

# Technical Data

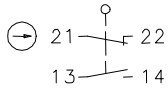
## Safety switch

### Series SLM – with separate actuator

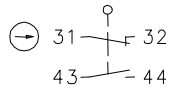
Description **SLM-FVTW24DC-55-AR**

Article number **6017119020**

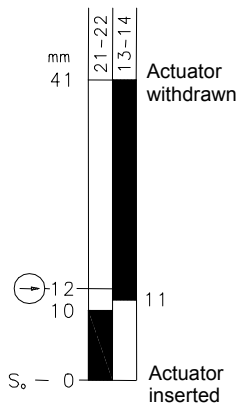
Position monitoring  
of guard locking



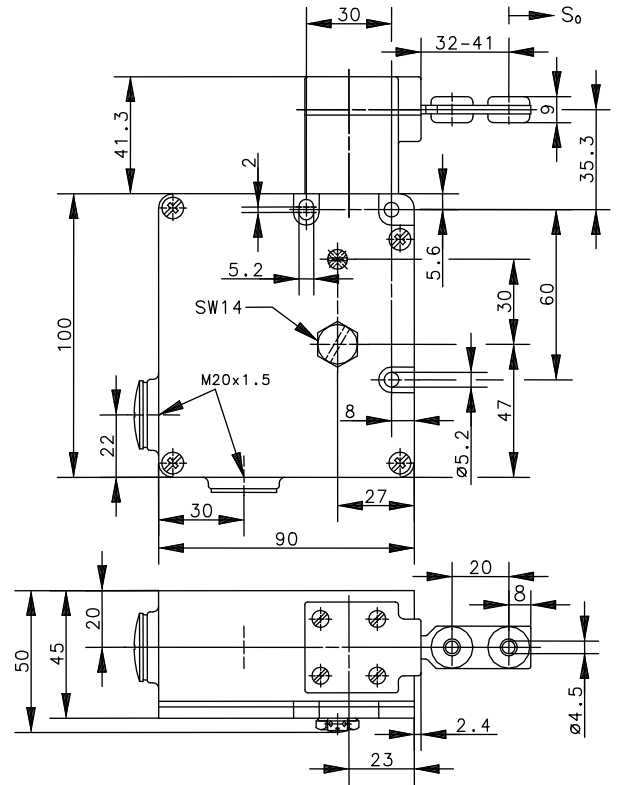
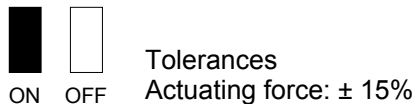
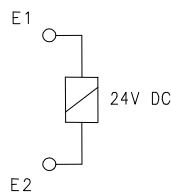
Position monitoring  
of electromagnet



Operating diagram



Termination  
electromagnet



| Electrical data                 |   |
|---------------------------------|---|
| Protection class                | I   |
| <b>Contact elements</b>         |   |
| Rated insulation voltage        | $U_i$ 250 V   |
| Rated impulse withstand voltage | $U_{imp}$ 2,5 kV  |
| Conv. thermal current           | $I_{the}$ 5A  |
| Utilization category            | AC-12, $U_e/I_e$ 250 V / 10 A<br>AC-15, $U_e/I_e$ 230 V / 4 A |
| Direct opening action           | ⊖ according to IEC/EN 60947-5-1, Annex K                      |
| Short-circuit protective device | 10 A gG   |
| <b>Electro magnets</b>          |   |
| Duty cycle                      | 100 % ED (at E1; E2)  |
| Temperature class               | B (130 °C)  |
| Power consumption P20           | 5,2 W   |
| Operating voltage               | 24 V DC   |

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# Technical Data

## Safety switch



### Mechanical data

|                          |  |                           |
|--------------------------|--|---------------------------|
| Enclosure                | AI-GD  |                           |
| Cover                    | AL-sheet   |                           |
| Actuating head           | Zn-GD  |                           |
| Actuator                 | Separate actuator (St / PA)                      |                           |
|                          | Minimum actuating radius                         | $R_{min}$ 400 mm          |
|                          | Velocity for actuating                           | $V_{max}$ 1,5 m/s         |
|                          | Extraction force                                 | ≥ 30 N                    |
| Interlocking principle   | Spring force                                     |                           |
| Unlocking                | a) Magnetic force<br>b) Auxiliary release        |                           |
| Hold on force            | $F_{Zh}$   | ≤ 1000 N acc. to GS-ET-19 |
| Ambient air temperature  | -30 °C ... +60 °C                                |                           |
| Contact type             | 2 NC, 2 NO                                       |                           |
| Switching principle      | 4 slow make and break contact elements           |                           |
| Mechanical life          | 1 x 10 <sup>6</sup> switching cycles             |                           |
| Assembly                 | 3 x M5   |                           |
| Connection               | 10 Screws M3,5; 2 non-fused earthed conductor M4 |                           |
| Conductor cross-sections | solid  | 0,5 - 2,5 mm <sup>2</sup> |
|                          | finely stranded with ferrules                    | 0,5 - 1,5 mm <sup>2</sup> |
| Cable entrance           | 2 x M20x1,5                                      |                           |
| Weight                   | ≈ 0,84 kg  |                           |
| Installation position    | Operator definable                               |                           |
| Protection type          | IP67 acc. to IEC/EN 60529                        |                           |

### Actuation

4 different actuating directions achievable by rotating the actuating head.  
Turning the actuator head (4 x 90 °) only when the actuator is plugged in.

### ID for safety engineering

B10d 2 x 10<sup>6</sup> switching cycles

### Standards

VDE 0660 T100, DIN EN 60947-1, IEC 60947-1  
VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1  
GS-ET-19  
DIN EN ISO 13849-1

### EU Conformity

acc. to directive 2006/42/EG

### Approvals

DGUV  
cCSA<sub>US</sub> B300, R300 (same polarity)  
UL

### Notes

The degree of protection (IP code) specified applies solely to a property closed cover and the use of an equivalent cable gland with adequate cable.

The switch may not be used as a mechanical stop.

When power is removed from the electromagnet (solenoid) the safety guard will be in locked position.

Remove hexagonal screw plug and push internal resin plunger in order to activate auxiliary release function.

Pre-travel actuator (compensation of shock and vibrations) approx. 9 mm.

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