



SIGUARD Safety Interlock Switches

Selection

For Moveable Guards, Protected Doors and Covers without Locking

Design

3SE3 interlock switches with separate, coded actuators are intended for use where the position of doors, machine guards, gates, enclosure covers, etc., must be in position for proper operation. Typically in control circuits, these switches interrupt machine operation when the coded actuator is removed.

Interlock switches are operated by means of their matching, coded actuator. Removing the actuator from the operating head causes the contacts to change state. The interlock switch must not be used as a mechanical stop.

3SE3 2 Plastic Housing

The switch housing consists of glass-reinforced fiber, flame-retardant molded plastic which is resistant to most shocks, impacts and cutting oils. The cover is captive to the switch body. The threaded cable entry is listed below and can be converted to 1/2"-NPT via a separately provided adaptor (3SX9900 or 3SY3124).

3SE3 1 Metal Housing

The die-cast aluminum housing is resistant to most shocks, impacts and hot swarf.

Design

3SE3 7 and 3SE3 8 interlock switches with locking mechanism and separate coded actuator are intended to restrict and prevent an unforeseen opening of a protective door, protective shutter or other protective piece of equipment as long as a dangerous situation is present. i.e., operation of moving parts after a machine has been switched off. Interlock switches with locking mechanism serve two primary purposes:

1. Enabling the closed protective system; and,
2. Locking the machine with opened protective system.

Ordering Data:



Note: Refer to SIGUARD Catalog SFPC-02000 for additional Interlock Switches

	Operating Head Type/Mounting	Housing Width	Length of Actuator	Threaded Cable Entry	Contact Type (NO for Signaling Only) ^②	Catalog No	Price \$
 	3SE3 200-0XX13						
	Plastic/Metal Enclosed SIGUARD 3SE3 Limit Switches without Locking^①						
	Plastic Housing IP65						
	Top & Side Operation / Mounting acc. EN50047	31mm		1 × PG 13.5	1NC + 1NO	⊖ 3SE3200-0XX13	49.
	Top & Side Operation / Mounting acc. EN50047	31mm		1 × PG 13.5	2NC	⊖ 3SE3200-6XX13	49.
	Actuators (For use with 3SE3 200 only)						
	Standard (in line movement)		44mm			3SX3220	5.
	Lateral Mounting (in line movement)		36mm			3SX3221	5.
	Radius (left/right movement)		44mm			3SX3222	16.
	Plastic Housing IP67						
Top & Front Operation (5N pulling force)	52mm		3 × PG 11.5	2NC + 1NO	⊖ 3SE3243-0XX40	46.	
(30N pulling force)	52mm		3 × PG 13.5	2NC + 1NO	⊖ 3SE3243-0XX	46.	
(automatic key ejection)	52mm		3 × PG 13.5	2NC + 1NO	⊖ 3SE3243-0XX30	46.	
Actuators (For use with 3SE3 243 only)							
Standard (in line movement)		27mm			3SX3218	5.	
Radius (left/right, up/down movement)		33mm			3SX3228	12.	
Actuator with Ball Catch (max. 100N pull out force)					3SX3217	29.	
Metal Housing IP67							
Front Operation	40mm		1 × PG 13.5	1NC + 1NO	⊖ 3SE3120-0XX	87.	
	40mm		1 × PG 13.5	2NC	⊖ 3SE3120-6XX	87.	
	40mm		1 × 1/2" NPT	1NC + 1NO	⊖ 3SE3170-0XX	92.	
	40mm		1 × 1/2" NPT	2NC	⊖ 3SE3170-6XX	92.	
Actuators (For use with 3SE3 120/170 only)							
Standard (in line movement)		79mm			3SX3197	13.	
Lateral Mounting (in line movement)		50mm			3SX3206	13.	
Radius (left/right, up/down movement)		90mm			3SX3203	77.	

① Standard delivery without actuator.

② Contact configuration is with actuator inserted

⊖ Safety function due to direct opening action according to IEC 60947-5-1-3.

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Machine Safety Components



SIGUARD Safety Interlock Switches

Selection

For Moveable Guards, Protected Doors and Covers with Locking

Solenoid Voltage Table

Voltage	*
24V DC	0
230V AC	1
120V AC	2

Ordering Data:



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Machine Safety
Components

Locking/Unlocking Type	Housing Width	Version (Auxiliary Release/ Indicator Lights)	Contacts, Monitoring the Position of the Actuator	Contacts, Monitoring the Position of the Solenoid	Catalog No	Price \$
IP67 – Side operation – 2000N locking force						
Mechanical Locking Solenoid Unlocking	90mm	Sealable cover-screw	1NC + 1NO	2NC	⊕ 3SE384*-0XX00	360.
		Key release	1NC + 1NO	2NC	⊕ 3SE384*-0XX01	395.
		Sealable cover-screw	2NC	2NC	⊕ 3SE384*-6XX00	360.
		Key release	2NC	2NC	⊕ 3SE384*-6XX01	392.
		Sealable cover-screw	1NC + 1NO	1NC + 1NO	⊕ 3SE384*-1XX00	360.
		Key release	1NC + 1NO	1NC + 1NO	⊕ 3SE384*-1XX01	392.
Solenoid Locking Mechanical Unlocking	90mm	Sealable cover-screw	1NC + 1NO	1NC + 1NO	⊕ 3SE384*-1XX20	372.
		status indicator LEDs	1NC + 1NO	1NC + 1NO	⊕ 3SE384*-1XX32	407.
		Key release	1NC + 1NO	1NC + 1NO	⊕ 3SE384*-1XX32	407.
		status indicator LEDs	1NC + 1NO	1NC + 1NO	⊕ 3SE384*-1XX32	407.
		—	1NC + 1NO	1NC + 1NO	⊕ 3SE383*-0XX00	360.
		—	2NC	2NC	⊕ 3SE383*-6XX00	360.
—	1NC + 1NO	1NC + 1NO	⊕ 3SE383*-1XX00	360.		
—	Status indicator LEDs	1NC + 1NO	1NC + 1NO	⊕ 3SE383*-1XX20	370.	



3SE3 84/83

Actuator Type	Used with Switch Type	Length	Catalog No	Price \$	
					Actuators
3SX3 197	Standard (in line movement)	3SE3 83 / 3SE3 84	79mm	3SX3197	13.
3SX3 207	Lateral Mounting (in line movement)	3SE3 83 / 3SE3 84	50mm	3SX3206	13.
3SX3 203	Standard, approach from left (in line movement)	3SE3 83 / 3SE3 84	132mm	3SX3207	14.
3SX 206	Radius, Lateral Mounting (left/right movement)	3SE3 83 / 3SE3 84	80mm	3SX3203	77.

Ordering Data:



Note: Refer to SIGUARD Catalog SFPC-02000 for additional Rope Pull Switches.

Rope Pull Switches—For Monitoring or E-STOP Applications on Endangered Systems with Large Dimensions

For Rope Length ^② (m)	Max. Dist. Between the Rope Props ^③ (m)	Description	Contact Type (NO for Signaling Only)	Catalog No	Price \$	
						SIGUARD Rope Pull Switch
≤25	3	Metal Housing (Plastic cover) w/ dust protection and adjustment window				
		w/o latching		1NC + 1NO	⊕ 3SE7150-2DD	152.
		w/ latching	pushbutton release	1NC + 1NO	⊕ 3SE7150-1BD	195.
			pushbutton release	2NC	⊕ 3SE7150-1BF	195.
		w/ latching	w/ indicator light bulb (red, 24V DC)	2NC	⊕ 3SE7150-1BF03	240.
w/ latching	key release	1NC + 1NO	⊕ 3SE7150-1CD	214.		

①Standard delivery without actuator.
②This rope length can be used with maximum temperature deviations of ±15K.

③For mounting details and our wide range of accessories please refer to Catalog SFPC-02000.

⊕ Safety function due to direct opening action according to IEC 60947-5-1.