

Safety position switch, LS(M)-..., Rounded plunger, Basic device, expandable, 2 NC, Yellow, Metal, Cage Clamp, -25 - +70 °C

Part no. **LSM-02**
266142
EL Number **4356137**
(Norway)

General specifications	
Product name	Eaton Moeller® series LSM Safety position switch
Part no.	LSM-02
EAN	4015082661427
Product Length/Depth	33.5 millimetre
Product height	76.5 millimetre
Product width	31 millimetre
Product weight	0.147 kilogram
Compliances	CE Marked
Certifications	UL 508 IEC 60947-5 EN 60947-5 CSA Std. C22.2 No. 14 UL IEC/EN 60947-5 CSA-C22.2 No. 14 UL Category Control No.: NKCR UL File No.: E29184 CE IEC/EN 60947 CSA Class No.: 3211-03 CSA CSA File No.: 012528
Product Tradename	LSM
Product Type	Safety position switch
Product Sub Type	None
Catalog Notes	Accessories for the Cage-Clamp terminals from Wago:power comb, gray, Wago Article No. 264-402 Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany Contacts with safety function, by positive opening to IEC/EN 60947-5-1
Features & Functions	
Electric connection type	Cable entry metrical
Enclosure color	Yellow Cover
Enclosure material	Metal
Features	Positive opening Expandable Forced opening
Material	Metal housing
Switch function type	Slow-action switch
General information	
Connection type	Cage Clamp
Degree of protection	IP66/IP67 NEMA Other
Lifespan	8,000,000 mechanical Operations
Operating frequency	6000 Operations/h
Overvoltage category	III
Pollution degree	3
Product category	Rounded plunger
Rated impulse withstand voltage (Uimp)	4000 V AC
Repetition accuracy	0.15 mm (Contacts/switching capacity)
Suitable for	Safety functions
Type	Safety position switch
Ambient conditions, mechanical	
Mounting position	As required

Shock resistance		25 g, Standard-action contact, Mechanical, Half-sinusoidal shock 20 ms
Temperature resistance		100 °C, Contact temperature of roller head
Climatic environmental conditions		
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		70 °C
Climatic proofing		Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Terminal capacities		
Terminal capacity (flexible with ferrule)		1 x (0.5 - 1.5) mm ²
Terminal capacity (solid)		1 x (0.5 - 2.5) mm ²
Electrical rating		
Rated conditional short-circuit current (I _q)		1 kA
Rated insulation voltage (U _i)		400 V
Rated operational current (I _e) at AC-15, 220 V, 230 V, 240 V		6 A
Rated operational current (I _e) at AC-15, 24 V		6 A
Rated operational current (I _e) at AC-15, 380 V, 400 V, 415 V		4 A
Rated operational current (I _e) at DC-13, 110 V		0.6 A
Rated operational current (I _e) at DC-13, 125 V		0.8 A
Rated operational current (I _e) at DC-13, 220 V, 230 V		0.3 A
Rated operational current (I _e) at DC-13, 24 V		3 A
Short-circuit protection rating		Max. 6 A gG/gL, Fuse, Contacts
Supply frequency		Max. 400 Hz, Contacts
Actuator		
Actuating force at beginning/end of stroke		1.0 N/8.0 N
Actuating torque of rotary drives		0.2 N·m
Actuator type		Plunger
Operating speed		Max. 1/0.5 m/s (with DIN cam, mechanical actuation) For angle of actuation α = 0°/30°
Contacts		
Control circuit reliability		1 failure per 10,000,000 switching operations (Statistically determined, at 24 V DC/5 mA) 1 failure per 5,000,000 switching operations (statistically determined, at 5 V DC/1 mA)
Number of contacts (change-over contacts)		0
Number of contacts (normally closed contacts)		2
Number of contacts (normally open contacts)		0
Safety		
Explosion safety category for gas		None
Explosion safety category for dust		None
Design verification		
Equipment heat dissipation, current-dependent P _{vid}		0 W
Heat dissipation capacity P _{diss}		0 W
Heat dissipation per pole, current-dependent P _{vid}		0.17 W
Rated operational current for specified heat dissipation (I _n)		6 A
Static heat dissipation, non-current-dependent P _{vs}		0 W
10.2.2 Corrosion resistance		Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures		Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat		Meets the product standard's requirements.
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects		Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation		Meets the product standard's requirements.
10.2.5 Lifting		Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact		Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions		Meets the product standard's requirements.
10.3 Degree of protection of assemblies		Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances		Meets the product standard's requirements.
10.5 Protection against electric shock		Does not apply, since the entire switchgear needs to be evaluated.

10.6 Incorporation of switching devices and components		Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections		Is the panel builder's responsibility.
10.8 Connections for external conductors		Is the panel builder's responsibility.
10.9.2 Power-frequency electric strength		Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage		Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material		Is the panel builder's responsibility.
10.10 Temperature rise		The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function		The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 9.0

Sensors (EG000026) / End switch (EC000030)			
Electric engineering, automation, process control engineering / Sensor technology, safety-related sensor technology / Safety-related mechanical switch (sensor technology) / Safety position switch (Type 1) (ecl@ss13-27-27-26-01 [AKE640018])			
Width sensor	mm		31
Diameter sensor	mm		0
Height of sensor	mm		61
Length of sensor	mm		33.5
Rated operation current I _e at AC-15, 24 V	A		6
Rated operation current I _e at AC-15, 125 V	A		6
Rated operation current I _e at AC-15, 230 V	A		6
Rated operation current I _e at DC-13, 24 V	A		3
Rated operation current I _e at DC-13, 125 V	A		0.8
Rated operation current I _e at DC-13, 230 V	A		0.3
Switching function			Slow-action switch
Switching function latching			No
Output electronic			No
Forced opening			Yes
Number of safety auxiliary contacts			0
Number of contacts as normally closed contact			2
Number of contacts as normally open contact			0
Number of contacts as change-over contact			0
Type of interface			None
Type of interface for safety communication			None
Construction type housing			Cuboid
Housing material			Metal
Coating housing			Other
Type of control element			Plunger
Alignment of the control element			Roller cam straight
Type of electric connection			Cable entry metrical
With status indication			No
Suitable for safety functions			Yes
Explosion safety category for gas			None
Explosion safety category for dust			None
Ambient temperature during operating	°C		-25 - 70
Degree of protection (IP)			IP66/IP67
Degree of protection (NEMA)			Other