10 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 2	3SE5212-0BD03	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0CD03	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KD03	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0LD03	1	1 unit	41K






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

¹⁾ Popular versions.

SIRIUS 3SE5 Mechanical Position 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	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Complete units¹⁾ · Enclosure width 31 mm							
	Roller plungers with central fixing With plastic roller 10 mm						
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KD10	1	1 unit	41K
3SE5212-0KD10							
	Roller levers, type E acc. to EN 50047 With metal lever and plastic roller 13 mm						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0BE10	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0CE10	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KE10	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0LE10	1	1 unit	41K
3SE5212-0BE10							
	Angular roller lever With metal lever and plastic roller 13 mm						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0BF10	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0CF10	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KF10	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0LF10	1	1 unit	41K
3SE5212-0BF10							
	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 --	⊕ 5	3SE5212-0BK21	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0CK21	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KK21	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0LK21	1	1 unit	41K
3SE5212-0BK21							
	Twist levers, adjustable length With metal lever with grid hole and plastic roller 19 mm						
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0CK60	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KK60	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0LK60	1	1 unit	41K
3SE5212-0CK60							
	With metal lever and plastic roller 19 mm						
	Slow-action contacts	1 NO + 1 NC --	5	3SE5212-0BK50	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	5	3SE5212-0CK50	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	5	3SE5212-0LK50	1	1 unit	41K

⊕ 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 12/32](#).






SIRIUS 3SE5 Mechanical Position Switches

3SE5, Metal Enclosures

Enclosure width 31 mm acc. to EN 50047

Modular system

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

Version	Contacts	LEDs	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU		
Basic switches • Enclosure width 31 mm (with rounded plunger¹⁾)							
	Plunger						
	Slow-action contacts	1 NO + 1 NC --	⊕ 2	3SE5212-0BC05	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5212-0CC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 2	3SE5212-0LC05	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 2	3SE5212-0MC05	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5212-0PC05	1	1 unit	41K
	Increased corrosion protection²⁾						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0BC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0CC05-1CA0	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0LC05-1CA0	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5212-0MC05-1CA0	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5212-0PC05-1CA0	1	1 unit	41K
	M12 connector socket, 5-pole (125 V, 4 A)						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5214-0BC05-1AC5	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5214-0CC05-1AC5	1	1 unit	41K
	Slow-action contacts	2 NC --	⊕ 5	3SE5214-0KC05-1AE1	1	1 unit	41K
	Snap-action contacts	2 NC --	⊕ 5	3SE5214-0LC05-1AE1	1	1 unit	41K
	2 LEDs yellow/green						
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5212-1KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊕ 2	3SE5212-1LC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5212-3KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5212-3LC05	1	1 unit	41K
	M12 connector socket, 5-pole (125 V, 4 A), and 2 LEDs						
	Slow-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5214-1BC05-1AF3	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5214-1CC05-1AF3	1	1 unit	41K



⊕ 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.

2) Use corresponding high-grade steel lever.

Note:

For the selection aid, see page 12/15.










Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG	
	mm	d	Article No.	Price per PU			
Operating mechanisms							
	Plain plungers						
	High-grade steel plunger	10	⊕ 2	3SE5000-0AB01	1	1 unit	41K
	Roller plungers, type C, acc. to EN 50047						
	Plastic rollers	10	⊕ 2	3SE5000-0AD03	1	1 unit	41K
	High-grade steel rollers	10	⊕ 5	3SE5000-0AD04	1	1 unit	41K

⊕ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, Metal Enclosures

Enclosure width 31 mm acc. to EN 50047

Version	Diameter	SD	Modular system		PU (UNIT, SET, M)	PS*	PG
	mm	d	Article No.	Price per PU			
Operating mechanisms							
	Roller plungers with central fixing						
	Plastic rollers	10	⊕ 2	3SE5000-0AD10		1	1 unit 41K
	High-grade steel rollers	10	⊕ 5	3SE5000-0AD11		1	1 unit 41K
3SE5000-0AD10							
	Roller levers, type E, acc. to EN 50047						
	Metal lever, plastic roller	13	⊕ 2	3SE5000-0AE10		1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊕ 5	3SE5000-0AE11		1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊕ 5	3SE5000-0AE12		1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊕ 5	3SE5000-0AE13		1	1 unit 41K
3SE5000-0AE10							
	Angular roller levers						
	Metal lever, plastic roller	13	⊕ 2	3SE5000-0AF10		1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊕ 5	3SE5000-0AF11		1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊕ 2	3SE5000-0AF12		1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊕ 5	3SE5000-0AF13		1	1 unit 41K
3SE5000-0AF10							
	Spring rods (for switches with snap-action contacts only)						
	Plunger made of plastic, spring of high-grade steel: 7						
		• Length 142.5 mm (spring 50 mm, plunger 50 mm)	5	3SE5000-0AR01		1	1 unit 41K
		• Length 76 mm (spring 23.5 mm, plunger 10 mm)	5	3SE5000-0AR03		1	1 unit 41K
		• Length 242.5 mm (spring 150 mm, plunger 50 mm)	5	3SE5000-0AR04		1	1 unit 41K
		Plunger and spring made of high-grade steel: 7					
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)	5	3SE5000-0AR02		1	1 unit 41K	
3SE5000-0AR01							
Twist actuators							
	Twist actuators , for 31/50 mm, EN 50047						
	Switching right and/or left, adjustable		⊕ 2	3SE5000-0AK00		1	1 unit 41K
3SE5000-0AK00							
	Levers						
	Twist levers, straight, type A, acc. to EN 50047						
	Metal lever 21 mm, plastic roller	19	⊕ 2	3SE5000-0AA21		1	1 unit 41K
	Metal lever 21 mm, high-grade steel roller	19	⊕ 5	3SE5000-0AA22		1	1 unit 41K
	Metal lever 21 mm, high-grade steel roller with ball bearing	19	⊕ 5	3SE5000-0AA23		1	1 unit 41K
	Metal lever 21 mm, plastic roller	30	⊕ 5	3SE5000-0AA25		1	1 unit 41K
	High-grade steel lever 21 mm, plastic roller	19	⊕ 5	3SE5000-0AA31		1	1 unit 41K
	High-grade steel lever 21 mm, high-grade steel roller	19	⊕ 5	3SE5000-0AA32		1	1 unit 41K
	Twist levers 30 mm, straight						
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA24		1	1 unit 41K
	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA26		1	1 unit 41K
	3SE5000-0AA01						
	Twist levers, adjustable length, with grid hole						
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA60		1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA61		1	1 unit 41K
	Metal lever, plastic roller	50	⊕ 5	3SE5000-0AA67		1	1 unit 41K
	Metal lever, rubber roller	50	⊕ 5	3SE5000-0AA68		1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA62		1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA63		1	1 unit 41K
	Twist levers, adjustable length						
	Metal lever, plastic roller	19	2	3SE5000-0AA50		1	1 unit 41K
	Metal lever, high-grade steel roller	19	5	3SE5000-0AA51		1	1 unit 41K
Metal lever, plastic roller	30	5	3SE5000-0AA55		1	1 unit 41K	
Metal lever, plastic roller	50	5	3SE5000-0AA57		1	1 unit 41K	
Metal lever, rubber roller	50	5	3SE5000-0AA58		1	1 unit 41K	
High-grade steel lever, plastic roller	19	5	3SE5000-0AA52		1	1 unit 41K	
High-grade steel lever, high-grade steel roller	19	5	3SE5000-0AA53		1	1 unit 41K	
3SE5000-0AA60 3SE5000-0AA50							
	Rod actuators, type D, acc. to EN 50041						
	Aluminum rod, length 200 mm	6	5	3SE5000-0AA80		1	1 unit 41K
	Spring rod, length 200 mm	6	5	3SE5000-0AA81		1	1 unit 41K
	Plastic rod, length 200 mm	6	5	3SE5000-0AA82		1	1 unit 41K
	Plastic rod, length 330 mm	6	5	3SE5000-0AA83		1	1 unit 41K
3SE5000-0AA80							

⊕ Positively driven actuator, necessary in safety circuits.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

SIRIUS 3SE5 Mechanical Position Switches







3SE5, Metal Enclosures

Enclosure width 40 mm acc. to EN 50041

Selection and ordering data

Complete units

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

Version	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG	
			d	Article No.	Price per PU			
Complete units¹⁾ · Enclosure width 40 mm								
	Plain plungers							
	With high-grade steel plunger							
	Slow-action contacts	1 NO + 1 NC --	⊕ 2	3SE5112-0BB01		1	1 unit 41K	
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5112-0CB01		1	1 unit 41K	
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0KB01		1	1 unit 41K	
3SE5112-0BB01	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0LB01		1	1 unit 41K	
	Rounded plungers, type B, acc. to EN 50041							
	With high-grade steel plungers, with 3 mm overtravel							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5112-0BC02		1	1 unit 41K	
	Snap-action contacts	1 NO + 1 NC --	⊕ ▶	3SE5112-0CC02		1	1 unit 41K	
	Snap-action contacts ²⁾	1 NO + 1 NC --	⊕ 5	3SE5112-0CC02-1AA7		1	1 unit 41K	
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0KC02		1	1 unit 41K	
	3SE5112-0BC02	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0LC02		1	1 unit 41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5114-0CC02-1AC4		1	1 unit 41K	
	with M12 connector socket, 4-pole							
	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 --	⊕ 5	3SE5112-0BD02		1	1 unit 41K	
	Snap-action contacts	1 NO + 1 NC --	⊕ ▶	3SE5112-0CD02		1	1 unit 41K	
	Snap-action contacts ²⁾	1 NO + 1 NC --	⊕ 5	3SE5112-0CD02-1AA7		1	1 unit 41K	
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0KD02		1	1 unit 41K	
	3SE5112-0BD02	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0LD02		1	1 unit 41K
		Snap-action contacts ²⁾	1 NO + 2 NC --	⊕ 5	3SE5112-0LD02-1AA7		1	1 unit 41K
		Snap-action contacts ²⁾	1 NO + 2 NC --	⊕ 5	3SE5112-0PD02-1AA7		1	1 unit 41K
		Slow-action contacts ²⁾	2 NO + 1 NC --	⊕ 5	3SE5112-0PD02-1AA7		1	1 unit 41K
	With M12 connector socket, 5-pole (125 V, 4 A)							
	Snap-action contacts with 2 LEDs	1 NO + 1 NC 24 V DC	⊕ 5	3SE5114-1CD02-1AF3		1	1 unit 41K	
	Snap-action contacts without LED	1 NO + 1 NC 24 V DC	⊕ 5	3SE5114-0CD02-1AC5		1	1 unit 41K	
	Snap-action contacts without LED ²⁾	1 NO + 1 NC 24 V DC	⊕ 5	3SE5114-0CD02-1AL0		1	1 unit 41K	
	Roller levers							
	With metal lever and plastic roller 22 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5112-0BE01		1	1 unit 41K	
	Snap-action contacts	1 NO + 1 NC --	⊕ ▶	3SE5112-0CE01		1	1 unit 41K	
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0KE01		1	1 unit 41K	
3SE5112-0BE01	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0LE01		1	1 unit 41K	
	Angular roller lever							
	With metal lever and plastic roller 22 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5112-0BF01		1	1 unit 41K	
	3SE5112-0BF01	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5112-0CF01		1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0LF01		1	1 unit 41K	
	Spring rod							
	Length 142.5 mm, with plastic plunger 50 mm							
3SE5112-0CR01	Snap-action contacts	1 NO + 1 NC --	▶	3SE5112-0CR01		1	1 unit 41K	

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

1) Popular versions.





2) Increased operation or restoring force 30 N; only available as complete unit, no modular design

SIRIUS 3SE5 Mechanical Position 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	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article 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 --	⊕ 5	3SE5112-0BH01	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ ▶	3SE5112-0CH01	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0KH01	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0LH01	1	1 unit	41K
3SE5112-0BH01	With M12 connector socket, 5-pole (125 V, 4 A)						
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5114-0CH01-1AC5	1	1 unit	41K
	With M12 connector socket, 5-pole (125 V, 4 A); LEDs						
	Snap-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5114-1CH01-1AF3	1	1 unit	41K
	With metal lever 27 mm and high-grade steel roller 19 mm						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5112-0BH02	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5112-0CH02	1	1 unit	41K
	With M12 connector socket, 5-pole (125 V, 4 A); 2 LEDs						
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5114-1CH02-1AF3	1	1 unit	41K
	With metal lever 30 mm and plastic roller 19 mm						
	Snap-action contacts	1 NO + 1 NC --	⊕ ▶	3SE5112-0CH24	1	1 unit	41K
	Twist levers, adjustable length						
	Metal lever, grid hole and plastic roller 19 mm						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5112-0BH60	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ ▶	3SE5112-0CH60	1	1 unit	41K
3SE5112-0BH60		Snap-action contacts	⊕ 5	3SE5112-0LH60	1	1 unit	41K
	With M12 connector socket, 5-pole (125 V, 4 A)						
	Snap-action contacts	1 NO + 2 NC --	5	3SE5114-0CH60-1AC5	1	1 unit	41K
	With metal lever and plastic roller 19 mm						
	Slow-action contacts	1 NO + 1 NC --	5	3SE5112-0BH50	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	▶	3SE5112-0CH50	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	5	3SE5112-0LH50	1	1 unit	41K
	With M12 connector socket, 5-pole (125 V, 4 A); 2 LEDs						
	Snap-action contacts	1 NO + 1 NC 24 V DC	5	3SE5114-1CH60-1AF3	1	1 unit	41K
	With M12 connector socket, 8-pole (30 V, 2 A); 2 LEDs						
	Snap-action contacts	1 NO + 2 NC 24 V DC	5	3SE5114-1LH50-1AD4	1	1 unit	41K
3SE5112-0BH50	With metal lever and high-grade steel roller 19 mm						
	Snap-action contacts	1 NO + 1 NC --	5	3SE5112-0CH51	1	1 unit	41K
	Fork levers, latching						
	With metal lever and 2 plastic rollers 19 mm						
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5112-0CT11	1	1 unit	41K
3SE5112-0CT11	Rod actuators, type D, acc. to EN 50041						
	With aluminum rod, length 200 mm						
	Snap-action contacts	1 NO + 1 NC --	▶	3SE5112-0CH80	1	1 unit	41K
	With plastic rod, length 200 mm						
	Snap-action contacts	1 NO + 1 NC --	5	3SE5112-0CH82	1	1 unit	41K
3SE5112-0CH80							

⊕ 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 12/36](#).









SIRIUS 3SE5 Mechanical Position 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	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU		
Basic switches • Enclosure width 40 mm							
	Connecting thread M20 × 1.5						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5112-0BA00	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5112-0CA00	1	1 unit	41K
	• Gold-plated contacts		⊕ 5	3SE5112-0CA00-1AC1	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 2	3SE5112-0KA00	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 2	3SE5112-0LA00	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 2	3SE5112-0MA00	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 2	3SE5112-0PA00	1	1 unit	41K
	Increased corrosion protection¹⁾						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5112-0BA00-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5112-0CA00-1CA0	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0KA00-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0LA00-1CA0	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5112-0MA00-1CA0	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5112-0PA00-1CA0	1	1 unit	41K
	M12 connector socket, 5-pole (125 V, 4 A)						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5114-0BA00-1AC5	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5114-0CA00-1AC5	1	1 unit	41K
	Slow-action contacts	2 NC --	⊕ 5	3SE5114-0KA00-1AE1	1	1 unit	41K
	Snap-action contacts	2 NC --	⊕ 5	3SE5114-0LA00-1AE1	1	1 unit	41K
	Connector socket, 6-pole + PE (250 V, 10 A)						
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5115-0KA00-1AD1	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5115-0LA00-1AD1	1	1 unit	41K
	Connector socket, 6-pole + PE (250 V, 10 A), and quick-release device						
Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5115-0CA00-1AD0	1	1 unit	41K	
	2 LEDs, yellow/green						
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5112-1KA00	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5112-1LA00	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5112-3KA00	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5112-3LA00	1	1 unit	41K
	M12 connector socket, 5-pole (125 V, 4 A), and 2 LEDs						
	Slow-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5114-1BA00-1AF3	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5114-1CA00-1AF3	1	1 unit	41K
	M12 connector socket, 8-pole (30 V, 2 A), and 2 LEDs						
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5114-1LA00-1AD4	1	1 unit	41K
	Connector socket, 6-pole + PE (10 A), and 2 LEDs						
	Slow-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5115-1BA00-1AF2	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5115-1CA00-1AF2	1	1 unit	41K
	Snap-action contacts	2 NC 24 V DC	⊕ 5	3SE5115-1LA00-1AD2	1	1 unit	41K

⊕ 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.







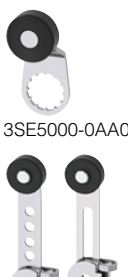


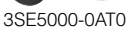

Note:

For the selection aid, see page 12/15.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, Metal Enclosures

Enclosure width 40 mm acc. to EN 50041

Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG	
	mm	d	Article No.	Price per PU			
Operating mechanisms							
	Plain plungers						
	High-grade steel plunger	10	⊕ 2	3SE5000-0AB01	1	1 unit 41K	
	Rounded plungers, type B, acc. to EN 50041						
	High-grade steel plungers, with 3 mm overtravel	10	⊕ 5	3SE5000-0AC02	1	1 unit 41K	
3SE5000-0AC02 3SE5000-0AD02	Roller plungers, type C, acc. to EN 50041						
	High-grade steel roller, with 3 mm overtravel	13	⊕ 5	3SE5000-0AD02	1	1 unit 41K	
	Roller levers						
	Metal lever, plastic roller	22	⊕ 2	3SE5000-0AE01	1	1 unit 41K	
	Metal lever, high-grade steel roller	22	⊕ 5	3SE5000-0AE02	1	1 unit 41K	
	High-grade steel lever, plastic roller	22	⊕ 5	3SE5000-0AE03	1	1 unit 41K	
3SE5000-0AE01	High-grade steel lever, high-grade steel roller		22	⊕ 5	3SE5000-0AE04	1	1 unit 41K
	Angular roller levers						
	Metal lever, plastic roller	22	⊕ 2	3SE5000-0AF01	1	1 unit 41K	
	Metal lever, high-grade steel roller	22	⊕ 5	3SE5000-0AF02	1	1 unit 41K	
	High-grade steel lever, plastic roller	22	⊕ 5	3SE5000-0AF03	1	1 unit 41K	
3SE5000-0AF01	High-grade steel lever, high-grade steel roller		22	⊕ 5	3SE5000-0AF04	1	1 unit 41K
	Spring rods (for switches with snap-action contacts only)						
	Plunger made of plastic, spring of high-grade steel: 7						
	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		5	3SE5000-0AR01	1	1 unit 41K	
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)		5	3SE5000-0AR03	1	1 unit 41K	
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)		5	3SE5000-0AR04	1	1 unit 41K	
	Plunger and spring made of high-grade steel: 7						
3SE5000-0AR01	• Length 142.5 mm (spring 50 mm, plunger 50 mm)		5	3SE5000-0AR02	1	1 unit 41K	
Twist actuators							
	Twist actuators , for 40/56/56 XL mm EN 50041						
	• For twist levers and rod actuators, switching right and/or left, adjustable		⊕ 2	3SE5000-0AH00	1	1 unit 41K	
3SE5000-0AH00	• For fork levers, latching		⊕ 5	3SE5000-0AT10	1	1 unit 41K	
	Levers						
	Twist levers, offset, type A, acc. to EN 50041						
	Metal lever 27 mm, plastic roller	19	⊕ 2	3SE5000-0AA01	1	1 unit 41K	
	Metal lever 27 mm, high-grade steel roller	19	⊕ 2	3SE5000-0AA02	1	1 unit 41K	
	Metal lever 27 mm, high-grade steel roller with ball bearing	19	⊕ 5	3SE5000-0AA03	1	1 unit 41K	
	3SE5000-0AA01	Metal lever 27 mm, 2 plastic rollers	19	⊕ 5	3SE5000-0AA04	1	1 unit 41K
		Metal lever 27 mm, plastic roller	30	⊕ 5	3SE5000-0AA05	1	1 unit 41K
		Metal lever 27 mm, rubber roller	50	⊕ 5	3SE5000-0AA08	1	1 unit 41K
		High-grade steel lever 27 mm, plastic roller	19	⊕ 5	3SE5000-0AA11	1	1 unit 41K
		High-grade steel lever 27 mm, high-grade steel roller	19	⊕ 5	3SE5000-0AA12	1	1 unit 41K
		Metal lever 35 mm, plastic roller	19	⊕ 5	3SE5000-0AA15	1	1 unit 41K
		High-grade steel lever 35 mm, plastic roller	19	⊕ 5	3SE5000-0AA16	1	1 unit 41K
		Twist levers 30 mm, straight					
		Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA24	1	1 unit 41K
	3SE5000-0AA60 3SE5000-0AA50	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA26	1	1 unit 41K
		Twist levers, adjustable length, with grid hole					
Metal lever, plastic roller		19	⊕ 5	3SE5000-0AA60	1	1 unit 41K	
Metal lever, high-grade steel roller		19	⊕ 5	3SE5000-0AA61	1	1 unit 41K	
Metal lever, rubber roller		50	⊕ 5	3SE5000-0AA68	1	1 unit 41K	
High-grade steel lever, plastic roller		19	⊕ 5	3SE5000-0AA62	1	1 unit 41K	
High-grade steel lever, high-grade steel roller		19	⊕ 5	3SE5000-0AA63	1	1 unit 41K	
	Twist levers, adjustable length						
	Metal lever, plastic roller	19	2	3SE5000-0AA50	1	1 unit 41K	
	Metal lever, high-grade steel roller	19	5	3SE5000-0AA51	1	1 unit 41K	
	Metal lever, plastic roller	30	5	3SE5000-0AA55	1	1 unit 41K	
	Metal lever, rubber roller	50	5	3SE5000-0AA58	1	1 unit 41K	
	High-grade steel lever, plastic roller	19	5	3SE5000-0AA52	1	1 unit 41K	
	High-grade steel lever, high-grade steel roller	19	5	3SE5000-0AA53	1	1 unit 41K	
	3SE5000-0AT01	Fork levers (for switches with snap-action contacts only)					
	2 metal levers, 2 plastic rollers	19	⊕ 5	3SE5000-0AT01	1	1 unit 41K	
	2 metal levers, 2 high-grade steel rollers	19	⊕ 5	3SE5000-0AT02	1	1 unit 41K	
	2 high-grade steel levers, 2 plastic rollers	19	⊕ 5	3SE5000-0AT03	1	1 unit 41K	
	Rod actuators, type D, acc. to EN 50041						
	Aluminum rod, length 200 mm	6	5	3SE5000-0AA80	1	1 unit 41K	
	Spring rod, length 200 mm	6	5	3SE5000-0AA81	1	1 unit 41K	
	Plastic rod, length 200 mm	6	5	3SE5000-0AA82	1	1 unit 41K	

⊕ Positively driven actuator, necessary in safety circuits.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

SIRIUS 3SE5 Mechanical Position 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	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU		
Complete units¹⁾ · Enclosure width 56 mm							
Plain plungers							
With high-grade steel plunger							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0BB01		1	1 unit 41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0CB01		1	1 unit 41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0KB01		1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0LB01		1	1 unit 41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5122-0PB01		1	1 unit 41K
3SE5122-0BB01							
Rounded plungers							
With high-grade steel plungers, with 3 mm overtravel							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0BC02		1	1 unit 41K
	Snap-action contacts	1 NO + 1 NC --	⊕ ▶	3SE5122-0CC02		1	1 unit 41K
	Snap-action contacts ²⁾	1 NO + 1 NC --	⊕ 5	3SE5122-0CC02-1AA7		1	1 unit 41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0KC02		1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0LC02		1	1 unit 41K
Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5122-0PC02		1	1 unit 41K	
3SE5122-0BC02							
Roller plunger							
With high-grade steel roller 13 mm, with 3 mm overtravel							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0BD02		1	1 unit 41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5122-0CD02		1	1 unit 41K
	Snap-action contacts ²⁾	1 NO + 1 NC --	⊕ 5	3SE5122-0CD02-1AA7		1	1 unit 41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0KD02		1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0LD02		1	1 unit 41K
3SE5122-0BD02							
Roller levers							
With metal lever and plastic roller 22 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0BE01		1	1 unit 41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5122-0CE01		1	1 unit 41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0KE01		1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0LE01		1	1 unit 41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5122-0PE01		1	1 unit 41K
3SE5122-0BE01							
With metal lever and high-grade steel roller 22 mm							
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0CE02		1	1 unit 41K
Angular roller lever							
With metal lever and plastic roller 22 mm							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0BF01		1	1 unit 41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0CF01		1	1 unit 41K
	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5122-0PF01		1	1 unit 41K
3SE5122-0BF01							

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

1) Popular versions.






2) Increased operation or restoring force 30 N; only available as complete unit, no modular design

SIRIUS 3SE5 Mechanical Position 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	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Complete units¹⁾ · Enclosure width 56 mm							
	Spring rod Length 142.5 mm, with plastic plunger 50 mm						
	Snap-action contacts	1 NO + 1 NC --	5	3SE5122-0CR01	1	1 unit	41K
3SE5122-0CR01							
	Twist levers With metal lever 27 mm and plastic roller 19 mm						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0BH01	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5122-0CH01	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0KH01	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0LH01	1	1 unit	41K
3SE5122-0BH01	Slow-action contacts	2 NO + 1 NC --	⊕ 5	3SE5122-0PH01	1	1 unit	41K
	With metal lever 27 mm and high-grade steel roller 19 mm						
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0CH02	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0LH02	1	1 unit	41K
	Twist levers, adjustable length With metal lever with grid hole and plastic roller 19 mm						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0BH60	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0CH60	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0LH60	1	1 unit	41K
3SE5122-0BH60	With metal lever and plastic roller 19 mm						
	Slow-action contacts	1 NO + 1 NC --	5	3SE5122-0BH50	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	2	3SE5122-0CH50	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	5	3SE5122-0LH50	1	1 unit	41K
	Fork levers, latching With metal lever and 2 plastic rollers 19 mm						
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0CT11	1	1 unit	41K
3SE5122-0CT11							
	Rod actuator With aluminum rod, length 200 mm						
	Snap-action contacts	1 NO + 1 NC --	5	3SE5122-0CH80	1	1 unit	41K
	With plastic rod, length 200 mm						
	Snap-action contacts	1 NO + 1 NC --	5	3SE5122-0CH82	1	1 unit	41K
3SE5122-0CH80							

⊕ 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 12/40](#).




SIRIUS 3SE5 Mechanical Position 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)





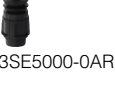
Version	Contacts	LEDs	SD	Modular system	PU (UNIT, SET, M)	PS*	PG	
			d	Article No.	Price per PU			
Basic switches • Enclosure width 56 mm								
With 3 × connection thread M20 × 1.5								
	Slow-action contacts	1 NO + 1 NC --	⊕ 2	3SE5122-0BA00	1	1 unit	41K	
	Snap-action contacts	1 NO + 1 NC --	⊕ 2	3SE5122-0CA00	1	1 unit	41K	
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0KA00	1	1 unit	41K	
	Snap-action contacts	1 NO + 2 NC --	⊕ 2	3SE5122-0LA00	1	1 unit	41K	
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 2	3SE5122-0MA00	1	1 unit	41K	
	Slow-action contacts	2 NO + 1 NC --	⊕ 2	3SE5122-0PA00	1	1 unit	41K	
	With increased corrosion protection¹⁾							
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0BA00-1CA0	1	1 unit	41K	
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5122-0CA00-1CA0	1	1 unit	41K	
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0KA00-1CA0	1	1 unit	41K	
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0LA00-1CA0	1	1 unit	41K	
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ 5	3SE5122-0MA00-1CA0	1	1 unit	41K	
	With 2 LEDs, yellow/green							
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5122-1KA00	1	1 unit	41K	
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5122-1LA00	1	1 unit	41K	
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5122-3KA00	1	1 unit	41K	
	Snap-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5122-3LA00	1	1 unit	41K	

⊕ 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:



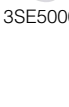



For the selection aid, see page 12/15.

Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm	d	Article No.	Price per PU		
Operating mechanisms						
	Plain plungers					
	High-grade steel plungers	10	⊕ 2	3SE5000-0AB01	1	1 unit 41K
	Rounded plungers, type B, acc. to EN 50041					
	High-grade steel plungers, with 3 mm overtravel	10	⊕ 5	3SE5000-0AC02	1	1 unit 41K
	Roller plungers, type C, acc. to EN 50041					
	High-grade steel roller, with 3 mm overtravel	13	⊕ 5	3SE5000-0AD02	1	1 unit 41K
	Roller levers					
	Metal lever, plastic roller	22	⊕ 2	3SE5000-0AE01	1	1 unit 41K
	Metal lever, high-grade steel roller	22	⊕ 5	3SE5000-0AE02	1	1 unit 41K
	High-grade steel lever, plastic roller	22	⊕ 5	3SE5000-0AE03	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	22	⊕ 5	3SE5000-0AE04	1	1 unit 41K
	Angular roller levers					
	Metal lever, plastic roller	22	⊕ 2	3SE5000-0AF01	1	1 unit 41K
	Metal lever, high-grade steel roller	22	⊕ 5	3SE5000-0AF02	1	1 unit 41K
	High-grade steel lever, plastic roller	22	⊕ 5	3SE5000-0AF03	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	22	⊕ 5	3SE5000-0AF04	1	1 unit 41K
	Spring rods (for switches with snap-action contacts only)					
	Plunger made of plastic, spring of high-grade steel:	7				
• Length 142.5 mm (spring 50 mm, plunger 50 mm)		5	3SE5000-0AR01	1	1 unit 41K	
• Length 76 mm (spring 23.5 mm, plunger 10 mm)		5	3SE5000-0AR03	1	1 unit 41K	
• Length 242.5 mm (spring 150 mm, plunger 50 mm)		5	3SE5000-0AR04	1	1 unit 41K	
Plunger and spring made of high-grade steel:	7					
• Length 142.5 mm (spring 50 mm, plunger 50 mm)		5	3SE5000-0AR02	1	1 unit 41K	

SIRIUS 3SE5 Mechanical Position Switches

3SE5, Metal Enclosures

Enclosure width 56 mm

Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm	d	Article No.	Price per PU		
Twist actuators						
	Twist actuators , for 40/56/56 XL mm EN 50041					
		⊕ 2	3SE5000-0AH00	1	1 unit	41K
		⊕ 5	3SE5000-0AT10	1	1 unit	41K
Levers						
	Twist levers 27 mm, offset, type A, acc. to EN 50041					
3SE5000-0AH00	Metal lever, plastic roller	19	⊕ 2	3SE5000-0AA01	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊕ 2	3SE5000-0AA02	1	1 unit 41K
	Metal lever, high-grade steel roller with ball bearing	19	⊕ 5	3SE5000-0AA03	1	1 unit 41K
	Metal lever, 2 plastic rollers	19	⊕ 5	3SE5000-0AA04	1	1 unit 41K
3SE5000-0AA01	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA05	1	1 unit 41K
	Metal lever, plastic roller	50	⊕ 5	3SE5000-0AA07	1	1 unit 41K
	Metal lever, rubber roller	50	⊕ 5	3SE5000-0AA08	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA11	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA12	1	1 unit 41K
	Twist levers 35 mm, offset					
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA15	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA16	1	1 unit 41K
	Twist levers 30 mm, straight (can be mounted rotated by 180°)					
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA24	1	1 unit 41K
	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA26	1	1 unit 41K
	Twist levers, adjustable length, with grid hole					
3SE5000-0AA60	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA60	1	1 unit 41K
3SE5000-0AA50	Metal lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA61	1	1 unit 41K
	Metal lever, plastic roller	50	⊕ 5	3SE5000-0AA67	1	1 unit 41K
	Metal lever, rubber roller	50	⊕ 5	3SE5000-0AA68	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA62	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA63	1	1 unit 41K
	Twist levers, adjustable length					
	Metal lever, plastic roller	19	2	3SE5000-0AA50	1	1 unit 41K
	Metal lever, high-grade steel roller	19	5	3SE5000-0AA51	1	1 unit 41K
	Metal lever, plastic roller	30	5	3SE5000-0AA55	1	1 unit 41K
	Metal lever, plastic roller	50	5	3SE5000-0AA57	1	1 unit 41K
	Metal lever, rubber roller	50	5	3SE5000-0AA58	1	1 unit 41K
	High-grade steel lever, plastic roller	19	5	3SE5000-0AA52	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	5	3SE5000-0AA53	1	1 unit 41K
	Fork levers (for switches with snap-action contacts only)					
3SE5000-0AT0	2 metal levers, 2 plastic rollers	19	⊕ 5	3SE5000-0AT01	1	1 unit 41K
	2 metal levers, 2 high-grade steel rollers	19	⊕ 5	3SE5000-0AT02	1	1 unit 41K
	2 high-grade steel levers, 2 plastic rollers	19	⊕ 5	3SE5000-0AT03	1	1 unit 41K
	2 high-grade steel levers, 2 high-grade steel rollers	19	⊕ 5	3SE5000-0AT04	1	1 unit 41K
	Rod actuators, type D, acc. to EN 50041					
3SE5000-0AA80	Aluminum rod, length 200 mm	6	5	3SE5000-0AA80	1	1 unit 41K
	Spring rod, length 200 mm	6	5	3SE5000-0AA81	1	1 unit 41K
	Plastic rod, length 200 mm	6	5	3SE5000-0AA82	1	1 unit 41K

⊕ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, 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	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Complete units¹⁾ · Enclosure width 56 mm, XL							
	Plain plungers With high-grade steel plunger Snap-action contacts	2 × (1 NO + 1 NC) --	⊕ 5	3SE5162-0CB01		1	1 unit 41K
3SE5162-0CB01							
	Rounded plungers With high-grade steel plungers, with 3 mm overtravel Slow-action contacts Slow-action contacts with make-before-break 2 mm travel difference	1 NO + 1 NC and -- 1 NO + 2 NC	⊕ 5	3SE5162-0EC02		1	1 unit 41K
3SE5162-0EC02							
	Roller plunger With high-grade steel roller 13 mm, with 3 mm overtravel Slow-action contacts Snap-action contacts	2 × (1 NO + 1 NC) -- 2 × (1 NO + 1 NC) --	⊕ 5 ⊕ 2	3SE5162-0BD02 3SE5162-0CD02		1 1	1 unit 41K 1 unit 41K
3SE5162-0BD02							
	Roller levers With metal lever and plastic roller 22 mm Slow-action contacts Snap-action contacts	2 × (1 NO + 1 NC) -- 2 × (1 NO + 1 NC) --	⊕ 5 ⊕ 2	3SE5162-0BE01 3SE5162-0CE01		1 1	1 unit 41K 1 unit 41K
3SE5162-0BE01							
	With metal lever and high-grade steel roller 22 mm Snap-action contacts	2 × (1 NO + 1 NC) --	⊕ 5	3SE5162-0CE02		1	1 unit 41K
3SE5162-0CE02							
	Angular roller lever With metal lever and plastic roller 22 mm Snap-action contacts	2 × (1 NO + 1 NC) --	⊕ 5	3SE5162-0CF01		1	1 unit 41K
3SE5162-0CF01							
	Twist levers With metal lever 27 mm and plastic roller 19 mm Snap-action contacts	2 × (1 NO + 1 NC) --	⊕ 2	3SE5162-0CH01		1	1 unit 41K
3SE5162-0CH01							
	With high-grade steel lever 27 mm and high-grade steel roller 19 mm increased corrosion protection Snap-action contacts (gold contacts)	2 × (1 NO + 1 NC) --	⊕ 5	3SE5162-0CH12-1CC1		1	1 unit 41K
3SE5162-0CH12-1CC1							
	Twist levers, adjustable length High-grade steel lever with grid hole and high-grade steel roller 19 mm, increased corrosion protection Adapter 3SX5100-3B included Snap-action contacts (gold contacts)	2 × (1 NO + 1 NC) --	⊕ 5	3SE5162-0CH63-1AN4		1	1 unit 41K
3SE5162-0CH63-1AN4							

⊕ 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 12/43](#).

SIRIUS 3SE5 Mechanical Position Switches

3SE5, 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	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU		

Basic switches · Enclosure width 56 mm, XL



3SE5162-0BA00

With 3 × connection thread M20 × 1.5

Slow-action contacts	2 × (1 NO + 1 NC)	--	⊕ 2	3SE5162-0BA00	1	1 unit	41K
Snap-action contacts	2 × (1 NO + 1 NC)	--	⊕ 2	3SE5162-0CA00	1	1 unit	41K
Slow-action contacts with make-before-break	2 × (1 NO + 2 NC)	--	⊕ 5	3SE5162-0DA00	1	1 unit	41K

With increased corrosion protection¹⁾

Slow-action contacts	2 × (1 NO + 1 NC)	--	⊕ 5	3SE5162-0BA00-1CA0	1	1 unit	41K
Snap-action contacts	2 × (1 NO + 1 NC)	--	⊕ 5	3SE5162-0CA00-1CA0	1	1 unit	41K
Slow-action contacts with make-before-break	2 × (1 NO + 2 NC)	--	⊕ 5	3SE5162-0DA00-1CA0	1	1 unit	41K

⊕ 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:

For the selection aid, see page 12/15.

Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm	d	Article No.	Price per PU		

Operating mechanisms



3SE5000-0AB01

Plain plungers

High-grade steel plunger	10	⊕ 2	3SE5000-0AB01	1	1 unit	41K
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3SE5000-0AC02

Rounded plungers, type B, acc. to EN 50041

High-grade steel plungers, with 3 mm overtravel	10	⊕ 5	3SE5000-0AC02	1	1 unit	41K
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3SE5000-0AD02

Roller plungers, type C, acc. to EN 50041

High-grade steel roller, with 3 mm overtravel	13	⊕ 5	3SE5000-0AD02	1	1 unit	41K
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3SE5000-0AE01

Roller levers

Metal lever, plastic roller	22	⊕ 2	3SE5000-0AE01	1	1 unit	41K
Metal lever, high-grade steel roller	22	⊕ 5	3SE5000-0AE02	1	1 unit	41K
High-grade steel lever, plastic roller	22	⊕ 5	3SE5000-0AE03	1	1 unit	41K
High-grade steel lever, high-grade steel roller	22	⊕ 5	3SE5000-0AE04	1	1 unit	41K



3SE5000-0AF01

Angular roller levers

Metal lever, plastic roller	22	⊕ 2	3SE5000-0AF01	1	1 unit	41K
Metal lever, high-grade steel roller	22	⊕ 5	3SE5000-0AF02	1	1 unit	41K
High-grade steel lever, plastic roller	22	⊕ 5	3SE5000-0AF03	1	1 unit	41K
High-grade steel lever, high-grade steel roller	22	⊕ 5	3SE5000-0AF04	1	1 unit	41K



3SE5000-0AR01

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






Plunger made of plastic, spring of high-grade steel:	7					
• Length 142.5 mm (spring 50 mm, plunger 50 mm)		5	3SE5000-0AR01	1	1 unit	41K
• Length 76 mm (spring 23.5 mm, plunger 10 mm)		5	3SE5000-0AR03	1	1 unit	41K
• Length 242.5 mm (spring 150 mm, plunger 50 mm)		5	3SE5000-0AR04	1	1 unit	41K
Plunger and spring made of high-grade steel:	7					
• Length 142.5 mm (spring 50 mm, plunger 50 mm)		5	3SE5000-0AR02	1	1 unit	41K

⊕ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, Metal Enclosures

Enclosure width 56 mm, XL

Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG	
	mm	d	Article No.	Price per PU			
Twist actuators							
	Twist actuators , for 40/56/56 XL mm EN 50041						
		⊕ 2	3SE5000-0AH00	1	1 unit	41K	
		⊕ 5	3SE5000-0AT10	1	1 unit	41K	
3SE5000-0AH00							
Levers							
	Twist levers 27 mm, offset, type A, acc. to EN 50041						
			⊕ 2	3SE5000-0AA01	1	1 unit	41K
			⊕ 2	3SE5000-0AA02	1	1 unit	41K
			⊕ 5	3SE5000-0AA03	1	1 unit	41K
			⊕ 5	3SE5000-0AA04	1	1 unit	41K
			⊕ 5	3SE5000-0AA05	1	1 unit	41K
			⊕ 5	3SE5000-0AA07	1	1 unit	41K
			⊕ 5	3SE5000-0AA08	1	1 unit	41K
			⊕ 5	3SE5000-0AA11	1	1 unit	41K
			⊕ 5	3SE5000-0AA12	1	1 unit	41K
	3SE5000-0AA01						
Twist levers 35 mm, offset							
		⊕ 5	3SE5000-0AA15	1	1 unit	41K	
		⊕ 5	3SE5000-0AA16	1	1 unit	41K	
Twist levers 30 mm, straight							
		⊕ 5	3SE5000-0AA24	1	1 unit	41K	
		⊕ 5	3SE5000-0AA26	1	1 unit	41K	
Twist levers, adjustable length, with grid hole							
							
			⊕ 5	3SE5000-0AA60	1	1 unit	41K
			⊕ 5	3SE5000-0AA61	1	1 unit	41K
			⊕ 5	3SE5000-0AA67	1	1 unit	41K
			⊕ 5	3SE5000-0AA68	1	1 unit	41K
			⊕ 5	3SE5000-0AA62	1	1 unit	41K
		⊕ 5	3SE5000-0AA63	1	1 unit	41K	
3SE5000-0AA60 3SE5000-0AA50							
Twist levers, adjustable length							
		2	3SE5000-0AA50	1	1 unit	41K	
		5	3SE5000-0AA51	1	1 unit	41K	
		5	3SE5000-0AA55	1	1 unit	41K	
		5	3SE5000-0AA57	1	1 unit	41K	
		5	3SE5000-0AA58	1	1 unit	41K	
		5	3SE5000-0AA52	1	1 unit	41K	
		5	3SE5000-0AA53	1	1 unit	41K	
Fork levers (for switches with snap-action contacts only)							
							
			⊕ 5	3SE5000-0AT01	1	1 unit	41K
			⊕ 5	3SE5000-0AT02	1	1 unit	41K
			⊕ 5	3SE5000-0AT03	1	1 unit	41K
		⊕ 5	3SE5000-0AT04	1	1 unit	41K	
3SE5000-0AT01							
Rod actuators, type D, acc. to EN 50041							
							
			5	3SE5000-0AA80	1	1 unit	41K
			5	3SE5000-0AA81	1	1 unit	41K
			5	3SE5000-0AA82	1	1 unit	41K
		5	3SE5000-0AA83	1	1 unit	41K	
3SE5000-0AA80							

⊕ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches 3SE5, Metal Enclosures

Compact design

Overview



Compact design in width 30 mm

Particularly in harsh environments or on equipment with limited space, the small 3SE54 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 spaces.

3SE54 compact position switches are available in two different widths as complete units:

- The 3SE5413 series complies with the EU standard and features a 30-mm-wide enclosure with drilled holes at a distance of 20 mm.
- The 3SE5423 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 actuator head are made of metal and comply with the high IP67 degree of protection. The following actuators are available:

- Rounded plungers
- Rounded plungers with central fixing
- Rounded plungers with external seal
- Roller plungers
- Roller plungers 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
- Roller plungers can be rotated through 90°
- Twist levers can be rotated through 180°; twist levers can be adjusted in 15° increments
- 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








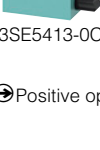
SIRIUS 3SE5 Mechanical Position Switches

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	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	mm	d					
Complete units • Enclosure width 30 or 40 mm							
Rounded plungers							
	• Standard mounting						
	- With 2 m cable 5 x 0.75 mm ²	30	⊕ 2	3SE5413-OCC20-1EA2		1	1 unit 41K
		40	⊕ 2	3SE5423-OCC20-1EA2		1	1 unit 41K
	- With 5 m cable 5 x 0.75 mm ²	30	⊕ 5	3SE5413-OCC20-1EA5		1	1 unit 41K
	- With M12 connector socket, 5-pole	30	⊕ 2	3SE5413-OCC20-1EB1		1	1 unit 41K
	40	⊕ 2	3SE5423-OCC20-1EB1		1	1 unit 41K	
	• With central fixing M12 x 1						
	- With 2 m cable 5 x 0.75 mm ²	30	⊕ 2	3SE5413-OCC21-1EA2		1	1 unit 41K
	40	⊕ 2	3SE5423-OCC21-1EA2		1	1 unit 41K	
	• With external seal						
	- With 2 m cable 5 x 0.75 mm ²	30	⊕ 2	3SE5413-OCC22-1EA2		1	1 unit 41K
	40	⊕ 2	3SE5423-OCC22-1EA2		1	1 unit 41K	
Roller plunger							
	• Standard mounting						
	- With 2 m cable 5 x 0.75 mm ²	30	⊕ 2	3SE5413-0CD20-1EA2		1	1 unit 41K
		40	⊕ 2	3SE5423-0CD20-1EA2		1	1 unit 41K
	- With 5 m cable 5 x 0.75 mm ²	30	⊕ 5	3SE5413-0CD20-1EA5		1	1 unit 41K
	- With M12 connector socket, 5-pole	30	⊕ 2	3SE5413-0CD20-1EB1		1	1 unit 41K
	40	⊕ 2	3SE5423-0CD20-1EB1		1	1 unit 41K	
	• With central fixing M12 x 1						
	- With 2 m cable 5 x 0.75 mm ²	30	⊕ 2	3SE5413-0CD21-1EA2		1	1 unit 41K
	40	⊕ 2	3SE5423-0CD21-1EA2		1	1 unit 41K	
	• Actuator head rotated 90°						
	- With 2 m cable 5 x 0.75 mm ²	30	⊕ 2	3SE5413-0CD23-1EA2		1	1 unit 41K
Twist levers							
	• Standard mounting						
	- With 2 m cable 5 x 0.75 mm ²	30	⊕ 2	3SE5413-0CN20-1EA2		1	1 unit 41K
		40	⊕ 2	3SE5423-0CN20-1EA2		1	1 unit 41K
	- With 5 m cable 5 x 0.75 mm ²	30	⊕ 2	3SE5413-0CN20-1EA5		1	1 unit 41K
	- With M12 connector socket, 5-pole	30	⊕ 2	3SE5413-0CN20-1EB1		1	1 unit 41K
	40	⊕ 2	3SE5423-0CN20-1EB1		1	1 unit 41K	
	• Twist levers with a smaller mounting depth and lower height						
	- With 2 m cable 5 x 0.75 mm ²	30	⊕ 2	3SE5413-0CP20-1EA2		1	1 unit 41K

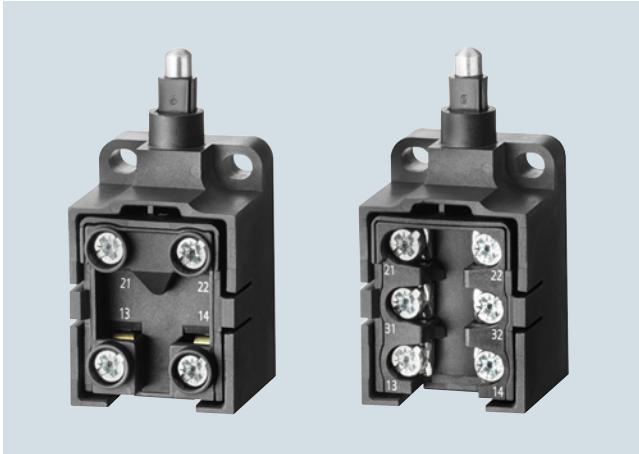
⊕ Positive opening according to IEC 60947-5-1, Appendix K.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, open-type design

Enclosure width 30 mm

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 snap-action, slow-action or slow-action with make-before-break versions. The stroke is 6 mm.





The empty enclosure can be equipped with all contact block versions (see page 12/49).

Improved version

The switches have a robust metal plunger with increased abrasion resistance (instead of the teflon plunger). This enables the switch to be approached from a 30° angle.

Selection and ordering data

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

Version	Contacts	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Plastic enclosures • Enclosure width 30 mm							
With metal plunger							
	Slow-action contacts	1 NO + 1 NC	⊕ 2	3SE5250-0BC05	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC	⊕ ▶	3SE5250-0CC05	1	1 unit	41K
3SE5250-0BC05							
	Slow-action contacts	1 NO + 2 NC	⊕ 5	3SE5250-0KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC	⊕ ▶	3SE5250-0LC05	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC	⊕ 2	3SE5250-0MC05	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC	⊕ 2	3SE5250-0PC05	1	1 unit	41K
3SE5250-0KC05							
	Empty enclosures without contact block	--	⊕ 5	3SE5250-0AC05	1	1 unit	41K
3SE5250-0AC05							
Contact blocks with 2 contacts For open-type design ¹⁾							
	• Slow-action contacts	1 NO + 1 NC	⊕ 5	3SE5050-0BA00	1	1 unit	41K
	• Snap-action contacts	1 NO + 1 NC	⊕ 5	3SE5050-0CA00	1	1 unit	41K
	- Standard		⊕ 5	3SE5050-0GA00	1	1 unit	41K
	- 2 × 2 mm switching interval		⊕ 5	3SE5050-0NA00	1	1 unit	41K
3SE5050-0BA00							
	- Short stroke		⊕ 5	3SE5050-0NA00	1	1 unit	41K

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













¹⁾ Contact blocks with 3 contacts, see page 12/49.

SIRIUS 3SE5 Mechanical Position Switches

Accessories and spare parts

Selection and ordering data

The quick-release devices and plug-in connections are used for fast installation and replacement of position switches.

Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Quick-release devices for enclosure width 40 mm						
	5	3SY3110		1	1 unit	41K
	5	3SY3027		1	1 unit	41K
		3SY3110				
		3SY3027				
Plug-in connections for M20 x 1.5 connecting threads						
	5	3SY3131		1	1 unit	41K
	2	3SY3136		1	1 unit	41K
		3SY3131				
		3SY3136				
	5	3SY3127		1	1 unit	41K
	5	3SY3128		1	1 unit	41K
		3SY3127				
		3SY3128				
	5	3SY3134		1	1 unit	41K
	10	3RK1902-4CA00-4AA0		1	1 unit	42D
		3RK1902-4CA00-4AA0				
Adapters and cable glands for M20 x 1.5 connecting threads						
	5	3SX9917		1	1 unit	41K
	30	3SX9918		1	1 unit	41K
		3SX9917				
		3SX9918				
	2	3SX9926		1	1 unit	41K
	2	3SX5601-1A		1	1 unit	41K
		3SX9926				
		3SX5601-1A				

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

SIRIUS 3SE5 Mechanical Position Switches

Accessories and spare parts

Version	Color/ contacts	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Optional accessories for 3SE51, 3SE52							
	Protective caps	Black	2	3SE5000-0AC30	1	1 unit	41K
3SE5000-0AC30	For rounded plungers acc. to EN 50047, 3SE5...-...C05						
	Adapters with screw¹⁾		5	3SX5100-3B	1	1 unit	41K
3SX5100-3B	For an increase in the mounting depth on the 3SE5000-0AH00 twist actuator, in combination with twist lever with adjustable length or rod actuator						
	Mounting plate		5	3SX5100-1A	1	1 unit	41K
3SX5100-1A	Suitable for 3SE523. and 3SE521. position switches with a width of 31 mm (in particular for control cabinet types)						
Spare parts for 3SE51, 3SE52							
	Empty enclosures, plastic	Turquoise					
3SE5232-0AC05	Enclosure width 31 mm		5	3SE5232-0AC05	1	1 unit	41K
	• With increased corrosion protection		5	3SE5232-0AC05-1CA0	1	1 unit	41K
	Enclosure width 40 mm		5	3SE5132-0AA00	1	1 unit	41K
	Enclosure width 50 mm		5	3SE5242-0AC05	1	1 unit	41K
	• With increased corrosion protection		5	3SE5242-0AC05-1CA0	1	1 unit	41K
	Empty enclosures, metal	Turquoise					
3SE5212-0AC05	Enclosure width 31 mm		5	3SE5212-0AC05	1	1 unit	41K
	• With increased corrosion protection		5	3SE5212-0AC05-1CA0	1	1 unit	41K
	Enclosure width 40 mm		5	3SE5112-0AA00	1	1 unit	41K
	• With increased corrosion protection		5	3SE5112-0AA00-1CA0	1	1 unit	41K
	Enclosure width 56 mm		5	3SE5122-0AA00	1	1 unit	41K
	• With increased corrosion protection		5	3SE5122-0AA00-1CA0	1	1 unit	41K
	Enclosure width 56 mm, XL ²⁾		5	3SE5162-0AA00	1	1 unit	41K
	Contact blocks with 2 contacts³⁾						
3SE5000-0BA00	• Slow-action contacts	1 NO + 1 NC	⊕ 5	3SE5000-0BA00	1	1 unit	41K
	• Snap-action contacts	1 NO + 1 NC					
	- Standard		⊕ 5	3SE5000-0CA00	1	1 unit	41K
	- Gold-plated contacts		⊕ 5	3SE5000-0CA00-1AC1	1	1 unit	41K
	- 2 x 2 mm switching interval		⊕ 5	3SE5000-0GA00	1	1 unit	41K
	- Short stroke		⊕ 5	3SE5000-0NA00	1	1 unit	41K
	Contact blocks with 3 contacts						
3SE5000-0KA00	• Slow-action contacts	1 NO + 2 NC	⊕ 5	3SE5000-0KA00	1	1 unit	41K
	• Snap-action contacts	1 NO + 2 NC	⊕ 5	3SE5000-0LA00	1	1 unit	41K
	• Slow-action contacts with make-before-break	1 NO + 2 NC	⊕ 2	3SE5000-0MA00	1	1 unit	41K
	• Slow-action contacts	2 NO + 1 NC	⊕ 2	3SE5000-0PA00	1	1 unit	41K
	Contact blocks for XL enclosure²⁾						
3SE5060-0BA00	• Slow-action contacts	1 NO + 1 NC	⊕ 5	3SE5060-0BA00	1	1 unit	41K
	• Snap-action contacts	1 NO + 1 NC	⊕ 5	3SE5060-0CA00	1	1 unit	41K
	• Slow-action contacts with make-before-break	1 NO + 2 NC	⊕ 5	3SE5060-0MA00	1	1 unit	41K

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







1) Possibly required for the conversion from 3SE21 to 3SE51.

2) Equip XL enclosures only with contact combinations according to pages 12/14, 12/42 and 12/43.

3) Unsuitable for open-type position switches see page 12/47.

SIRIUS 3SE5 Mechanical Position Switches

Accessories and spare parts

Version	Rated voltage LED	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	V	d					
Spare parts for 3SE51, 3SE52							
	Covers for plastic enclosures, width 31 mm						
	• Turquoise with LED	24 DC	5	3SE5230-1AA00		1	1 unit 41K
		230 AC	5	3SE5230-3AA00		1	1 unit 41K
	• Yellow	--	5	3SE5230-0AA00-1AG0		1	1 unit 41K
	• Yellow with LED	24 DC	5	3SE5230-1AA00-1AG0		1	1 unit 41K
	230 AC	5	3SE5230-3AA00-1AG0		1	1 unit 41K	
3SE5230-1AA00							
	Covers for plastic enclosures, width 40 mm						
	• Turquoise with LED	24 DC	5	3SE5130-1AA00		1	1 unit 41K
		230 AC	5	3SE5130-3AA00		1	1 unit 41K
	• Yellow	--	5	3SE5130-0AA00-1AG0		1	1 unit 41K
	• Yellow with LED	24 DC	5	3SE5130-1AA00-1AG0		1	1 unit 41K
	230 AC	5	3SE5130-3AA00-1AG0		1	1 unit 41K	
3SE5130-1AA00-1AG0							
	Covers for plastic enclosures, width 50 mm						
	• Turquoise with LED	24 DC	5	3SE5240-1AA00		1	1 unit 41K
		230 AC	5	3SE5240-3AA00		1	1 unit 41K
	• Yellow	--	5	3SE5240-0AA00-1AG0		1	1 unit 41K
	• Yellow with LED	24 DC	5	3SE5240-1AA00-1AG0		1	1 unit 41K
	230 AC	5	3SE5240-3AA00-1AG0		1	1 unit 41K	
3SE5240-1AA00							
	Covers for metal enclosures, width 31 mm						
	• Turquoise with LED	24 DC	5	3SE5210-1AA00		1	1 unit 41K
		230 AC	5	3SE5210-3AA00		1	1 unit 41K
	• Yellow	--	5	3SE5210-0AA00-1AG0		1	1 unit 41K
	• Yellow with LED	24 DC	5	3SE5210-1AA00-1AG0		1	1 unit 41K
	230 AC	5	3SE5210-3AA00-1AG0		1	1 unit 41K	
3SE5210-1AA00							
	Covers for metal enclosures, width 40 mm						
	• Turquoise with LED	24 DC	5	3SE5110-1AA00		1	1 unit 41K
		230 AC	5	3SE5110-3AA00		1	1 unit 41K
	• Yellow	--	5	3SE5110-0AA00-1AG0		1	1 unit 41K
	• Yellow with LED	24 DC	5	3SE5110-1AA00-1AG0		1	1 unit 41K
	230 AC	5	3SE5110-3AA00-1AG0		1	1 unit 41K	
3SE5110-1AA00							
	Covers for metal enclosures, width 56 mm						
	• Turquoise with LED	24 DC	5	3SE5120-1AA00		1	1 unit 41K
		230 AC	5	3SE5120-3AA00		1	1 unit 41K
	• Yellow	--	5	3SE5120-0AA00-1AG0		1	1 unit 41K
	• Yellow with LED	24 DC	5	3SE5120-1AA00-1AG0		1	1 unit 41K
	230 AC	5	3SE5120-3AA00-1AG0		1	1 unit 41K	
3SE5120-0AA00-1AG0							
	Covers for XL metal enclosures, width 56 mm						
	• Yellow	--	5	3SE5160-0AA00-1AG0		1	1 unit 41K

Overview

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

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



3SE5 safety switches with head for separate actuator

Design

Enclosure sizes

The 3SE5 safety switches are available in four different enclosure sizes:

- Plastic enclosures according to EN 50047, 31 mm wide, IP65, 1 cable entry
- Metal enclosure 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 enclosure, 50 mm wide, IP66/IP67, 2 cable entries
- Metal enclosure, 56 mm wide, IP66/IP67, 3 cable entries

Also available are safety switches in the 3SE2 series which have been developed 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
- AS-Interface version with integrated ASIsafe electronics for all enclosure designs (see page 12/100)

For a description of the basic switches, see page 12/5.

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 actuator heads of the 3SE2243 and 3SE2257 switches with special enclosures cannot be changed. The switches can be approached from the two broad sides and from above.

The actuator is not included in the scope of supply of the safety switches and must be ordered separately from a choice of different versions to suit the application (see page 12/61).

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

Radius actuators

The safety switches with radius actuators are particularly suitable for rotary 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 security (see page 12/61).



Blocking inserts with padlock

Dust protection

For use in dusty environments, a rubber cap is offered that protects the actuator entries of the actuator head from dirt (see page 12/61).

Contact reliability

The 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".

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Separate Actuator

General data

Benefits

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

- All enclosure sizes with increased corrosion protection.
- All enclosure sizes are optionally available with an 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 approx. 20 to 25 % of the time when connecting.
- The ASIsafe electronic component is integrated in the enclosure for the versions with AS-Interface connection (see page 12/100); an additional adapter is not required.

Application

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

The safety 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. The high-grade steel actuator IP69(K) with optimized geometry is suitable for extreme environmental conditions as low as -40 °C. 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/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/EN 60204-1, the devices can be used as a safety position switch. They comply with the standard EN ISO 14119. A TÜV certificate is available. To secure position switches against changes in their position, keyed techniques must be employed on installation.

Safety circuits

The IEC/EN 60947-5-1 standard requires positive opening of the NC contacts. In other words, 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 in accordance with the standard IEC 60947-5-1 with the symbol ☺.

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

Category 4 can be achieved when using an additional 3SE5 safety switch.

Technical specifications

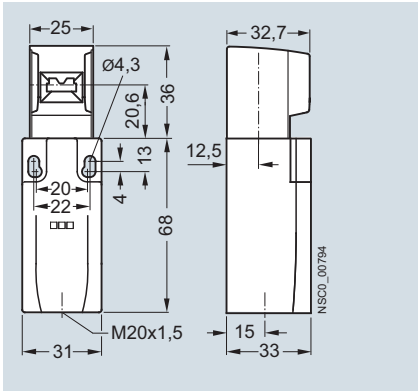
Type	3SE51...V.., 3SE52...V..	3SE2257-XX..	3SE2243-XX..			
General data						
Standards	IEC 60947-5-1, EN 60947-5-1, EN ISO 14119					
Rated insulation voltage U_i	V	400	500			
Degree of pollution according to IEC 60664-1		Class 3	Class 3			
Rated impulse withstand voltage U_{imp}	kV	6				
Rated operational voltage U_e	V	400 AC; over 300 V AC same potential only	500 AC; over 380 V AC same potential only			
Conventional thermal current I_{th}	A	6	10			
Rated operational current I_e			1-pole		3-pole	
• With alternating current 50/60 Hz		I_e / AC-15	I_e / AC-12	I_e / AC-15	I_e / AC-12	I_e / AC-15
- At 24 V	A	6	10	10	10	10
- At 120 V	A	6	10	10	10	10
- At 240 V	A	4	10	6	10	4
- At 400 V	A	4	10	4	10	4
- At 500 V	A	--	10	3	10	3
• For direct current		I_e / DC-13	I_e / DC-12	I_e / DC-13	I_e / DC-12	I_e / DC-13
- At 24 V	A	3	10	10	10	10
- At 125 V	A	0.55	--	--	--	--
- At 250 V	A	0.27	--	--	--	--
- At 110 V	A	--	4	1	4	1
- At 220 V	A	--	1	0.4	1	0.4
- At 400 V	A	0.12	--	--	--	--
- At 440 V	A	--	0.5	0.2	0.5	0.2
Short-circuit protection						
• With DIAZED fuse links, operational class gG	A	6	6			
• With fuse links, quick	A	--	10			
• With miniature circuit breaker, C char. ($I_{K < 400A}$)	A	1	--			
Mechanical endurance		1 × 10 ⁶ operating cycles				
Electrical endurance						
• With 3RH.1, 3RT contactors in size S00, S0		1 × 10 ⁶ operating cycles	> 1 × 10 ⁶ operating cycles			
• For utilization category AC-15 when switching off I_e /AC-15 at 240 V		100 000 operating cycles	500 000 operating cycles			
Switching frequency		6 000 operating cycles/h				
With 3RH.1, 3RT contactors in size S00, S0						
Minimum pull-out force for positive opening	N	20	10		30	

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Separate Actuator

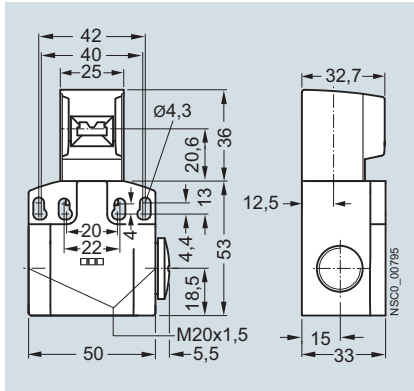
General data

3SE51, 3SE52 configuration

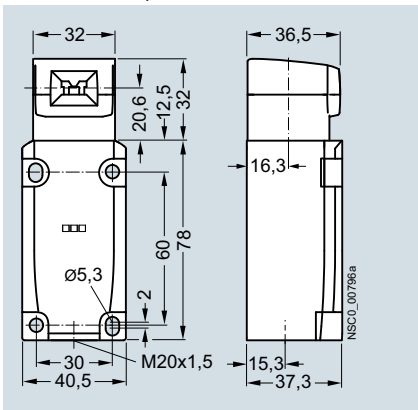
Enclosure width 31 mm
3SE523.-.QV40, 3SE523.-.RV40



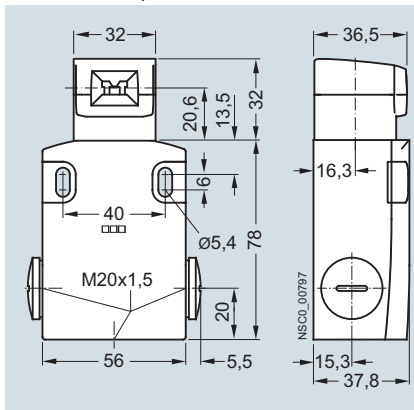
Enclosure width 50 mm
3SE524.-.QV40, 3SE524.-.RV40



Enclosure width 40 mm
3SE511.-.QV10, 3SE511.-.RV10

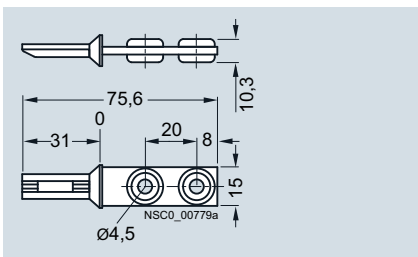


Enclosure width 56 mm
3SE512.-.QV10, 3SE512.-.RV10

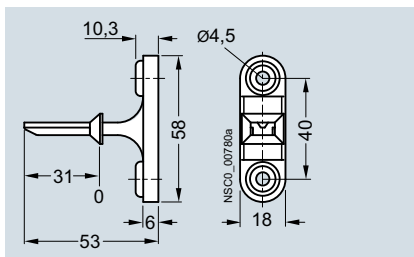


Actuators

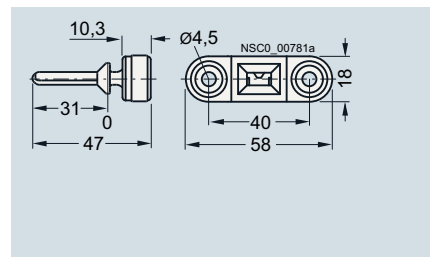
Standard actuator
3SE5000-0AV01



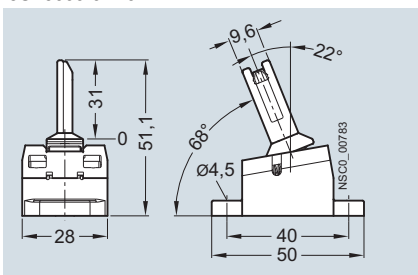
Actuator with vertical fixing
3SE5000-0AV02



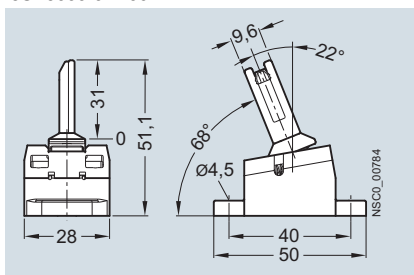
Actuator with horizontal fixing
3SE5000-0AV03



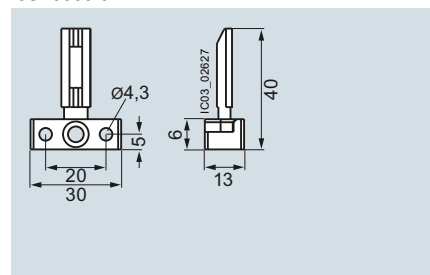
Radius actuator, approach from left
3SE5000-0AV04



Radius actuator, approach from right
3SE5000-0AV06



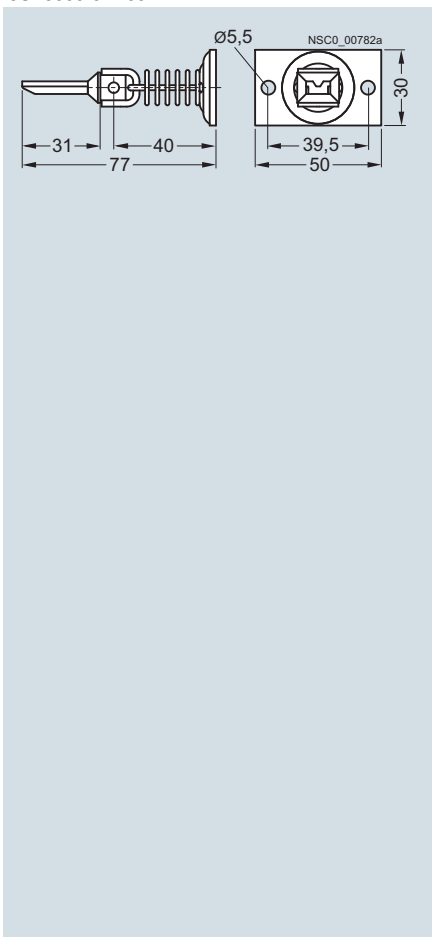
Actuator with horizontal fixing
3SE5000-0AV11



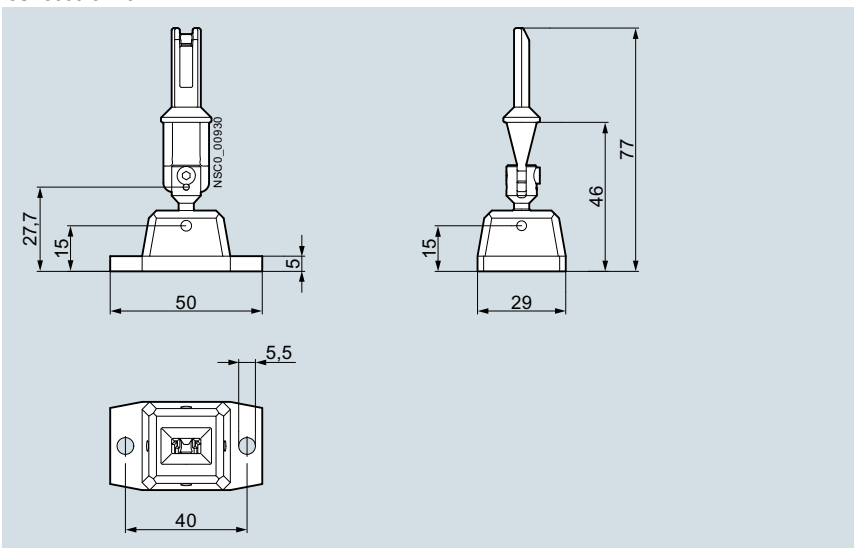
SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Separate Actuator

General data

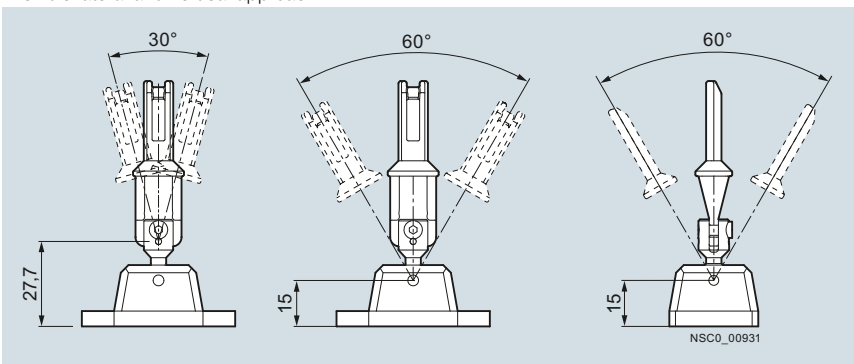
Universal radius actuator 3SE5000-0AV05



Universal radius actuator, heavy duty 3SE5000-0AV07



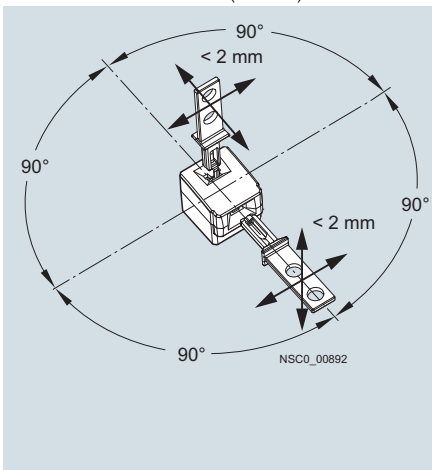
Flexible lateral and vertical approach



Actuation and travel

Standard actuator

Axial and lateral actuation (4 × 90°)



Lateral actuation (4 × 90°)

Slow-action contacts

1 NO + 1 NC, Ident. No. 11

0	1,7	2,5	NSC0_00921	13-14	21-22 **
mm	2,4**			≥ 30	

1 NO + 2 NC, Ident. No. 12

0	1,7	2,5	NSC0_00923	13-14	21-22 **	31-32 **
mm	2,4**			≥ 30		

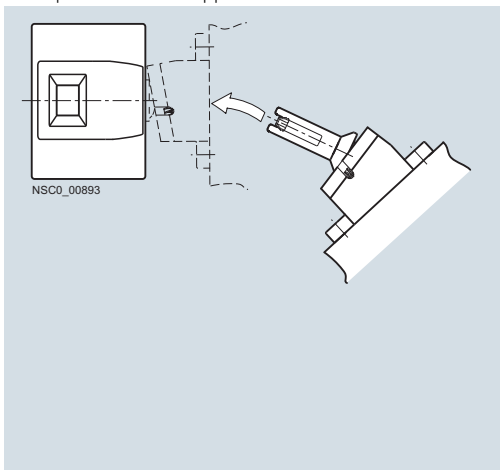
Contact closed
 Contact open

Actuator in actuator head:
NC is closed

** Positive opening point

Radius actuators (all directions of approach)

Example: Direction of approach from the left



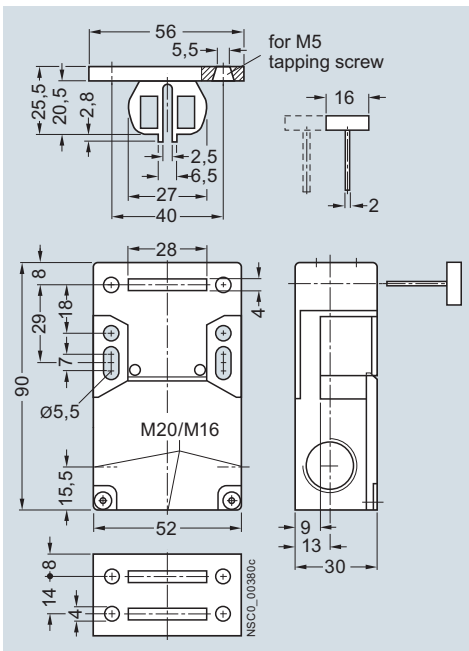
Circuit diagrams and connector assignment, [see page 12/14](#).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Separate Actuator

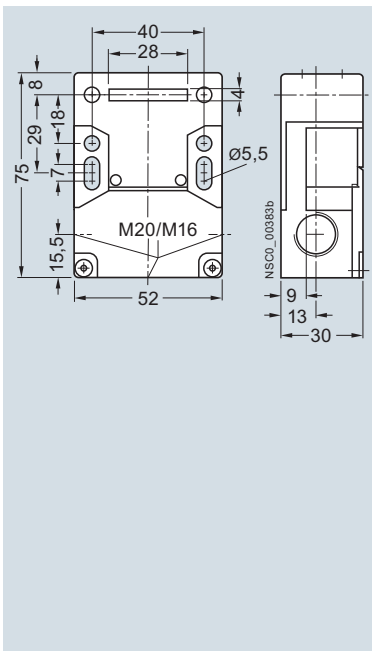
General data

3SE2243, 3SE2257 configuration

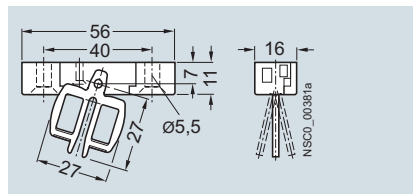
3SE2243, lateral and front-end actuation,
with 3SX3218 standard actuator



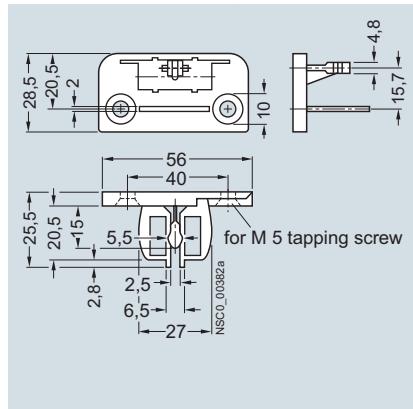
3SE2257, lateral and front-end actuation



3SX3228
universal radius actuator



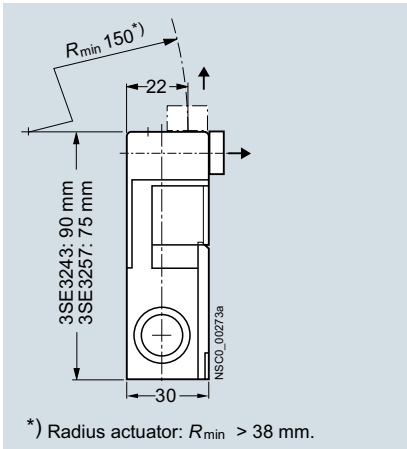
3SX3217
actuator with ball locating



Actuation and travel

Standard and radius actuators

Axial and lateral actuation

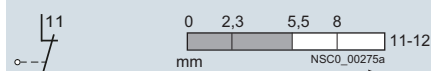


*) Radius actuator: $R_{min} > 38$ mm.

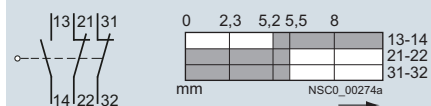
Lateral actuation

Slow-action contacts

1 NC, Ident. No. 01



1 NO + 2 NC, Ident. No. 12



■ Contact closed
□ Contact open

Actuator in actuator head:
NC is closed

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Separate Actuator

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

Selection and ordering data

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

Version ¹⁾	Contacts	LEDs	SD	Complete units	<input type="checkbox"/>	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU			

Enclosure width 31 mm acc. to EN 50047



3SE5232-0RV40

5 directions of approach

Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5232-0RV40	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ ▶ 5	3SE5232-0QV40	1	1 unit	41K
With increased minimum pull-out force 30 N						
Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0QV40-1AA1	1	1 unit	41K



3SE5234-0RV40-1AC4

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

Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5234-0RV40-1AC4	1	1 unit	41K
Slow-action contacts	2 NC --	⊕ 5	3SE5234-0QV40-1AE0	1	1 unit	41K



3SE5232-1RV40

With 2 LEDs, yellow/green

Slow-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5232-1RV40	1	1 unit	41K
Slow-action contacts	1 NO + 1 NC 230 V AC	⊕ 5	3SE5232-3RV40	1	1 unit	41K

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

Slow-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5234-1RV40-1AF3	1	1 unit	41K
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⊕ Positive opening according to IEC 60947-5-1, Appendix K.



¹⁾ Supplied without actuator. Please order separately (see page 12/61).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Separate Actuator

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

Selection and ordering data

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

Version ¹⁾	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Enclosure width 40 mm acc. to EN 50041							
	5 directions of approach Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-0QV20	1	1 unit	41K
3SE5132-0QV20	With 2 LEDs, yellow/green Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5132-1QV20	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5132-3QV20	1	1 unit	41K
3SE5132-1QV20							

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

¹⁾ Supplied without actuator. Please order separately (see page 12/61).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Separate Actuator



3SE5, plastic enclosures, enclosure width 50 mm

Selection and ordering data

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

Version ¹⁾	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				<input type="checkbox"/>			
				Article No.	Price per PU		

Enclosure width 50 mm

	5 directions of approach						
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5242-0QV40	1	1 unit	41K
	With increased minimum pull-out force 30 N						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5242-0RV40-1AA1	1	1 unit	41K
3SE5242-0QV40							
	With 2 LEDs, yellow/green						
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5242-1QV40	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5242-3QV40	1	1 unit	41K
3SE5242-1QV40							

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

¹⁾ Supplied without actuator. Please order separately (see page 12/61).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Separate Actuator



3SE5, metal enclosures, enclosure width 31 mm according to EN 50047

Selection and ordering data

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

Version ¹⁾	Contacts	LEDs	SD	Complete units	<input type="checkbox"/>	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU			

Enclosure width 31 mm acc. to EN 50047

5 directions of approach		Contacts	LEDs	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	Slow-action contacts	1 NO + 1 NC --		⊕ 2	3SE5212-0RV40		1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --		⊕ 5	3SE5212-0QV40		1	1 unit	41K
3SE5212-0RV40									
With 2 LEDs, yellow/green		Contacts	LEDs	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	Slow-action contacts	1 NO + 1 NC 24 V DC		⊕ 5	3SE5212-1RV40		1	1 unit	41K
	Slow-action contacts	1 NO + 1 NC 230 V AC		⊕ 5	3SE5212-3RV40		1	1 unit	41K
3SE5212-1RV40									

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






¹⁾ Supplied without actuator. Please order separately (see page 12/61).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Separate Actuator

3SE5, metal enclosures, enclosure width 40 mm according to EN 50041 / 56 mm

Selection and ordering data

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

Version ¹⁾	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Enclosure width 40 mm acc. to EN 50041							
	5 directions of approach						
	Slow-action contacts	1 NO + 2 NC --	⊕ ▶	3SE5112-0QV10	1	1 unit	41K
	With increased minimum pull-out force 30 N						
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5112-0QV10-1AA7	1	1 unit	41K
	With M12 connector socket, 5-pole (125 V, 4 A)						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5114-0RV10-1AC5	1	1 unit	41K
	Slow-action contacts	2 NC --	⊕ 5	3SE5114-0QV10-1AE1	1	1 unit	41K
	With connector socket, 6-pole + PE (250 V, 10 A)						
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5115-0QV10-1AD1	1	1 unit	41K
	With 2 LEDs, yellow/green						
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5112-1QV10	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5112-3QV10	1	1 unit	41K
	With M12 connector socket, 5-pole (125 V, 4 A), and 2 LEDs						
	Slow-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5114-1RV10-1AF3	1	1 unit	41K
	With connector socket, 6-pole + PE (250 V, 10 A), and 2 LEDs						
	Slow-action contacts	1 NO + 1 NC 24 V DC	⊕ 5	3SE5115-1RV10-1AF2	1	1 unit	41K
Enclosure width 56 mm							
	5 directions of approach						
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0QV10	1	1 unit	41K
	With increased minimum pull-out force 30 N						
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5122-0QV10-1AA7	1	1 unit	41K
	With 2 LEDs, yellow/green						
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ 5	3SE5122-1QV10	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ 5	3SE5122-3QV10	1	1 unit	41K














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

¹⁾ Supplied without actuator. Please order separately (see page 12/61).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Separate Actuator

Accessories

Selection and ordering data

Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
IP66/IP67						
		Standard actuator				
3SE5000-0AV01		• Length 75.6 mm	▶	3SE5000-0AV01	1	1 unit 41K
		• With vertical fixing, length 53 mm		3SE5000-0AV02	1	1 unit 41K
3SE5000-0AV02	5					
		• With transverse fixing, length 47 mm		3SE5000-0AV03	1	1 unit 41K
3SE5000-0AV03	5					
		• With transverse fixing, plastic ¹⁾ , Length 40 mm		3SE5000-0AW11	1	1 unit 41K
3SE5000-0AW11	5					
		High-grade steel actuator, IP69 (K)²⁾				
3SE5000-0AW51	5	• Length 75.6 mm		3SE5000-0AW51	1	1 unit 41K
		Radius actuator, length 51 mm				
3SE5000-0AV06	2	• Direction of approach from the left		3SE5000-0AV04	1	1 unit 41K
	▶	• Direction of approach from the right		3SE5000-0AV06	1	1 unit 41K
		Universal radius actuator				
3SE5000-0AV05-1AA6	5	• Length 77 mm		3SE5000-0AV05	1	1 unit 41K
	5	• Length 77 mm, tab rotated 90°		3SE5000-0AV05-1AA6	1	1 unit 41K
		Universal radius actuator, heavy duty				
3SE5000-0AV07	2	• Length 67 mm		3SE5000-0AV07-1AK2	1	1 unit 41K
	5	• Length 77 mm		3SE5000-0AV07	1	1 unit 41K
Optional accessories for 3SE5						
		Protective caps , black rubber For the actuator head, to protect the actuator openings from contamination (Only for enclosure width 40 or 56 mm)		3SE5000-0AV08-1AA2	1	1 unit 41K
3SE5000-0AV08-1AA2	5					
		Blocking inserts , high-grade steel, for actuator head, for up to eight padlocks		3SE5000-0AV08-1AA3	1	1 unit 41K
3SE5000-0AV08-1AA3	5					
Connections for 3SE5, 3SE2						
		Connector sockets (4-pole), M12, fixed for M20 × 1.5 For max. 250 V, 4 A With connecting cable 0.25 mm ² , plastic, degree of protection IP67, ambient temperature -40 to +85 °C		3SY3127	1	1 unit 41K
3SY3127	5					
		Connector sockets (5-pole), M12, fixed for M20 × 1.5 For max. 125 V, 4 A With connecting cable 0.25 mm ² , plastic, degree of protection IP67, ambient temperature -40 to +85 °C		3SY3128	1	1 unit 41K
3SX9926	5					
		Cable glands M20 × 1.5 Plastic		3SX9926	1	1 unit 41K
3SX9926	2					

¹⁾ Not suitable for safety switches with tumbler.

²⁾ With optimized geometry and suitable for extreme environmental conditions such as -40 °C







SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Separate Actuator

3SE2, plastic enclosures, special width 52 mm

Selection and ordering data

1 or 3 contacts · 3 directions of approach · Degree of protection IP67

Version	Operation	SD	Complete units	PU (UNIT, SET, M)	PS*	PG	
			<input type="checkbox"/>				
		d	Article No.	Price per PU			
Plastic enclosures in special width of 52 mm							
 <p>3SE2243</p>	Lateral and front-end actuation¹⁾	6 mm stroke					
	• With connecting thread M20 × 1.5						
	- Slow-action contacts 1 NO + 2 NC	Holding force 5 N	⊙ ▶	3SE2243-0XX40	1	1 unit	41K
		Holding force 30 N	⊙ ▶	3SE2243-0XX	1	1 unit	41K
		With automatic ejection	⊙ ▶	3SE2243-0XX30	1	1 unit	41K
	- Slow-action contacts 1 NC	Holding force 5 N	⊙ ▶	3SE2257-6XX40	1	1 unit	41K
		Holding force 30 N	⊙ ▶	3SE2257-6XX	1	1 unit	41K
	With automatic ejection	⊙ 5	3SE2257-6XX30	1	1 unit	41K	
• With connecting thread M16 × 1.5							
- Slow-action contacts 1 NO + 2 NC	Holding force 30 N	⊙ 2	3SE2243-0XX18	1	1 unit	41K	
Accessories							
 <p>3SX3218</p>  <p>3SX3228</p>  <p>3SX3256</p>  <p>3SX3217</p>  <p>3SX3234</p>	Actuators						
	• Standard actuators ($r_{\min} = 150$ mm), length 28 mm	2	3SX3218		1	1 unit	41K
	• Universal radius actuator ($r_{\min} = 45$ mm), length 34 mm	2	3SX3228		1	1 unit	41K
	• Radius actuator, adjustable radius, length 34 mm	30	3SX3256		1	1 unit	41K
	• Ball locating, force adjustable up to max. 100 N by 2 adjustable screws, length 28 mm	2	3SX3217		1	1 unit	41K
• Actuator, length 34 mm, with dust protection and slit cover	30	3SX3234		1	1 unit	41K	
	Accessories						
• Slit cover (1 set = 3 units)	30	3SX3233		1	3 units	41K	

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

¹⁾ Supplied without actuator.

Overview

The safety switches with tumbler are exceptional safety-related devices which 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 switched-off machine).



3SE5 safety switch with tumbler

The safety 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 safety switches with tumbler are offered in plastic or metal enclosures.

Dimensions (W × H × D): 54 mm × 185 mm × 43.5 mm

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 actuator is not included in the scope of supply of the safety switches and must be ordered separately from a choice of different versions to suit the application (see page 12/70).

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 safety switches with radius actuators are particularly suitable for rotary 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 security (see page 12/70).

Dust protection

A rubber cap to protect the actuator entry of the actuator head from contamination is available for operation in dusty environments (see page 12/70).

Tumbler

There are two versions for interlocking the actuator:

- Spring-actuated lock (closed-circuit principle) with various release mechanisms
- Solenoid-locked (open-circuit principle)

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

- Escape release or
- Emergency release

Contact blocks

The safety switches with tumbler have one switching block each for:

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

The mechanical design of the switches corresponds to the requirements of the fail-safe principle according to EN ISO 14119.

Optical signaling equipment

The safety switches with tumbler are available with an optional optical signaling device.

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

Protective device	Tumbler	Display	Meaning
Closed	Released		Actuator able to be pulled
Closed	Locked		Actuator locked
Open	Released		Actuator pulled

Internal wiring:

- The yellow LED is pre-wired to the magnetic monitoring NO contact.
- The green LED is pre-wired to the actuator monitoring NC contact.
- LED ground is pre-wired to the ground of the solenoid.

Note:

- The operational voltage must be connected to the corresponding contacts by the customer.
- This voltage for the LEDs must match the operational voltage of the solenoid (same potential).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Tumbler

General data

Benefits

The new generation of 3SE53 safety switches offers:

- More safety through higher locking forces:
 - 1 300 N with plastic enclosure
 - 2 600 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 versions: 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 versions
- Devices with ASIsafe electronics integrated in the enclosure (see page 12/104)
- 3SE5322-1S.21-1AG4 series with high degree of protection IP69, IP69K in accordance with IEC 60529, cover with foamed seal

Application

The safety switches with tumbler are exceptional safety-related devices which 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 switched-off machine).

The safety position switches with tumbler 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 tumbler

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 fail-safe principle according to EN ISO 14119.

Approvals

The switches are approved for use with locking devices according to EN ISO 14119 and EN 292, Parts 1 and 2.

Category 3 according to EN ISO 13849-1 can be attained with a safety switch with tumbler if the corresponding fail-safe evaluation units are selected and correctly installed, e.g. the 3SK or 3TK28 safety relays or matching units from the ASIsafe, SIMATIC or SINUMERIK product ranges.

Category 4 can be achieved when using an additional 3SE5 safety switch.

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

Tumbler

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 safety 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.

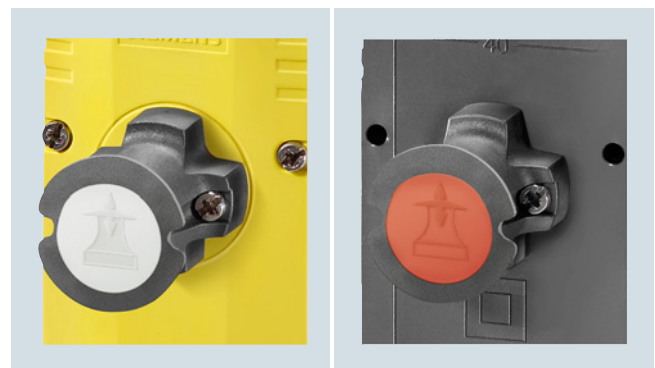


Auxiliary release

Auxiliary release with lock

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

- Personnel working inside the hazard zone can use the escape release feature to manually release the tumbler 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 tumbler 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 of the mechanical lock.



Escape release from the front

Emergency release from the back

Solenoid-locked (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 coasting times.

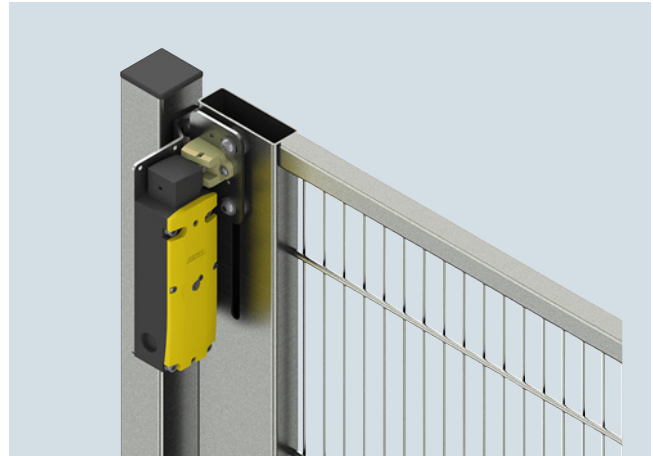
SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Tumbler

General data

Examples of door interlocking



X-Lock door interlocking from Axelent



Door interlocking from Brühl

For the addresses of the door interlock manufacturers,
see [page 16/15](#).

Technical specifications

Type		3SE5322	3SE5312
General data			
Standards		IEC/EN 60947-5-1, EN ISO 14119	
Rated insulation voltage U_i	V	250	
Degree of pollution according to IEC 60664-1		Class 3	
Rated impulse withstand voltage U_{imp}	kV	4	
Rated operational voltage U_e			
• DC	V	24	
• 50/60 Hz AC	V	230	
Conventional thermal current I_{th}	A	6	
Rated operational current I_e			
• With alternating current 50/60 Hz		I_e / AC-15 or B300	
- At 24 V	A	6	
- At 120 V	A	6	
- At 240 V	A	3	
• For direct current		I_e / DC-13 or Q300	
- At 24 V	A	3	
- At 125 V	A	0.55	
- At 250 V	A	0.27	
Solenoid			
• Locking force, max.	N	1 300	2 600
• Locking force acc. to EN ISO 14119	N	1 000	2 000
• Power consumption at U_c	W	3.5	
Short-circuit protection¹⁾			
• With DIAZED fuse links, utilization category gG	A	6	
• With miniature circuit breaker, Char. C	A	0.5	
Mechanical endurance		1×10^6 operating cycles	
Electrical endurance			
• With 3RH.1, 3RT contactors in size S00, S0		1×10^6 operating cycles	
• For utilization category AC-15 when switching off I_e / AC-15 at 230 V		100 000 operating cycles	
• With utilization category DC-12/DC-13		For direct current depending on the loading of the switch	
Switching frequency		6 000 operating cycles/h	
With 3RH.1, 3RT contactors in size S00, S0			
Shock resistance acc. to IEC 60068-2-27	g / ms	30 / 11	

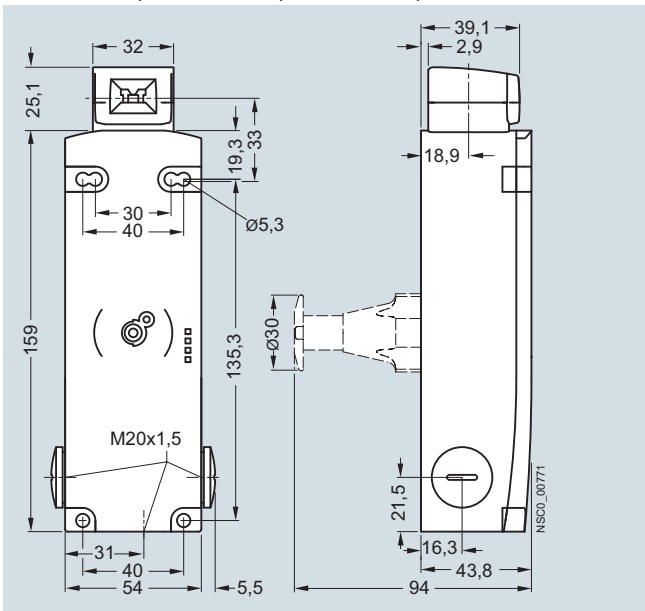
¹⁾ Without any welds according to IEC 60947-5-1.

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Tumbler

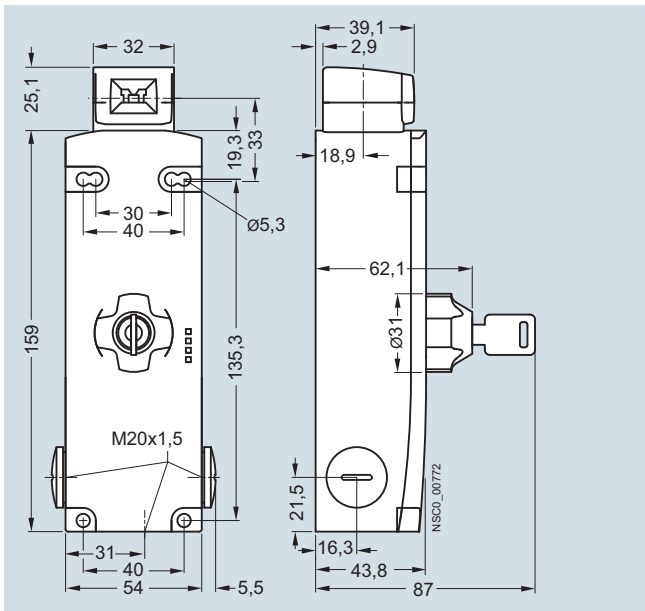
General data

3SE53 configuration

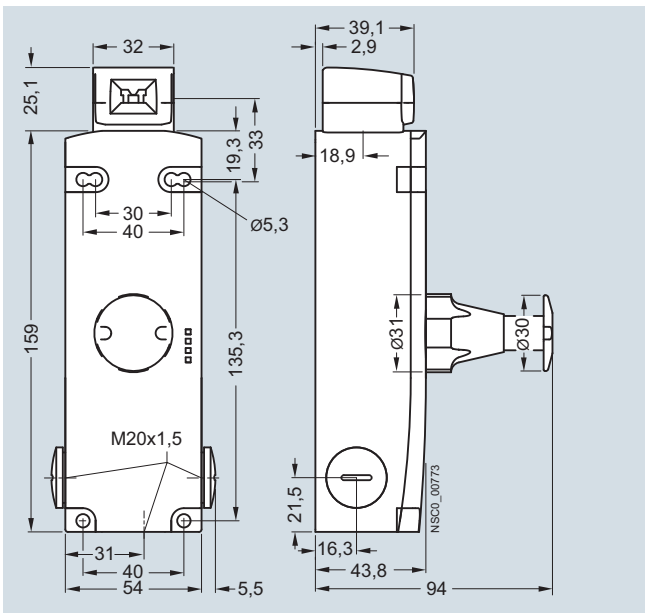
Spring-actuated lock, with auxiliary release
3SE5322-.SD2., 3SE5322-.SG2., 3SE5322-.SJ2.,
3SE5312-.SD1., 3SE5312-.SG1., 3SE5312-.SJ1.,



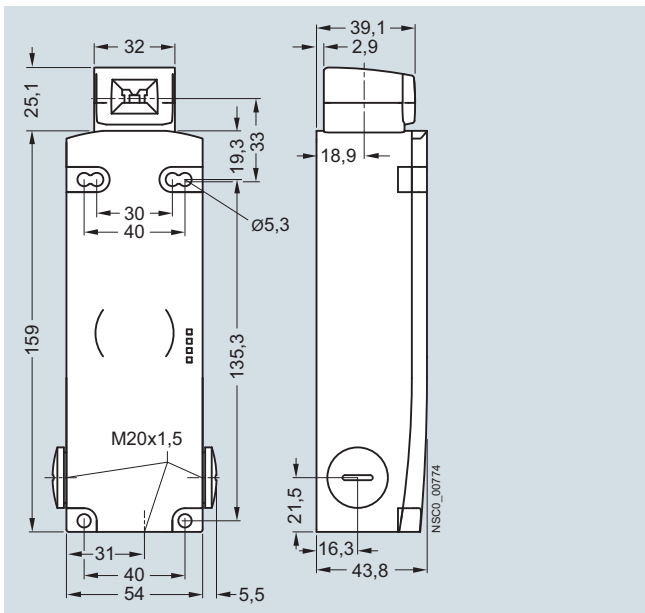
Spring-actuated lock, with auxiliary release with lock
3SE5322-.SE2.,
3SE5312-.SE1.



Spring-actuated lock, with escape release
3SE5322-.SF2.,
3SE5312-.SF1.



Solenoid-locked
3SE5322-.SB2.,
3SE5312-.SB1.



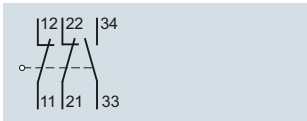
Note:

The plastic enclosures have knock-out openings behind the connecting thread; and are supplied without protective caps because of this.

Circuit diagrams

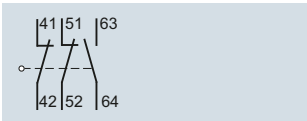
Monitoring the actuator

Slow-action contacts 1 NO + 2 NC



Monitoring the solenoid

Slow-action contacts 1 NO + 2 NC



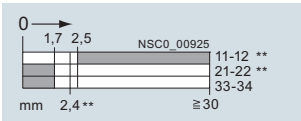
Actuators, see pages 12/53 and 12/54.

Operation, see page 12/54.

Operating travel

Monitoring the actuator

Slow-action contacts 1 NO + 2 NC









SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Tumbler

3SE5, plastic enclosures with locking force greater than 1 200 N

Selection and ordering data

6 slow-action contacts · 5 directions of approach · Degree of protection IP66/IP67 · Cable entry 3 × M20 × 1.5 · Locking force 1 300 N

Tumbler ¹⁾	LEDs	Solenoid, rated operational voltage	SD	Complete units Position monitoring: Actuators: 1 NO + 2 NC Solenoid: 1 NO + 2 NC	PU (UNIT, SET, M)	PS*	PG	
		V	d	Article No.	Price per PU			
1 300 N locking force - Enclosure width 54 mm								
Spring-actuated lock								
	• With auxiliary release	--	24 DC	⊕ ▶	3SE5322-0SD21	1	1 unit 41K	
		--	115 AC	⊕ 5	3SE5322-0SD22	1	1 unit 41K	
		--	230 AC	⊕ 5	3SE5322-0SD23	1	1 unit 41K	
		Yellow/Green	24 DC	⊕ 2	3SE5322-1SD21	1	1 unit 41K	
		Yellow/Green	115 AC	⊕ 5	3SE5322-2SD22	1	1 unit 41K	
		Yellow/Green	230 AC	⊕ 5	3SE5322-3SD23	1	1 unit 41K	
	• With auxiliary release with lock	--	24 DC	⊕ 5	3SE5322-0SE21	1	1 unit 41K	
		--	115 AC	⊕ 5	3SE5322-0SE22	1	1 unit 41K	
		--	230 AC	⊕ 5	3SE5322-0SE23	1	1 unit 41K	
		Yellow/Green	24 DC	⊕ 5	3SE5322-1SE21	1	1 unit 41K	
		Yellow/Green	115 AC	⊕ 5	3SE5322-2SE22	1	1 unit 41K	
		Yellow/Green	230 AC	⊕ 5	3SE5322-3SE23	1	1 unit 41K	
	• With escape release from the front	--	24 DC	⊕ 5	3SE5322-0SF21	1	1 unit 41K	
		--	115 AC	⊕ 5	3SE5322-0SF22	1	1 unit 41K	
		--	230 AC	⊕ 5	3SE5322-0SF23	1	1 unit 41K	
		Yellow/Green	24 DC	⊕ 5	3SE5322-1SF21	1	1 unit 41K	
		Yellow/Green	115 AC	⊕ 5	3SE5322-2SF22	1	1 unit 41K	
		Yellow/Green	230 AC	⊕ 5	3SE5322-3SF23	1	1 unit 41K	
	• With escape release from the front and emergency release from the back	--	24 DC	⊕ 5	3SE5322-0SL21	1	1 unit 41K	
		• With escape release from the back and auxiliary release from the front	--	24 DC	⊕ 5	3SE5322-0SG21	1	1 unit 41K
			--	115 AC	⊕ 5	3SE5322-0SG22	1	1 unit 41K
			--	230 AC	⊕ 5	3SE5322-0SG23	1	1 unit 41K
			Yellow/Green	24 DC	⊕ 5	3SE5322-1SG21	1	1 unit 41K
			Yellow/Green	115 AC	⊕ 5	3SE5322-2SG22	1	1 unit 41K
Yellow/Green	230 AC		⊕ 5	3SE5322-3SG23	1	1 unit 41K		
	• With escape release from the back and auxiliary release with lock from the front	--	24 DC	⊕ 5	3SE5322-0SH21	1	1 unit 41K	
		• With emergency release from the back and auxiliary release from the front	--	24 DC	⊕ 5	3SE5322-0SJ21	1	1 unit 41K
			--	115 AC	⊕ 5	3SE5322-0SJ22	1	1 unit 41K
			--	230 AC	⊕ 5	3SE5322-0SJ23	1	1 unit 41K
			Yellow/Green	24 DC	⊕ 5	3SE5322-1SJ21	1	1 unit 41K
			Yellow/Green	115 AC	⊕ 5	3SE5322-2SJ22	1	1 unit 41K
Yellow/Green	230 AC		⊕ 5	3SE5322-3SJ23	1	1 unit 41K		
	Solenoid-locked	--	24 DC	⊕ ▶	3SE5322-0SB21	1	1 unit 41K	
		--	115 AC	⊕ 5	3SE5322-0SB22	1	1 unit 41K	
		--	230 AC	⊕ 5	3SE5322-0SB23	1	1 unit 41K	
		Yellow/Green	24 DC	⊕ 2	3SE5322-1SB21	1	1 unit 41K	
		Yellow/Green	115 AC	⊕ 5	3SE5322-2SB22	1	1 unit 41K	
		Yellow/Green	230 AC	⊕ 5	3SE5322-3SB23	1	1 unit 41K	





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

¹⁾ Supplied without actuator. Please order separately (see page 12/70).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Tumbler

3SE5, plastic enclosures with locking force greater than 1 200 N


6 slow-action contacts · 5 directions of approach · **Degree of protection IP69K** · Cable entry 3 × M20 × 1.5 · Locking force 1 300 N
• With foamed seal and special cover

Tumbler ¹⁾	LEDs	Solenoid, rated operational voltage	SD	Complete units Position monitoring: Actuators: 1 NO + 2 NC Solenoid: 1 NO + 2 NC	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
1 300 N locking force · Enclosure width 54 mm · Degree of protection IP69K							
Spring-actuated locks							
	• With auxiliary release	Yellow/Green 24 DC	⊕ 5	3SE5322-1SD21-1AG4	1	1 unit	41K
3SE5322-1SD21-1AG4							
	• With auxiliary release with lock	Yellow/Green 24 DC	⊕ 5	3SE5322-1SE21-1AG4	1	1 unit	41K
3SE5322-1SE21-1AG4							
	• With escape release from the front	Yellow/Green 24 DC	⊕ 5	3SE5322-1SF21-1AG4	1	1 unit	41K
3SE5322-1SF21-1AG4							
	• With escape release from the back and auxiliary release from the front	Yellow/Green 24 DC	⊕ 5	3SE5322-1SG21-1AG4	1	1 unit	41K
3SE5322-1SG21-1AG4							

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

¹⁾ Supplied without actuator. Please order separately (see page 12/70).

Accessories







Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Accessories						
	2	3SX5601-1A		1	1 unit	41K
Cable glands M20 × 1.5 Plastic High degree of protection IP69, IEC 60529						

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Tumbler

3SE5, metal enclosures with locking force greater than 2 000 N

Selection and ordering data

6 slow-action contacts · 5 directions of approach · Degree of protection IP66/IP67 · Cable entry 3 × M20 × 1.5 · Locking force 2 600 N

Tumbler ¹⁾	LEDs	Solenoid, rated operational voltage	SD	Complete units Position monitoring: Actuators: 1 NO + 2 NC Solenoid: 1 NO + 2 NC	PU (UNIT, SET, M)	PS*	PG
		V	d	Article No.	Price per PU		
2 600 N locking force · Enclosure width 54 mm							
Spring-actuated locks							
	• With auxiliary release	--	24 DC	⊕ ▶	3SE5312-0SD11	1	1 unit 41K
		--	115 AC	⊕ 5	3SE5312-0SD12	1	1 unit 41K
		--	230 AC	⊕ 5	3SE5312-0SD13	1	1 unit 41K
		Yellow/Green	24 DC	⊕ 5	3SE5312-1SD11	1	1 unit 41K
		Yellow/Green	115 AC	⊕ 5	3SE5312-2SD12	1	1 unit 41K
		Yellow/Green	230 AC	⊕ 5	3SE5312-3SD13	1	1 unit 41K
3SE5312-0SD11							
	• With auxiliary release with lock	--	24 DC	⊕ 5	3SE5312-0SE11	1	1 unit 41K
		--	115 AC	⊕ 5	3SE5312-0SE12	1	1 unit 41K
		--	230 AC	⊕ 5	3SE5312-0SE13	1	1 unit 41K
		Yellow/Green	24 DC	⊕ 5	3SE5312-1SE11	1	1 unit 41K
		Yellow/Green	115 AC	⊕ 5	3SE5312-2SE12	1	1 unit 41K
		Yellow/Green	230 AC	⊕ 5	3SE5312-3SE13	1	1 unit 41K
3SE5312-0SE11							
	• With escape release from the front	--	24 DC	⊕ 5	3SE5312-0SF11	1	1 unit 41K
		--	115 AC	⊕ 5	3SE5312-0SF12	1	1 unit 41K
		--	230 AC	⊕ 5	3SE5312-0SF13	1	1 unit 41K
		Yellow/Green	24 DC	⊕ 5	3SE5312-1SF11	1	1 unit 41K
		Yellow/Green	115 AC	⊕ 5	3SE5312-2SF12	1	1 unit 41K
		Yellow/Green	230 AC	⊕ 5	3SE5312-3SF13	1	1 unit 41K
3SE5312-0SF11							
	• With escape release from the back and auxiliary release from the front	--	24 DC	⊕ 5	3SE5312-0SG11	1	1 unit 41K
		--	115 AC	⊕ 5	3SE5312-0SG12	1	1 unit 41K
		--	230 AC	⊕ 5	3SE5312-0SG13	1	1 unit 41K
		Yellow/Green	24 DC	⊕ 5	3SE5312-1SG11	1	1 unit 41K
		Yellow/Green	115 AC	⊕ 5	3SE5312-2SG12	1	1 unit 41K
		Yellow/Green	230 AC	⊕ 5	3SE5312-3SG13	1	1 unit 41K
3SE5312-0SG11							
	• With escape release from the back and auxiliary release with lock from the front	--	24 DC	⊕ 5	3SE5312-0SH11	1	1 unit 41K
		--	24 DC	⊕ 5	3SE5312-0SJ11	1	1 unit 41K
		--	115 AC	⊕ 5	3SE5312-0SJ12	1	1 unit 41K
		--	230 AC	⊕ 5	3SE5312-0SJ13	1	1 unit 41K
		Yellow/Green	24 DC	⊕ 5	3SE5312-1SJ11	1	1 unit 41K
		Yellow/Green	115 AC	⊕ 5	3SE5312-2SJ12	1	1 unit 41K
	Yellow/Green	230 AC	⊕ 5	3SE5312-3SJ13	1	1 unit 41K	
3SE5312-0SJ11							
	Solenoid-locked	--	24 DC	⊕ ▶	3SE5312-0SB11	1	1 unit 41K
		--	115 AC	⊕ 5	3SE5312-0SB12	1	1 unit 41K
		--	230 AC	⊕ 5	3SE5312-0SB13	1	1 unit 41K
		Yellow/Green	24 DC	⊕ 5	3SE5312-1SB11	1	1 unit 41K
		Yellow/Green	115 AC	⊕ 5	3SE5312-2SB12	1	1 unit 41K
		Yellow/Green	230 AC	⊕ 5	3SE5312-3SB13	1	1 unit 41K
3SE5312-0SB11							










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

¹⁾ Supplied without actuator. Please order separately (see page 12/70).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Tumbler

Accessories

Selection and ordering data





Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
IP66/IP67						
 3SE5000-0AV01		Standard actuator • Length 75.6 mm	▶	3SE5000-0AV01	1	1 unit 41K
 3SE5000-0AV02	5	• With vertical fixing, length 53 mm		3SE5000-0AV02	1	1 unit 41K
 3SE5000-0AV03	5	• With transverse fixing, length 47 mm		3SE5000-0AV03	1	1 unit 41K
High-grade steel actuator, IP69 (K)¹⁾						
 3SE5000-0AW51	5	• Length 75.6 mm		3SE5000-0AW51	1	1 unit 41K
 3SE5000-0AW52	NEW X	• With vertical fixing, length 53 mm		3SE5000-0AW52	1	1 unit 41K
 3SE5000-0AW53	NEW X	• With transverse fixing, length 47 mm		3SE5000-0AW53	1	1 unit 41K
Radius actuators, length 51 mm						
 3SE5000-0AV06	2	• Direction of approach from the left		3SE5000-0AV04	1	1 unit 41K
	▶	• Direction of approach from the right		3SE5000-0AV06	1	1 unit 41K
Universal radius actuator						
 3SE5000-0AV05-1AA6	5	• Length 77 mm		3SE5000-0AV05	1	1 unit 41K
	5	• Length 77 mm, tab rotated 90°		3SE5000-0AV05-1AA6	1	1 unit 41K
Universal radius actuator, heavy duty						
 3SE5000-0AV07	2	• Length 67 mm		3SE5000-0AV07-1AK2	1	1 unit 41K
	5	• Length 77 mm		3SE5000-0AV07	1	1 unit 41K

For further connector versions [see page 12/48](#).

¹⁾ With optimized geometry and suitable for extreme environmental conditions such as -40 °C

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches With Tumbler

Accessories

Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	d					
Optional accessories for 3SE5						
 3SE5000-0AV08-1AA2		Protective caps made of black rubber For the actuator head, to protect the actuator openings from contamination	5	3SE5000-0AV08-1AA2	1	1 unit 41K
 3SE5000-0AV08-1AA3		Blocking inserts , high-grade steel, for actuator head For up to eight padlocks	5	3SE5000-0AV08-1AA3	1	1 unit 41K
Spare parts for 3SE5						
		Spare keys	5	3SX5100-1F	1	1 unit 41K
Connection for 3SE5						
 3SY3127		Connector sockets (4-pole), M12, fixed for M20 x 1.5 For max. 250 V, 4 A With connecting cable 0.25 mm ² , plastic, degree of protection IP67, ambient temperature -40 to +85 °C	5	3SY3127	1	1 unit 41K
 3SY3128		Connector sockets (5-pole), M12, fixed for M20 x 1.5 For max. 125 V, 4 A With connecting cable 0.25 mm ² , plastic, degree of protection IP67, ambient temperature -40 to +85 °C	5	3SY3128	1	1 unit 41K
 3SX9926		Cable glands M20 x 1.5 Plastic				
		• Degree of protection IP67	2	3SX9926	1	1 unit 41K
		• High degree of protection IP69, IEC 60529	2	3SX5601-1A	1	1 unit 41K

For further connector versions, [see page 12/48](#).

SIRIUS 3SE5, 3SE2 Mechanical Safety Hinge Switches

General data

Overview

3SE5 hinge switches have the same enclosures as the 3SE5 position 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 enclosure 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:

- With two or three-pole switching elements designed as snap-action contacts
- AS-Interface version with integrated ASIsafe electronics for all enclosure designs (see page 12/107)

For a description of the basic switches, see page 12/5.

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

3SE2283 hinge switches

The 3SE2283 hinge switches with integrated hinge are available in a special design. They are particularly suitable for use in machine doors and flaps.

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, page 12/6).
- The new three-pole contact block 1 NO + 2 NC is available for all enclosure sizes (see picture, page 12/6).
- The plastic enclosure with a width of 31 mm has simple and fast wiring equipment which makes it possible to save approx. 20 to 25% of the time when connecting (see picture, page 12/6).
- The ASIsafe electronic component is integrated in the enclosure for the versions with AS-Interface connection (see page 12/92); 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 flaps 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 contact blocks best 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/EN 60947-5-1

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

Safety position switches

For controls according to IEC/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

The IEC/EN 60947-5-1 standard requires positive opening of the NC contacts. In other words, 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 in accordance with IEC 60947-5-1 with the symbol \ominus .

Category 4 according to EN ISO 13849-1 can be attained with the 3SE5 hinge switches with \ominus if the corresponding fail-safe evaluation units are selected and correctly installed, e.g. the 3SK or 3TK28 safety relays or matching devices from the ASIsafe, SIMATIC or SINUMERIK product ranges.

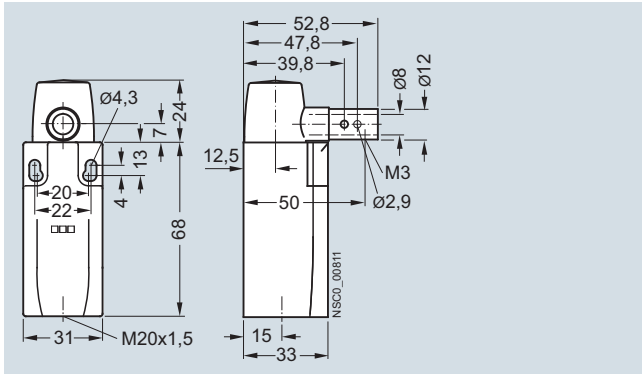
Technical specifications

The technical specifications are the same as for the standard switches (see page 12/9).

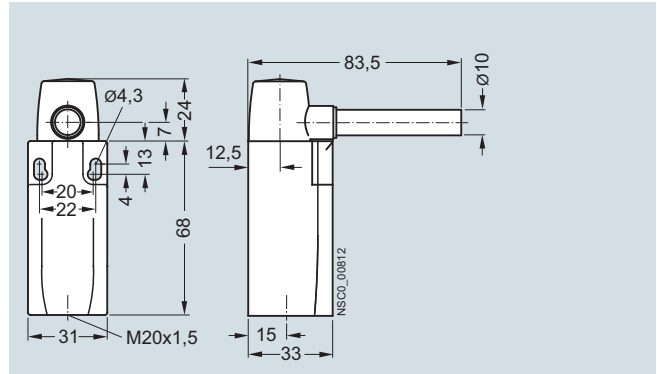
Configuration

Enclosure width 31 mm

With hollow shaft
3SE5212-0.U21, 3SE5232-0.U21

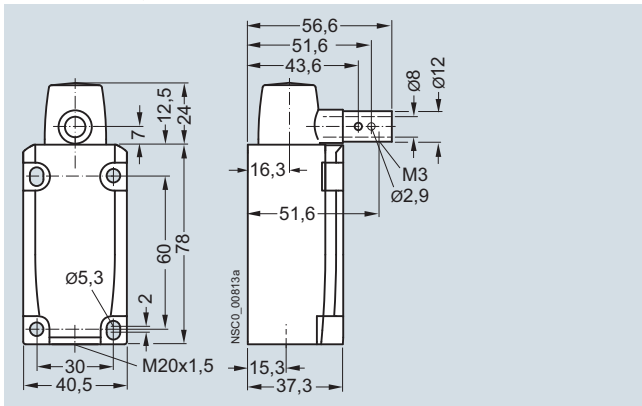


With solid shaft
3SE5212-0.U22, 3SE5232-0.U22

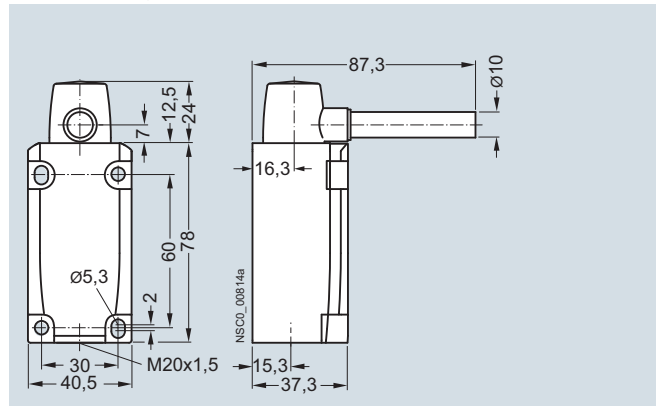


Enclosure width 40 mm

With hollow shaft
3SE5112-0.U21, 3SE5132-0.U21



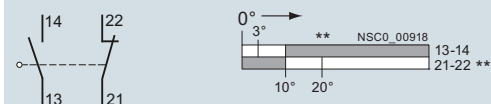
With solid shaft
3SE5112-0.U22, 3SE5132-0.U22



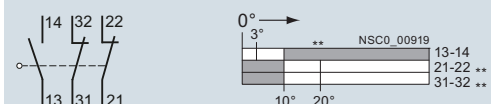
Operating travel of the shaft

Snap-action contacts

1 NO + 1 NC, Ident. No. 11



1 NO + 2 NC, Ident. No. 12



■ Contact closed
□ Contact open

** Positive opening point





SIRIUS 3SE5, 3SE2 Mechanical Safety Hinge Switches 3SE5, Plastic Enclosures

Enclosure widths 31 mm acc. to EN 50047 / 40 mm acc. to EN 50041

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	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
		d	Article No.	Price per PU		
Plastic enclosures · Enclosure width 31 mm acc. to EN 50047						
	With hollow shaft					
	Operating angle 10°	1 NO + 1 NC ¹⁾ ⊕ 5	3SE5232-0HU21	1	1 unit	41K
	Operating angle 10°	1 NO + 2 NC ⊕ 5	3SE5232-0LU21	1	1 unit	41K
Plastic enclosures · Enclosure width 40 mm acc. to EN 50041						
	With hollow shaft					
	Operating angle 10°	1 NO + 2 NC ⊕ 5	3SE5132-0LU21	1	1 unit	41K
	With solid shaft					
	Operating angle 10°	1 NO + 1 NC ¹⁾ ⊕ 5	3SE5232-0HU22	1	1 unit	41K
	Operating angle 10°	1 NO + 2 NC ⊕ 5	3SE5232-0LU22	1	1 unit	41K
	With solid shaft					
	Operating angle 10°	1 NO + 2 NC ⊕ 5	3SE5132-0LU22	1	1 unit	41K

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

¹⁾ Contact blocks permanently integrated, replacement not available.

Spare parts

Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	d					
Actuator heads						
	With hollow shaft					
	Operating angle 10°	5	3SE5000-0AU21	1	1 unit	41K
	With solid shaft					
	Operating angle 10°	5	3SE5000-0AU22	1	1 unit	41K

Note:

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

* You can order this quantity or a multiple thereof.
Illustrations are approximate

SIRIUS 3SE5, 3SE2 Mechanical Safety Hinge Switches 3SE5, Metal Enclosures

Enclosure widths 31 mm acc. to EN 50047 / 40 mm acc. to EN 50041



Selection and ordering data

Complete units


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

Version	Snap-action contacts	SD	Complete units <input type="checkbox"/>	PU (UNIT, SET, M)	PS*	PG
		d	Article No.	Price per PU		

Metal enclosures · Enclosure width 31 mm according to EN 50047

	With hollow shaft	1 NO + 2 NC	⊕ 5	3SE5212-0LU21	1	1 unit	41K
	Operating angle 10°						
3SE5212-0LU21							
	With solid shaft	1 NO + 2 NC	⊕ 5	3SE5212-0LU22	1	1 unit	41K
	Operating angle 10°						
3SE5212-0LU22							

Metal enclosures · Enclosure width 40 mm according to EN 50041



	With hollow shaft	1 NO + 2 NC	⊕ 5	3SE5112-0LU21	1	1 unit	41K
	Operating angle 10°						
3SE5112-0LU21							
	With solid shaft	1 NO + 2 NC	⊕ 5	3SE5112-0LU22	1	1 unit	41K
	Operating angle 10°						
3SE5112-0LU22							

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

Spare parts

Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	d					

Actuator heads

	With hollow shaft	5	3SE5000-0AU21	1	1 unit	41K
	Operating angle 10°					
3SE5000-0AU21						
	With solid shaft	5	3SE5000-0AU22	1	1 unit	41K
	Operating angle 10°					
3SE5000-0AU22						

Note:

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

SIRIUS 3SE5, 3SE2 Mechanical Safety Hinge Switches

3SE2, Plastic Enclosures

With integrated hinge

Overview

The 3SE2283 hinge switches with built-in hinge 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 the compact design allow them to be directly mounted on a hinged protective cover and the stable frame.

Benefits

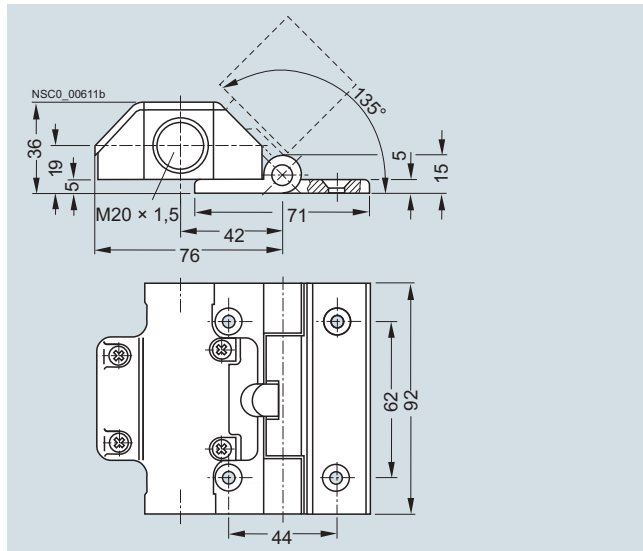
- Easy mounting through use of versions with integrated hinge
- Versions with small operating angle of 4° or 8°
- Protection against personal injury provided by positively driven NC contacts according to IEC 60947-5-1
- Simultaneous shutdown and signaling by 1 NO + 2 NC contacts

Technical specifications

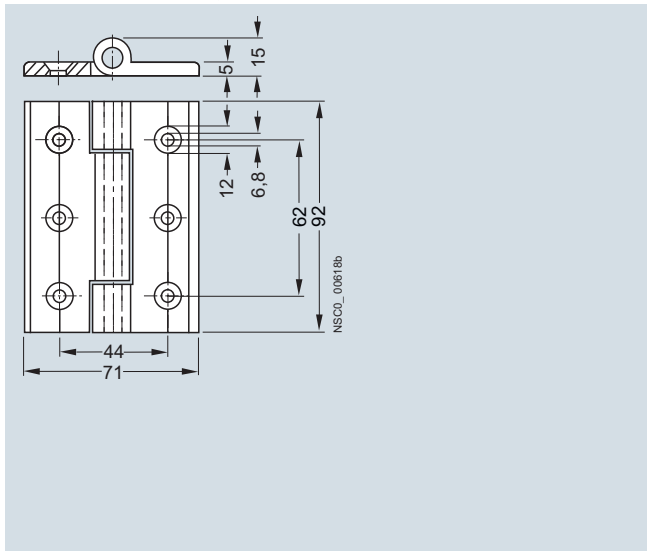
Type	3SE2283	
Rated insulation voltage U_i	V	250
Conventional thermal current I_{th}	A	2.5
Rated operational current I_e		
• At AC-15, 120 V	A	4.2
• At AC-15, 250 V	A	2
• At DC-13, 24 V	A	1
Min. make-break capacity	> 5 V/1 mA	
Short-circuit protection		
• Operational class gG	A	2
Mechanical endurance	> 1 × 10 ⁶ operating cycles	
Switching frequency	1 200 operating cycles/h	
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

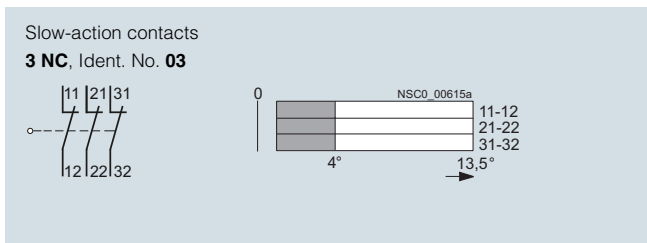
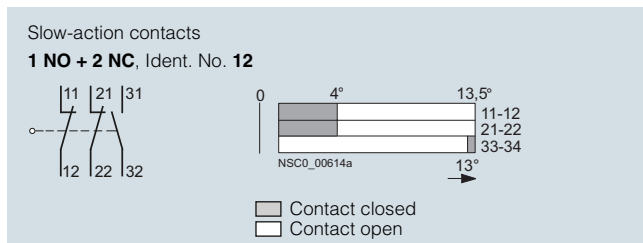
3SE2283-GA.3 hinge switch with hinge



3SX3225 additional hinge



Operating travel of the hinge



SIRIUS 3SE5, 3SE2 Mechanical Safety Hinge Switches

3SE2, Plastic Enclosures

With integrated hinge

Selection and ordering data

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

Version	Slow-action contacts	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
			<input type="checkbox"/>			
		d	Article No.	Price per PU		

Plastic enclosures with integrated hinge



3SE2283

With integrated hinge

(Scope of supply includes additional hinge and fixing accessories)

- Aluminum hinge

- 4° actuating angle	1 NO + 2 NC	⊕ 2	3SE2283-0GA43	1	1 unit	41K
- 4° actuating angle	3 NC	⊕ 5	3SE2283-6GA43	1	1 unit	41K
- 8° actuating angle	1 NO + 2 NC	⊕ 10	3SE2283-0GA53	1	1 unit	41K
- 8° actuating angle	3 NC	⊕ 10	3SE2283-6GA53	1	1 unit	41K

- High-grade steel hinge

- 4° actuating angle	1 NO + 2 NC	⊕ 5	3SE2283-0GA44	1	1 unit	41K
----------------------	-------------	-----	----------------------	---	--------	-----

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

Accessories/spare parts

Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	d					

Accessories



3SX3225

Additional hinge

(Scope of supply includes fixing accessories)

- Made of aluminum

30	3SX3225	1	1 unit	41K
----	----------------	---	--------	-----

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C





Shock and Vibration Test

SIRIUS 3SE5 Mechanical Position 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 or IP66/IP67 · Cable entry M20 × 1.5, with enhanced corrosion protection

Version	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Complete units¹⁾ · Enclosure width 31 mm							
	Twist levers, 21 mm long, acc. to EN 50047 With plastic roller 19 mm						
SE5232-OLK21-1AY0	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-OLK21-1AY0	1	1 unit	41K
	Roller levers, acc. to EN 50047 With plastic roller 13 mm						
3SE5232-OLE10-1AY0	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-OLE10-1AY0	1	1 unit	41K
	Rod actuators, acc. to EN 50047 Plastic rod, length 200 mm						
3SE5232-OHK82-1AY0	Snap-action contacts	1 NO + 1 NC --	5	3SE5232-OHK82-1AY0	1	1 unit	41K
	Spring rods						
3SE5232-OHR01-1AY0	Snap-action contacts	1 NO + 1 NC --	5	3SE5232-OHR01-1AY0	1	1 unit	41K

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

1) Popular versions.

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C

Shock and Vibration Test

SIRIUS 3SE5 Mechanical Safety Switches with Tumbler

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

Selection and ordering data

6 slow-action contacts · 5 directions of approach · Degree of protection IP66/IP67 · Cable entry 3 × M20 × 1.5 · Locking force 1 300 N

Tumbler ¹⁾	LEDs	Solenoid, rated operational voltage	SD	Complete units Position monitoring: Actuators: 1 NO + 2 NC Solenoid: 1 NO + 2 NC	PU (UNIT, SET, M)	PS*	PG
		V	d	Article No.	Price per PU		

1 300 N locking force · Enclosure width 54 mm**Spring-actuated locks**

- With front auxiliary release

24 DC

⊕ 5

3SE5322-0SD21-1AY0

1

1 unit 41K



3SE5322-0SD21-1AY0

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

1) Supplied without actuator. Please order separately.

Accessories/spare parts

Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	d					

Accessories**Standard actuator**

- Length 75.6 mm

▶

3SE5000-0AV01

1

1 unit 41K

3SE5000-0AV01

**High-grade steel actuator, standard, IP69(K)¹⁾**

- Length 75.6 mm

5

3SE5000-0AW51

1

1 unit 41K

3SE5000-0AW51



- With vertical fixing, length 53 mm

NEW

X

3SE5000-0AW52

1

1 unit 41K

3SE5000-0AW52



- With transverse fixing, length 47 mm

NEW

X

3SE5000-0AW53

1

1 unit 41K

3SE5000-0AW53

1) With optimized geometry and suitable for extreme environmental conditions such as -40 °C.

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C

Shock and Vibration Test

SIRIUS 3SE5 Mechanical Safety Hinge Switches

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

Selection and ordering data

With enhanced corrosion protection

Version	Contacts	LEDs	SD	Complete units	<input type="checkbox"/>	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU			

Complete units¹⁾ • Enclosure width 31 mm

3SE5232-0HU21-1AY0

Hinge switches, acc. to EN 50047

**With hollow shaft D = 8 mm, operating angle
10 degrees,
with M20 connector socket**

Snap-action contacts 1 NO + 1 NC -- 5 **3SE5232-0HU21-1AY0** 1 1 unit 41K

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

¹⁾ With optimized geometry and suitable for extreme environmental conditions such as -40 °C.

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C






Shock and Vibration Test according to Railway Standard
SIRIUS 3SE5 Mechanical Position Switches with Tumbler

3SE5, plastic enclosures, enclosure width 31 mm acc. to EN 50047 / 50 mm

Selection and ordering data

Complete units

2 or 3 contacts · Degree SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C of protection IP65 or IP66/IP67 · Cable entry M20 × 1.5, with enhanced corrosion protection

Version	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Complete units¹⁾ • Enclosure width 31 mm							
	Roller plungers, type C, acc. to EN 50047 With plastic roller 10 mm, with M12 connector socket, 4-pole (250 V, 4 A) Snap-action contacts		1 NO + 1 NC --	⊕ 5	3SE5234-0CD03-1AJ1	1	1 unit 41K
3SE5234-0CD03-1AJ1							
	Roller plungers with central fixing Snap-action contacts		1 NO + 1 NC --	⊕ 5	3SE5232-0CD10-1AJ0	1	1 unit 41K
3SE5232-0CD10-1AJ0							
	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 --	⊕ 2	3SE5232-0CK31-1AJ0	1	1 unit 41K
3SE5232-0CK31-1AJ0							
	Twist levers, adjustable length With high-grade steel lever with grid hole and plastic roller 19 mm Snap-action contacts		1 NO + 1 NC --	⊕ 5	3SE5232-0CK62-1AJ0	1	1 unit 41K
3SE5232-0CK62-1AJ0	Snap-action contacts		1 NO + 2 NC --	⊕ 5	3SE5232-0LK62-1AJ0	1	1 unit 41K
3SE5232-0CK62-1AJ0							
Complete units¹⁾ • Enclosure width 50 mm							
	Twist levers With metal lever 21 mm and plastic roller 19 mm Snap-action contacts, integrated ²⁾		1 NO + 1 NC --	⊕ 5	3SE5242-0HK21-1AJ0	1	1 unit 41K
3SE5242-0HK21-1AJ0	Twist levers, adjustable length With high-grade steel lever with grid hole and plastic roller 19 mm Snap-action contacts, integrated ²⁾		1 NO + 1 NC --	⊕ 5	3SE5242-0HK62-1AJ0	1	1 unit 41K

⊕ 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, page 12/82](#).

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C



Shock and Vibration Test according to Railway Standard

SIRIUS 3SE5 Mechanical Position Switches with Tumbler

3SE5, plastic enclosures, enclosure width 31 mm acc. to EN 50047 / 50 mm

Modular system

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

Version	Contacts	LEDs	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU		
Basic switches • Enclosure width 31 mm (with rounded plunger¹⁾)							
	With teflon plunger						
	Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5232-0CC05-1AJ0	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0KC05-1AJ0	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5232-0LC05-1AJ0	1	1 unit	41K
Basic switches • Enclosure width 50 mm (with rounded plunger¹⁾)							
	With teflon plunger						
	Slow-action contacts	1 NO + 1 NC --	⊕ 5	3SE5242-0BC05-1AJ0	1	1 unit	41K
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ 5	3SE5242-0HC05-1AJ0	1	1 unit	41K

3SE5232-0CC05-1AJ0

3SE5242-0BC05-1AJ0

⊕ 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:

For the selection aid, see page 12/15.

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C

Shock and Vibration Test according to Railway Standard
SIRIUS 3SE5 Mechanical Position Switches with Tumbler

3SE5, plastic enclosures, enclosure width 31 mm acc. to EN 50047 / 50 mm

Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm	d	Article No.	Price per PU		
Operating mechanisms						
 3SE5000-0AD03	Roller plungers, type C, acc. to EN 50047					
	Plastic roller	10	↻ 5	3SE5000-0AD03-1AJ0	1	1 unit 41K
 3SE5000-0AF10-1AJ0	Roller levers, type E, acc. to EN 50047					
	Metal lever, plastic roller	13	↻ 5	3SE5000-0AE10-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	13	↻ 5	3SE5000-0AE12-1AJ0	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	NEW 13	↻ X	3SE5000-0AE13-1AJ0	1	1 unit 41K
	Angular roller levers					
Metal lever, plastic roller	13	↻ 5	3SE5000-0AF10-1AJ0	1	1 unit 41K	
High-grade steel lever, plastic roller	13	↻ 5	3SE5000-0AF12-1AJ0	1	1 unit 41K	
Twist actuators						
 3SE5000-0AK00-1AJ0	Twist actuators, for 31/50 mm, EN 50047					
	Switching right and/or left, adjustable		↻ 5	3SE5000-0AK00-1AJ0	1	1 unit 41K
Levers						
 3SE5000-0AA21-1AJ0	Twist levers straight, 21 mm, type A acc. to EN 50047					
	Metal lever, plastic roller	19	↻ 5	3SE5000-0AA21-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	19	↻ 5	3SE5000-0AA31-1AJ0	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	NEW 19	↻ 5	3SE5000-0AA32-1AJ0	1	1 unit 41K
 3SE5000-0AA60-1AJ0	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	↻ 5	3SE5000-0AA60-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	19	↻ 5	3SE5000-0AA62-1AJ0	1	1 unit 41K

↻ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C

Shock and Vibration Test according to Railway Standard

SIRIUS 3SE5 Mechanical Position Switches with Tumbler

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

Selection and ordering data**Modular system**

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

Version	Contacts	LEDs	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
				<input checked="" type="checkbox"/>			
				Article No.	Price per PU		

Basic switches • Enclosure width 40 mm

3SE5132-OCA00-1AJ0

With connecting thread M20 × 1.5

Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5132-OCA00-1AJ0	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-OKA00-1AJ0	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5132-OLA00-1AJ0	1	1 unit	41K

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

Note:

For the selection aid, see page 12/15.

Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
			<input checked="" type="checkbox"/>			
	mm	d	Article No.	Price per PU		

Operating mechanisms

3SE5000-0AC03-1AJ0

Rounded plungers, type B, acc. to EN 50041

Plastic plungers	10	⊕ 5	3SE5000-0AC03-1AJ0	1	1 unit	41K
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3SE5000-0AD05-1AJ0

Roller plungers, type C, acc. to EN 50041

Plastic plunger, plastic roller	13	⊕ 5	3SE5000-0AD05-1AJ0	1	1 unit	41K
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3SE5000-0AE05-1AJ0

Roller levers

Metal lever with plastic roller, plastic base	22	⊕ 5	3SE5000-0AE05-1AJ0	1	1 unit	41K
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Twist actuators

3SE5000-0AJ00-1AJ0

Twist actuators, for 31/50 mm, EN 50047

• For twist levers and rod actuators, switching right and/or left, adjustable		⊕ 5	3SE5000-0AJ00-1AJ0	1	1 unit	41K
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3SE5000-0AA01-1AJ0

Levers**Twist levers, type A, acc. to EN 50041**

Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA01-1AJ0	1	1 unit	41K
High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA11-1AJ0	1	1 unit	41K



3SE5000-0AA60-1AJ0

Twist levers, adjustable length, with grid hole

Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA60-1AJ0	1	1 unit	41K
High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA62-1AJ0	1	1 unit	41K

⊕ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C

Shock and Vibration Test according to Railway Standard
SIRIUS 3SE5 Mechanical Position Switches with Tumbler

3SE5, metal enclosures, enclosure width 31 mm according to EN 50047

Selection and ordering data

Complete units

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

Version	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
				<input type="checkbox"/>			
			d	Article No.	Price per PU		

Complete units • Enclosure width 31 mm

Rounded plungers, type B, acc. to EN 50047

Snap-action contacts	1 NO + 1 NC --	⊕	5	3SE5212-0CC05-1AJ0	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕	5	3SE5212-0KC05-1AJ0	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕	5	3SE5212-0LC05-1AJ0	1	1 unit	41K



3SE5212-0CC05-1AJ0

Twist levers, type A, acc. to EN 50047

With metal lever 21 mm and high-grade steel roller
19 mm, twist actuator for 40 mm

Snap-action contacts	1 NO + 1 NC --	⊕	5	3SE5212-0CH22-1AJ0	1	1 unit	41K
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3SE5212-0CH22-1AJ0

⊕ 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", page 12/84.

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C

Shock and Vibration Test according to Railway Standard

SIRIUS 3SE5 Mechanical Position Switches with Tumbler

3SE5, metal enclosures, enclosure width 31 mm according to EN 50047

Modular system

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

Version	Contacts	LEDs	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
			d	<input checked="" type="checkbox"/>	Article No.	Price per PU	

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



With plunger

Snap-action contacts	1 NO + 1 NC --	⊕ 5	3SE5212-0CC05-1AJ0	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0KC05-1AJ0	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ 5	3SE5212-0LC05-1AJ0	1	1 unit	41K

3SE5212-0CC05-1AJ0

⊕ 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:

For the selection aid, see page 12/15.

Version	Diame-ter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm	d	<input checked="" type="checkbox"/>	Article No.	Price per PU	

Operating mechanisms



Roller plungers, type C, acc. to EN 50047

Plastic roller	10	⊕ 5	3SE5000-0AD03-1AJ0	1	1 unit	41K
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3SE5000-0AD03-1AJ0



Roller levers, type E, acc. to EN 50047

Metal lever, plastic roller	13	⊕ 5	3SE5000-0AE10-1AJ0	1	1 unit	41K
High-grade steel lever, plastic roller	13	⊕ 5	3SE5000-0AE12-1AJ0	1	1 unit	41K

3SE5000-0AE10-1AJ0



Angular roller levers

Metal lever, plastic roller	13	⊕ 5	3SE5000-0AF10-1AJ0	1	1 unit	41K
High-grade steel lever, plastic roller	13	⊕ 5	3SE5000-0AF12-1AJ0	1	1 unit	41K
High-grade steel lever, high-grade steel roller	NEW 13	⊕ X	3SE5000-0AE13-1AJ0	1	1 unit	41K

3SE5000-0AF10-1AJ0

Twist actuators



Twist actuators, for 31/50 mm, EN 50047

Switching right and/or left, adjustable		⊕ 5	3SE5000-0AK00-1AJ0	1	1 unit	41K
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3SE5000-0AK00-1AJ0

Levers

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

Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA21-1AJ0	1	1 unit	41K
High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA31-1AJ0	1	1 unit	41K

3SE5000-0AA21-1AJ0



Twist levers, adjustable length, with grid hole

Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA60-1AJ0	1	1 unit	41K
High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA62-1AJ0	1	1 unit	41K

3SE5000-0AA60-1AJ0

⊕ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C






Shock and Vibration Test according to Railway Standard
SIRIUS 3SE5 Mechanical Position Switches with Tumbler

3SE5, metal enclosures, enclosure width 40 mm according to EN 50041 / 56 mm, XL

Selection and ordering data

Complete units

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

Version	Contacts	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
		d	Article No.	Price per PU		
Complete units • Enclosure width 40 mm						
	Rounded plungers, type B, acc. to EN 50041 With high-grade steel plungers, with 3 mm overtravel Snap-action contacts	1 NO + 1 NC	⊕ 5	3SE5112-0CC02-1AJ0	1	1 unit 41K
3SE5112-0CC02-1AJ0						
	Roller plungers, type C, acc. to EN 50041 NEW With high-grade steel plungers, with 3 mm overtravel Snap-action contacts	1 NO + 2 NC	⊕ 5	3SE5112-0LD02-1AJ0	1	1 unit 41K
3SE5112-0LD02-1AJ0						
	Twist levers, type A, acc. to EN 50041 With high-grade steel lever 27 mm and plastic roller 19 mm Snap-action contacts	1 NO + 2 NC	⊕ 5	3SE5112-0LH11-1AJ0	1	1 unit 41K
3SE5112-0LH11-1AJ0						
	Twist levers, adjustable length With high-grade steel lever with grid hole and plastic roller 19 mm Snap-action contacts	1 NO + 1 NC	⊕ 5	3SE5112-0CH62-1AJ0	1	1 unit 41K
3SE5112-0CH62-1AJ0						
Complete units • Enclosure width 56 mm, XL						
	Twist levers, adjustable length With metal lever with grid hole and plastic roller 19 mm Snap-action contacts	1 NO + 1 NC	⊕ 5	3SE5162-0CH60-1AJ0	1	1 unit 41K
3SE5162-0CH60-1AJ0						

⊕ 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", page 12/88.

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C




Shock and Vibration Test according to Railway Standard

SIRIUS 3SE5 Mechanical Position Switches with Tumbler

3SE5, metal enclosures, enclosure width 40 mm / 56 mm / 56 mm, XL

Selection and ordering data**Modular system**

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

Version	Contacts	LEDs	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Basic switches • Enclosure width 40 mm							
With connecting thread M20 × 1.5							
	Snap-action contacts	1 NO + 1 NC	--	⊕ 5	3SE5112-0CA00-1AJ0	1	1 unit 41K
	Slow-action contacts	1 NO + 2 NC	--	⊕ 5	3SE5112-0KA00-1AJ0	1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC	--	⊕ 5	3SE5112-0LA00-1AJ0	1	1 unit 41K
3SE5112-0CA00-1AJ0							
Basic switches • Enclosure width 56 mm							
With 3 x connecting thread M20 × 1.5							
	Snap-action contacts	1 NO + 1 NC	--	⊕ 5	3SE5122-0CA00-1AJ0	1	1 unit 41K
	Slow-action contacts	1 NO + 2 NC	--	⊕ 5	3SE5122-0KA00-1AJ0	1	1 unit 41K
	Snap-action contacts	1 NO + 2 NC	--	⊕ 5	3SE5122-0LA00-1AJ0	1	1 unit 41K
3SE5122-0CA00-1AJ0							
Basic switches • Enclosure width 56 mm, XL							
With 3 x connection thread M20 × 1.5							
	Slow-action contacts	2 × (1 NO + 1 NC)	--	⊕ 5	3SE5162-0BA00-1AJ0	1	1 unit 41K
	Snap-action contacts	2 × (1 NO + 1 NC)	--	⊕ 5	3SE5162-0CA00-1AJ0	1	1 unit 41K
3SE5162-0BA00-1AJ0							

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

Note:

For the selection aid, see page 12/15.

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C

Shock and Vibration Test according to Railway Standard
SIRIUS 3SE5 Mechanical Position Switches with Tumbler

3SE5, metal enclosures, enclosure width 40 mm / 56 mm / 56 mm, XL

Version	Diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm	d	Article No.	Price per PU		
Operating mechanisms						
	Rounded plungers, type B, acc. to EN 50041 High-grade steel plunger, with 3 mm overtravel	10	⊕ 5	3SE5000-0AC02-1AJ0	1	1 unit 41K
3SE5000-0AC02-1AJ0						
	Roller plungers, type C, acc. to EN 50041 High-grade steel roller, with 3 mm overtravel	10	⊕ 5	3SE5000-0AD02-1AJ0	1	1 unit 41K
3SE5000-0AD02-1AJ0						
	Roller levers Metal lever, plastic roller	13	⊕ 5	3SE5000-0AE01-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊕ 5	3SE5000-0AE03-1AJ0	1	1 unit 41K
3SE5000-0AE01-1AJ0						
	Angular roller levers Metal lever, plastic roller	13	⊕ 5	3SE5000-0AF01-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊕ 5	3SE5000-0AF03-1AJ0	1	1 unit 41K
3SE5000-0AF01-1AJ0						
Twist actuators						
	Twist actuators, for 40/56/56 XL mm EN 50041 Switching right and/or left, adjustable		⊕ 5	3SE5000-0AH00-1AJ0	1	1 unit 41K
3SE5000-0AH00-1AJ0						
Levers						
	Twist levers, type A, acc. to EN 50041 Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA01-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA11-1AJ0	1	1 unit 41K
3SE5000-0AA01-1AJ0						
	Twist levers, adjustable length, with grid hole Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA60-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA62-1AJ0	1	1 unit 41K
3SE5000-0AA60-1AJ0						

⊕ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C

Shock and Vibration Test according to Railway Standard

SIRIUS 3SE5 Mechanical Safety Switches with Separate Actuator

3SE5, plastic 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 IP65 (31 mm) or IP66/IP67 (50 mm) · Cable entry M20 × 1.5

Version	Contacts	LEDs	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
			d	<input type="checkbox"/>			
				Article No.	Price per PU		

Enclosure width 31 mm acc. to EN 50047



3SE5232-0RV40-1AJ0

Ambient temperature down to -40° C
With increased corrosion protection

Slow-action contacts 1 NO + 1 NC -- ↻ 5 **3SE5232-0RV40-1AJ0** 1 1 unit 41K

Accessories/spare parts

Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	d					

Accessories

Standard actuator

- With transverse fixing, plastic, length 40 mm



3SE5000-0AW11

5 **3SE5000-0AW11** 1 1 unit 41K

High-grade steel actuator¹⁾

- Length 75.6 mm



3SE5000-0AW51

5 **3SE5000-0AW51** 1 1 unit 41K

- With vertical fixing, length 53 mm



3SE5000-0AW52

NEW X **3SE5000-0AW52** 1 1 unit 41K

- With transverse fixing, length 47 mm



3SE5000-0AW53

NEW X **3SE5000-0AW53** 1 1 unit 41K

¹⁾ With optimized geometry and suitable for extreme environmental conditions such as -40 °C

SIRIUS 3SE5 Mechanical Position Switches for Ambient Temperatures down to -40 °C

Shock and Vibration Test according to Railway Standard
SIRIUS 3SE5 Mechanical Safety Switches with Tumbler

3SE5, plastic enclosures

Selection and ordering data

6 slow-action contacts · 5 directions of approach · Degree of protection IP66/IP67 · Cable entry 3 × M20 × 1.5 · Locking force 1 300 N

Tumbler ¹⁾	Solenoid, rated operational voltage	SD	Complete units Position monitoring: Actuators: 1 NO + 2 NC Solenoid: 1 NO + 2 NC	PU (UNIT, SET, M)	PS*	PG
	V	d	Article No.	Price per PU		

1 300 N locking force • Enclosure width 54 mm

3SE5322-0SL21-1AJ0

Spring-actuated locks

- With escape release from the front and emergency release from the back

24 DC

⊕ 5

3SE5322-0SL21-1AJ0

1

1 unit

41K

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

¹⁾ Supplied without actuator. Please order separately.**Accessories/spare parts**

Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	d					

Accessories

3SE5000-0AV01

Standard actuator

- Length 75.6 mm

3SE5000-0AV01

1

1 unit

41K



3SE5000-0AW51

High-grade steel actuator¹⁾

- Length 75.6 mm

5

3SE5000-0AW51

1

1 unit

41K



3SE5000-0AW52

- With vertical fixing, length 53 mm

NEW

X

3SE5000-0AW52

1

1 unit

41K



3SE5000-0AW53

- With transverse fixing, length 47 mm

NEW

X

3SE5000-0AW53

1

1 unit

41K

¹⁾ With optimized geometry and suitable for extreme environmental conditions such as -40 °C

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

General data

Overview

The 3SF1 position switches with safety-related communication can be directly connected using the AS-Interface bus system. The safety functions no longer have to be wired up conventionally.

With the 3SF1 position switches the ASIsafe electronics component is integrated in the switch enclosure.



Examples of selection options in the modular system

Modular system

The position switches of the 3SF11.4 and 3SF12.4 series are designed as a modular system comprising different versions of the basic switch and an actuator which must be ordered separately. Thanks to the modular design of the switch the end users can select the right solution for their application from numerous versions and install it themselves in a very short time.

Design

The 3SF1 switches are available in four different enclosure sizes:

- Plastic and metal enclosures according to EN 50047, 31 mm wide, with M12 plug
- Metal enclosures according to EN 50041, 40 mm wide, with M12 plug
- Plastic enclosures, 50 mm wide, with M12 plug and M12 socket
- Metal enclosures, 56 mm wide, with M12 plug and M12 socket

Display

The switches have a status display with three LEDs:

- LED 1 (yellow): F-IN1
- LED 2 (yellow): F-IN2
- LED 3 (green/red): AS-i/FAULT

Connection

Connection to the AS-Interface is by means of a 4-pole M12 connector socket (plastic version) connected to the yellow AS-Interface bus cable.

The wide enclosures (50 or 56 mm) also have an M12 socket for connecting a second position switch. Category 4 according to EN ISO 13849-1 is thus achieved.

Benefits

The new generation of 3SF1 position switches offers:

- ASIsafe electronics component integrated in the enclosure, with low power consumption < 60 mA
- An extensive range of actuators
- Status display with three LEDs
- Can be integrated easily via TIA Portal

Application

With the standard position switches, mechanical positions of moving machine parts are converted into electrical signals. Through their modular and uniform design and large number of variants, the devices can comply with 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 variants are available to match the mechanical configuration of the moving 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

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 fail-safe principle according to EN ISO 14119.

Approvals

AS-Interface according to EN 50295 and IEC 62026-2.

With a 3SF1 position switch it is possible to achieve Category 2 according to EN ISO 13849-1 or SIL 1 according to IEC 61508.

Categories 3 or 4 according to EN ISO 13849-1 or SIL 2 or 3 according to IEC 61508 can be achieved by using a second 3SE5 position switch.

The 3SF1 position switches are approved according to UL 508, UL 50 and UL 746-C.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

General data

Technical specifications

Type	3SF11..., 3SF12..	
General data		
Standards	IEC/EN 60947-5-1, EN ISO 14119	
According to AS-Interface specification		
• I/O configuration / ID configuration	0 / B	
• ID1 code / ID2 code (Hex)	F / F	
• Power consumption, overall	mA	≤ 60
Inputs		
• Low signal range	Contact open	
• High signal range	Contact closed, I_{in} dynamic ($I_{peak} \geq 5$ mA)	
Status display	Green/red dual LED	
Rated impulse withstand voltage U_{imp}	kV	0.6
EMC strength		
• IEC 61000-1-2	kV	4
• IEC 61000-4-3	V/m	10
• IEC 61000-4-4 (A / B)	kV	1 / 2
Mechanical endurance		
• Basic switch	15 × 10 ⁶ operating cycles	
• With separate actuator, 3SF1...-..V..	1 × 10 ⁶ operating cycles	
PFH value		
Probability of failure upon request of the safety function, with 1 actuation per hour and $B10 = 5 \times 10^6$		
• Basic switch	1/h	4 × 10 ⁻⁹
• With separate actuator, 3SF1...-..V..	1/h	2 × 10 ⁻⁹
• Hinge switches, 3SF1...-..U..	1/h	2 × 10 ⁻⁹
Shock resistance acc. to IEC 60068-2-27	30 g / 11 ms	

Type	3SF1234	3SF1134	3SF1244	3SF1214	3SF1114	3SF1124
Enclosure						
Enclosure	Ultramid A3X2G7			Zinc die casting GD Zn Al4 Cu1		
• Material						
• Width	mm	31	40	50	31	40
• Dimensions according to EN		EN 50047	EN 50041	--	EN 50047	EN 50041
Degree of protection acc. to IEC 60529		IP65	IP66/IP67			
Ambient temperature						
• During operation	°C	-25 ... +60				
• Storage, transport	°C	-40 ... +80				
Mounting position	Any					

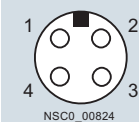
Connector assignment

M12 connector socket, 4-pole



- 1 ASi +
- 2 Not assigned
- 3 ASi -
- 4 Not assigned

M12 socket, 4-pole



- 1 Channel 2
- 2 Channel 2
- 3 Not assigned
- 4 Not assigned

LED

Status display (operating state)

LED	No voltage on AS-Interface chip	Communication OK	Communication failed	Slave has address "0"
ASi/Fault (GN/RD)				

Safe inputs

LED	Not actuated	Actuated		
F-IN1 (YE)				
F-IN2 (YE)				

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

3SF1, plastic enclosures, enclosure width 31 mm acc. to EN 50047 / 50 mm

Selection and ordering data

Modular system

For the ASIsafe version of the position switch, the basic switch and actuator must be ordered separately.

1 or 2 contacts · 3 LEDs · Degree of protection IP65 (31 mm) or IP66/IP67 (50 mm) · M12 connector socket

Version	Contacts	LEDs	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
			d	Article No.	Price per PU		

Basic switches (with rounded plunger¹⁾) Enclosure width 31 mm acc. to EN 50047



With teflon plunger

With M12 connector socket, 4-pole,
channel 1 on NC contact,
channel 2 on NC contact

Slow-action contacts 2 NC 24 V DC ⤴ 5

Snap-action contacts 2 NC 24 V DC ⤴ 5

3SF1234-1KC05-1BA1

1 1 unit 42A

3SF1234-1LC05-1BA1

1 1 unit 42A

3SF1234-1KC05-1BA1

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



With teflon plunger

With M12 connector socket, 4-pole,
channel 1 on NC contact,
channel 2 on M12 socket, right

Slow-action contacts 1 NC 24 V DC ⤴ 5

Snap-action contacts 1 NC 24 V DC ⤴ 5

3SF1244-1KC05-1BA2

1 1 unit 42A

3SF1244-1LC05-1BA2

1 1 unit 42A

3SF1244-1KC05-1BA2

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








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

Note:

For the selection aid, [see page 12/15](#).

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

3SF1, plastic enclosures, enclosure width 31 mm acc. to EN 50047 / 50 mm

Version	Roller diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm	d	Article No.	Price per PU		
Operating mechanisms						
 3SE5000-0AD03	Roller plungers, type C, acc. to EN 50047					
	Plastic roller	10	⊕ 2	3SE5000-0AD03	1	1 unit 41K
	High-grade steel roller	10	⊕ 5	3SE5000-0AD04	1	1 unit 41K
 3SE5000-0AD10	Roller plungers with central fixing					
	Plastic roller	10	⊕ 2	3SE5000-0AD10	1	1 unit 41K
	High-grade steel roller	10	⊕ 5	3SE5000-0AD11	1	1 unit 41K
 3SE5000-0AE10	Roller levers, type E, acc. to EN 50047					
	Metal lever, plastic roller	13	⊕ 2	3SE5000-0AE10	1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊕ 5	3SE5000-0AE11	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊕ 5	3SE5000-0AE12	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊕ 5	3SE5000-0AE13	1	1 unit 41K
 3SE5000-0AF10	Angular roller levers					
	Metal lever, plastic roller	13	⊕ 2	3SE5000-0AF10	1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊕ 5	3SE5000-0AF11	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊕ 2	3SE5000-0AF12	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊕ 5	3SE5000-0AF13	1	1 unit 41K
Twist actuators with lever						
 3SE5000-0AK00	Twist actuators, for 31/50 mm, EN 50047					
	Switching right or left, adjustable		⊕ 2	3SE5000-0AK00	1	1 unit 41K
Levers						
 3SE5000-0AA21	Twist levers, type A, acc. to EN 50047					
	Metal lever, plastic roller	19	⊕ 2	3SE5000-0AA21	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA22	1	1 unit 41K
	Metal lever, high-grade steel roller with ball bearing	19	⊕ 5	3SE5000-0AA23	1	1 unit 41K
	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA25	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA31	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA32	1	1 unit 41K
Twist levers 30 mm, straight¹⁾						
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA24	1	1 unit 41K
	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA26	1	1 unit 41K
 3SE5000-0AA60-	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA60	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA61	1	1 unit 41K
	Metal lever, plastic roller	50	⊕ 5	3SE5000-0AA67	1	1 unit 41K
	Metal lever, rubber roller	50	⊕ 5	3SE5000-0AA68	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA62	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA63	1	1 unit 41K

3SE5000-0AA60-

⊕ Positively driven actuator, for use in safety circuits.

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

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

3SF1, metal enclosures, enclosure width 31 mm acc. to EN 50047

Selection and ordering data

Modular system

For the ASIsafe version of the position switch, the basic switch and actuator must be ordered separately.

2 contacts · 3 LEDs · Degree of protection IP66/IP67 · M12 connector socket

Version	Contacts	LEDs	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
			d	<input checked="" type="checkbox"/>			
				Article No.	Price per PU		

Basic switches (with rounded plunger¹⁾) Enclosure width 31 mm acc. to EN 50047



With plunger

With M12 connector socket, 4-pole,
channel 1 on NC contact,
channel 2 on NC contact

Slow-action contacts	2 NC	24 V DC	⊕	5
Snap-action contacts	2 NC	24 V DC	⊕	5

3SF1214-1KC05-1BA1	1	1 unit	42A
3SF1214-1LC05-1BA1	1	1 unit	42A

3SF1214-1KC05-1BA1

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









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

Note:

For the selection aid, see page 12/15.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

3SF1, metal enclosures, enclosure width 31 mm acc. to EN 50047

Version	Roller diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm	d	Article No.	Price per PU		
Operating mechanisms						
	Plain plungers					
3SE5000-0AB01	High-grade steel plunger	10	⊕ 2	3SE5000-0AB01	1	1 unit 41K
	Roller plungers, type C, acc. to EN 50047					
3SE5000-0AD03	Plastic roller	10	⊕ 2	3SE5000-0AD03	1	1 unit 41K
	High-grade steel roller	10	⊕ 5	3SE5000-0AD04	1	1 unit 41K
	Roller plungers with central fixing					
3SE5000-0AD10	Plastic roller	10	⊕ 2	3SE5000-0AD10	1	1 unit 41K
	High-grade steel roller	10	⊕ 5	3SE5000-0AD11	1	1 unit 41K
	Roller levers, type E, acc. to EN 50047					
3SE5000-0AE10	Metal lever, plastic roller	13	⊕ 2	3SE5000-0AE10	1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊕ 5	3SE5000-0AE11	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊕ 5	3SE5000-0AE12	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊕ 5	3SE5000-0AE13	1	1 unit 41K
	Angular roller levers					
3SE5000-0AF10	Metal lever, plastic roller	13	⊕ 2	3SE5000-0AF10	1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊕ 5	3SE5000-0AF11	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊕ 2	3SE5000-0AF12	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊕ 5	3SE5000-0AF13	1	1 unit 41K
Twist actuators with lever						
	Twist actuators, for 31/50 mm, EN 50047					
3SE5000-0AK00	Switching right or left, adjustable		⊕ 2	3SE5000-0AK00	1	1 unit 41K
	Levers					
3SE5000-0AA21	Twist levers, type A, acc. to EN 50047					
	Metal lever, plastic roller	19	⊕ 2	3SE5000-0AA21	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA22	1	1 unit 41K
	Metal lever, high-grade steel roller with ball bearing	19	⊕ 5	3SE5000-0AA23	1	1 unit 41K
	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA25	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA31	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA32	1	1 unit 41K
	Twist levers 30 mm, straight¹⁾					
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA24	1	1 unit 41K
	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA26	1	1 unit 41K
	Twist levers, adjustable length, with grid hole					
3SE5000-0AA60	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA60	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA61	1	1 unit 41K
	Metal lever, plastic roller	50	⊕ 5	3SE5000-0AA67	1	1 unit 41K
	Metal lever, rubber roller	50	⊕ 5	3SE5000-0AA68	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA62	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA63	1	1 unit 41K

⊕ Positively driven actuator, for use in safety circuits.

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

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

3SF1, metal enclosures, enclosure width 40 mm acc. to EN 50041 / 56 mm

Selection and ordering data

Modular system

For the ASIsafe version of the position switch, the basic switch and actuator must be ordered separately.

1 or 2 contacts · 3 LEDs · Degree of protection IP66/IP67 · M12 connector socket

Version	Contacts	LEDs	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		

Basic switches - Enclosure width 40 mm acc. to EN 50041



With M12 connector socket, 4-pole, channel 1 on NC contact, channel 2 on NC contact

Slow-action contacts 2 NC 24 V DC ⌚ 5

Snap-action contacts 2 NC 24 V DC ⌚ 5

3SF1114-1KA00-1BA1

1 1 unit 42A

3SF1114-1LA00-1BA1

1 1 unit 42A

3SF1114-1KA00-1BA1

Basic switches - Enclosure width 56 mm



With M12 connector socket, 4-pole, channel 1 on NC contact, channel 2 on M12 socket, right

Slow-action contacts 1 NC 24 V DC ⌚ 5

Snap-action contacts 1 NC 24 V DC ⌚ 5

3SF1124-1KA00-1BA2

1 1 unit 42A

3SF1124-1LA00-1BA2

1 1 unit 42A

3SF1124-1KA00-1BA2

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

Note:

For the selection aid, see page 12/15.

Version	Roller diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
		mm	Article No.	Price per PU		

Operating mechanisms



3SE5000-0AB01

Plain plungers

High-grade steel plunger 10 ⌚ 2

3SE5000-0AB01

1 1 unit 41K



3SE5000-0AC02

Rounded plungers, type B, acc. to EN 50041

High-grade steel plunger, with 3 mm overtravel 10 ⌚ 5

3SE5000-0AC02

1 1 unit 41K



3SE5000-0AD02

Roller plungers, type C, acc. to EN 50041

High-grade steel roller, with 3 mm overtravel 13 ⌚ 5







3SE5000-0AD02

1 1 unit 41K

⌚ Positively driven actuator, for use in safety circuits.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

3SF1, metal enclosures, enclosure width 40 mm acc. to EN 50041 / 56 mm

Version	Roller diameter	SD	Modular system	PU (UNIT, SET, M)	PS*	PG	
	mm	d	Article No.	Price per PU			
Operating mechanisms							
 3SE5000-0AE01	Roller levers						
	Metal lever, plastic roller	22	⊕ 2	3SE5000-0AE01	1	1 unit 41K	
	Metal lever, high-grade steel roller	22	⊕ 5	3SE5000-0AE02	1	1 unit 41K	
	High-grade steel lever, plastic roller	22	⊕ 5	3SE5000-0AE03	1	1 unit 41K	
	High-grade steel lever, high-grade steel roller	22	⊕ 5	3SE5000-0AE04	1	1 unit 41K	
 3SE5000-0AF01	Angular roller levers						
	Metal lever, plastic roller	22	⊕ 2	3SE5000-0AF01	1	1 unit 41K	
	Metal lever, high-grade steel roller	22	⊕ 5	3SE5000-0AF02	1	1 unit 41K	
	High-grade steel lever, plastic roller	22	⊕ 5	3SE5000-0AF03	1	1 unit 41K	
	High-grade steel lever, high-grade steel roller	22	⊕ 5	3SE5000-0AF04	1	1 unit 41K	
Twist actuators with lever							
 3SE5000-0AH00	Twist actuators , for 40/56/56 XL mm EN 50041						
	• For twist levers, switching right or left, adjustable - For enclosure width 40 and 56 mm		⊕ 2	3SE5000-0AH00	1	1 unit 41K	
	• For fork levers, latching		⊕ 5	3SE5000-0AT10	1	1 unit 41K	
 3SE5000-0AA01	Levers						
	Twist levers 27 mm, offset, type A, acc. to EN 50041						
	Metal lever, plastic roller	19	⊕ 2	3SE5000-0AA01	1	1 unit 41K	
	Metal lever, high-grade steel roller	19	⊕ 2	3SE5000-0AA02	1	1 unit 41K	
	Metal lever, high-grade steel roller with ball bearing	19	⊕ 5	3SE5000-0AA03	1	1 unit 41K	
	Metal lever, 2 plastic rollers	19	⊕ 5	3SE5000-0AA04	1	1 unit 41K	
	Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA05	1	1 unit 41K	
	Metal lever, plastic roller	50	⊕ 5	3SE5000-0AA07	1	1 unit 41K	
	Metal lever, rubber roller	50	⊕ 5	3SE5000-0AA08	1	1 unit 41K	
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA11	1	1 unit 41K	
	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA12	1	1 unit 41K	
	Twist levers 35 mm, offset						
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA15	1	1 unit 41K	
High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA16	1	1 unit 41K		
Twist levers 30 mm, straight¹⁾							
Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA24	1	1 unit 41K		
Metal lever, plastic roller	30	⊕ 5	3SE5000-0AA26	1	1 unit 41K		
 3SE5000-0AA60	Twist levers, adjustable length, with grid hole						
	Metal lever, plastic roller	19	⊕ 5	3SE5000-0AA60	1	1 unit 41K	
	Metal lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA61	1	1 unit 41K	
	Metal lever, plastic roller	50	⊕ 5	3SE5000-0AA67	1	1 unit 41K	
	Metal lever, rubber roller	50	⊕ 5	3SE5000-0AA68	1	1 unit 41K	
	High-grade steel lever, plastic roller	19	⊕ 5	3SE5000-0AA62	1	1 unit 41K	
	High-grade steel lever, high-grade steel roller	19	⊕ 5	3SE5000-0AA63	1	1 unit 41K	
 3SE5000-0AT01	Fork levers (for switches with snap-action contacts only)						
	Metal lever, 2 plastic rollers	19	⊕ 5	3SE5000-0AT01	1	1 unit 41K	
	Metal lever, 2 high-grade steel rollers	19	⊕ 5	3SE5000-0AT02	1	1 unit 41K	
	High-grade steel lever, 2 plastic rollers	19	⊕ 5	3SE5000-0AT03	1	1 unit 41K	
	High-grade steel lever, 2 high-grade steel rollers	19	⊕ 5	3SE5000-0AT04	1	1 unit 41K	

⊕ Positively driven actuator, for use in safety circuits.

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

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface With Separate Actuator

General data

Overview

The 3SF1 safety switches with safety-related communication can be directly connected using the AS-Interface bus system. The safety functions no longer have to be wired up conventionally.

With the 3SF1 safety switches the ASIsafe electronics component is integrated in the switch enclosure.



3SF1 safety switches with head for separate actuator and with integrated ASIsafe electronics

3SF1 safety switches with separate actuator have the same enclosures as the 3SF1 position switches.

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 actuators are not included in the scope of supply of the safety switch and must be ordered separately from a choice of different versions to suit the application (see page 12/103).

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

A high-grade steel blocking insert for attaching up to eight padlocks is available for even more safety.

A rubber cap to protect the actuator head from contamination is available for operation in dusty environments.

Display

The switches have a status display with three LEDs:

- LED 1 (yellow): F-IN1
- LED 2 (yellow): F-IN2
- LED 3 (green/red): AS-i/FAULT

Connection

Connection to the AS-Interface is by means of a 4-pole M12 connector socket (plastic version) connected to the yellow AS-Interface bus cable.

The wide enclosures (50 or 56 mm) also have an M12 socket for connecting a second safety switch. Category 4 according to EN ISO 13849-1 is thus achieved.

Benefits

The new generation of 3SF1 safety switches with separate actuator offers

- ASIsafe electronics component integrated in the enclosure, with low power consumption < 60 mA
- An extensive range of actuators
- Status display with three LEDs

Application

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

The safety 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 and 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

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 fail-safe principle according to EN ISO 14119.

Approvals

AS-Interface according to EN 50295 and IEC 62026-2.

With a 3SF1 safety switch it is possible to achieve Category 3 according to EN ISO 13849-1 or SIL 2 according to IEC 61508.

Category 4 according to EN ISO 13849-1 or SIL 3 according to IEC 61508 can be achieved by using an additional 3SE5 safety switch.

The 3SF1 safety switches are approved according to UL 508, UL 50 and UL 746-C.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface With Separate Actuator

3SF1, plastic enclosures, enclosure width 31 mm acc. to EN 50047 / 50 mm

Overview

- Contacts: 1 or 2 slow-action contacts
- Status display with 3 LEDs 24 V DC;
1: F-IN1, 2: F-IN2, 3: AS-i/FAULT
- Degree of protection IP65 (31 mm) or IP66/IP67 (50 mm)

Selection and ordering data

Version ¹⁾	Contacts	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
			<input type="checkbox"/>			
		d	Article No.	Price per PU		

Enclosure width 31 mm acc. to EN 50047



5 directions of approach

With M12 connector socket, 4-pole,
channel 1 on NC contact,
channel 2 on NC contact
Slow-action contacts

2 NC

⊕ 5

3SF1234-1QV40-1BA1

1

1 unit

42A

3SF1234-1QV40-1BA1

Enclosure width 50 mm



5 directions of approach

With M12 connector socket, 4-pole;
channel 1 on NC contact,
channel 2 on M12 socket, right
Slow-action contacts

1 NC

⊕ 5

3SF1244-1QV40-1BA2

1

1 unit

42A

3SF1244-1QV40-1BA2

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

¹⁾ Supplied without actuator. Please order separately (see page 12/103).




SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface With Separate Actuator

3SF1, metal enclosures, enclosure width 31 mm acc. to EN 50047 / 40 mm acc. to EN 50041 / 56 mm

Overview

- Contacts: 1 or 2 slow-action contacts
- Status display with 3 LEDs 24 V DC;
1: F-IN1, 2: F-IN2, 3: AS-i/FAULT
- Degree of protection IP66/IP67

Selection and ordering data

Version ¹⁾	Contacts	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
			<input type="checkbox"/>			
		d	Article No.	Price per PU		
Enclosure width 31 mm acc. to EN 50047						
	5 directions of approach With M12 connector socket, 4-pole, channel 1 on NC contact, channel 2 on NC contact Slow-action contacts	2 NC	⊕ 5	3SF1214-1QV40-1BA1	1	1 unit 42A
3SF1214-1QV40-1BA1						
Enclosure width 40 mm acc. to EN 50041						
	5 directions of approach With M12 connector socket, 4-pole, channel 1 on NC contact, channel 2 on NC contact Slow-action contacts	2 NC	⊕ 5	3SF1114-1QV10-1BA1	1	1 unit 42A
3SF1114-1QV10-1BA1						
Enclosure width 56 mm						
	5 directions of approach With M12 connector socket, 4-pole, channel 1 on NC contact, channel 2 on M12 socket, right Slow-action contacts	1 NC	⊕ 5	3SF1124-1QV10-1BA2	1	1 unit 42A
3SF1124-1QV10-1BA2						











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

¹⁾ Supplied without actuator. Please order separately (see page 12/103).

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface With Separate Actuator

Accessories

Selection and ordering data

Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Actuators						
 3SE5000-0AV01		Standard actuator • Length 75.6 mm	▶	3SE5000-0AV01	1	1 unit 41K
 3SE5000-0AV02	5	• With vertical fixing, length 53 mm		3SE5000-0AV02	1	1 unit 41K
 3SE5000-0AV03	5	• With transverse fixing, length 47 mm		3SE5000-0AV03	1	1 unit 41K
 3SE5000-0AW11	5	• With transverse fixing, plastic ¹⁾ , length 40 mm		3SE5000-0AW11	1	1 unit 41K
Radius actuators						
 3SE5000-0AV04	2	• Length 51 mm, direction of approach from the left		3SE5000-0AV04	1	1 unit 41K
 3SE5000-0AV06		• Length 51 mm, direction of approach from the right	▶	3SE5000-0AV06	1	1 unit 41K
Universal radius actuator						
 3SE5000-0AV05-1AA6	5	- Length 77 mm		3SE5000-0AV05	1	1 unit 41K
	5	- Length 77 mm, tab rotated 90°		3SE5000-0AV05-1AA6	1	1 unit 41K
Universal radius actuator, heavy duty						
 3SE5000-0AV07	2	- Length 67 mm		3SE5000-0AV07-1AK2	1	1 unit 41K
	5	- Length 77 mm		3SE5000-0AV07	1	1 unit 41K
Optional accessories						
 3SE5000-0AV08-1AA2	5	Protective caps made of black rubber for the actuator head, to protect the actuator openings from contamination (Only for enclosure width 40 or 56 mm)		3SE5000-0AV08-1AA2	1	1 unit 41K
 3SE5000-0AV08-1AA3	5	Blocking inserts , high-grade steel, for actuator head, for up to eight padlocks		3SE5000-0AV08-1AA3	1	1 unit 41K

¹⁾ Not suitable for safety switches with tumbler.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface With Tumbler

General data

Overview

The 3SF1 safety switches with safety-related communication can be directly connected using the AS-Interface bus system. The safety functions no longer have to be wired up conventionally.

With the 3SF1 safety switches the ASIsafe electronics component is integrated in the switch enclosure.



3SF1 safety switch with tumbler and with integrated ASIsafe electronics

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 actuators are not included in the scope of supply of the safety switch and must be ordered separately from a choice of different versions to suit the application (see page 12/103).

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

A high-grade steel blocking insert for attaching up to eight padlocks is available for even more safety.

A rubber cap to protect the actuator entry of the actuator head from contamination is available for operation of the enclosures in dusty environments.

Tumbler

There are two versions for interlocking the actuator:

- Spring-actuated lock (closed-circuit principle) with various release mechanisms
- Solenoid-locked (open-circuit principle)

For more explanations, see page 12/64.

Display

The switches have a status display with four LEDs:

- LED 1 (green): AS-i
- LED 2 (red): FAULT
- LED 3 (yellow): F-IN1
- LED 4 (yellow): F-IN2

Connection

Connection to the AS-Interface is by means of a 4-pole M12 connector socket (plastic version) connected to the yellow AS-Interface bus cable (no additional supply of auxiliary power is required thanks to the low current consumption of the solenoid of max. 170 mA).

Benefits

The new generation of 3SF13 safety switches with tumbler offers:

- More safety through higher locking forces:
 - 1 300 N for the plastic version
 - 2 600 N for the metal version
- Various release mechanisms: Lock release, escape release and emergency release
- ASIsafe electronics integrated in the enclosure; connected through 4-pole M12 connector socket
- Current consumption of the solenoid no more than 170 mA
- Two contact blocks as standard equipment, hence fewer versions needed
- Same dimensions for all enclosure versions: Plastic, metal
- An extensive range of actuators
- Status display with four LEDs
- 3SF1324-1S.21-1BK4 series with high degree of protection IP69K, IP69 in accordance with IEC 60529, cover with foamed seal

Application

The safety switches with tumbler are exceptional safety-related devices which 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 switched-off machine).

The safety switches with tumbler 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 tumbler

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 fail-safe principle according to EN ISO 14119.

Approvals

AS-Interface according to EN 50295 and IEC 62026-2

The switches are approved for use with locking devices according to EN ISO 14119 and EN 292, Parts 1 and 2.

3SF13 safety switches with tumbler have a VDE test mark.

With a 3SF13 safety switch with tumbler it is possible to achieve Category 3 according to EN ISO 13849-1 or SIL 2 according to IEC 61508.

Category 4 according to EN ISO 13849-1 or SIL 3 according to IEC 61508 can be achieved by using an additional 3SE5 safety switch.

The 3SF1 safety switches are approved according to UL 508, UL 50 and UL 746-C.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface With Tumbler

3SF1, plastic enclosures with locking force greater than 1 200 N

Overview

Versions

- 1BA1: ASIsafe channel 1 on 1 NC contact from the actuator, and channel 2 on 1 NC contact from the solenoid
- 1BA3: ASIsafe channel 1 on the first NC contact from the actuator and channel 2 on the second NC contact from the actuator
- 1BA4: ASIsafe channel 1 on 2 NC contacts (two-channel) from the actuator, and channel 2 on 1 NC contact from the solenoid. The position switch transfers the information of actuators to a transfer channel because the discrepancy of the two actuator contacts is already evaluated in the switch.

The 3SF1324-1S.21-1BA4 safety switches are also recommended where there are several protective door tumblers and reliable diagnostics and quick restart capability of equipment is required.

- A response is received from the solenoid
- No opening of the doors required after the solenoid is unlocked.

In connection with an ASIsafe MSS modular safety system or an ET 200SP F-CM AS-i Safety ST module, it is possible to achieve SIL 2 according to IEC 61508 or PL d according to ISO 13849-1. They comply with the standard EN ISO 14119. A TÜV certificate is available.

Features:




- Slow-action contacts
- 5 directions of approach
- Solenoid: Rated operational voltage 24 V DC
- 1 300 N locking force
- Degree of protection IP66/IP67 (IP69K)
- Status display with 4 LEDs 24 V DC;
1: AS-i, 2: FAULT, 3: F-IN1, 4: F-IN2

Comparison of versions

Safety switches	Contacts	Achievable safety level	Diagnostics	Reclosing condition after unlocking the solenoid (depending on the type of evaluation)
Type	Actuator / solenoid		Feedback from the solenoid	
3SF1324-1S.21-1BA1	1 NC / 1 NC	SIL 1 / PL c	✓	Door does <u>not</u> have to be opened
	1 NC / 1 NC	SIL 2 / PL d	✓	Door must be opened
3SF1324-1S.21-1BA3	2 NC / --	SIL 2 / PL d	--	Door does <u>not</u> have to be opened
3SF1324-1S.21-1BA4	2 NC / 1 NC	SIL 2 / PL d	✓	Door does <u>not</u> have to be opened
3SF1324-1S.21-1BK4 (IP69K)	2 NC / 1 NC	SIL 2 / PL d	✓	Door does <u>not</u> have to be opened

✓ Available -- Not available

Selection and ordering data

Tumbler ¹⁾	Contacts Actuator / Solenoid	SD	Complete units	PU (UNIT, SET, M)	PS*	PG
		d	Article No.	Price per PU		
1 300 N locking force · Enclosure width 54 mm						
Spring-actuated locks						
	• With auxiliary release	1 NC / 1 NC	⊕ 5	3SF1324-1SD21-1BA1	1	1 unit 42A
		2 NC / --	⊕ 5	3SF1324-1SD21-1BA3	1	1 unit 42A
		2 NC / 1 NC	⊕ 5	3SF1324-1SD21-1BA4	1	1 unit 42A
	- Degree of protection IP69 acc. to 60529; IP69K acc. to DIN 40050	2 NC / 1 NC	⊕ 5	3SF1324-1SD21-1BK4	1	1 unit 42A
	• With auxiliary release with lock	1 NC / 1 NC	⊕ 5	3SF1324-1SE21-1BA1	1	1 unit 42A
3SF1324-1SD21-1BA1						
	• With escape release from the front	1 NC / 1 NC	⊕ 5	3SF1324-1SF21-1BA1	1	1 unit 42A
		2 NC / 1 NC	⊕ 5	3SF1324-1SF21-1BA4	1	1 unit 42A
		2 NC / 1 NC	⊕ 5	3SF1324-1SF21-1BK4	1	1 unit 42A
	- Degree of protection IP69 acc. to 60529; IP69K acc. to DIN 40050	2 NC / 1 NC	⊕ 5	3SF1324-1SG21-1BA1	1	1 unit 42A
	• With escape release from the back and auxiliary release from the front	1 NC / 1 NC	⊕ 5	3SF1324-1SG21-1BA1	1	1 unit 42A
	2 NC / 1 NC	⊕ 5	3SF1324-1SG21-1BA4	1	1 unit 42A	
	2 NC / 1 NC	⊕ 5	3SF1324-1SG21-1BK4	1	1 unit 42A	
3SF1324-1SF21-1BA1						
	• With emergency release from the back and auxiliary release from the front	1 NC / 1 NC	⊕ 5	3SF1324-1SJ21-1BA1	1	1 unit 42A
		1 NC / 1 NC	⊕ 5	3SF1324-1SB21-1BA1	1	1 unit 42A
3SF1324-1SB21-1BA1						
	2 NC / --	⊕ 5	3SF1324-1SB21-1BA3	1	1 unit 42A	

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

¹⁾ Supplied without actuator. Please order separately. For actuators and optional accessories, see page 12/70.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface With Tumbler

3SF1, metal enclosures with locking force greater than 2 000 N

Overview

Version

- 1BA1: ASIsafe channel 1 on 1 NC contact from the actuator, and channel 2 on 1 NC contact from the solenoid

Features




- Slow-action contacts
- Solenoid: Rated operational voltage 24 V DC
- 2 600 N locking force
- Degree of protection IP66/IP67
- Status display with 4 LEDs 24 V DC;
1: AS-i, 2: FAULT, 3: F-IN1, 4: F-IN2

Comparison of versions

Safety switches	Contacts	Achievable safety level	Diagnostics	Reclosing condition after unlocking the solenoid (depending on the type of evaluation)
Type	Actuator / solenoid		Feedback from the solenoid	
3SF1314-1S.11-1BA1	1 NC / 1 NC	SIL 1 / PL c	✓	Door does <u>not</u> have to be opened

✓ Available

Selection and ordering data

Tumbler ¹⁾	Contacts Actuator / Solenoid	SD	Complete units <input type="checkbox"/>	PU (UNIT, SET, M)	PS*	PG
			Article No.	Price per PU		
2 600 N locking force · Enclosure width 54 mm						
	Spring-actuated locks					
	• With auxiliary release	1 NC / 1 NC	⊕ 5	3SF1314-1SD11-1BA1	1	1 unit 42A
	• With auxiliary release with lock	1 NC / 1 NC	⊕ 5	3SF1314-1SE11-1BA1	1	1 unit 42A
3SF1314-1SD11-1BA1						
	• With escape release from the front	1 NC / 1 NC	⊕ 5	3SF1314-1SF11-1BA1	1	1 unit 42A
	• With escape release from the back and auxiliary release from the front	1 NC / 1 NC	⊕ 5	3SF1314-1SG11-1BA1	1	1 unit 42A
	• With escape release from the back and auxiliary release with lock from the front	1 NC / 1 NC	⊕ 5	3SF1314-1SH11-1BA1	1	1 unit 42A
	• With emergency release from the back and auxiliary release from the front	1 NC / 1 NC	⊕ 5	3SF1314-1SJ11-1BA1	1	1 unit 42A
3SF1314-1SF11-1BA1						
	Solenoid-locked	1 NC / 1 NC	⊕ 5	3SF1314-1SB11-1BA1	1	1 unit 42A
3SF1314-1SB11-1BA1						

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

¹⁾ Supplied without actuator. Please order separately.

For actuators and optional accessories, see page 12/70.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface Safety Hinge Switches

3SF1, plastic enclosures, enclosure width 31 mm acc. to EN 50047 / 50 mm

Overview

The 3SF1 safety hinge switches with safety-related communication can be directly connected using the AS-Interface bus system. The safety functions no longer have to be wired up conventionally.

With the 3SF1 hinge switches the ASIsafe electronics component is integrated in the switch enclosure.

The hinge switches are provided for mounting on hinges. There are two actuator variants here:

- Hollow shaft, inner diameter 8 mm, outer 12 mm
- Solid shaft, diameter 10 mm


For the ASIsafe version of the hinge switch, the basic switch and actuator head must be ordered separately. The basic switches correspond to the 3SF1 position switches (use only versions with snap-action contacts).

The provisions and approvals are the same as for the 3SF1 standard switches ([see page 12/92](#)).

Selection and ordering data

Modular system

1 or 2 contacts · 3 LEDs · Degree of protection IP65 (31 mm) or IP66/IP67 (50 mm) · M12 connector socket

Version	Contacts	LEDs	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
							
				Article No.	Price per PU		

Basic switches · Enclosure width 31 mm acc. to EN 50047



3SF1234-1LC05-1BA1

With Teflon plunger, with M12 connector socket, 4-pole, channel 1 on NC contact, channel 2 on NC contact

Snap-action contacts

2 NC

24 V DC



5

3SF1234-1LC05-1BA1

1

1 unit

42A

Basic switches · Enclosure width 50 mm



3SF1244-1LC05-1BA2

With Teflon plunger, with M12 connector socket, 4-pole, channel 1 on NC contact, channel 2 on M12 socket, right

Snap-action contacts

1 NC

24 V DC



5

3SF1244-1LC05-1BA2

1

1 unit

42A

Actuator heads



3SE5000-0AU21

With hollow shaft

Operating angle 10°

5

3SE5000-0AU21

1

1 unit

41K



3SE5000-0AU22

With solid shaft

Operating angle 10°

5

3SE5000-0AU22

1

1 unit

41K

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

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface Safety Hinge Switches

3SF1, metal enclosures, enclosure width 31 mm acc. to EN 50047 / 40 mm acc. to EN 50041 / 56 mm

Overview

The 3SF1 safety hinge switches with safety-related communication can be directly connected using the AS-Interface bus system. The safety functions no longer have to be wired up conventionally.

With the 3SF1 hinge switches the ASIsafe electronics component is integrated in the switch enclosure.

The hinge switches are provided for mounting on hinges. There are two actuator variants here:

- Hollow shaft, inner diameter 8 mm, outer 12 mm
- Solid shaft, diameter 10 mm






For the ASIsafe version of the hinge switch, the basic switch and actuator head must be ordered separately. The basic switches correspond to the 3SF1 position switches (use only versions with snap-action contacts).

The provisions and approvals are the same as for the 3SF1 standard switches ([see page 12/92](#)).

Selection and ordering data

Modular system

1 or 2 contacts · 3 LEDs · Degree of protection IP66/IP67 · M12 connector socket

Version	Contacts	LEDs	SD	Modular system	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Basic switches · Enclosure width 31 mm acc. to EN 50047							
	With plunger With M12 connector socket, 4-pole, channel 1 on NC contact, channel 2 on NC contact Snap-action contacts	2 NC	24 V DC	⊕ 5	3SF1214-1LC05-1BA1	1	1 unit 42A
3SF1214-1LC05-1BA1							
Basic switches · Enclosure width 40 mm acc. to EN 50041							
	With M12 connector socket , 4-pole, channel 1 on NC contact, channel 2 on NC contact Snap-action contacts	2 NC	24 V DC	⊕ 5	3SF1114-1LA00-1BA1	1	1 unit 42A
3SF1114-1LA00-1BA1							
Basic switches · Enclosure width 56 mm							
	With M12 connector socket , 4-pole, channel 1 on NC contact, channel 2 on M12 socket, right Snap-action contacts	1 NC	24 V DC	⊕ 5	3SF1124-1LA00-1BA2	1	1 unit 42A
3SF1124-1LA00-1BA2							
Actuator heads							
	Hollow shaft Operating angle 10°			5	3SE5000-0AU21	1	1 unit 41K
3SE5000-0AU21							
	Solid shaft Operating angle 10°			5	3SE5000-0AU22	1	1 unit 41K
3SE5000-0AU22							

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

SIRIUS 3SE6 Non-Contact Safety Switches Magnet

3SE66, 3SE67 magnetically operated switches

Overview



3SE66 contact blocks and 3SE67 switching magnets

A magnetically operated switch comprises a coded switching magnet and a contact block (sensor unit). The switch must be connected to a safety relay, e.g. SIRIUS 3SK1, or a bus system, e.g. SIMATIC ET 200SP, for evaluation. The switches use reed contacts as mechanical contacts. The status of the contacts is monitored using an evaluation unit.



3SE66 contact blocks and 3SE67 switching magnets, supplementary range in new design

Safety relays

3SK safety relays can be used worldwide since they possess all the required certification. Since they satisfy the most exacting safety requirements, they are suitable for all kinds of safety applications.

The following can be selected:

- 3SK1 Standard basic units: simple and compact to satisfy all the essential requirements of safety sensor monitoring systems
- 3SK1 Advanced basic units: multifunctional series with relay enabling circuits, semiconductor outputs or time-delay outputs
- 3SK2 basic units: multifunctional series whose functionality is parameterized using software. The basic units have solid-state outputs. Relay outputs from the 3SK1 portfolio can also be connected via device connectors.
- Expansion units for inputs and outputs

The 3SE6806 safety relay is also available with two floating enabling circuits (safe circuits) as NO contact circuits and one floating signaling circuit as an NC contact circuit.

Benefits

Standard range

- Non-contact round, rectangular, small (25 mm x 33 mm) and larger (25 mm x 88 mm) versions
- Small, compact, safe
- Simple mounting with alignment of sensor and actuator, and concealed installation also easy
- Suitable for restricted spaces

Supplementary range

- New design for rectangular shape
- More functionality
- Greater switching intervals and a larger horizontal or vertical displacement
- Various mounting positions possible (e.g. at 90° offset)
- SIL 3 and PL e diagnostics possible because there are two safety contacts and one signaling contact
- LED variant
- Fast connection possible using plug-in variants

SIRIUS 3SE6 Non-Contact Safety Switches Magnet

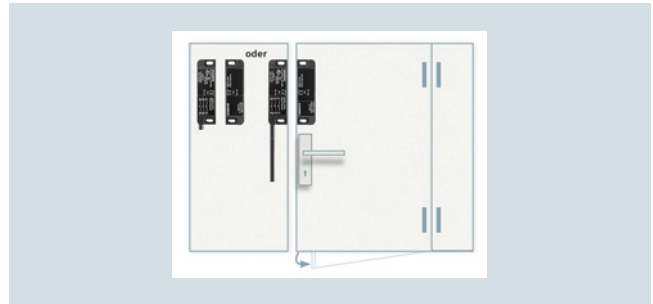
3SE66, 3SE67 magnetically operated switches

Application

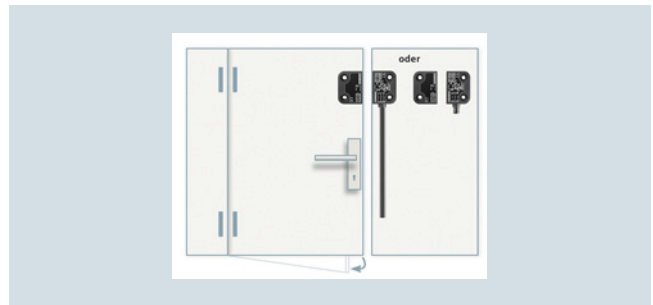
SIRIUS 3SE6 magnetically operated switches are designed for mounting on movable protective guards (hoods, hinged covers, doors, etc.). Evaluation can be performed by means of a safety relay or through connection to a bus system.

The 3SE66 non-contact, magnetically operated safety switches stand out due to their enclosed design with degree of protection IP67. Since they are coded, they do not have to be concealed when installed. 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 (+ 1 NC signaling contact) or 2 NC (+ 1 NC signaling contact) are used, the 3SK safety relay, for example, provides a high degree of protection against manipulation and can be installed in safety circuits up to SIL 3 according to IEC 62061 and PL e according to EN ISO 13849-1.



Non-contact safety magnetically operated switches (with plug or cable) for right-hinged door



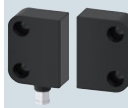

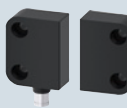








Non-contact safety magnetically operated switches (with plug or cable) for left-hinged door

SIRIUS 3SE6 Non-Contact Safety Switches Magnet

3SE66, 3SE67 magnetically operated switches

Combination of monitoring units and magnetically operated switches

Monitoring units		Magnetically operated switches (contact block + switching magnet)			Achievable SIL (IEC 61508, IEC 62061) Performance Level (EN ISO 13849-1)
		1 NO + 1 NC 3SE6605-.BA..  3SE6704-.BA	2 NC 3SE6604-2BA.. 1 NO + 2 NC 3SE6606-2BA04  3SE6704-2BA	--	
		1 NO + 1 NC (+ 1 NC signaling contact) 3SE6616-3CA01 3SE6626-3CA01  3SE6714-3CA 3SE6724-3CA	2 NC; 2 NC (+ 1 NC signaling contact) 3SE6614-4CA01 3SE6624-4CA01 3SE6617-2CA01 3SE6627-2CA01 3SE6617-2CA04 3SE6627-2CA04  3SE6714-2CA 3SE6724-2CA	2 NC (+ 1 NC signaling contact) 3SE6617-3CA01 3SE6627-3CA01 3SE6617-3CA04 3SE6627-3CA04  3SE6714-3CA 3SE6724-3CA	
Relay output					
SIRIUS safety relays	3SK1121, 3TK2826 	✓	✓	✓	SIL 3/PL e
Solid-state outputs					
SIRIUS safety relays	3SK1112, 3SK1122 	--/✓	✓	✓	SIL 3/PL e
	3SK2112, 3SK2122 	✓	✓	✓	SIL 3/PL e
	3TK2845 	--	✓	✓	SIL 3/PL e
ASIsafe compact safety modules	3RK1205, 3RK1405 	--	✓	✓	SIL 3/PL e
Modular Safety System (MSS)	3RK3 	✓	✓	✓	SIL 3/PL e
SIMATIC S7-1200F	F-DI 16 x 24 V DC	✓	✓	✓	SIL 3/PL e
SIMATIC ET 200SP PROFIsafe	4/8 F-DI, 24 V DC	✓	✓	✓	SIL 3/PL e
SIMATIC ET 200eco	4/8 F-DI, 24 V DC	✓	✓	✓	SIL 3/PL e
SIMATIC ET 200pro	8/16 F-DI, 24 V DC, 4/8 F-DI / 4 F-DO 2 A, 24 V DC, F-Switch	✓	✓	✓	SIL 3/PL e
SIMATIC ET 200SP	8F-DI, 24 V DC F-PM-E 24 V DC	✓	✓	✓	SIL 3/PL e
SIMATIC ET 200MP	16 F-DI, 24 V DC	✓	✓	✓	SIL 3/PL e

✓ Suitable magnetically operated switch

-- Not available

SIRIUS 3SE6 Non-Contact Safety Switches

Magnet

3SE66, 3SE67 magnetically operated switches

Selection and ordering data

Version	Size	Contacts	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	mm		d					
Standard range – Round sensor units								
	Switching magnet (coded)	M30	--	2	3SE6704-1BA		1	1 unit 41K
3SE6704-1BA								
	Contact blocks							
	• With cable 3 m	M30	1 NO + 1 NC	2	3SE6605-1BA		1	1 unit 41K
	• With M12 plug, 4-pole	M30	1 NO + 1 NC	2	3SE6605-1BA02		1	1 unit 41K
3SE6505-1BA								
Standard range – Rectangular sensor units								
	Switching magnet (coded)	25 × 88	--	2	3SE6704-2BA		1	1 unit 41K
3SE6704-2BA								
	Contact blocks							
	• With cable 3 m	25 × 88	1 NO + 1 NC 2 NC	2 2	3SE6605-2BA 3SE6604-2BA		1 1	1 unit 41K 1 unit 41K
			1 NO + 2 NC	10	3SE6606-2BA04		1	1 unit 41K
	• With cable 10 m	25 × 88	1 NO + 1 NC 2 NC	2 2	3SE6605-2BA10 3SE6604-2BA10		1 1	1 unit 41K 1 unit 41K
	• With M8 plug, 4-pole	25 × 88	1 NO + 1 NC 2 NC	2 2	3SE6605-2BA01 3SE6604-2BA01		1 1	1 unit 41K 1 unit 41K
3SE660.-2BA								
	Switching magnet (coded)	25 × 33	--	2	3SE6704-3BA		1	1 unit 41K
3SE660.-3BA								
	Contact blocks							
	• With cable 3 m	25 × 33	1 NO + 1 NC	2	3SE6605-3BA		1	1 unit 41K
	• With cable 5 m			2	3SE6605-3BA05		1	1 unit 41K
	• With cable 10 m			2	3SE6605-3BA10		1	1 unit 41K
3SE660.-3BA								
Supplementary range in new design – Rectangular sensor units for left-hinged door								
	Switching magnets (coded)	25 × 88	--	5	3SE6714-2CA		1	1 unit 41K
3SE6714-2CA								
	• 90° offset			5	3SE6724-2CA		1	1 unit 41K
	Contact blocks							
	• With M8 plug, 4-pole, with LED	25 × 88	2 NC	5	3SE6614-4CA01		1	1 unit 41K
	• 8 mm Ø, latching connection, plug, 6-pole		2 NC + 1 NC ¹⁾	5	3SE6617-2CA01		1	1 unit 41K
	• With cable 3 m		2 NC + 1 NC ¹⁾	5	3SE6617-2CA04		1	1 unit 41K
3SE6614-4CA01								
	Switching magnets (coded)	26 × 36	--	5	3SE6714-3CA		1	1 unit 41K
3SE6714-3CA								
	• 90° offset			5	3SE6724-3CA		1	1 unit 41K
	Contact blocks							
	• 8 mm Ø, latching connection, plug, 6-pole	26 × 36	1 NO + 1 NC + 1 NC ¹⁾	5	3SE6616-3CA01		1	1 unit 41K
			2 NC + 1 NC ¹⁾	5	3SE6617-3CA01		1	1 unit 41K
	• With cable 3 m		2 NC + 1 NC ¹⁾	5	3SE6617-3CA04		1	1 unit 41K
3SE6616-3CA01								

¹⁾ The second NC is a signaling contact, not a safety contact.

SIRIUS 3SE6 Non-Contact Safety Switches Magnet

3SE66, 3SE67 magnetically operated switches

Version	Size	Contacts	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
	mm		d						
Supplementary range in new design – Rectangular sensor units for right-hinged door									
	Switching magnets (coded)								
	• Same level	25 x 88	--	5	3SE6714-2CA		1	1 unit	41K
	• 90° offset			5	3SE6724-2CA		1	1 unit	41K
	Contact blocks								
	• With M8 plug, 4-pole, with LED	25 x 88	2 NC	5	3SE6624-4CA01		1	1 unit	41K
	• 8 mm Ø, latching connection, plug, 6-pole		2 NC + 1 NC ¹⁾	5	3SE6627-2CA01		1	1 unit	41K
	• With cable 3 m		2 NC + 1 NC ¹⁾	5	3SE6627-2CA04		1	1 unit	41K
	Switching magnets (coded)								
	• Same level	26 x 36	--	5	3SE6714-3CA		1	1 unit	41K
	• 90° offset			5	3SE6724-3CA		1	1 unit	41K
	Contact blocks								
	• 8 mm Ø, latching connection, plug, 6-pole	26 x 36	1 NO + 1 NC + 1 NC ¹⁾	5	3SE6626-3CA01		1	1 unit	41K
			2 NC + 1 NC ¹⁾	5	3SE6627-3CA01		1	1 unit	41K
	• With cable 3 m		2 NC + 1 NC ¹⁾	5	3SE6627-3CA04		1	1 unit	41K
Accessories for standard range									
	Spacer								
		25 x 88	--	2	3SX3260		1	1 unit	41K
	Spacer								
		25 x 33	--	2	3SX3261		1	1 unit	41K
	Coupling								
	With connecting cable, 5 m								
	• With M8 socket, 4-pole		--	5	3SX5601-3GA05		1	1 unit	41K
Accessories for supplementary range in new design									
	Spacer								
		25 x 88	--	2	3SX5600-2GA01		1	1 unit	41K
	Spacer								
		26 x 36	--	2	3SX5600-2GA02		1	1 unit	41K
	Coupling								
	With connecting cable, 5 m								
	• With M8 socket, 4-pole		--	5	3SX5601-3GA05		1	1 unit	41K
	• With 8 mm socket Ø, 8 mm, latching connection, 6-pole		--	5	3SX5601-4GA05		1	1 unit	41K

¹⁾ The second NC is a signaling contact, not a safety contact.

SIRIUS 3SE6 Non-Contact Safety Switches

Magnet

3SE66, 3SE67 magnetically operated switches

Version	Rated control voltage	Number of sensors	Enabling/signaling circuits	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
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Monitoring units

3SK1 safety relays

Standard or Advanced basic units

With relay output	24 V DC	6 ¹⁾	3 NO/1 NC	▶	3SK1121-1AB40		1	1 unit	41L
With semiconductor output	24 V DC	1	2 x F-DQ/1 QM	2	3SK1112-1BB40		1	1 unit	41L



3SK1111-1AB30

3SK2 safety relays

Basic units

With semiconductor output	24 V DC	5	2 x F-DQ/1 QM	2	3SK2112-1AA10		1	1 unit	41L
		10	4 x F-DQ/2 QM	2	3SK2122-1AA10		1	1 unit	41L



3SK2112-1AA10

3SE68 safety relay

With relay output, 6-fold	24 V DC	6	2 S/1 NC	5	3SE6806-2CD00		1	1 unit	41K
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3SE6806-2CD00

¹⁾ Only when up to 5 3SK1220 expansion units are used, see page 11/23.

For more monitoring units, see pages 2/1, 8/1, 9/1 and 11/1, as well as Catalog I K PI.

Overview



Non-contact RFID safety switches with maximum tamper resistance

RFID 3SE63 non-contact safety switches comply with the highest safety requirements, SIL 3 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 variant 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.

Mounting and maintenance

Various options for mounting save on enclosure variants:

- Mounting of the switch on the right or left side
- The actuator can be mounted on all sides

Quick and easy mounting thanks to universal mounting holes:

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

Little adjustment or maintenance required:

- Threshold indication by LED display on the switch for quick and easy adjustment during mounting 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

Optional accessories (mounting)

- 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 high-pressure cleaners, for example

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 detection 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 proof diagnostics output. The signals can then be used for central displays or non-safety-related control tasks.

There are the following diagnostics functions:

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

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 function of a safety switch results in the disconnection of the safety channels after a 30-minute delay. However, the diagnostics output switches off instantaneously.

SIRIUS 3SE6 Non-Contact Safety Switches RFID

3SE63 RFID safety switches

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 detection 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
- Two solid-state 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 hinge switches 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 IP69(K)
IP69 does not automatically mean that it can be used outdoors. The devices must be installed with corresponding protection for this purpose. UV radiation additionally affects the enclosure.
- 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 non-contact 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 suitable for solid-state inputs and in which the built-in crossover monitoring function can be deactivated, e.g.:

Monitoring units	
Relay output	
SIRIUS safety relays	3SK1111-. AB30, 3SK1121
SIRIUS safety relays	3TK2826-. BB4.
Solid-state outputs	
SIRIUS safety relays	3SK1112, 3SK1122, 3SK2112, 3SK2122
SIRIUS safety relays	3TK2841, 3TK2842, 3TK2845, 3TK2853-. BB40
Modular Safety System (MSS)	
3RK3 (safe inputs)	
SIMATIC ET 200S	6ES7138-4FA0.-0AB0 6ES7138-4FC0.-0AB0
SIMATIC ET 200M	6ES7326-1BK0.-0AB0
SIMATIC ET 200eco	6ES7148-3FA00-0XB0
SIMATIC ET 200pro	6ES7148-4F.00-0AB0
SIMATIC ET 200SP	6ES7136-6BA00-0CA0 6ES7136-6PA00-0BC0
SIMATIC ET 200MP	6ES7526-3BH00-0AB0
SIMATIC S7-1200F	6ES7226-6BA32-0XB0

These safety categories can be achieved in safety circuits:

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

Technical specifications

Type	3SE63	
General data		
Standards	IEC 60947-5-3, IEC 61508, EN ISO 13849-1, EN ISO 14119	
Enclosure material	Glass-fiber reinforced thermoplast, self-extinguishing	
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	

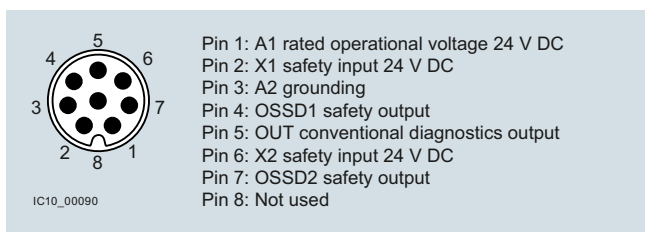
Type	3SE63	
Electrical specifications		
Rated insulation voltage U_i	V	32
Degree of pollution acc. to IEC 60664-1		3
Rated impulse withstand voltage U_{imp}	V	800
Rated conditional short-circuit current	A	100
Rated operational voltage U_e (PELV acc. to EN 60204-1)	V DC	24 -15/+10%
Protection class	II	
Overvoltage category	III	
Rated operational current I_e	A	0.6
Lowest operating current I_m	mA	0.5
No-load current I_0	mA	35

SIRIUS 3SE6 Non-Contact Safety Switches RFID

3SE63 RFID safety switches

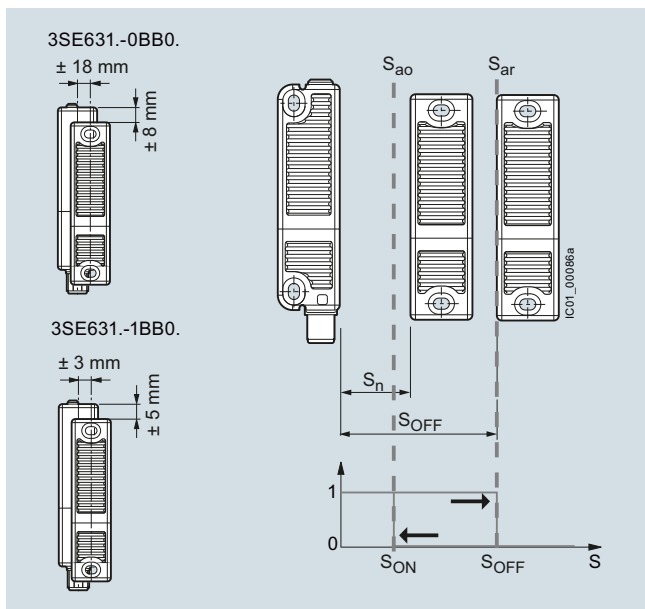
Type	3SE63	
Inputs/outputs		
Safety inputs X1/X2		
• Input voltage	V DC	24 -15/+10%
• Power consumption per input	mA	5
Safety outputs OSSD1/OSSD2		
		p operation
• Max. rated operating current $I_{e\ max}$	A	0.25
• Rated operational current I_e /DC-12/DC-13 at U_e	A	0.25
• Voltage drop U_e	V	< 1
• Switching frequency	Hz	1
• Response time, max.	ms	100
• Risk time, max.	ms	200
• Recovery, max.	s	5
Diagnostics output		
		p operation
• Max. rated operating 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

Connector assignment

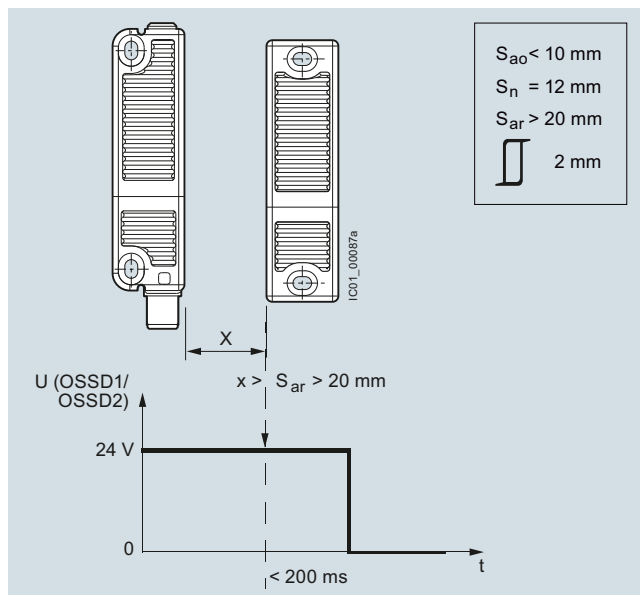


Directions of approach and switching interval

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. ± 18 mm.



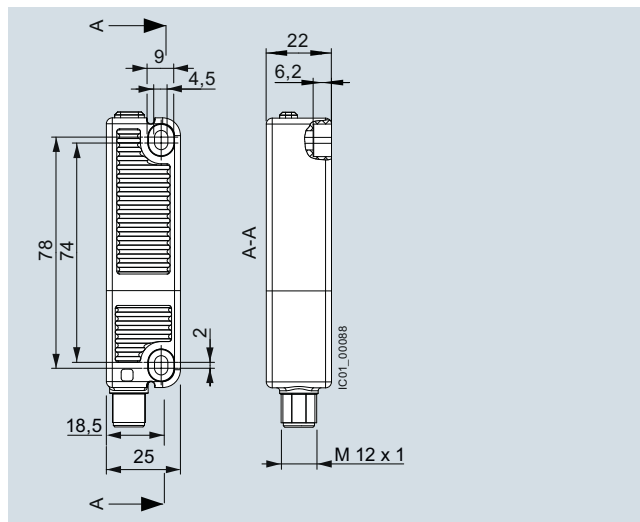
Switching interval: Output signal with hysteresis



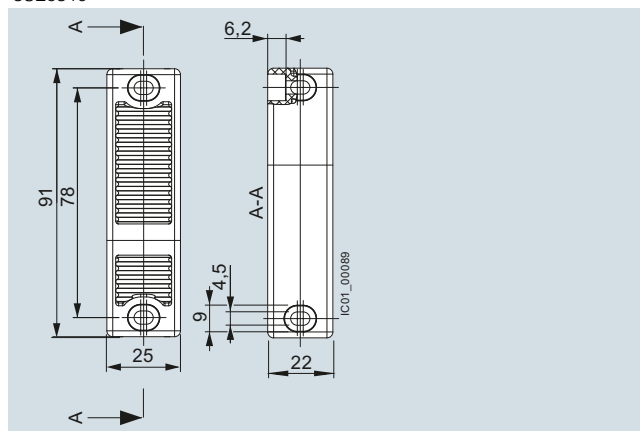
Switching interval: Output signal with OFF delay

Dimension drawings

RFID switch 3SE6315



RFID actuator 3SE6310







SIRIUS 3SE6 Non-Contact Safety Switches

RFID

3SE63 RFID safety switches

Selection and ordering data

With M12 connector, 8-pole

Version/coding	Latching/length	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Rectangular safety switches 91 mm x 25 mm¹⁾								
 <p>3SE6315</p>	RFID safety switch							
	• Family coded	None	2	3SE6315-0BB01		1	1 unit	41K
		With 18 N magnetic catch	2	3SE6315-1BB01		1	1 unit	41K
	• Individually coded, programmable several times	None	2	3SE6315-0BB02		1	1 unit	41K
		With 18 N magnetic catch	2	3SE6315-1BB02		1	1 unit	41K
	• Individually coded, programmable once	None	2	3SE6315-0BB03		1	1 unit	41K
	With 18 N magnetic catch	2	3SE6315-1BB03		1	1 unit	41K	
 <p>3SE6310</p>	RFID actuator							
	• Standard	None	2	3SE6310-0BC01		1	1 unit	41K
	With 18 N magnetic catch	2	3SE6310-1BC01		1	1 unit	41K	
Optional accessories								
 <p>3SX5600-1G</p>	Covers and spacers		2	3SX5600-1G		1	1 unit	41K
	One pack (1 unit) contains 8 covers and 4 spacers							
 <p>3SX5601-2GA03</p>	Connecting cables, 8-pole, with 1 straight M12 socket		Length 3 m	2	3SX5601-2GA03	1	1 unit	41K
			Length 5 m	2	3SX5601-2GA05	1	1 unit	41K
			Length 10 m	2	3SX5601-2GA10	1	1 unit	41K
		Rated voltage 30 V						
		Rated current 2 A						

¹⁾ Not connectable via AS-i modules.

Monitoring units, see pages 8/1, 9/1 and 11/1.