



Conforms to EN1088, EN292, EN60947-5-1, EN60204-1 CSA approved

#### ■ Actual Size





# Mini Safety Limit Switch

- Miniature size will fit in the most confined spaces, while providing the performance of larger units
- NEMA 1 enclosure makes the SLM suitable for dry, dust-free, indoor applications
- Choice of roller plunger orientations will satisfy most installation requirements
- Positive operation—all contacts are force guided for positive operation by the actuator conforming to safety switch standards
- Long life—the SLM with its stainless steel roller plunger is designed for ten million actuations



#### Go to the Engineering Guide For in-depth information on

safety standards and use.



#### **For More Guarding Products** See Section N for safeguarding

cutting and turning machines



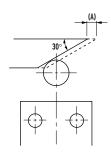






#### Operation

# **Cam Displacement**

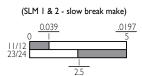


# **Operating Example**



# **Contact Arrangements**

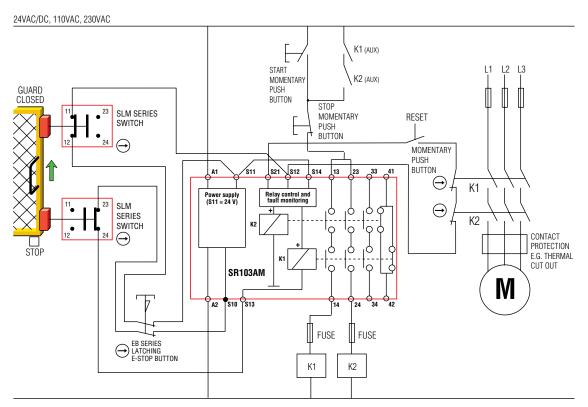




The actuating cam should be profiled at 30° for optimum operation.

# ■ Application Diagram

# Typical Application of SLM with a Safety Monitoring Relay



For a full explanation of the circuit operating principle and fault detection, see "Common Circuit Examples" in the Engineering Section of this catalog.

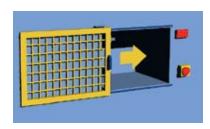
Canada Tel. 1/866/986-6766





#### Application

Typical applications are on sliding guard doors, moving machine beds, crane arms, etc.



### Specifications

Contact Configurations:         1 N/C + 1 N/O           Salety Contacts:         1 N/C positive break           Switching Ability         1 N/C positive break           AC:         500 V−1 A, 250 V−2 A, 100 V−5 A           DC:         250 V−0.5 A, 24 V−2 A           Salety Contact Gap:         > 2 mm (0.079 in.)           Auxiliary Contacts:         1 N/O           Max Switching Current/Volt/Amp:         500 V/500 VA           Minimum Current:         5 V 5 mA DC           Electrical Life:         1 x 10 <sup>6</sup> minimum           Mounting:         Any position           Mounting:         Any position           Mounting Hardware:         2 x M3 or 2 x M4 screws           Actuator Travel for Positive Opening:         2.5 mm (0.098 in.)           Max Actuator Travel for Positive Opening:         5 mm (0.197 in.)           Break Contact Min Force:         10 N (2.25 lb.)           Max Actuation Speed:         160 mm/sec (6.30 in./sec)           Max Actuation Frequency:         2 cycles/sec           Case Material:         UL listed glass-filled polyester           Actuator Material:         Stainless steel roller/acetal plunger           Weight:         36 g (1.3 oz.)           Color:         Red           Mechanical Life:         1	Electrical	All Models	
Switching Ability   AC:	Contact Configurations:	1 N/C + 1 N/O	
AC: 500 V-1 A, 250 V-2 A, 100 V-5 A  DC: 250 V-0.5 A, 24 V-2 A  Safety Contact Gap: > 2 mm (0.079 in.)  Auxiliary Contacts: 1 N/O  Max Switching Current/Volt/Amp: 500 V/500 VA  Minimum Current: 5 V 5 mA DC  Electrical Life: 1 x 10° minimum  Mechanical  Mounting: Any position  Mounting Hardware: 2 x M3 or 2 x M4 screws  Actuator Travel for Positive Opening: 2.5 mm (0.098 in.)  Max Actuator Travel: 5 mm (0.197 in.)  Break Contact Min Force: 10 N (2.25 lb.)  Max Actuation Speed: 160 mm/sec (6.30 in./sec)  Max Actuation Frequency: 2 cycles/sec  Case Material: UL listed glass-filled polyester  Actuator Material: Stainless steel roller/acetal plunger  Wiring Entry: 3 x wiring breakous  Weight: 36 g (1.3 oz.)  Color: Red  Mechanical Life: 10 x 10° minimum  Protection: IP30 (NEMA 1)  Operating Temperature: -25 to 80°C (-13 to 176°F)  Compliance	Safety Contacts:	1 N/C positive break	
DC:	Switching Ability		
Safety Contact Gap:   > 2 mm (0.079 in.)	AC:	500 V-1 A, 250 V-2 A, 100 V-5 A	
Auxiliary Contacts:         1 N/O           Max Switching Current/Volt/Amp:         500 V/500 VA           Minimum Current:         5 V 5 mA DC           Electrical Life:         1 x 10° minimum           Mechanical            Mounting:         Any position           Mounting Hardware:         2 x M3 or 2 x M4 screws           Actuator Travel for Positive Opening:         2.5 mm (0.098 in.)           Max Actuator Travel for Positive Opening:         5 mm (0.197 in.)           Break Contact Min Force:         10 N (2.25 lb.)           Max Actuation Speed:         160 mm/sec (6.30 in./sec)           Max Actuation Frequency:         2 cycles/sec           Case Material:         UL listed glass-filled polyester           Actuator Material:         Stainless steel roller/acetal plunger           Wiring Entry:         3 x wiring breakous           Weight:         36 g (1.3 oz.)           Color:         Red           Mechanical Life:         10 x 10° minimum           Environmental         Protection:         IP30 (NEMA 1)           Operating Temperature:         -25 to 80°C (-13 to 176°F)           Compliance	DC:	250 V-0.5 A, 24 V-2 A	
Max Switching Current/Volt/Amp:         500 V/500 VA           Minimum Current:         5 V 5 mA DC           Electrical Life:         1 x 106 minimum           Mechanical         **** Mounting:         Any position           Mounting Hardware:         2 x M3 or 2 x M4 screws           Actuator Travel for Positive Opening:         2.5 mm (0.098 in.)           Max Actuator Travel:         5 mm (0.197 in.)           Break Contact Min Force:         10 N (2.25 lb.)           Max Actuation Speed:         160 mm/sec (6.30 in./sec)           Max Actuation Frequency:         2 cycles/sec           Case Material:         UL listed glass-filled polyester           Actuator Material:         Stainless steel roller/acetal plunger           Wiring Entry:         3 x wiring breakous           Weight:         36 g (1.3 oz.)           Color:         Red           Mechanical Life:         10 x 106 minimum           Environmental         Protection:         IP30 (NEMA 1)           Operating Temperature:         -25 to 80°C (-13 to 176°F)           Compliance	Safety Contact Gap:	> 2 mm (0.079 in.)	
Minimum Current:         5 V 5 mA DC           Electrical Life:         1 x 106 minimum           Mechanical         Any position           Mounting:         Any position           Mounting Hardware:         2 x M3 or 2 x M4 screws           Actuator Travel for Positive Opening:         2.5 mm (0.098 in.)           Max Actuator Travel:         5 mm (0.197 in.)           Break Contact Min Force:         10 N (2.25 lb.)           Max Actuation Speed:         160 mm/sec (6.30 in./sec)           Max Actuation Frequency:         2 cycles/sec           Case Material:         UL listed glass-filled polyester           Actuator Material:         Stainless steel roller/acetal plunger           Wiring Entry:         3 x wiring breakous           Weight:         36 g (1.3 oz.)           Color:         Red           Mechanical Life:         10 x 106 minimum           Environmental         IP30 (NEMA 1)           Operating Temperature:         -25 to 80°C (-13 to 176°F)           Compliance	Auxiliary Contacts:	1 N/O	
Electrical Life:	Max Switching Current/Volt/Amp:	500 V/500 VA	
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Environmental       Protection:     IP30 (NEMA 1)       Operating Temperature:     -25 to 80°C (-13 to 176°F)       Compliance	Color:	Red	
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Operating Temperature: -25 to 80°C (-13 to 176°F)  Compliance	Environmental		
Compliance	Protection:	IP30 (NEMA 1)	
	Operating Temperature:	-25 to 80°C (-13 to 176°F)	
	Compliance		
<b>Standards:</b> EN1088, EN292, EN60947-5-1, EN60204-1	Standards:	EN1088, EN292, EN60947-5-1, EN60204-1	
Approvals/Listings: CE marked for all applicable directives, CSA	Approvals/Listings:	CE marked for all applicable directives, CSA	

Specifications are subject to change without notice.

Note: The safety contacts of the Omron STI switches are described as normally closed (N/C) i.e., with the guard closed, actuator in place, and the machine able to be started.



#### Go to the Engineering Guide

For in-depth information on safety standards and use.



#### For More Guarding Products

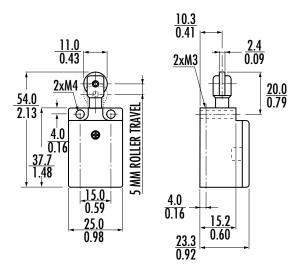
See Section N for safeguarding cutting and turning machines







# ■ Dimensions — mm/in.



# Ordering

Model	Contacts	Wiring Entry	Part No.
SLM-1K (Roller parallel to switch front)	1 N/C + 1 N/O	3 x wiring breakouts	44511-0010
SLM-2K (Roller parallel to switch side)	1 N/C + 1 N/O	3 x wiring breakouts	44511-0020
Accessories (see page G238)			