Technical data sheet
Safety hinge switch
Part no.: 63000409
S410-M1M12-T

For Illustration purposes only

Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Circuit diagrams
- Notes

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We reserve the right to make technical changes

Technical data

Basic data

Series	S400

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

Characteristic parameters

Mission time T_M	20 years, EN ISO 13849-1
$B10_d$	2,000,000 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 + 1NO
Contact opening	Force-fit
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)

Connection 1

Function	Contact connection
Type of connection	Connector
Thread size	M12
Material	Metal
No. of pins	8 -pin

Mechanical data

Design	Cubic
Dimension (W x H x L)	79 mm x 22.5 mm x 100.6 mm
Housing material	Metal
Metal housing	ZAMAK
Electrical contact material	Silver alloy
Net weight	418 g
Housing color	Silver
Type of fastening	Mounting thread
Side of cable entry	From above (with left installation)
Switch type	Interlock device without guard interlocking, ISO 14119
Switching principle	Snap-action contact
Axial stress	750 N·m
Radial stress	500 N·m
Torsional stress	12 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

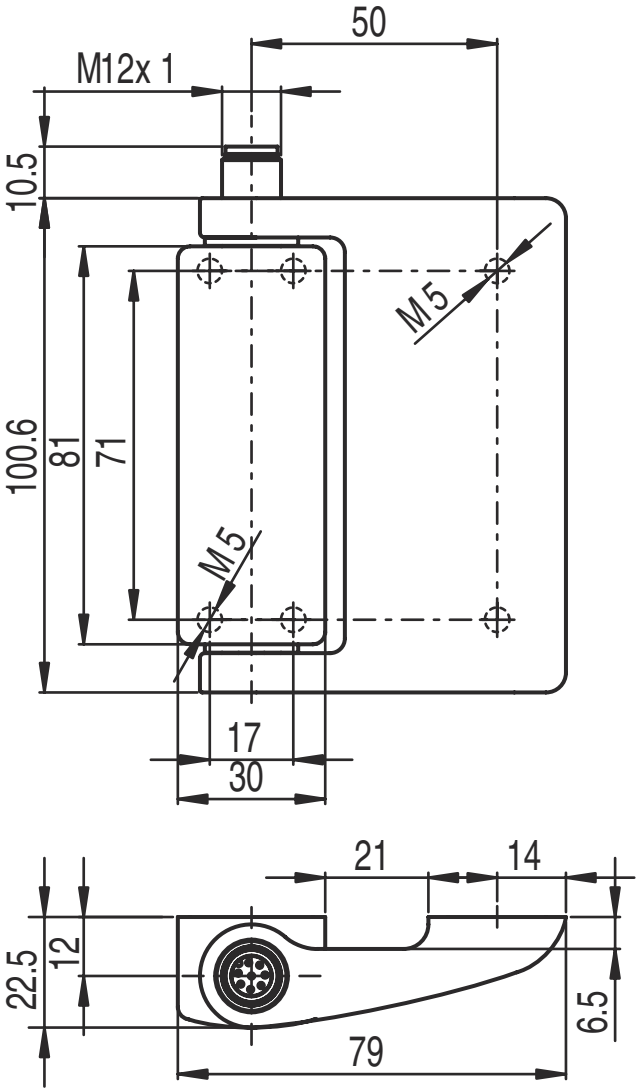
Degree of protection	IP 67
	IP 69K
Approvals	c UL US
	IMQ

Classification

Customs tariff number	85369095
ECLASS 5.1.4	27272690
ECLASS 8.0	27270609
ECLASS 9.0	27270609
ECLASS 10.0	27270609
ECLASS 11.0	27270609
ECLASS 12.0	27272608
ECLASS 13.0	27272608
ECLASS 14.0	27272608
ECLASS 15.0	27272608
ETIM 5.0	EC002591
ETIM 6.0	EC002591
ETIM 7.0	EC002591
ETIM 8.0	EC002591
ETIM 9.0	EC002591
ETIM 10.0	EC002591

Dimensioned drawings

All dimensions in millimeters



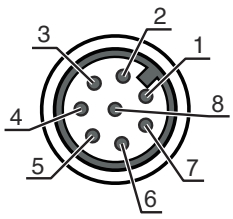
Electrical connection

Connection 1

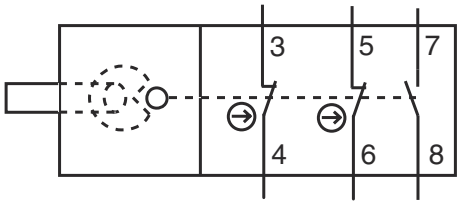
Function	Contact connection
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

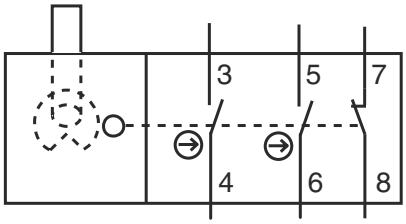
Electrical connection

Pin	Pin assignment
1	GND
2	n.c.
3	NC(1)
4	NC(1)
5	NC(2)
6	NC(2)
7	NO(1)
8	NO(1)



Circuit diagrams





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.