

# Technical Data

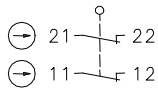
## Safety switch

### Series SLM – with separate actuator

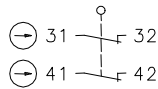
Description **SLM-FVTW24AC-22-AR**

Article number **6117169023**

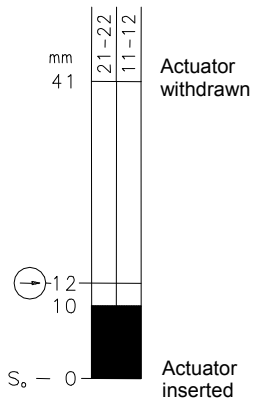
Position monitoring  
of guard locking



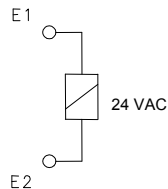
Position monitoring  
of electromagnet



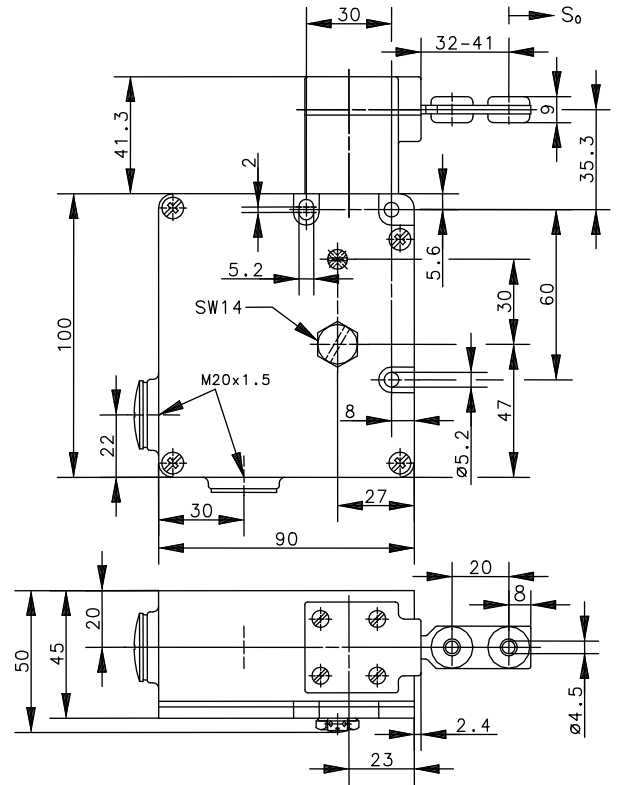
Operating diagram



Termination  
electromagnet



**ON**   **OFF**   Tolerances  
 Actuating force:  $\pm 15\%$



#### 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	$I_{the}$	5 A
Utilization category	AC-12, $U_e/I_e$ 250 V / 10 A AC-15, $U_e/I_e$ 230 V / 4 A	
Direct opening action	$\ominus$	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 AC	

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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 b) Auxiliary release
Hold on force		$F_{Zh}$	≤ 1000 N acc. to GS-ET-19
Ambient air temperature			-30 °C ... +60 °C
Contact type			4 NC
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			≈ 0,81 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/EC

### 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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