SAFELOCK
Solenoid Locking Interlock Switches with Separate Actuator

SLK

Description

The SLK series of Solenoid Locking Switches are designed to ensure movable protective guards and are kept locked in place on machinery until the operating sequence or machine cycle is completed.

The actuator key is held in position under force, while the interlocking mechanism is activated. The interlocking mechanism is directly connected to the machine's control system.

Safety Interlock Switches perform three functions:

1. Allow the machine/process to operate when the protective guard is in position and locked.
2. Ensure the machine/process cannot operate when the actuator key is not in the locked and closed position.
3. Monitor the switch and the interlocking mechanism during operation.

System Description

Two types of locking methods are available:

Spring Lock...Mechanically locked-power to solenoid unlocks actuator

Magnetic Lock...Power to solenoid locks actuator in position.

Features

- Compact and slim in design
- Rugged plastic insulated housing
- Triple coding of the actuator for a high level of safety
- Flexible mounting options with rotatable actuator head (4X90°) and horizontal or vertical actuator approach
- Three cable entries
- Wiring chamber protected to IP 67/NEMA 4

Electrical Features

Switching Devices

Rated isolation voltage max.:	250 V
Thermal Continuous Current max.:	10 A
Category of Use:	AC 15 230 V/4 A
Short Circuit protection:	DIAZED- DIN VDE 0636 Part 1 6 A/inert gl/gG

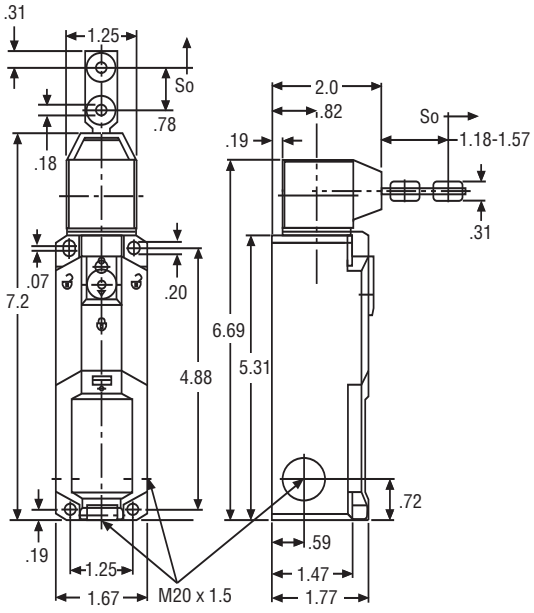
Solenoid

Duration of Current:	3.4/100% ED
Temperature Class:	E (120°C)
Inrush Power Consumption:	56 VA (0.2s)
Permanent Power Consumption:	1.1 VA (constant)
Switching Frequency:	600/hr. max.

Actuation

- Standard actuator allows 8 different mounting positions
  4 Horizontal in 90° increments
  4 Vertical in 90° increments

(Dimensions are in inches)



Head Mounted Vertical (Standard Actuator)

Head Mounted Horizontal (Standard Actuator)

Mechanical Characteristics

Enclosure:	PA 6 GV (UL94-V0)
Actuator Key:	Stainless Steel/PA
Ambient Temperature:	–25°C to +70°C
Switching Function:	2 NC; 2 NO contacts
Mechanical Life:	1,000,000 cycles
Actuation Radius:	400mm min.
Approach Speed:	V = 0.5m/s max
Weight:	approx. 0.3 kg
Locking Force:	1000 N (250 lbs.)

Part Number	Designation	Locking Spring Force Magnet Force	Connection Assembly Safety Equipment	Connection Assembly Locking	Control Voltage	Add. Functions Auxiliary Release (AR)	Add. Functions LED (L)	Actuator Standard Radial Actuator
601-8119-001	SLK-FVTU24UC-55-AR	Spring Force	1 NC ⊖ 1 NO	1 NC ⊖ 1 NO	24 VAC/DC	AR	—	Standard
601-8119-002	SLK-FVTU24-230MC-55-AR	Spring Force	1 NC ⊖ 1 NO	1 NC ⊖ 1 NO	24–48 VDC + 24–230 VAC	AR	—	Standard
601-8119-003	SLK-MVTU24UC-55	Magnet Force	1 NC ⊖ 1 NO	1 NC ⊖ 1 NO	24 VAC/DC	—	—	Standard
601-8119-004	SLK-MVTU24-230MC-55	Magnet Force	1 NC ⊖ 1 NO	1 NC ⊖ 1 NO	24–48 VDC + 24–230 VAC	—	—	Standard

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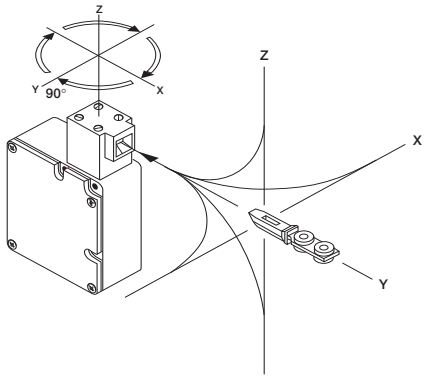

Description

The SLM series of Solenoid Locking Switches is designed to ensure movable protective guards are kept locked in place on machinery until the operating sequence or machine cycle is completed.

The actuator key is held in position under force, while the interlocking mechanism is activated. The interlocking mechanism is directly connected to the machine's control system.

Safety Interlock Switches perform three functions:

1. Allow the machine/process to operate when the protective guard is in position and locked.
2. Ensure the machine/process cannot operate when the actuator key is not in the locked and closed position.
3. Monitor the switch and the interlocking mechanism during operation.

System Description

Two types of locking methods are available:

Spring Lock...Mechanically locked-power to solenoid unlocks actuator

Magnetic Lock...Power to solenoid locks actuator in position

Features:

- UL, CSA, and BG approved
- Triple coding of the actuator for a high level of safety
- Rugged, heavy duty, metal housing
- Actuator approach direction can be changed in 90° increments
- Actuator has smooth surface with no protruding sharp parts
- Forced disconnection of the N.C. contacts
- Contacts galvanically isolated
- Two cable entries
- Conduit adapter or cord grip provided
- Manufactured to VDE 0660 part 200, IEC 947-5-1, and test principle GS-ET 19

Model Identification

Body Style	Lock Type	Actuator	Solenoid Voltage	Contact Block	Release Type
SLM	F	VTW	24 DC	55	AR

F = Spring Lock
M = Magnetic Lock

AR = Auxiliary Release

24 DC = 24 VDC
120 AC = 110-130 VAC
50-60 Hz

55 = 1 N.C., ⊕ Forced Disconnect per IEC 947-5-1 Ch. 3
1 N.O.
(Actuator and Lock Monitor Contacts)

Non-Standard Options

- 230 VAC/50 Hz solenoid voltage
- Key operated auxiliary release (Spring Lock Only)
- Mushroom head auxiliary release with key reset (Spring Lock Only)
- LED indicators for switch status
- Extended length actuator

Consult the factory for details.

Common Features

Safety Category:	4
Contact Voltage:	250 V (maximum)
Contact Current:	10 A (maximum)
Protection Class:	NEMA 4
Mechanical Life:	1 x 10^6 Switching Cycles
Temperature:	-22°F to +140°F
Actuator Locking Force:	225 lbs. [1000 N]
Actuator Holding Force:	4.5 lbs. [20 N]
Operating Radius:	15.7" [400 mm] (minimum)
Enclosure:	Die Cast Aluminum

Model (Spring Lock)	Part Number	Solenoid Voltage
SLM-FVTW 24 DC-55-AR	601-7119-020	24 VDC
SLM-FVTW 120 AC-55-AR	601-7119-032	120 VAC

Model (Magnetic Lock)	Part Number	Solenoid Voltage
SLM-MVTW 24 DC-55	601-7119-023	24 VDC
SLM-MVTW 120 AC-55	601-7119-033	120 VAC

(Dimensions are in inches)