

Safety interlocks

i10 Lock



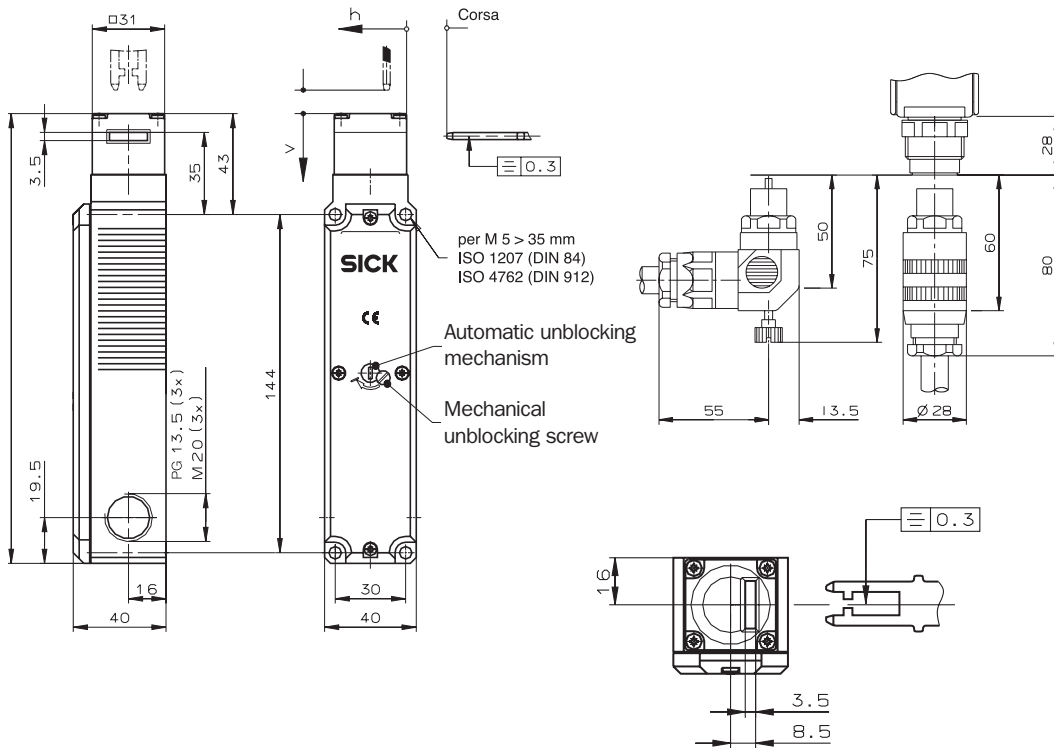
The i10 Lock is a safety interlock that is guard lock capable. It can prevent the machine guard from opening until the release mechanism is activated. This device is available with 2 forced opening, normally closed contacts (NC), 1 signaling, normally open contact (NO), and with 1 normally closed contact (NC) for guard condition monitoring. The i10 Lock head can be turned (4 x 90°) and provides five ways of access for the actuator. With the i10 Lock M version (with mechanical locking), the guard can be opened only by applying voltage to the coil. With the i10 Lock E version (with

electrical lock), the guard can be opened only by removing voltage from the coil. This device is an ideal solution for machinery with long stopping time, when premature interruption of the machine could cause damage to tools and components or cause additional hazards for the operator.

The locking mechanism can tolerate holding forces up to 1200 N. The auxiliary manual release mechanism (3-way) releases the guard in the event of general failure or of a power interruption.



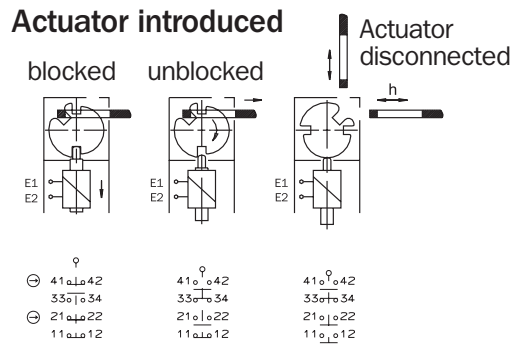
Drawings



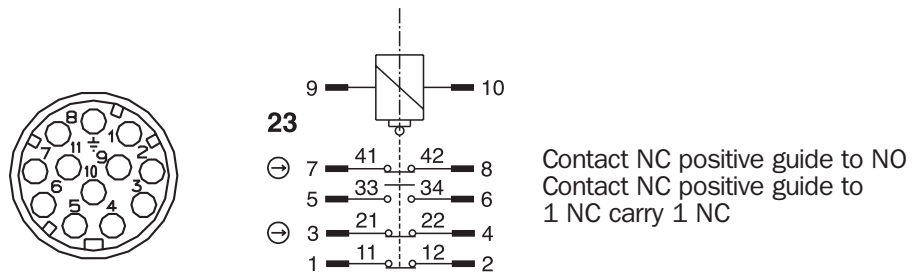
Technical specifications

	i10 Lock
Housing material	glass-reinforced plastic
Environmental protection to IEC 60529	i 10-M/E...3 IP 67 i10-M/E...2 IP 65
Mechanical service life	10 ⁶ switching cycles
Ambient temperature	-20...55° C
Mounting position	optional
Approach speed (max.)	20 m/min
Frequency of approach (max.)	max 7000 h
Switching principle	slow acting
Contact material	Silver alloy, gold plated
Conductor cross section	i10-M/E...3 max 1.5 mm ² i10 M/E...2 0.5 mm ²
Rated insulation voltage U _i	i10-M/E...3 U _i = 250 V i10-M/E...2 U _i = 50 V
Utilization category to IEC 60947-5-1	i10-M/E...3 AC-15 230 V, 6 A, DC-13 24 V, 6 A i10-M/E...2 AC-15 50 V, 4 A, DC-13 24 V, 4 A
Switching voltage (min.)	12 V
Switching current (min.) at 24 V	10 mA
Short-circuit protection (Control circuit fuse) IEC 60269-1	i10-M/E...3: 6 A gG i10-M/E...2: 4 A gG
Solenoid operating voltage (+ 10%...-15%)	AC/DC 24 V AC 110 V AC 230 V
Duty cycle	100%
Power consumption	8 W
Actuating force	8 N
Retaining force (max.)	1200 N

Switching elements

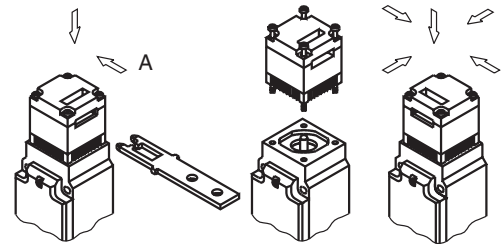


Allocation



Changing direction of approach

- The small head can be oriented according to the desired insertion direction by unscrewing the four clamping screws.
- The switch is supplied with the small head set positioned in the A direction



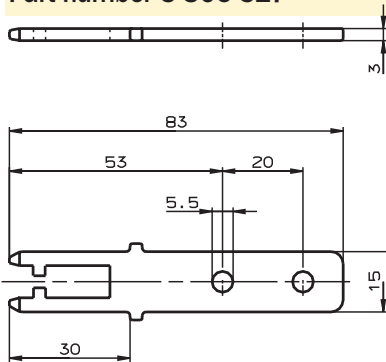
Product selection table

Model	Block function		Reel voltage			Connection	Connection type			part number
	mechanical	electrical	24 V DC	110 V AC	230 V AC		PG 13.5	SR 11	M 20	
i10 -	M				230		1			6 012 137
i10 -	M		024					2		6 012 139
i10 -		E	024					2		6 012 140
i10 -	M		0			23			3	6 022 580
i10 -		E	0			23			3	6 022 585
i10 -	M				2	23			3	6 022 582
i10 -		E			2	23			3	6 022 586
i10-	M			1		23			3	6 022 581
i10-		E		1		23			3	6 022 587
i10	M		0			23		2		6 025 101

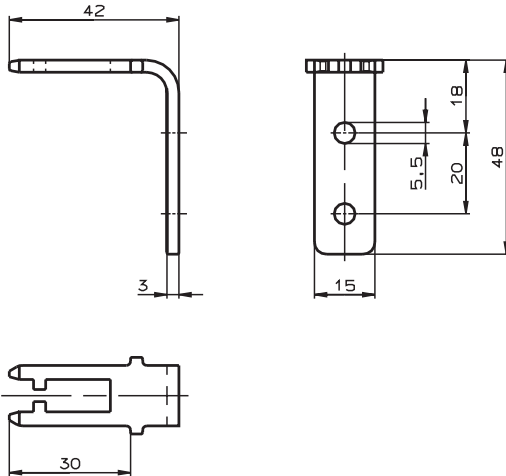
We recommend contacting Customer Service for product selection.

Accessories

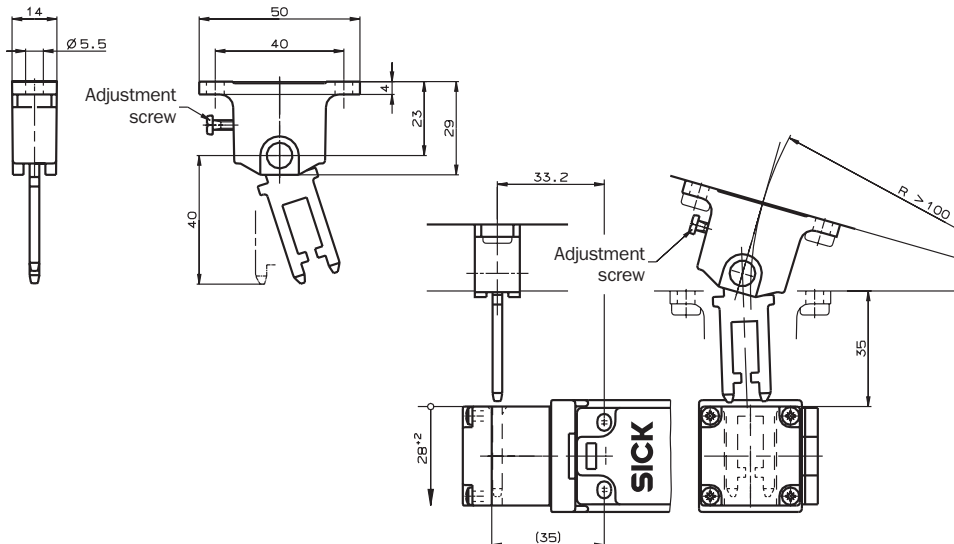
Actuator straight iE10-S1 - Minimum door radius 1000 mm
Part number 5 306 527



Actuator at 90° iE10-A1 - Minimum door radius 1000 mm
Part number 5 306 535

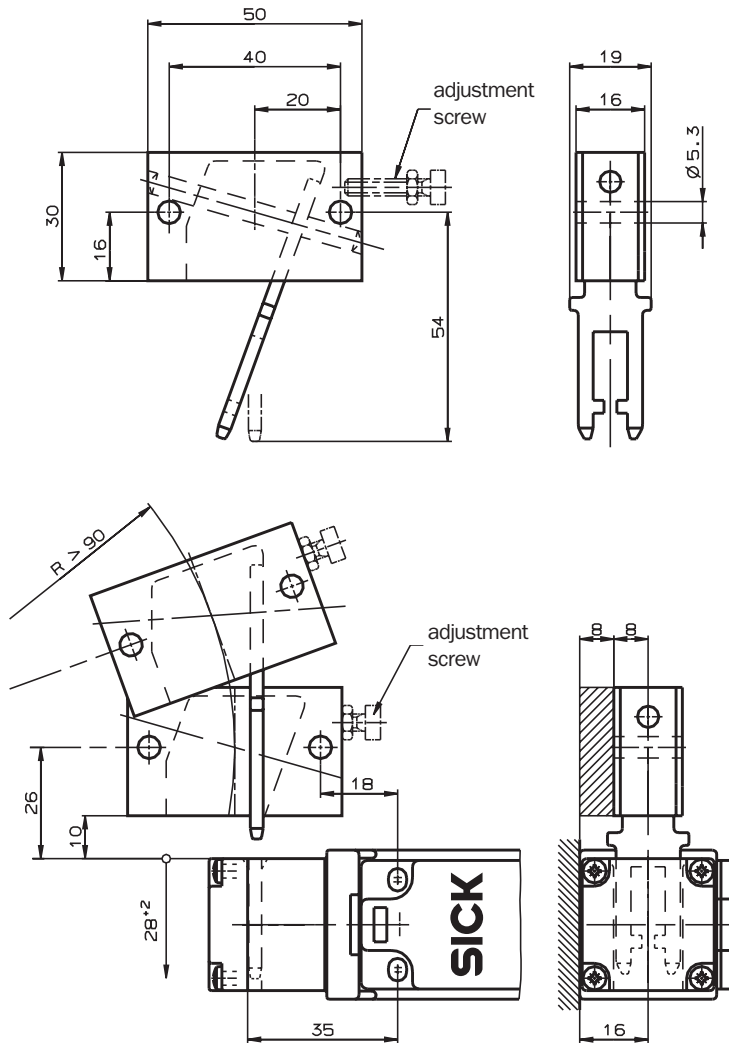


iE10-R2 radius actuator – Minimum door radius 100 mm
Part number 5 306 529



Accessories

Radial actuator for top and bottom hinged doors
 Minimum door radius: 90 mm iE10-R1
 Part number 5 306 528



Accessories: connector and cable glands

Connector technical specifications

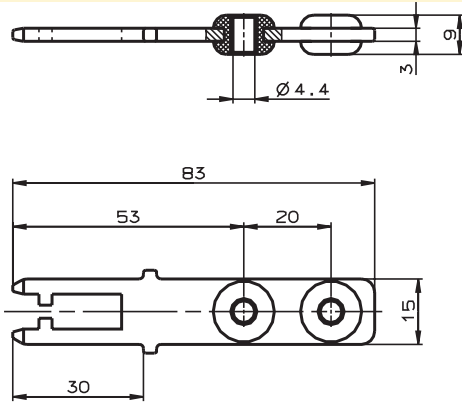
Housing material	plastic
Number of PIN	12 (11+PE)
Nominal voltage	50 V ~/=
Protection class	IP 65
Connection type	contact crimp 0.5...1.5 mm ²

Selection table

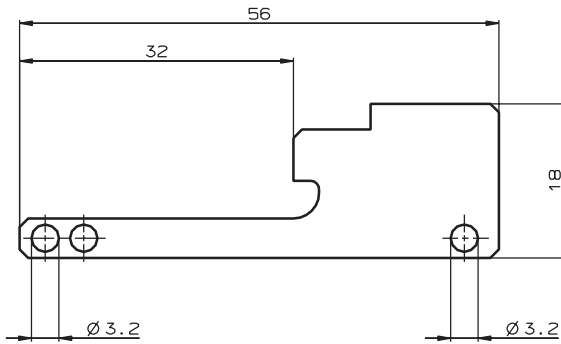
Type		Number of PIN	Part number
SSR 11, connector	straight	11+PE	6 020 757
ASR 11, connector	angled	11+PE	6 020 758
Connector	side limit stop	11+PE	6 020 759
Cable gland M16			5 309 163
Cable gland M20			5 309 163
Cable gland PG 13.5			5 305 811

Accessories

Actuator flexible straight iE10-S2 - minimum door radius 1000 mm
Part number 5 306 530



Lockable bar iE10-S3
Part number 5 306 536



When opening the guard, this lockable bar is inserted within the safety switch head. Once the bar is in the head, a lock is placed in one of the holes in order to prevent the guard from closing behind the operator.

Unlocking key iE10-K1, iE10-K2
Part number K1: 5 308 269, K2: 5 308 270

