Technical data sheet
Safety hinge switch
Part no.: 63000405
S410-M1M12-B

Figure can vary

Contents

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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	412 g
Housing color	Silver
Type of fastening	Mounting thread
Side of cable entry	From below (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

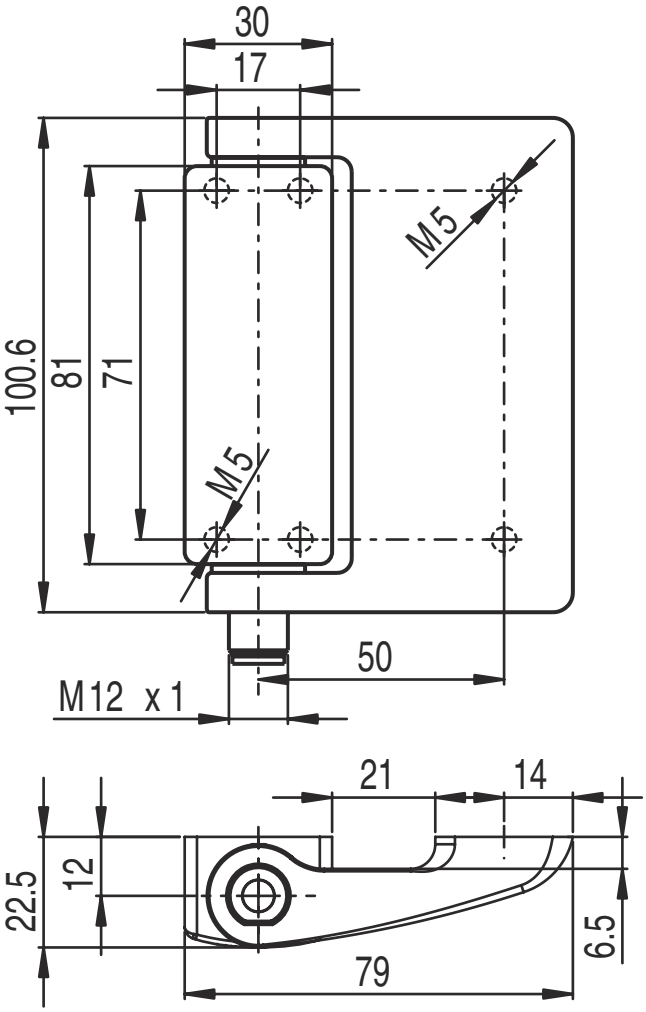
Degree of protection	IP 67
	IP 69K
Certifications	c UL US
	IMQ

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



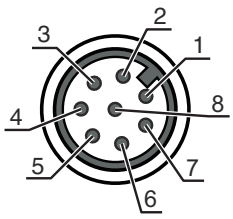
Electrical connection

Connection 1

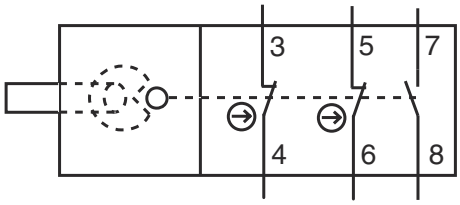
Function	Contact connection
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

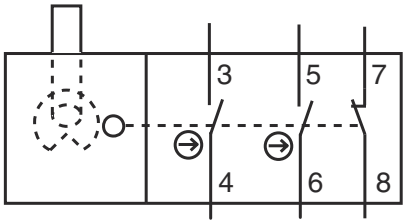
Electrical connection

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.