

Position switch, Rounded plunger, Basic device, expandable, 2 N/O, Cage
Clamp, Yellow, Insulated material, -25 - +70 °C, version A



Part no. **LS-20A**
 292362
EL Number **4315235**
(Norway)

General specifications		
Product name		Eaton Moeller® series LS Position switch
Part no.		LS-20A
EAN		4015082923624
Product Length/Depth		33.5 millimetre
Product height		76.5 millimetre
Product width		31 millimetre
Product weight		0.05 kilogram
Certifications		CSA Class No.: 3211-03 CSA UL Category Control No.: NKCR CSA File No.: 012528 IEC/EN 60947-5 CE UL UL 508 CSA-C22.2 No. 14 IEC/EN 60947 UL File No.: E29184
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
Features & Functions		
Electric connection type		Cable entry metrical
Enclosure color		Yellow Cover
Enclosure material		Insulated material Plastic
Features		Expandable
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)
Type		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) mm²
Terminal capacity (solid)			1 x (0.5 - 2.5) mm²
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 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)			0
Number of contacts (normally open contacts)			2
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 Ie at AC-15, 24 V		A	6
Rated operation current Ie at AC-15, 125 V		A	6
Rated operation current Ie at AC-15, 230 V		A	6
Rated operation current Ie at DC-13, 24 V		A	3
Rated operation current Ie at DC-13, 125 V		A	0.8
Rated operation current Ie at DC-13, 230 V		A	0.3
Switching function			Slow-action switch
Switching function latching			No
Output electronic			No
Forced opening			No
Number of safety auxiliary contacts			0
Number of contacts as normally closed contact			0
Number of contacts as normally open contact			2
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			Plunger
Alignment of the control element			Roller cam straight
Type of electric connection			Cable entry metrical
With status indication			No
Suitable for safety functions			No
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