

Technical data sheet

Safety hinge switch

Part no.: 50135657

S420-9CB5-LW

Contents

- Technical data
- Dimensioned drawings
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- Circuit diagrams
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Figure can vary



Technical data

Basic data

Series	S400
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Functions

Functions	Integration in control circuits up to category 4 in accordance with EN ISO 13849-1 Locking device without guard interlocking according to EN ISO 14119 Mechanical hinge with integrated safety switch
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Characteristic parameters

Mission time T_M	20 years, EN ISO 13849-1
$B10_d$	5,000,000 number of cycles

Electrical data

Usage category at DC 13	Ue 24 V, Ie 2 A, EN 60947-5-1
Usage category at AC 15	Ue 24 V, Ie 2 A, EN 60947-5-1
Contact allocation	2NC + 2NO
Short circuit protected	500 V, 2 A, type gG, IEC 60269-1

Performance data

Rated insulation voltage	30 V AC, 36 V DC
Conventional thermal current, max.	2 A

Connection

Number of connections	1 Piece(s)
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Connection 1

Function	Contact connection
Type of connection	Cable
Cable length	5,000 mm
Sheathing material	PVC
Number of conductors	8 -wire

Mechanical data

Design	Cubic
Dimension (W x H x L)	76 mm x 31.5 mm x 126 mm
Housing material	Stainless steel
Stainless steel housing	AISI 316L
Electrical contact material	Silver alloy
Net weight	1,025 g
Housing color	Silver
Type of fastening	Mounting plate Mounting thread
Side of cable entry	Wall side
Switch type	Interlock device without guard interlocking, ISO 14119
Switching principle	Slow-action contact
Axial stress	2,000 N·m
Radial stress	2,000 N·m
Torsional stress	50 N·m
Mechanical life time	1,000,000 actuation cycles, IEC 6047-5-1
Actuation frequency, max.	1,200 per hour, IEC 6047-5-1
Internal actuator	Safety switch in hinge, encapsulated
Actuating path (angle) with forced separation	4 N
Actuation angle, max.	180 °
Actuating path (angle) with forced separation	From set switching point

Environmental data

Ambient temperature, operation	-25 ... 80 °C
Degree of contamination	3, EN 60947-1

Certifications

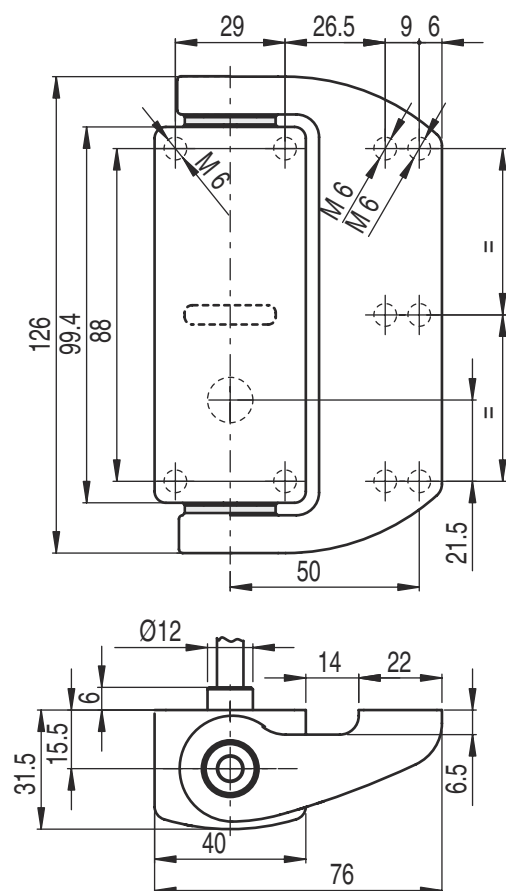
Degree of protection	IP 67 IP 69K
Certifications	c UL US TÜV Süd

Classification

Customs tariff number	85369095
eCl@ss 5.1.4	27272690
eCl@ss 8.0	27270609
eCl@ss 9.0	27270609
eCl@ss 10.0	27270609
eCl@ss 11.0	27270609
ETIM 5.0	EC002591
ETIM 6.0	EC002591
ETIM 7.0	EC002591

Dimensioned drawings

All dimensions in millimeters



Electrical connection

Connection 1

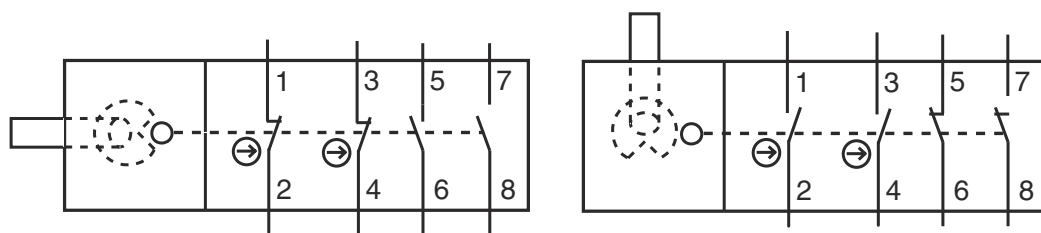
Function	Contact connection
Type of connection	Cable
Cable length	5,000 mm
Sheathing material	PVC
Cable color	Black
Number of conductors	8 -wire
Wire cross section	0.5 mm ²

Conductor color

Conductor assignment

Black	NC(1)
Black / White	NC(1)
Red	NC(2)
Red / White	NC(2)
Brown	NO(1)
Blue	NO(1)
Violet	NO(2)
Violet / White	NO(2)

Circuit diagrams



- | | |
|---------------|----------------|
| 1 Black | 5 Brown |
| 2 Black-white | 6 Blue |
| 3 Red | 7 Violet |
| 4 Red-white | 8 Violet-white |

Notes



Observe intended use!



- ⚡ The product may only be put into operation by competent persons.
- ⚡ Only use the product in accordance with its intended use.