

## Technical data sheet Safety position switch

Part no.: 63000307

S300-P13C1-M12-CB



For illustration purposes only

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## Technical data

### Basic data

|        |      |
|--------|------|
| Series | S300 |
|--------|------|

### 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                |

### Characteristic parameters

|                    |                             |
|--------------------|-----------------------------|
| Mission time $T_M$ | 20 years, EN ISO 13849-1    |
| $B10_d$            | 40,000,000 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 |
| Contact protection      | Protective insulation O          |

#### 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           | Plastic            |
| No. of pins        | 8 -pin             |

### Mechanical data

|                               |                                                             |
|-------------------------------|-------------------------------------------------------------|
| Design                        | Cubic                                                       |
| Dimension (W x H x L)         | 40 mm x 39 mm x 97 mm                                       |
| Housing material              | Plastic                                                     |
| Plastic housing               | Glass fiber reinforced (PPS), self-extinguishing            |
| Electrical contact material   | Silver alloy                                                |
| Net weight                    | 155 g                                                       |
| Housing color                 | Black                                                       |
| Type of fastening             | Through-hole mounting                                       |
| Switch type                   | Interlock device without guard interlocking, ISO 14119      |
| Switching principle           | Slow-action contact                                         |
| Switching direction           | Both sides                                                  |
|                               | One side                                                    |
| Approach actuation directions | 360°                                                        |
|                               | 4 x side (90°)                                              |
| Approach speed                | Depending on actuator used                                  |
| Mechanical life time          | 20,000,000 actuation cycles, IEC 60947-5-1 switching cycles |
| Actuation frequency, max.     | 3,600 per hour, IEC 60947-5-1                               |
| Actuator mount                | Short                                                       |

### Environmental data

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

### Certifications

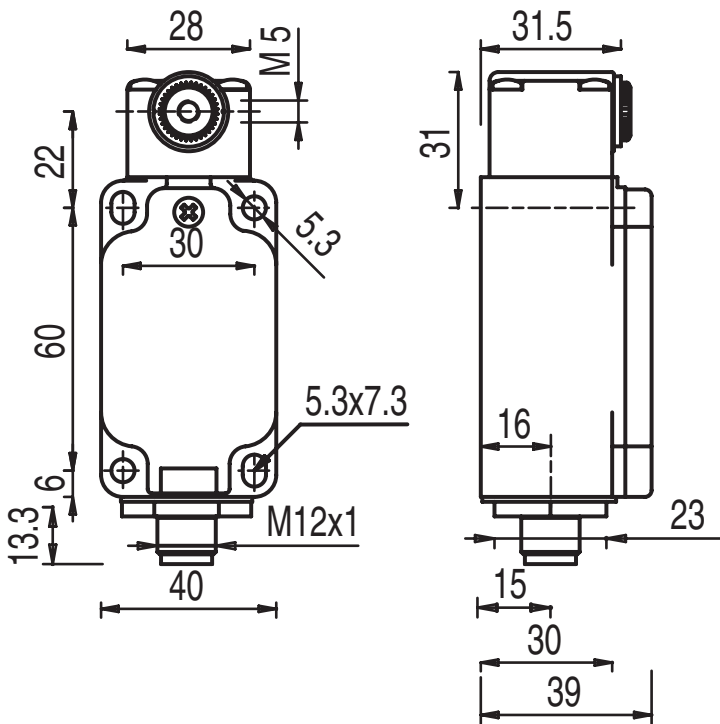
|                      |         |
|----------------------|---------|
| Degree of protection | IP 67   |
| Approvals            | c UL US |
|                      | IMQ     |

### Classification

|                       |          |
|-----------------------|----------|
| Customs tariff number | 85369095 |
| ECLASS 5.1.4          | 27272601 |
| ECLASS 8.0            | 27272601 |
| ECLASS 9.0            | 27272601 |
| ECLASS 10.0           | 27272601 |
| ECLASS 11.0           | 27272601 |
| ECLASS 12.0           | 27272601 |
| ECLASS 13.0           | 27272601 |
| ECLASS 14.0           | 27272601 |
| ECLASS 15.0           | 27272601 |
| ECLASS 16.0           | 27272601 |
| ETIM 5.0              | EC000030 |
| ETIM 6.0              | EC000030 |
| ETIM 7.0              | EC000030 |
| ETIM 8.0              | EC000030 |
| ETIM 9.0              | EC000030 |
| ETIM 10.0             | EC000030 |

Dimensioned drawings

All dimensions in millimeters

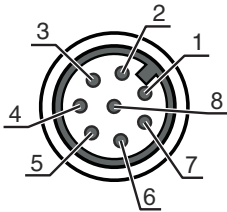


Electrical connection

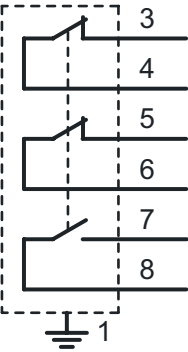
Connection 1

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

| Pin | Pin assignment |
|-----|----------------|
| 1   | n.c.           |
| 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! |                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                         | <ul style="list-style-type: none"><li>↪ The product may only be put into operation by competent persons.</li><li>↪ Only use the product in accordance with its intended use.</li></ul> |