

Position switch, Roller plunger, Complete device, 1 N/O, 1 NC, Snap-action contact - Yes, Cage Clamp, Yellow, Insulated material, -25 - +70 °C, with M12 connector, EN 50047 Form C

**Part no. LS-11S/P-M12A
178141**

General specifications		
Product name		Eaton Moeller® series LS Position switch
Part no.		LS-11S/P-M12A
EAN		4015081734641
Product Length/Depth		33.5 millimetre
Product height		101 millimetre
Product width		31 millimetre
Product weight		0.065 kilogram
Certifications		IEC/EN 60947
Product Tradename		LS
Product Type		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		
Design		EN 50047 Form C
Electric connection type		Connector M12
Enclosure color		Yellow Cover
Enclosure material		Insulated material Plastic
Features		Forced opening Positive opening Snap-action contact
Switch function type		Quick-break switch
General information		
Accessories		M12 connector included.
Connection type		Cage Clamp
Degree of protection		IP66 NEMA Other
Lifespan		8,000,000 mechanical Operations
Operating frequency		6000 Operations/h
Overvoltage category		III
Pollution degree		3
Product category		Roller plunger
Rated impulse withstand voltage (Uimp)		2500 V AC
Repetition accuracy		0.15 mm (Contacts/switching capacity)
Suitable for		Safety functions
Type		Position switch Safety position switch
Ambient conditions, mechanical		
Mounting position		As required
Shock resistance		25 g, Standard-action contact, Mechanical, Half-sinusoidal shock 20 ms
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)	250 V
Rated operational current (I _e) at AC-15, 115 V	4 A
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	0.8 A
Rated operational current (I _e) at DC-13, 125 V	0.6 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. 4 A gG/gL, Fuse, Contacts
Supply frequency	Max. 400 Hz, Contacts
Actuator	
Actuating torque of rotary drives	0.2 N·m
Actuator type	Roller lever
Operating speed	For angle of actuation $\alpha = 0^\circ/30^\circ$ Max. 1/1 m/s (with DIN cam, mechanical actuation)
Contacts	
Control circuit reliability	1 failure per 5,000,000 switching operations (statistically determined, at 5 V DC/1 mA) 1 failure per 10,000,000 switching operations (Statistically determined, at 24 V DC/5 mA)
Number of contacts (change-over contacts)	0
Number of contacts (normally closed contacts)	1
Number of contacts (normally open contacts)	1
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	86
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	0.6
Rated operation current I _e at DC-13, 230 V	A	0.3
Switching function		Quick-break switch
Switching function latching		No
Output electronic		No
Forced opening		Yes
Number of safety auxiliary contacts		1
Number of contacts as normally closed contact		1
Number of contacts as normally open contact		1
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		Plastic
Coating housing		Other
Type of control element		Roller lever
Alignment of the control element		Roller cam straight
Type of electric connection		Connector M12
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
Degree of protection (NEMA)		Other