

SIRIUS Detecting Product Overview of 3SE5 Position Switches



Brochure • November 2007

Low-Voltage

CONTROLS AND DISTRIBUTION



SIEMENS

Precise and reliable: Our SIRIUS Detecting Devices

There is a lot of information in the field. To capture the data accurately, you need devices which you can rely on. Our comprehensive range of SIRIUS detecting devices is just what you need for nearly any field-level application. Our mechanical high-precision sensors dependably detect any motion sequence, convert the event into electrical signals and transmit the data to your control systems, so that you can immediately shut down your machines and systems if a fault occurs. Reliably and with everything under control.

Always in step with developments: the complete range of detecting devices

Whatever information you need and no matter how you want to get it, our portfolio offers the right solution. From position switches in a plastic or metal enclosure for any conceivable standard or safety-related application, to position switches with short-stroke contact block for high-precision disconnect, and position switches with separate actuator or with solenoid interlocking, e.g. for the secure interlocking of protective doors.

We also offer a complete range of non-contact sensors to help you monitor the entire process in any application. Our portfolio includes optical sensors such as light curtains and laser scanners as well as our dependable family of proximity switches.

Whether you use the switches for standard functions or in safety circuits, no unexpected movement escapes our detecting devices no matter how harsh the conditions are. Positive-opening IEC60947-5-1 compliant contacts are suitable for use as mechanical position switches in applications up to EN954-1 Category 4.



Contents

Introduction

SIRIUS Detecting Devices 2

Position Switches

Plastic enclosures, 31 mm, according to EN 50047 . . 8

Plastic enclosures, 50 mm 12

Metal enclosures, 40 mm, according to EN 50041 . . 16

Metal enclosures, 56 mm 20

Open-type limit switches 24

Safety Position Switches

With separate actuator. 26

With solenoid interlocking. 28

Hinge switches. 32

ASIsafe  33


ATEX. 42



Your Field Level Informants: SIRIUS Limit Switches

SIRIUS limit switches give you the dependable performance you need in your everyday industrial applications thanks to their modular, consistent design with a wide choice of variants and enormous variety of operating mechanisms. If you are looking for a low-cost, durable solution for applications with less stringent safety requirements, for example to detect hazardous motion of machine parts or to monitor safety devices, SIRIUS limit switches are just what you are looking for.

Standardized designs and functions make it easy for you to select the right switch, and they also facilitate simple, efficient stockage, installation, wiring and maintenance. Our wide range of products is designed for applications up to EN 954-1 Category 4 when you select the right product and use them properly in conjunction with fail-safe monitoring units such as the 3TK28, ASISafe, SIMATIC or SINUMERIK.

All modules/devices which have positive-opening code  can be used in safety circuits.

New features

Even more compact, modular, simple to connect: Limit switches have to offer more and more features. We have developed our new generation of SIRIUS limit switches to meet market demands and offer you a whole series of advantages:

- **Modular design** with many standardized components reduces the number of variants, simplifies part stockage and increases the availability of spare parts.
- **Plug-in design** and a standardized interface simplify installation and replacement of the actuator heads.
- All **actuator heads can be rotated in 22.5° increments.**
- **Quick-connect technology on our plastic enclosures** according to EN 50047 (31 mm wide) **reduces installation time by up to 25 %.**
- The entire **ASISafe electronics are now integrated into the standard enclosure** – ASISafe now does not take up any extra space.
- **LED displays** are available **for all enclosures**, making it easier to perform on-site diagnosis (24 V DC and 115 – 230 V AC available).
- **The new 3-pole contact block** offers redundant disconnect and additional signaling for added safety, and it does not take up any more space than 2-pole contact blocks.
- Short-stroke contact blocks with 1 NO/1 NC improve the precision of switching operations.
- The 1 NO/1 NC snap-action contact with 2.2 mm x 2 mm contact opening is suitable for simultaneous disconnect and signaling in the elevator industry.

The modular design of the new generation of limit switches saves time and increases flexibility during installation of a whole range of switch variants.

The Advantages at a Glance

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



- ① Open the cover
- ② Actuate the locking lever
- ③ Replace the actuator head

ASIsafe electronics integrated in standard enclosure



Fast connection method for plastic enclosures




Optional LED displays for all enclosures



Selection Criteria for Limit Switches

Enclosure designs

Enclosures	Degree of protection	Number of screw connections M20 x 1.5
 Open-type	IP20	--
 Plastic enclosure, 31 mm wide, according to EN 50047	IP65	1
 Plastic enclosure, 50 mm wide	IP66, IP67	2 (suitable for looping through cables)
 Metal enclosure, 40 mm wide, according to EN 50041	IP66, IP67	1
 Metal enclosure, 56 mm wide	IP66, IP67	3 (suitable for looping through cables)

Contacts

Snap-action contact 1 NO/1 NC or 1 NO/2 NC	NC contacts and NO contacts switch at the same time regardless of the actuation speed
Slow-action contact 1 NO/1 NC or 1 NO/2 NC	Difference in travel between "NC contact opens" and "NO contact closes"; the switching speed is the same as or proportional to the actuation speed

Actuators

Please note:

- Direction of approach
- Actuation speed
- Form of actuating element
- Favorable material pair (actuator head - actuator)

Rounded plungers and roller plungers

- Operation in direction of the plunger axis or with bar at right angles to the plunger axis
- Rounded plungers and roller plungers have an additional overtravel and hence a larger operating distance
- The roller plunger is recommended for lateral actuation and relatively long overtravel

Roller levers and angular roller levers

- Depending on the direction of starting (left or right), various approach angles ($\alpha = 30^\circ$) and trailing angles ($\gamma = 45^\circ$) are possible
- For actuators made of finely ground steel in the form of cams, straight-edges or cam disks

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, ice and coarse-grained material
- With the twist lever the maximum approach angle is always equal to the maximum trailing angle
- Rod actuator – when no actuator with approach and trailing angle is possible
- 10° adjustment of the twist lever possible

Spring rods

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

Roller plungers for central fixing with M18 x 1 thread

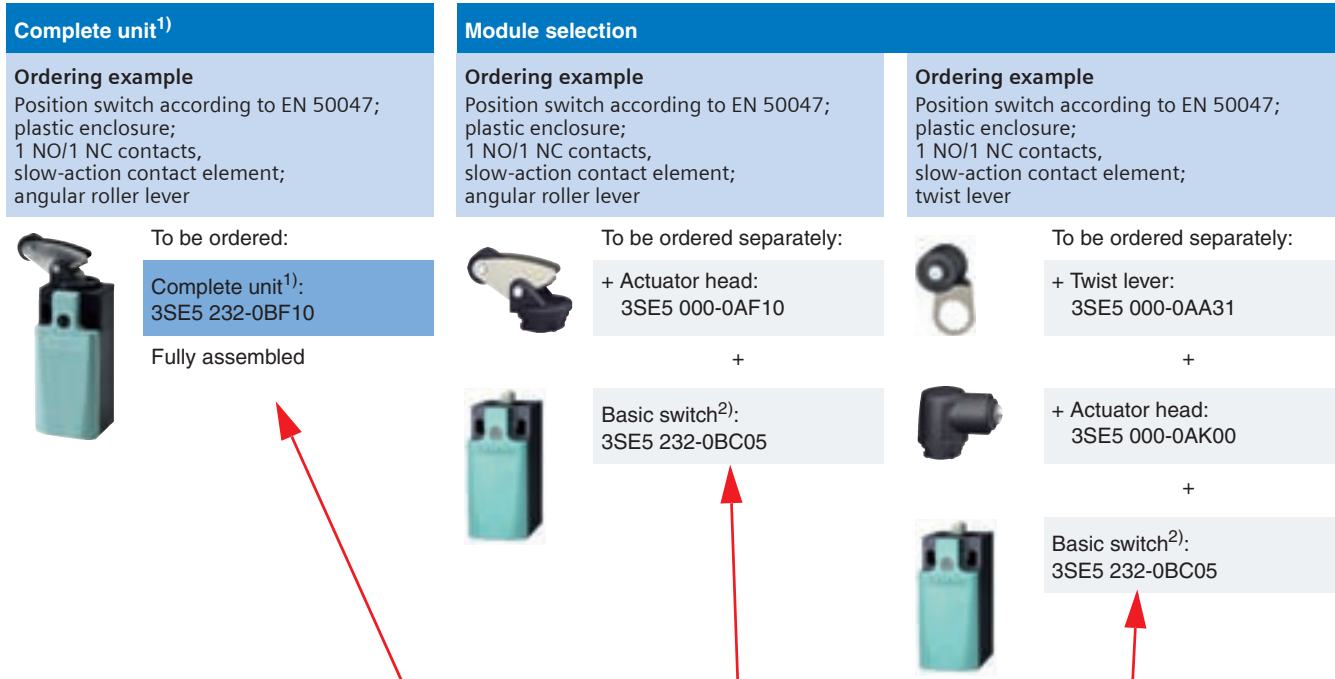
- Fast assembly
- Easy adjustment

Fork levers

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



Ordering Notes on Selection Tables for 3SE5 Position Switches



Excerpt from ordering table

Contact block		LED display	Connection	Angular roller levers		Twist levers according to EN 50047	
Con-tacts	Contact element			Metal levers	Plastic rollers	High-grade steel levers	Plastic rollers
1 NO/1 NC	Slow action	Without	1 x (M20 x 1.5)	Complete unit ¹⁾	3SE5 232-0BF10	--	--
				Basic switch ²⁾	3SE5 232-0BC05	3SE5 232-0BC05	3SE5 232-0BC05
				+ Actuator head	3SE5 000-0AF10	3SE5 000-0AK00	3SE5 000-0AA31
				+ Twist lever	--	--	3SE5 000-0AA31

1) Each complete unit can also be ordered as a module.

2) A basic switch comprises an enclosure with contacts and a cover.


Limit Switches

Plastic Enclosures, 31 mm









Switching points and mounting according to EN 50047, IP65

Complete unit and
Module selection



		Rounded plungers		Roller plungers			
		(Integrated in basic switch)					
		Teflon plungers		Plastic rollers	High-grade steel rollers		
		↓ $v_{max.} = 1 \text{ m/s}$ →		↔ $v_{max.} = 1 \text{ m/s}$ →	↔ $v_{max.} = 1 \text{ m/s}$ →		
1 NO/ 1 NC	Slow action	without	1 x (M20 x 1.5)	Complete unit	3SE5 232-0BC05	3SE5 232-0BD03	--
				Basic switch	--	3SE5 232-0BC05	3SE5 232-0BC05
				+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04
		M12 plug, 4-pole	Complete unit	3SE5 234-0BC05-1AC4	--	--	
			Basic switch	--	3SE5 234-0BC05-1AC4	3SE5 234-0BC05-1AC4	
			+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04	
	Snap action integrated, not replaceable	without	1 x (M20 x 1.5)	Complete unit	3SE5 232-0HC05	3SE5 232-0HD03	--
				Basic switch	--	3SE5 232-0HC05	3SE5 232-0HC05
				+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04
		M12 plug, 4-pole	Complete unit	3SE5 234-0HC05-1AC4	3SE5 234-0HD03-1AC4	--	
			Basic switch	--	3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4	
			+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04	
Snap action, short stroke, not replaceable	without	1 x (M20 x 1.5)	Complete unit	3SE5 232-0FC05	--	--	
			Basic switch	--	3SE5 232-0FC05	3SE5 232-0FC05	
			+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04	
1 NO/ 2 NC	Slow-action contact	without	1 x (M20 x 1.5)	Complete unit	3SE5 232-0KC05	3SE5 232-0KD03	--
				Basic switch	--	3SE5 232-0KC05	3SE5 232-0KC05
				+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04
		M12 plug, 4-pole (2 NC con- nected)	Complete unit	3SE5 234-0KC05-1AE0	--	--	
			Basic switch	--	3SE5 234-0KC05-1AE0	3SE5 234-0KC05-1AE0	
			+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04	
	Snap-action contact	without	1 x (M20 x 1.5)	Complete unit	3SE5 232-0LC05	3SE5 232-0LD03	--
				Basic switch	--	3SE5 232-0LC05	3SE5 232-0LC05
				+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04
		2 LEDs, yellow / green 24 V DC	1 x (M20 x 1.5)	Complete unit	3SE5 232-1LC05	--	--
				Basic switch	--	3SE5 232-1LC05	3SE5 232-1LC05
				+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04
		without	M12 plug, 4-pole (2 NC con- nected)	Complete unit	3SE5 234-0LC05-1AE0	--	--
				Basic switch	--	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0
				+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04

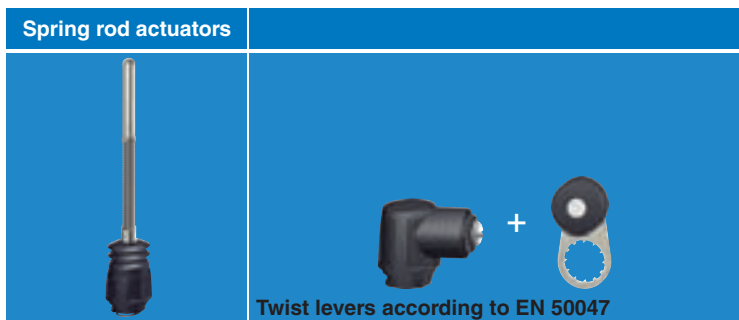
For ordering notes see page 7.

		Roller levers			Angular roller levers	
						
Levers	Plastic rollers, central fixing $\leftrightarrow v_{max.} = 1 \text{ m/s}$ 	Metal levers		High-grade steel levers	Metal levers	High-grade steel levers
		Plastic rollers $\leftarrow v_{max.} = 1 \text{ m/s}$ 	High-grade steel rollers $\leftarrow v_{max.} = 1 \text{ m/s}$ 	Plastic rollers $\leftarrow v_{max.} = 1 \text{ m/s}$ 	Plastic rollers $\uparrow v_{max.} = 1 \text{ m/s}$ 	Plastic rollers $\uparrow v_{max.} = 1 \text{ m/s}$ 
	--	3SE5 232-0BE10	--	--	3SE5 232-0BF10	--
	3SE5 232-0BC05	3SE5 232-0BC05	3SE5 232-0BC05	3SE5 232-0BC05	3SE5 232-0BC05	3SE5 232-0BC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE11	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	--	--	--	--	--
4	3SE5 234-0BC05-1AC4	3SE5 234-0BC05-1AC4	3SE5 234-0BC05-1AC4	3SE5 234-0BC05-1AC4	3SE5 234-0BC05-1AC4	3SE5 234-0BC05-1AC4
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE11	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	3SE5 232-0HD10	3SE5 232-0HE10	--	--	3SE5 232-0HF10	--
	3SE5 232-0HC05	3SE5 232-0HC05	3SE5 232-0HC05	3SE5 232-0HC05	3SE5 232-0HC05	3SE5 232-0HC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE11	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	3SE5 234-0HE10-1AC4	--	--	--	--
4	3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE11	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	--	--	--	--	--
	3SE5 232-0FC05	3SE5 232-0FC05	3SE5 232-0FC05	3SE5 232-0FC05	3SE5 232-0FC05	3SE5 232-0FC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE11	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	3SE5 232-0KD10	3SE5 232-0KE10	--	--	3SE5 232-0KF10	--
	3SE5 232-0KC05	3SE5 232-0KC05	3SE5 232-0KC05	3SE5 232-0KC05	3SE5 232-0KC05	3SE5 232-0KC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE11	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	--	--	--	--	--
0	3SE5 234-0KC05-1AE0	3SE5 234-0KC05-1AE0	3SE5 234-0KC05-1AE0	3SE5 234-0KC05-1AE0	3SE5 234-0KC05-1AE0	3SE5 234-0KC05-1AE0
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE11	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	3SE5 232-0LE10	--	--	3SE5 232-0LF10	--
	3SE5 232-0LC05	3SE5 232-0LC05	3SE5 232-0LC05	3SE5 232-0LC05	3SE5 232-0LC05	3SE5 232-0LC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE11	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	--	--	--	--	--
	3SE5 232-1LC05	3SE5 232-1LC05	3SE5 232-1LC05	3SE5 232-1LC05	3SE5 232-1LC05	3SE5 232-1LC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE11	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	--	--	--	--	--
0	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE11	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12

Limit Switches Plastic Enclosures, 31 mm

Switching points and mounting according to EN 50047, IP65

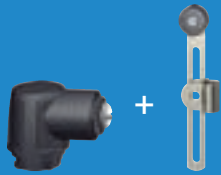
Complete unit and
Module selection



Contact block		LED display	Connection	Spring rod actuators						
Contacts	Contact element			Plastic plungers, total length 143 mm $v_{max.} = 1 \text{ m/s}$	Metal levers Plastic rollers $\leftrightarrow v_{max.} = 1,5 \text{ m/s}$	High-grade steel levers Plastic rollers $\leftrightarrow v_{max.} = 1,5 \text{ m/s}$				
1 NO/ 1 NC	Slow action	without	1 x (M20 x 1.5)	Complete unit	--	3SE5 232-0BK21	--			
				Basic switch	--	3SE5 232-0BC05	3SE5 232-0BC05			
				+ Actuator head	--	3SE5 000-0AK00	3SE5 000-0AK00			
			+ Twist lever	--	3SE5 000-0AA21	3SE5 000-0AA31				
			M12 plug, 4-pole	Complete unit	--	--	--			
				Basic switch	--	3SE5 234-0BC05-1AC4	3SE5 234-0BC05-1AC4			
	+ Actuator head	--		3SE5 000-0AK00	3SE5 000-0AK00					
	Snap action integrated, not replaceable	without	1 x (M20 x 1.5)	Complete unit	3SE5 232-0HR01	3SE5 232-0HK21	--			
				Basic switch	3SE5 232-0HC05	3SE5 232-0HC05	3SE5 232-0HC05			
				+ Actuator head	3SE5 000-0AR01	3SE5 000-0AK00	3SE5 000-0AK00			
			+ Twist lever	--	3SE5 000-0AA21	3SE5 000-0AA31				
			M12 plug, 4-pole	Complete unit	--	3SE5 234-0HK21-1AC4	--			
Basic switch				3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4				
+ Actuator head	3SE5 000-0AR01	3SE5 000-0AK00		3SE5 000-0AK00						
Snap action, short stroke, not replaceable	without	1 x (M20 x 1.5)	Complete unit	--	--	--				
			Basic switch	3SE5 232-0FC05	3SE5 232-0FC05	3SE5 232-0FC05				
			+ Actuator head	3SE5 000-0AR01	3SE5 000-0AK00	3SE5 000-0AK00				
			+ Twist lever	--	3SE5 000-0AA21	3SE5 000-0AA31				
			1 NO/ 2 NC	Slow action	without	1 x (M20 x 1.5)	Complete unit	--	3SE5 232-0KK21	--
							Basic switch	--	3SE5 232-0KC05	3SE5 232-0KC05
+ Actuator head	--	3SE5 000-0AK00	3SE5 000-0AK00							
M12 plug, 4-pole (2 NC connected)	Complete unit	--	--		--					
	Basic switch	--	3SE5 234-0KC05-1AE0		3SE5 234-0KC05-1AE0					
	+ Actuator head	--	3SE5 000-0AK00		3SE5 000-0AK00					
Snap action	without	1 x (M20 x 1.5)	Complete unit	--	3SE5 232-0LK21	--				
			Basic switch	3SE5 232-0LC05	3SE5 232-0LC05	3SE5 232-0LC05				
			+ Actuator head	3SE5 000-0AR01	3SE5 000-0AK00	3SE5 000-0AK00				
		+ Twist lever	--	3SE5 000-0AA21	3SE5 000-0AA31					
		2 LEDs, yellow / green 24 V DC	1 x (M20 x 1.5)	Complete unit	--	--	--			
				Basic switch	3SE5 232-1LC05	3SE5 232-1LC05	3SE5 232-1LC05			
	+ Actuator head			3SE5 000-0AR01	3SE5 000-0AK00	3SE5 000-0AK00				
	without	M12 plug, 4-pole (2 NC connected)	Complete unit	--	--	--				
			Basic switch	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0				
+ Actuator head			3SE5 000-0AR01	3SE5 000-0AK00	3SE5 000-0AK00					
			+ Twist lever	--	3SE5 000-0AA21	3SE5 000-0AA31				

For ordering notes see page 7.

Twist actuators (switching right and/or left, adjustable)



Length-adjustable twist levers



Rod actuators, 200 mm long

Actuator	Metal levers			Aluminum	Plastic
	Plastic rollers	High-grade steel rollers	With latching holes, plastic rollers		
	↔ $v_{max.} = 1,5 \text{ m/s}$	↔ $v_{max.} = 1,5 \text{ m/s}$	↔ $v_{max.} = 1,5 \text{ m/s}$	↔ $v_{max.} = 1,5 \text{ m/s}$	↔ $v_{max.} = 1,5 \text{ m/s}$
	3SE5 232-0BK50	--	--	--	--
	3SE5 232-0BC05	3SE5 232-0BC05	3SE5 232-0BC05	3SE5 232-0BC05	3SE5 232-0BC05
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--
1AC4	3SE5 234-0BC05-1AC4	3SE5 234-0BC05-1AC4	3SE5 234-0BC05-1AC4	3SE5 234-0BC05-1AC4	3SE5 234-0BC05-1AC4
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	3SE5 232-0HK50	--	3SE5 232-0HK60	3SE5 232-0HK80	3SE5 232-0HK82
	3SE5 232-0HC05	3SE5 232-0HC05	3SE5 232-0HC05	3SE5 232-0HC05	3SE5 232-0HC05
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--
1AC4	3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4	3SE5 234-0HC05-1AC4
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--
	3SE5 232-0FC05	3SE5 232-0FC05	3SE5 232-0FC05	3SE5 232-0FC05	3SE5 232-0FC05
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--
	3SE5 232-0KC05	3SE5 232-0KC05	3SE5 232-0KC05	3SE5 232-0KC05	3SE5 232-0KC05
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--
1AE0	3SE5 234-0KC05-1AE0	3SE5 234-0KC05-1AE0	3SE5 234-0KC05-1AE0	3SE5 234-0KC05-1AE0	3SE5 234-0KC05-1AE0
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	3SE5 232-0LK50	--	--	--	--
	3SE5 232-0LC05	3SE5 232-0LC05	3SE5 232-0LC05	3SE5 232-0LC05	3SE5 232-0LC05
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--
	3SE5 232-1LC05	3SE5 232-1LC05	3SE5 232-1LC05	3SE5 232-1LC05	3SE5 232-1LC05
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--
1AE0	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0	3SE5 234-0LC05-1AE0
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82

Limit Switches

Plastic Enclosures, 50 mm








Switching points according to EN 50047, IP66/IP67

Complete unit and
Module selection



		Rounded plungers		Roller plungers				
		(Integrated in basic switch)						
		Teflon plungers		Plastic rollers	High-grade steel rollers			
		$\downarrow v_{max.} = 1 \text{ m/s}$ 		$\leftrightarrow v_{max.} = 1 \text{ m/s}$ 	$\leftrightarrow v_{max.} = 1 \text{ m/s}$ 			
Contact block	1 NO/ 1 NC	Slow action	without	2 x (M20 x 1.5)	Complete unit	3SE5 242-0BC05	3SE5 242-0BD03	--
					Basic switch	--	3SE5 242-0BC05	3SE5 242-0BC05
					+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04
	1 NO/ 2 NC	Snap action, not replaceable	without	2 x (M20 x 1.5)	Complete unit	3SE5 242-0HC05	3SE5 242-0HD03	--
					Basic switch	--	3SE5 242-0HC05	3SE5 242-0HC05
					+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04
		Snap action, short stroke, not replaceable	without	Complete unit	3SE5 242-0FC05	--	--	
				Basic switch	--	3SE5 242-0FC05	3SE5 242-0FC05	
				+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04	
1 NO/ 2 NC	Slow action	without	2 x (M20 x 1.5)	Complete unit	3SE5 242-0KC05	--	--	
				Basic switch	--	3SE5 242-0KC05	3SE5 242-0KC05	
				+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04	
		2 LEDs, yellow / green 24 V DC	Complete unit	3SE5 242-1KC05	--	--		
			Basic switch	--	3SE5 242-1KC05	3SE5 242-1KC05		
			+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04		
	Snap action	without	2 x (M20 x 1.5)	Complete unit	3SE5 242-0LC05	3SE5 242-0LD03	--	
				Basic switch	--	3SE5 242-0LC05	3SE5 242-0LC05	
				+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04	
2 LEDs, yellow / green, 24 V DC	Complete unit	3SE5 242-1LC05	--	--				
	Basic switch	--	3SE5 242-1LC05	3SE5 242-1LC05				
	+ Actuator head	--	3SE5 000-0AD03	3SE5 000-0AD04				

For ordering notes see page 7.

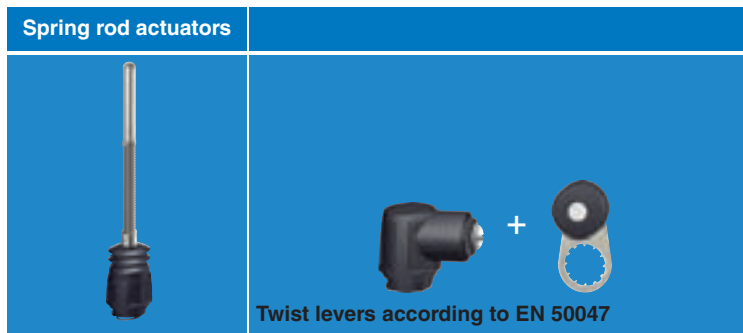
		Roller levers		Angular roller levers	
					
Rollers	Plastic rollers, central fixing	Metal levers	High-grade steel levers	Metal levers	High-grade steel levers
	$\leftrightarrow v_{max.} = 1 \text{ m/s}$ 	Plastic rollers $\leftarrow v_{max.} = 1 \text{ m/s}$ 	Plastic rollers $\leftarrow v_{max.} = 1 \text{ m/s}$ 	Plastic rollers $\uparrow v_{max.} = 1 \text{ m/s}$ 	Plastic rollers $\uparrow v_{max.} = 1 \text{ m/s}$ 
	--	3SE5 242-0BE10	--	--	--
	3SE5 242-0BC05	3SE5 242-0BC05	3SE5 242-0BC05	3SE5 242-0BC05	3SE5 242-0BC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	3SE5 242-0HE10	--	--	--
	3SE5 242-0HC05	3SE5 242-0HC05	3SE5 242-0HC05	3SE5 242-0HC05	3SE5 242-0HC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	--	--	--	--
	3SE5 242-0FC05	3SE5 242-0FC05	3SE5 242-0FC05	3SE5 242-0FC05	3SE5 242-0FC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	--	--	--	--
	3SE5 242-0KC05	3SE5 242-0KC05	3SE5 242-0KC05	3SE5 242-0KC05	3SE5 242-0KC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	3SE5 242-0LE10	--	--	--
	3SE5 242-0LC05	3SE5 242-0LC05	3SE5 242-0LC05	3SE5 242-0LC05	3SE5 242-0LC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12
	--	--	--	--	--
	3SE5 242-1LC05	3SE5 242-1LC05	3SE5 242-1LC05	3SE5 242-1LC05	3SE5 242-1LC05
	3SE5 000-0AD10	3SE5 000-0AE10	3SE5 000-0AE12	3SE5 000-0AF10	3SE5 000-0AF12

Limit Switches

Plastic Enclosures, 50 mm

Switching points according to EN 50047, IP66/IP67

Complete unit and
Module selection

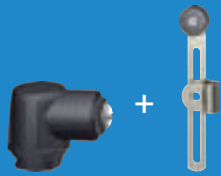


Contact block		LED display	Connection						
Contacts	Contact element								
1 NO/ 1 NC	Slow action	without	2 x (M20 x 1.5)						
				Snap action, not replaceable	without	2 x (M20 x 1.5)			
							Snap action, short stroke, not replaceable	without	2 x (M20 x 1.5)
	Snap action	without	2 x (M20 x 1.5)						
				2 LEDs, yellow / green, 24 V DC	without	2 x (M20 x 1.5)			

Plastic plungers, total length 143 mm $v_{max.} = 1 \text{ m/s}$	Metal levers	High-grade steel levers
	Plastic rollers $v_{max.} = 1,5 \text{ m/s}$ →	Plastic rollers ↔ $v_{max.} = 1,5 \text{ m/s}$ →
Complete unit	--	3SE5 242-0BK21
Basic switch	3SE5 242-0BC05	3SE5 242-0BC05
+ Actuator head	3SE5 000-0AR01	3SE5 000-0AK00
+ Twist lever	--	3SE5 000-0AA21
Complete unit	--	3SE5 242-0HK21
Basic switch	3SE5 242-0HC05	3SE5 242-0HC05
+ Actuator head	3SE5 000-0AR01	3SE5 000-0AK00
+ Twist lever	--	3SE5 000-0AA21
Complete unit	--	--
Basic switch	3SE5 242-0FC05	3SE5 242-0FC05
+ Actuator head	3SE5 000-0AR01	3SE5 000-0AK00
+ Twist lever	--	3SE5 000-0AA21
Complete unit	--	--
Basic switch	3SE5 242-0KC05	3SE5 242-0KC05
+ Actuator head	3SE5 000-0AR01	3SE5 000-0AK00
+ Twist lever	--	3SE5 000-0AA21
Complete unit	--	--
Basic switch	3SE5 242-1KC05	3SE5 242-1KC05
+ Actuator head	3SE5 000-0AR01	3SE5 000-0AK00
+ Twist lever	--	3SE5 000-0AA21
Complete unit	--	--
Basic switch	3SE5 242-0LC05	3SE5 242-0LC05
+ Actuator head	3SE5 000-0AR01	3SE5 000-0AK00
+ Twist lever	--	3SE5 000-0AA21
Complete unit	--	--
Basic switch	3SE5 242-1LC05	3SE5 242-1LC05
+ Actuator head	3SE5 000-0AR01	3SE5 000-0AK00
+ Twist lever	--	3SE5 000-0AA21

For ordering notes see page 7.

Twist actuators (switching right and/or left, adjustable)



+



+

Length-adjustable twist levers

Rod actuators, 200 mm long

Series	Metal levers			Aluminum	Plastic
	Plastic rollers ↔ $v_{max.} = 1,5 \text{ m/s}$ →	High-grade steel rollers ↔ $v_{max.} = 1,5 \text{ m/s}$	With latching holes, plastic rollers ↔ $v_{max.} = 1,5 \text{ m/s}$ →	↔ $v_{max.} = 1 \text{ m/s}$	↔ $v_{max.} = 1 \text{ m/s}$
	--	--	--	--	--
3SE5 242-0BC05	3SE5 242-0BC05	3SE5 242-0BC05	3SE5 242-0BC05	3SE5 242-0BC05	3SE5 242-0BC05
3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
3SE5 242-0HK50	--	--	--	--	--
3SE5 242-0HC05	3SE5 242-0HC05	3SE5 242-0HC05	3SE5 242-0HC05	3SE5 242-0HC05	3SE5 242-0HC05
3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
--	--	--	--	--	--
3SE5 242-0FC05	3SE5 242-0FC05	3SE5 242-0FC05	3SE5 242-0FC05	3SE5 242-0FC05	3SE5 242-0FC05
3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
--	--	--	--	--	--
3SE5 242-0KC05	3SE5 242-0KC05	3SE5 242-0KC05	3SE5 242-0KC05	3SE5 242-0KC05	3SE5 242-0KC05
3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
--	--	--	--	--	--
3SE5 242-1KC05	3SE5 242-1KC05	3SE5 242-1KC05	3SE5 242-1KC05	3SE5 242-1KC05	3SE5 242-1KC05
3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
--	--	--	--	--	--
3SE5 242-0LC05	3SE5 242-0LC05	3SE5 242-0LC05	3SE5 242-0LC05	3SE5 242-0LC05	3SE5 242-0LC05
3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
--	--	--	--	--	--
3SE5 242-1LC05	3SE5 242-1LC05	3SE5 242-1LC05	3SE5 242-1LC05	3SE5 242-1LC05	3SE5 242-1LC05
3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00
3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	

Limit Switches

Metal Enclosures, 40 mm

Switching points according to EN 50041, IP66/IP67

Complete unit and
Module selection



				Rounded plungers	Roller plungers	Roller levers	
							
				High-grade steel plungers, with overtravel	High-grade steel rollers	Metal levers	
				↓ $v_{max.} = 1 \text{ m/s}$ →	↔ $v_{max.} = 1 \text{ m/s}$ →	← $v_{max.} = 1 \text{ m/s}$ →	
						Plastic rollers	
Contact block	LED display	Connection					
Contacts	Contact element						
1 NO/ 1 NC	Slow action	without	1 x (M20 x 1.5)	Complete unit	3SE5 112-0BC02	3SE5 112-0BD02	3SE5 112-0BE01
				Basic switch	3SE5 112-0BA00	3SE5 112-0BA00	3SE5 112-0BA00
				+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01
		M12 plug, 5-pole (PE connected)	Complete unit	--	--	--	
			Basic switch	3SE5 114-0BA00-1AC5	3SE5 114-0BA00-1AC5	3SE5 114-0BA00-1AC5	
			+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01	
	Snap action	without	1 x (M20 x 1.5)	Complete unit	3SE5 112-0CC02	3SE5 112-0CD02	3SE5 112-0CE01
				Basic switch	3SE5 112-0CA00	3SE5 112-0CA00	3SE5 112-0CA00
				+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01
		M12 plug, 5-pole (PE connected)	Complete unit	--	--	--	
			Basic switch	3SE5 114-0CA00-1AC5	3SE5 114-0CA00-1AC5	3SE5 114-0CA00-1AC5	
			+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01	
2 LEDs, yellow / green, 24 V DC	M12 plug, 5-pole	Complete unit	--	--	--		
		Basic switch	3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3		
		+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01		
1 NO/ 2 NC	Slow action	without	1 x (M20 x 1.5)	Complete unit	3SE5 112-0KC02	3SE5 112-0KD02	3SE5 112-0KE01
				Basic switch	3SE5 112-0KA00	3SE5 112-0KA00	3SE5 112-0KA00
				+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01
		M12 plug, 5-pole (2 NC, PE connected)	Complete unit	--	--	--	
			Basic switch	3SE5 114-0KA00-1AE1	3SE5 114-0KA00-1AE1	3SE5 114-0KA00-1AE1	
			+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01	
	Snap action	without	1 x (M20 x 1.5)	Complete unit	3SE5 112-0LC02	3SE5 112-0LD02	3SE5 112-0LE01
				Basic switch	3SE5 112-0LA00	3SE5 112-0LA00	3SE5 112-0LA00
				+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01
		M12 plug, 5-pole (2 NC, PE connected)	Complete unit	--	--	--	
			Basic switch	3SE5 114-0LA00-1AE1	3SE5 114-0LA00-1AE1	3SE5 114-0LA00-1AE1	
			+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01	

For ordering notes see page 7.

		Angular roller levers		Spring rod actuators
				
		Metal levers		Plastic plungers, total length 143 mm
High-grade steel rollers ← $v_{max.} = 1 \text{ m/s}$ →	Plastic rollers ↑ $v_{max.} = 1 \text{ m/s}$ →	High-grade steel rollers ↑ $v_{max.} = 1 \text{ m/s}$ →	$v_{max.} = 1 \text{ m/s}$	
--	3SE5 112-0BF01	--	--	
3SE5 112-0BA00	3SE5 112-0BA00	3SE5 112-0BA00	--	
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	--	
--	--	--	--	
E5 3SE5 114-0BA00-1AC5	3SE5 114-0BA00-1AC5	3SE5 114-0BA00-1AC5	--	
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	--	
--	3SE5 112-0CF01	--	3SE5 112-0CR01	
3SE5 112-0CA00	3SE5 112-0CA00	3SE5 112-0CA00	3SE5 112-0CA00	
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	3SE5 000-0AR01	
--	--	--	--	
E5 3SE5 114-0CA00-1AC5	3SE5 114-0CA00-1AC5	3SE5 114-0CA00-1AC5	3SE5 114-0CA00-1AC5	
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	3SE5 000-0AR01	
--	--	--	--	
E3 3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3	
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	3SE5 000-0AR01	
--	--	--	--	
3SE5 112-0KA00	3SE5 112-0KA00	3SE5 112-0KA00	--	
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	--	
--	--	--	--	
E1 3SE5 114-0KA00-1AE1	3SE5 114-0KA00-1AE1	3SE5 114-0KA00-1AE1	--	
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	--	
--	3SE5 112-0LF01	--	--	
3SE5 112-0LA00	3SE5 112-0LA00	3SE5 112-0LA00	3SE5 112-0LA00	
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	3SE5 000-0AR01	
--	--	--	--	
E1 3SE5 114-0LA00-1AE1	3SE5 114-0LA00-1AE1	3SE5 114-0LA00-1AE1	3SE5 114-0LA00-1AE1	
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	3SE5 000-0AR01	

Limit Switches

Metal Enclosures, 40 mm

Switching points according to EN 50041, IP66/IP67

Complete unit and
Module selection



Twist levers

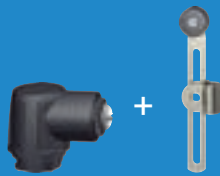
Contact block		LED display	Connection		
Contacts	Contact element				
1 NO/ 1 NC	Slow action	without	1 x (M20 x 1.5)	Complete unit	3SE5 112-0BH01
				Basic switch	3SE5 112-0BA00
				+ Actuator head	3SE5 000-0AH00
			+ Twist lever	3SE5 000-0AA01	
			M12 plug, 5-pole (PE connected)	Complete unit	--
				Basic switch	3SE5 114-0BA00-1AC5
	+ Actuator head	3SE5 000-0AH00			
	Snap action	without	1 x (M20 x 1.5)	Complete unit	3SE5 112-0CH01
				Basic switch	3SE5 112-0CA00
				+ Actuator head	3SE5 000-0AH00
		M12 plug, 5-pole (PE connected)	Complete unit	3SE5 114-0CH01-1AC5	
			Basic switch	3SE5 114-0CA00-1AC5	
+ Actuator head			3SE5 000-0AH00		
2 LEDs, yellow / green, 24 V DC	without	M12 plug, 5-pole	Complete unit	3SE5 114-1CH01-1AF3	
			Basic switch	3SE5 114-1CA00-1AF3	
			+ Actuator head	3SE5 000-0AH00	
	M12 plug, 5-pole (2 NC, PE connected)	Complete unit	--		
		Basic switch	3SE5 114-1CA00-1AF3		
		+ Actuator head	3SE5 000-0AH00		
1 NO/ 2 NC	Slow action	without	1 x M20 x 1.5)	Complete unit	3SE5 112-0KH01
				Basic switch	3SE5 112-0KA00
				+ Actuator head	3SE5 000-0AH00
			M12 plug, 5-pole (2 NC, PE connected)	Complete unit	--
				Basic switch	3SE5 114-0KA00-1AE1
				+ Actuator head	3SE5 000-0AH00
	Snap action	without	1 x (M20 x 1.5)	Complete unit	3SE5 112-0LH01
				Basic switch	3SE5 112-0LA00
				+ Actuator head	3SE5 000-0AH00
		M12 plug, 5-pole (2 NC, PE connected)	Complete unit	--	
			Basic switch	3SE5 114-0LA00-1AE1	
			+ Actuator head	3SE5 000-0AH00	

Metal levers		High-grade steel levers	
Plastic rollers	High-grade steel rollers	Plastic rollers	
$\leftrightarrow v_{max.} = 3 \text{ m/s}$	$\leftrightarrow v_{max.} = 1,5 \text{ m/s}$	$\leftrightarrow v_{max.} = 1,5 \text{ m/s}$	
Complete unit	3SE5 112-0BH01	3SE5 112-0BH02	--
Basic switch	3SE5 112-0BA00	3SE5 112-0BA00	3SE5 112-0BA00
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02	3SE5 000-0AA11
Complete unit	--	--	--
Basic switch	3SE5 114-0BA00-1AC5	3SE5 114-0BA00-1AC5	3SE5 114-0BA00-1AC5
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02	3SE5 000-0AA11
Complete unit	3SE5 112-0CH01	3SE5 112-0CH02	--
Basic switch	3SE5 112-0CA00	3SE5 112-0CA00	3SE5 112-0CA00
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02	3SE5 000-0AA11
Complete unit	3SE5 114-0CH01-1AC5	--	--
Basic switch	3SE5 114-0CA00-1AC5	3SE5 114-0CA00-1AC5	3SE5 114-0CA00-1AC5
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02	3SE5 000-0AA11
Complete unit	3SE5 114-1CH01-1AF3	--	--
Basic switch	3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02	3SE5 000-0AA11
Complete unit	3SE5 112-0KH01	--	--
Basic switch	3SE5 112-0KA00	3SE5 112-0KA00	3SE5 112-0KA00
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02	3SE5 000-0AA11
Complete unit	--	--	--
Basic switch	3SE5 114-0KA00-1AE1	3SE5 114-0KA00-1AE1	3SE5 114-0KA00-1AE1
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02	3SE5 000-0AA11
Complete unit	3SE5 112-0LH01	--	--
Basic switch	3SE5 112-0LA00	3SE5 112-0LA00	3SE5 112-0LA00
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02	3SE5 000-0AA11
Complete unit	--	--	--
Basic switch	3SE5 114-0LA00-1AE1	3SE5 114-0LA00-1AE1	3SE5 114-0LA00-1AE1
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02	3SE5 000-0AA11

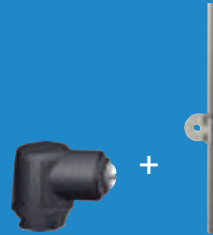
For ordering notes see page 7.

Twist actuators (switching right and/or left, adjustable)

Fork lever actuators



Length-adjustable twist levers



Rod actuators, 200 mm long



Actuator type	Metal levers			Aluminum	Plastic	Metal levers
	Plastic rollers	High-grade steel rollers	With latching holes, plastic rollers			Plastic rollers
	↔ $v_{max.} = 1,5 \text{ m/s}$	↔ $v_{max.} = 1,5 \text{ m/s}$	↔ $v_{max.} = 1,5 \text{ m/s}$ ↻	↔ $v_{max.} = 1 \text{ m/s}$	↔ $v_{max.} = 1 \text{ m/s}$	↔ $v_{max.} = 1,5 \text{ m/s}$ ↻
	3SE5 112-OBH50	--	3SE5 112-OBH60	--	--	--
	3SE5 112-OBA00	3SE5 112-OBA00	3SE5 112-OBA00	3SE5 112-OBA00	3SE5 112-OBA00	3SE5 112-OBA00
	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAT10
	3SE5 000-OAA50	3SE5 000-OAA51	3SE5 000-OAA60	3SE5 000-OAA80	3SE5 000-OAA82	3SE5 000-OAT01
	--	--	--	--	--	--
C5	3SE5 114-OBA00-1AC5	3SE5 114-OBA00-1AC5	3SE5 114-OBA00-1AC5	3SE5 114-OBA00-1AC5	3SE5 114-OBA00-1AC5	3SE5 114-OBA00-1AC5
	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAT10
	3SE5 000-OAA50	3SE5 000-OAA51	3SE5 000-OAA60	3SE5 000-OAA80	3SE5 000-OAA82	3SE5 000-OAT01
	3SE5 112-OCH50	3SE5 112-OCH51	3SE5 112-OCH60	3SE5 112-OCH80	3SE5 112-OCH82	3SE5 112-OCT11
	3SE5 112-OCA00	3SE5 112-OCA00	3SE5 112-OCA00	3SE5 112-OCA00	3SE5 112-OCA00	3SE5 112-OCA00
	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAT10
	3SE5 000-OAA50	3SE5 000-OAA51	3SE5 000-OAA60	3SE5 000-OAA80	3SE5 000-OAA82	3SE5 000-OAT01
	--	--	--	--	--	--
C5	3SE5 114-OCA00-1AC5	3SE5 114-OCA00-1AC5	3SE5 114-OCA00-1AC5	3SE5 114-OCA00-1AC5	3SE5 114-OCA00-1AC5	3SE5 114-OCA00-1AC5
	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAT10
	3SE5 000-OAA50	3SE5 000-OAA51	3SE5 000-OAA60	3SE5 000-OAA80	3SE5 000-OAA82	3SE5 000-OAT01
	--	--	--	--	--	--
F3	3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3	3SE5 114-1CA00-1AF3
	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAT10
	3SE5 000-OAA50	3SE5 000-OAA51	3SE5 000-OAA60	3SE5 000-OAA80	3SE5 000-OAA82	3SE5 000-OAT01
	--	--	--	--	--	--
	3SE5 112-OKA00	3SE5 112-OKA00	3SE5 112-OKA00	3SE5 112-OKA00	3SE5 112-OKA00	3SE5 112-OKA00
	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAT10
	3SE5 000-OAA50	3SE5 000-OAA51	3SE5 000-OAA60	3SE5 000-OAA80	3SE5 000-OAA82	3SE5 000-OAT01
	--	--	--	--	--	--
E1	3SE5 114-OKA00-1AE1	3SE5 114-OKA00-1AE1	3SE5 114-OKA00-1AE1	3SE5 114-OKA00-1AE1	3SE5 114-OKA00-1AE1	3SE5 114-OKA00-1AE1
	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAT10
	3SE5 000-OAA50	3SE5 000-OAA51	3SE5 000-OAA60	3SE5 000-OAA80	3SE5 000-OAA82	3SE5 000-OAT01
	3SE5 112-OLH50	--	3SE5 112-OLH60	--	--	--
	3SE5 112-OLA00	3SE5 112-OLA00	3SE5 112-OLA00	3SE5 112-OLA00	3SE5 112-OLA00	3SE5 112-OLA00
	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAT10
	3SE5 000-OAA50	3SE5 000-OAA51	3SE5 000-OAA60	3SE5 000-OAA80	3SE5 000-OAA82	3SE5 000-OAT01
	--	--	--	--	--	--
E1	3SE5 114-OLA00-1AE1	3SE5 114-OLA00-1AE1	3SE5 114-OLA00-1AE1	3SE5 114-OLA00-1AE1	3SE5 114-OLA00-1AE1	3SE5 114-OLA00-1AE1
	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAH00	3SE5 000-OAT10
	3SE5 000-OAA50	3SE5 000-OAA51	3SE5 000-OAA60	3SE5 000-OAA80	3SE5 000-OAA82	3SE5 000-OAT01

Limit Switches Metal Enclosures, 56mm mm

Switching points according to
EN 50041, IP66/IP67

Complete unit and
Module selection



Rounded plungers	Roller plungers	Roller levers
		
High-grade steel plungers, with over-travel ↓ $v_{max.} = 1 \text{ m/s}$ →	High-grade steel rollers ↔ $v_{max.} = 1 \text{ m/s}$ →	Metal levers Plastic rollers ← $v_{max.} = 1 \text{ m/s}$ →

Contact block		LED display	Connection				
Contacts	Contact element						
1 NO/ 1 NC	Slow action	without	3 x (M20 x 1.5)	Complete unit	3SE5 122-0BC02	3SE5 122-0BD02	3SE5 122-0BE01
				Basic switch	3SE5 122-0BA00	3SE5 122-0BA00	3SE5 122-0BA00
				+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01
	Snap action	without	3 x (M20 x 1.5)	Complete unit	3SE5 122-0CC02	3SE5 122-0CD02	3SE5 122-0CE01
				Basic switch	3SE5 122-0CA00	3SE5 122-0CA00	3SE5 122-0CA00
				+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01
1 NO/ 2 NC	Slow action	without	3 x (M20 x 1.5)	Complete unit	3SE5 122-0KC02	3SE5 122-0KD02	3SE5 122-0KE01
				Basic switch	3SE5 122-0KA00	3SE5 122-0KA00	3SE5 122-0KA00
				+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01
				Complete unit	--	--	--
				Basic switch	3SE5 122-1KA00	3SE5 122-1KA00	3SE5 122-1KA00
				+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01
	Snap action	without	3 x (M20 x 1.5)	Complete unit	3SE5 122-0LC02	3SE5 122-0LD02	3SE5 122-0LE01
				Basic switch	3SE5 122-0LA00	3SE5 122-0LA00	3SE5 122-0LA00
				+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01
				Complete unit	--	--	--
				Basic switch	3SE5 122-1LA00	3SE5 122-1LA00	3SE5 122-1LA00
				+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE01

For ordering notes see page 7.

		Angular roller levers		Spring rod actuators
				
		Metal levers		Plastic plungers, total length 143 mm
High-grade steel rollers	Plastic rollers	High-grade steel rollers	$v_{max.} = 1 \text{ m/s}$	
$\leftarrow v_{max.} = 1 \text{ m/s} \rightarrow$	$\uparrow v_{max.} = 1 \text{ m/s} \rightarrow$	$\uparrow v_{max.} = 1 \text{ m/s} \rightarrow$	$\uparrow v_{max.} = 1 \text{ m/s} \rightarrow$	
--	3SE5 122-0BF01	--	--	--
3SE5 122-0BA00	3SE5 122-0BA00	3SE5 122-0BA00	3SE5 122-0BA00	--
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	3SE5 000-0AF02	--
3SE5 122-0CE02	3SE5 122-0CF01	--	--	3SE5 122-0CR01
3SE5 122-0CA00	3SE5 122-0CA00	3SE5 122-0CA00	3SE5 122-0CA00	3SE5 122-0CA00
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	3SE5 000-0AF02	3SE5 000-0AR01
--	--	--	--	--
3SE5 122-0KA00	3SE5 122-0KA00	3SE5 122-0KA00	3SE5 122-0KA00	--
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	3SE5 000-0AF02	--
--	--	--	--	--
3SE5 122-1KA00	3SE5 122-1KA00	3SE5 122-1KA00	3SE5 122-1KA00	--
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	3SE5 000-0AF02	--
--	--	--	--	--
3SE5 122-0LA00	3SE5 122-0LA00	3SE5 122-0LA00	3SE5 122-0LA00	3SE5 122-0LA00
3SE5 000-0AE02	3SE5 000-0AF01	3SE5 000-0AF02	3SE5 000-0AF02	3SE5 000-0AR01
--	--	--	--	--
3SE5 122-1LA00	3SE5 122-1LA00	3SE5 122-1LA00	3SE5 122-1LA00	3SE5 122-1LA00
3SE5 000- AE02	3SE5 000-0AF01	3SE5 000-0AF02	3SE5 000-0AF02	3SE5 000-0AR01

Limit Switches Metal Enclosures, 56 mm

Switching points according to
EN 50041, IP66/IP67

Complete unit and
Module selection



Twist levers

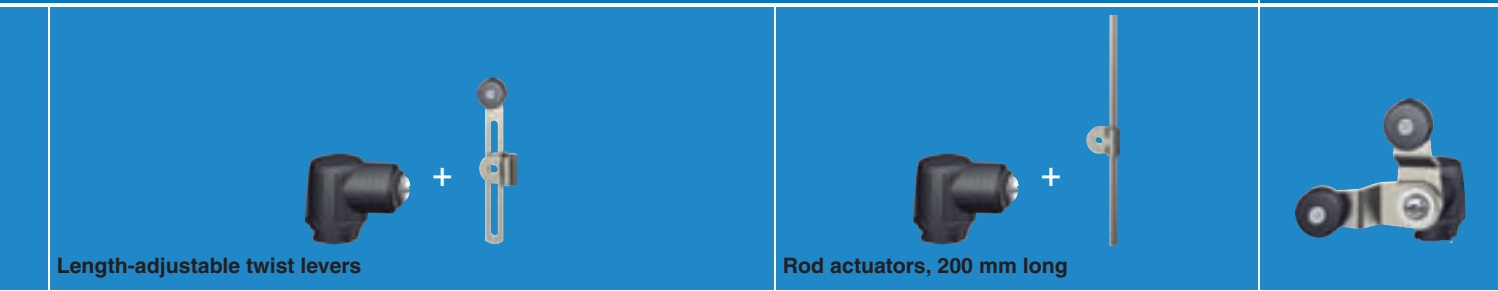
Metal levers		High-grade steel levers
Plastic rollers	High-grade steel rollers	Plastic rollers
↔ $v_{max.} = 1,5 \text{ m/s}$ →	↔ $v_{max.} = 1,5 \text{ m/s}$ →	↔ $v_{max.} = 1,5 \text{ m/s}$ →

Contact block		LED display	Connection					
Contacts	Contact element							
1 NO/ 1 NC	Slow action	without	3 x (M20 x 1.5)	Complete unit	3SE5 122-0BH01			
				Basic switch	3SE5 122-0BA00			
				+ Actuator head	3SE5 000-0AH00			
				+ Twist lever	3SE5 000-0AA01			
	Snap action	without	3 x (M20 x 1.5)	Complete unit	3SE5 122-0CH01			
				Basic switch	3SE5 122-0CA00			
				+ Actuator head	3SE5 000-0AH00			
				+ Twist lever	3SE5 000-0AA01			
1 NO/ 2 NC	Slow action	without	3 x (M20 x 1.5)	Complete unit	3SE5 122-0KH01			
				Basic switch	3SE5 122-0KA00			
				+ Actuator head	3SE5 000-0AH00			
				+ Twist lever	3SE5 000-0AA01			
				Snap action	without	3 x (M20 x 1.5)	Complete unit	3SE5 122-0LH01
							Basic switch	3SE5 122-0LA00
	+ Actuator head	3SE5 000-0AH00						
	+ Twist lever	3SE5 000-0AA01						
	Slow action	2 LEDs, yellow / green, 24 V DC	3 x (M20 x 1.5)				Complete unit	--
							Basic switch	3SE5 122-1KA00
				+ Actuator head	3SE5 000-0AH00			
				+ Twist lever	3SE5 000-0AA01			
Snap action				2 LEDs, yellow / green, 24 V DC	3 x (M20 x 1.5)	Complete unit	--	
						Basic switch	3SE5 122-1LA00	
	+ Actuator head	3SE5 000-0AH00						
	+ Twist lever	3SE5 000-0AA01						

--	--	--
3SE5 122-0BA00	3SE5 122-0BA00	3SE5 122-0BA00
3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
3SE5 000-0AA02	3SE5 000-0AA02	3SE5 000-0AA11
3SE5 122-0CH02	3SE5 122-0CH02	--
3SE5 122-0CA00	3SE5 122-0CA00	3SE5 122-0CA00
3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
3SE5 000-0AA02	3SE5 000-0AA02	3SE5 000-0AA11
--	--	--
3SE5 122-0KA00	3SE5 122-0KA00	3SE5 122-0KA00
3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
3SE5 000-0AA02	3SE5 000-0AA02	3SE5 000-0AA11
3SE5 122-0LH02	3SE5 122-0LH02	--
3SE5 122-0LA00	3SE5 122-0LA00	3SE5 122-0LA00
3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
3SE5 000-0AA02	3SE5 000-0AA02	3SE5 000-0AA11
--	--	--
3SE5 122-1LA00	3SE5 122-1LA00	3SE5 122-1LA00
3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
3SE5 000-0AA02	3SE5 000-0AA02	3SE5 000-0AA11

For ordering notes see page 7.

Twist actuators (switching right and/or left, adjustable) Fork lever actuators



	Length-adjustable twist levers			Rod actuators, 200 mm long		
ers	Metal levers			Aluminum	Plastic	Metal levers
	Plastic rollers	High-grade steel rollers	With latching holes, plastic rollers			Plastic rollers
	↔ $v_{max.} = 1,5 \text{ m/s}$	↔ $v_{max.} = 1,5 \text{ m/s}$	↔ $v_{max.} = 1,5 \text{ m/s}$ ↻	↔ $v_{max.} = 1 \text{ m/s}$	↔ $v_{max.} = 1 \text{ m/s}$	↔ $v_{max.} = 1,5 \text{ m/s}$ ↻

	3SE5 122-0BH50	--	3SE5 122-0BH60	--	--	--
	3SE5 122-0BA00	3SE5 122-0BA00	3SE5 122-0BA00	3SE5 122-0BA00	3SE5 122-0BA00	3SE5 122-0BA00
	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AT10
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	3SE5 000-0AT01
	3SE5 122-0CH50	--	3SE5 122-0CH60	3SE5 122-0CH80	3SE5 122-0CH82	3SE5 122-0CT11
	3SE5 122-0CA00	3SE5 122-0CA00	3SE5 122-0CA00	3SE5 122-0CA00	3SE5 122-0CA00	3SE5 122-0CA00
	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AT10
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	3SE5 000-0AT01
	--	--	--	--	--	--
	3SE5 122-0KA00	3SE5 122-0KA00	3SE5 122-0KA00	3SE5 122-0KA00	3SE5 122-0KA00	3SE5 122-0KA00
	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AT10
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	3SE5 000-0AT01
	--	--	--	--	--	--
	3SE5 122-1KA00	3SE5 122-1KA00	3SE5 122-1KA00	3SE5 122-1KA00	3SE5 122-1KA00	3SE5 122-1KA00
	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AT10
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	3SE5 000-0AT01
	3SE5 122-0LH50	--	3SE5 122-0LH60	--	--	--
	3SE5 122-0LA00	3SE5 122-0LA00	3SE5 122-0LA00	3SE5 122-0LA00	3SE5 122-0LA00	3SE5 122-0LA00
	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AT10
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	3SE5 000-0AT01
	--	--	--	--	--	--
	3SE5 122-1LA00	3SE5 122-1LA00	3SE5 122-1LA00	3SE5 122-1LA00	3SE5 122-1LA00	3SE5 122-1LA00
	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AT10
	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	3SE5 000-0AT01

Convincing Performance: SIRIUS Limit Switches



SIRIUS open-type limit switches: with even greater compactness, IP20

Their compact design makes them particularly suitable for use in confined conditions.

Our open-type position switches are equipped as standard with three contacts.

The fixing dimensions are according to EN 50047.

3SE5 position switches, open-type

Version	Contacts	Contact element	Order No.
Plastic enclosures, 30 mm wide			
Rounded plungers, teflon Ø 6 mm, 6 mm travel	1 NO/2 NC	Slow action 	3SE5 250-0KC05
	1 NO/2 NC	Snap action 	3SE5 250-0LC05



Maximizing Safety at Field Level: SIRIUS Safety Position Switches

You can totally rely on SIRIUS detecting devices. Besides a wide range of reliable devices for standard applications, our portfolio also includes a whole family of detecting devices which are designed for use in safety circuits. These devices can be used in detection applications up to EN 954-1 Category 4 and SIL3 according to IEC 62061. Different switch types are available to handle a variety of applications.

Tamper-proof **position switches with separate actuator** are a good choice for checking the position of protective doors. **Position switches with solenoid interlocking** are a reliable and safe solution when interlocking is needed to eliminate hazards, for example within the working radius of a robotics system. **Hinge switches** with positive locking between the switch and the door hinge offer excellent tamper protection in pivoting door and cover applications. In other words: You get maximum safety and flexibility when you design SIRIUS detecting devices into your solutions.

Demand for safety position switches continues to increase, and customers expect that the switches will offer even better functionality. Because the switches play such an important role, we have developed a new generation of products which offers a whole range of additional functions.

New features

- **Optional LED displays** are available for all enclosures to facilitate user-friendly on-site diagnosis.
- The entire **ASIsafe electronics are now integrated into the enclosure** – ASIsafe now does not take up any extra space.

Safety position switches with solenoid interlocking now offer additional functionality:

- **High locking forces** up to 2600 N (metal version) and 1300 N (plastic version)
- **A number of additional release mechanisms** to handle any application.
- Direct connection to the ASi network with a **very low current load** of ≤ 170 mA
- **2 x 3 contacts** as standard



SIRIUS Interlock Switches with Separate Actuator: Proven and Safe

SIRIUS interlock switches with separate actuator are the ideal choice if you need to be absolutely sure that the safety mechanism on protective doors cannot be deactivated. Multiple mechanical coding virtually eliminates any possibility of tampering. The separate actuator is mounted directly on the protective door. When the door is closed, the actuator moves into the

opening on the switch. When the door is opened, the actuator is removed from the switch and the NC contacts open. The circuit is broken – safely and reliably. Full actuator rotation in four 90° increments and approach from the top give you the flexibility you need for your application.

3SE5 interlock switches with separate actuator			
Contacts (slow-action contact element)	Version	LED display	Order No.
Plastic enclosures according to EN 50047 (31 mm wide), 5 directions of approach			
1 NO/1 NC	1 x (M20 x 1.5)	without	3SE5 232-0RV40
		yellow + green, 24 V DC	3SE5 232-1RV40
		yellow + green, 115 V - 230 V AC	3SE5 232-3RV40
	M12 plug, 5-pole (1 NO/1 NC connected); max. 24 V DC, 4 A	yellow + green, 24 V DC	3SE5 234-1RV40-1AF3
1 NO/2 NC	M12 plug, 4-pole (1 NO/1 NC connected); max. 250 V AC, 4 A	without	3SE5 234-0RV40-1AC4
	1 x (M20 x 1.5)	without	3SE5 232-0QV40
1 NO/2 NC	M12 plug, 4-pole (2 NC connected); max. 250 V AC, 4 A	without	3SE5 234-0QV40-1AE0
	Plastic enclosures (50 mm wide), 5 directions of approach		
1 NO/2 NC	2 x (M20 x 1.5)	without	3SE5 242-0QV40
		yellow + green, 24 V DC	3SE5 242-1QV40
		yellow + green, 115 V - 230 V AC	3SE5 242-3QV40
Metal enclosures according to EN 50041 (40 mm wide), 5 directions of approach			
1 NO/1 NC	M12 plug, plastic, 5-pole, (1 NO/1 NC connected); max. 24 V DC, 4 A	yellow + green, 24 V DC	3SE5 114-1RV10-1AF3
	M12 plug, plastic, 5-pole, (1 NO/1 NC, PE connected); max. 24 V AC/DC, 4 A	without	3SE5 114-0RV10-1AC5
	Plug 6 + PE according to EN 43651, plastic (1 NO/1 NC and PE connected); max. 24 V DC, 6 A	yellow + green, 24 V DC	3SE5 115-1RV10-1AF2
	Plug 6 + PE according to EN 43651, plastic (1 NO/1 NC and PE connected); max. 250 V AC, 6 A	without	3SE5 115-0RV10-1AD1
1 NO/2 NC	1 x (M20 x 1.5)	without	3SE5 112-0QV10
		yellow + green, 24 V DC	3SE5 112-1QV10
		yellow + green, 115 V - 230 V AC	3SE5 112-3QV10
2 NC	M12 plug, plastic, 5-pole, (2 NC, PE connected); max. 24 V AC/DC, 4 A	without	3SE5 114-0QV10-1AE1
Metal enclosures (56 mm wide), 5 directions of approach			
1 NO/2 NC	3 x (M20 x 1.5)	without	3SE5 122-0QV10
		yellow + green, 24 V DC	3SE5 122-1QV10
		yellow + green, 115 V - 230 V AC	3SE5 122-3QV10

Actuators for 3SE5/3SF1 interlock switches with separate actuator

	Standard actuators	3SE5 000-0AV01
	Actuators with vertical fixing	3SE5 000-0AV02
	Actuators with transverse fixing	3SE5 000-0AV03
	Radius actuators, left	3SE5 000-0AV04
	Radius actuators, right	3SE5 000-0AV06
	Universal radius actuators	3SE5 000-0AV05

The switches with separate actuator can only be operated with the matching coded actuator. Simple overruling by hand or auxiliary devices is impossible. The actuators are not included in the scope of supply of the switch and must be ordered separately.



SIRIUS Interlock Switches with Solenoid Interlocking: Clever and Reliable

When protective doors have to remain closed while a machine is being shut down, for example to prevent access to the working radius of a robotic system, SIRIUS interlock switches with separate actuator and additional electromagnetic tumbler are the best solution. An integrated auxiliary solenoid keeps the door locked until a specific signal has been received. Not even a force of 2600 N is sufficient to remove the actuator. A safety mechanism to prevent unwanted closing ensures that the NC contacts of the solenoid never close even when the door is open. The switch can be released manually using an auxiliary release mechanism if, for example, access is required following a power failure or during installation. Some of the outstanding standard features include an integrated solenoid interlocking with 24 V, 115 V or 230 V coil voltage, 6 switching contacts and separate position sensing for the solenoid and the protective door. Optical status monitoring is also available.

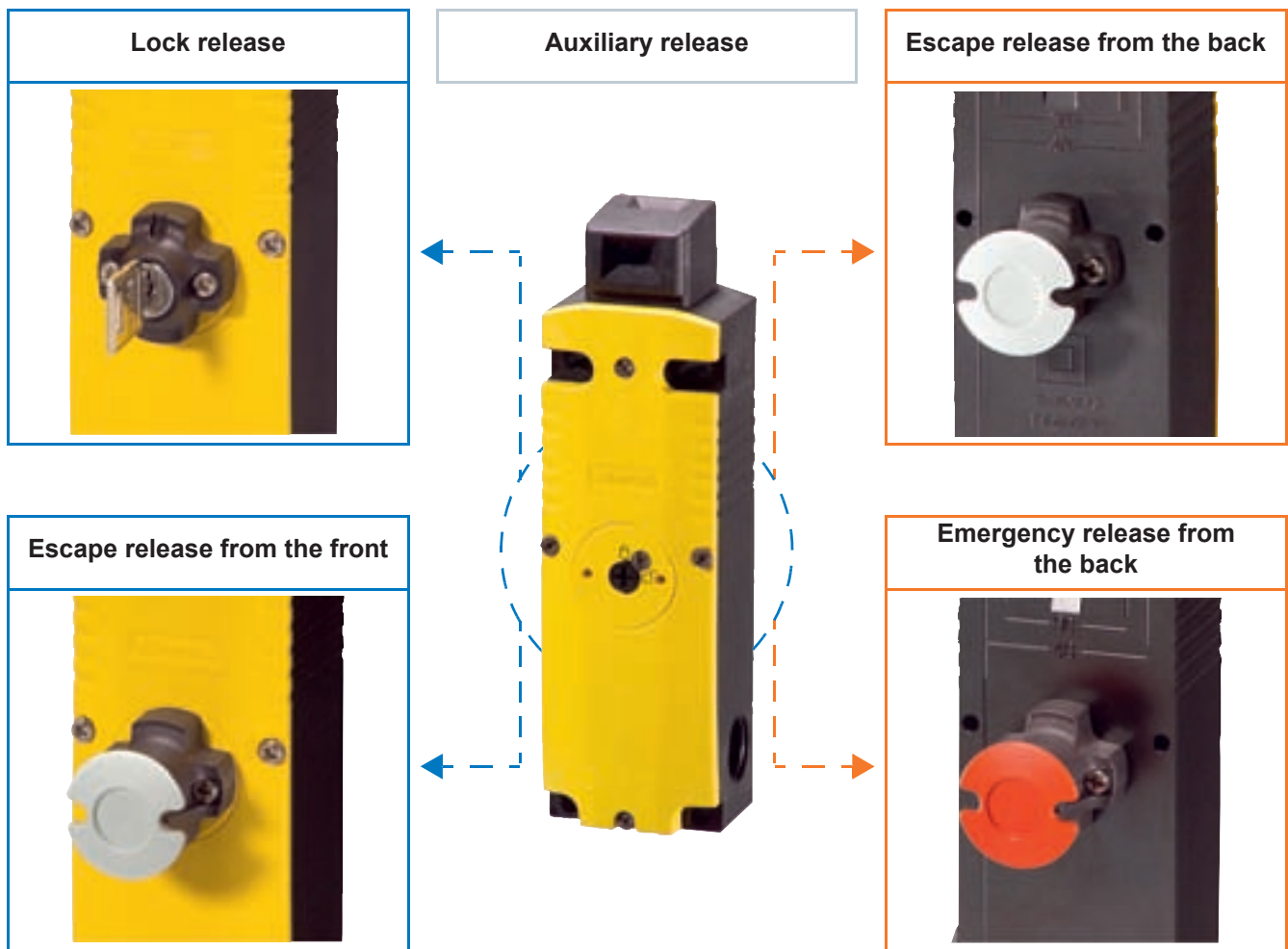
New features

- **Higher locking forces** (2600 N on the metal version, 1300 N on the plastic versions) guarantee enhanced safety even in harsh industrial environments.
- **2 x 3 contacts are included as standard.** Two NC contacts and one NO contact are provided for solenoid and actuator monitoring.
- **The new, innovative ASIsafe solution** with integrated module, which has been designed with safety in mind, greatly reduces the load on the data line: contact monitoring and solenoid control draw on ≤ 170 mA.
- **A number of additional release mechanisms** to handle any application: auxiliary release mechanism, lock release, escape release and emergency release
- Actuator heads can be rotated in 4 x 90° increments; 5 directions of approach (4 x lateral + 1 x front)



Interlock Switches with Solenoid Interlocking

Release Variants






- Personnel working inside the hazard zone can use the **escape release** feature to manually release the tumbler without tools 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. (Source: GS-ET 19)

- **Emergency release** enables someone outside of the hazard zone to manually release the tumbler without tools in an emergency situation. Releasing the lock and restoring the normal operating status must require effort which is comparable to repair activity, in this case removal of the red actuator and resetting the mechanical lock.

3SE5 interlock switches with solenoid interlocking, complete units

Version	Release	Solenoid voltage	LED display	Plastic enclosure	Metal enclosure
				Locking force 1300 N (1000 N acc. to GS-ET19) Order No.	Locking force 2600 N (2000 N acc. to GS-ET19) Order No.
Mechanical lock (closed-circuit principle) Actuator contacts 1 NO/2 NC Solenoid contacts 1 NO/2 NC	 Auxiliary release	24 V DC	--	3SE5 322-0SD21	3SE5 312-0SD11
			yellow / green	3SE5 322-1SD21	3SE5 312-1SD11
		115 V AC	--	3SE5 322-0SD22	3SE5 312-0SD12
			yellow / green	3SE5 322-2SD22	3SE5 312-2SD12
		230 V AC	--	3SE5 322-0SD23	3SE5 312-0SD13
			yellow / green	3SE5 322-3SD23	3SE5 312-3SD13
	 Auxiliary release with lock	24 V DC	--	3SE5 322-0SE21	3SE5 312-0SE11
			yellow / green	3SE5 322-1SE21	3SE5 312-1SE11
		115 V AC	--	3SE5 322-0SE22	3SE5 312-0SE12
			yellow / green	3SE5 322-2SE22	3SE5 312-2SE12
		230 V AC	--	3SE5 322-0SE23	3SE5 312-0SE13
			yellow / green	3SE5 322-3SE23	3SE5 312-3SE13
	 Escape release from the front	24 V DC	--	3SE5 322-0SF21	3SE5 312-0SF11
			yellow / green	3SE5 322-1SF21	3SE5 312-1SF11
		115 V AC	--	3SE5 322-0SF22	3SE5 312-0SF12
			yellow / green	3SE5 322-2SF22	3SE5 312-2SF12
		230 V AC	--	3SE5 322-0SF23	3SE5 312-0SF13
			yellow / green	3SE5 322-3SF23	3SE5 312-3SF13
 Escape release from the back and auxiliary release from the front (rear view)	24 V DC	--	3SE5 322-0SG21	3SE5 312-0SG11	
		yellow / green	3SE5 322-1SG21	3SE5 312-1SG11	
	115 V AC	--	3SE5 322-0SG22	3SE5 312-0SG12	
		yellow / green	3SE5 322-2SG22	3SE5 312-2SG12	
	230 V AC	--	3SE5 322-0SG23	3SE5 312-0SG13	
		yellow / green	3SE5 322-3SG23	3SE5 312-3SG13	
 Emergency release from the back and auxiliary release from the front (rear view)	24 V DC	--	3SE5 322-0SJ21	3SE5 312-0SJ11	
		yellow / green	3SE5 322-1SJ21	3SE5 312-1SJ11	
	115 V AC	--	3SE5 322-0SJ22	3SE5 312-0SJ12	
		yellow / green	3SE5 322-2SJ22	3SE5 312-2SJ12	
	230 V AC	--	3SE5 322-0SJ23	3SE5 312-0SJ13	
		yellow / green	3SE5 322-3SJ23	3SE5 312-3SJ13	
Solenoid lock (open-circuit principle) Actuator contacts 1 NO/2 NC Solenoid contacts 1 NO/2 NC		24 V DC	--	3SE5 322-0SB21	3SE5 312-0SB11
			yellow / green	3SE5 322-1SB21	3SE5 312-1SB11
		115 V AC	--	3SE5 322-0SB22	3SE5 312-0SB12
			yellow / green	3SE5 322-2SB22	3SE5 312-2SB12
		230 V AC	--	3SE5 322-0SB23	3SE5 312-0SB13
			yellow / green	3SE5 322-3SB23	3SE5 312-3SB13



Actuators for 3SE5/3SF1 interlock switches with solenoid interlocking		
	Standard actuators	3SE5 000-0AV01
	Actuators with vertical fixing	3SE5 000-0AV02
	Actuators with transverse fixing	3SE5 000-0AV03
	Radius actuators, left	3SE5 000-0AV04
	Radius actuators, right	3SE5 000-0AV06
	Universal radius actuators	3SE5 000-0AV05

The interlock switches with solenoid interlocking can only be operated with the matching coded actuator. Simple overruling by hand or auxiliary devices is impossible. The actuators are not included in the scope of supply of the switch and must be ordered separately.



SIRIUS Hinge Switches: Tamper-Proof

Our offering of hinge switches rounds off the range of position switches for monitoring hinged doors and flaps. With their fixed, positive connection between the switch and the door hinge directly at the pivoting point of the protective device, these mechanical switches offer excellent protection from overruling and tampering. And the same time hinge switches in standard enclosures according to EN 50047 and EN 50041 have a very small operating angle of just 5°. Simultaneous shutdown and signaling is provided in addition by the 1 NO/1 NC snap-action contacts. SIRIUS hinge switches are available as complete units only.



3SE5 hinge switches, complete units

		 Hollow shaft $\varnothing_{int.} = 8 \text{ mm}$, $\varnothing_{ext.} = 12 \text{ mm}$ Operating angle 5°  Operating angle 15° 		 Solid shaft $\varnothing = 10 \text{ mm}$ Operating angle 5°  Operating angle 15° 		
Plastic enclosures according to EN 50047 (31 mm wide), mounting on hinges						
	1 NO/ 1 NC	Snap action	--	3SE5 232-0HU21	--	3SE5 232-0HU22
	1 NO/ 2 NC	Snap action	3SE5 232-0LU11	3SE5 232-0LU21	3SE5 232-0LU12	3SE5 232-0LU22
Plastic enclosures according to EN 50041 (40 mm wide), mounting on hinges						
	1 NO/ 1 NC	Snap action	3SE5 112-0LU11	3SE5 112-0LU21	3SE5 112-0LU12	3SE5 112-0LU22

AS-Interface Connections: Total Flexibility



If you want to deploy networking solutions in your system, SIRIUS detecting devices are the ideal choice. All of the components can be used in AS-Interface system environments. This is because they comply with IEC 62026-2 and are fully compatible with familiar AS-Interface components such as master, slaves, power supply, etc. Hence they can be used together on the yellow AS-Interface line. We supply all of the components you need to set up an ASIsafe network.

New features

Our new generation of switches enables easy and fast connection to the ASi network because:

- The **complete range of 3SE5 position switches is available with integrated ASIsafe electronics:**
 - Position switches
 - Position switches with separate actuator
 - Position switches with tumbler
 - Hinge switches
- **Connection to the AS-Interface system** is by means of an **M12 plug**.
- **Direct integration of the safety position switches with tumbler in the ASi network** results in a very low data line load, ≤ 170 mA.



3SF1 Position Switches with Integrated ASIsafe Electronics

Module selection

Plastic enclosures



Enclosure	Contacts	Contact element	Connection
31 mm wide acc. to EN 50047	2 NC	Slow action	M12 plug, 4-pole; channel 1 on NC contact, channel 2 on NC contact
		Snap action	
50 mm wide	2 NC	Slow action	M12 plug, 4-pole; channel 1 on NC contact, channel 2 on M12 socket right
		Snap action	

Rounded plungers	Roller plungers
(Integrated in basic switch)	
Teflon plungers ↓ v _{max.} = 1 m/s →	Plastic rollers ↓ v _{max.} = 1 m/s →
Basic switch	3SF1 234-1KC05-1BA1
+ Actuator head	--
Basic switch	3SF1 234-1LC05-1BA1
+ Actuator head	--
Basic switch	3SF1 244-1KC05-1BA2
+ Actuator head	--
Basic switch	3SF1 244-1LC05-1BA2
+ Actuator head	--

Metal enclosures






Enclosure	Contacts	Contact element	Connection
40 mm wide acc. to EN 50041	2 NC	Slow action	M12 plug, 4-pole; channel 1 on NC contact, channel 2 on NC contact
		Snap action	
56 mm wide	2 NC	Slow action	M12 plug, 4-pole; channel 1 on NC contact, channel 2 on M12 socket right
		Snap action	

Rounded plungers	Roller plungers
	
High-grade steel plungers, with overtravel ↓ v _{max.} = 1 m/s →	High-grade steel rollers ↔ v _{max.} = 1 m/s →
Basic switch	3SF1 114-1KA00-1BA1
+ Actuator head	3SE5 000-0AC02
Basic switch	3SF1 114-1LA00-1BA1
+ Actuator head	3SE5 000-0AC02
Basic switch	3SF1 124-1KA00-1BA2
+ Actuator head	3SE5 000-0AC02
Basic switch	3SF1 124-1LA00-1BA2
+ Actuator head	3SE5 000-0AC02

For ordering notes see page 7.

Roller levers		Angular roller levers		Spring rod actuators
				
Metal levers	High-grade steel levers	Metal levers	High-grade steel levers	Plastic plungers, total length 143 mm
Plastic rollers $\leftarrow v_{\max.} = 1 \text{ m/s} \rightarrow$	Plastic rollers $\leftarrow v_{\max.} = 1 \text{ m/s} \rightarrow$	High-grade steel rollers $\uparrow v_{\max.} = 1 \text{ m/s} \rightarrow$	Plastic rollers $\leftarrow v_{\max.} = 1 \text{ m/s} \rightarrow$	
3SF1 234-1KC05-1BA1 3SE5 000-0AE10	3SF1 234-1KC05-1BA1 3SE5 000-0AE12	3SF1 234-1KC05-1BA1 3SE5 000-0AF10	3SF1 234-1KC05-1BA1 3SE5 000-0AF12	--
3SF1 234-1LC05-1BA1 3SE5 000-0AE10	3SF1 234-1LC05-1BA1 3SE5 000-0AE12	3SF1 234-1LC05-1BA1 3SE5 000-0AF10	3SF1 234-1LC05-1BA1 3SE5 000-0AF12	3SF1 234-1LC05-1BA1 3SE5 000-0AR01
3SF1 244-1KC05-1BA2 3SE5 000-0AE10	3SF1 244-1KC05-1BA2 3SE5 000-0AE12	3SF1 244-1KC05-1BA2 3SE5 000-0AF10	3SF1 244-1KC05-1BA2 3SE5 000-0AF12	--
3SF1 244-1LC05-1BA2 3SE5 000-0AE10	3SF1 244-1LC05-1BA2 3SE5 000-0AE12	3SF1 244-1LC05-1BA2 3SE5 000-0AF10	3SF1 244-1LC05-1BA2 3SE5 000-0AF12	3SF1 244-1LC05-1BA2 3SE5 000-0AR01

Roller levers		Angular roller levers		Spring rod actuators
				
Metal levers		Metal levers		Plastic plungers, total length 143 mm
Plastic rollers $\leftarrow v_{\max.} = 1 \text{ m/s} \rightarrow$	High-grade steel rollers $\leftarrow v_{\max.} = 1 \text{ m/s} \rightarrow$	Plastic rollers $\uparrow v_{\max.} = 2.5 \text{ m/s} \rightarrow$	High-grade steel rollers $\uparrow v_{\max.} = 2.5 \text{ m/s} \rightarrow$	
3SF1 114-1KA00-1BA1 3SE5 000-0AE01	3SF1 114-1KA00-1BA1 3SE5 000-0AE02	3SF1 114-1KA00-1BA1 3SE5 000-0AF01	3SF1 114-1KA00-1BA1 3SE5 000-0AF02	--
3SF1 114-1LA00-1BA1 3SE5 000-0AE01	3SF1 114-1LA00-1BA1 3SE5 000-0AE02	3SF1 114-1LA00-1BA1 3SE5 000-0AF01	3SF1 114-1LA00-1BA1 3SE5 000-0AF02	3SF1 114-1LA00-1BA1 3SE5 000-0AR01
3SF1 124-1KA00-1BA2 3SE5 000-0AE01	3SF1 124-1KA00-1BA2 3SE5 000-0AE02	3SF1 124-1KA00-1BA2 3SE5 000-0AF01	3SF1 124-1KA00-1BA2 3SE5 000-0AF02	--
3SF1 124-1LA00-1BA2 3SE5 000-0AE01	3SF1 124-1LA00-1BA2 3SE5 000-0AE02	3SF1 124-1LA00-1BA2 3SE5 000-0AF01	3SF1 124-1LA00-1BA2 3SE5 000-0AF02	3SF1 124-1LA00-1BA2 3SE5 000-0AR01

3SF1 Position Switches with Integrated ASIsafe Electronics

Module selection

Plastic enclosures



Enclosure	Contacts	Contact element	Connection
31 mm wide acc. to EN 50047	2 NC	Slow action	M12 plug, 4-pole; channel 1 on NC contact, channel 2 on NC contact
		Snap action	
50 mm wide	2 NC	Slow action	M12 plug, 4-pole; channel 1 on NC contact, channel 2 on M12 socket right
		Snap action	

- Basic switch
- + Actuator head
- + Twist lever
- Basic switch
- + Actuator head
- + Twist lever
- Basic switch
- + Actuator head
- + Twist lever
- Basic switch
- + Actuator head
- + Twist lever



Twist levers according to EN 50047

Metal levers		
Plastic rollers	High-grade steel rollers	
$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$	$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$	
Basic switch	3SF1 234-1KC05-1BA1	3SF1 234-1KC05-1BA1
+ Actuator head	3SE5 000-0AK00	3SE5 000-0AK00
+ Twist lever	3SE5 000-0AA21	3SE5 000-0AA22
Basic switch	3SF1 234-1LC05-1BA1	3SF1 234-1LC05-1BA1
+ Actuator head	3SE5 000-0AK00	3SE5 000-0AK00
+ Twist lever	3SE5 000-0AA21	3SE5 000-0AA22
Basic switch	3SF1 244-1KC05-1BA2	3SF1 244-1KC05-1BA2
+ Actuator head	3SE5 000-0AK00	3SE5 000-0AK00
+ Twist lever	3SE5 000-0AA21	3SE5 000-0AA22
Basic switch	3SF1 244-1LC05-1BA2	3SF1 244-1LC05-1BA2
+ Actuator head	3SE5 000-0AK00	3SE5 000-0AK00
+ Twist lever	3SE5 000-0AA21	3SE5 000-0AA22

Metal enclosures



Enclosure	Contacts	Contact element	Connection
40 mm wide acc. to EN 50041	2 NC	Slow action	M12 plug, 4-pole; channel 1 on NC contact, channel 2 on NC contact
		Snap action	
56 mm wide	2 NC	Slow action	M12 plug, 4-pole; channel 1 on NC contact, channel 2 on M12 socket right
		Snap action	

- Basic switch
- + Actuator head
- + Twist lever
- Basic switch
- + Actuator head
- + Twist lever
- Basic switch
- + Actuator head
- + Twist lever
- Basic switch
- + Actuator head
- + Twist lever



Twist levers according to EN 50047



Metal levers		
Plastic rollers	High-grade steel rollers	
$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$	$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$	
Basic switch	3SF1 114-1KA00-1BA1	3SF1 114-1KA00-1BA1
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02
Basic switch	3SF1 114-1LA00-1BA1	3SF1 114-1LA00-1BA1
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02
Basic switch	3SF1 124-1KA00-1BA2	3SF1 124-1KA00-1BA2
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02
Basic switch	3SF1 124-1LA00-1BA2	3SF1 124-1LA00-1BA2
+ Actuator head	3SE5 000-0AH00	3SE5 000-0AH00
+ Twist lever	3SE5 000-0AA01	3SE5 000-0AA02

For ordering notes see page 7.





Twist lever actuators (switching right and/or left, adjustable)

		 Length-adjustable twist levers				 Rod actuators, 200 mm long	
High-grade steel levers		Metal levers				Aluminum	Plastic
Rollers	Plastic rollers	Plastic rollers	High-grade steel rollers	With latching holes, plastic rollers	Aluminum	Plastic	
	$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$ 	$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$	$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$	$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$ 			$\leftrightarrow v_{max.} = 1 \text{ m/s}$
	3SF1 234-1KC05-1BA1	3SF1 234-1KC05-1BA1	3SF1 234-1KC05-1BA1	3SF1 234-1KC05-1BA1	3SF1 234-1KC05-1BA1	--	
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	
	3SE5 000-0AA31	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
	3SF1 234-1LC05-1BA1	3SF1 234-1LC05-1BA1	3SF1 234-1LC05-1BA1	3SF1 234-1LC05-1BA1	3SF1 234-1LC05-1BA1	3SF1 234-1LC05-1BA1	
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	
	3SE5 000-0AA31	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
	3SF1 244-1KC05-1BA2	3SF1 244-1KC05-1BA2	3SF1 244-1KC05-1BA2	3SF1 244-1KC05-1BA2	3SF1 244-1KC05-1BA2	--	
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	
	3SE5 000-0AA31	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
	3SF1 244-1LC05-1BA2	3SF1 244-1LC05-1BA2	3SF1 244-1LC05-1BA2	3SF1 244-1LC05-1BA2	3SF1 244-1LC05-1BA2	3SF1 244-1LC05-1BA2	
	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	3SE5 000-0AK00	
	3SE5 000-0AA31	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	




Twist lever actuators (switching right and/or left, adjustable)

		 Length-adjustable twist levers				 Rod actuators, 200 mm long	
High-grade steel levers		Metal levers				Aluminum	Plastic
Rollers	Plastic rollers	Plastic rollers	High-grade steel rollers	With latching holes, plastic rollers	Aluminum	Plastic	
	$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$ 	$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$	$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$	$\leftrightarrow v_{max.} = 1.5 \text{ m/s}$ 			$\leftrightarrow v_{max.} = 1 \text{ m/s}$
	3SF1 114-1KA00-1BA1	3SF1 114-1KA00-1BA1	3SF1 114-1KA00-1BA1	3SF1 114-1KA00-1BA1	3SF1 114-1KA00-1BA1	--	
	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	
	3SE5 000-0AA11	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
	3SF1 114-1LA00-1BA1	3SF1 114-1LA00-1BA1	3SF1 114-1LA00-1BA1	3SF1 114-1LA00-1BA1	3SF1 114-1LA00-1BA1	3SF1 114-1LA00-1BA1	
	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	
	3SE5 000-0AA11	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
	3SF1 124-1KA00-1BA2	3SF1 124-1KA00-1BA2	3SF1 124-1KA00-1BA2	3SF1 124-1KA00-1BA2	3SF1 124-1KA00-1BA2	--	
	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	
	3SE5 000-0AA11	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	
	3SF1 124-1LA00-1BA2	3SF1 124-1LA00-1BA2	3SF1 124-1LA00-1BA2	3SF1 124-1LA00-1BA2	3SF1 124-1LA00-1BA2	3SF1 124-1LA00-1BA2	
	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	
	3SE5 000-0AA11	3SE5 000-0AA50	3SE5 000-0AA51	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82	

3SF1 interlock switches with separate actuator and ASIsafe; complete units





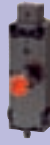


Contacts	Contact elements	Version	LED display	Order No.
Plastic enclosures according to EN 50047 (31 mm wide), 5 directions of approach				
2 NC 	Slow action →	M12 plug, 4-pole; channel 1 on NC contact, channel 2 on NC contact	ASI status, F-In1, F-In2	3SF1 234-1QV40-1BA1
Plastic enclosures (50 mm wide), 5 directions of approach				
1 NC 	Slow action →	M12 plug, 4-pole, left channel 1 on NC contact, channel 2 on M12 socket right	ASI status, F-In1, F-In2	3SF1 244-1QV40-1BA2
Metal enclosures according to EN 50041 (40 mm wide), 5 directions of approach				
2 NC 	Slow action →	M12 plug, 4-pole; channel 1 on NC contact, channel 2 on NC contact	ASI status, F-In1, F-In2	3SF1 114-1QV10-1BA1
Metal enclosures (56 mm wide), 5 directions of approach				
1 NC 	Slow action →	M12 plug, 4-pole, bottom channel 1 on NC contact, channel 2 on M12 socket right	ASI status, F-In1, F-In2	3SF1 124-1QV10-1BA2

Actuators for 3SE5/3SF1 interlock switches with separate actuator/tumbler and ASIsafe

	Standard actuators	3SE5 000-0AV01
	Actuators with vertical fixing	3SE5 000-0AV02
	Actuators with transverse fixing	3SE5 000-0AV03
	Radius actuators, left	3SE5 000-0AV04
	Radius actuators, right	3SE5 000-0AV06
	Universal radius actuators	3SE5 000-0AV05

The actuators are not included in the scope of supply of the switch and must be ordered separately.

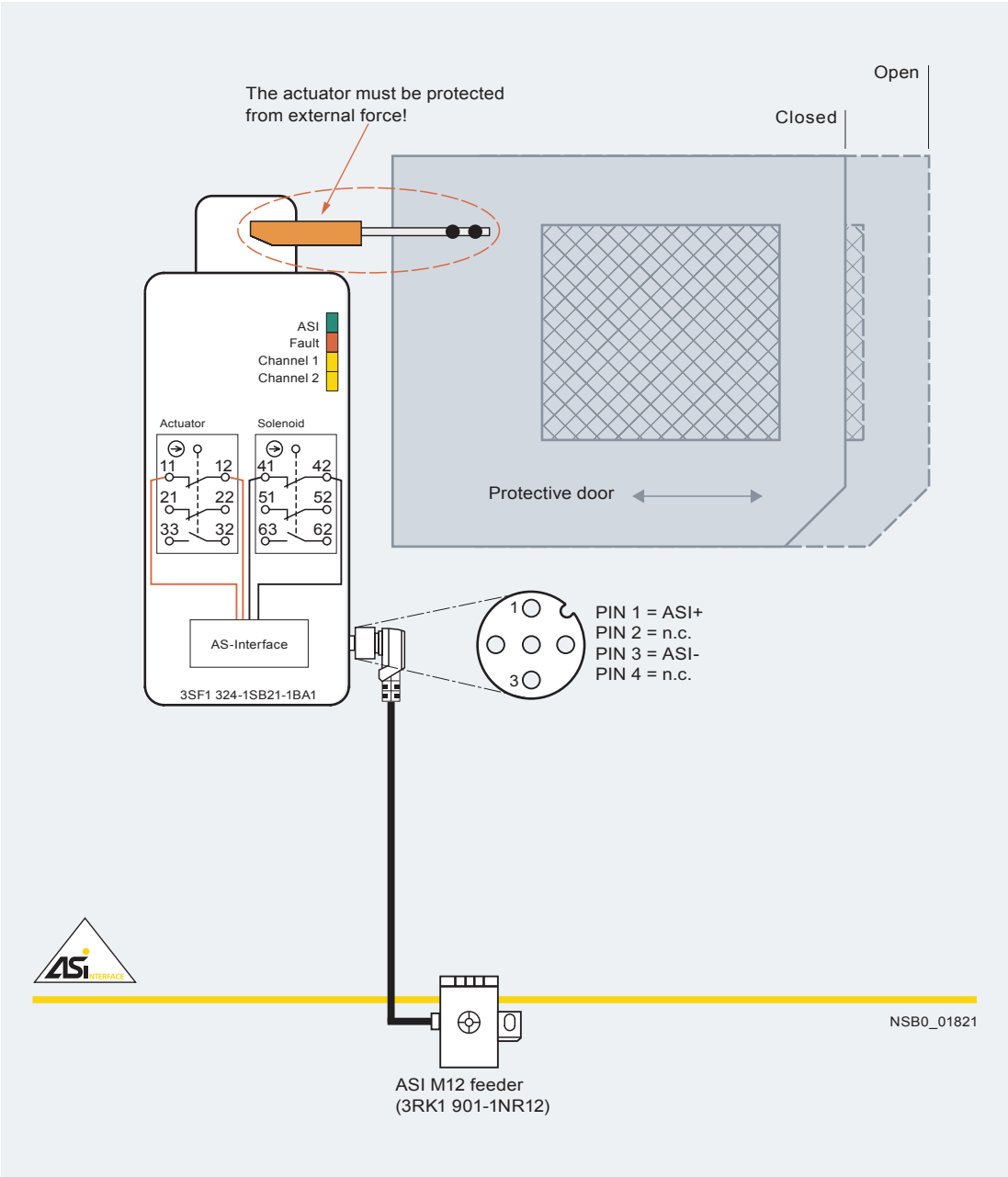
3SF1 interlock switches with separate actuator and ASIsafe,1) complete units

Version	Release	Solenoid voltage	LED display	Plastic enclosure, M12 plug, 4-pole	Metal enclosure, M12 plug, 4-pole
				Order No.	Order No.
Mechanical lock (closed-circuit principle) Channel 1 on NC contact actuator, channel 2 on NC contact solenoid	Auxiliary release 	24 V DC	ASI status, (F-In1, F-In2, ASI, Fault)	3SF1 324-1SD21-1BA1	3SF1 314-1SD11-1BA1
	Auxiliary release with lock 			3SF1 324-1SE21-1BA1	3SF1 314-1SE11-1BA1
	Escape release from the front 			3SF1 324-1SF21-1BA1	3SF1 314-1SF11-1BA1
	Escape release from the back, auxiliary release from the front  (Rear view)			3SF1 324-1SG21-1BA1	3SF1 314-1SG11-1BA1
	Emergency release from the back, emergency release from the front  (Rear view)			3SF1 324-1SJ21-1BA1	3SF1 314-1SJ11-1BA1
Mechanical lock (closed-circuit principle) Channel 1 and 2 on NC contact of the actuator	Auxiliary release 	24 V DC	ASI status, (F-In1, F-In2, ASI, Fault)	3SF1 324-1SD21-1BA3	--
Solenoid field lock (open-circuit principle) Channel 1 on NC contact actuator, channel 2 on NC contact solenoid		24 V DC	ASI status, (F-In1, F-In2, ASI, Fault)	3SF1 324-1SB21-1BA1	3SF1 314-1SB11-1BA1

1) For actuators see page 38.

Position Switches with Solenoid Interlocking

ASI-Safe application Cat. 3 according to EN 954-1



3SF1 hinge switches with ASIsafe, complete units

Contacts (snap-action contact element)	Connection	 Hollow shaft $\varnothing_{\text{int.}} = 8 \text{ mm}$, $\varnothing_{\text{ext.}} = 12 \text{ mm}$		 Solid shaft $\varnothing 10 \text{ mm}$		
		Switching point	Switching point	Switching point	Switching point	
		5° 	15° 	5° 	15° 	
Plastic enclosures, 31 mm wide according to EN50047						
 2 NC M12 plug, 4-pole; channel 1 on NC contact, channel 2 on NC contact	Basic switch + Actuator head	3SF1 234-1LC05-1BA1	3SF1 234-1LC05-1BA1	3SF1 234-1LC05-1BA1	3SF1 234-1LC05-1BA1	
		3SE5 000-0AU11	3SE5 000-0AU21	3SE5 000-0AU12	3SE5 000-0AU22	
Plastic enclosures, 50 mm wide						
 1 NC M12 plug, 4-pole; channel 1 on NC contact, channel 2 on M12 socket right	Basic switch + Actuator head	3SF1 244-1LC05-1BA2	3SF1 244-1LC05-1BA2	3SF1 244-1LC05-1BA2	3SF1 244-1LC05-1BA2	
		3SE5 000-0AU11	3SE5 000-0AU21	3SE5 000-0AU12	3SE5 000-0AU22	
Metal enclosures, 40 mm wide according to EN 50041						
 2 NC M12 plug, 4-pole; channel 1 on NC contact, channel 2 on NC contact	Basic switch + Actuator head	3SF1 114-1LA00-1BA1	3SF1 114-1LA00-1BA1	3SF1 114-1LA00-1BA1	3SF1 114-1LA00-1BA1	
		3SE5 000-0AU11	3SE5 000-0AU21	3SE5 000-0AU12	3SE5 000-0AU22	
Metal enclosures, 56 mm wide						
 1 NC M12 plug, 4-pole; channel 1 on NC contact, channel 2 on M12 socket right	Basic switch + Actuator head	3SF1 124-1LA00-1BA2	3SF1 124-1LA00-1BA2	3SF1 124-1LA00-1BA2	3SF1 124-1LA00-1BA2	
		3SE5 000-0AU11	3SE5 000-0AU21	3SE5 000-0AU12	3SE5 000-0AU22	

SIRIUS Position Switches according to ATEX 95:

In many industries the production, processing, transport and storage of combustible substances are accompanied by escaping gases, vapor or spray which find their way into the environment. Other processes result in combustible dust. Together with the oxygen in the air, the result can be an explosive atmosphere (in French: *ATmosphère EXplosive*) which will explode if ignited.

To guarantee the maximum possible safety in these areas, the legislators of most countries have drawn up requirements in the form of laws, regulations and standards which our switches comply with to the letter.

In explosion-protected areas and misty or dusty environments we recommend the use of our position switches according to ATEX 95. These variants comply with Directive 94/4/EG || 3D, ATEX 95 of the European Union and are approved for Zone 22.



For more information about ATEX we recommend our brochure:


Explosion Protection (ATEX) Fundamentals
Order No.: E86060-T1811-A101-A1-7600



3SE5 hinge switches, complete units

Contacts (snap-action contact element)	Connection	Hollow shaft $\varnothing_{\text{int.}} = 8 \text{ mm}$, $\varnothing_{\text{ext.}} = 12 \text{ mm}$		Solid shaft $\varnothing = 10 \text{ mm}$	
		Operating angle 5° ↻	Operating angle 15° ↻	Operating angle 5° ↻	Operating angle 15° ↻
		Metal enclosures according to EN 50041 (40 mm wide), mounting on hinges, ATEX Zone 22			
1 NO/2 NC 	1 x (M20 x 1.5)	3SE5 112-0LU11-1DA0	3SE5 112-0LU21-1DA0	3SE5 112-0LU12-1DA0	3SE5 112-0LU22-1DA0

3SE5 interlock switches with separate actuator, complete units

Version	Contacts (slow-action contact)	Connection	LED display	Order No.	
Metal enclosures, ATEX Zone 22, 5 directions of approach					
	40 mm wide (EN 50041)	1 NO/2 NC ↻	1 x (M20 x 1.5)	without	3SE5 112-0QV10-1DA0
	56 mm wide	1 NO/2 NC ↻	3 x (M20 x 1.5)	without	3SE5 122-0QV10-1DA0

Actuators for 3SE5 interlock switches with separate actuator




	Standard actuators	3SE5 000-0AV01
	Actuators with vertical fixing	3SE5 000-0AV02
	Actuators with transverse fixing	3SE5 000-0AV03
	Radius actuators, left	3SE5 000-0AV04
	Radius actuators, right	3SE5 000-0AV06
	Universal radius actuators	3SE5 000-0AV05

The actuators are not included in the scope of supply of the switch and must be ordered separately.





3SE5 Position Switches according to ATEX 95, Zone 22 Metal Enclosures

Complete unit and
Module selection



Rounded plungers	Roller plungers	Roller levers
		
High-grade steel, with overtravel	High-grade steel rollers	High-grade steel levers, plastic rollers
↓ $v_{max.} = 1 \text{ m/s}$ ↻	↔ $v_{max.} = 1 \text{ m/s}$ ↻	↔ $v_{max.} = 1 \text{ m/s}$ ↻

Enclosure	Contacts	Contact element				
Metal enclosure according to EN 50041, (40 mm wide), 1 x M20 x 1.5)	1 NO/1 NC	Slow action	Complete unit	--	--	
			Basic switch	3SE5 112-0BA00-1DA0	3SE5 112-0BA00-1DA0	
			+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	
		+ Twist lever	--	--		
		Snap action	Complete unit	3SE5 112-0CC02-1DA0	3SE5 112-0CD02-1DA0	3SE5 112-0CE03-1DA0
			Basic switch	3SE5 112-0CC02-1DA0	3SE5 112-0CA00-1DA0	3SE5 112-0CA00-1DA0
	+ Actuator head		3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE03	
	1 NO/2 NC	Slow action	Complete unit	--	--	
			Basic switch	3SE5 112-0KA00-1DA0	3SE5 112-0KA00-1DA0	
			+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	
		+ Twist lever	--	--		
		Snap action	Complete unit	--	--	
Basic switch			3SE5 112-0LA00-1DA0	3SE5 112-0LA00-1DA0		
+ Actuator head	3SE5 000-0AC02		3SE5 000-0AD02			
Metal enclosure (56 mm wide), 3 x (M20 x 1.5)	1 NO/1 NC	Slow action	Complete unit	--	--	
			Basic switch	3SE5 122-0BA00-1DA0	3SE5 122-0BA00-1DA0	
			+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	
		+ Twist lever	--	--		
		Snap action	Complete unit	3SE5 122-0CC02-1DA0	3SE5 122-0CD02-1DA0	3SE5 122-0CE03-1DA0
			Basic switch	3SE5 122-0CA00-1DA0	3SE5 122-0CA00-1DA0	3SE5 122-0CA00-1DA0
	+ Actuator head		3SE5 000-0AC02	3SE5 000-0AD02	3SE5 000-0AE03	
	1 NO/2 NC	Slow action	Complete unit	--	--	
			Basic switch	3SE5 122-0KA00-1DA0	3SE5 122-0KA00-1DA0	
			+ Actuator head	3SE5 000-0AC02	3SE5 000-0AD02	
		+ Twist lever	--	--		
		Snap action	Complete unit	--	--	
Basic switch			3SE5 122-0LA00-1DA0	3SE5 122-0LA00-1DA0		
+ Actuator head	3SE5 000-0AC02		3SE5 000-0AD02			
+ Twist lever	--	--				

	Angular roller levers	Spring rod actuators	Twist lever actuators (switching right and/or left, adjustable)			
						
ers,	High-grade steel levers, plastic rollers	Plastic plungers, total length 143 mm	EN 50041 High-grade steel levers, plastic rollers	High-grade steel levers With latching holes, plastic rollers	Rod actuators, 200 mm long	
	$\leftarrow v_{\max.} = 1 \text{ m/s} \rightarrow$	$v_{\max.} = 1 \text{ m/s}$	$\leftrightarrow v_{\max.} = 1.5 \text{ m/s} \rightarrow$	$v_{\max.} = 1.5 \text{ m/s} \rightarrow$	Aluminum $\leftrightarrow v_{\max.} = 3 \text{ m/s}$	Plastic $\leftrightarrow v_{\max.} = 3 \text{ m/s}$
	--	--	--	--	--	--
0	3SE5 112-OBA00-1DA0	3SE5 112-OBA00-1DA0	3SE5 112-OBA00-1DA0	3SE5 112-OBA00-1DA0	3SE5 112-OBA00-1DA0	3SE5 112-OBA00-1DA0
	3SE5 000-0AF03	3SE5 000-0AR01	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
	--	--	3SE5 000-0AA11	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
0	3SE5 112-OCF03-1DA0	3SE5 112-OCR01-1DA0	3SE5 112-OCH11-1DA0	--	--	--
0	3SE5 112-OCA00-1DA0	3SE5 112-OCA00-1DA0	3SE5 112-OCA00-1DA0	3SE5 112-OCA00-1DA0	3SE5 112-OCH80-1DA0	3SE5 112-OCH82-1DA0
	3SE5 000-0AF03	3SE5 000-0AR01	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
	--	--	3SE5 000-0AA11	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--	--
0	3SE5 112-OKA00-1DA0	3SE5 112-OKA00-1DA0	3SE5 112-OKA00-1DA0	3SE5 112-OKA00-1DA0	3SE5 112-OKA00-1DA0	3SE5 112-OKA00-1DA0
	3SE5 000-0AF03	3SE5 000-0AR01	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
	--	--	3SE5 000-0AA11	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--	--
0	3SE5 112-OLA00-1DA0	3SE5 112-OLA00-1DA0	3SE5 112-OLA00-1DA0	3SE5 112-OLA00-1DA0	3SE5 112-OLA00-1DA0	3SE5 112-OLA00-1DA0
	3SE5 000-0AF03	3SE5 000-0AR01	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
	--	--	3SE5 000-0AA11	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--	--
0	3SE5 122-OBA00-1DA0	3SE5 122-OBA00-1DA0	3SE5 122-OBA00-1DA0	3SE5 122-OBA00-1DA0	3SE5 122-OBA00-1DA0	3SE5 122-OBA00-1DA0
	3SE5 000-0AF03	3SE5 000-0AR01	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
	--	--	3SE5 000-0AA11	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
0	3SE5 122-OCF03-1DA0	3SE5 122-OCR01-1DA0	3SE5 122-OCH11-1DA0	--	--	--
0	3SE5 122-OCA00-1DA0	3SE5 122-OCA00-1DA0	3SE5 122-OCA00-1DA0	3SE5 122-OCA00-1DA0	3SE5 122-OCA00-1DA0	3SE5 122-OCA00-1DA0
	3SE5 000-0AF03	3SE5 000-0AR01	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
	--	--	3SE5 000-0AA11	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--	--
0	3SE5 122-OKA00-1DA0	3SE5 122-OKA00-1DA0	3SE5 122-OKA00-1DA0	3SE5 122-OKA00-1DA0	3SE5 122-OKA00-1DA0	3SE5 122-OKA00-1DA0
	3SE5 000-0AF03	3SE5 000-0AR01	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
	--	--	3SE5 000-0AA11	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82
	--	--	--	--	--	--
0	3SE5 122-OLA00-1DA0	3SE5 122-OLA00-1DA0	3SE5 122-OLA00-1DA0	3SE5 122-OLA00-1DA0	3SE5 122-OLA00-1DA0	3SE5 122-OLA00-1DA0
	3SE5 000-0AF03	3SE5 000-0AR01	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00	3SE5 000-0AH00
	--	--	3SE5 000-0AA11	3SE5 000-0AA60	3SE5 000-0AA80	3SE5 000-0AA82



Notes





SIRIUS Controls

Newsletter

Always up-to date: Our regular newsletter brings you up-to-date information about industrial controls and power distribution. You can sign up for it at:

www.siemens.de/lowvoltage/newsletter

Please send the selected information to the following address:

Company/Department

Name

Street, ZIP/Town, Country

Telephone/Fax

E-Mail

CONTROLS	<input type="checkbox"/> SIRIUS Solid-State Switching Devices		
PROTECTING			
STARTING	<input type="checkbox"/> SIRIUS Infeed System	<input type="checkbox"/> Configuring SIRIUS Load Feeders	
	<input type="checkbox"/> SIRIUS Soft Starters	<input type="checkbox"/> SIMATIC ET 200pro	<input type="checkbox"/> SIRIUS Motor Starters
MONITORING AND CONTROL	<input type="checkbox"/> SIRIUS Motor Management System SIMOCODE pro		<input type="checkbox"/> SIRIUS Relays
			<input type="checkbox"/> SIRIUS Safety Relays
DETECTION	<input type="checkbox"/> SIRIUS Position Switches		
	<input type="checkbox"/> SIMATIC Sensor Technology		
COMMANDING AND SIGNALING	<input type="checkbox"/> SIRIUS Pushbuttons and Indicator Lights	<input type="checkbox"/> SIRIUS Signaling Columns and Integrated Signal Lamps	<input type="checkbox"/> SIRIUS Cable-Operated Switches
	<input type="checkbox"/> SIRIUS Fans	<input type="checkbox"/> SIDAC Reactors & Filters	<input type="checkbox"/> SIDAC & SIVENT Solutions
ENGINEERING SUPPLY	<input type="checkbox"/> Switch ES Motor Starters	<input type="checkbox"/> SIMOCODE ES	
	<input type="checkbox"/> Soft Starter ES		
SIRIUS AND MORE	<input type="checkbox"/> SIRIUS Safety Integrated	<input type="checkbox"/> AS-Interface	<input type="checkbox"/> SIRIUS Connection Method
	<input type="checkbox"/> ECOFAST	<input type="checkbox"/> SIRIUS Modular System	

www.siemens.com/lowvoltage

Siemens AG

Automation and Drives
Low-Voltage Controls and Distribution
Postfach 48 48
90327 NÜRNBERG
GERMANY

www.siemens.com/lowvoltage/technical assistance
www.siemens.com/sirius

The information provided in this catalog contains descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. Availability and technical specifications are subject to change without notice.

All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes could violate the rights of the owners.

Order No. E86060-T1812-A101-A1-7600

Token fee: 0.00 €

Subject to change without prior notice | Dispo 68206 | KB 1106 5-AUM 48 De / 703110 | Printed in Germany | © Siemens AG 2007