

# Safety interlocks

## i100 Lock

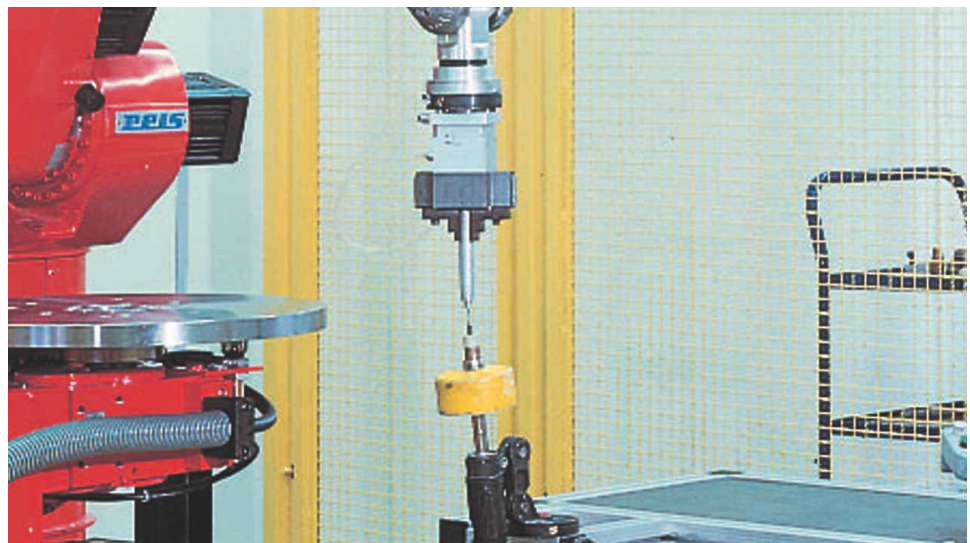


The i100 series safety interlocks with guard lock are designed to prevent the operator from opening the guard before the machine hazard motion has stopped. The i100 series has been designed with a mechanical lock that can be released by applying voltage to the electrical coil (i100 M) or with an electrical lock that can be released by removing voltage from the electrical coil (i100 E).

The high retention force (1000 N) and the availability of safety and alert contacts associated with the coil and the

actuator, allow to it to distinguish a guard that has been released from one that has been released and opened.

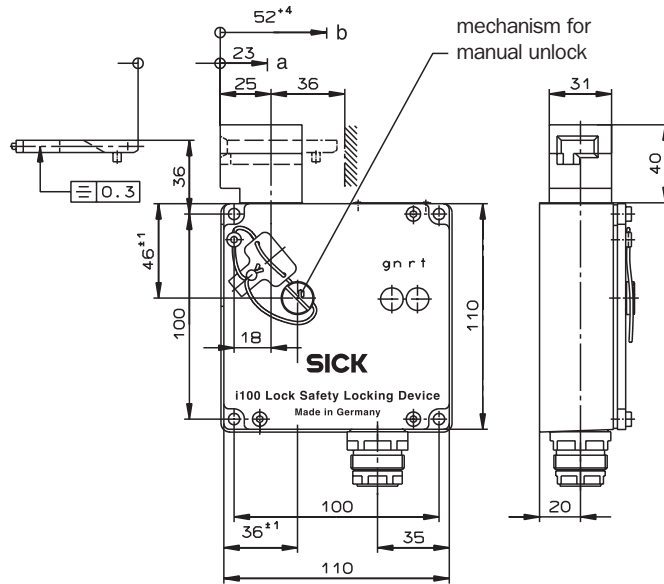
Thanks to the anodized die-cast aluminum alloy enclosure, the high performance of this safety interlock is suitable for the most demanding heavy-duty industrial environments. Two coil status LED indicators and the availability of auxiliary release, allow the operator to program and monitor operating conditions.



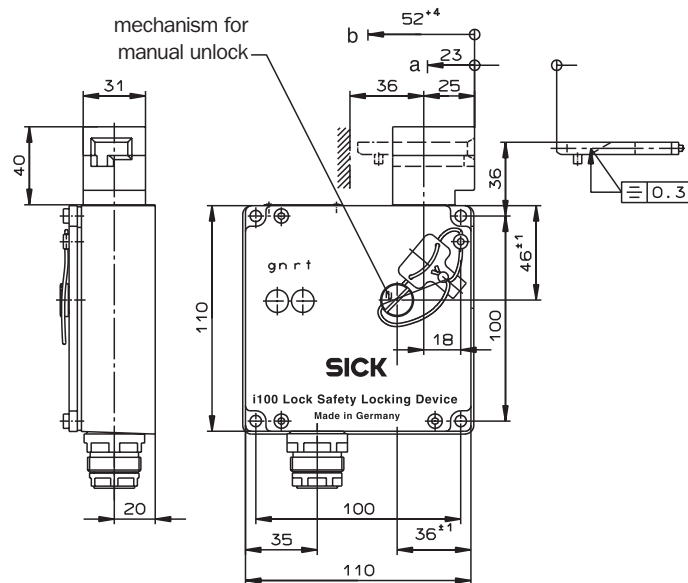


# i100 Lock

Actuating head oriented to the left and electrical connection SR 11



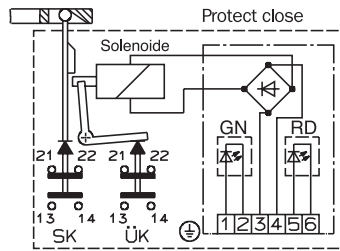
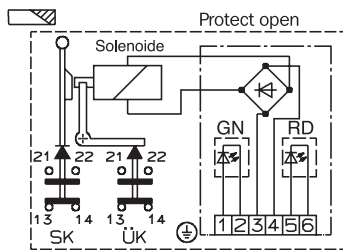
Actuating head oriented to the right and electrical connection SR 11



**Technical specifications**

	<b>i100 Lock</b>
Housing material	die-cast silver alloy
Housing color	black
Environmental protection to IEC 60 529	IP 67
Mounting position	optional
Mechanical service life	2 X 10 <sup>6</sup> switching cycles
Ambient temperature	-25...80° C
Approach speed (max.)	20m/min
Actuating force	35 N
Retaining force in locked condition	1000 N
Switching elements	2 X 11
Contact elements	1 NO + 1 NC ↻
Switching principle	slow action
Rated insulation voltage	Vi = 250 V $\bar{=}$
Utilization category IEC 947-5-1	AC-15 Ue 230 Ie 6 A/ DC 13 Ve 24 Ule 6 A
Switching voltage (min.)	12 v
Switching current (min.) at 24 V	10 mA
Contact material	silver alloy, gold-plated
Connection type	screw terminal
Cable cross-section (max.)	1.5 mm <sup>2</sup>
Short-circuit protection	slow 10 A, fast 20 A
Weight	1.07 Kg
<b>Solenoid</b>	
Solenoid operating voltage	24/110/230 V $\bar{=}$
On time	100%
Connected load	7 W

**Switching elements**



**11 gold-plated,  
slow action, 1 NC  
forced opening  
positive + 1 NO**

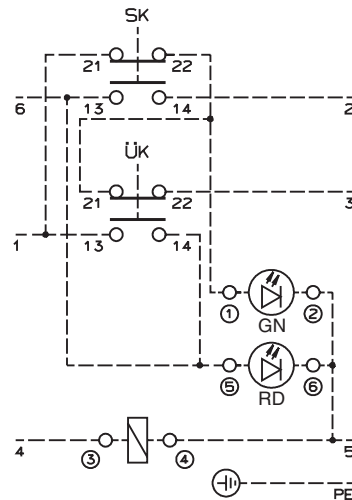
**OPERATING VOLTAGE OF SOLENOID**

**24 V DC -15...+10%**

**110 V AC -15...+10%**

**230 V AC -15...+10%**

## System connection

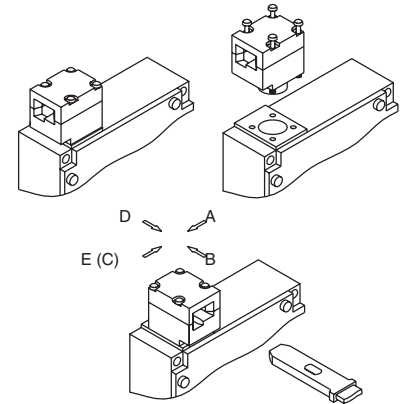


### Voltage control

24 V AC/DC	± 10%
110 V AC/DC	± 10%
230 V AC/DC	± 10%

## Insertion direction

- The head can be rotated by unscrewing the four clamping screws.



## LED function

The LED allows operating check of safety interlock:

**Green: safety circuit closed**  
**Red: key unblocked, safety circuit open**

## Installation note

The safety switch and actuator must be assembled for installation purposes. The actuator must be permanently secured to the safety device such that it can no be detached, e.g., with unscrewable screws, rivets or welding. The safety switch should not be used as a mechanical stop plate.

## Auxiliary locking device

In case of failure, the mechanical release can be used to unlock safety devices with a mechanical lock.

The mechanical release mechanism may be sealed to prevent tampering.

## Product selection table

Model	Block		Action		Solenoid voltage			Switching Element	Connections			Part number
	Mechanical	Electrical	right	left	24 V DC	110 V AC	230 V AC		PG 13.5	SR 11	M 20	
i 100		E			024				1			6 012 122
i 100		E		L	024				1			6 012 118
i 100	M		R				230		1			6 012 123
i 100		E	R				230		1			6 012 124
i 100	M			L			230		1			6 012 119
i 100		E		L			230		1			6 012 120
i 100	M		R		024					2		6 012 127
i 100		E	R		024					2		6 012 128
i 100	M			L	024					2		6 012 125
i 100		E		L	024					2		6 012 126
i 100	M			L		110			1			6 021 907
i 100		E		L		110			1			6 021 908
i 100	M		R			110			1			6 021 909
i 100		E	R			110			1			6 021 910
i 100	M		R		0			11			3	6 022 595
i 100	M			L	0			11			3	6 022 591
i 100		E		L	0			11			3	6 022 592
i 100	M			L			2	11			3	6 022 593
i 100		E		L			2	11			3	6 022 594
i 100		E	R		0			11			3	6 022 596
i 100	M		R				2	11			3	6 022 597
i 100		E	R				2	11			3	6 022 598
i 100	M			L		1		11			3	6 022 599
i 100		E		L		1		11			3	6 022 600
i 100	M		R			1		11			3	6 022 601
i 100		E	R			1		11			3	6 022 602

We recommend contacting Customer Service for product selection.

## Accessories: connectors and cable glands

## Connector technical specifications

Housing material	plastic
Number of PINs	12 (11+PE)
Nominal voltage	50 V ~/=
Protection class	IP 65
Connection type	crimp contacts 0.5...1.5 mm <sup>2</sup>

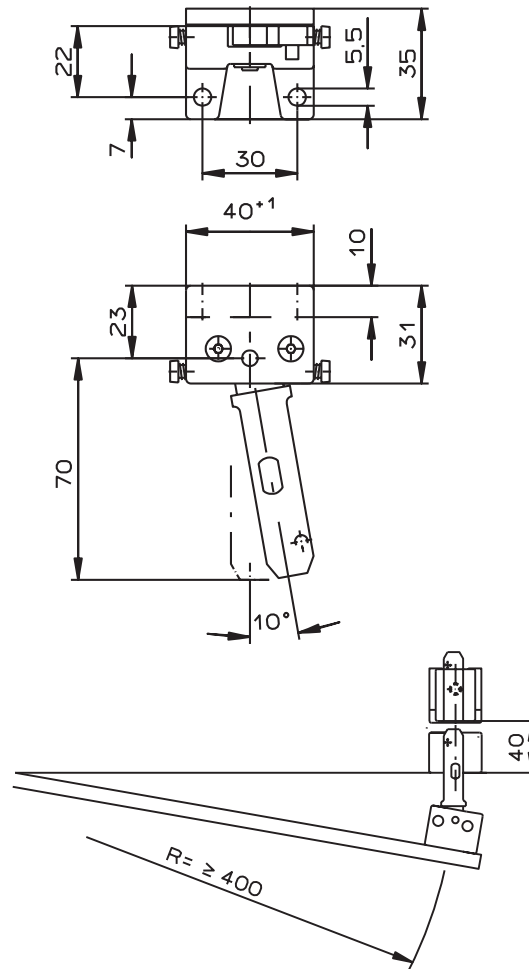
## Selection table

Type		Number of PIN	Part number
SSR 11, connector	straight	11+PE	6 020 757
ASR 11, connector	angled	11+PE	6 020 758
Connector	for safety switch	11+PE	6 020 759
Cable gland M16			5 309 163
Cable gland M20			5 309 163
Cable gland PG 13.5			5 305 811

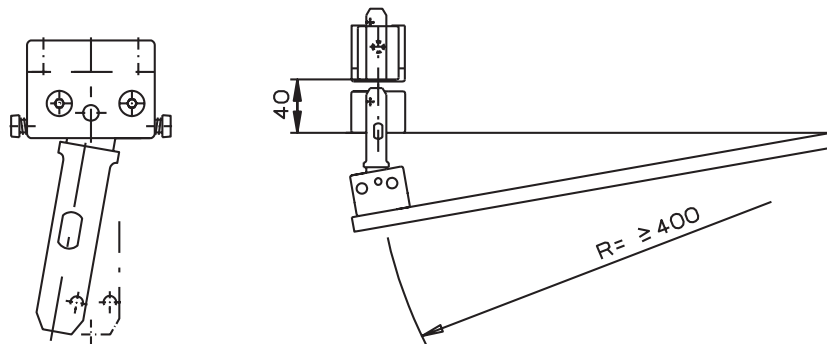
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# i100 Lock

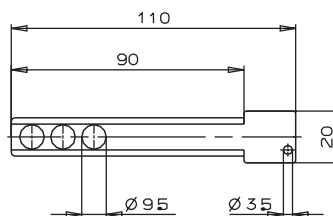
Actuator for hinged door to left iE100-R1 - part number 5 306 498



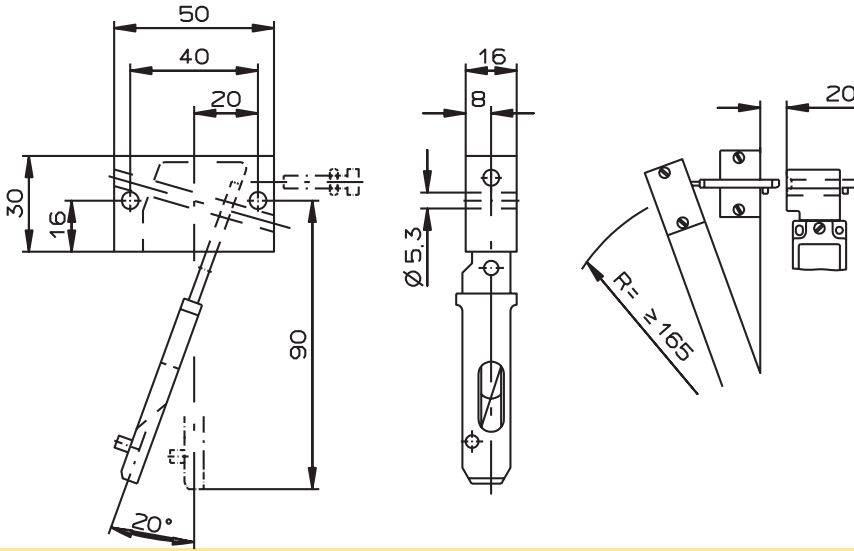
Actuator for hinged door to right iE100-R2 - Part number 5 306 499



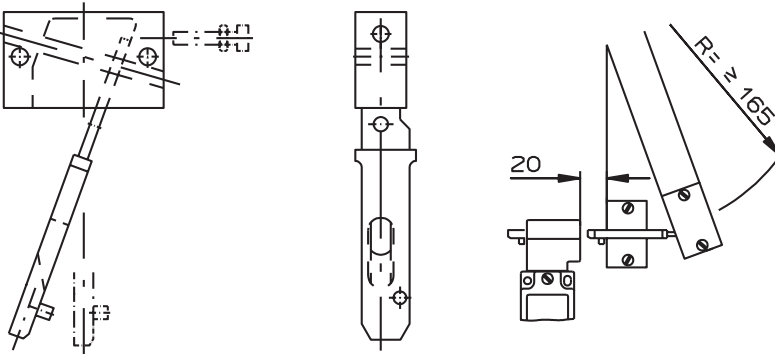
Lockout bar - Part number 5 603 534



Actuator for hinged door on bottom iE100-R3 - Part number 5 306 500



Actuator for hinged door on top iE100-R4 - part number 5 306 526



Actuator straight iE100-S1 - part number 5 306 497

