DATASHEET - LS-11-SW

Position switch, Rounded plunger, Basic device, expandable, 1 N/O, 1 NC, Cage Clamp, Black, Insulated material, -25 - +70 $^{\circ}$ C

LS-11-SW 272006



Part no.

General specifications	
Product name	Eaton Moeller® series LS Position switch
Part no.	LS-11-SW
EAN	4015082720063
Product Length/Depth	33.5 millimetre
Product height	76.5 millimetre
Product width	31 millimetre
Product weight	0.05 kilogram
Certifications	IEC/EN 60947-5 UL UL File No.: E29184 CSA Class No.: 3211-03 UL 508 UL Category Control No.: NKCR IEC/EN 60947 CSA CE CSA File No.: 012528 CSA-C22.2 No. 14
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	
Electric connection type	Cable entry metrical
Enclosure color	Black (Cover)
Enclosure material	Plastic Insulated material
Features	Forced opening Expandable Positive opening
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	
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
Туре	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
Amoreni operating temperature - mm	-20 0

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 (Iq)	1 kA
Rated insulation voltage (Ui)	400 V
Rated operational current (Ie) at AC-15, 220 V, 230 V, 240 V	6 A
Rated operational current (Ie) at AC-15, 24 V	6 A
Rated operational current (Ie) at AC-15, 380 V, 400 V, 415 V	4 A
Rated operational current (Ie) at DC-13, 110 V	0.6 A
Rated operational current (Ie) at DC-13, 125 V	0.8 A
Rated operational current (Ie) at DC-13, 220 V, 230 V	0.3 A
Rated operational current (Ie) at DC-13, 24 V	3A
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	For angle of actuation $\alpha = 0^{\circ}/30^{\circ}$
	Max. 1/0.5 m/s (with DIN cam, mechanical actuation)
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)	1
Number of contacts (normally open contacts)	1
Safety	
Explosion safety category for gas	None
Explosion safety category for dust	
	None
	None
	None OW
Design verification	
Design verification Equipment heat dissipation, current-dependent Pvid	0 W
Design verification Equipment heat dissipation, current-dependent Pvid Heat dissipation capacity Pdiss	0 W 0 W
Design verification Equipment heat dissipation, current-dependent Pvid Heat dissipation capacity Pdiss Heat dissipation per pole, current-dependent Pvid	0 W 0 W 0 W 0 W 0.17 W
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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])

Rated operation current le at DC-13, 125 V A 0.8 Rated operation current le at DC-13, 230 V A 0.3 Switching function Sow-action switch Sow-action switch Switching function latching No No Output electronic Yes Sow-action switch Forced opening Yes Interconce Number of safety auxiliary contacts Yes Interconce Number of contacts as normally open contact Yes Interconce Number of contacts as change-over contact None None			
Height of sensorImmI	Width sensor	mm	31
Langh of sensor nm 3.5 Bated operation current le at AC-15, 24V A 6 Bated operation current le at AC-15, 25V A 6 Bated operation current le at AC-15, 25V A 6 Bated operation current le at AC-15, 25V A 8 Reted operation current le at AC-15, 25V A 8 Bated operation current le at AC-15, 25V A 8 Switching function B Solor additional science Switching function A 8 Solor additional science Output electron C A A Number of contacts as normally closed contact C No Number of contacts as normally closed contact C No Number of contacts as normally closed contact C No Number of contacts as normally closed contact C No Number of contacts as normally closed contact No No Construction type housing C No No Number of contacts as normally closed contact No No Constructintype housing	Diameter sensor	mm	0
Rate operation current le at AC-15, 24 V A 6 Bate operation current le at AC-15, 25 V A 6 Rate operation current le at AC-15, 26 V A 6 Rate operation current le at AC-15, 26 V A 6 Rate operation current le at DC-13, 25 V A 0 Rate operation current le at DC-13, 25 V A 0 Switching function Switching function Non-conservet le at DC-13, 25 V Switching function latching Switching function Non-conservet le at DC-13, 25 V Switching function latching Switching function Non-conservet le at DC-13, 25 V Switching function latching Switching function Non-conservet le at DC-13, 25 V Switching function latching Switching function Non-conservet le at DC-13, 25 V Switching function latching Switching function Non-conservet le at DC-13, 25 V Switching function latching Switching function Non-conservet le at DC-13, 25 V Switching function latching Switching function Switching function Number of softext sandmalp open contact Switching function Switching function Number of contacts as change-vever contact Switching function Switc	Height of sensor	mm	61
Rated operation current leat AC-15, 250 V A 6 Rated operation current leat AC-15, 230 V A 6 Rated operation current leat DC-13, 25 V B 0 Rated operation current leat DC-13, 250 V A 0 Soluching function B A 0 Soluching function B M Non-consonkich Number of contacts as normally closed contact B M Non-Consonkich Number of contacts as normally closed contact M Non-Consonkich Non-Consonkich Soluting function starburg-over contact M Non-Consonkich N	Length of sensor	mm	33.5
Rated operation current le at DC-13, 23V A 6 Rated operation current le at DC-13, 23V C A Rated operation current le at DC-13, 25V C B Switching function C A 0 Switching function C A 0 Switching function C A 0 Output electricities Non-action switch Non-action switch Switching function leathing C Non-action switch Number of safety awiliary contacts C Non-action switch Number of contacts as normally closed contact C Non-action contact Number of contacts as change-over contact C Non-action contact Number of contacts as change-over contact Non-action contact Non-action contact Systemation contact as change-over contact Non-action contact Non-action contact Systemation contact as change-over contact Non-action contact Non-action contact Systemation contact as change-over contact Non-action contact Non-action contact Systemation contact as change-over contact Non-action contact Non-action contact Systemation contact as change-over contact	Rated operation current le at AC-15, 24 V	А	6
Rated operation current le at DC-13, 25 V A 3 Bated operation current le at DC-13, 25 V A 3 Switching function A 3 Switching function Switching function Non-action switching Switching function latching Non-action switching Non-action switching Output electronic Person Non-action switching Number of acting switching Person 1 Number of acting switching Person Non-Action Number of acting switching Person Non-Action None Contracts as normally open contact Person Non-Action None Contracts as normally open contact Non-Action Non-Action Notation factor for safety communication Person <	Rated operation current le at AC-15, 125 V	А	6
Rated operation current le at DC-13, 230 V A 0 Switching function Slow-action switch Switching function latching Slow-action switch Output electronic Slow-action switch Switching function latching No Output electronic No Number of safety axiliary contacts No Number of safety axiliary contacts I Number of contacts as normally copen contact I Number of contacts as change-over contact I Number of contact as change-over contact I Number of contract as change-over contact I Number o	Rated operation current le at AC-15, 230 V	Α	6
Rated operation current le at DC-13,230 V P A 0.3 Switching function Switching switching Switching switching Non-action switching Output electronic Non-action switching Non-action switching Non-action switching Forced opening Vice of the switching Non-action switching Non-action switching Number of contacts as normally closed contact P F 1 Number of contacts as change-over contact P F 1 Number of contacts as change-over contact P F 1 Number of contacts as change-over contact P F 1 Number of contacts as change-over contact P F 0 Number of contacts as change-over contact P F F 0 Number of contacts as change-over contact P F Non-Contaction P F P Non-Contaction P P P P P P P P P P P P P P P P P P	Rated operation current le at DC-13, 24 V	А	3
Switching functionImage: Section Switching function latchingImage: Section SwitchingImage: Section	Rated operation current le at DC-13, 125 V	А	0.8
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Number of contacts as normally open contactImage of point of as a change over contactImage of point of as a change over contactImage of point of a change over contactImage of point of a change over contactImage of point of a change over contactImage over contactImag	Number of safety auxiliary contacts		1
Number of contacts as change-over contact Image: Provide the set of the set	Number of contacts as normally closed contact		1
Type of interface More Type of interface for safety communication More Construction type housing More Housing material More Coating housing More Coating housing More Type of control element More Alignment of the control element More Type of electric connection More With status indication More Suitable for safety functions More Explosion safety category for gas More Explosion safety category for dust More Aminent emperature during operating More Degree of protection (IP) More	Number of contacts as normally open contact		1
Type of interface for safety communication Image: Selection of the construction type housing Mone Construction type housing Image: Selection of the construction type housing Image: Selection of the construction of the con	Number of contacts as change-over contact		0
Construction type housing Cobid Cuboid Housing material Plastic Coating housing Cuboid Cuboid Type of control element Cuboid Cuboid Alignment of the control element Feed Roller cam straight Type of electric connection Feed Roller cam straight With status indication Feed Solle entry metrical Stable for safety functions Feed Solle entry metrical Explosion safety category for gas Feed None Ambient temperature during operating Feed Solle Feed Perge of protection (IP) Feed Solle Solle Feed	Type of interface		None
Housing material Feed of the control element Alignment of the control element Feed of the control element Yub of clectric connection Feed of the control element With status indication Feed of the control element Suitable for safety functions Feed of the control element Explosion safety category for dust Feed of the control element Anbient temperature during operating Feed of the control element Partice Feed of the control element Partice Feed of the control element With status indication Feed of the control element Suitable for safety functions Feed of the control element Feed of the control element Feed of the control element Suitable for safety functions Feed of the control element Feed of the control element Feed of the control element Suitable for safety functions Feed of the control element Suitable for safety functions Feed of the control element Suitable for safety category for dust Feed of the control element Ambient temperature during operating Feed of the control element Feed of the control element Feed of the control element Feed of the control element	Type of interface for safety communication		None
Coating housingOtherType of control elementPlungerAlignment of the control elementPlungerType of electric connectionRoller cam straightWith status indicationSolle entry metricalSuitable for safety functionsSolleExplosion safety category for dustSolleAmbient temperature during operatingSolleDegree of protection (IP)Solle (Plane)	Construction type housing		Cuboid
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 Ambient temperature during operating Sone Percent of (P) For Sone	Housing material		Plastic
Alignment of the control elementRoller cam straightType of electric connectionCable entry metricalWith status indicationCable entry metricalSuitable for safety functionsSetExplosion safety category for gasSetAmbient temperature during operatingSetPerce of protection (IP)Set	Coating housing		Other
Type of electric connectionCable entry metricalWith status indicationNoSuitable for safety functionsYesExplosion safety category for gasNoneExplosion safety category for dustNoneAmbient temperature during operating°CSeree of protection (IP)Seree of the seree of the serie o	Type of control element		Plunger
With status indicationNoSuitable for safety functionsYesExplosion safety category for gasYesExplosion safety category for dustNoneAmbient temperature during operatingYesDegree of protection (IP)Yes	Alignment of the control element		Roller cam straight
Suitable for safety functionsPage Page Page Page Page Page Page Page	Type of electric connection		Cable entry metrical
Explosion safety category for gas Mone Explosion safety category for dust None Ambient temperature during operating C -25 - 70 Degree of protection (IP) Image: Comparison of the section	With status indication		No
Explosion safety category for dust None Ambient temperature during operating °C -25 - 70 Degree of protection (IP) C -266/IP67	Suitable for safety functions		Yes
Ambient temperature during operating °C -25 - 70 Degree of protection (IP) IP66/IP67	Explosion safety category for gas		None
Degree of protection (IP)	Explosion safety category for dust		None
	Ambient temperature during operating	°C	-25 - 70
Degree of protection (NEMA) Other	Degree of protection (IP)		IP66/IP67
	Degree of protection (NEMA)		Other