

Position and Safety Switches



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Position and Safety Switches

Introduction

Overview



	Position switches, standard					Safety hinge switches	
Enclosure							
Plastic	✓	✓	✓	--	--	✓	✓
Metal	✓	--	✓	✓	✓	✓	✓
Dimensions (W x H x D) in mm	31 x 68 x 33	50 x 53 x 33	40 x 78 x 38	56 x 78 x 38	56 x 100 x 38	31 x 68 x 33	40 x 78 x 38
Degree of protection	IP65, IP66/IP67	IP66/IP67	IP66/IP67	IP66/IP67	IP66/IP67	IP65, IP66/IP67	IP66/IP67
Standards	Mounting and operating points acc. to EN 50047	Operating points acc. to EN 50047	Mounting and operating points acc. to EN 50041	Operating points acc. to EN 50041	Operating points acc. to EN 50047	Mounting and operating points acc. to EN 50047	Mounting and operating points acc. to EN 50041
IEC 60947-5-1							
Approvals	CE, UL, CSA, CCC		CE, UL, CSA, CCC		CE, UL, CSA, CCC		
Contact blocks							
2 slow-action contacts	1 NO + 1 NC, 2 NC		1 NO + 1 NC, 2 NC		2 x (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	
• 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		--	--	
• With make-before-break	1 NO + 2 NC		1 NO + 2 NC		2 x (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		
Conventional thermal current I_{the}	6 A/10 A (3-/2-pole)		6 A/10 A (3-/2-pole)		6 A/10 A (3-/2-pole)		
Connections							
Cable entry	1 x M20 x 1.5	2 x M20 x 1.5	1 x M20 x 1.5	3 x M20 x 1.5	3 x M20 x 1.5	1 x M20 x 1.5	1 x M20 x 1.5
M12 connector socket, 4-, 5- or 8-pole	✓	✓	✓	✓	✓	✓	✓
Connector socket, 6-pole + PE	--	--	✓	✓	--	--	--
Actuators							
Rounded plungers and roller plungers	✓		✓		✓	--	
Roller levers and angular roller levers	✓		✓		✓	--	
Spring rod	✓		✓		--	--	
Twist levers and rod actuators	✓		✓		✓	--	
Fork lever	--		✓		--	--	
Hinge switches	--		--		--	✓	
Page							
Complete units	12/14, 12/32	12/24	12/20, 12/36	12/40	12/44	12/78	12/79
Modular system	12/18, 12/34	12/26	12/22, 12/38	12/42	12/45	--	--
Ambient temperature -40 °C	12/28, 12/48	12/28	12/31, 12/49	12/50	12/50	--	--
ASIsafe	12/84, 12/86	12/84	12/88	12/88	--	12/97	12/98

✓ Available

-- Not available



	Compact design	Open-type	Safety switches with separate actuator		Safety switches with solenoid interlocking	RFID safety switches
Enclosure						
Plastic	--	✓	✓	✓	✓	✓
Metal	✓	--	✓	✓	✓	--
Dimensions (W x H x D) in mm	30 x .. x .., 40 x .. x ..	30 x 48.5 x 20	31 x 68 x 33, 50 x 53 x 33	40 x 78 x 38, 56 x 78 x 38	54 x 185 x 44	25 x 91 x 22
Degree of protection	IP66/IP67	IP10 or IP20	IP65, IP66/IP67	IP66/IP67	IP66/IP67	IP69K
Standards	--	Mounting and operating points acc. to EN 50047	Mounting acc. to EN 50047	Mounting acc. to EN 50041	EN 1088	Category 4 acc. to ISO 13849-1, PL e acc. to ISO 13849-1, SIL 3 acc. to IEC 61508
IEC 60947-5-1						
Approvals	CE, UL, CSA, CCC	--	CE, TÜV, UL, CSA, CCC		CE, TÜV, UL, CSA, CCC	CE, TÜV, UL, CSA ¹⁾
Contact blocks / outputs						
2 slow-action contacts	--	1 NO + 1 NC	1 NO + 1 NC, 2 NC		--	--
2 snap-action contacts	1 NO + 1 NC	1 NO + 1 NC	--		--	--
• Short stroke	--	✓				
• With 2 x 2 mm contact gap	--	✓				
3 slow-action contacts	--	1 NO + 2 NC; 2 NO + 1 NC	1 NO + 2 NC		2 x (1 NO + 2 NC)	--
• With make-before-break	--	1 NO + 2 NC				
3 snap-action contacts	--	1 NO + 2 NC	--		--	--
Electron. safety outputs	--	--	--		--	2
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_{the}	6 A	6 A	6 A		6 A	--
Connections						
Cable entry	--	--	1 x M20 x 1.5, 2 x M20 x 1.5	1 x M20 x 1.5, 3 x M20 x 1.5	3 x M20 x 1.5	--
M12 connector socket, 4-, 5- or 8-pole	✓	--	✓	✓	✓	✓
Molded cables	✓	--	--	--	--	--
AS-Interface	--	--	✓	✓	✓	--
Actuators						
Plungers, twist levers	✓	✓	--		--	--
Separate actuators	--	--	✓		✓	--
Page						
Complete units	12/52	12/54	12/63, 12/65	12/64, 12/66	12/73, 12/74	--
Modular system	--	--	--	--	--	12/101
ASIsafe	--	--	12/91	12/92	12/95, 12/96	--

✓ Available

-- Not available

1) CCC not required for voltages < 36 V.

Note:

Safety characteristics see Chapter 16, "Appendix" → "Standards and Approvals".

SIRIUS 3SE5 Mechanical Position Switches

General data

Overview

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 features a new 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.

An easy plug-in method 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 (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 variants

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

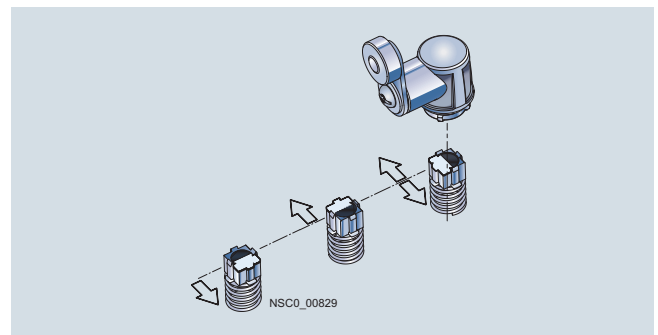
- With contact blocks with two or three contacts (screw terminals) designed as slow-action or snap-action contacts; the slow-action contacts also with make-before-break
- Optional LED status display
- With mounted four- or five-pole M12 connector socket (available for the wide enclosures as an accessory for self-assembly)
- With 6-pole connector socket + PE on the metal enclosures
- Versions with increased corrosion protection
- Versions for operating temperature up to -40°C
- AS-Interface version with integrated ASIsafe electronics for all enclosure designs (see page 12/82)

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 actuator
- Fork levers with twist actuator

The actuator rollers are available with various materials and diameters.



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

SIRIUS 3SE5 Mechanical Position Switches

General data

Optional LED indicators

LED indicators
available for all enclosure sizes except for XL.



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

Many different 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

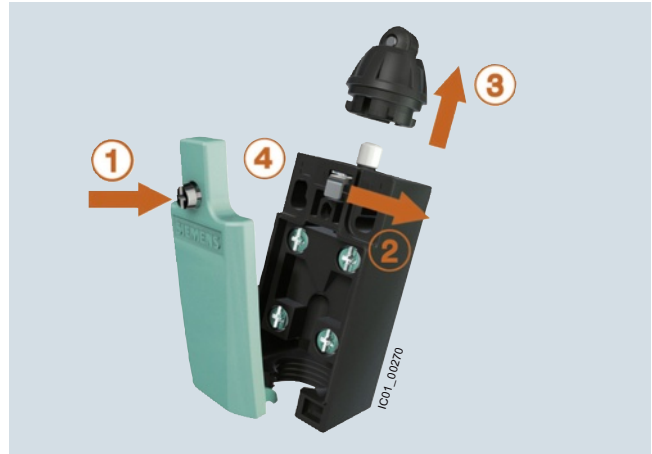
The contact blocks ensure an extremely high contact stability. This applies even when the devices are switching low voltages and currents, e.g. 1 mA at 5 V DC.

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

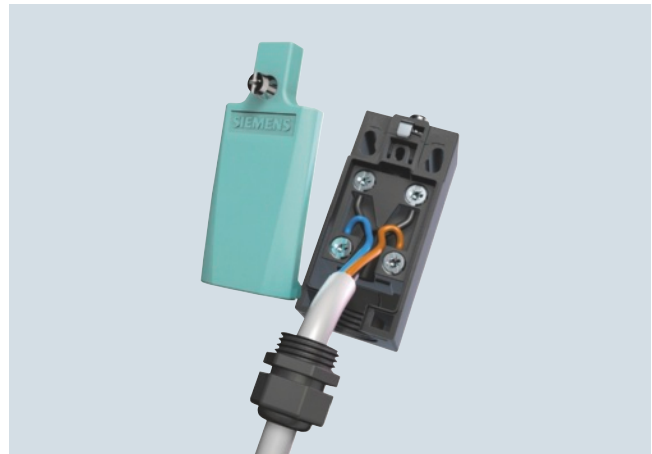
Easy plug-in method
for fast replacement of the actuator heads



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 enclosures 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.

General 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 12/5).
- 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 12/5).
- All enclosure variants have an integrated chlorinated rubber diaphragm (high functional safety in cold and aggressive environments).
- All contact blocks are replaceable (see page 12/56).
- The three-pole contact blocks are available for all enclosure sizes (see picture, page 12/5).
- Elements with 1 NO + 2 NC slow-action contacts with make-before-break and 2 NO + 1 NC.
- The short-stroke contact block 1 NO + 1 NC improves the precision of the switching operation through a reduced actuation path.
- The contact block with 1 NO + 1 NC snap-action contacts with 2 x 2 mm contact opening is suitable for simultaneous disconnection and signaling, particularly in the elevator industry.
- 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 from approx. 20 to 25 % of the time when connecting (see picture, page 12/5).
- The ASIsafe electronic component is integrated in the enclosure for the versions with AS-Interface connection (see page 12/82); an additional adapter is not required.

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

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

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

Safety position switches

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

Safety circuits

IEC 60947-5-1 and EN 60947-5-1 require positive opening of the NC contacts, i.e. for the purposes of personal safety, the assured opening of NC contacts is expressly stipulated for the electrical equipment of machines in all safety circuits and marked accordingly to the IEC standard 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 installed, e.g. the 3SK1 or 3TK28 safety relays or matching devices from the ASIsafe, SIMATIC or SINUMERIK product ranges. The operating mechanisms (actuators) must also be connected to the enclosure by keyed techniques. The corresponding operating mechanisms are marked in the catalog with .

Contacts for each application

- **Snap-action contacts:** NC and NO contacts switch simultaneously – regardless of the actuating speed ($v_{\min} = 0.01 \text{ m/s}$) 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 ($v_{\min} = 0.4 \text{ m/s}$).
- **Slow-action contacts with make-before-break:** e.g. suitable for adding a second function to a sequence control.

Operating mechanisms for each application

Standard, rounded and roller plungers

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

Roller 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

Spring rod

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

Twist levers and rod actuators

- For a high starting speed ($v = 1.5 \text{ m/s}$)
- 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

SIRIUS 3SE5 Mechanical Position Switches

General data

Technical specifications

Type		3SE51.., 3SE52..	3SE541.	3SE542.
General data				
Standards		IEC 60947-5-1, EN 60947-5-1		
Rated insulation voltage U_i	V	400 ¹⁾	400	
Pollution degree acc. to IEC 60664-1		Class 3	Class 3	
Rated impulse withstand voltage U_{imp}	kV	6	4	
Rated operational voltage U_e	V	400 V AC, over 300 V AC only for equal potential ²⁾		300 AC
Conventional thermal current I_{th}	A	10	6	10
Rated operational current I_e		2-pole	3-pole	2-pole
• With alternating current 50/60 Hz		$I_e/AC-15$	$I_e/AC-15$	$I_e/AC-15$
- At 24 V	A	6	6	6
- At 120 V	A	6	3	6
- At 240 V	A	3	1.5	3
• For direct current		$I_e/DC-13$	$I_e/DC-13$	$I_e/DC-13$
- At 24 V	A	3	3	3
- At 125 V	A	0.55	0.55	0.55
- At 250 V	A	0.27	0.27	0.27
Short-circuit protection³⁾				
• With DIAZED fuse links, operational class gG	A	6	10	
• With miniature circuit breaker, Char. C	A	1	3	
Mechanical endurance				
• Basic switch		15 × 10 ⁶ operating cycles	30 × 10 ⁶ operating cycles	30 × 10 ⁶ operating cycles
• With spring rod, 3SE5...-R..		10 × 10 ⁶ operating cycles	--	--
• With fork lever, 3SE51...-T..		1 × 10 ⁶ operating cycles	--	--
Electrical endurance				
• With 3RH.1, 3RT contactors in size S00, S0		10 × 10 ⁶ operating cycles	10 × 10 ⁶ operating cycles	5 × 10 ⁶ operating cycles
• For utilization category AC-15 when switching off $I_e/AC-15$ at 240 V		0.1 × 10 ⁶ operating cycles	--	--
• With utilization category DC-12/DC-13		For direct current depending on the loading of the switch		
Switching frequency 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 ☐, ☐ and ☐				
• 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⁾ For slow-action contacts 1 NO + 2 NC with make-before-break ("M") and 2 NO + 1 NC ("P") the following applies: 250 V.

²⁾ 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 only equal potential.

³⁾ Without any welds according to IEC 60947-5-1.

Type		3SE523.	3SE513.	3SE524.	3SE521.	3SE511.	3SE512., 3SE516.	3SE54..	3SE525.	
Enclosure										
Enclosure										
• Material		Ultramid A3X2G7			Zinc diecasting GD Zn Al4 Cu1			Zn/Al	--	
• Width	mm	31	40	50	31	40	56	30 / 40	30	
Degree of protection acc. to IEC 60529		IP65		IP66/IP67 ¹⁾				IP67	IP20, IP10	
Ambient temperature										
• During operation	°C	-25 ... +85							-25 ... +85	-25 ... +85
• In operation, switch with LEDs	°C	-25 ... +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	mm²	1 x (0.5 ... 1.5), 2 x (0.5 ... 0.75)								
• Finely stranded with end sleeve	mm²	1 x (0.5 ... 1.5), 2 x (0.5 ... 0.75)								
• AWG cables	AWG	1 x (AWG 20 ... 16), 2 x (AWG 20 ... 19)								
Tightening torque , contact block		Nm								
		0.8 ... 1.0								
Protective conductor connection inside enclosure					M3.5			--	--	

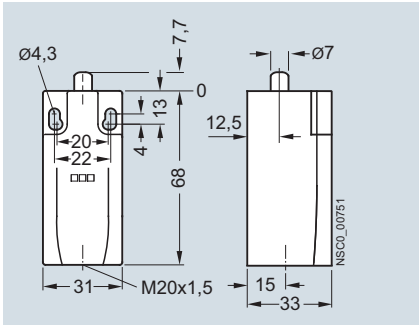
¹⁾ For twist actuators with spring rod and rod actuators: IP65/IP67.

SIRIUS 3SE5 Mechanical Position Switches

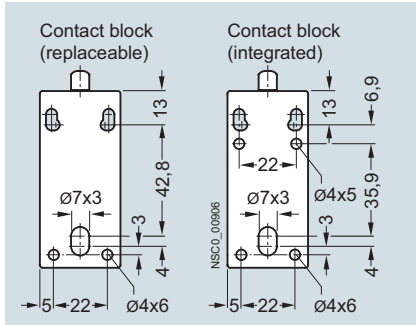
General data

Dimensions of the basic switches

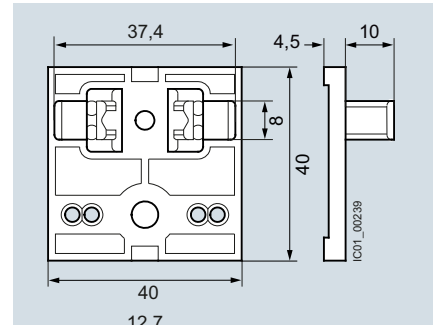
Enclosure width 31 mm, EN 50047,
with M20 × 1.5/7 connecting thread
3SE5232, 3SE5212



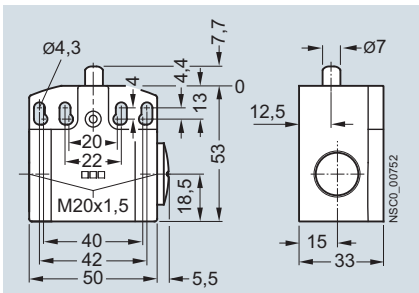
Enclosure width 31 mm, EN 50047,
rear with fixing holes
3SE5232, 3SE5212



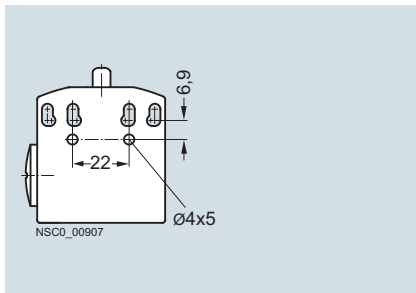
Mounting plate
for 3SE5232, 3SE5212 position switch
3SX5100-1A



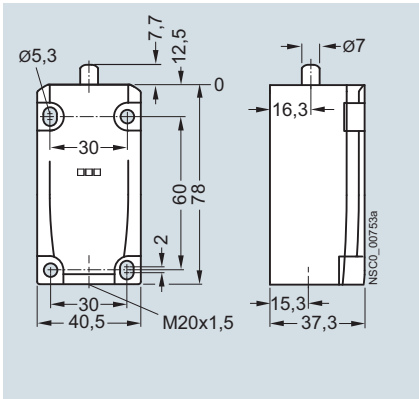
Enclosure width 50 mm,
with M20 × 1.5 connecting thread
3SE5242



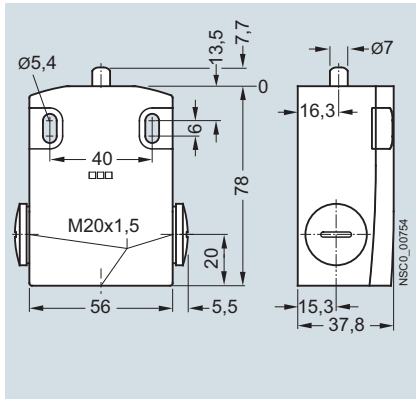
Enclosure width 50 mm,
rear with fixing holes
3SE5242



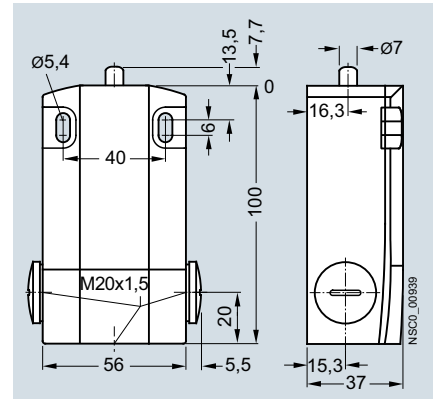
Enclosure width 40 mm, EN 50041,
with M20 × 1.5 connecting thread
3SE5112, 3SE5132



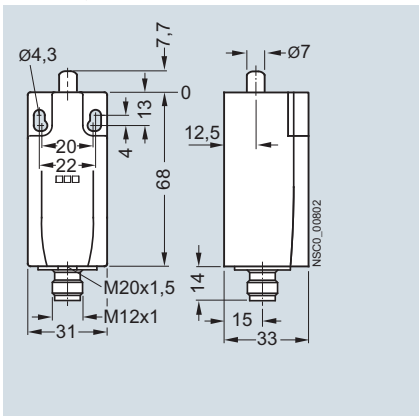
Enclosure width 56 mm,
with M20 × 1.5 connecting thread
3SE5122



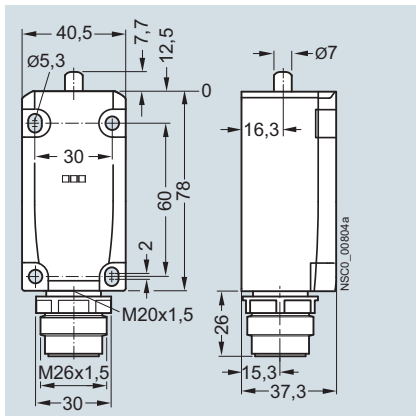
XL enclosure, width 56 mm,
with M20 × 1.5 connecting thread
3SE5162



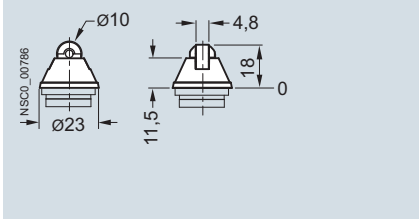
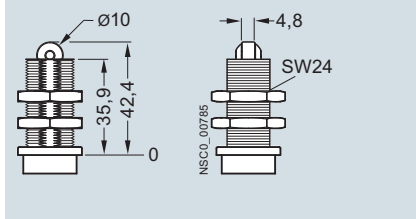
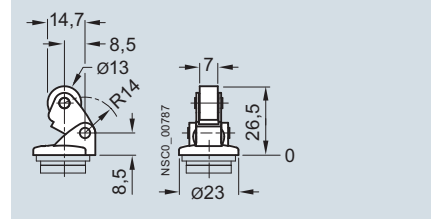
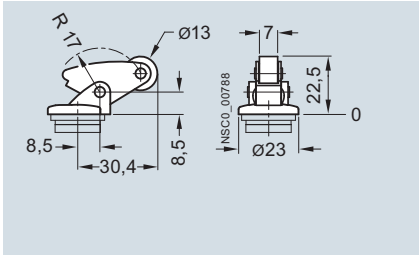
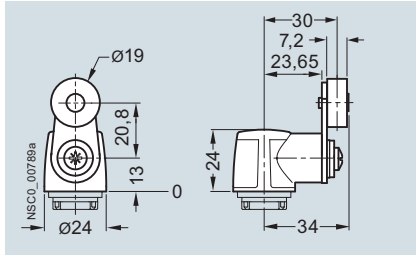
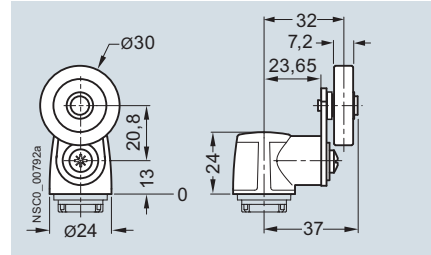
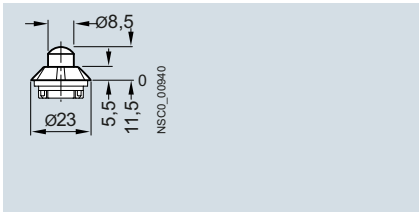
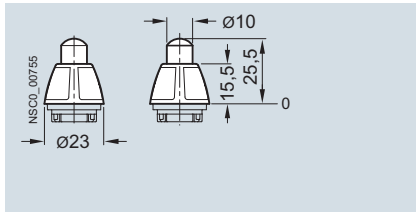
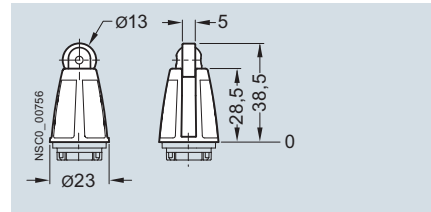
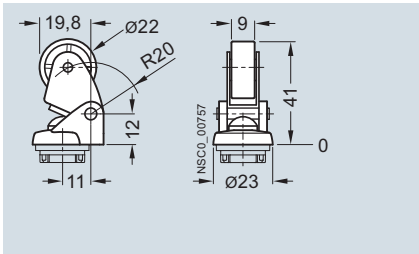
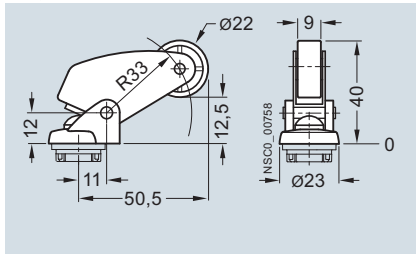
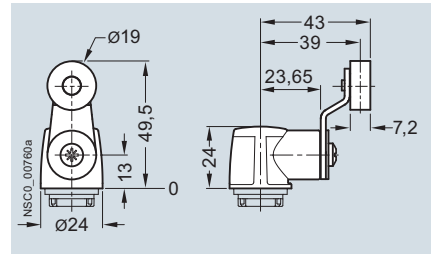
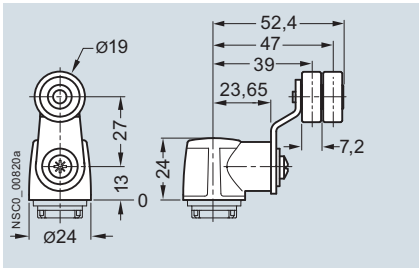
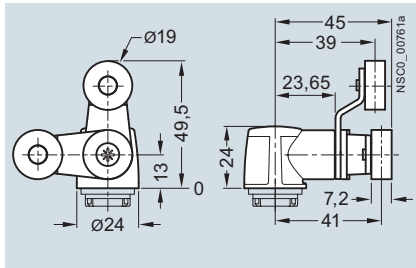
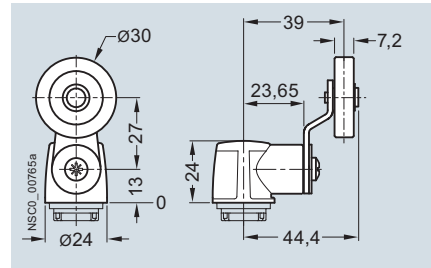
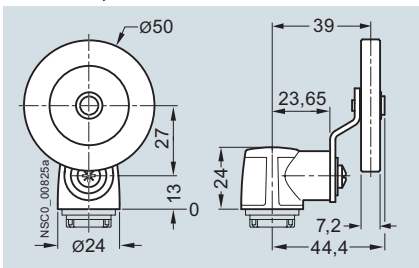
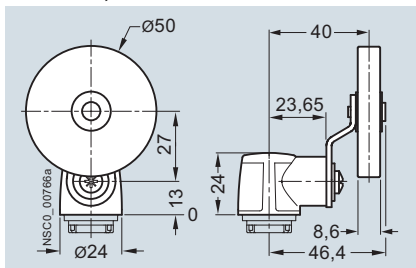
Enclosure width 31 mm, EN 50047,
with M12 connector socket
3SE5234, 3SE5214



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



Operating mechanisms for basic switches, see pages 12/9 and 12/10.

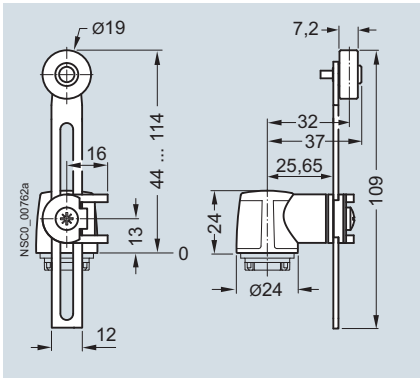
Operating mechanisms for enclosure width 31 mm and 50 mm**Roller plungers, type C acc. to EN 50047****Roller plunger with central fixing****Roller levers, type E acc. to EN 50047****Angular roller lever****Twist levers, type A acc. to EN 50047****Twist lever, roller 30 mm****Operating mechanisms for enclosure width 40 mm and 56 mm****Plain plunger****Rounded plungers, type B acc. to EN 50041****Roller plungers, type C acc. to EN 50041****Roller lever****Angular roller lever****Twist levers, type A acc. to EN 50041****Twist lever, 2 rollers 19 mm****Fork lever, roller 19 mm****Twist lever, roller 30 mm****Twist lever, roller 50 mm****Twist lever, rubber roller 50 mm**

SIRIUS 3SE5 Mechanical Position Switches

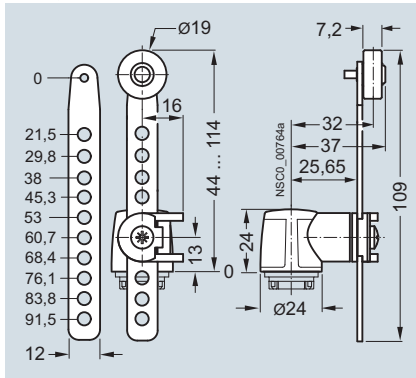
General data

Operating mechanisms for all enclosure widths

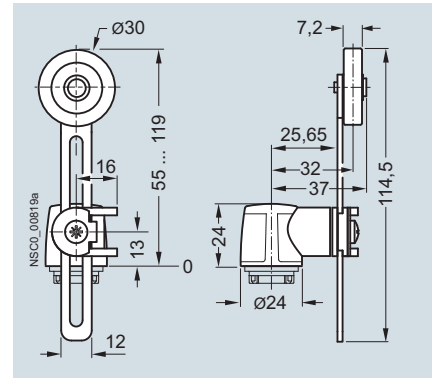
Twist lever, adjustable length,
roller 19 mm



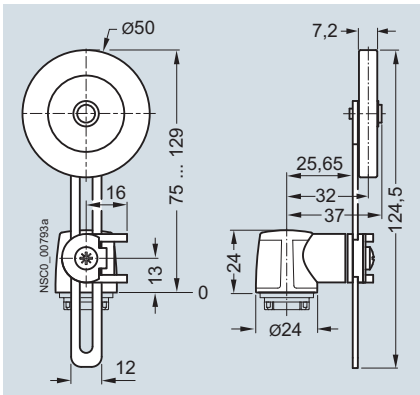
Twist lever, adjustable length,
with grid hole, roller 19 mm



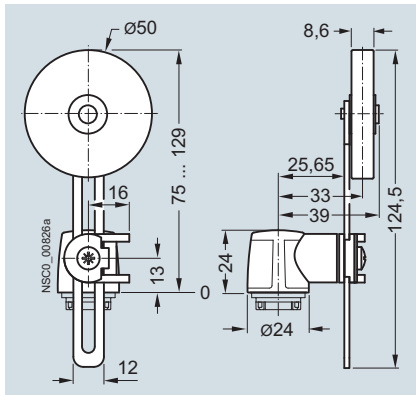
Twist lever, adjustable length,
roller 30 mm



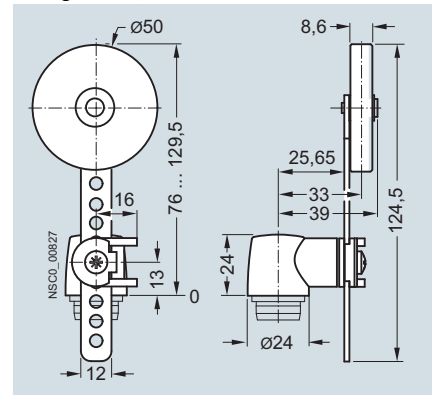
Twist lever, adjustable length,
roller 50 mm



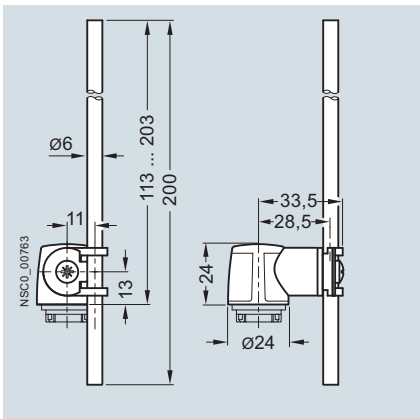
Twist lever, adjustable length,
rubber roller 50 mm



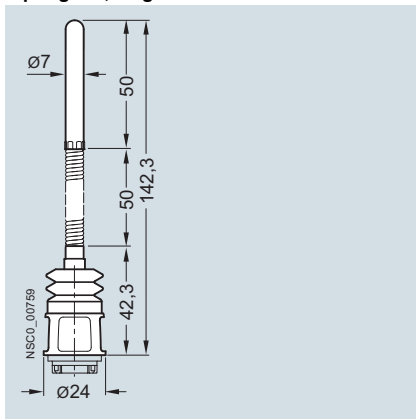
Twist lever, adjustable length,
with grid hole, rubber roller 50 mm



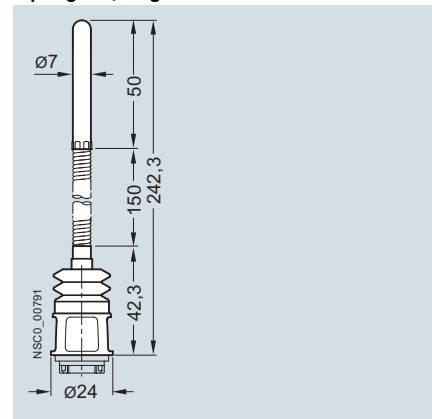
Rod actuator



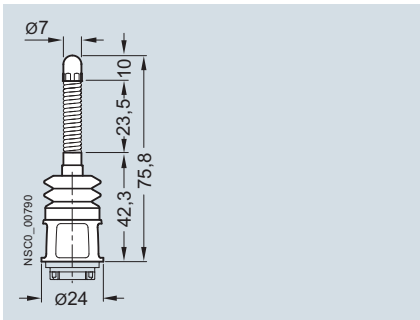
Spring rod, length 142.5 mm



Spring rod, length 242.5 mm

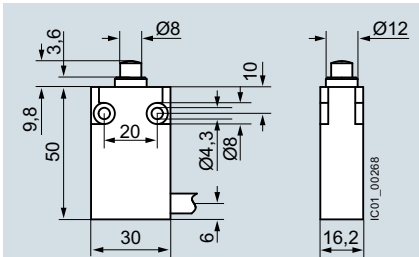


Spring rod, length 76 mm

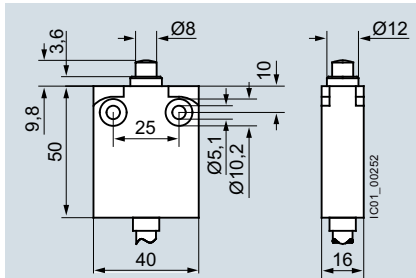


Dimensions of the switches in compact design

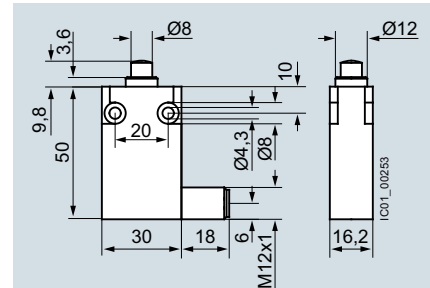
**Rounded plunger, enclosure width 30 mm,
with connecting cable
3SE5413-0CC20-1EA2**



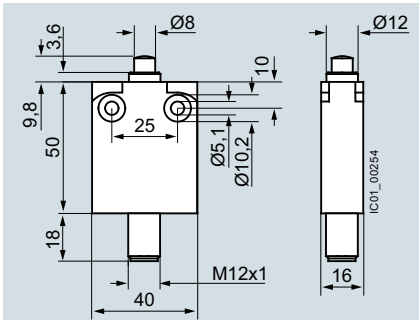
**Rounded plunger, enclosure width 40 mm,
with connecting cable
3SE5423-0CC20-1EA2**



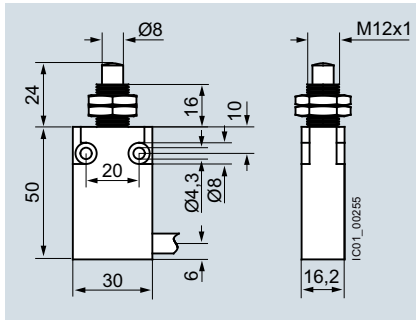
**Rounded plunger, enclosure width 30 mm,
with M12 connector socket
3SE5413-0CC20-1EB1**



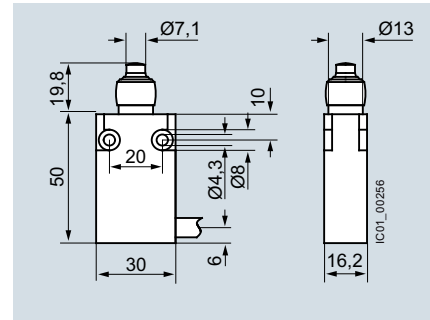
**Rounded plunger, enclosure width 40 mm,
with M12 connector socket
3SE5423-0CC20-1EB1**



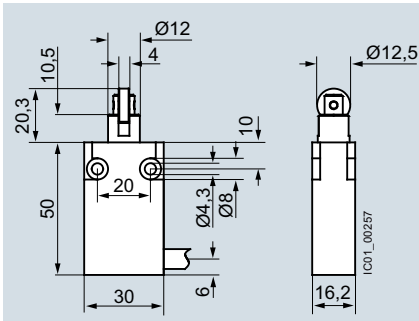
**Rounded plunger, enclosure width 30 mm,
with central fixing
3SE5413-0CC21-1EA2**



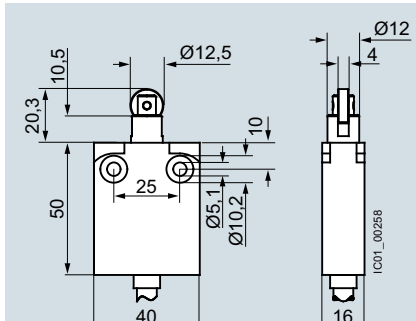
**Rounded plunger, enclosure width 30 mm,
with external seal
3SE5413-0CC22-1EA2**



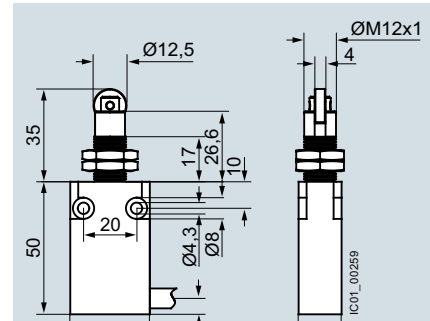
**Roller plunger, enclosure width 30 mm,
with connecting cable
3SE5413-0CD20-1EA2**



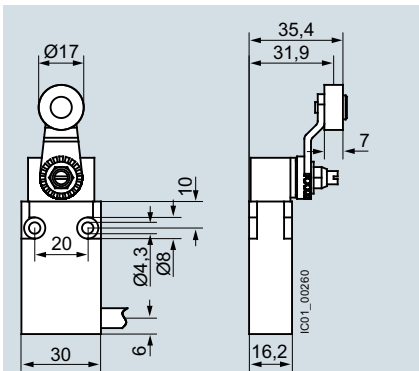
**Roller plunger, enclosure width 40 mm,
with connecting cable
3SE5423-0CD20-1EA2**



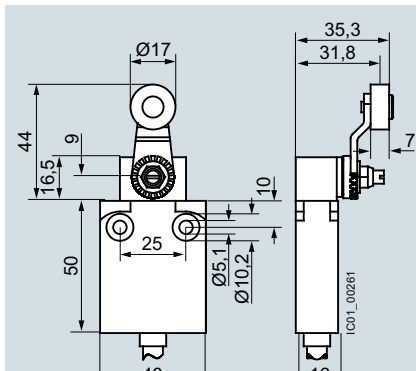
**Roller plunger, enclosure width 30 mm,
with central fixing
3SE5413-0CD21-1EA2**



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



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



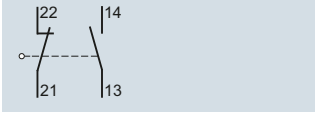
SIRIUS 3SE5 Mechanical Position Switches

General data

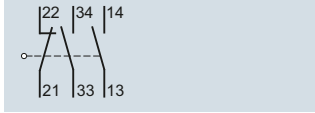
Circuit diagrams

Enclosure widths 31, 40, 50 and 56 mm

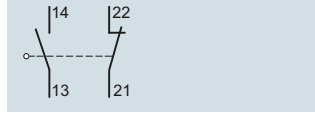
Slow-action contacts
1 NO + 1 NC
3SE5...-B..., -R...



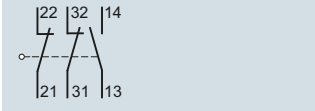
Slow-action contacts
2 NO + 1 NC
3SE5...-P...



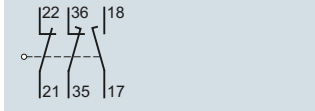
Snap-action contacts
1 NO + 1 NC
3SE5...-C..., -F..., -G..., -H..., -N...



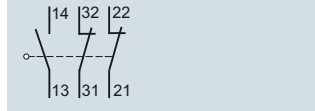
Slow-action contacts
1 NO + 2 NC
3SE5...-K..., -Q...



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

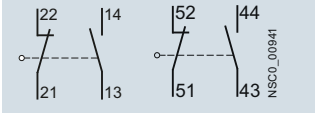


Snap-action contacts
1 NO + 2 NC
3SE5...-L...

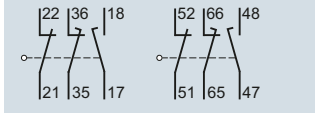


XL enclosures, width 56 mm

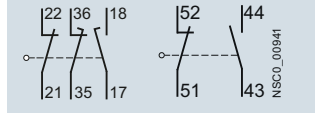
Slow-action contacts
2 x (1 NO + 1 NC)
3SE5162-0B...



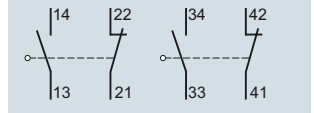
Slow-action contacts
2 x (1 NO + 2 NC) with make-before-break, 3SE5162-0D...



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

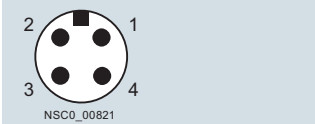


Snap-action contacts
2 x (1 NO + 1 NC)
3SE5162-0C...

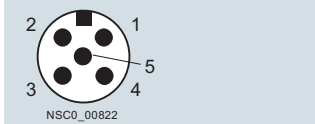


3SE5 connector assignment

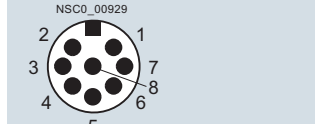
M12 connector socket, 4-pole
3SY3127



M12 connector socket, 5-pole
3SY3128



M12 connector socket, 8-pole
3SY3134



Connector sockets, 6-pole + PE
3SY3131



Article No.	Connector sockets	Contacts	LEDs	Connections								
	Type	Version	Version	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	PE
M12 connector sockets (4-, 5- or 8-pole)												
3SE5..4-0....-1AC4	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

Support function

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

 Configurator available in the Industry Mall

The online configurator is indicated in the corresponding tables by the symbol shown on an orange background.

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 more information, see www.siemens.com/sirius/configurators.

Complete units

Ordering example

Required:

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

To be ordered:

Version	Complete units ☐
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 ☒
Article No.	
Basic switches • Enclosure width 31 mm	
	With teflon plunger Slow-action contacts 1 NO + 1 NC
	3SE5232-0BC05
+	
Operating mechanisms	
	Angular roller lever 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 ☒
Article No.	
Basic switches • Enclosure width 31 mm	
	With teflon plunger Slow-action contacts 1 NO + 1 NC
	3SE5232-0BC05
+	
Twist actuators	
	Twist actuator
	3SE5000-0AK00
	Twist levers High-grade steel lever, plastic roller
	3SE5000-0AA31

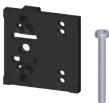
SIRIUS 3SE5 Mechanical Position Switches

3SE5, plastic enclosures Enclosure width 31 mm according 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	DT	Complete units	☐	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU			
Complete units ¹⁾ • Enclosure width 31 mm								
 Rounded plunger, flat cover	Control cabinet type, IP40, rounded plungers, type B, acc. to EN 50047							
	Flat cover							
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ B	3SE5232-0HC05-1AB1	1	1 unit	41K	
 Rounded plung- ers, flat cover, mounting plate	Flat cover with mounting plate and screws for attachment profile							
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ B	3SE5232-0HC05-1AB2	1	1 unit	41K	
 Rounded plung- ers, standard cover	Standard cover							
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ B	3SE5232-0HC05-1AB3	1	1 unit	41K	
 Rounded plung- ers, standard cover, mounting plate	Standard cover with mounting plate and screws for attachment profile							
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ B	3SE5232-0HC05-1AB4	1	1 unit	41K	
Accessories								
 Mounting plate	Mounting plate							
	Suitable for 3SE523. and 3SE521. position switches with a width of 31 mm			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 according to EN 50047

Complete units

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

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

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

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

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

²⁾ Popular versions.

³⁾ Subsequent replacement of contact blocks is not possible.

SIRIUS 3SE5 Mechanical Position Switches

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

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

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

Complete units²⁾ · Enclosure width 31 mm



Roller plungers

Roller plungers, type C, acc. to EN 50047

With plastic roller 10 mm

Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5232-0BD03	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⊙ ►	3SE5232-0HD03	1	1 unit	41K
• Integrated ³⁾						
Snap-action contacts	1 NO + 1 NC --	⊙ B	3SE5232-0FD03	1	1 unit	41K
• Short stroke, integrated ³⁾						
Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5232-0KD03	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5232-0LD03	1	1 unit	41K

Actuator head rotated by 90°

Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5232-0LD03-1AH0	1	1 unit	41K
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With M12 connector socket, 4-pole (250 V, 4 A)

Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊙ B	3SE5234-0HD03-1AC4	1	1 unit	41K
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Roller plungers with central fixing

With plastic roller 10 mm

Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊙ B	3SE5232-0HD10	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5232-0KD10	1	1 unit	41K



Roller plunger
with central
fixing

Roller levers, type E acc. to EN 50047

With metal lever and plastic roller 13 mm

Slow-action contacts	1 NO + 1 NC --	⊙ A	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 --	⊙ B	3SE5232-0KE10	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5232-0LE10	1	1 unit	41K

With increased corrosion protection (ICP), with high-grade steel lever and plastic roller 13 mm

Snap-action contacts	1 NO + 1 NC --	⊙ B	3SE5232-0CE12-1CA0	1	1 unit	41K
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With M12 connector socket, 4-pole (250 V, 4 A)

Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊙ B	3SE5234-0HE10-1AC4	1	1 unit	41K
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With high-grade steel lever and plastic roller 13 mm

Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5232-0LE12	1	1 unit	41K
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Angular roller lever

With metal lever and plastic roller 13 mm

Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5232-0BF10	1	1 unit	41K
Snap-action contacts, integrated ³⁾	1 NO + 1 NC --	⊙ A	3SE5232-0HF10	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5232-0KF10	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5232-0LF10	1	1 unit	41K



Angular roller
lever

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

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

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

²⁾ Popular versions.

³⁾ Subsequent replacement of contact blocks is not possible.

SIRIUS 3SE5 Mechanical Position Switches

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

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

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

Complete units²⁾ · Enclosure width 31 mm



Spring rod



Twist levers



Twist levers,
adjustable
length,
with grid hole



Twist levers,
adjustable
length



Rod actuator

Spring rod

Length 142.5 mm, with plastic plunger 50 mm

Snap-action contacts, integrated³⁾ 1 NO + 1 NC --

A

3SE5232-0HR01

1

1 unit

41K

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

Snap-action contacts, integrated³⁾ 1 NO + 1 NC --

B

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 --

⊙ A

3SE5232-0BK21

1

1 unit

41K

Snap-action contacts, integrated³⁾ 1 NO + 1 NC --

⊙ B

3SE5232-0HK21

1

1 unit

41K

Slow-action contacts 1 NO + 2 NC --

⊙ B

3SE5232-0KK21

1

1 unit

41K

Snap-action contacts 1 NO + 2 NC --

⊙ B

3SE5232-0LK21

1

1 unit

41K

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

Snap-action contacts, integrated³⁾ 1 NO + 1 NC --

⊙ B

3SE5234-0HK21-1AC4

1

1 unit

41K

With metal lever 35 mm and plastic roller 19 mm

Snap-action contacts, integrated³⁾ 1 NO + 1 NC --

⊙ B

3SE5232-0HK15

1

1 unit

41K

Twist levers, adjustable length

With metal lever with grid hole and plastic roller 19 mm

Snap-action contacts, integrated³⁾ 1 NO + 1 NC --

⊙ A

3SE5232-0HK60

1

1 unit

41K

With metal lever and plastic roller 19 mm

Slow-action contacts 1 NO + 1 NC --

B

3SE5232-0BK50

1

1 unit

41K

Snap-action contacts, integrated³⁾ 1 NO + 1 NC --

▶

3SE5232-0HK50

1

1 unit

41K

Snap-action contacts 1 NO + 2 NC --

B

3SE5232-0LK50

1

1 unit

41K

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

Snap-action contacts, integrated³⁾ 1 NO + 1 NC --

B

3SE5234-0HK50-1AC4

1

1 unit

41K

Rod actuators

With aluminum rod, length 200 mm

Snap-action contacts, integrated³⁾ 1 NO + 1 NC --

B

3SE5232-0HK80

1

1 unit

41K

With plastic rod, length 200 mm

Snap-action contacts, integrated³⁾ 1 NO + 1 NC --

B

3SE5232-0HK82

1

1 unit

41K

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

Snap-action contacts, integrated³⁾ 1 NO + 1 NC --

B

3SE5234-0HK82-1AC4

1

1 unit

41K

Note:

If the device you require is not available as a complete unit, see "Modular System", page 12/18.

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

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

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

²⁾ Popular versions.

³⁾ Subsequent replacement of contact blocks is not possible.

SIRIUS 3SE5 Mechanical Position Switches

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

Modular system

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

Version		Contacts	LEDs	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
					Configurator			
					Article No.	Price per PU		
Basic switches • Enclosure width 31 mm (with rounded plunger¹⁾)								
	With teflon plunger							
	Slow-action contacts	1 NO + 1 NC --		⊕ ▶	3SE5232-0BC05	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --		⊕ B	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 --		⊕ B	3SE5232-0FC05	1	1 unit	41K
	Snap-action contacts • 2 × 2 mm contact gap	1 NO + 1 NC --		⊕ B	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 --		⊕ A	3SE5232-0MC05	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --		⊕ A	3SE5232-0PC05	1	1 unit	41K
	With increased corrosion protection⁴⁾							
	Slow-action contacts	1 NO + 1 NC --		⊕ B	3SE5232-0BC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --		⊕ B	3SE5232-0CC05-1CA0	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --		⊕ B	3SE5232-0KC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --		⊕ B	3SE5232-0LC05-1CA0	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --		⊕ B	3SE5232-0MC05-1CA0	1	1 unit	41K
	With M12 connector socket, 4-pole (250 V, 4 A)							
	Slow-action contacts	1 NO + 1 NC --		⊕ B	3SE5234-0BC05-1AC4	1	1 unit	41K
	Snap-action contacts, integrated ³⁾	1 NO + 1 NC --		⊕ A	3SE5234-0HC05-1AC4	1	1 unit	41K
	Slow-action contacts	2 NC --		⊕ B	3SE5234-0KC05-1AE0	1	1 unit	41K
	Snap-action contacts	2 NC --		⊕ A	3SE5234-0LC05-1AE0	1	1 unit	41K
	With 2 LEDs, yellow/green							
	Slow-action contacts	1 NO + 2 NC 24 V DC		⊕ B	3SE5232-1KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 24 V DC		⊕ B	3SE5232-1LC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC		⊕ B	3SE5232-3KC05	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		⊕ B	3SE5234-1BC05-1AF3	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC 24 V DC		⊕ B	3SE5234-1CC05-1AF3	1	1 unit	41K

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

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

¹⁾ 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:

Selection aid see page 12/13.

SIRIUS 3SE5 Mechanical Position Switches

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

Version		Diameter	DT	Modular system		PU (UNIT, SET, M)	PS*	PG
		mm		Article No.	Price per PU			
Operating mechanisms								
 Roller plunger	Roller plungers, type C acc. to EN 50047							
	Plastic rollers	10	⤴ A	3SE5000-0AD03		1	1 unit	41K
	High-grade steel rollers	10	⤴ B	3SE5000-0AD04		1	1 unit	41K
 With central fixing	Roller plungers with central fixing							
	Plastic rollers	10	⤴ B	3SE5000-0AD10		1	1 unit	41K
	High-grade steel rollers	10	⤴ B	3SE5000-0AD11		1	1 unit	41K
 Roller lever	Roller levers, type E acc. to EN 50047							
	Metal lever, plastic roller	13	⤴ A	3SE5000-0AE10		1	1 unit	41K
	Metal lever, high-grade steel roller	13	⤴ B	3SE5000-0AE11		1	1 unit	41K
	High-grade steel lever, plastic roller	13	⤴ B	3SE5000-0AE12		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	13	⤴ B	3SE5000-0AE13		1	1 unit	41K
 Ang. roller lever	Angular roller levers							
	Metal lever, plastic roller	13	⤴ A	3SE5000-0AF10		1	1 unit	41K
	Metal lever, high-grade steel roller	13	⤴ B	3SE5000-0AF11		1	1 unit	41K
	High-grade steel lever, plastic roller	13	⤴ A	3SE5000-0AF12		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	13	⤴ B	3SE5000-0AF13		1	1 unit	41K
 Spring rod	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)		B	3SE5000-0AR01		1	1 unit	41K
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)		B	3SE5000-0AR03		1	1 unit	41K
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)		B	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)		B	3SE5000-0AR02		1	1 unit	41K
Twist actuators								
 Twist actuator	Twist actuators, plastic (without lever)							
	Switching right and/or left, adjustable		⤴ A	3SE5000-0AK00		1	1 unit	41K
 Twist levers	Levers							
	Twist levers 21 mm, straight, type A according to EN 50047							
	Metal lever, plastic roller	19	⤴ A	3SE5000-0AA21		1	1 unit	41K
	Metal lever, high-grade steel roller	19	⤴ B	3SE5000-0AA22		1	1 unit	41K
	Metal lever, high-grade steel roller with ball bearing	19	⤴ B	3SE5000-0AA23		1	1 unit	41K
	Metal lever, plastic roller	30	⤴ B	3SE5000-0AA25		1	1 unit	41K
	High-grade steel lever, plastic roller	19	⤴ B	3SE5000-0AA31		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	19	⤴ B	3SE5000-0AA32		1	1 unit	41K
 Twist lever, adjust. length	Twist levers 30 mm, straight¹⁾							
	Metal lever, plastic roller	19	⤴ B	3SE5000-0AA24		1	1 unit	41K
	Metal lever, plastic roller	30	⤴ B	3SE5000-0AA26		1	1 unit	41K
 Twist lever, adjust. length	Twist levers, adjustable length, with grid hole							
	Metal lever, plastic roller	19	⤴ B	3SE5000-0AA60		1	1 unit	41K
	Metal lever, high-grade steel roller	19	⤴ B	3SE5000-0AA61		1	1 unit	41K
	Metal lever, plastic roller	50	⤴ B	3SE5000-0AA67		1	1 unit	41K
	Metal lever, rubber roller	50	⤴ B	3SE5000-0AA68		1	1 unit	41K
	High-grade steel lever, plastic roller	19	⤴ B	3SE5000-0AA62		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	19	⤴ B	3SE5000-0AA63		1	1 unit	41K
	Twist levers, adjustable length							
Metal lever, plastic roller	19	A	3SE5000-0AA50		1	1 unit	41K	
Metal lever, high-grade steel roller	19	B	3SE5000-0AA51		1	1 unit	41K	
Metal lever, plastic roller	30	B	3SE5000-0AA55		1	1 unit	41K	
Metal lever, plastic roller	50	B	3SE5000-0AA57		1	1 unit	41K	
Metal lever, rubber roller	50	B	3SE5000-0AA58		1	1 unit	41K	
High-grade steel lever, plastic roller	19	B	3SE5000-0AA52		1	1 unit	41K	
High-grade steel lever, high-grade steel roller	19	B	3SE5000-0AA53		1	1 unit	41K	
 Rod actuator	Rod actuators							
	Aluminum rod, length 200 mm	6	B	3SE5000-0AA80		1	1 unit	41K
	Spring rod, length 200 mm	6	B	3SE5000-0AA81		1	1 unit	41K
	Plastic rod, length 200 mm	6	B	3SE5000-0AA82		1	1 unit	41K

⊕ Positively driven actuator, necessary in safety circuits.

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

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

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

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

¹⁾ Popular versions.

* 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

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

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

Complete units¹⁾ · Enclosure width 40 mm



Twist levers

Twist levers, type A acc. to EN 50041

With metal lever 27 mm and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC --	⊕ A	3SE5132-0BJ01	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⊕ A	3SE5132-0CJ01	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5132-0KJ01	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5132-0LJ01	1	1 unit	41K
Slow-action contacts	2 NO + 1 NC --	⊕ B	3SE5132-0PJ01	1	1 unit	41K



Twist levers,
adjustable
length,
with grid hole

Twist levers, adjustable length

With metal lever with grid hole and plastic roller 19 mm

Snap-action contacts	1 NO + 1 NC --	⊕ B	3SE5132-0CJ60	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5132-0LJ60	1	1 unit	41K



Twist levers,
adjustable
length

With metal lever and plastic roller 19 mm

Snap-action contacts	1 NO + 1 NC --	A	3SE5132-0CJ50	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	B	3SE5132-0LJ50	1	1 unit	41K



Rod actuator

Rod actuators, type D, acc. to EN 50041

With aluminum rod, length 200 mm

Snap-action contacts	1 NO + 1 NC --	B	3SE5132-0CJ80	1	1 unit	41K
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With plastic rod, length 200 mm

Snap-action contacts	1 NO + 1 NC --	A	3SE5132-0CJ82	1	1 unit	41K
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⚙ For online configurator see www.siemens.com/sirius/configurators

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

¹⁾ Popular versions.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 12/22.

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

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

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

¹⁾ Use corresponding high-grade steel lever.

Note:

Selection aid see page 12/13.

SIRIUS 3SE5 Mechanical Position Switches

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

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm		Article No.	Price per PU		
Operating mechanisms						
 Plain plunger	Plain plungers High-grade steel plungers	10	⊕ A	3SE5000-0AB01	1	1 unit 41K
 Plunger	Rounded plungers, type B according to EN 50041 Plastic plungers	10	⊕ B	3SE5000-0AC03	1	1 unit 41K
	Roller plungers, type C acc. to EN 50041 Plastic plunger, plastic roller	13	⊕ B	3SE5000-0AD05	1	1 unit 41K
	Plastic plunger, high-grade steel roller	13	⊕ B	3SE5000-0AD06	1	1 unit 41K
 Roller lever	Roller levers Metal lever with plastic roller, plastic base	22	⊕ B	3SE5000-0AE05	1	1 unit 41K
 Ang. roller lever	Angular roller levers Metal lever with plastic roller, plastic base	22	⊕ B	3SE5000-0AF05	1	1 unit 41K
 Spring rod	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) • 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: 7 • Length 142.5 mm (spring 50 mm, plunger 50 mm)		B B B B	3SE5000-0AR01 3SE5000-0AR03 3SE5000-0AR04 3SE5000-0AR02	1 1 1 1	1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K
Twist actuators						
 Twist actuator	Twist actuators, plastic (without lever) • For twist levers and rod actuators, switching right and/or left, adjustable		⊕ B	3SE5000-0AJ00	1	1 unit 41K
 Twist lever	Levers Twist levers, offset, type A according to EN 50041 Metal lever 27 mm, plastic roller Metal lever 27 mm, high-grade steel roller Metal lever 27 mm, high-grade steel roller with ball bearing Metal lever 27 mm, 2 plastic rollers Metal lever 27 mm, plastic roller Metal lever 27 mm, rubber roller High-grade steel lever 27 mm, plastic roller High-grade steel lever 27 mm, high-gr. steel roller Metal lever 35 mm, plastic roller High-grade steel lever 35 mm, plastic roller	19 19 19 19 30 50 19 19 19 19	⊕ A ⊕ A ⊕ B ⊕ B ⊕ B ⊕ B ⊕ B ⊕ B ⊕ B ⊕ B	3SE5000-0AA01 3SE5000-0AA02 3SE5000-0AA03 3SE5000-0AA04 3SE5000-0AA05 3SE5000-0AA08 3SE5000-0AA11 3SE5000-0AA12 3SE5000-0AA15 3SE5000-0AA16	1 1 1 1 1 1 1 1 1 1	1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K
 Twist lever, adjustable length	Twist levers 30 mm, straight¹⁾ Metal lever, plastic roller Metal lever, plastic roller	19 30	⊕ B ⊕ B	3SE5000-0AA24 3SE5000-0AA26	1 1	1 unit 41K 1 unit 41K
 Rod actuator	Twist levers, adjustable length, with grid hole Metal lever, plastic roller Metal lever, high-grade steel roller Metal lever, rubber roller High-grade steel lever, plastic roller High-grade steel lever, high-grade steel roller	19 19 50 19 19	⊕ B ⊕ B ⊕ B ⊕ B ⊕ B	3SE5000-0AA60 3SE5000-0AA61 3SE5000-0AA68 3SE5000-0AA62 3SE5000-0AA63	1 1 1 1 1	1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K
	Twist lever, adjustable length Metal lever, plastic roller Metal lever, high-grade steel roller Metal lever, plastic roller Metal lever, rubber roller High-grade steel lever, plastic roller High-grade steel lever, high-grade steel roller	19 19 30 50 19 19	A B B B B B	3SE5000-0AA50 3SE5000-0AA51 3SE5000-0AA55 3SE5000-0AA58 3SE5000-0AA52 3SE5000-0AA53	1 1 1 1 1 1	1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K 1 unit 41K
	Rod actuators, type D according to EN 50041 Aluminum rod, length 200 mm Spring rod, length 200 mm Plastic rod, length 200 mm	6 6 6	B B B	3SE5000-0AA80 3SE5000-0AA81 3SE5000-0AA82	1 1 1	1 unit 41K 1 unit 41K 1 unit 41K

⊕ Positively driven actuator, necessary in safety circuits.

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

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	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		

Complete units¹⁾ · Enclosure width 50 mm



Rounded
plunger

Rounded plungers

With teflon plunger

Slow-action contacts	1 NO + 1 NC --	⊕ A	3SE5242-0BC05	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⊕ B	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 --	⊕ B	3SE5242-0FC05	1	1 unit	41K
Snap-action contacts • 2 × 2 mm contact gap	1 NO + 1 NC --	⊕ B	3SE5242-0GC05	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5242-0KC05	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5242-0LC05	1	1 unit	41K
Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ A	3SE5242-0MC05	1	1 unit	41K
Slow-action contacts	2 NO + 1 NC --	⊕ A	3SE5242-0PC05	1	1 unit	41K



With increased
corrosion
protection

With increased corrosion protection

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



With 2 LEDs

With 2 LEDs, yellow/green

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



Roller plunger

Roller plungers

With plastic roller 10 mm

Slow-action contacts	1 NO + 1 NC --	⊕ B	3SE5242-0BD03	1	1 unit	41K
Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ B	3SE5242-0HD03	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5242-0LD03	1	1 unit	41K

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

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

¹⁾ Popular versions.

²⁾ Subsequent replacement of contact blocks is not possible.

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	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		

Complete units¹⁾ · Enclosure width 50 mm



Roller lever

Roller levers

With metal lever and plastic roller 13 mm

Slow-action contacts	1 NO + 1 NC --	⊕ B	3SE5242-0BE10	1	1 unit	41K
Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ A	3SE5242-0HE10	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5242-0LE10	1	1 unit	41K

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

Snap-action contacts	2 NC --	⊕ B	3SE5244-0LE10-1AE0	1	1 unit	41K
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Twist lever

Twist levers

With metal lever 21 mm and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC --	⊕ B	3SE5242-0BK21	1	1 unit	41K
Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ B	3SE5242-0HK21	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5242-0LK21	1	1 unit	41K



Twist lever,
adjustable
length

Twist levers, adjustable length

With metal lever and plastic roller 19 mm

Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	B	3SE5242-0HK50	1	1 unit	41K
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⚙ For online configurator see www.siemens.com/sirius/configurators

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

¹⁾ Popular versions.

²⁾ Subsequent replacement of contact blocks is not possible.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 12/26.

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	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		
Basic switches • Enclosure width 50 mm (with rounded plunger¹⁾)							
 Basic switch	With teflon plunger						
	Slow-action contacts	1 NO + 1 NC --	⊕ A	3SE5242-0BC05	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ B	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 --	⊕ B	3SE5242-0FC05	1	1 unit	41K
	Snap-action contacts • 2 × 2 mm contact gap	1 NO + 1 NC --	⊕ B	3SE5242-0GC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5242-0KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5242-0LC05	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ A	3SE5242-0MC05	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ A	3SE5242-0PC05	1	1 unit	41K
 With increased corrosion protection	With increased corrosion protection³⁾						
	Slow-action contacts	1 NO + 1 NC --	⊕ B	3SE5242-0BC05-1CA0	1	1 unit	41K
	Snap-action contacts, integrated ²⁾	1 NO + 1 NC --	⊕ B	3SE5242-0HC05-1CA0	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5242-0KC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5242-0LC05-1CA0	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊕ B	3SE5242-0MC05-1CA0	1	1 unit	41K
 With 2 LEDs	With 2 LEDs, yellow/green						
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ B	3SE5242-1KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊕ B	3SE5242-1LC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ B	3SE5242-3KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 230 V AC	⊕ B	3SE5242-3LC05	1	1 unit	41K

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

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

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

²⁾ Subsequent replacement of contact blocks is not possible.

³⁾ Use corresponding high-grade steel lever.

Note:

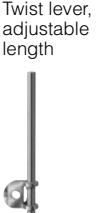
Selection aid see page 12/13.

Version		Diameter	DT	Modular system		PU (UNIT, SET, M)	PS*	PG
		mm		Article No.	Price per PU			
Operating mechanisms								
 Roller plunger	Roller plungers, type C acc. to EN 50047							
	Plastic rollers	10	↻ A	3SE5000-0AD03		1	1 unit	41K
	High-grade steel rollers	10	↻ B	3SE5000-0AD04		1	1 unit	41K
 With central fixing	Roller plungers with central fixing							
	Plastic rollers	10	↻ B	3SE5000-0AD10		1	1 unit	41K
	High-grade steel rollers	10	↻ B	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	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm		Article No.	Price per PU		
Operating mechanisms						
	Roller levers, type E acc. to EN 50047					
	Metal lever, plastic roller	13	⊙ A	3SE5000-0AE10	1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊙ B	3SE5000-0AE11	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊙ B	3SE5000-0AE12	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊙ B	3SE5000-0AE13	1	1 unit 41K
	Angular roller levers					
	Metal lever, plastic roller	13	⊙ A	3SE5000-0AF10	1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊙ B	3SE5000-0AF11	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊙ A	3SE5000-0AF12	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊙ B	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)		B	3SE5000-0AR01	1	1 unit 41K
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)		B	3SE5000-0AR03	1	1 unit 41K
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)		B	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)		B	3SE5000-0AR02	1	1 unit 41K
	Twist actuators					
	Twist actuators, plastic (without lever)					
	Switching right and/or left, adjustable		⊙ A	3SE5000-0AK00	1	1 unit 41K
	Levers					
	Twist levers 21 mm, straight, type A according to EN 50047					
	Metal lever, plastic roller	19	⊙ A	3SE5000-0AA21	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊙ B	3SE5000-0AA22	1	1 unit 41K
	Metal lever, high-grade steel roller with ball bearing	19	⊙ B	3SE5000-0AA23	1	1 unit 41K
	Metal lever, plastic roller	30	⊙ B	3SE5000-0AA25	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊙ B	3SE5000-0AA31	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊙ B	3SE5000-0AA32	1	1 unit 41K
	Twist levers 30 mm, straight¹⁾					
	Metal lever, plastic roller	19	⊙ B	3SE5000-0AA24	1	1 unit 41K
	Metal lever, plastic roller	30	⊙ B	3SE5000-0AA26	1	1 unit 41K
	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	⊙ B	3SE5000-0AA60	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊙ B	3SE5000-0AA61	1	1 unit 41K
	Metal lever, plastic roller	50	⊙ B	3SE5000-0AA67	1	1 unit 41K
	Metal lever, rubber roller	50	⊙ B	3SE5000-0AA68	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊙ B	3SE5000-0AA62	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊙ B	3SE5000-0AA63	1	1 unit 41K
	Twist lever, adjustable length					
	Metal lever, plastic roller	19	A	3SE5000-0AA50	1	1 unit 41K
	Metal lever, high-grade steel roller	19	B	3SE5000-0AA51	1	1 unit 41K
	Metal lever, plastic roller	30	B	3SE5000-0AA55	1	1 unit 41K
	Metal lever, plastic roller	50	B	3SE5000-0AA57	1	1 unit 41K
	Metal lever, rubber roller	50	B	3SE5000-0AA58	1	1 unit 41K
	High-grade steel lever, plastic roller	19	B	3SE5000-0AA52	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	B	3SE5000-0AA53	1	1 unit 41K
	Rod actuators					
	Aluminum rod, length 200 mm	6	B	3SE5000-0AA80	1	1 unit 41K
	Spring rod, length 200 mm	6	B	3SE5000-0AA81	1	1 unit 41K
	Plastic rod, length 200 mm	6	B	3SE5000-0AA82	1	1 unit 41K

⊙ Positively driven actuator, necessary in safety circuits.

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

SIRIUS 3SE5 Mechanical Position Switches

3SE5, plastic enclosures
Ambient temperature up to –40 °C

Selection and ordering data

Complete units

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

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

Complete units¹⁾ • Enclosure width 31 mm



Roller plunger

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 -- ⊕ B 3SE5234-0CD03-1AJ1 1 1 unit 41K



Roller plunger
with central
fixing

Roller plungers with central fixing

Snap-action contacts 1 NO + 1 NC -- ⊕ B 3SE5232-0CD10-1AJ0 1 1 unit 41K



Twist lever

Twist levers, type A acc. to EN 50047

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

Snap-action contacts 1 NO + 1 NC -- ⊕ A 3SE5232-0CK31-1AJ0 1 1 unit 41K



Twist levers,
adjustable
length,
with grid hole

Twist levers, adjustable length

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

Snap-action contacts 1 NO + 1 NC -- ⊕ A 3SE5232-0CK62-1AJ0 1 1 unit 41K

Snap-action contacts 1 NO + 2 NC -- ⊕ B 3SE5232-0LK62-1AJ0 1 1 unit 41K

Complete units¹⁾ • Enclosure width 50 mm



Twist levers,
adjustable
length,
with grid hole

Twist lever

With metal lever 21 mm and plastic roller 19 mm

Snap-action contacts, integrated²⁾ 1 NO + 1 NC -- ⊕ B 3SE5242-0HK21-1AJ0 1 1 unit 41K

Twist levers, adjustable length

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

Snap-action contacts, integrated²⁾ 1 NO + 1 NC -- ⊕ B 3SE5242-0HK62-1AJ0 1 1 unit 41K

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

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

¹⁾ Popular versions.

²⁾ Subsequent replacement of contact blocks is not possible.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 12/29.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, plastic enclosures
Ambient temperature up to –40 °C

Modular system

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

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

Basic switch

Basic switch

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

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

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

²⁾ Subsequent replacement of contact blocks is not possible.

Note:

Selection aid see page 12/13.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, plastic enclosures
Ambient temperature up to –40 °C

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm		Article No.	Price per PU		
Operating mechanisms						
 Roller plunger	Roller plungers, type C acc. to EN 50047					
	Plastic rollers	10	⤵ B	3SE5000-0AD03-1AJ0	1	1 unit 41K
 Roller lever	Roller levers, type E acc. to EN 50047					
	Metal lever, plastic roller	13	⤵ B	3SE5000-0AE10-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⤵ B	3SE5000-0AE12-1AJ0	1	1 unit 41K
 Angular roller lever	Angular roller lever					
	Metal lever, plastic roller	13	⤵ B	3SE5000-0AF10-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⤵ B	3SE5000-0AF12-1AJ0	1	1 unit 41K
Twist actuators						
 Twist actuator	Twist actuators, plastic (without lever)					
	Switching right and/or left, adjustable		⤵ B	3SE5000-0AK00-1AJ0	1	1 unit 41K
 Twist lever	Levers					
	Twist levers straight, 21 mm, type A acc. to EN 50047					
	Metal lever, plastic roller	19	⤵ B	3SE5000-0AA21-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⤵ B	3SE5000-0AA31-1AJ0	1	1 unit 41K
 Twist lever, adjustable length	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	⤵ B	3SE5000-0AA60-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⤵ B	3SE5000-0AA62-1AJ0	1	1 unit 41K

⤵ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches

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

Modular system

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

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

Basic switches • Enclosure width 40 mm



Basic switch

With M20 × 1.5 connecting thread

Snap-action contacts	1 NO + 1 NC --	⊕ B	3SE5132-0CA00-1AJ0	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5132-0KA00-1AJ0	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5132-0LA00-1AJ0	1	1 unit	41K

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

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

Note:

Selection aid see page 12/13.

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

Operating mechanisms



Rounded plunger

Rounded plungers, type B according to EN 50041

Plastic plungers	10	⊕ B	3SE5000-0AC03-1AJ0	1	1 unit	41K
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Roller plunger

Roller plungers, type C acc. to EN 50041

Plastic plunger, plastic roller	13	⊕ B	3SE5000-0AD05-1AJ0	1	1 unit	41K
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Roller lever

Roller levers

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



Twist actuator

Twist actuators, plastic (without lever)

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

Levers

Twist levers, type A acc. to EN 50041

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

Twist levers, adjustable length, with grid hole

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



Twist lever, adjustable length

⊕ 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	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		
Complete units¹⁾ · Enclosure width 31 mm							
 Rounded plunger	Rounded plungers, type B, according to EN 50047						
	With plunger						
	Slow-action contacts	1 NO + 1 NC --	⊙ A	3SE5212-0BC05	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ A	3SE5212-0CC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ A	3SE5212-0KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ A	3SE5212-0LC05	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊙ A	3SE5212-0MC05	1	1 unit	41K
 With increased corrosion protection	Slow-action contacts	2 NO + 1 NC --	⊙ A	3SE5212-0PC05	1	1 unit	41K
	With increased corrosion protection						
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5212-0BC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ B	3SE5212-0CC05-1CA0	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5212-0KC05-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5212-0LC05-1CA0	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC --	⊙ B	3SE5212-0MC05-1CA0	1	1 unit	41K
 With 2 LEDs	Slow-action contacts	2 NO + 1 NC --	⊙ B	3SE5212-0PC05-1CA0	1	1 unit	41K
	With M12 connector socket, 5-pole (125 V, 4 A)						
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5214-0BC05-1AC5	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ B	3SE5214-0CC05-1AC5	1	1 unit	41K
	Slow-action contacts	2 NC --	⊙ B	3SE5214-0KC05-1AE1	1	1 unit	41K
	Snap-action contacts	2 NC --	⊙ B	3SE5214-0LC05-1AE1	1	1 unit	41K
	With 2 LEDs, yellow/green						
 Plain plunger	Slow-action contacts	1 NO + 2 NC 24 V DC	⊙ B	3SE5212-1KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊙ A	3SE5212-1LC05	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊙ B	3SE5212-3KC05	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 230 V AC	⊙ B	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	⊙ B	3SE5214-1BC05-1AF3	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC 24 V DC	⊙ B	3SE5214-1CC05-1AF3	1	1 unit	41K
 Roller plunger	Plain plungers						
	With high-grade steel plunger						
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5212-0BB01	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ B	3SE5212-0CB01	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5212-0KB01	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5212-0LB01	1	1 unit	41K
	Roller plungers, type C, acc. to EN 50047						
 Roller plunger	With plastic roller 10 mm						
	Slow-action contacts	1 NO + 1 NC --	⊙ A	3SE5212-0BD03	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ B	3SE5212-0CD03	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ A	3SE5212-0KD03	1	1 unit	41K
 Roller plunger	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5212-0LD03	1	1 unit	41K

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

⊙ 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	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		

Complete units¹⁾ · Enclosure width 31 mm



Roller plunger
with central
fixing

Roller plungers with central fixing

With plastic roller 10 mm

Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5212-0KD10	1	1 unit	41K
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Roller lever

Roller levers, type E acc. to EN 50047

With metal lever and plastic roller 13 mm

Slow-action contacts	1 NO + 1 NC --	⊕ A	3SE5212-0BE10	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⊕ B	3SE5212-0CE10	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5212-0KE10	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5212-0LE10	1	1 unit	41K



Angular roller
lever

Angular roller levers

With metal lever and plastic roller 13 mm

Slow-action contacts	1 NO + 1 NC --	⊕ B	3SE5212-0BF10	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⊕ B	3SE5212-0CF10	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5212-0KF10	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5212-0LF10	1	1 unit	41K



Twist lever

Twist levers, type A acc. to EN 50047

With metal lever 21 mm and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC --	⊕ B	3SE5212-0BK21	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⊕ B	3SE5212-0CK21	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5212-0KK21	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5212-0LK21	1	1 unit	41K



Twist levers,
adjustable
length,
with grid hole

Twist lever, adjustable length

With metal lever with grid hole and plastic roller 19 mm

Snap-action contacts	1 NO + 1 NC --	⊕ B	3SE5212-0CK60	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5212-0KK60	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5212-0LK60	1	1 unit	41K

With metal lever and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC --	A	3SE5212-0BK50	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	B	3SE5212-0CK50	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	B	3SE5212-0LK50	1	1 unit	41K

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

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

¹⁾ Popular versions.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 12/34.

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	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		

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



Basic switch

With plunger

Slow-action contacts	1 NO + 1 NC --	⤵ A	3SE5212-0BC05	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⤵ A	3SE5212-0CC05	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⤵ A	3SE5212-0KC05	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⤵ A	3SE5212-0LC05	1	1 unit	41K
Slow-action cont. with make-before-break	1 NO + 2 NC --	⤵ A	3SE5212-0MC05	1	1 unit	41K
Slow-action contacts	2 NO + 1 NC --	⤵ A	3SE5212-0PC05	1	1 unit	41K



With increased
corrosion
protection

With increased corrosion protection²⁾

Slow-action contacts	1 NO + 1 NC --	⤵ B	3SE5212-0BC05-1CA0	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⤵ B	3SE5212-0CC05-1CA0	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⤵ B	3SE5212-0KC05-1CA0	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⤵ B	3SE5212-0LC05-1CA0	1	1 unit	41K
Slow-action cont. with make-before-break	1 NO + 2 NC --	⤵ B	3SE5212-0MC05-1CA0	1	1 unit	41K
Slow-action contacts	2 NO + 1 NC --	⤵ B	3SE5212-0PC05-1CA0	1	1 unit	41K



With M12 plug

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

Slow-action contacts	1 NO + 1 NC --	⤵ B	3SE5214-0BC05-1AC5	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⤵ B	3SE5214-0CC05-1AC5	1	1 unit	41K
Slow-action contacts	2 NC --	⤵ B	3SE5214-0KC05-1AE1	1	1 unit	41K
Snap-action contacts	2 NC --	⤵ B	3SE5214-0LC05-1AE1	1	1 unit	41K



With 2 LEDs

With 2 LEDs, yellow/green

Slow-action contacts	1 NO + 2 NC 24 V DC	⤵ B	3SE5212-1KC05	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC 24 V DC	⤵ A	3SE5212-1LC05	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC 230 V AC	⤵ B	3SE5212-3KC05	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC 230 V AC	⤵ B	3SE5212-3LC05	1	1 unit	41K



With M12 plug
and 2 LEDs

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

Slow-action contacts	1 NO + 1 NC 24 V DC	⤵ B	3SE5214-1BC05-1AF3	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC 24 V DC	⤵ B	3SE5214-1CC05-1AF3	1	1 unit	41K

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

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

¹⁾ 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:

Selection aid see page 12/13.

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

Operating mechanisms



Plain plunger

Plain plungers

High-grade steel plungers	10	⤵ A	3SE5000-0AB01	1	1 unit	41K
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Roller plunger

Roller plungers, type C acc. to EN 50047

Plastic roller	10	⤵ A	3SE5000-0AD03	1	1 unit	41K
High-grade steel rollers	10	⤵ B	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	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm		Article No.	Price per PU		
Operating mechanisms						
	Roller plungers with central fixing					
	Plastic roller	10	⊕ B	3SE5000-0AD10	1	1 unit 41K
	High-grade steel rollers	10	⊕ B	3SE5000-0AD11	1	1 unit 41K
With central fixing						
	Roller levers, type E acc. to EN 50047					
	Metal lever, plastic roller	13	⊕ A	3SE5000-0AE10	1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊕ B	3SE5000-0AE11	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊕ B	3SE5000-0AE12	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊕ B	3SE5000-0AE13	1	1 unit 41K
	Angular roller lever					
	Metal lever, plastic roller	13	⊕ A	3SE5000-0AF10	1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊕ B	3SE5000-0AF11	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊕ A	3SE5000-0AF12	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊕ B	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)		B	3SE5000-0AR01	1	1 unit 41K
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)		B	3SE5000-0AR03	1	1 unit 41K
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)		B	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)		B	3SE5000-0AR02	1	1 unit 41K	
Twist actuators						
	Twist actuators, plastic (without lever)					
	Switching right and/or left, adjustable		⊕ A	3SE5000-0AK00	1	1 unit 41K
Levers						
	Twist levers, straight, type A according to EN 50047					
	Metal lever 21 mm, plastic roller	19	⊕ A	3SE5000-0AA21	1	1 unit 41K
	Metal lever 21 mm, high-grade steel roller	19	⊕ B	3SE5000-0AA22	1	1 unit 41K
	Metal lever 21 mm, high-grade steel roller with ball bearing	19	⊕ B	3SE5000-0AA23	1	1 unit 41K
	Metal lever 21 mm, plastic roller	30	⊕ B	3SE5000-0AA25	1	1 unit 41K
	High-grade steel lever 21 mm, plastic roller	19	⊕ B	3SE5000-0AA31	1	1 unit 41K
	High-grade steel lever 21 mm, high-grade steel roller	19	⊕ B	3SE5000-0AA32	1	1 unit 41K
	Twist levers 30 mm, straight¹⁾					
	Metal lever, plastic roller	19	⊕ B	3SE5000-0AA24	1	1 unit 41K
	Metal lever, plastic roller	30	⊕ B	3SE5000-0AA26	1	1 unit 41K
	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	⊕ B	3SE5000-0AA60	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊕ B	3SE5000-0AA61	1	1 unit 41K
	Metal lever, plastic roller	50	⊕ B	3SE5000-0AA67	1	1 unit 41K
	Metal lever, rubber roller	50	⊕ B	3SE5000-0AA68	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊕ B	3SE5000-0AA62	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊕ B	3SE5000-0AA63	1	1 unit 41K
	Twist lever, adjustable length					
	Metal lever, plastic roller	19	A	3SE5000-0AA50	1	1 unit 41K
	Metal lever, high-grade steel roller	19	B	3SE5000-0AA51	1	1 unit 41K
	Metal lever, plastic roller	30	B	3SE5000-0AA55	1	1 unit 41K
	Metal lever, plastic roller	50	B	3SE5000-0AA57	1	1 unit 41K
	Metal lever, rubber roller	50	B	3SE5000-0AA58	1	1 unit 41K
	High-grade steel lever, plastic roller	19	B	3SE5000-0AA52	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	B	3SE5000-0AA53	1	1 unit 41K
	Rod actuators, type D according to EN 50041					
	Aluminum rod, length 200 mm	6	B	3SE5000-0AA80	1	1 unit 41K
	Spring rod, length 200 mm	6	B	3SE5000-0AA81	1	1 unit 41K
	Plastic rod, length 200 mm	6	B	3SE5000-0AA82	1	1 unit 41K
	Plastic rod, length 330 mm	6	B	3SE5000-0AA83	1	1 unit 41K

⊕ Positively driven actuator, necessary in safety circuits.

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

SIRIUS 3SE5 Mechanical Position Switches

3SE5, metal enclosures Enclosure width 40 mm according 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	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				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 --	⊙ A	3SE5112-0BB01	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ A	3SE5112-0CB01	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5112-0KB01	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5112-0LB01	1	1 unit	41K
Rounded plungers, type B according to EN 50041							
With high-grade steel plungers, with 3 mm overtravel							
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5112-0BC02	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ ⊕	3SE5112-0CC02	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5112-0KC02	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5112-0LC02	1	1 unit	41K
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 --	⊙ B	3SE5112-0BD02	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ ►	3SE5112-0CD02	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5112-0KD02	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5112-0LD02	1	1 unit	41K
With M12 connector socket, 5-pole (125 V, 4 A) and 2 LEDs							
	Snap-action contacts	1 NO + 1 NC 24 V DC	⊙ B	3SE5114-1CD02-1AF3	1	1 unit	41K
Roller levers							
With metal lever and plastic roller 22 mm							
	Slow-action contacts	1 NO + 1 NC --	⊙ B	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 --	⊙ B	3SE5112-0KE01	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5112-0LE01	1	1 unit	41K
Angular roller lever							
With metal lever and plastic roller 22 mm							
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5112-0BF01	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ A	3SE5112-0CF01	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5112-0LF01	1	1 unit	41K
Spring rod							
Length 142.5 mm, with plastic plunger 50 mm							
	Snap-action contacts	1 NO + 1 NC --	►	3SE5112-0CR01	1	1 unit	41K

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

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

¹⁾ Popular versions.

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

SIRIUS 3SE5 Mechanical Position Switches

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

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

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

Complete units¹⁾ • Enclosure width 40 mm



Twist lever

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 --	⊕ B	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 --	⊕ B	3SE5112-0KH01	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5112-0LH01	1	1 unit	41K

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

Snap-action contacts	1 NO + 1 NC --	⊕ A	3SE5114-0CH01-1AC5	1	1 unit	41K
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With M12 connector socket, 5-pole (125 V, 4 A), and 2 LEDs

Snap-action contacts	1 NO + 1 NC 24 V DC	⊕ B	3SE5114-1CH01-1AF3	1	1 unit	41K
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With metal lever 27 mm and high-grade steel roller 19 mm

Slow-action contacts	1 NO + 1 NC --	⊕ B	3SE5112-0BH02	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⊕ A	3SE5112-0CH02	1	1 unit	41K

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

Snap-action contacts	1 NO + 1 NC --	⊕ B	3SE5114-1CH02-1AF3	1	1 unit	41K
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With metal lever 30 mm and plastic roller 19 mm

Snap-action contacts	1 NO + 1 NC --	⊕ ►	3SE5112-0CH24	1	1 unit	41K
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Twist lever, adjustable length

With metal lever with grid hole and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC --	⊕ B	3SE5112-0BH60	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⊕ ►	3SE5112-0CH60	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5112-0LH60	1	1 unit	41K

Twist levers, adjustable length, with grid hole



Twist lever, adjustable length

With metal lever and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC --	B	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 --	B	3SE5112-0LH50	1	1 unit	41K

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

Snap-action contacts	1 NO + 2 NC 24 V DC	B	3SE5114-1LH50-1AD4	1	1 unit	41K
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With metal lever and high-grade steel roller 19 mm

Snap-action contacts	1 NO + 1 NC --	B	3SE5112-0CH51	1	1 unit	41K
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Fork levers, latching

With metal lever and 2 plastic rollers 19 mm

Snap-action contacts	1 NO + 1 NC --	⊕ B	3SE5112-0CT11	1	1 unit	41K
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Fork lever



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
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With plastic rod, length 200 mm

Snap-action contacts	1 NO + 1 NC --	B	3SE5112-0CH82	1	1 unit	41K
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Rod actuator

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

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

¹⁾ Popular versions.

Note:

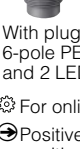
If the device you require is not available as a complete unit, see "Modular System", page 12/38.

SIRIUS 3SE5 Mechanical Position Switches

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

Modular system

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

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

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

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

¹⁾ Use corresponding high-grade steel lever.

Note:

Selection aid see page 12/13.

SIRIUS 3SE5 Mechanical Position Switches

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

Version		Diameter	DT	Modular system		PU (UNIT, SET, M)	PS*	PG	
		mm		Article No.	Price per PU				
Operating mechanisms									
	Plain plunger								
	High-grade steel plunger	10	⊕ A	3SE5000-0AB01		1	1 unit	41K	
	Rounded plungers, type B according to EN 50041								
	High-grade steel plungers, with 3 mm overtravel	10	⊕ B	3SE5000-0AC02		1	1 unit	41K	
	Roller plungers, type C acc. to EN 50041								
	High-grade steel roller, with 3 mm overtravel	13	⊕ B	3SE5000-0AD02		1	1 unit	41K	
	Roller lever								
	Metal lever, plastic roller	22	⊕ A	3SE5000-0AE01		1	1 unit	41K	
	Metal lever, high-grade steel roller	22	⊕ B	3SE5000-0AE02		1	1 unit	41K	
	High-grade steel lever, plastic roller	22	⊕ B	3SE5000-0AE03		1	1 unit	41K	
	High-grade steel lever, high-grade steel roller	22	⊕ B	3SE5000-0AE04		1	1 unit	41K	
	Angular roller lever								
	Metal lever, plastic roller	22	⊕ A	3SE5000-0AF01		1	1 unit	41K	
	Metal lever, high-grade steel roller	22	⊕ B	3SE5000-0AF02		1	1 unit	41K	
	High-grade steel lever, plastic roller	22	⊕ B	3SE5000-0AF03		1	1 unit	41K	
	High-grade steel lever, high-grade steel roller	22	⊕ B	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)		B	3SE5000-0AR01		1	1 unit	41K	
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)		B	3SE5000-0AR03		1	1 unit	41K	
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)		B	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)		B	3SE5000-0AR02		1	1 unit	41K	
Twist actuators									
	Twist actuators, metal (without lever)								
	• For twist levers and rod actuators, switching right and/or left, adjustable		⊕ A	3SE5000-0AH00		1	1 unit	41K	
	• For fork levers, latching		⊕ B	3SE5000-0AT10		1	1 unit	41K	
	Levers								
	Twist levers, offset, type A according to EN 50041								
	Metal lever 27 mm, plastic roller	19	⊕ A	3SE5000-0AA01		1	1 unit	41K	
	Metal lever 27 mm, high-grade steel roller	19	⊕ A	3SE5000-0AA02		1	1 unit	41K	
	Metal lever 27 mm, high-gr. steel roller with ball bearing	19	⊕ B	3SE5000-0AA03		1	1 unit	41K	
	Metal lever 27 mm, 2 plastic rollers	19	⊕ B	3SE5000-0AA04		1	1 unit	41K	
	Metal lever 27 mm, plastic roller	30	⊕ B	3SE5000-0AA05		1	1 unit	41K	
	Metal lever 27 mm, rubber roller	50	⊕ B	3SE5000-0AA08		1	1 unit	41K	
	High-grade steel lever 27 mm, plastic roller	19	⊕ B	3SE5000-0AA11		1	1 unit	41K	
	High-grade steel lever 27 mm, high-grade steel roller	19	⊕ B	3SE5000-0AA12		1	1 unit	41K	
	Metal lever 35 mm, plastic roller	19	⊕ B	3SE5000-0AA15		1	1 unit	41K	
	High-grade steel lever 35 mm, plastic roller	19	⊕ B	3SE5000-0AA16		1	1 unit	41K	
	Twist levers 30 mm, straight¹⁾								
	Metal lever, plastic roller	19	⊕ B	3SE5000-0AA24		1	1 unit	41K	
	Metal lever, plastic roller	30	⊕ B	3SE5000-0AA26		1	1 unit	41K	
		Twist levers, adjustable length, with grid hole							
		Metal lever, plastic roller	19	⊕ B	3SE5000-0AA60		1	1 unit	41K
Metal lever, high-grade steel roller		19	⊕ B	3SE5000-0AA61		1	1 unit	41K	
Metal lever, rubber roller		50	⊕ B	3SE5000-0AA68		1	1 unit	41K	
High-grade steel lever, plastic roller		19	⊕ B	3SE5000-0AA62		1	1 unit	41K	
High-grade steel lever, high-grade steel roller		19	⊕ B	3SE5000-0AA63		1	1 unit	41K	
Twist lever, adjustable length									
	Metal lever, plastic roller	19	A	3SE5000-0AA50		1	1 unit	41K	
	Metal lever, high-grade steel roller	19	B	3SE5000-0AA51		1	1 unit	41K	
	Metal lever, plastic roller	30	B	3SE5000-0AA55		1	1 unit	41K	
	Metal lever, rubber roller	50	B	3SE5000-0AA58		1	1 unit	41K	
	High-grade steel lever, plastic roller	19	B	3SE5000-0AA52		1	1 unit	41K	
	High-grade steel lever, high-grade steel roller	19	B	3SE5000-0AA53		1	1 unit	41K	
	Fork levers (for switches with snap-action contacts only)								
2 metal levers, 2 plastic rollers	19	⊕ B	3SE5000-0AT01		1	1 unit	41K		
2 metal levers, 2 high-grade steel rollers	19	⊕ B	3SE5000-0AT02		1	1 unit	41K		
2 high-grade steel levers, 2 plastic rollers	19	⊕ B	3SE5000-0AT03		1	1 unit	41K		
	Rod actuators, type D according to EN 50041								
	Aluminum rod, length 200 mm	6	B	3SE5000-0AA80		1	1 unit	41K	
	Spring rod, length 200 mm	6	B	3SE5000-0AA81		1	1 unit	41K	
	Plastic rod, length 200 mm	6	B	3SE5000-0AA82		1	1 unit	41K	

⊕ Positively driven actuator, necessary in safety circuits.

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

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	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				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 --	⊙ B	3SE5122-0BB01	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ B	3SE5122-0CB01	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5122-0KB01	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5122-0LB01	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊙ B	3SE5122-0PB01	1	1 unit	41K
	Rounded plungers						
	With high-grade steel plungers, with 3 mm overtravel						
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5122-0BC02	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ ►	3SE5122-0CC02	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5122-0KC02	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5122-0LC02	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊙ B	3SE5122-0PC02	1	1 unit	41K
	Roller plungers						
	With high-grade steel roller 13 mm, with 3 mm overtravel						
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5122-0BD02	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ A	3SE5122-0CD02	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5122-0KD02	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5122-0LD02	1	1 unit	41K
	Roller levers						
	With metal lever and plastic roller 22 mm						
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5122-0BE01	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ A	3SE5122-0CE01	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5122-0KE01	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊙ B	3SE5122-0LE01	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊙ B	3SE5122-0PE01	1	1 unit	41K
	With metal lever and high-grade steel roller 22 mm						
	Snap-action contacts	1 NO + 1 NC --	⊙ B	3SE5122-0CE02	1	1 unit	41K
	Angular roller levers						
	With metal lever and plastic roller 22 mm						
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5122-0BF01	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊙ B	3SE5122-0CF01	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊙ B	3SE5122-0PF01	1	1 unit	41K

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

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

¹⁾ Popular versions.

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	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
							
							
				Article No.	Price per PU		

Complete units¹⁾ · Enclosure width 56 mm



Spring rod

Spring rods

Length 142.5 mm, with plastic plunger 50 mm

Snap-action contacts	1 NO + 1 NC --	B	3SE5122-0CR01	1	1 unit	41K
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Twist lever

Twist levers

With metal lever 27 mm and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC --	⊕ B	3SE5122-0BH01	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⊕ A	3SE5122-0CH01	1	1 unit	41K
Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5122-0KH01	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5122-0LH01	1	1 unit	41K
Slow-action contacts	2 NO + 1 NC --	⊕ B	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 --	⊕ B	3SE5122-0CH02	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5122-0LH02	1	1 unit	41K



Twist levers,
adjustable
length,
with grid hole

Twist lever, adjustable length

With metal lever with grid hole and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC --	⊕ B	3SE5122-0BH60	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	⊕ B	3SE5122-0CH60	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5122-0LH60	1	1 unit	41K

With metal lever and plastic roller 19 mm

Slow-action contacts	1 NO + 1 NC --	B	3SE5122-0BH50	1	1 unit	41K
Snap-action contacts	1 NO + 1 NC --	A	3SE5122-0CH50	1	1 unit	41K
Snap-action contacts	1 NO + 2 NC --	B	3SE5122-0LH50	1	1 unit	41K



Fork lever

Fork levers, latching

With metal lever and 2 plastic rollers 19 mm

Snap-action contacts	1 NO + 1 NC --	⊕ B	3SE5122-0CT11	1	1 unit	41K
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Rod actuator

Rod actuators

With aluminum rod, length 200 mm

Snap-action contacts	1 NO + 1 NC --	B	3SE5122-0CH80	1	1 unit	41K
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With plastic rod, length 200 mm

Snap-action contacts	1 NO + 1 NC --	B	3SE5122-0CH82	1	1 unit	41K
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 For online configurator see www.siemens.com/sirius/configurators

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

¹⁾ Popular versions.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 12/42.

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	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		

Basic switches • Enclosure width 56 mm

	With 3 x M20 x 1.5 connecting thread						
	Slow-action contacts	1 NO + 1 NC --	⊕ A	3SE5122-0BA00	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ A	3SE5122-0CA00	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5122-0KA00	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ A	3SE5122-0LA00	1	1 unit	41K
	Slow-action cont. with make-before-break	1 NO + 2 NC --	⊕ A	3SE5122-0MA00	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ A	3SE5122-0PA00	1	1 unit	41K
	With increased corrosion protection¹⁾						
	Slow-action contacts	1 NO + 1 NC --	⊕ B	3SE5122-0BA00-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 1 NC --	⊕ B	3SE5122-0CA00-1CA0	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊕ B	3SE5122-0KA00-1CA0	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC --	⊕ B	3SE5122-0LA00-1CA0	1	1 unit	41K
	Slow-action cont. with make-before-break	1 NO + 2 NC --	⊕ B	3SE5122-0MA00-1CA0	1	1 unit	41K
	Slow-action contacts	2 NO + 1 NC --	⊕ B	3SE5122-0PA00-1CA0	1	1 unit	41K
	With 2 LEDs, yellow/green						
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊕ B	3SE5122-1KA00	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 24 V DC	⊕ B	3SE5122-1LA00	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊕ B	3SE5122-3KA00	1	1 unit	41K
	Snap-action contacts	1 NO + 2 NC 230 V AC	⊕ B	3SE5122-3LA00	1	1 unit	41K

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

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

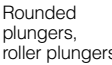
¹⁾ Use corresponding high-grade steel lever.

Note:

Selection aid see page 12/13.

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

Operating mechanisms

	Plain plunger					
	High-grade steel plunger	10	⊕ A	3SE5000-0AB01	1	1 unit 41K
	Rounded plungers, type B according to EN 50041					
	High-grade steel plungers, with 3 mm overtravel	10	⊕ B	3SE5000-0AC02	1	1 unit 41K
	Roller plungers, type C acc. to EN 50041					
	High-grade steel roller, with 3 mm overtravel	13	⊕ B	3SE5000-0AD02	1	1 unit 41K
	Roller levers					
	Metal lever, plastic roller	22	⊕ A	3SE5000-0AE01	1	1 unit 41K
	Metal lever, high-grade steel roller	22	⊕ B	3SE5000-0AE02	1	1 unit 41K
	High-grade steel lever, plastic roller	22	⊕ B	3SE5000-0AE03	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	22	⊕ B	3SE5000-0AE04	1	1 unit 41K
	Angular roller levers					
	Metal lever, plastic roller	22	⊕ A	3SE5000-0AF01	1	1 unit 41K
	Metal lever, high-grade steel roller	22	⊕ B	3SE5000-0AF02	1	1 unit 41K
	High-grade steel lever, plastic roller	22	⊕ B	3SE5000-0AF03	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	22	⊕ B	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)	B		3SE5000-0AR01	1	1 unit 41K
	• Length 76 mm (spring 23.5 mm, plunger 10 mm)	B		3SE5000-0AR03	1	1 unit 41K
	• Length 242.5 mm (spring 150 mm, plunger 50 mm)	B		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)	B		3SE5000-0AR02	1	1 unit 41K

SIRIUS 3SE5 Mechanical Position Switches

3SE5, metal enclosures
Enclosure width 56 mm

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm		Article No.	Price per PU		
Twist actuators						
 Twist actuator	Twist actuators , metal (without lever)					
	- For twist levers and rod actuators, switching right and/or left, adjustable - For fork levers, latching					
		⤵ A	3SE5000-0AH00	1	1 unit	41K
		⤵ B	3SE5000-0AT10	1	1 unit	41K
Levers						
 Twist levers	Twist levers 27 mm, offset, type A according to EN 50041					
	Metal lever, plastic roller	19	⤵ A	3SE5000-0AA01	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⤵ A	3SE5000-0AA02	1	1 unit 41K
	Metal lever, high-grade steel roller with ball bearing	19	⤵ B	3SE5000-0AA03	1	1 unit 41K
	Metal lever, 2 plastic rollers	19	⤵ B	3SE5000-0AA04	1	1 unit 41K
	Metal lever, plastic roller	30	⤵ B	3SE5000-0AA05	1	1 unit 41K
	Metal lever, plastic roller	50	⤵ B	3SE5000-0AA07	1	1 unit 41K
	Metal lever, rubber roller	50	⤵ B	3SE5000-0AA08	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⤵ B	3SE5000-0AA11	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⤵ B	3SE5000-0AA12	1	1 unit 41K
	Twist levers 35 mm, offset					
	Metal lever, plastic roller	19	⤵ B	3SE5000-0AA15	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⤵ B	3SE5000-0AA16	1	1 unit 41K
	Twist levers 30 mm, straight¹⁾					
	Metal lever, plastic roller	19	⤵ B	3SE5000-0AA24	1	1 unit 41K
	Metal lever, plastic roller	30	⤵ B	3SE5000-0AA26	1	1 unit 41K
 Twist lever, adjustable length	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	⤵ B	3SE5000-0AA60	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⤵ B	3SE5000-0AA61	1	1 unit 41K
	Metal lever, plastic roller	50	⤵ B	3SE5000-0AA67	1	1 unit 41K
	Metal lever, rubber roller	50	⤵ B	3SE5000-0AA68	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⤵ B	3SE5000-0AA62	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⤵ B	3SE5000-0AA63	1	1 unit 41K
	Twist lever, adjustable length					
 Twist lever, adjustable length	Metal lever, plastic roller	19	A	3SE5000-0AA50	1	1 unit 41K
	Metal lever, high-grade steel roller	19	B	3SE5000-0AA51	1	1 unit 41K
	Metal lever, plastic roller	30	B	3SE5000-0AA55	1	1 unit 41K
	Metal lever, plastic roller	50	B	3SE5000-0AA57	1	1 unit 41K
	Metal lever, rubber roller	50	B	3SE5000-0AA58	1	1 unit 41K
	High-grade steel lever, plastic roller	19	B	3SE5000-0AA52	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	B	3SE5000-0AA53	1	1 unit 41K
	Fork levers (for switches with snap-action contacts only)					
	2 metal levers, 2 plastic rollers	19	⤵ B	3SE5000-0AT01	1	1 unit 41K
	2 metal levers, 2 high-grade steel rollers	19	⤵ B	3SE5000-0AT02	1	1 unit 41K
 Fork lever	2 high-grade steel levers, 2 plastic rollers	19	⤵ B	3SE5000-0AT03	1	1 unit 41K
	2 high-grade steel levers, 2 high-grade steel rollers	19	⤵ B	3SE5000-0AT04	1	1 unit 41K
 Rod actuator	Rod actuators, type D according to EN 50041					
	Aluminum rod, length 200 mm	6	B	3SE5000-0AA80	1	1 unit 41K
	Spring rod, length 200 mm	6	B	3SE5000-0AA81	1	1 unit 41K
	Plastic rod, length 200 mm	6	B	3SE5000-0AA82	1	1 unit 41K

⤵ Positively driven actuator, necessary in safety circuits.

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

SIRIUS 3SE5 Mechanical Position Switches

Metal enclosures Enclosure width 56 mm, XL

Selection and ordering data

Complete units

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

Version	Contacts	LEDs	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				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) --	⊕ B	3SE5162-0CB01	1	1 unit	41K
	Rounded plungers						
	With high-grade steel plungers, with 3 mm overtravel						
	Slow-action contacts	1 NO + 1 NC and --	⊕ B	3SE5162-0EC02	1	1 unit	41K
	Slow-action contacts with make-before-break	1 NO + 2 NC					
	2 mm travel difference						
	Roller plungers						
	With high-grade steel roller 13 mm, with 3 mm overtravel						
	Slow-action contacts	2 × (1 NO + 1 NC) --	⊕ B	3SE5162-0BD02	1	1 unit	41K
	Snap-action contacts	2 × (1 NO + 1 NC) --	⊕ A	3SE5162-0CD02	1	1 unit	41K
	Roller levers						
	With metal lever and plastic roller 22 mm						
	Slow-action contacts	2 × (1 NO + 1 NC) --	⊕ B	3SE5162-0BE01	1	1 unit	41K
	Snap-action contacts	2 × (1 NO + 1 NC) --	⊕ A	3SE5162-0CE01	1	1 unit	41K
	With metal lever and high-grade steel roller 22 mm						
	Snap-action contacts	2 × (1 NO + 1 NC) --	⊕ B	3SE5162-0CE02	1	1 unit	41K
	Angular roller lever						
	With metal lever and plastic roller 22 mm						
	Snap-action contacts	2 × (1 NO + 1 NC) --	⊕ B	3SE5162-0CF01	1	1 unit	41K
	Twist levers						
	With metal lever 27 mm and plastic roller 19 mm						
	Snap-action contacts	2 × (1 NO + 1 NC) --	⊕ A	3SE5162-0CH01	1	1 unit	41K

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

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

¹⁾ Popular versions.

Note:

If the device you require is not available as a complete unit, see "Modular System", page 12/45.

SIRIUS 3SE5 Mechanical Position Switches

Metal enclosures
Enclosure width 56 mm, XL

Modular system

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

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

Basic switches • Enclosure width 56 mm, XL



Basic switch

With 3 x M20 x 1.5 connecting thread

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

With increased corrosion protection¹⁾

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

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

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

¹⁾ Use corresponding high-grade steel lever.

Note:

Selection aid see page 12/13.

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

Operating mechanisms



Plain plunger

Plain plungers

High-grade steel plunger	10	⊕ A	3SE5000-0AB01	1	1 unit	41K
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Rounded plunger

Rounded plungers, type B according to EN 50041

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

Roller plungers, type C acc. to EN 50041

High-grade steel roller, with 3 mm overtravel	13	⊕ B	3SE5000-0AD02	1	1 unit	41K
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Roller lever

Roller levers

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



Angular roller lever

Angular roller lever

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



Spring rod

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)		B	3SE5000-0AR01	1	1 unit	41K
• Length 76 mm (spring 23.5 mm, plunger 10 mm)		B	3SE5000-0AR03	1	1 unit	41K
• Length 242.5 mm (spring 150 mm, plunger 50 mm)		B	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)		B	3SE5000-0AR02	1	1 unit	41K

⊕ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches

Metal enclosures Enclosure width 56 mm, XL

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm		Article No.	Price per PU		
Twist actuators						
 Twist actuator	Twist actuators , metal (without lever)					
	- For twist levers and rod actuators, switching right and/or left, adjustable - For fork levers, latching					
		⤵ A	3SE5000-0AH00	1	1 unit	41K
		⤵ B	3SE5000-0AT10	1	1 unit	41K
Levers						
 Twist levers	Twist levers 27 mm, offset, type A according to EN 50041					
	Metal lever, plastic roller	19	⤵ A	3SE5000-0AA01	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⤵ A	3SE5000-0AA02	1	1 unit 41K
	Metal lever, high-grade steel roller with ball bearing	19	⤵ B	3SE5000-0AA03	1	1 unit 41K
	Metal lever, 2 plastic rollers	19	⤵ B	3SE5000-0AA04	1	1 unit 41K
	Metal lever, plastic roller	30	⤵ B	3SE5000-0AA05	1	1 unit 41K
	Metal lever, plastic roller	50	⤵ B	3SE5000-0AA07	1	1 unit 41K
	Metal lever, rubber roller	50	⤵ B	3SE5000-0AA08	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⤵ B	3SE5000-0AA11	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⤵ B	3SE5000-0AA12	1	1 unit 41K
	Twist levers 35 mm, offset					
	Metal lever, plastic roller	19	⤵ B	3SE5000-0AA15	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⤵ B	3SE5000-0AA16	1	1 unit 41K
	Twist levers 30 mm, straight¹⁾					
	Metal lever, plastic roller	19	⤵ B	3SE5000-0AA24	1	1 unit 41K
	Metal lever, plastic roller	30	⤵ B	3SE5000-0AA26	1	1 unit 41K
 Twist lever, adjustable length	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	⤵ B	3SE5000-0AA60	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⤵ B	3SE5000-0AA61	1	1 unit 41K
	Metal lever, plastic roller	50	⤵ B	3SE5000-0AA67	1	1 unit 41K
	Metal lever, rubber roller	50	⤵ B	3SE5000-0AA68	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⤵ B	3SE5000-0AA62	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⤵ B	3SE5000-0AA63	1	1 unit 41K
	Twist lever, adjustable length					
	Metal lever, plastic roller	19	A	3SE5000-0AA50	1	1 unit 41K
	Metal lever, high-grade steel roller	19	B	3SE5000-0AA51	1	1 unit 41K
 Fork lever	Metal lever, plastic roller	30	B	3SE5000-0AA55	1	1 unit 41K
	Metal lever, plastic roller	50	B	3SE5000-0AA57	1	1 unit 41K
	Metal lever, rubber roller	50	B	3SE5000-0AA58	1	1 unit 41K
	High-grade steel lever, plastic roller	19	B	3SE5000-0AA52	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	B	3SE5000-0AA53	1	1 unit 41K
	Fork levers (for switches with snap-action contacts only)					
	2 metal levers, 2 plastic rollers	19	⤵ B	3SE5000-0AT01	1	1 unit 41K
	2 metal levers, 2 high-grade steel rollers	19	⤵ B	3SE5000-0AT02	1	1 unit 41K
	2 high-grade steel levers, 2 plastic rollers	19	⤵ B	3SE5000-0AT03	1	1 unit 41K
	2 high-grade steel levers, 2 high-grade steel rollers	19	⤵ B	3SE5000-0AT04	1	1 unit 41K
 Rod actuator	Rod actuators, type D according to EN 50041					
	Aluminum rod, length 200 mm	6	B	3SE5000-0AA80	1	1 unit 41K
	Spring rod, length 200 mm	6	B	3SE5000-0AA81	1	1 unit 41K
	Plastic rod, length 200 mm	6	B	3SE5000-0AA82	1	1 unit 41K
	Plastic rod, length 330 mm	6	B	3SE5000-0AA83	1	1 unit 41K

⤵ Positively driven actuator, necessary in safety circuits.

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

SIRIUS 3SE5 Mechanical Position Switches

3SE5, metal enclosures
Ambient temperature up to –40 °C

Selection and ordering data

Complete units

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

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

Complete units • Enclosure width 31 mm

Rounded plungers, type B, according to EN 50047



Rounded plungers

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

Twist levers, type A acc. to EN 50047



Twist levers

With metal lever 21 mm and high-grade steel roller 19 mm, twist actuator in metal version

Snap-action contacts	1 NO + 1 NC --	→ B	3SE5212-0CH22-1AJ0	1	1 unit	41K
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For online configurator see www.siemens.com/sirius/configurators

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

Note:

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

SIRIUS 3SE5 Mechanical Position Switches

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

Modular system

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

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

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



With plunger

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

Basic switch

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

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

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

Note:

Selection aid see page 12/13.

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

Operating mechanisms



Roller plungers

Roller plungers, type C acc. to EN 50047

Plastic roller	10	⤵ B	3SE5000-0AD03-1AJ0	1	1 unit	41K
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Roller lever

Roller levers, type E acc. to EN 50047

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



Angular roller lever

Angular roller lever

Metal lever, plastic roller	13	⤵ B	3SE5000-0AF10-1AJ0	1	1 unit	41K
High-grade steel lever, plastic roller	13	⤵ B	3SE5000-0AF12-1AJ0	1	1 unit	41K

Twist actuators



Twist actuator

Twist actuators, plastic (without lever)

Switching right and/or left, adjustable		⤵ B	3SE5000-0AK00-1AJ0	1	1 unit	41K
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Levers

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



Twist levers

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

Twist levers, adjustable length, with grid hole



Twist lever, adjustable length

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

⤵ Positively driven actuator, necessary in safety circuits.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, metal enclosures
Ambient temperature up to –40 °C

Complete units

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

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

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

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

Note:

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

SIRIUS 3SE5 Mechanical Position Switches

3SE5, metal enclosures
Ambient temperature up to –40 °C

Modular system

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

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

Basic switch

Basic switch

Basic switch

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

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

Note:

Selection aid see page 12/13.

SIRIUS 3SE5 Mechanical Position Switches

3SE5, metal enclosures
Ambient temperature up to –40 °C

Version	Diameter	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm		Article No.	Price per PU		
Operating mechanisms						
 Rounded plungers	Rounded plungers, type B according to EN 50041					
	High-grade steel plungers, with 3 mm overtravel	10	⤵ B	3SE5000-0AC02-1AJ0	1	1 unit 41K
 Roller plungers	Roller plungers, type C acc. to EN 50041					
	High-grade steel roller, with 3 mm overtravel	10	⤵ B	3SE5000-0AD02-1AJ0	1	1 unit 41K
 Roller lever	Roller levers					
	Metal lever, plastic roller	13	⤵ B	3SE5000-0AE01-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⤵ B	3SE5000-0AE03-1AJ0	1	1 unit 41K
 Angular roller lever	Angular roller levers					
	Metal lever, plastic roller	13	⤵ B	3SE5000-0AF01-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⤵ B	3SE5000-0AF03-1AJ0	1	1 unit 41K
Twist actuators						
 Twist actuator	Twist actuators, metal (without lever)					
	Switching right and/or left, adjustable		⤵ B	3SE5000-0AH00-1AJ0	1	1 unit 41K
Levers						
 Twist lever	Twist levers, type A acc. to EN 50041					
	Metal lever, plastic roller	19	⤵ B	3SE5000-0AA01-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⤵ B	3SE5000-0AA11-1AJ0	1	1 unit 41K
 Twist lever, adjustable length	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	⤵ B	3SE5000-0AA60-1AJ0	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⤵ B	3SE5000-0AA62-1AJ0	1	1 unit 41K

⤵ 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. 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 lever can be rotated through 180°;
Twist lever 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	DT	Configurator		PU (UNIT, SET, M)	PS*	PG
		mm		Article No.	Price per PU			
Complete units • Enclosure width 30 or 40 mm								
 Rounded plungers	Rounded plungers							
	• Standard mounting							
	- With 2 m cable 5 x 0.75 mm ²	30	⌚ A	3SE5413-0CC20-1EA2	1	1 unit	41K	
		40	⌚ A	3SE5423-0CC20-1EA2	1	1 unit	41K	
	- With 5 m cable 5 x 0.75 mm ²	30	⌚ B	3SE5413-0CC20-1EA5	1	1 unit	41K	
	- With M12 connector socket, 5-pole	30	⌚ A	3SE5413-0CC20-1EB1	1	1 unit	41K	
		40	⌚ A	3SE5423-0CC20-1EB1	1	1 unit	41K	
	• With central fixing M12 x 1							
	- With 2 m cable 5 x 0.75 mm ²	30	⌚ A	3SE5413-0CC21-1EA2	1	1 unit	41K	
		40	⌚ A	3SE5423-0CC21-1EA2	1	1 unit	41K	
 With central fixing	• With external seal							
	- With 2 m cable 5 x 0.75 mm ²	30	⌚ A	3SE5413-0CC22-1EA2	1	1 unit	41K	
		40	⌚ A	3SE5423-0CC22-1EA2	1	1 unit	41K	
 Roller plunger	Roller plungers							
	• Standard mounting							
	- With 2 m cable 5 x 0.75 mm ²	30	⌚ A	3SE5413-0CD20-1EA2	1	1 unit	41K	
		40	⌚ A	3SE5423-0CD20-1EA2	1	1 unit	41K	
	- With 5 m cable 5 x 0.75 mm ²	30	⌚ B	3SE5413-0CD20-1EA5	1	1 unit	41K	
	- With M12 connector socket, 5-pole	30	⌚ A	3SE5413-0CD20-1EB1	1	1 unit	41K	
		40	⌚ A	3SE5423-0CD20-1EB1	1	1 unit	41K	
	• With central fixing M12 x 1							
	- With 2 m cable 5 x 0.75 mm ²	30	⌚ A	3SE5413-0CD21-1EA2	1	1 unit	41K	
		40	⌚ A	3SE5423-0CD21-1EA2	1	1 unit	41K	
	• Actuator head rotated 90°							
	- With 2 m cable 5 x 0.75 mm ²	30	⌚ A	3SE5413-0CD23-1EA2	1	1 unit	41K	
 With plug	Twist levers							
	• Standard mounting							
	- With 2 m cable 5 x 0.75 mm ²	30	⌚ A	3SE5413-0CN20-1EA2	1	1 unit	41K	
		40	⌚ A	3SE5423-0CN20-1EA2	1	1 unit	41K	
	- With 5 m cable 5 x 0.75 mm ²	30	⌚ A	3SE5413-0CN20-1EA5	1	1 unit	41K	
	- With M12 connector socket, 5-pole	30	⌚ A	3SE5413-0CN20-1EB1	1	1 unit	41K	
		40	⌚ A	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	⌚ A	3SE5413-0CP20-1EA2	1	1 unit	41K	
 Twist lever								

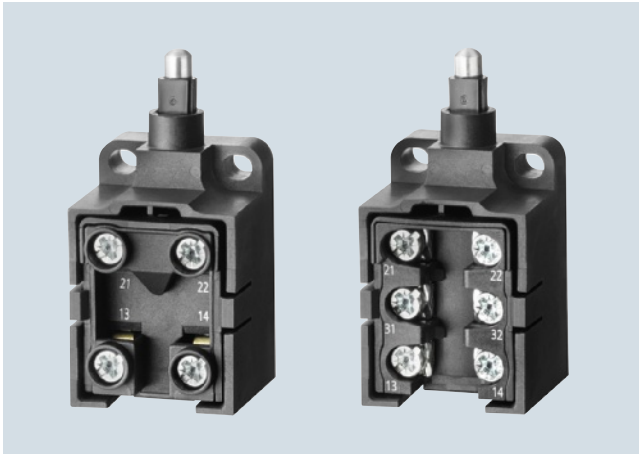
⊙ Positive opening according to IEC 60947-5-1, Appendix K.

SIRIUS 3SE5 Mechanical Position Switches

Open-Type

3SE5, open-type design

Overview



Open-type design

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

The switches are equipped with two or three contacts in 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 12/56](#)).

Improved version

NEW: The switches now 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	DT	Configurator	PU (UNIT, SET, M)	PS*	PG
			Article No.	Price per PU		
Plastic enclosures • Enclosure width 30 mm						
With metal plunger, Ø 6 mm						
	Slow-action contacts	1 NO + 1 NC	⌚ A	3SE5250-0BC05	1	1 unit 41K
	Snap-action contacts	1 NO + 1 NC	⌚ ▶	3SE5250-0CC05	1	1 unit 41K
	Slow-action contacts	1 NO + 2 NC	⌚ B	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	⌚ A	3SE5250-0MC05	1	1 unit 41K
	Slow-action contacts	2 NO + 1 NC	⌚ A	3SE5250-0PC05	1	1 unit 41K
	Empty enclosures without contact block	--	⌚ B	3SE5250-0AC05	1	1 unit 41K
Contact blocks with 2 contacts for open-type design ¹⁾						
	• Slow-action contacts	1 NO + 1 NC	⌚ B	3SE5050-0BA00	1	1 unit 41K
	• Snap-action contacts	1 NO + 1 NC	⌚ B	3SE5050-0CA00	1	1 unit 41K
	- Standard		⌚ B	3SE5050-0GA00	1	1 unit 41K
	- 2 × 2 mm switching interval		⌚ B	3SE5050-0GA00	1	1 unit 41K
	- Short stroke		⌚ B	3SE5050-0NA00	1	1 unit 41K

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

¹⁾ Contact blocks with 3 contacts [see page 12/56](#).

Selection and ordering data

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

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

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	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Manuals for 3SE5, 3SF1							
Configuration Manual SIRIUS 3SE5/3SF1 Position Switches¹⁾							
Optional accessories for 3SE51, 3SE52							
	Protective caps, rubber For rounded plungers acc. to EN 50047, 3SE5...-.C05	Black	A	3SE5000-0AC30	1	1 unit	41K
	Adapters with screw²⁾ For an increase in the mounting depth on the 3SE5000-0AH00 twist actuator, in combination with twist lever with adjustable length or rod actuator		B	3SX5100-3B	1	1 unit	41K
Spare parts for 3SE51, 3SE52							
	Empty enclosures, plastic Enclosure width 31 mm • With increased corrosion protection Enclosure width 40 mm Enclosure width 50 mm • With increased corrosion protection	Turquoise	B	3SE5232-0AC05	1	1 unit	41K
			B	3SE5232-0AC05-1CA0	1	1 unit	41K
			B	3SE5132-0AA00	1	1 unit	41K
			B	3SE5242-0AC05	1	1 unit	41K
			B	3SE5242-0AC05-1CA0	1	1 unit	41K
	Empty enclosures, metal Enclosure width 31 mm • With increased corrosion protection Enclosure width 40 mm • With increased corrosion protection Enclosure width 56 mm • With increased corrosion protection Enclosure width 56 mm, XL ²⁾	Turquoise	B	3SE5212-0AC05	1	1 unit	41K
			B	3SE5212-0AC05-1CA0	1	1 unit	41K
			B	3SE5112-0AA00	1	1 unit	41K
			B	3SE5112-0AA00-1CA0	1	1 unit	41K
			B	3SE5122-0AA00	1	1 unit	41K
			B	3SE5122-0AA00-1CA0	1	1 unit	41K
			B	3SE5162-0AA00	1	1 unit	41K
	Contact blocks with 2 contacts³⁾ • Slow-action contacts • Snap-action contacts - Standard - Gold-plated contacts - 2 x 2 mm switching interval - Short stroke	1 NO + 1 NC 1 NO + 1 NC	⊕ B ⊕ C ⊕ B ⊕ B ⊕ B	3SE5000-0BA00 3SE5000-0CA00 3SE5000-0CA00-1AC1 3SE5000-0GA00 3SE5000-0NA00	1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit	41K 41K 41K 41K 41K
	Contact blocks with 3 contacts • Slow-action contacts • Snap-action contacts • Slow-action contacts with make-before-break • Slow-action contacts	1 NO + 2 NC 1 NO + 2 NC 1 NO + 2 NC 2 NO + 1 NC	⊕ B ⊕ B ⊕ A ⊕ A	3SE5000-0KA00 3SE5000-0LA00 3SE5000-0MA00 3SE5000-0PA00	1 1 1 1	1 unit 1 unit 1 unit 1 unit	41K 41K 41K 41K
	Contact blocks for enclosure XL⁴⁾ • Slow-action contacts • Snap-action contacts • Slow-action contacts with make-before-break	1 NO + 1 NC 1 NO + 1 NC 1 NO + 2 NC	⊕ B ⊕ B ⊕ B	3SE5060-0BA00 3SE5060-0CA00 3SE5060-0MA00	1 1 1	1 unit 1 unit 1 unit	41K 41K 41K

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

¹⁾ Download of the Configuration Manual [see http://support.automation.siemens.com/WW/view/en/43920150](http://support.automation.siemens.com/WW/view/en/43920150)

²⁾ Possibly required for the conversion from 3SE21 to 3SE51.

³⁾ Unsuitable for open-type position switches; [see page 12/54](#).

⁴⁾ Equip XL enclosures only with contact combinations according to pages 12/12, 12/44 and 12/45.

SIRIUS 3SE5 Mechanical Position Switches

Accessories and spare parts

Version	Rated voltage LED	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	V						

Spare parts for 3SE51, 3SE52

 31 mm, turquoise with LED	Covers for plastic enclosures, width 31 mm						
	• Turquoise with LED	24 DC	B	3SE5230-1AA00	1	1 unit	41K
		230 AC	B	3SE5230-3AA00	1	1 unit	41K
	• Yellow	--	B	3SE5230-0AA00-1AG0	1	1 unit	41K
	• Yellow with LED	24 DC	B	3SE5230-1AA00-1AG0	1	1 unit	41K
		230 AC	B	3SE5230-3AA00-1AG0	1	1 unit	41K
 40 mm, yellow with LED	Covers for plastic enclosures, width 40 mm						
	• Turquoise with LED	24 DC	B	3SE5130-1AA00	1	1 unit	41K
		230 AC	B	3SE5130-3AA00	1	1 unit	41K
	• Yellow	--	B	3SE5130-0AA00-1AG0	1	1 unit	41K
	• Yellow with LED	24 DC	B	3SE5130-1AA00-1AG0	1	1 unit	41K
		230 AC	B	3SE5130-3AA00-1AG0	1	1 unit	41K
 50 mm, turquoise with LED	Covers for plastic enclosures, width 50 mm						
	• Turquoise with LED	24 DC	B	3SE5240-1AA00	1	1 unit	41K
		230 AC	B	3SE5240-3AA00	1	1 unit	41K
	• Yellow	--	B	3SE5240-0AA00-1AG0	1	1 unit	41K
	• Yellow with LED	24 DC	B	3SE5240-1AA00-1AG0	1	1 unit	41K
		230 AC	B	3SE5240-3AA00-1AG0	1	1 unit	41K
 31 mm, turquoise with LED	Covers for metal enclosures, width 31 mm						
	• Turquoise with LED	24 DC	B	3SE5210-1AA00	1	1 unit	41K
		230 AC	B	3SE5210-3AA00	1	1 unit	41K
	• Yellow	--	B	3SE5210-0AA00-1AG0	1	1 unit	41K
	• Yellow with LED	24 DC	B	3SE5210-1AA00-1AG0	1	1 unit	41K
		230 AC	B	3SE5210-3AA00-1AG0	1	1 unit	41K
 40 mm, yellow with LED	Covers for metal enclosures, width 40 mm						
	• Turquoise with LED	24 DC	B	3SE5110-1AA00	1	1 unit	41K
		230 AC	B	3SE5110-3AA00	1	1 unit	41K
	• Yellow	--	B	3SE5110-0AA00-1AG0	1	1 unit	41K
	• Yellow with LED	24 DC	B	3SE5110-1AA00-1AG0	1	1 unit	41K
		230 AC	B	3SE5110-3AA00-1AG0	1	1 unit	41K
 56 mm, yellow with LED	Covers for metal enclosures, width 56 mm						
	• Turquoise with LED	24 DC	B	3SE5120-1AA00	1	1 unit	41K
		230 AC	B	3SE5120-3AA00	1	1 unit	41K
	• Yellow	--	B	3SE5120-0AA00-1AG0	1	1 unit	41K
	• Yellow with LED	24 DC	B	3SE5120-1AA00-1AG0	1	1 unit	41K
		230 AC	B	3SE5120-3AA00-1AG0	1	1 unit	41K
	Covers for XL metal enclosures, width 56 mm						
	• Yellow	--	B	3SE5160-0AA00-1AG0	1	1 unit	41K

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Separate Actuator

General data

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 enclosures according to EN 50047, 31 mm wide, IP66/IP67, 1 cable entry
- Plastic and metal enclosures according to EN 50041, 40 mm wide, IP66/IP67, 1 cable entry
- Plastic enclosures, 50 mm wide, IP66/IP67, 2 cable entries
- Metal enclosures, 56 mm wide, IP66/IP67, 3 cable entries

Also available 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 12/90)

For a description of the basic switches, see page 12/4.

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 actuators are 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 12/67).

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 safety (see page 12/67).



Blocking inserts with padlock

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 12/67).

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 characteristics:

- 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 12/90); 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. Different control tasks can be performed with the best contact blocks suited for the particular purpose. Dimensions, fixing points of the enclosure are in

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

Standards

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

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

Safety position switches

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

Safety circuits

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

Category 3 according to 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 3SK1 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.

Technical specifications

Type		3SE51...-V.., 3SE52...-V..	3SE2257-XX..	3SE2243-XX..	
General data					
Standards		IEC 60947-5-1, EN 60947-5-1			
Rated insulation voltage U_i	V	400	500		
Pollution degree acc. to IEC 60664-1		Class 3	Class 3		
Rated impulse withstand voltage U_{imp}	kV	6			
Rated operational voltage U_e	V	AC 400; over 300 V AC only equal potential	AC 500; over 380 V AC only equal potential		
Conventional thermal current I_{th}	A	6	10		
Rated operational current I_e		2-pole	3-pole	1-pole	3-pole
• With alternating current 50/60 Hz		$I_e/AC-15$	$I_e/AC-15$	$I_e/AC-12$	$I_e/AC-15$
- At 24 V	A	6	6	10	10
- At 120 V	A	6	3	10	10
- At 240 V	A	3	1.5	10	10
- At 400 V	A	--	--	10	10
- At 500 V	A	--	--	10	10
• For direct current		$I_e/DC-13$	$I_e/DC-13$	$I_e/DC-12$	$I_e/DC-13$
- At 24 V	A	3	3	10	10
- At 125 V	A	0.55	0.55	--	--
- At 250 V	A	0.27	0.27	--	--
- At 110 V	A	--	--	4	1
- At 220 V	A	--	--	1	0.4
- At 440 V	A	--	--	0.5	0.2
Short-circuit protection ¹⁾					
• With DIAZED fuse links, operational class gG	A	6	6		
• With fuse links, quick	A	--	10		
• With miniature circuit breaker, Char. C	A	1	--		
• With miniature circuit breaker, Char. B	A	2	--		
Mechanical endurance		1 ×10 ⁶ operating cycles			
Electrical endurance					
• With 3RH.1, 3RT contactors in size S00, S0		10 ×10 ⁶ operating cycles		> 1 ×10 ⁶ operating cycles	
• For utilization category AC-15 when switching off $I_e/AC-15$ at 240 V		0.1 ×10 ⁶ operating cycles		0.5 ×10 ⁶ operating cycles	
Switching frequency		6000 operating cycles/h			
With 3RH.1, 3RT contactors in size S00, S0					
Minimum pull-out force for positive opening	N	20	10		30

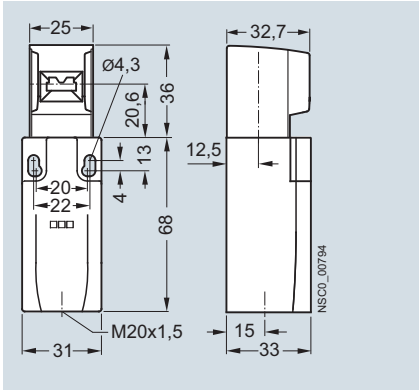
SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Separate Actuator

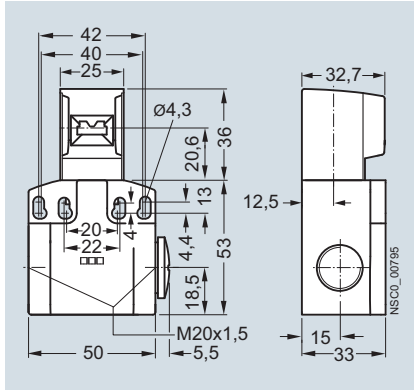
General data

3SE51, 3SE52 configuration

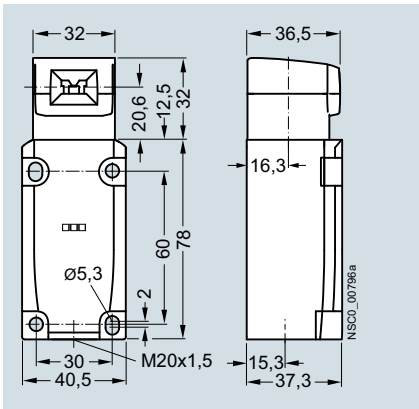
Enclosure width 31 mm
3SE523.-.QV40, 3SE523.-.RV40



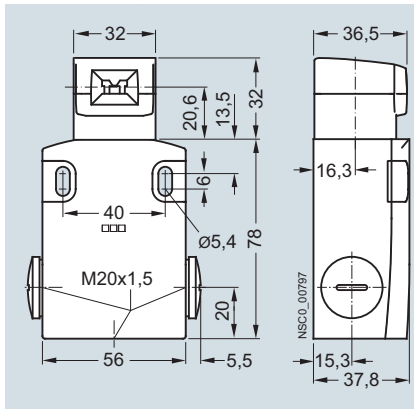
Enclosure width 50 mm
3SE524.-.QV40, 3SE524.-.RV40



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

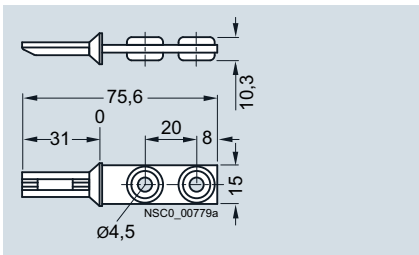


Enclosure width 56 mm
3SE512.-.QV10, 3SE512.-.RV10

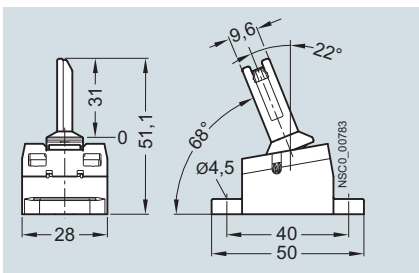


Actuators

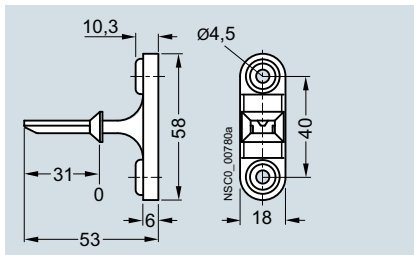
Standard actuator
3SE5000-0AV01



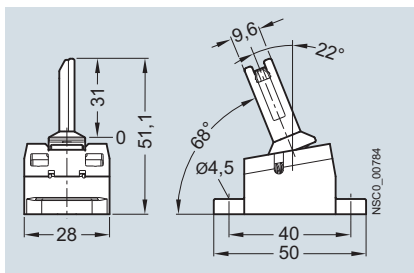
Radius actuator, approach from left
3SE5000-0AV04



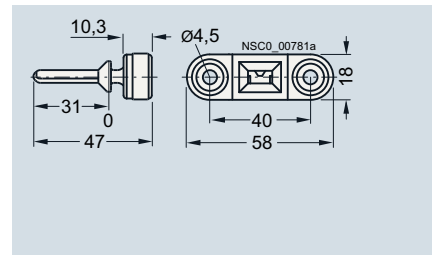
Actuator with vertical fixing
3SE5000-0AV02



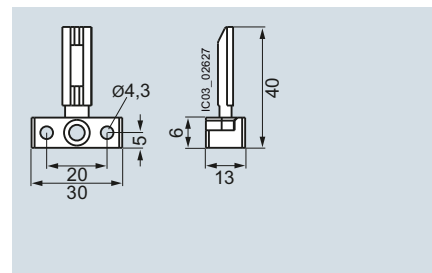
Radius actuator, approach from right
3SE5000-0AV06



Actuator with horizontal fixing
3SE5000-0AV03



Actuator with horizontal fixing
3SE5000-0AV11

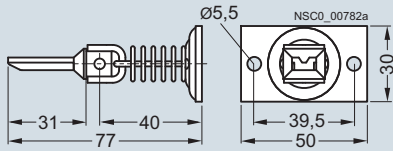


SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

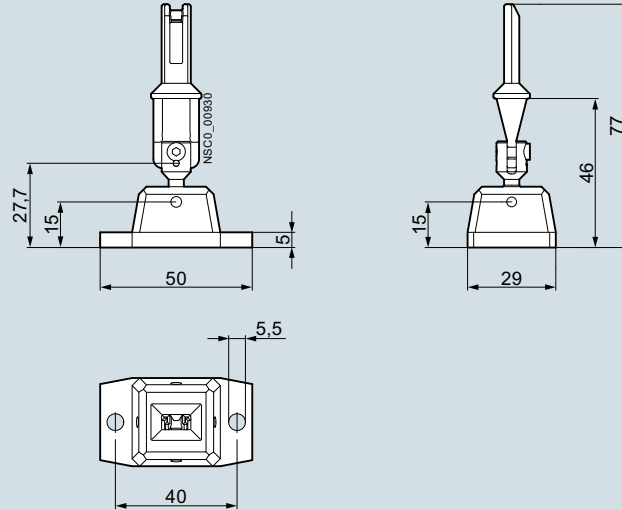
With Separate Actuator

General data

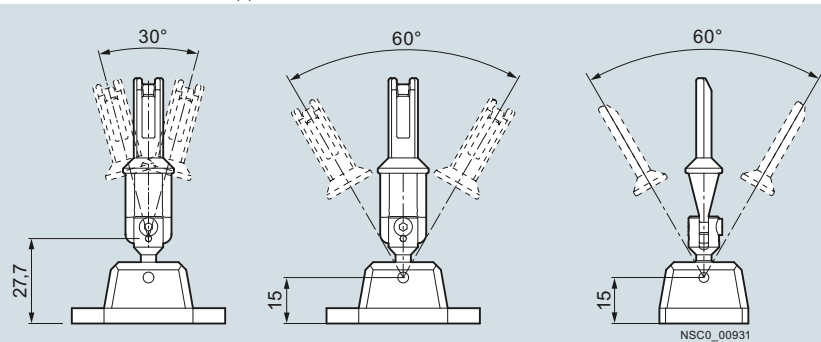
Universal radius actuator 3SE5000-0AV05



Universal radius actuator, heavy duty 3SE5000-0AV07



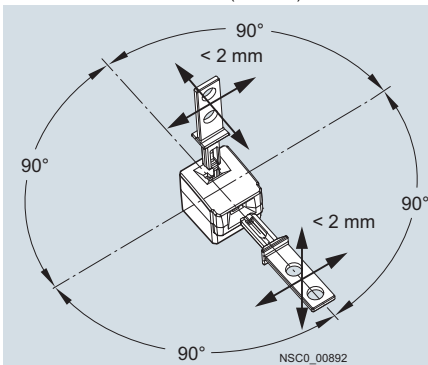
Flexible lateral and vertical approach



Actuation and travel

Standard actuators

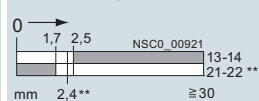
Axial and lateral actuation ($4 \times 90^\circ$)



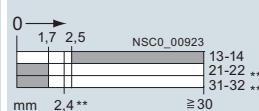
Lateral actuation ($4 \times 90^\circ$)

Slow-action contacts

1 NO + 1 NC, Ident. No. 11



1 NO + 2 NC, Ident. No. 12



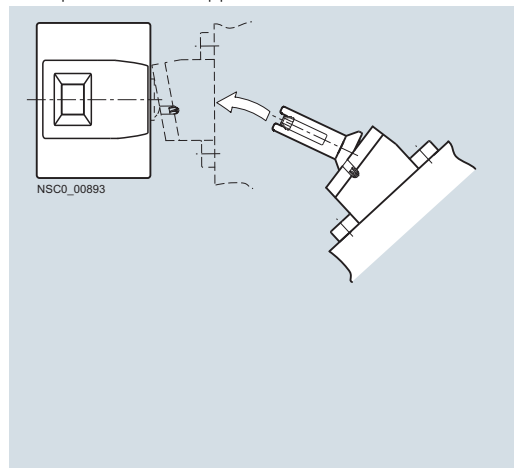
■ Contact closed
□ Contact open

Actuator in actuator head:
NC is closed

** Positive opening point

Radius actuators (all directions of approach)

Example: Direction of approach from the left



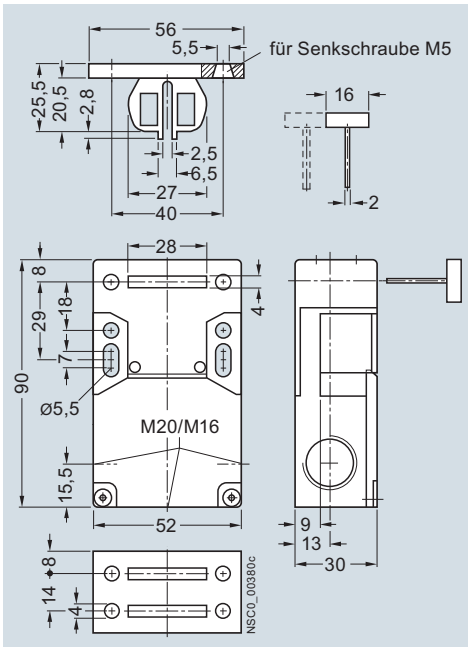
Circuit diagrams and connector assignment [see page 12/12](#).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

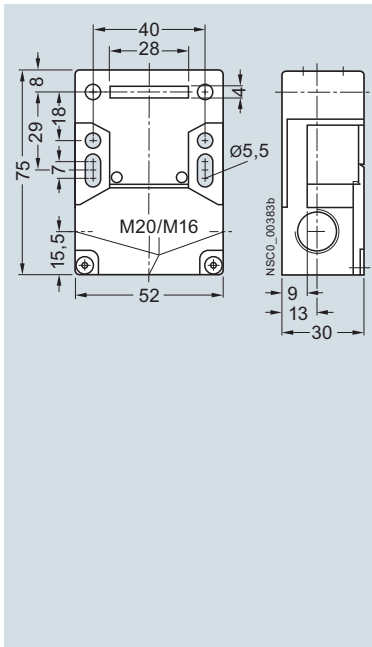
General data

3SE2243, 3SE2257 configuration

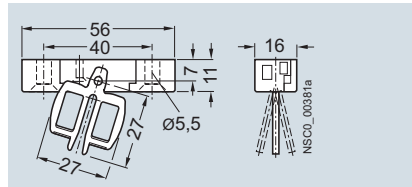
**3SE2243, lateral and front-end actuation,
with 3SX3218 standard actuator**



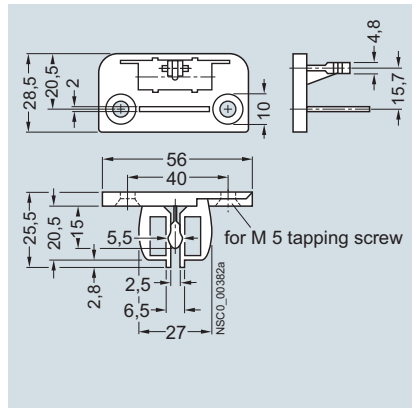
3SE2257, lateral and front-end actuation



3SX3228
universal radius actuator



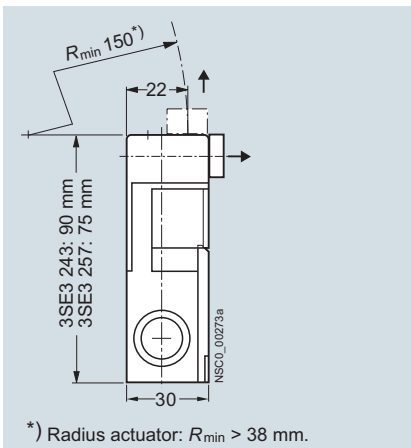
3SX3217
actuator with ball locating



Actuation and travel

Standard and radius actuators

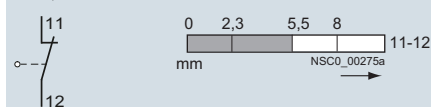
Axial and lateral actuation



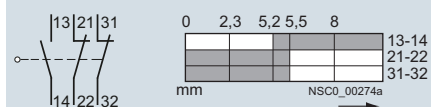
Lateral actuation

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 50047/50 mm

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 ¹⁾	Contacts	LEDs	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		
Enclosure width 31 mm acc. to EN 50047							
	5 directions of approach						
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5232-0RV40	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⊙ ▶	3SE5232-0QV40	1	1 unit	41K
	With increased minimum pull-out force 30 N						
	Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5232-0QV40-1AA1	1	1 unit	41K
With M12 connector socket, 4-pole (250 V, 4 A)							
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5234-0RV40-1AC4	1	1 unit	41K
	Slow-action contacts	2 NC --	⊙ B	3SE5234-0QV40-1AE0	1	1 unit	41K
With 2 LEDs, yellow/green							
	Slow-action contacts	1 NO + 1 NC 24 V DC	⊙ B	3SE5232-1RV40	1	1 unit	41K
	Slow-action contacts	1 NO + 1 NC 230 V AC	⊙ B	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	⊙ B	3SE5234-1RV40-1AF3	1	1 unit	41K
Enclosure width 50 mm							
	5 directions of approach						
	Slow-action contacts	1 NO + 2 NC --	⊙ B	3SE5242-0QV40	1	1 unit	41K
	With increased minimum pull-out force 30 N						
	Slow-action contacts	1 NO + 1 NC --	⊙ B	3SE5242-0RV40-1AA1	1	1 unit	41K
With 2 LEDs, yellow/green							
	Slow-action contacts	1 NO + 2 NC 24 V DC	⊙ B	3SE5242-1QV40	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC 230 V AC	⊙ B	3SE5242-3QV40	1	1 unit	41K

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

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

¹⁾ Supplied without actuator. Please order separately (see page 12/67).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Separate Actuator

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

Selection and ordering data

Complete units

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

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

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

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

¹⁾ Supplied without actuator. Please order separately (see page 12/67).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Separate Actuator

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

Selection and ordering data

Complete units

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

Version ¹⁾	Contacts	LEDs	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		
Enclosure width 31 mm acc. to EN 50047							
	5 directions of approach						
	Slow-action contacts	1 NO + 1 NC --	⤵ A	3SE5212-0RV40	1	1 unit	41K
	Slow-action contacts	1 NO + 2 NC --	⤵ B	3SE5212-0QV40	1	1 unit	41K
	With 2 LEDs, yellow/green						
	Slow-action contacts	1 NO + 1 NC 24 V DC	⤵ B	3SE5212-1RV40	1	1 unit	41K
	Slow-action contacts	1 NO + 1 NC 230 V AC	⤵ B	3SE5212-3RV40	1	1 unit	41K

With separate
actuator

With 2 LEDs

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

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

¹⁾ Supplied without actuator. Please order separately (see page 12/67).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Separate Actuator

3SE5, metal enclosures
Enclosure width 40 mm acc. to EN 50041/56 mm

Selection and ordering data

Complete units

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

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

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

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

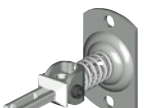
¹⁾ Supplied without actuator. Please order separately (see page 12/67).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Separate Actuator

Accessories

Selection and ordering data

Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Actuators for 3SE51, 3SE52						
 3SE5000-0AV01	Standard actuators					
	Length 75.6 mm					
	▶ 3SE5000-0AV01					
				1	1 unit	41K
 3SE5000-0AV02	With vertical fixing, length 53 mm					
	B	3SE5000-0AV02		1	1 unit	41K
 3SE5000-0AV03	With transverse fixing, length 47 mm					
	B	3SE5000-0AV03		1	1 unit	41K
 3SE5000-0AW11	With transverse fixing, plastic¹⁾ Length 40 mm					
	B	3SE5000-0AW11		1	1 unit	41K
 3SE5000-0AV06	Radius actuators, length 51 mm					
	Direction of approach from the left					
	A	3SE5000-0AV04		1	1 unit	41K
	Direction of approach from the right					
	▶	3SE5000-0AV06		1	1 unit	41K
 3SE5000-0AV05-1AA6	Universal radius actuators					
	Length 77 mm					
	B	3SE5000-0AV05		1	1 unit	41K
	Length 77 mm, tab rotated 90°					
	B	3SE5000-0AV05-1AA6		1	1 unit	41K
 3SE5000-0AV07	Universal radius actuators, heavy duty					
	Length 67 mm					
	A	3SE5000-0AV07-1AK2		1	1 unit	41K
	Length 77 mm					
	B	3SE5000-0AV07		1	1 unit	41K
Optional accessories for 3SE5						
 3SE5000-0AV08-1AA2	Protective caps made of black rubber for the actuator head, to protect the actuator openings from contamination					
	C	3SE5000-0AV08-1AA2		1	1 unit	41K
 3SE5000-0AV08-1AA3	Blocking inserts , high-grade steel, for actuator head, for up to eight padlocks					
	B	3SE5000-0AV08-1AA3		1	1 unit	41K
Connections for 3SE5, 3SE2						
 3SY3127	Connector sockets (4-pole), M12, fixed for M20 × 1.5					
	B	3SY3127		1	1 unit	41K
	For max. 250 V, 4 A With 0.25 mm ² connecting cable, plastic, degree of protection IP67, ambient temperature –40 to +85 °C					
	Connector sockets (5-pole), M12, fixed for M20 × 1.5					
	B	3SY3128		1	1 unit	41K
	For max. 125 V, 4 A With 0.25 mm ² connecting cable, plastic, degree of protection IP67, ambient temperature –40 to +85 °C					
 3SX9926	Cable glands M20 × 1.5					
	A	3SX9926		1	1 unit	41K
Plastic						

¹⁾ Not suitable for safety switches with interlocking.

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Separate Actuator

3SE2, plastic enclosures
Enclosure width 52 mm

Selection and ordering data

Complete units

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

Version	Operation	DT	Complete units	PU (UNIT, SET, M)	PS*	PG	
			Article No.	Price per PU			
Molded-plastic enclosures in special width of 52 mm							
 3SE2243	Lateral and front-end actuation ¹⁾	6 mm stroke					
	• With M20 × 1.5 connecting thread						
	- Slow-action contacts 1 NO + 2 NC	Holding force 5 N Holding force 30 N With automatic ejection	➡ ▶ ➡ ▶ ➡ ▶	3SE2243-0XX40 3SE2243-0XX 3SE2243-0XX30	1 1 1	1 unit 1 unit 1 unit	41K 41K 41K
	- Slow-action contacts 1 NC	Holding force 5 N Holding force 30 N With automatic ejection	➡ ▶ ➡ ▶ ➡ B	3SE2257-6XX40 3SE2257-6XX 3SE2257-6XX30	1 1 1	1 unit 1 unit 1 unit	41K 41K 41K
	• With M16 × 1.5 connecting thread						
	- Slow-action contacts 1 NO + 2 NC	Holding force 5 N Holding force 30 N With automatic ejection	➡ B ➡ A ➡ C	3SE2243-0XX48 3SE2243-0XX18 3SE2243-0XX38	1 1 1	1 unit 1 unit 1 unit	41K 41K 41K
	- Slow-action contacts 1 NC	Holding force 5 N Holding force 30 N With automatic ejection	➡ B ➡ C ➡ C	3SE2257-6XX48 3SE2257-6XX18 3SE2257-6XX38	1 1 1	1 unit 1 unit 1 unit	41K 41K 41K
	Accessories						
	 3SX3218	Actuators					
		• Standard actuators (<i>r</i> _{min} = 150 mm), length 28 mm	A	3SX3218	1	1 unit	41K
		• Universal radius actuator (<i>r</i> _{min} = 45 mm), length 34 mm	A	3SX3228	1	1 unit	41K
		• Radius actuator, adjustable radius, length 34 mm	D	3SX3256	1	1 unit	41K
		• Ball locating, force adjustable up to 100 N by 2 screws, length 28 mm	A	3SX3217	1	1 unit	41K
	 3SX3234	• Actuator, length 34 mm, with dust protection and slit cover	D	3SX3234	1	1 unit	41K
		Accessories					
	• Slit cover (1 set = 3 units)	D	3SX3233	1	3 units	41K	

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

¹⁾ Supplied without actuator.

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Solenoid Interlocking

General data

Overview

The safety switches with solenoid interlocking 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 solenoid interlocking

The safety switches with solenoid interlocking comprise 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 solenoid interlocking 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 actuators are 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 12/75).

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 safety (see page 12/75).

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 12/75).

Solenoid interlocking

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 solenoid interlocking have one contact block each for:

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

The mechanical design of the switch corresponds to the requirements of the fail-safe principle according to EN 1088.

Optical signaling equipment

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

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

Protective device	Solenoid interlocking	Display	Meaning
Closed	Released	 	Actuator 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 Solenoid Interlocking

General data

Benefits

The new generation of 3SE53 safety switches offers

- More safety through higher locking forces:
 - 1300 N with plastic enclosure
 - 2600 N with metal enclosure
- Various release mechanisms: Lock release, escape release and emergency release
- Two contact blocks each with three contacts as standard equipment, hence fewer versions needed
- Same dimensions for all enclosure 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 12/94)

Application

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

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

Standards

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

The mechanical design of the switch corresponds to the requirements of the fail-safe principle according to EN 1088.

Approvals

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

Category 3 according to EN ISO 13849-1 can be attained with a safety switch with solenoid interlocking if the corresponding fail-safe evaluation units are selected and correctly installed, e.g. the 3SK1 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.

Solenoid interlocking

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

There are two versions of locking:

Spring-actuated lock (closed-circuit principle)

- In the standard version, the 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.

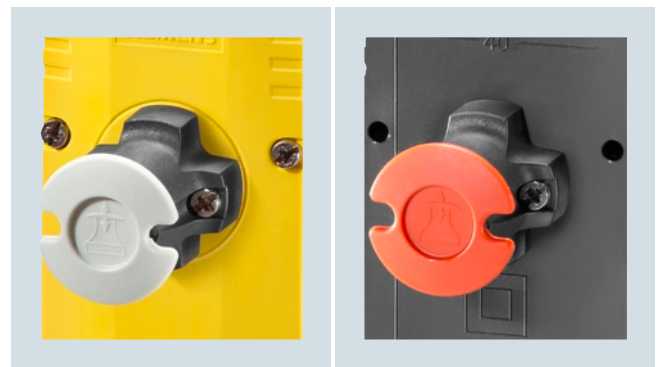


Auxiliary release

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



Escape release from the front

Emergency release from the back

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

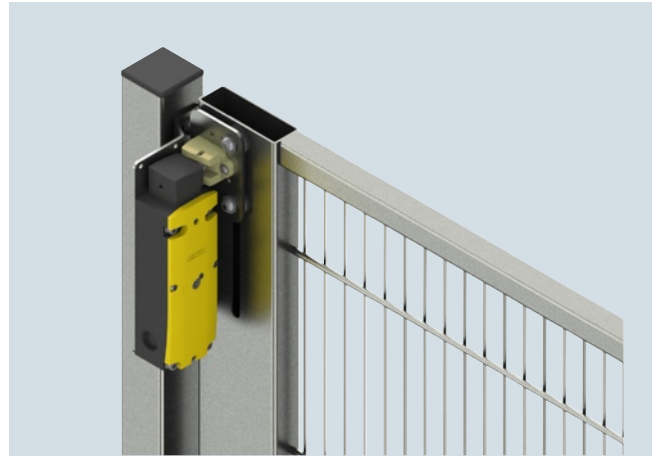
With Solenoid Interlocking

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 [Chapter 16, "Appendix" → "External Partners"](#).

Technical specifications

Type		3SE5322	3SE5312
General data			
Standards		IEC 60947-5-1, EN 60947-5-1	
Rated insulation voltage U_i	V	250	
Pollution degree acc. 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	3	
- At 230 V	A	1.5	
• 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	
Magnet			
• Locking force, max.	N	1 300	2 600
• Locking force according to GS-ET 19	N	1 000	2 000
• Power consumption at U_c	W	3.5	
Short-circuit protection¹⁾			
• With DIAZED fuse links, operational class 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 with interrupting of I_e / AC-15 at 230 V		1 × 10 ⁵ operating 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		6000 operating cycles/h	
Shock resistance acc. to IEC 60068-2-27		30 g / 11 ms	

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

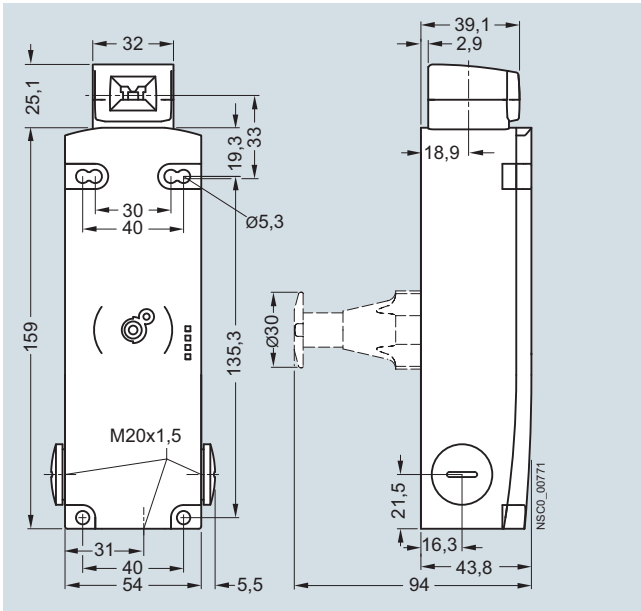
SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Solenoid Interlocking

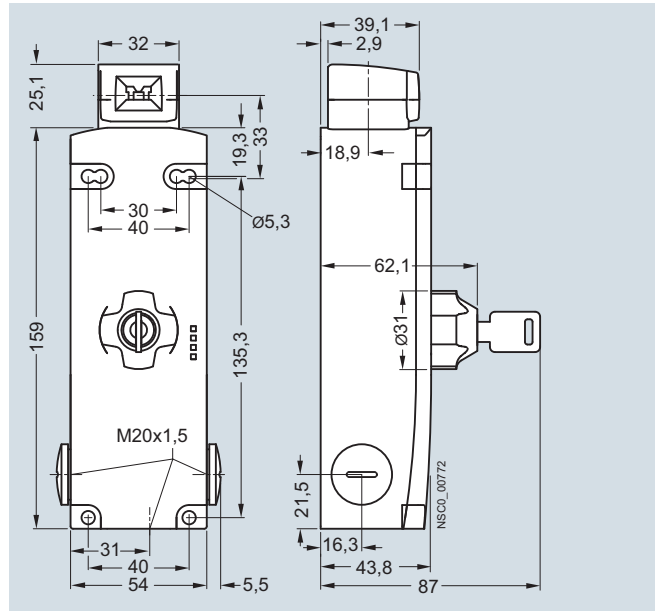
General data

3SE53 configuration

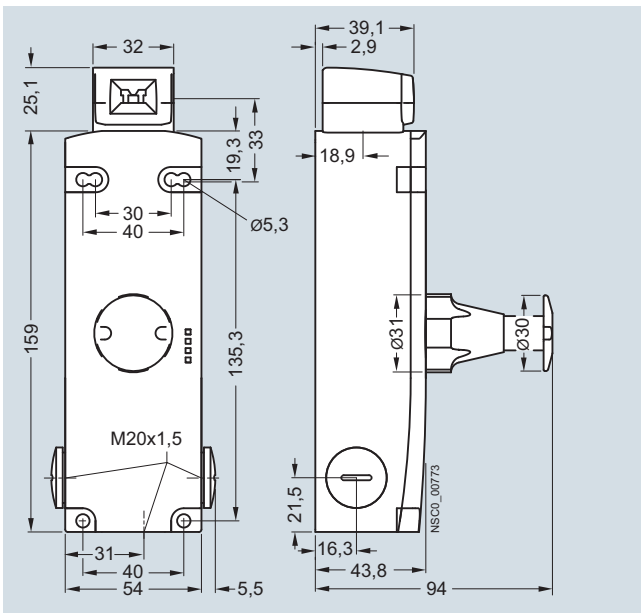
Spring-actuated lock, with auxiliary release
3SE5322-.SD2., 3SE5322-.SG2., 3SE5322-.SJ2.,
3SE5312-.SD1., 3SE5312-.SG1., 3SE5312-.SJ1.,



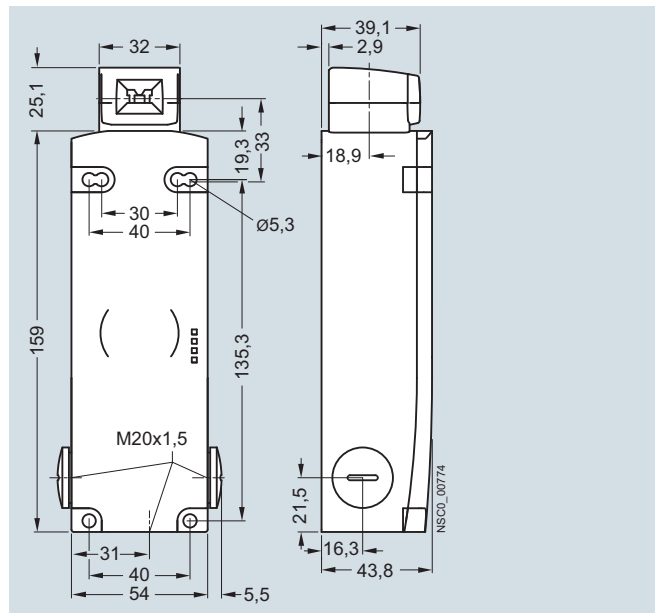
Spring-actuated lock, with auxiliary release with lock
3SE5322-.SE2.,
3SE5312-.SE1.



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



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



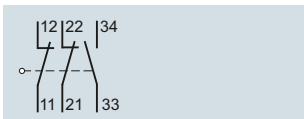
Note:

The plastic enclosures have knock-out openings behind the connecting thread; they are delivered therefore without protective caps.

Circuit diagrams

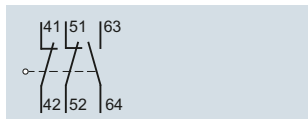
Monitoring the actuator

Slow-action contacts 1 NO + 2 NC



Monitoring the solenoid

Slow-action contacts 1 NO + 2 NC



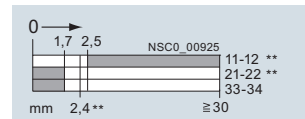
Actuators [see pages 12/60 and 12/61](#).

Actuation [see page 12/61](#).

Operating travel

Monitoring the actuator

Slow-action contacts 1 NO + 2 NC



SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Solenoid Interlocking

3SE5, plastic enclosures
With locking force greater than 1200 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

Interlock ¹⁾	LEDs	Solenoid, rated operational voltage	DT	Complete units Position monitoring: Actuators: 1 NO + 2 NC Solenoid: 1 NO + 2 NC Configurator Article No.	PU (UNIT, SET, M)	PS*	PG	
V				Price per PU				
1 300 N locking force · Enclosure width 54 mm								
 3SE5312-0SD2.	Spring-actuated locks							
	• With auxiliary release	-- 24 DC	➡ B	3SE5322-0SD21	1	1 unit	41K	
		-- 115 AC	➡ B	3SE5322-0SD22	1	1 unit	41K	
		-- 230 AC	➡ B	3SE5322-0SD23	1	1 unit	41K	
	Yellow/Green	24 DC	➡ A	3SE5322-1SD21	1	1 unit	41K	
		115 AC	➡ B	3SE5322-2SD22	1	1 unit	41K	
230 AC		➡ B	3SE5322-3SD23	1	1 unit	41K		
 3SE5312-0SE2.	• With auxiliary release with lock	-- 24 DC	➡ B	3SE5322-0SE21	1	1 unit	41K	
		-- 115 AC	➡ B	3SE5322-0SE22	1	1 unit	41K	
		-- 230 AC	➡ B	3SE5322-0SE23	1	1 unit	41K	
	Yellow/Green	24 DC	➡ B	3SE5322-1SE21	1	1 unit	41K	
		115 AC	➡ B	3SE5322-2SE22	1	1 unit	41K	
		230 AC	➡ B	3SE5322-3SE23	1	1 unit	41K	
 3SE5312-0SF2.	• With escape release from the front	-- 24 DC	➡ B	3SE5322-0SF21	1	1 unit	41K	
		-- 115 AC	➡ B	3SE5322-0SF22	1	1 unit	41K	
		-- 230 AC	➡ B	3SE5322-0SF23	1	1 unit	41K	
	Yellow/Green	24 DC	➡ B	3SE5322-1SF21	1	1 unit	41K	
		115 AC	➡ B	3SE5322-2SF22	1	1 unit	41K	
		230 AC	➡ B	3SE5322-3SF23	1	1 unit	41K	
 3SE5312-0SL2.	• With escape release from the front and emergency release from the back	-- 24 DC	➡ B	3SE5322-0SL21	1	1 unit	41K	
		- For ambient temperature up to -40 °C		➡ B	3SE5322-0SL21-1AJ0	1	1 unit	41K
	 3SE5312-0SG2.	• With escape release from the back and auxiliary release from the front	-- 24 DC	➡ B	3SE5322-0SG21	1	1 unit	41K
			-- 115 AC	➡ B	3SE5322-0SG22	1	1 unit	41K
			-- 230 AC	➡ B	3SE5322-0SG23	1	1 unit	41K
Yellow/Green		24 DC	➡ B	3SE5322-1SG21	1	1 unit	41K	
		115 AC	➡ B	3SE5322-2SG22	1	1 unit	41K	
		230 AC	➡ B	3SE5322-3SG23	1	1 unit	41K	
 3SE5312-0SH2.	• With escape release from the back and auxiliary release with lock from the front	-- 24 DC	➡ B	3SE5322-0SH21	1	1 unit	41K	
	 3SE5312-0SJ2.	• With emergency release from the back and auxiliary release from the front	-- 24 DC	➡ B	3SE5322-0SJ21	1	1 unit	41K
			-- 115 AC	➡ B	3SE5322-0SJ22	1	1 unit	41K
			-- 230 AC	➡ B	3SE5322-0SJ23	1	1 unit	41K
Yellow/Green		24 DC	➡ B	3SE5322-1SJ21	1	1 unit	41K	
		115 AC	➡ B	3SE5322-2SJ22	1	1 unit	41K	
		230 AC	➡ B	3SE5322-3SJ23	1	1 unit	41K	
 3SE5312-0SB2.	Solenoid locks							
	--	24 DC	➡ B	3SE5322-0SB21	1	1 unit	41K	
		115 AC	➡ B	3SE5322-0SB22	1	1 unit	41K	
		230 AC	➡ B	3SE5322-0SB23	1	1 unit	41K	
	Yellow/Green	24 DC	➡ A	3SE5322-1SB21	1	1 unit	41K	
		115 AC	➡ B	3SE5322-2SB22	1	1 unit	41K	
230 AC		➡ B	3SE5322-3SB23	1	1 unit	41K		

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

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

¹⁾ Supplied without actuator. Please order separately (see page 12/75).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Solenoid Interlocking

3SE5, metal enclosures
With locking force greater than 2000 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

Interlock ¹⁾	LEDs	Solenoid, rated operational voltage	DT	Complete units Position monitoring: Actuators: 1 NO + 2 NC Solenoid: 1 NO + 2 NC		PU (UNIT, SET, M)	PS*	PG	
				Configurator					
				Article No.	Price per PU				
V									
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	 B	3SE5312-0SD12	1	1 unit	41K	
		--	230 AC	 B	3SE5312-0SD13	1	1 unit	41K	
		Yellow/Green	24 DC	 B	3SE5312-1SD11	1	1 unit	41K	
		Yellow/Green	115 AC	 B	3SE5312-2SD12	1	1 unit	41K	
Yellow/Green		230 AC	 B	3SE5312-3SD13	1	1 unit	41K		
3SE5312-0SD1.									
	• With auxiliary release with lock	--	24 DC	 B	3SE5312-0SE11	1	1 unit	41K	
		--	115 AC	 B	3SE5312-0SE12	1	1 unit	41K	
		--	230 AC	 B	3SE5312-0SE13	1	1 unit	41K	
		Yellow/Green	24 DC	 B	3SE5312-1SE11	1	1 unit	41K	
		Yellow/Green	115 AC	 B	3SE5312-2SE12	1	1 unit	41K	
		Yellow/Green	230 AC	 B	3SE5312-3SE13	1	1 unit	41K	
3SE5312-0SE1.									
	• With escape release from the front	--	24 DC	 B	3SE5312-0SF11	1	1 unit	41K	
		--	115 AC	 B	3SE5312-0SF12	1	1 unit	41K	
		--	230 AC	 B	3SE5312-0SF13	1	1 unit	41K	
		Yellow/Green	24 DC	 B	3SE5312-1SF11	1	1 unit	41K	
		Yellow/Green	115 AC	 B	3SE5312-2SF12	1	1 unit	41K	
		Yellow/Green	230 AC	 B	3SE5312-3SF13	1	1 unit	41K	
3SE5312-0SF1.									
	• With escape release from the back and auxiliary release from the front	--	24 DC	 B	3SE5312-0SG11	1	1 unit	41K	
		--	115 AC	 B	3SE5312-0SG12	1	1 unit	41K	
		--	230 AC	 B	3SE5312-0SG13	1	1 unit	41K	
		Yellow/Green	24 DC	 B	3SE5312-1SG11	1	1 unit	41K	
		Yellow/Green	115 AC	 B	3SE5312-2SG12	1	1 unit	41K	
		Yellow/Green	230 AC	 B	3SE5312-3SG13	1	1 unit	41K	
3SE5312-0SG1.									
	• With escape release from the back and auxiliary release with lock from the front	--	24 DC	 B	3SE5312-0SH11	1	1 unit	41K	
		• With emergency release from the back and auxiliary release from the front	--	24 DC	 B	3SE5312-0SJ11	1	1 unit	41K
			--	115 AC	 B	3SE5312-0SJ12	1	1 unit	41K
			--	230 AC	 B	3SE5312-0SJ13	1	1 unit	41K
			Yellow/Green	24 DC	 B	3SE5312-1SJ11	1	1 unit	41K
Yellow/Green	115 AC		 B	3SE5312-2SJ12	1	1 unit	41K		
Yellow/Green	230 AC		 B	3SE5312-3SJ13	1	1 unit	41K		
3SE5312-0SJ1.									
	Solenoid locks								
	--	24 DC	 ►	3SE5312-0SB11	1	1 unit	41K		
	--	115 AC	 B	3SE5312-0SB12	1	1 unit	41K		
	--	230 AC	 B	3SE5312-0SB13	1	1 unit	41K		
	Yellow/Green	24 DC	 B	3SE5312-1SB11	1	1 unit	41K		
	Yellow/Green	115 AC	 B	3SE5312-2SB12	1	1 unit	41K		
Yellow/Green	230 AC	 B	3SE5312-3SB13	1	1 unit	41K			
3SE5312-0SB1.									

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

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

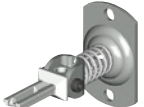
¹⁾ Supplied without actuator. Please order separately (see page 12/75).

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

With Solenoid Interlocking

Accessories

Selection and ordering data

Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Actuators for 3SE53						
 3SE5000-0AV01		▶ 3SE5000-0AV01		1	1 unit	41K
		• Length 75.6 mm				
	B	▶ 3SE5000-0AV02		1	1 unit	41K
 3SE5000-0AV02		• With vertical fixing, length 53 mm				
 3SE5000-0AV03	B	▶ 3SE5000-0AV03		1	1 unit	41K
		• With transverse fixing, length 47 mm				
 3SE5000-0AV04		Radius actuators, length 51 mm				
	A	▶ 3SE5000-0AV04		1	1 unit	41K
		• Direction of approach from the left				
		• Direction of approach from the right		1	1 unit	41K
 3SE5000-0AV05-1AA6	B	▶ 3SE5000-0AV05		1	1 unit	41K
	B	▶ 3SE5000-0AV05-1AA6		1	1 unit	41K
		• Length 77 mm				
		• Length 77 mm, tab rotated 90°				
 3SE5000-0AV07	A	▶ 3SE5000-0AV07-1AK2		1	1 unit	41K
	B	▶ 3SE5000-0AV07		1	1 unit	41K
		• Length 67 mm				
		• Length 77 mm				
Optional accessories for 3SE5						
 3SE5000-0AV08-1AA2	C	▶ 3SE5000-0AV08-1AA2		1	1 unit	41K
		Protective caps made of black rubber for the actuator head, to protect the actuator openings from contamination				
 3SE5000-0AV08-1AA3	B	▶ 3SE5000-0AV08-1AA3		1	1 unit	41K
		Blocking inserts , high-grade steel, for actuator head, for up to eight padlocks				
Spare parts for 3SE53						
	B	▶ 3SX5100-1F		1	1 unit	41K
		Spare keys				
Connection for 3SE5						
 3SY3 127	B	▶ 3SY3127		1	1 unit	41K
		Connector sockets (4-pole), M12, fixed for M20 × 1.5 For max. 250 V, 4 A With 0.25 mm ² connecting cable, plastic, degree of protection IP67, ambient temperature -40 to +85 °C				
 3SY3 128	B	▶ 3SY3128		1	1 unit	41K
		Connector sockets (5-pole), M12, fixed for M20 × 1.5 For max. 125 V, 4 A With 0.25 mm ² connecting cable, plastic, degree of protection IP67, ambient temperature -40 to +85 °C				
 3SX9 926	A	▶ 3SX9926		1	1 unit	41K
		Cable glands M20 × 1.5 Plastic				

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

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

Enclosure versions

Various basic versions can be selected for the enclosures:

- Available with two or three-pole contact blocks designed as snap-action contacts
- AS-Interface version with integrated ASIsafe electronics for all enclosure designs (see page 12/97)

For a description of the basic switches, see page 12/4.

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 12/5).
- The new three-pole contact block 1 NO + 2 NC is available for all enclosure sizes (see picture, page 12/5).
- The plastic enclosure with a width of 31 mm has simple and fast wiring equipment which makes it possible to save from approx. 20 to 25 % of the time when connecting (see picture, page 12/5).
- The ASIsafe electronic component is integrated in the enclosure for the versions with AS-Interface connection (see page 12/82); an additional adapter is not required.

Application

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

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

The devices are suitable for use in any climate.

Standards

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

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

Safety position switches

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

Safety circuits

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

Category 4 according to EN ISO 13849-1 can be attained with the 3SE5 hinge switches with ☞ if the corresponding fail-safe evaluation units are selected and correctly installed, e.g. the 3TK28 or 3SK1 safety relays or matching devices from the ASIsafe, SIMATIC or SINUMERIK product ranges.

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

Hinge Switches

General data

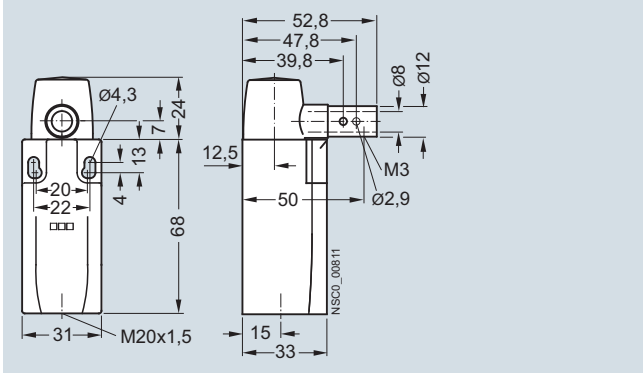
Technical specifications

The technical specifications are the same as for the standard switches (see page 12/7).

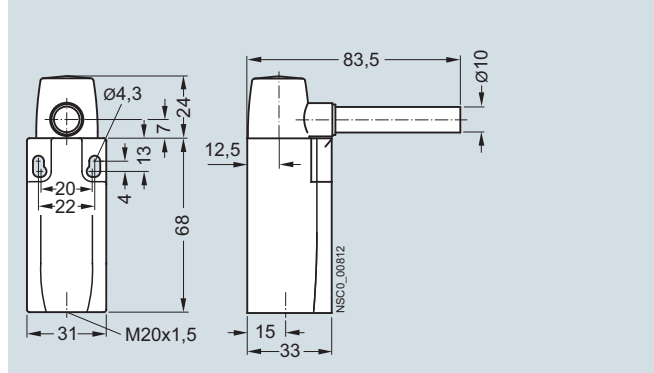
Configuration

Enclosure width 31 mm

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

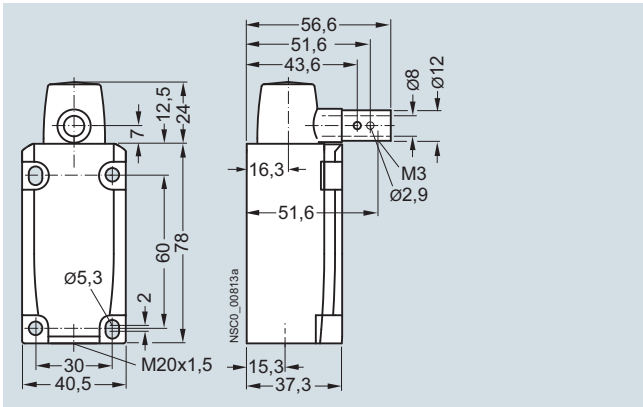


With solid shaft
3SE5212-0.U22, 3SE5232-0.U22

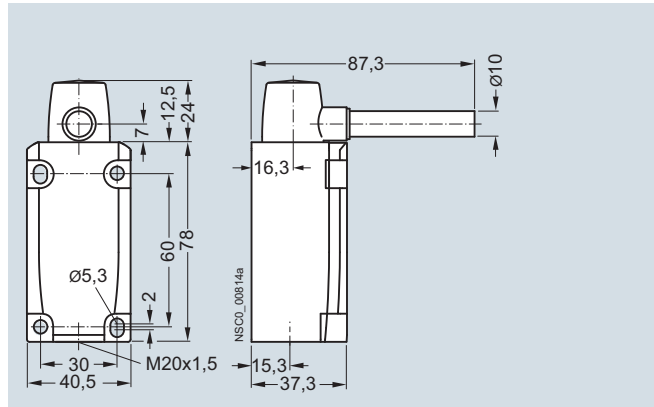


Enclosure width 40 mm

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



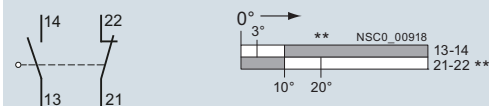
With solid shaft
3SE5112-0.U22, 3SE5132-0.U22



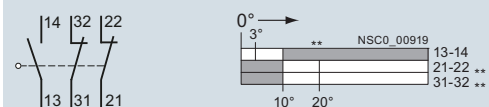
Operating travel of the shaft

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 Switches

Hinge Switches

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

Selection and ordering data

Complete units

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

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

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



With hollow shaft

With hollow shaft

Operating angle 10°

1 NO + 1 NC ¹⁾ → B

3SE5232-0HU21

1 1 unit 41K

Operating angle 10°

1 NO + 2 NC → B

3SE5232-0LU21

1 1 unit 41K



With solid shaft

With solid shaft

Operating angle 10°

1 NO + 1 NC ¹⁾ → B

3SE5232-0HU22

1 1 unit 41K

Operating angle 10°

1 NO + 2 NC → B

3SE5232-0LU22

1 1 unit 41K

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



With hollow shaft

With hollow shaft

Operating angle 10°

1 NO + 2 NC → B

3SE5132-0LU21

1 1 unit 41K



With solid shaft

With solid shaft

Operating angle 10°

1 NO + 2 NC → B

3SE5132-0LU22

1 1 unit 41K

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

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

¹⁾ Contact blocks permanently integrated, replacement not available.

Spare parts

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

Actuator heads



With hollow shaft

With hollow shaft

Operating angle 10°

B

3SE5000-0AU21

1 1 unit 41K



With solid shaft

With solid shaft

Operating angle 10°

B

3SE5000-0AU22

1 1 unit 41K

Note:

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

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

Hinge Switches

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

Selection and ordering data

Complete units

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

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

Metal enclosures · Enclosure width 31 mm according to EN 50047



With hollow shaft

With hollow shaft

Operating angle 10°

1 NO + 2 NC

⤴ B

3SE5212-0LU21

1

1 unit

41K



With solid shaft

With solid shaft

Operating angle 10°

1 NO + 2 NC

⤴ B

3SE5212-0LU22

1

1 unit

41K

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



With hollow shaft

With hollow shaft

Operating angle 10°

1 NO + 2 NC

⤴ B

3SE5112-0LU21

1

1 unit

41K



With solid shaft

With solid shaft

Operating angle 10°

1 NO + 2 NC

⤴ B

3SE5112-0LU22

1

1 unit

41K

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

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

Spare parts

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

Actuator heads



With hollow shaft

With hollow shaft

Operating angle 10°

B

3SE5000-0AU21

1

1 unit

41K



With solid shaft

With solid shaft

Operating angle 10°

B

3SE5000-0AU22

1

1 unit

41K

Note:

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

SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

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

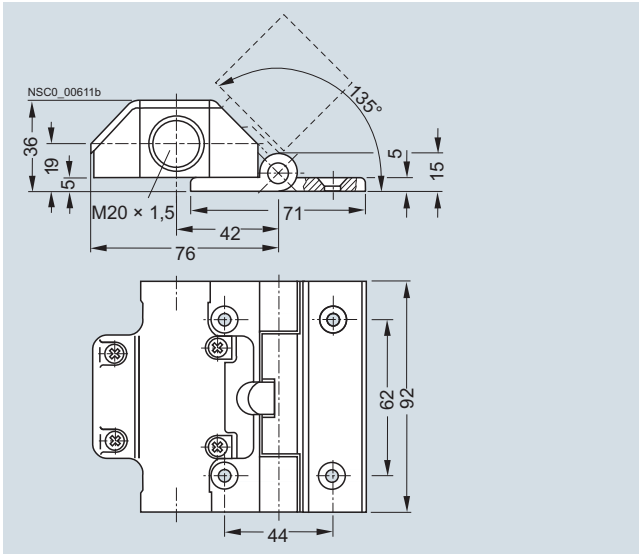
- Easy mounting through use of versions with integrated hinge
- Versions with small operating angle of 4° or 8°
- Protection against personal injury provided by positively driven NC contacts according to IEC 60947-5-1
- Simultaneous shutdown and reporting by 1 NO + 2 NC contacts

Technical specifications

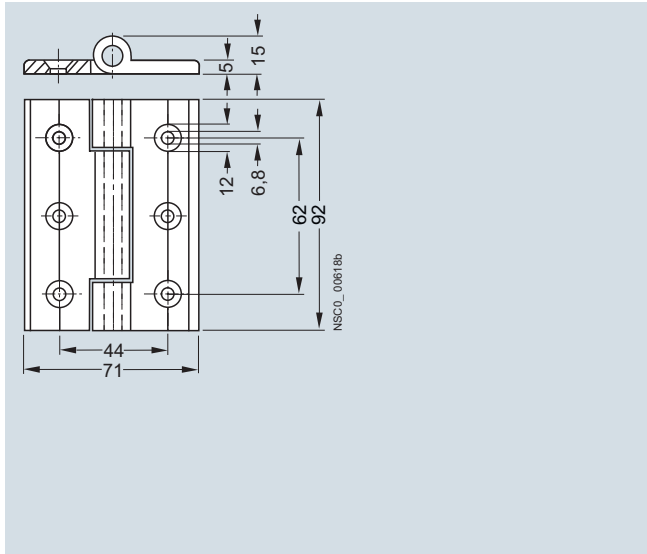
Type	3SE2283	
Rated insulation voltage U_i	V	250
Conventional thermal current I_{th}	A	2.5
Rated operational current I_e		
• At AC-15, 120 V	A	4.2
• At AC-15, 250 V	A	2
• At DC-13, 24 V	A	1
Min. make-break capacity	> 5 V / 1 mA	
Short-circuit protection		
• Operational class gG	A	2
Mechanical endurance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



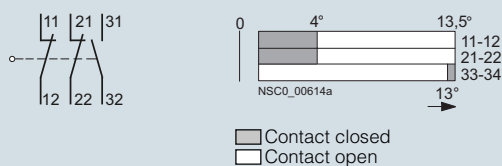
3SX3225 additional hinge



Operating travel of the hinge

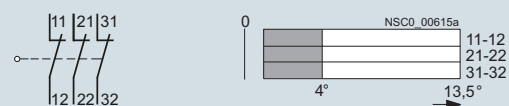
Slow-action contacts

1 NO + 2 NC, Ident. No. 12



Slow-action contacts

3 NC, Ident. No. 03



SIRIUS 3SE5, 3SE2 Mechanical Safety Switches

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	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
			☐			
Article No.	Price per PU					

Plastic enclosures with integrated hinge



3SE2283

With integrated hinge

(Delivery includes additional hinge and fixing accessories)

• Aluminum hinge

- Operating angle 4°	1 NO + 2 NC	⤵ A	3SE2283-0GA43	1	1 unit	41K
- Operating angle 4°	3 NC	⤵ B	3SE2283-6GA43	1	1 unit	41K
- Operating angle 8°	1 NO + 2 NC	⤵ C	3SE2283-0GA53	1	1 unit	41K
- Operating angle 8°	3 NC	⤵ C	3SE2283-6GA53	1	1 unit	41K

• High-grade steel hinge

- Operating angle 4°	1 NO + 2 NC	⤵ B	3SE2283-0GA44	1	1 unit	41K
- Operating angle 4°	3 NC	⤵ C	3SE2283-6GA44	1	1 unit	41K

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

Accessories/spare parts

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

Accessories



3SX3225

Additional hinge

(delivered with fixing accessories)

• Made of aluminum

⤵ D	3SX3225	1	1 unit	41K
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• Made of high-grade steel

⤵ D	3SX3231	1	1 unit	41K
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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 conventionally wired up.

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

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 Switchgear and Controlgear, General) and IEC 60947-5-1 (Electromechanical Control Circuit Devices).

The mechanical design of the switch corresponds to the requirements of the fail-safe principle according to EN 1088.

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

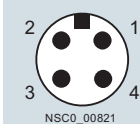
Technical specifications

Type	3SF11..., 3SF12..	
General data		
Standards	IEC 60947-5-1, EN 60947-5-1, EN 1088	
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 resistance		
• 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 switches	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 × 10 ⁶		
• Basic switches	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							
• Material		Ultramid A3X2G7			Zinc diecasting GD Zn Al4 Cu1		
• Width	mm	31	40	50	31	40	56
• 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					

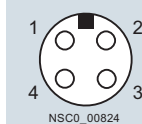
Connector assignment

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

LEDs

Status display (operating state)

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

Safe inputs

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

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

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	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				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	➡ B	3SF1234-1KC05-1BA1	1	1 unit	42A
Snap-action contacts	2 NC	24 V DC	➡ B	3SF1234-1LC05-1BA1	1	1 unit	42A

ASIsafe basic switch

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	➡ B	3SF1244-1KC05-1BA2	1	1 unit	42A
Snap-action contacts	1 NC	24 V DC	➡ B	3SF1244-1LC05-1BA2	1	1 unit	42A

ASIsafe basic switch

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

➡ Positive opening according to IEC 60947-5-1, Appendix K, or positively driven actuator 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:

Selection aid see page 12/13.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

Plastic enclosures
Enclosure width 31 mm acc. to EN 50047 / 50 mm

Version	Roller diameter	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
	mm		Article No.	Price per PU		
Operating mechanisms						
 Roller plungers	Roller plungers, type C acc. to EN 50047					
	Plastic roller	10	⊙ A	3SE5000-0AD03	1	1 unit 41K
	High-grade steel roller	10	⊙ B	3SE5000-0AD04	1	1 unit 41K
 With central fixing	Roller plungers with central fixing					
	Plastic roller	10	⊙ B	3SE5000-0AD10	1	1 unit 41K
	High-grade steel roller	10	⊙ B	3SE5000-0AD11	1	1 unit 41K
 Roller lever	Roller levers, type E acc. to EN 50047					
	Metal lever, plastic roller	13	⊙ A	3SE5000-0AE10	1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊙ B	3SE5000-0AE11	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊙ B	3SE5000-0AE12	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊙ B	3SE5000-0AE13	1	1 unit 41K
 Angular roller lever	Angular roller levers					
	Metal lever, plastic roller	13	⊙ A	3SE5000-0AF10	1	1 unit 41K
	Metal lever, high-grade steel roller	13	⊙ B	3SE5000-0AF11	1	1 unit 41K
	High-grade steel lever, plastic roller	13	⊙ A	3SE5000-0AF12	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	13	⊙ B	3SE5000-0AF13	1	1 unit 41K
Twist actuators with lever						
 Twist actuator	Twist actuators, plastic (without lever)					
	Switching right or left, adjustable		⊙ A	3SE5000-0AK00	1	1 unit 41K
Levers						
 Twist lever	Twist levers, type A acc. to EN 50047					
	Metal lever, plastic roller	19	⊙ A	3SE5000-0AA21	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊙ B	3SE5000-0AA22	1	1 unit 41K
	Metal lever, high-grade steel roller with ball bearing	19	⊙ B	3SE5000-0AA23	1	1 unit 41K
	Metal lever, plastic roller	30	⊙ B	3SE5000-0AA25	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊙ B	3SE5000-0AA31	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊙ B	3SE5000-0AA32	1	1 unit 41K
	Twist levers 30 mm, straight¹⁾					
 Twist lever, adjustable length	Metal lever, plastic roller	19	⊙ B	3SE5000-0AA24	1	1 unit 41K
	Metal lever, plastic roller	30	⊙ B	3SE5000-0AA26	1	1 unit 41K
	Twist levers, adjustable length, with grid hole					
	Metal lever, plastic roller	19	⊙ B	3SE5000-0AA60	1	1 unit 41K
	Metal lever, high-grade steel roller	19	⊙ B	3SE5000-0AA61	1	1 unit 41K
	Metal lever, plastic roller	50	⊙ B	3SE5000-0AA67	1	1 unit 41K
	Metal lever, rubber roller	50	⊙ B	3SE5000-0AA68	1	1 unit 41K
	High-grade steel lever, plastic roller	19	⊙ B	3SE5000-0AA62	1	1 unit 41K
	High-grade steel lever, high-grade steel roller	19	⊙ B	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

Metal enclosures
Enclosure width 31 mm according 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	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				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	⤵ B	3SF1214-1KC05-1BA1	1	1 unit	42A
Snap-action contacts	2 NC	24 V DC	⤵ B	3SF1214-1LC05-1BA1	1	1 unit	42A

ASIsafe basic switch

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

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

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

Note:

Selection aid see page 12/13.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

Metal enclosures
Enclosure width 31 mm according to EN 50047

Version		Roller diameter	DT	Modular system		PU (UNIT, SET, M)	PS*	PG
mm				Article No.	Price per PU			
Operating mechanisms								
 Plain plunger	Plain plungers							
	High-grade steel plungers	10	→ A	3SE5000-0AB01		1	1 unit	41K
 Roller plungers	Roller plungers, type C acc. to EN 50047							
	Plastic roller	10	→ A	3SE5000-0AD03		1	1 unit	41K
	High-grade steel roller	10	→ B	3SE5000-0AD04		1	1 unit	41K
 With central fixing	Roller plungers with central fixing							
	Plastic roller	10	→ B	3SE5000-0AD10		1	1 unit	41K
	High-grade steel roller	10	→ B	3SE5000-0AD11		1	1 unit	41K
 Roller lever	Roller levers, type E acc. to EN 50047							
	Metal lever, plastic roller	13	→ A	3SE5000-0AE10		1	1 unit	41K
	Metal lever, high-grade steel roller	13	→ B	3SE5000-0AE11		1	1 unit	41K
	High-grade steel lever, plastic roller	13	→ B	3SE5000-0AE12		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	13	→ B	3SE5000-0AE13		1	1 unit	41K
 Angular roller lever	Angular roller levers							
	Metal lever, plastic roller	13	→ A	3SE5000-0AF10		1	1 unit	41K
	Metal lever, high-grade steel roller	13	→ B	3SE5000-0AF11		1	1 unit	41K
	High-grade steel lever, plastic roller	13	→ A	3SE5000-0AF12		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	13	→ B	3SE5000-0AF13		1	1 unit	41K
Twist actuators with lever								
 Twist actuator	Twist actuators, plastic (without lever)							
	Switching right or left, adjustable		→ A	3SE5000-0AK00		1	1 unit	41K
 Twist lever	Levers							
	Twist levers, type A acc. to EN 50047							
	Metal lever, plastic roller	19	→ A	3SE5000-0AA21		1	1 unit	41K
	Metal lever, high-grade steel roller	19	→ B	3SE5000-0AA22		1	1 unit	41K
	Metal lever, high-grade steel roller with ball bearing	19	→ B	3SE5000-0AA23		1	1 unit	41K
	Metal lever, plastic roller	30	→ B	3SE5000-0AA25		1	1 unit	41K
	High-grade steel lever, plastic roller	19	→ B	3SE5000-0AA31		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	19	→ B	3SE5000-0AA32		1	1 unit	41K
	Twist levers 30 mm, straight ¹⁾							
	Metal lever, plastic roller	19	→ B	3SE5000-0AA24		1	1 unit	41K
Metal lever, plastic roller	30	→ B	3SE5000-0AA26		1	1 unit	41K	
 Twist lever, adjustable length	Twist levers, adjustable length, with grid hole							
	Metal lever, plastic roller	19	→ B	3SE5000-0AA60		1	1 unit	41K
	Metal lever, high-grade steel roller	19	→ B	3SE5000-0AA61		1	1 unit	41K
	Metal lever, plastic roller	50	→ B	3SE5000-0AA67		1	1 unit	41K
	Metal lever, rubber roller	50	→ B	3SE5000-0AA68		1	1 unit	41K
	High-grade steel lever, plastic roller	19	→ B	3SE5000-0AA62		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	19	→ B	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

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	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				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	⊙ B	3SF1114-1KA00-1BA1	1	1 unit	42A
Snap-action contacts	2 NC	24 V DC	⊙ B	3SF1114-1LA00-1BA1	1	1 unit	42A

ASIsafe basic switch

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	⊙ B	3SF1124-1KA00-1BA2	1	1 unit	42A
Snap-action contacts	1 NC	24 V DC	⊙ B	3SF1124-1LA00-1BA2	1	1 unit	42A

ASIsafe basic switch

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

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

Note:

Selection aid see page 12/13.

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

Operating mechanisms



Plain plunger

Plain plungers

High-grade steel plungers	10	⊙ A	3SE5000-0AB01	1	1 unit	41K
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Rounded plunger

Rounded plungers, type B, acc. to EN 50041

High-grade steel plungers, with 3 mm overtravel	10	⊙ B	3SE5000-0AC02	1	1 unit	41K
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Roller plunger

Roller plungers, type C acc. to EN 50041

High-grade steel roller, with 3 mm overtravel	13	⊙ B	3SE5000-0AD02	1	1 unit	41K
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⊙ Positively driven actuator, for use in safety circuits.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

Metal enclosures
Enclosure width 40 mm acc. to EN 50041 / 56 mm

Version		Roller diameter	DT	Modular system		PU (UNIT, SET, M)	PS*	PG
mm				Article No.	Price per PU			
Operating mechanisms								
	Roller levers							
	Metal lever, plastic roller	22	⌚ A	3SE5000-0AE01		1	1 unit	41K
	Metal lever, high-grade steel roller	22	⌚ B	3SE5000-0AE02		1	1 unit	41K
	High-grade steel lever, plastic roller	22	⌚ B	3SE5000-0AE03		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	22	⌚ B	3SE5000-0AE04		1	1 unit	41K
	Angular roller levers							
	Metal lever, plastic roller	22	⌚ A	3SE5000-0AF01		1	1 unit	41K
	Metal lever, high-grade steel roller	22	⌚ B	3SE5000-0AF02		1	1 unit	41K
	High-grade steel lever, plastic roller	22	⌚ B	3SE5000-0AF03		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	22	⌚ B	3SE5000-0AF04		1	1 unit	41K
Twist actuators with lever								
	Twist actuators, metal (without lever)							
	• For twist levers, switching right or left, adjustable		⌚ A	3SE5000-0AH00		1	1 unit	41K
	- For enclosure width 40 and 56 mm		⌚ B	3SE5000-0AT10		1	1 unit	41K
	• For fork levers, latching		⌚ B					
	Levers							
	Twist levers 27 mm, offset, type A, according to EN 50041							
	Metal lever, plastic roller	19	⌚ A	3SE5000-0AA01		1	1 unit	41K
	Metal lever, high-grade steel roller	19	⌚ A	3SE5000-0AA02		1	1 unit	41K
	Metal lever, high-grade steel roller with ball bearing	19	⌚ B	3SE5000-0AA03		1	1 unit	41K
	Metal lever, 2 plastic rollers	19	⌚ B	3SE5000-0AA04		1	1 unit	41K
	Metal lever, plastic roller	30	⌚ B	3SE5000-0AA05		1	1 unit	41K
	Metal lever, plastic roller	50	⌚ B	3SE5000-0AA07		1	1 unit	41K
	Metal lever, rubber roller	50	⌚ B	3SE5000-0AA08		1	1 unit	41K
	High-grade steel lever, plastic roller	19	⌚ B	3SE5000-0AA11		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	19	⌚ B	3SE5000-0AA12		1	1 unit	41K
	Twist levers 35 mm, offset							
	Metal lever, plastic roller	19	⌚ B	3SE5000-0AA15		1	1 unit	41K
	High-grade steel lever, plastic roller	19	⌚ B	3SE5000-0AA16		1	1 unit	41K
	Twist levers 30 mm, straight¹⁾							
	Metal lever, plastic roller	19	⌚ B	3SE5000-0AA24		1	1 unit	41K
	Metal lever, plastic roller	30	⌚ B	3SE5000-0AA26		1	1 unit	41K
	Twist levers, adjustable length, with grid hole							
	Metal lever, plastic roller	19	⌚ B	3SE5000-0AA60		1	1 unit	41K
	Metal lever, high-grade steel roller	19	⌚ B	3SE5000-0AA61		1	1 unit	41K
	Metal lever, plastic roller	50	⌚ B	3SE5000-0AA67		1	1 unit	41K
	Metal lever, rubber roller	50	⌚ B	3SE5000-0AA68		1	1 unit	41K
	High-grade steel lever, plastic roller	19	⌚ B	3SE5000-0AA62		1	1 unit	41K
	High-grade steel lever, high-grade steel roller	19	⌚ B	3SE5000-0AA63		1	1 unit	41K
	Fork levers (for switches with snap-action contacts only)							
	Metal lever, 2 plastic rollers	19	⌚ B	3SE5000-0AT01		1	1 unit	41K
	Metal lever, 2 high-grade steel rollers	19	⌚ B	3SE5000-0AT02		1	1 unit	41K
High-grade steel lever, 2 plastic rollers	19	⌚ B	3SE5000-0AT03		1	1 unit	41K	
High-grade steel lever, 2 high-grade steel rollers	19	⌚ B	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 conventionally wired up.

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 12/93](#)).

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 $< 60 \text{ mA}$
- 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, 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 Switchgear and Controlgear, General) and IEC 60947-5-1 (Electromechanical Control Circuit Devices).

The mechanical design of the switch corresponds to the requirements of the fail-safe principle according to EN 1088.

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 a second 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

Plastic enclosures
Enclosure width 31 mm / 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	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
			Configurator			
			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

⊕ B

3SF1234-1QV40-1BA1

1

1 unit

42A

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

⊕ B

3SF1244-1QV40-1BA2

1

1 unit

42A

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

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

¹⁾ Supplied without actuator. Please order separately (see page 12/93).

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

With Separate Actuator

Metal enclosures
Enclosure width 31 mm / 40 mm / 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	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
			Configurator			
			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	⊙ B	3SF1214-1QV40-1BA1	1	1 unit 42A
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	⊙ B	3SF1114-1QV10-1BA1	1	1 unit 42A
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	⊙ B	3SF1124-1QV10-1BA2	1	1 unit 42A

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

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

¹⁾ Supplied without actuator. Please order separately (see page 12/93).

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

With Separate Actuator

Accessories

Overview

Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Actuators						
Standard actuators						
 3SE5000-0AV01		▶ 3SE5000-0AV01		1	1 unit	41K
 3SE5000-0AV02	B	3SE5000-0AV02		1	1 unit	41K
 3SE5000-0AV03	B	3SE5000-0AV03		1	1 unit	41K
 3SE5000-0AW11	B	3SE5000-0AW11		1	1 unit	41K
Radius actuators						
 3SE5000-0AV04	A	3SE5000-0AV04		1	1 unit	41K
 3SE5000-0AV6	▶	3SE5000-0AV06		1	1 unit	41K
Universal radius actuators						
 3SE5000-0AV05-1AA6	B	3SE5000-0AV05		1	1 unit	41K
	B	3SE5000-0AV05-1AA6		1	1 unit	41K
Universal radius actuators, heavy duty						
 3SE5000-0AV07	A	3SE5000-0AV07-1AK2		1	1 unit	41K
	B	3SE5000-0AV07		1	1 unit	41K
Optional accessories						
 3SE5000-0AV08-1AA2	C	3SE5000-0AV08-1AA2		1	1 unit	41K
 3SE5000-0AV08-1AA3	B	3SE5000-0AV08-1AA3		1	1 unit	41K

¹⁾ Not suitable for safety switches with interlocking.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

With Solenoid Interlocking

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 conventionally wired up.

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



3SF1 safety switch with solenoid interlocking 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 12/93).

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.

Solenoid interlocking

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 12/70.

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 solenoid interlocking 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

Application

The safety switches with solenoid interlocking 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 solenoid interlocking

Standards

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

The mechanical design of the switch corresponds to the requirements of the fail-safe principle according to EN 1088.

Approvals

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

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

3SF13 safety switches with solenoid interlocking have a VDE test mark.

With a 3SF13 safety switch with solenoid interlocking 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 a second 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 Solenoid Interlocking

Plastic enclosures
With locking force greater than 1200 N

Overview

5 directions of approach · Degree of protection IP66/IP67

- Slow-action contacts:
 - Version -1BA1: ASIsafe channel 1 on 1 NC contact from the actuator and channel 2 on 1 NC contact from the solenoid
 - Version -1BA3: ASIsafe channel 1 on the first NC contact from the actuator and channel 2 on the second NC contact from the actuator
 - Version -1BA4: ASIsafe channel 1 on 2 NC contacts from the actuator and channel 2 on 1 NC contact from the solenoid. A discrepancy between the two contacts of the actuator will be evaluated already in the switch.
- Solenoid: Rated operational voltage 24 V DC
- 1 300 N locking force
- Status display with 4 LEDs 24 V DC;
 - 1: AS-i, 2: FAULT, 3: F-IN1, 4: F-IN2

Safety level

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

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

In connection with an ASIsafe MSS modular safety system or in DP/AS-i F-Link it is possible to achieve SIL 2 according to IEC 61508 or PL d according to ISO 13849-1.

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

✓ Available

-- Not available

Selection and ordering data

Interlock ¹⁾		Contacts Actuators/ Solenoids	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		
1300 N locking force · Enclosure width 54 mm							
	Spring-actuated locks						
	• With auxiliary release	1 NC/1 NC	⊙ B	3SF1324-1SD21-1BA1	1	1 unit	42A
		2 NC/--	⊙ B	3SF1324-1SD21-1BA3	1	1 unit	42A
		2 NC/1 NC	⊙ B	3SF1324-1SD21-1BA4	1	1 unit	42A
	• With auxiliary release with lock	1 NC/1 NC	⊙ B	3SF1324-1SE21-1BA1	1	1 unit	42A
3SF1324-1SD21-...							
	• With escape release from the front	1 NC/1 NC	⊙ B	3SF1324-1SF21-1BA1	1	1 unit	42A
		2 NC/1 NC	⊙ B	3SF1324-1SF21-1BA4	1	1 unit	42A
	• With escape release from the back and auxiliary release from the front	1 NC/1 NC	⊙ B	3SF1324-1SG21-1BA1	1	1 unit	42A
		2 NC/1 NC	⊙ B	3SF1324-1SG21-1BA4	1	1 unit	42A
	• With emergency release from the back and auxiliary release from the front	1 NC/1 NC	⊙ B	3SF1324-1SJ21-1BA1	1	1 unit	42A
3SF1324-1SF21-...							
	Solenoid locks						
		1 NC/1 NC	⊙ B	3SF1324-1SB21-1BA1	1	1 unit	42A
		2 NC/--	⊙ B	3SF1324-1SB21-1BA3	1	1 unit	42A
3SF1324-1SB21-...							

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

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

¹⁾ Supplied without actuator. Please order separately.

For actuators and optional accessories see page 12/93.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

With Solenoid Interlocking

Metal enclosures
With locking force greater than 2000 N

Overview

5 directions of approach · Degree of protection IP66/IP67

- Slow-action contacts:
Version -1BA1: ASIsafe channel 1 on 1 NC contact from the actuator and channel 2 on 1 NC contact from the solenoid
- Solenoid: Rated operational voltage 24 V DC
- 2 600 N locking force
- Status display with 4 LEDs 24 V DC;
1: AS-i, 2: FAULT, 3: F-IN1, 4: F-IN2

Safety level

See page 12/95.

Selection and ordering data

Interlock ¹⁾	Contacts Actuators/ Solenoids	DT	Complete units	PU (UNIT, SET, M)	PS*	PG
			Configurator			
			Article No.	Price per PU		
2600 N locking force · Enclosure width 54 mm						
	Spring-actuated locks					
	• With auxiliary release	1 NC/1 NC	⊙ B	3SF1314-1SD11-1BA1	1	1 unit 42A
	• With auxiliary release with lock	1 NC/1 NC	⊙ B	3SF1314-1SE11-1BA1	1	1 unit 42A
	• With escape release from the front	1 NC/1 NC	⊙ B	3SF1314-1SF11-1BA1	1	1 unit 42A
	• With escape release from the back and auxiliary release from the front	1 NC/1 NC	⊙ B	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	⊙ B	3SF1314-1SH11-1BA1	1	1 unit 42A
	• With emergency release from the back and auxiliary release from the front	1 NC/1 NC	⊙ B	3SF1314-1SJ11-1BA1	1	1 unit 42A
	Solenoid locks	1 NC/1 NC	⊙ B	3SF1314-1SB11-1BA1	1	1 unit 42A
						

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

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

¹⁾ Supplied without actuator. Please order separately.

For actuators and optional accessories see page 12/93.

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

Hinge Switches

Plastic enclosures
Enclosure width 31 mm / 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 conventionally wired up.

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 standards and approvals are the same as for the 3SF1 standard switches (see page 12/82).

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	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		

Basic switches · 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

Snap-action contacts

2 NC

24 V DC



B

3SF1234-1LC05-1BA1

1

1 unit

42A

ASIsafe basic switch

Basic switches · Enclosure width 50 mm



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



B

3SF1244-1LC05-1BA2

1

1 unit

42A

ASIsafe basic switch

Actuator heads



Actuator head with
hollow shaft

With hollow shaft

Operating angle 10°

B

3SE5000-0AU21

1

1 unit

41K



Actuator head with
solid shaft

With solid shaft

Operating angle 10°

B

3SE5000-0AU22

1

1 unit

41K

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

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

SIRIUS 3SF1 Mechanical Safety Switches for AS-Interface

Hinge Switches

Metal enclosures

Enclosure width 31 mm / 40 mm / 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 conventionally wired up.

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 standards and approvals are the same as for the 3SF1 standard switches ([see page 12/82](#)).

Selection and ordering data

Modular system

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

Version	Contacts	LEDs	DT	Modular system	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				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



B

3SF1214-1LC05-1BA1

1

1 unit

42A

ASIsafe basic switch

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



B

3SF1114-1LA00-1BA1

1

1 unit

42A

ASIsafe basic switch

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



B

3SF1124-1LA00-1BA2

1

1 unit

42A

ASIsafe basic switch

Actuator heads



Actuator head with hollow shaft

Hollow shaft

Operating angle 10°

B

3SE5000-0AU21

1

1 unit

41K



Actuator head with solid shaft

Solid shaft

Operating angle 10°

B

3SE5000-0AU22

1

1 unit

41K

For online configurator [see www.siemens.com/sirius/configurators](http://www.siemens.com/sirius/configurators)

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

Overview

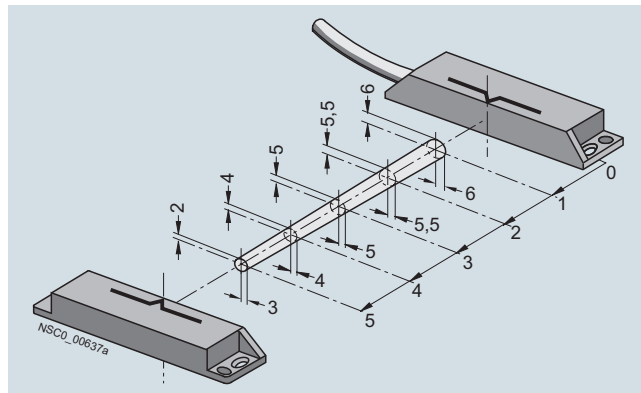


3SE66 contact blocks and 3SE67 switching magnets

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

3SE6806 safety relays

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



Enabling range (example)

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

The 3SE6806 safety relay has two floating enabling circuits (safe circuits) as NO contact circuits and one floating signaling circuit as an NC contact circuit. The number of enabling circuits can be increased by adding one or more 3TK2830 expansion modules.

Application

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

The 3SE66 non-contact, magnetically operated safety switches stand out due to their enclosed design with degree of protection IP67. They are particularly suitable therefore for areas exposed to contamination, cleaning or disinfecting.

A magnetic monitoring system comprises one or more magnetically operated switches and an evaluation unit, e.g. a safety relay. When contact blocks 1 NO + 1 NC are used the 3SE6806 safety relay provides a high degree of protection against manipulation and can be installed in safety circuits up to SIL 3 according to EN ISO 13849-1.

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	2 NC	1 NO + 2 NC ¹⁾	
		3SE6605-.BA 3SE6704-.BA	3SE6604-2BA 3SE6704-2BA	3SE6606-3BA 3SE6704-3BA	
Relay outputs					
SIRIUS safety relays, 6-fold	3SE6806-2CD00	✓	--	✓	SIL 3 / e
SIRIUS safety relays	3SK1111	--	✓	--	SIL 3 / e
	3SK1121, 3TK2826	✓	✓	✓	SIL 3 / e
Solid-state outputs					
SIRIUS safety relays	3SK1112, 3SK1122	--	✓	--	SIL 3 / e
	3TK2845	--	✓	--	SIL 3 / e
SIRIUS safety relays with contactor relay	3TK2850, 3TK2851, 3TK2852	--	✓	--	SIL 2 / d
	3TK2853	--	✓	--	SIL 3 / e
ASIsafe compact safety modules	3RK1205, 3RK1405	--	✓	--	SIL 3 / e
Modular Safety System (MSS)	3RK3	✓	✓	✓	SIL 3 / e
SIMATIC S7-31xF-2 DP or SIMATIC ET 200M	SM 326 F, 24 DI, 24 V DC, SM 326 F, 8 DI, NAMUR	✓	✓	✓	SIL 3
SIMATIC ET 200S PROFIsafe	4/8 F-DI / 3 F-DO, 24 V DC	✓	✓	✓	SIL 2
	4/8 F-DI, 24 V DC	✓	✓	✓	SIL 3
SIMATIC ET 200eco	4/8 F-DI, 24 V DC	✓	✓	✓	SIL 3
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

✓ Suitable magnetically operated switch

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

SIRIUS 3SE6 Non-Contact Safety Switches

Magnet

3SE66, 3SE67 magnetically operated switches

Selection and ordering data

Version	Size	Contacts	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
mm								
Round sensor units								
 3SE6704-1BA	Switching magnets (coded)	M30	A	3SE6704-1BA		1	1 unit	41K
	Contact blocks							
 3SE6505-1BA	• With cable, 3 m	M30	1 NO + 1 NC	C	3SE6605-1BA	1	1 unit	41K
	• With M12 plug, 4-pole	M30	1 NO + 1 NC	X	3SE6605-1BA02	1	1 unit	41K
Rectangular sensor units								
 3SE6704-2BA	Switching magnets (coded)	25 × 88	--	A	3SE6704-2BA	1	1 unit	41K
	Contact blocks							
 3SE660-2BA	• With cable, 3 m	25 × 88	1 NO + 1 NC	C	3SE6605-2BA	1	1 unit	41K
			2 NC	C	3SE6604-2BA	1	1 unit	41K
	• With cable, 10 m	25 × 88	1 NO + 1 NC	A	3SE6605-2BA10	1	1 unit	41K
			2 NC	A	3SE6604-2BA10	1	1 unit	41K
	• With M8 plug, 4-pole	25 × 88	1 NO + 1 NC	X	3SE6605-2BA01	1	1 unit	41K
			2 NC	X	3SE6604-2BA01	1	1 unit	41K
 3SE660-3BA	Switching magnets (coded)	25 × 33	--	X	3SE6704-3BA	1	1 unit	41K
	Contact blocks							
	• With cable, 3 m	25 × 33	1 NO + 1 NC	C	3SE6605-3BA	1	1 unit	41K
	• With cable, 5 m			D	3SE6605-3BA05	1	1 unit	41K
	• With cable, 10 m			D	3SE6605-3BA10	1	1 unit	41K
	• With cable, 15 m			X	3SE6605-3BA15	1	1 unit	41K
	• With cable, 1 m	25 × 33	1 NO + 2 NC ¹⁾	A	3SE6606-3BA	1	1 unit	41K
Accessories								
 3SX3260	Spacers	25 × 88	--	D	3SX3260	1	1 unit	41K
	Spacers	25 × 33	--	D	3SX3261	1	1 unit	41K
 3SX3261								

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

Version	Number of sensors	Enabling/signaling circuits	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Monitoring units								
 3SE6806-2CD00	Safety relays with relay output, 6-fold	6	2 NO / 1 NC	X	3SE6806-2CD00	1	1 unit	41K
	Rated control supply voltage 24 V DC							

For more monitoring units see Chapters 2, 8, 9 and 11 as well as Catalog IK PI.

Overview



Non-contact RFID safety switches with maximum tamper resistance

RFID 3SE63 non-contact safety switches comply with the highest safety requirements, SIL3 or Cat. 4, for monitoring the positions of movable protective devices.

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

The switch is available in several versions:

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

The actuator is therefore available in two versions

- Standard
- With 18 N magnetic catch

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

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 two diagnostics functions:

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

RFID 3SE63 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 IP69K
- Fine adjustment thanks to slotted holes
- Little adjustment or maintenance required
- Molded switch allows it to be used as an end stop for small and medium-sized doors

Application

RFID 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 outputs	
SIRIUS safety relays	3SK1111-.AB30, 3SK1121
SIRIUS safety relays	3TK2826-.BB4.
Solid-state outputs	
SIRIUS safety relays	3SK1112, 3SK1122
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

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

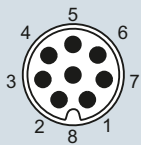
Type	3SE63
General data	
Standards	IEC 60947-5-3, IEC 61508, EN ISO 13849-1
Enclosure material	Glass-fiber reinforced thermoplast, self-extinguishing
Degree of protection	IP69K
Ambient temperature	
• During operation	°C -25 ... +70
• During storage, transport	°C -25 ... +85
Shock resistance	30 g / 11 ms
Vibration resistance	10 ... 55 Hz / amplitude 1 mm

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

RFID 3SE63 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 operational current I_e	A	0.25
• Rated operational current I_e /DC-12/DC-13 at U_e	A	0.25
• Voltage drop U_e	V	< 1
• Switching frequency	Hz	1
• Response time, max.	ms	100
• Risk time, max.	ms	200
• Recovery, max.	s	5
Diagnostics output		
		p operation
• Max. rated operational current $I_{e2 \max}$	A	0.05
• Rated operational current I_e /DC-12/DC-13 at U_e	A	0.05
• Voltage drop U_e	V	< 2
• Operational current	mA	150
• Conductor capacity, max.	nF	50

Connector assignment

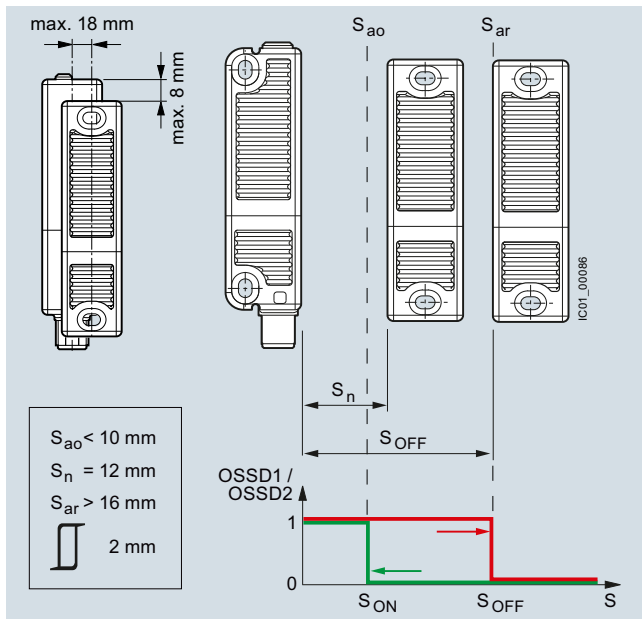


IC10_00090

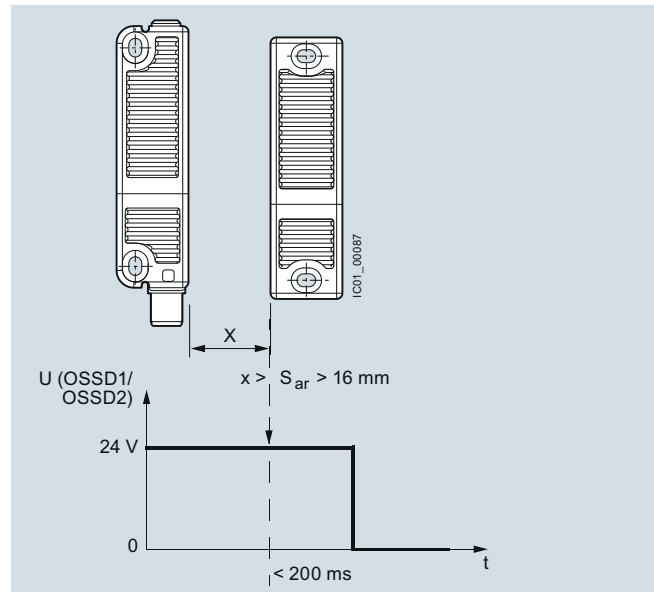
- Pin 1: A1 rated operational voltage 24 V DC
 Pin 2: X1 safety input 24 V DC
 Pin 3: A2 grounding
 Pin 4: OSSD1 safety output
 Pin 5: OUT conventional diagnostics output
 Pin 6: X2 safety input 24 V DC
 Pin 7: OSSD2 safety output
 Pin 8: Not used

Directions of approach and switching interval

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

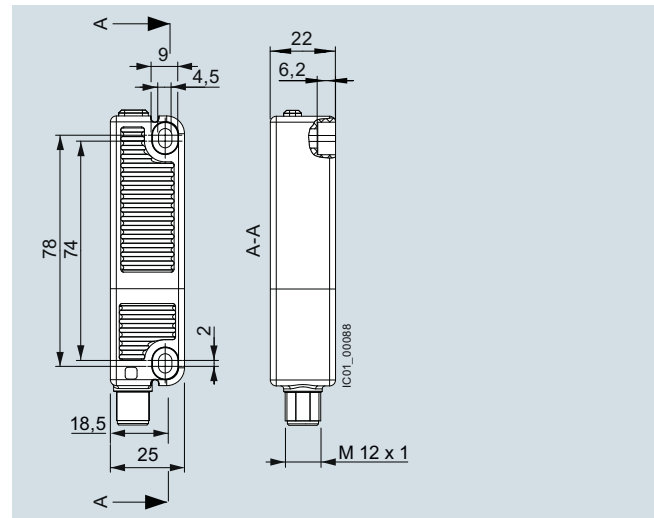
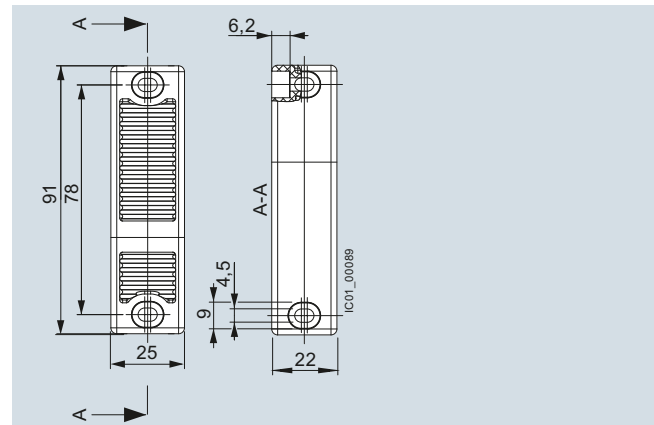


Switching interval: Output signal with hysteresis



Switching interval: Output signal

Dimensional drawings

RFID switch
3SE6315RFID actuator
3SE6310

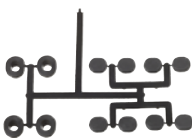
SIRIUS 3SE6 Non-Contact Safety Switches

RFID

RFID 3SE63 safety switches

Selection and ordering data

With M12 connector, 8-pole

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

For monitoring units see Chapter 2, "Industrial Communication" → "AS-Interface" and Chapter 11, "Safety Technology" as well as Catalogs IK PI and ST 70.