



Part no.: 63000102
S20-P1C3-M20-LH
Safety switch



Figure can vary

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Part no.: 63000102 – S20-P1C3-M20-LH – Safety switch

Technical data

| Basic data | |
|------------------------------------|---|
| Series | S20 |
| Functions | |
| Functions | Type 2 interlock device with mechanically actuated position switch with low-coded actuator acc. to DIN EN ISO 14119 |
| 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 | 3 Piece(s) |
| Connection 1 | |
| Type of connection | Terminal |
| Function | Contact connection |
| 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 |
| Mechanical data | |
| Design | Cubic |
| Dimension (W x H x L) | 52.2 mm x 31.6 mm x 90.5 mm |
| Housing material | Plastic, Glass fiber reinforced (PPS), self-extinguishing |
| Electrical contact material | Silver alloy |
| Net weight | 112 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 |

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| | |
|---------------------------------------|--|
| Actuation frequency, max. | 3,600 per hour, IEC 6047-5-1 |
| External actuator | AC-ANxx series: straight, angled, resilient, alignable |
| Actuation force (pull-out) | 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

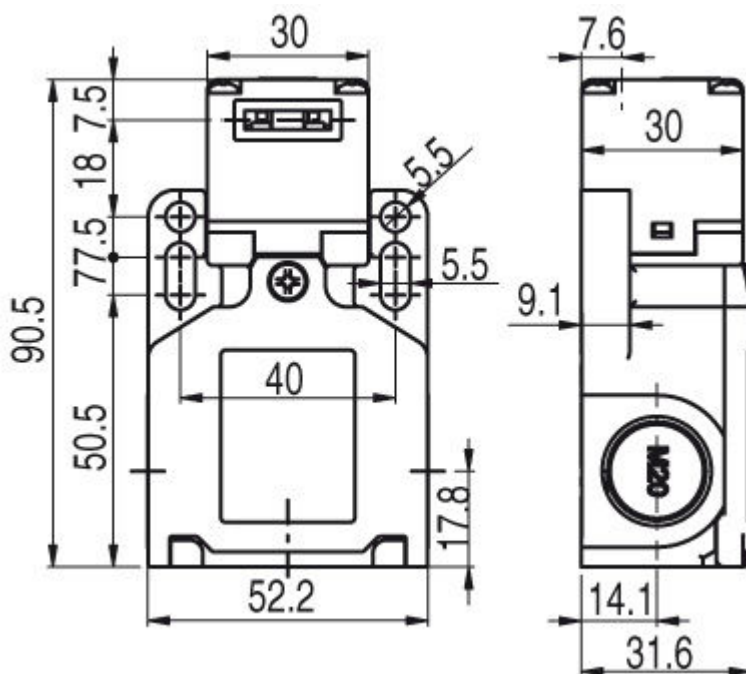
| | |
|----------------------|----------------|
| Degree of protection | IP 67 |
| Certifications | IMQ c UL US |

Classification

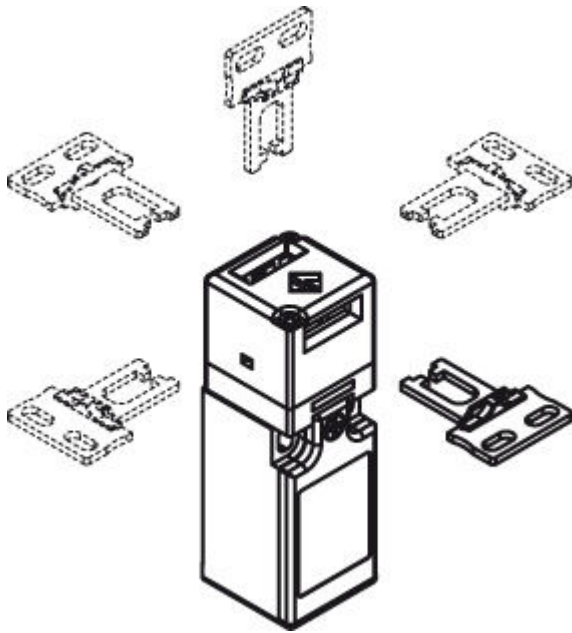
| | |
|------------|----------|
| eCl@ss 8.0 | 27272602 |
| eCl@ss 9.0 | 27272602 |
| ETIM 5.0 | EC002592 |

Dimensioned drawings

All dimensions in millimeters



Approach directions

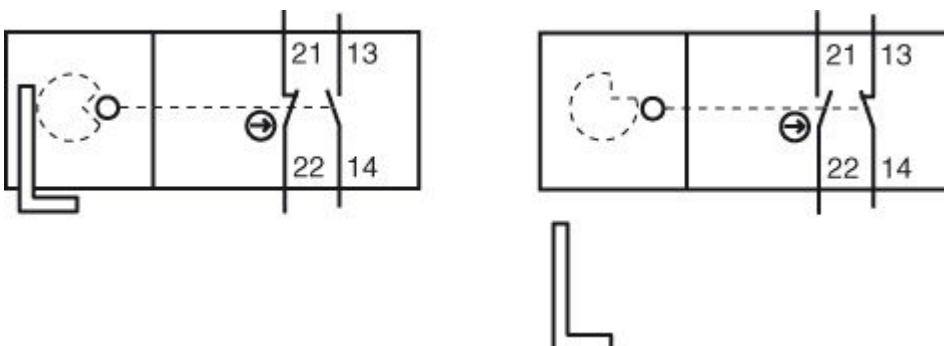


Electrical connection

| Connection 1 | |
|--------------------|--------------------|
| Type of connection | Terminal |
| Function | Contact connection |
| Type of terminal | Screw terminal |
| No. of pins | 4 -pin |

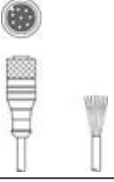
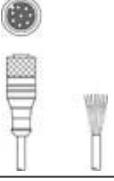

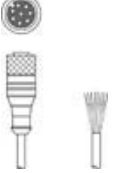
| Terminal | Assignment |
|----------|------------|
| 13 | NO |
| 14 | NO |
| 21 | NC |
| 22 | NC |

Circuit diagrams




Accessories


Connection technology - Connection cables

| | Part no. | Designation | Article | Description |
|---|----------|--------------------|------------------|---|
|  | 50135128 | KD S-M12-8A-P1-050 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR |
|  | 50135129 | KD S-M12-8A-P1-100 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Open end Shielded: Yes Cable length: 10,000 mm Sheathing material: PUR |
|  | 50135130 | KD S-M12-8A-P1-150 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Open end Shielded: Yes Cable length: 15,000 mm Sheathing material: PUR |
|  | 50135131 | KD S-M12-8A-P1-250 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Open end Shielded: Yes Cable length: 25,000 mm Sheathing material: PUR |

Connection technology - Connectors

| | Part no. | Designation | Article | Description |
|---|----------|-------------|---------------|--|
|  | 63000844 | AC-PLP-8 | Built-in plug | Number of conductors: 8 Piece(s) Connection: Connector, M12, Plastic, Axial, 8 -pin |

Connection technology - Adapters

| | Part no. | Designation | Article | Description |
|---|----------|----------------|---------|------------------------------|
|  | 63000843 | AC-A-M20-12NPT | Adapter | Design: M20 x 1.5 on 1/2 NPT |

Actuator

| | Part no. | Designation | Article | Description |
|---|----------|-------------|----------|---|
|  | 63000701 | AC-AN-A | Actuator | Dimensions: 28 mm x 11.8 mm x 30.7 mm Type of fastening: Through-hole mounting Design: Angled Area of application: Normal duty Mounting bore holes: In key direction Material: Stainless steel |
|  | 63000705 | AC-AN-AL | Actuator | Dimensions: 20.6 mm x 41.7 mm x 42.7 mm Type of fastening: Through-hole mounting Design: Angled Area of application: Normal duty Mounting bore holes: In key direction Material: Stainless steel |
|  | 63000707 | AC-AN-ASH | Actuator | Dimensions: 53 mm x 14 mm x 29 mm Type of fastening: Through-hole mounting Design: Angled Area of application: Normal duty Mounting bore holes: In key direction Material: Stainless steel |
|  | 63000706 | AC-AN-F1J2 | Actuator | Dimensions: 56 mm x 16 mm x 35 mm Type of fastening: Through-hole mounting Design: Straight Area of application: Normal duty Mounting bore holes: In key direction Material: Plastic, Stainless steel Functions: Flexible, 1 direction, Adjustable, 2 directions |
|  | 63000703 | AC-AN-F2J2 | Actuator | Dimensions: 30 mm x 22 mm x 44 mm Type of fastening: Through-hole mounting Design: Straight Area of application: Normal duty Mounting bore holes: 90° to key direction Material: Plastic, Stainless steel Functions: Flexible, 2 directions, Adjustable, 2 directions |
|  | 63000702 | AC-AN-F4 | Actuator | Dimensions: 30 mm x 16 mm x 48 mm Type of fastening: Through-hole mounting Design: Straight Area of application: Normal duty Mounting bore holes: 90° to key direction Material: Plastic, Stainless steel Functions: Flexible, 4 directions |
|  | 63000700 | AC-AN-S | Actuator | Dimensions: 28 mm x 9 mm x 39.8 mm Type of fastening: Through-hole mounting Design: Straight Area of application: Normal duty Mounting bore holes: 90° to key direction Material: Stainless steel |
|  | 63000704 | AC-AN-SL | Actuator | Dimensions: 20.6 mm x 9 mm x 64 mm Type of fastening: Through-hole mounting Design: Straight Area of application: Normal duty Mounting bore holes: 90° to key direction Material: Stainless steel |

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.