

Technical data sheet

Safety switch

Part no.: 63000101

S20-P1C1-M20-FH

Contents

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



Figure can vary



Technical data

Basic data

Series	S20
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Functions

Functions	Type 2 interlock device with mechanically actuated position switch with low-coded actuator acc. to DIN EN ISO 14119
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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 / Ie: 24 V / 6 A, 125 V / 1.1 A, 250 V / 0.4 A, EN 60947-5-1
Usage category at AC 15	Ue / Ie: 250 V / 6 A, 400 V / 4 A, 500 V / 1 A, EN 60947-5-1
Contact allocation	1NC + 1NO
Contact opening	Force-fit
Short circuit protected	500 V, 10 A, type aM, IEC 60269-1
Contact protection	Protective insulation O

Performance data

Rated insulation voltage	500 V AC, 600 V DC
Conventional thermal current, max.	10 A

Connection

Number of connections	1 Piece(s)
Number of cable entries	1 Piece(s)

Connection 1

Function	Contact connection
Type of connection	Terminal
Type of terminal	Screw terminal
No. of pins	4 -pin

Cable properties

Connection cross sections	1 x 0.5 mm ² to 2 x 2.5 mm ² , wire
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Mechanical data

Design	Cubic
Dimension (W x H x L)	30.8 mm x 30.8 mm x 93 mm
Housing material	Plastic, Glass fiber reinforced (PPS), self-extinguishing
Electrical contact material	Silver alloy
Net weight	99 g
Housing color	Black Red
Type of fastening	Through-hole mounting
Type of cable entry	M20 x 1.5
Switch type	Interlock device without guard interlocking, ISO 14119
Switching principle	Slow-action contact
Approach actuation directions	1 x top 4 x side (90°)
Approach speed	0 ... 0.5 m/s
Mechanical life time	1,000,000 actuation cycles, IEC 6047-5-1
Actuation frequency, max.	3,600 per hour, IEC 6047-5-1
External actuator	AC-ANxx series: straight, angled, resilient, alignable
Extraction force, unlocked actuator	10 N
Actuating path with forced separation	7.2 mm
Recoil tolerance	4.5 mm

Environmental data

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

Certifications

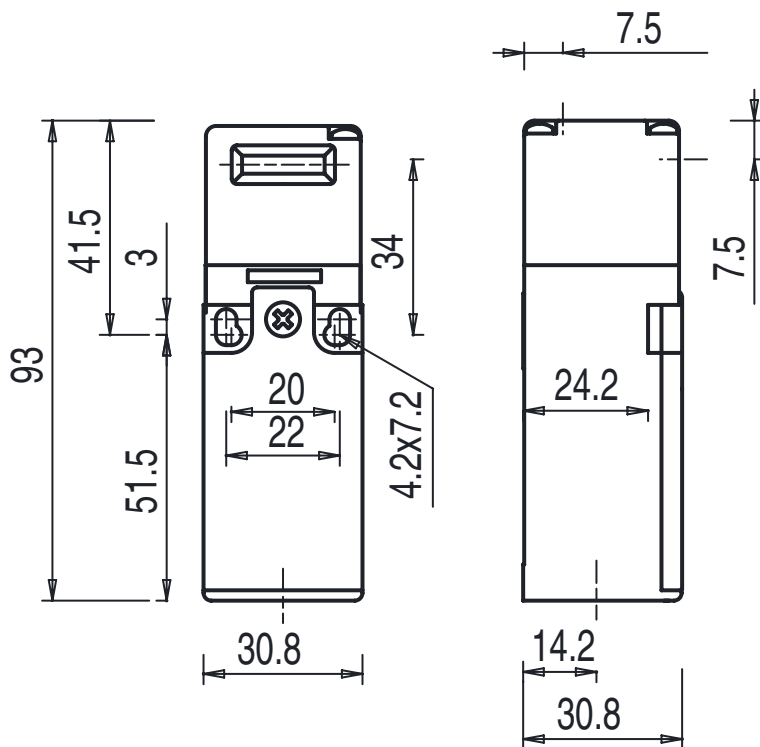
Degree of protection	IP 67
Certifications	c UL US IMQ

Classification

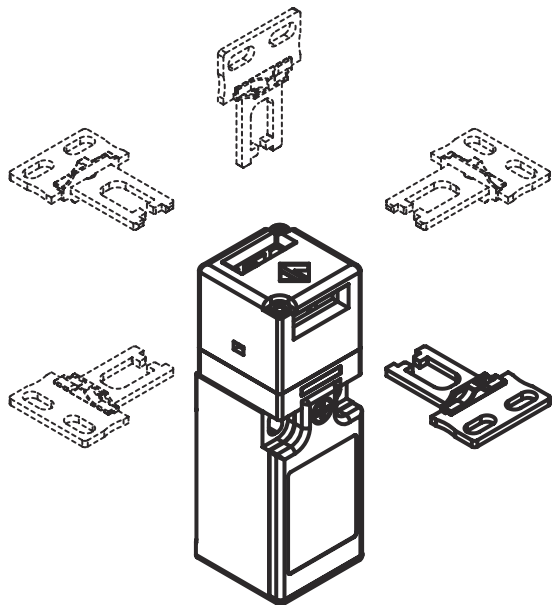
Customs tariff number	85369095
eCl@ss 8.0	27272602
eCl@ss 9.0	27272602
ETIM 5.0	EC002592
ETIM 6.0	EC002592

Dimensioned drawings

All dimensions in millimeters



Approach directions



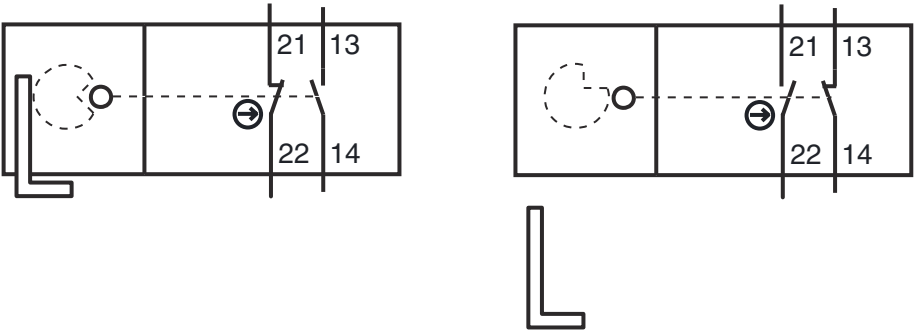
Electrical connection

Connection 1

Function	Contact connection
Type of connection	Terminal
Type of terminal	Screw terminal
No. of pins	4 -pin

Pin	Pin assignment
	13
1	NO
	14
2	NO
	21
3	NC
	22
4	NC

Circuit diagrams



21/22 NC contact, forced

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.