

S10

Safety Interlock without Guard Locking



Safety Interlock without Guard Locking

Safety interlocking devices, series S10, are used to monitor the position and electrical locking of protective devices (e.g. safety doors) in industrial machinery and systems. In this way, they protect people from dangerous machine movements.

Safety interlocks without guard locking can be implemented whenever the dangerous movement has come to a standstill before the person entering can reach the danger point.

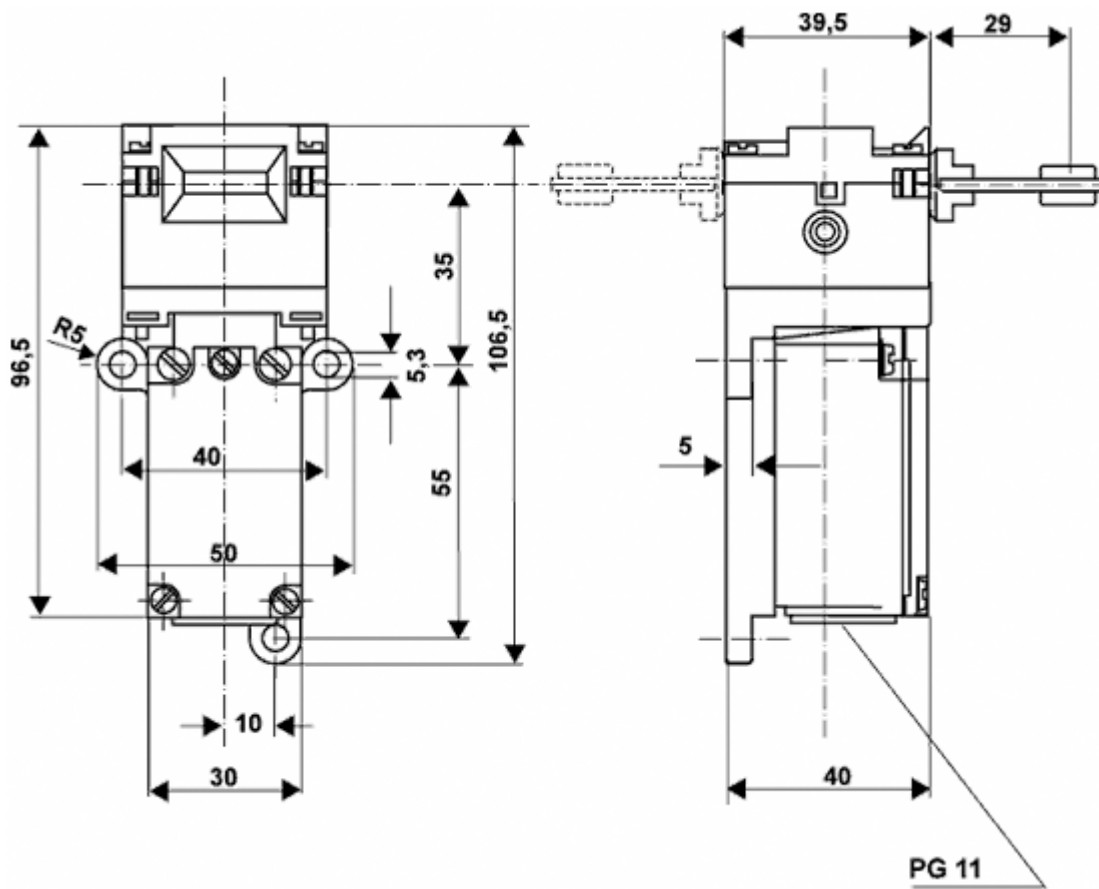
The Series S10 safety interlocks without guard locking have a housing made of fiberglass-reinforced plastic with an enclosure rating of IP 67. Equipped with different contact units, the various versions allow the integration into technical controls in accordance with Safety Category 1 to 4 as specified by EN 954-1. The deflection head, which can be swivelled by $4 \times 90^\circ$, enables universal use.



Advantages

- BG and UL approval (EN 1088, IEC 947, DIN VDE 0660)
- Compact design, 40 mm mounting possible
- Plastic enclosed design
- 4 approach directions possible
Variable actuating radius possible with radial actuator
- Actuating heads can be displaced $4 \times 90^\circ$
- Ball lock in the actuating head for fixing the actuator
- Auto-centering due to funnel-shaped insertion opening
- Contact units suitable for integration from Category 1 to 4

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Dimensional Drawings



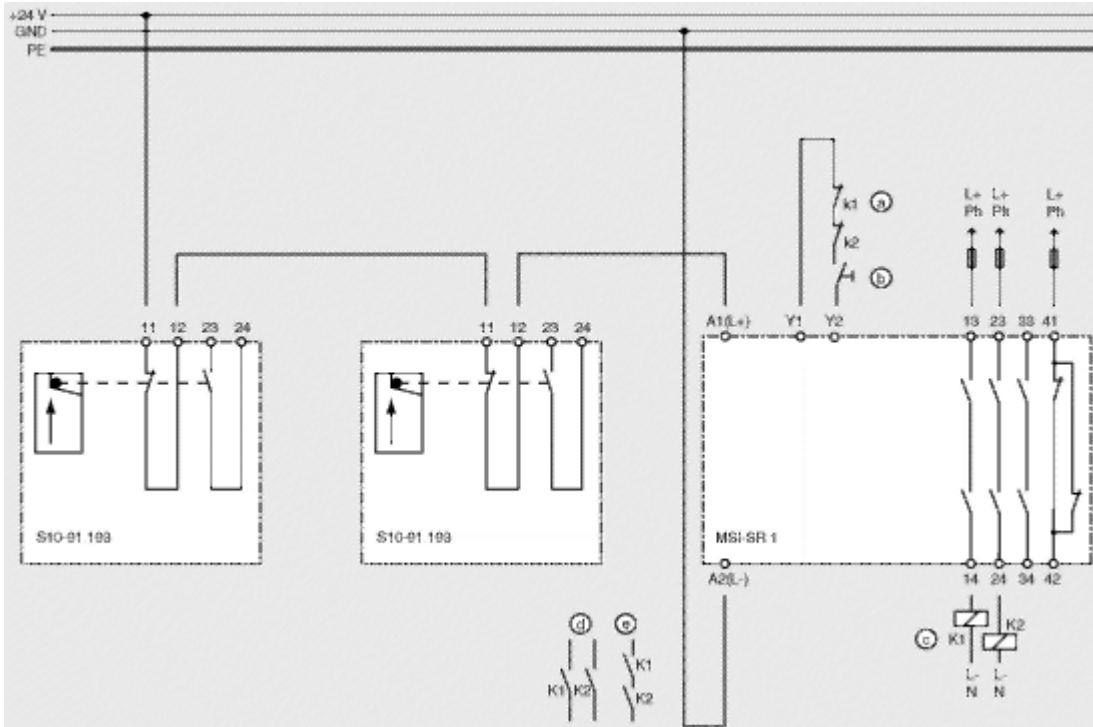
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Electrical Connection

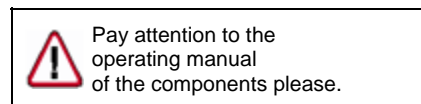
Application drawing Safety Interlocking Device S10

Safety relay MSI-SR 1 with Safety Interlocking device S10, circuitry for safety category 1 (2).

Applications for safety category 2 require the safety function to be tested at appropriate intervals by actuating the safety door.



- a) Feedback circuit for relay monitoring
 - b) Start/restart button
 - c) Positively guided relay or motor relay, provide suitable spark suppression
 - d) Switching off path 2-channel
 - e) Switching off path 1-channel
- always use both contacts in the switching off path



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Technical Data

Technical Data	series		
	S10-01.103	S10-01.110	S10-P01
Operating ambient temperature range [°C]	-25...+70	-25...+70	-25...+70
Contact layout normally closed contacts	1	2	1
Contact layout normally open contacts	1	-	1
Max. switching frequency [switching cycles/h]	6000	6000	6000
Mechanical serviceable life [switching cycles]	1x10 ⁶	1x10 ⁶	1x10 ⁶
IP Enclosure rating	IP67	IP67	IP67
Actuating force for insertion [N]	10	10	10
Actuating force for withdrawal [N]	20	20	20
Nominal voltage of the control circuits [VAC]	440	440	440
Max. permanent current of the control circuits [A]	10	10	6