Explanations of features

Positive action normally closed contacts/normally open contacts

Safety switches have contact elements in normally closed contact/normally open contact combinations. The normally closed contacts of a safety switch are of the “positive action” type, i.e. the forced movement of the normally closed contact ensures that the contacts are separated every time. Normally open contacts primarily serve as signalling contacts and must not be used for the safety circuit.

Housing material

The housing materials used can be separated into two large groups - “metals” and “plastics”. The metal housing materials are available as both anodised die-cast light metal and painted die-cast zinc versions. Glass-fibre reinforced thermoplastics are exclusively used for the plastic housings.

Switching principle

- Slow-action switch

The speed with which the slow-acting switching element is actuated directly affects the speed of normally closed contacts or normally open contacts. The switching points for actuating and resetting the position switch are in the same position.

- Snap-action switch

Snap-action switching elements react independently of the actuation speed and open or close at a defined point. The contacts of the snap-action switching elements have a different switching point depending on the directional movement, i.e. the switching points for actuating and resetting the position switch are in different positions.

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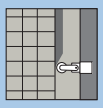
Safety position switches

Safety application	Number of positive action normally closed contacts/normally open contacts [1]	Housing material [1]	Switching principle [1]	Type of actuator	Enclosure rating	Product	Page
	2 / 1	Plastic	Slow-action switch	Roller plunger	IP 66	i10P	J-2
				Turning lever		i10R	J-4
	3 / 1	Metal	Slow-action switch	Roller plunger	IP 67	i100P	J-7
				Turning lever		i100R	J-10
	1 / 1 2 / 2 3 / 1		Slow-action switch/ snap-action switch	Roller plunger	IP 66	i110P	J-13
				Turning lever		i110R	J-16

[1] Explanation see page J-0

J

- Housing material glass-fibre reinforced thermoplastic
- Cable gland M20
- Design according to EN 50047
- Enclosure rating IP 66

J

Overview of technical specifications

Number of positive action normally closed contacts	2
Number of normally open contacts	1
Switching principle	Slow-action switch
Type of actuator	Roller plunger
Housing material	Plastic
Enclosure rating	IP 66

Product description

- Roller plunger design
- Plunger made of plastic
- 3-pole contact element

In-system added value

Safety relays

Safety relays allow simple integration of safety components into machinery or plant. ➜ see N-0

Safety controllers

Safety controllers are utilised when the safety function (e.g. switching off a dangerous movement) is to be accomplished in a flexible way by logical combination of safety relevant signals. Operation of machinery becomes more flexible as well as generation of machine variants becomes more easy. ➜ see O-0

Safety network solutions

Safety network solutions are utilised in plants and machinery of larger scale. This is saving cabling and enables modular design of the safety automation. Potential errors or faults can be easily localised and quickly trouble shooted thanks to comprehensive diagnostics functions. That significantly reduces machine down times.
SICK offers solutions for the open automation standards: AS-i Safety at Work, DeviceNet Safety and PROFIsafe. ➜ see P-0

Ordering information

Number of positive action normally closed contacts	Number of normally open contacts	Switching principle	Type	Part number
2	1	Slow-action switch	i10-PA213	6025088

Further information	Page
➜ Services	A-2

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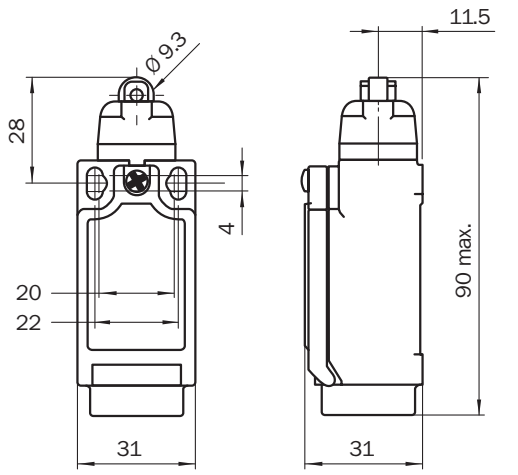
Detailed technical specifications

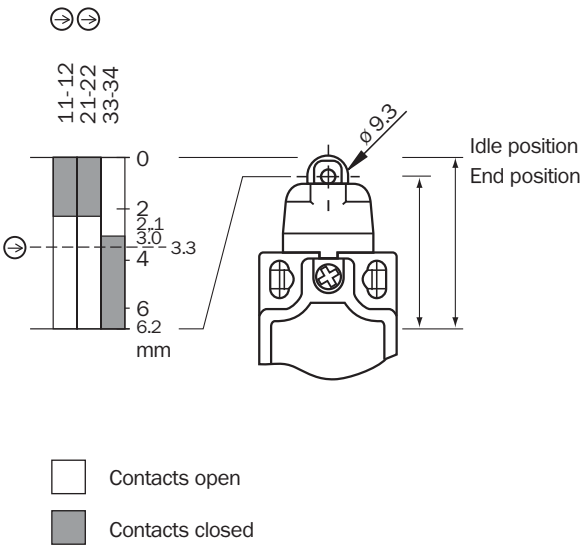
Housing material	Glass-fibre reinforced thermoplastic
Enclosure rating	IP 66
Mechanical life (relay contacts)	10 x 10^6 switching cycles
Ambient operating temperature from ... to	–25 °C ... +80 °C
Approach speed from ... to	0.1 m/min ... 15 m/min
Actuation force	Min. 6 N
Actuation frequency	Max. 1.67 Hz
Switching principle	Slow-action switch
Number of positive action normally closed contacts	2
Number of normally open contacts	1
Usage category in compliance with IEC 947-5-1	AC-15/DC-13
Rated operating current (voltage)	3 A (230 V AC), 0.27 A (230 V DC)
Rated insulation voltage U_i	250 V
Rated impulse withstand voltage U_{imp}	2500 V AC
Minimum switching voltage	5 V DC
Minimum switching current (switching voltage)	5 mA (5 V DC)
Connection type	Cable gland
Maximum connection wire cross-section	2.5 mm²
Short-circuit protection	F15
Positive break travel	3.5 mm
Weight	0.11 kg

Dimensional drawings



Dimensions in mm

Actuator travel diagram



Accessories

Cable gland

Type	Part number
Cable gland M20	5309164

- Housing material glass-fibre reinforced thermoplastic
- Cable gland M20
- Design according to EN 50047
- Enclosure rating IP 66

J

Overview of technical specifications

Number of positive action normally closed contacts	2
Number of normally open contacts	1
Switching principle	Slow-action switch
Type of actuator	Turning lever
Housing material	Plastic
Enclosure rating	IP 66

Product description

- Turning lever design
- Roller made of plastic
- 3-pole contact element

In-system added value

Safety relays

Safety relays allow simple integration of safety components into machinery or plant. → see N-0

Safety controllers

Safety controllers are utilised when the safety function (e.g. switching off a dangerous movement) is to be accomplished in a flexible way by logical combination of safety relevant signals. Operation of machinery becomes more flexible as well as generation of machine variants becomes more easy. → see O-0

Safety network solutions

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SICK offers solutions for the open automation standards: AS-i Safety at Work, DeviceNet Safety and PROFIsafe. → see P-0

Ordering information

Number of positive action normally closed contacts	Number of normally open contacts	Switching principle	Type	Part number
2	1	Slow-action switch	i10-RA213	6025085

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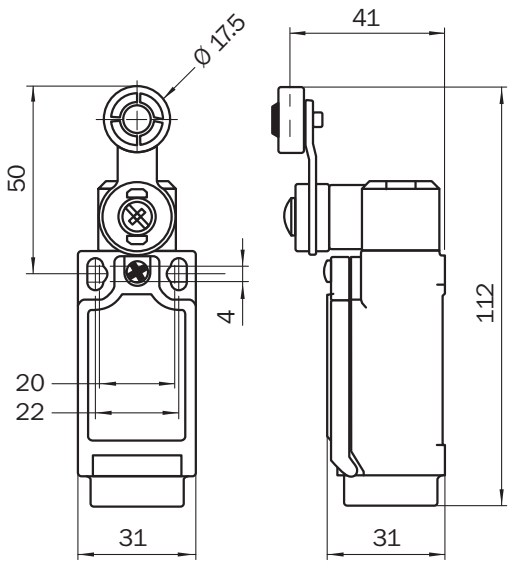
Detailed technical specifications

Housing material	Glass-fibre reinforced thermoplastic
Enclosure rating	IP 66
Mechanical life (relay contacts)	10 x 10^6 switching cycles
Ambient operating temperature from ... to	–25 °C ... +80 °C
Minimum actuation torque	0.14 Nm
Approach speed from ... to	0.1 m/min ... 15 m/min
Actuation frequency	Max. 1.67 Hz
Switching principle	Slow-action switch
Number of positive action normally closed contacts	2
Number of normally open contacts	1
Usage category in compliance with IEC 947-5-1	AC-15/DC-13
Rated operating current (voltage)	3 A (230 V AC), 0.27 A (230 V DC)
Rated insulation voltage U_i	250 V
Rated impulse withstand voltage U_{imp}	2500 V AC
Minimum switching voltage	5 V DC
Minimum switching current (switching voltage)	5 mA (5 V DC)
Connection type	Cable gland
Maximum connection wire cross-section	2.5 mm²
Short-circuit protection	F15
Positive break angle	47°
Weight	0.11 kg

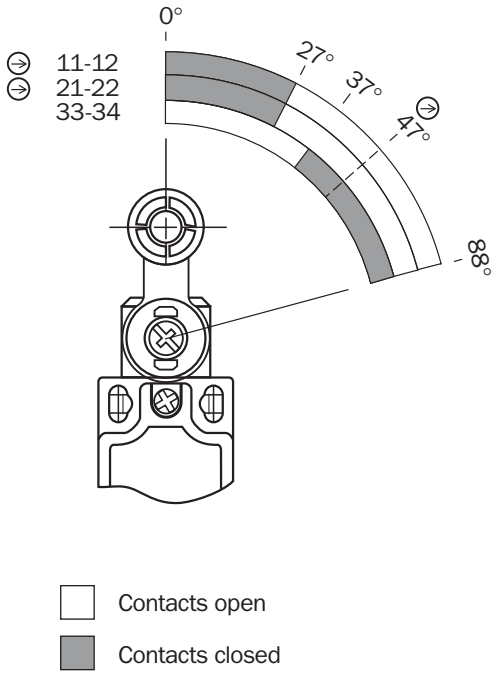
J

Dimensional drawings



Dimensions in mm

Actuator travel diagram



Contacts open

Contacts closed

Accessories

Cable gland

Type	Part number
Cable gland M20	5309164

J

Overview of technical specifications

Number of positive action normally closed contacts	3
Number of normally open contacts	1
Switching principle	Slow-action switch
Type of actuator	Roller plunger
Housing material	Metal
Enclosure rating	IP 67

Product description

- Roller plunger design
- 4-pole contact element

In-system added value

Safety relays

Safety relays allow simple integration of safety components into machinery or plant.
→ see N-0

Safety controllers

Safety controllers are utilised when the safety function (e.g. switching off a dangerous movement) is to be accomplished in a flexible way by logical combination of safety relevant signals. Operation of machinery becomes more flexible as well as generation of machine variants becomes more easy.
→ see 0-0

Safety network solutions

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SICK offers solutions for the open automation standards: AS-i Safety at Work, DeviceNet Safety and PROFIsafe.
→ see P-0

Ordering information

Number of positive action normally closed contacts	Number of normally open contacts	Switching principle	Type	Part number
3	1	Slow-action switch	i100-P313	6022589

- Housing material die-cast light alloy
- Roller plunger with stainless steel roller
- Cable gland M20
- Design according to EN 50041
- Enclosure rating IP 67

J

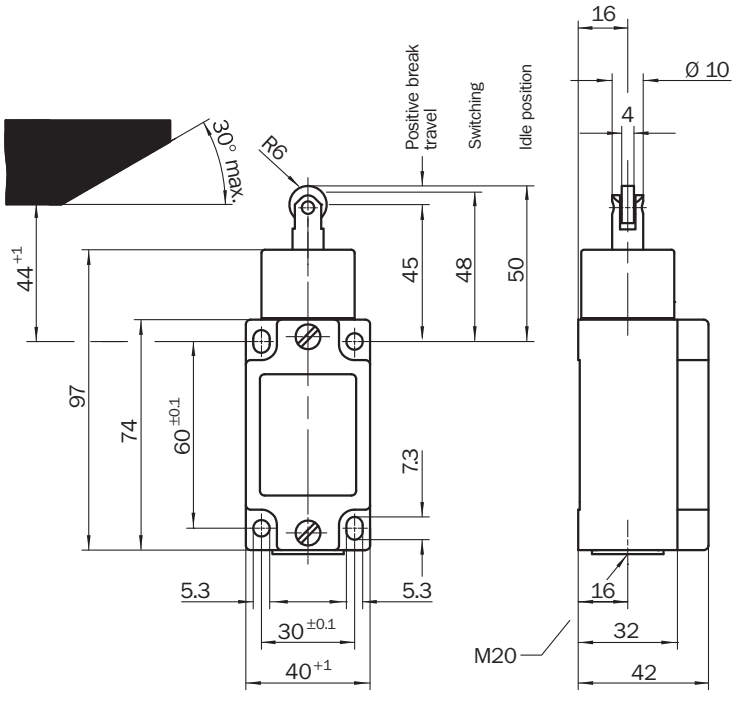
Further information	Page
→ Technical specifications	J-8
→ Dimensional drawings	J-8
→ Actuator travel diagram	J-9
→ Accessories	J-9
→ Services	A-2

Detailed technical specifications

Housing material	Die-cast light alloy
Surface treatment	Anodized
Enclosure rating	IP 67
Mechanical life (relay contacts)	1 x 10^6 switching cycles
Ambient operating temperature from ... to	–25 °C ... +80 °C
Approach speed from ... to	0.1 m/min ... 20 m/min
Actuation force	Min. 30 N
Actuation frequency	Max. 1.94 Hz
Switching principle	Slow-action switch
Number of positive action normally closed contacts	3
Number of normally open contacts	1
Usage category in compliance with IEC 947-5-1	AC-15/DC-13
Rated operating current (voltage)	4 A (230 V AC), 4 A (24 V DC)
Rated insulation voltage U_i	250 V
Rated impulse withstand voltage U_{imp}	2500 V AC
Minimum switching voltage	12 V DC
Minimum switching current (switching voltage)	1 mA (24 V DC)
Contact material	Silver alloy, gold flashed
Connection type	Cable gland
Maximum connection wire cross-section	1.5 mm²
Short-circuit protection	4A gG
Positive break travel	5 mm
Weight	0.33 kg

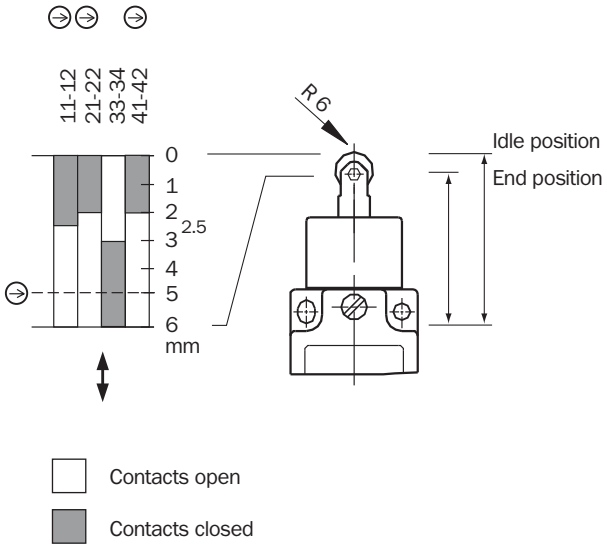
J

Dimensional drawings



Dimensions in mm

Actuator travel diagram



Accessories

Cable gland

Type	Part number
Cable gland M20	5309164

J

- Housing material die-cast light alloy
- Adjustable switching direction (left, right, both sides)
- Turning lever with stainless steel roller
- Cable gland M20
- Design according to EN 50041
- Enclosure rating IP 67

J

Overview of technical specifications

Number of positive action normally closed contacts	3
Number of normally open contacts	1
Switching principle	Slow-action switch
Type of actuator	Turning lever
Housing material	Metal
Enclosure rating	IP 67

Product description

- Turning lever design
- 4-pole contact element
- High flexibility through adjustable switching direction

In-system added value

Safety relays

Safety relays allow simple integration of safety components into machinery or plant. → see N-0

Safety controllers

Safety controllers are utilised when the safety function (e.g. switching off a dangerous movement) is to be accomplished in a flexible way by logical combination of safety relevant signals. Operation of machinery becomes more flexible as well as generation of machine variants becomes more easy. → see O-0

Safety network solutions

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Ordering information

Number of positive action normally closed contacts	Number of normally open contacts	Switching principle	Type	Part number
3	1	Slow-action switch	i100-R313	6022588

Further information	Page
→ Actuator travel diagram	J-12
→ Accessories	J-12
→ Services	A-2

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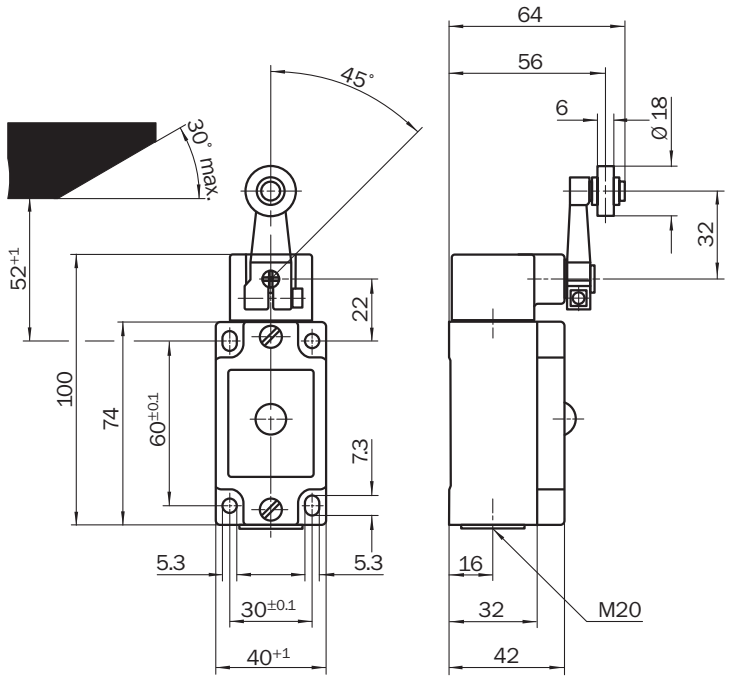
Detailed technical specifications

Housing material	Die-cast light alloy
Surface treatment	Anodised
Enclosure rating	IP 67
Mechanical life (relay contacts)	1 x 10^6 switching cycles
Ambient operating temperature from ... to	–25 °C ... +80 °C
Approach speed from ... to	0.1 m/min ... 60 m/min
Actuation force	Min. 15 N
Actuation frequency	Max. 2.78 Hz
Switching principle	Slow-action switch
Number of positive action normally closed contacts	3
Number of normally open contacts	1
Usage category in compliance with IEC 947-5-1	AC-15/DC-13
Rated operating current (voltage)	4 A (230 V AC), 4 A (24 V DC)
Rated insulation voltage U_i	250 V
Rated impulse withstand voltage U_{imp}	2500 V AC
Minimum switching voltage	12 V DC
Minimum switching current (switching voltage)	1 mA (24 V DC)
Contact material	Silver alloy, gold flashed
Connection type	Cable gland
Maximum connection wire cross-section	1.5 mm²
Short-circuit protection	4A gG
Positive break angle	45°
Weight	0.37 kg

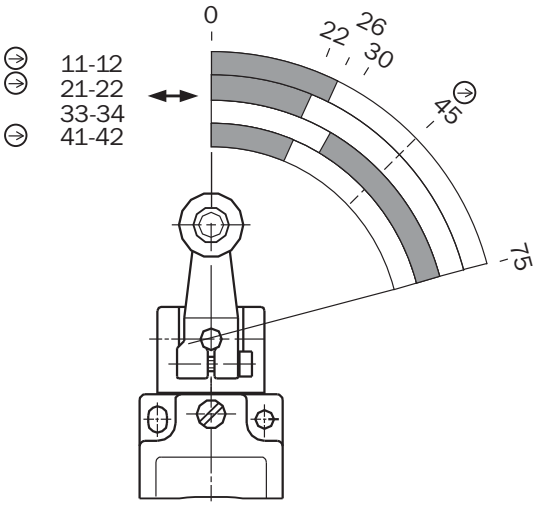
Dimensional drawings



Dimensions in mm

J

Actuator travel diagram



Contacts open

Contacts closed

Accessories

Cable gland

Type	Part number
Cable gland M20	5309164

J

Overview of technical specifications

Number of positive action normally closed contacts (depending on type)	1 / 2 / 3
Number of normally open contacts (depending on type)	1 / 2
Switching principle (depending on type)	Slow-action switch / snap-action switch
Type of actuator	Roller plunger
Housing material	Metal
Enclosure rating	IP 66

Product description

- Roller plunger design
- 4-pole contact element

In-system added value

Safety relays

Safety relays allow simple integration of safety components into machinery or plant.
→ see N-0

Safety controllers

Safety controllers are utilised when the safety function (e.g. switching off a dangerous movement) is to be accomplished in a flexible way by logical combination of safety relevant signals. Operation of machinery becomes more flexible as well as generation of machine variants becomes more easy.
→ see O-0

Safety network solutions

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SICK offers solutions for the open automation standards: AS-i Safety at Work, DeviceNet Safety and PROFIsafe.
→ see P-0

Ordering information

Number of positive action normally closed contacts	Number of normally open contacts	Switching principle	Type	Part number
1	1	Snap-action switch	i110-PA123	6025106
2	2	Slow-action switch	i110-PA223	6025105
3	1	Slow-action switch	i110-PA313	6025104

- Housing material die-cast zinc
- Roller plunger with stainless steel roller
- Slow- or snap-action switch
- Cable gland M20
- Design according to EN 50041
- Enclosure rating IP 66

J

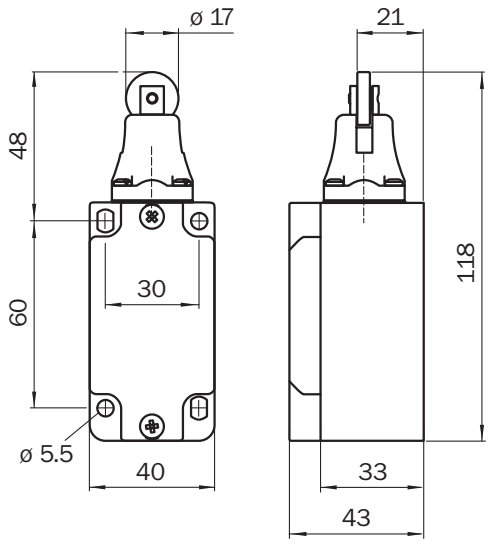
Further information	Page
→ Technical specifications	J-14
→ Dimensional drawings	J-14
→ Actuator travel diagrams	J-15
→ Accessories	J-15
→ Services	A-2

Detailed technical specifications

Type	i110-PA123	i110-PA223	i110-PA313
Housing material	Zinc die-cast		
Surface treatment	Varnished		
Enclosure rating	IP 66		
Mechanical life (relay contacts)	10 x 10^6 switching cycles		
Ambient operating temperature from ... to	–25 °C ... +80 °C		
Approach speed from ... to	0.1 m/min ... 15 m/min		
Actuation force	Min. 13 N	Min. 11 N	
Actuation frequency	Max. 1.67 Hz		
Switching principle	Snap-action switch	Slow-action switch	
Number of positive action normally closed contacts	1	2	3
Number of normally open contacts	1	2	1
Usage category in compliance with IEC 947-5-1	AC-15/DC-13		
Rated operating current (voltage)	3 A (230 V AC), 0.27 A (230 V DC)		
Rated insulation voltage U_i	250 V		
Rated impulse withstand voltage U_{imp}	2500 V AC		
Minimum switching voltage	5 V DC		
Minimum switching current (switching voltage)	5 mA (5 V DC)		
Connection type	Cable gland		
Maximum connection wire cross-section	2.5 mm²		
Short-circuit protection	F15		
Positive break travel	4.5 mm	4 mm	
Weight	0.43 kg		

J

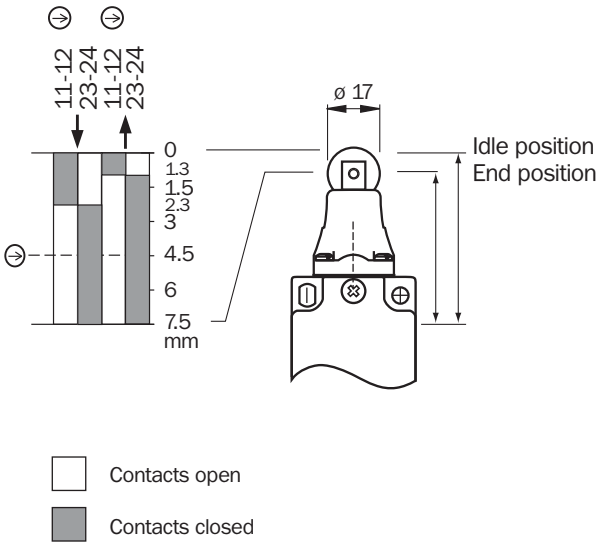
Dimensional drawings



Dimensions in mm

Actuator travel diagrams

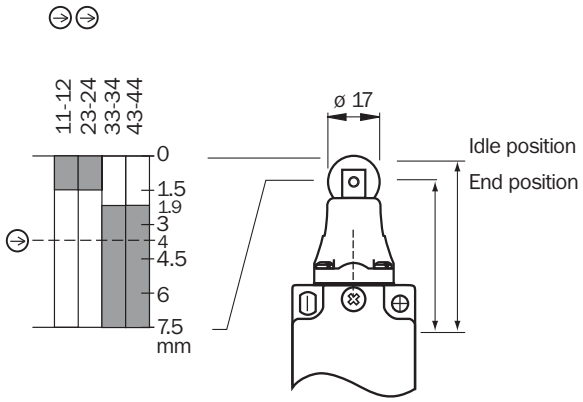
i110-PA123



Contacts open

Contacts closed

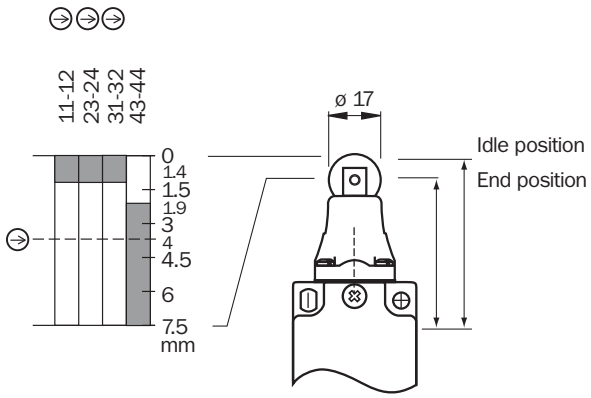
i110-PA223



Contacts open

Contacts closed

i110-PA313



Contacts open

Contacts closed

Accessories

Cable gland

Type	Part number
Cable gland M20	5309164

J

- Housing material die-cast zinc
- Turning lever with plastic roller
- Slow- or snap-action switch
- Cable gland M20
- Design according to EN 50041
- Enclosure rating IP 66

J

Overview of technical specifications

Number of positive action normally closed contacts (depending on type)	1 / 2 / 3
Number of normally open contacts (depending on type)	1 / 2
Switching principle (depending on type)	Slow-action switch / snap-action switch
Type of actuator	Turning lever
Housing material	Metal
Enclosure rating	IP 66

Product description

- Turning lever design
- 4-pole contact element

In-system added value

Safety relays

Safety relays allow simple integration of safety components into machinery or plant.
→ see N-0

Safety controllers

Safety controllers are utilised when the safety function (e.g. switching off a dangerous movement) is to be accomplished in a flexible way by logical combination of safety relevant signals. Operation of machinery becomes more flexible as well as generation of machine variants becomes more easy.
→ see O-0

Safety network solutions

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SICK offers solutions for the open automation standards: AS-i Safety at Work, DeviceNet Safety and PROFIsafe.
→ see P-0

Ordering information

Number of positive action normally closed contacts	Number of normally open contacts	Switching principle	Type	Part number
1	1	Snap-action switch	i110-RA123	6025109
2	2	Slow-action switch	i110-RA223	6025108
3	1	Slow-action switch	i110-RA313	6025107

Further information	Page
→ Actuator travel diagrams	J-18
→ Accessories	J-19
→ Services	A-2

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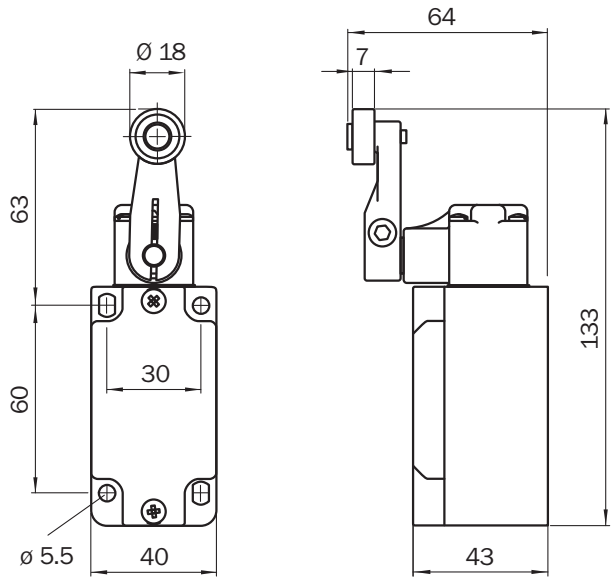
Detailed technical specifications

Type	i110-RA123	i110-RA223	i110-RA313
Housing material	Zinc die-cast		
Surface treatment	Varnished		
Enclosure rating	IP 66		
Mechanical life (relay contacts)	10 x 10^6 switching cycles		
Ambient operating temperature from ... to	–25 °C ... +80 °C		
Minimum actuation torque	0.34 Nm		
Approach speed from ... to	0.1 m/min ... 15 m/min		
Actuation frequency	Max. 1.67 Hz		
Switching principle	Snap-action switch	Slow-action switch	
Number of positive action normally closed contacts	1	2	3
Number of normally open contacts	1	2	1
Usage category in compliance with IEC 947-5-1	AC-15/DC-13		
Rated operating current (voltage)	3 A (230 V AC), 0.27 A (230 V DC)		
Rated insulation voltage U_i	250 V		
Rated impulse withstand voltage U_{imp}	2500 V AC		
Minimum switching voltage	5 V DC		
Minimum switching current (switching voltage)	5 mA (5 V DC)		
Connection type	Cable gland		
Maximum connection wire cross-section	2.5 mm²		
Short-circuit protection	F15		
Positive break angle	54°	44°	
Weight	0.52 kg		

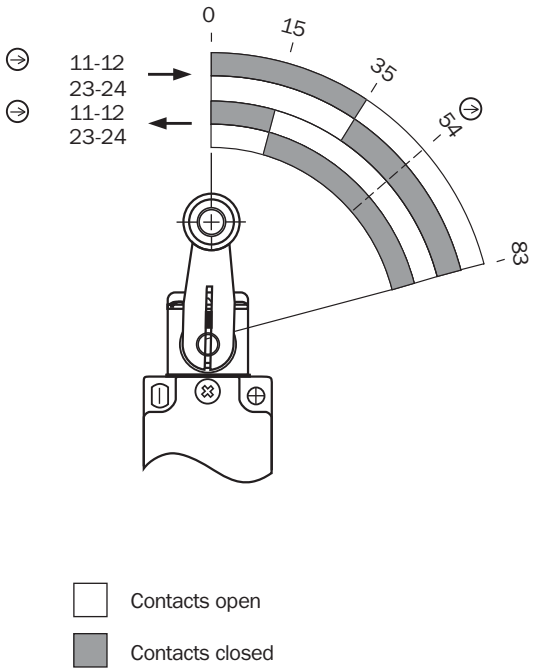
Dimensional drawings



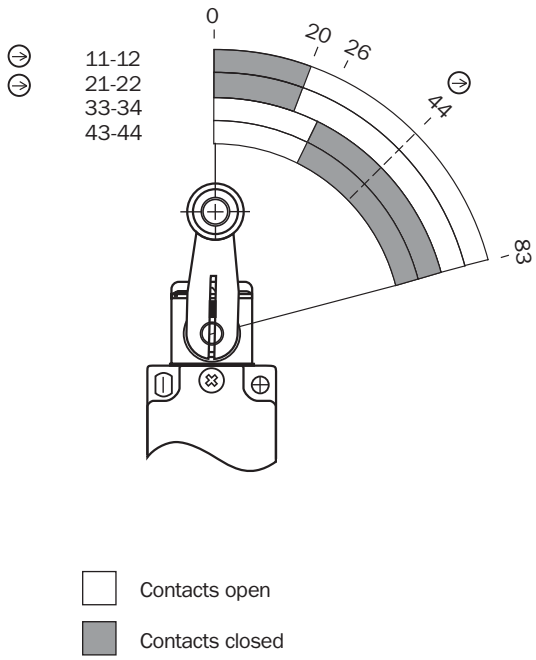
Dimensions in mm

Actuator travel diagrams

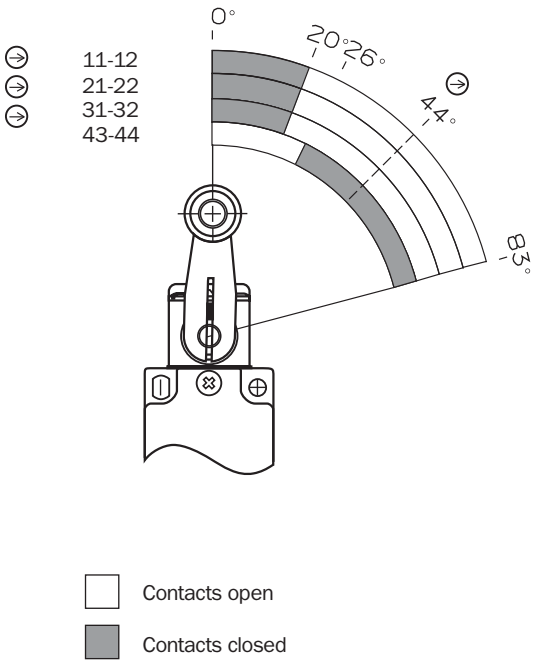
i110-RA123



i110-RA223



i110-RA313



J

Accessories

Cable gland

Type	Part number
Cable gland M20	5309164

J

Explanations of features

Positive action normally closed contacts/normally open contacts

Safety switches have contact elements in normally closed contact/normally open contact combinations. The normally closed contacts of a safety switch are of the “positive action” type, i.e. the forced movement of the normally closed contact ensures that the contacts are separated every time. Normally open contacts primarily serve as signalling contacts and must not be used for the safety circuit.

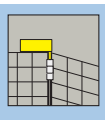
Housing material

The housing materials used can be separated into two large groups - “metals” and “plastics”. The metal housing materials are available as both anodised die-cast light metal and painted die-cast zinc versions. Glass-fibre reinforced thermoplastics are exclusively used for the plastic housings.

Shaft version

The safety hinge switches are designed to be directly fitted to pivotal protective devices. For this, either the solid shaft is used to replace the existing hinge pin, or the solid shaft or hollow shaft is connected directly to the existing hinge pin.

Safety hinge switches

Safety application	Number of positive action normally closed contacts/ normally open contacts [1]	Housing material [1]	Type of shaft [1]	Length of the shaft	Enclosure rating	Product	Page
	1 / 1 2 / 1	Plastic	Solid	55 mm 85 mm	IP 67	i10H	K-2
	2 / 1	Metal	Hollow shaft	36.5 mm	IP 66	i110H	K-5

[1] Explanation see page K-0

K

- Housing material glass-fibre reinforced thermoplastic
- Solid stainless steel shaft
- Cable gland M16
- Adjustable switching point
- Miniature housing and design according to EN 50047
- Enclosure rating IP 67

K

Overview of technical specifications

Number of positive action normally closed contacts (depending on type)	1 / 2
Number of normally open contacts	1
Type of shaft	Solid
Length of the shaft (depending on type)	55 mm / 85 mm
Housing material	Plastic
Enclosure rating	IP 67

Product description

- Safety hinge switches for direct installation to pivotal protective devices
- Solid shaft design
- 2- or 3-pole contact element

In-system added value

Safety relays

Safety relays allow simple integration of safety components into machinery or plant. → see N-0

Safety controllers

Safety controllers are utilised when the safety function (e.g. switching off a dangerous movement) is to be accomplished in a flexible way by logical combination of safety relevant signals. Operation of machinery becomes more flexible as well as generation of machine variants becomes more easy. → see O-0

Safety network solutions

Safety network solutions are utilised in plants and machinery of larger scale. This is saving cabling and enables modular design of the safety automation. Potential errors or faults can be easily localised and quickly trouble shooted thanks to comprehensive diagnostics functions. That significantly reduces machine down times.
SICK offers solutions for the open automation standards: AS-i Safety at Work, DeviceNet Safety and PROFIsafe. → see P-0

Ordering information

Number of positive action normally closed contacts	Number of normally open contacts	Type	Part number
1	1	i10-HA113	6025050
2	1	i10-HB213	6025053

Further information	Page
→ Switching elements	K-4
→ Actuator travel diagrams	K-4
→ Mounting	K-4
→ Accessories	K-4
→ Services	A-2

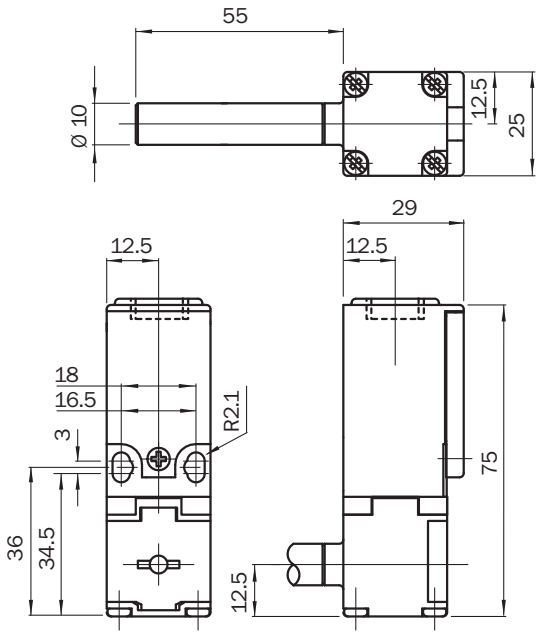
 8010889/2006-10-03

Detailed technical specifications

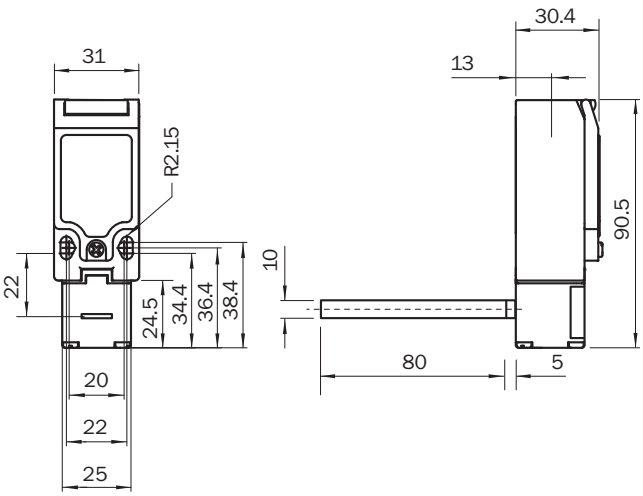
Type	i10-HA113	i10-HB213
Housing material	Glass-fibre reinforced polyester	
Enclosure rating	IP 67	
Mechanical life (relay contacts)	1 x 10^6 switching cycles	
Ambient operating temperature from ... to	–20 °C ... +80 °C	
Minimum actuation torque	0.08 Nm	
Actuation frequency	Max. 1 Hz	
Switching principle	Slow-action switch	
Switching angle	Adjustable 3° ... 11°	Adjustable 5° ... 14°
Number of positive action normally closed contacts	1	2
Number of normally open contacts	1	
Usage category in compliance with IEC 947-5-1	AC-15/DC-13	
Rated operating current (voltage)	2 A (250 V AC), 2 A (24 V DC)	
Rated insulation voltage U_i	250 V	
Rated impulse withstand voltage U_{imp}	2500 V AC	
Minimum switching voltage	5 V DC	
Minimum switching current (switching voltage)	5 mA (5 V DC)	
Connection type	Cable gland	
Weight	0.12 kg	0.17 kg

Dimensional drawings

i10-HA113



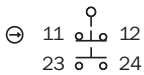
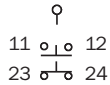
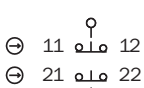
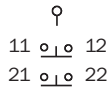
i10-HB213



Dimensions in mm

K

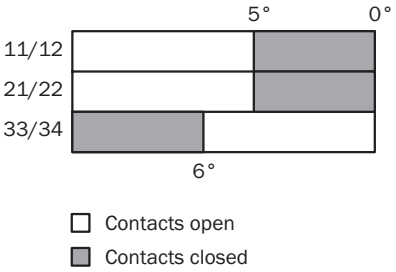
Switching elements

Not actuated	Actuated	
		11, 1 positive action N/C contact + 1 N/O contact
		21, 2 positive action N/C contacts + 1 N/O contact

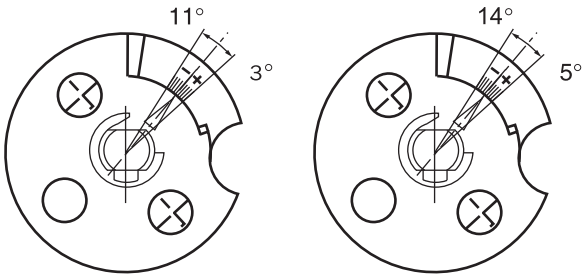
Actuator travel diagrams

i10-HA113

i10-HB213



Mounting



Adjusting the switching angle

The switching angle can be set in the range of 3° ... 11° (i10HA) or 5° ... 14° (i10HB).
After functional testing safety hinge switches and switch cams must be pinned together to ensure integral intermeshed connection.

Accessories

Cable gland

Type	Part number
Cable gland M16	5309163

Overview of technical specifications

Number of positive action normally closed contacts	2
Number of normally open contacts	1
Type of shaft	Hollow shaft
Length of the shaft	36.5 mm
Housing material	Metal
Enclosure rating	IP 66

Product description

- Safety hinge switch for direct installation to pivotal protective devices
- Hollow shaft design
- 3-pole contact element

In-system added value

Safety relays

Safety relays allow simple integration of safety components into machinery or plant. → see N-0

Safety controllers

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Safety network solutions

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SICK offers solutions for the open automation standards: AS-i Safety at Work, DeviceNet Safety and PROFIsafe. → see P-0

Ordering information

Number of positive action normally closed contacts	Number of normally open contacts	Type	Part number
2	1	i110-HA213	6025072

- Housing material die-cast zinc
- Hollow shaft stainless steel
- Cable gland M20
- Adjustable switching point
- Enclosure rating IP 66

K

Further information	Page
→ Technical specifications	K-6
→ Dimensional drawings	K-6
→ Switching elements	K-7
→ Actuator travel diagram	K-7
→ Mounting	K-7
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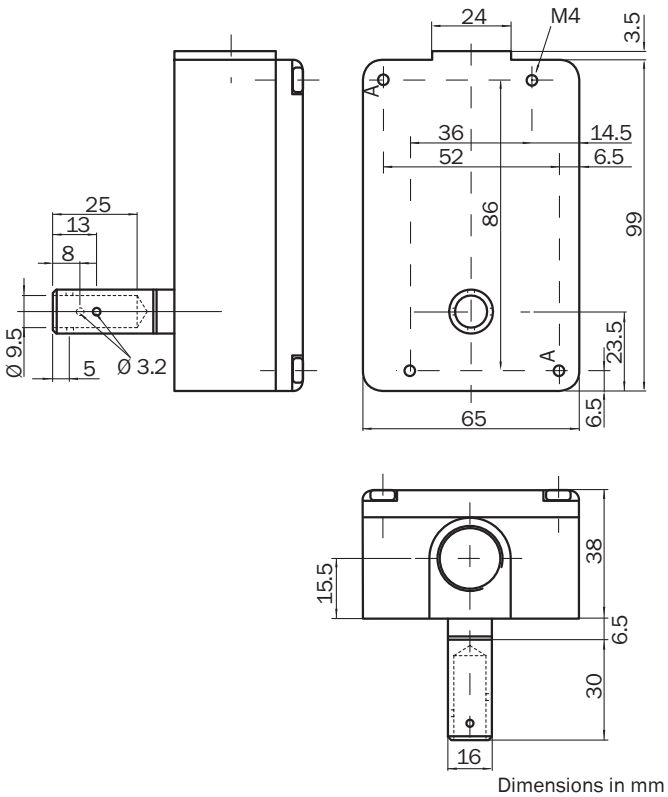
Detailed technical specifications

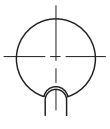
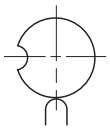
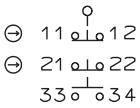
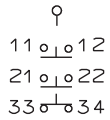
Housing material	Zinc die-cast
Surface treatment	Varnished
Enclosure rating	IP 66
Mechanical life (relay contacts)	1 x 10^6 switching cycles
Ambient operating temperature from ... to	–25 °C ... +80 °C
Minimum actuation torque	0.12 Nm
Actuation frequency	Max. 1 Hz
Switching principle	Slow-action switch
Switching angle	Adjustable 5° ... 11°
Number of positive action normally closed contacts	2
Number of normally open contacts	1
Usage category in compliance with IEC 947-5-1	AC-15/DC-13
Rated operating current (voltage)	2 A (250 V AC), 5 A (100 V AC), 2 A (24 V DC)
Rated insulation voltage U_i	250 V
Rated impulse withstand voltage U_{imp}	2500 V AC
Minimum switching voltage	5 V DC
Minimum switching current (switching voltage)	5 mA (5 V DC)
Connection type	Cable gland
Maximum connection cable cross-section	1.5 mm²
Short-circuit protection	2A gG
Weight	0.45 kg

Dimensional drawings

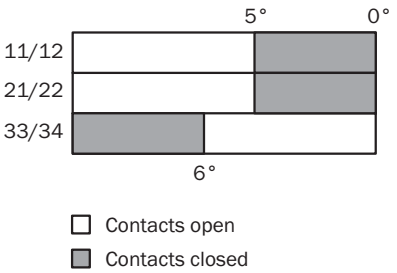


Dimensions in mm

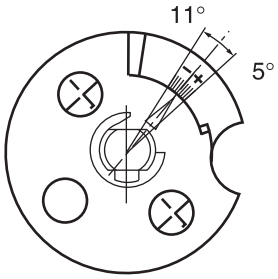
Switching elements

Not actuated	Actuated	
		
		21, 2 positive action N/C contacts + 1 N/O contact

Actuator travel diagram



Mounting



Adjusting the switching angle

The switching angle can be set within the range of 5° ... 11°. After functional testing safety hinge switches and switch cams must be pinned together to ensure integral intermeshed connection.

Accessories

Cable gland

Type	Part number
Cable gland M20	5309164

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