

Safety position switch, LSE, Position switch with electronically adjustable operating point, Basic device, expandable, 2 NC, Yellow, Insulated material, Cage Clamp, -25 - +70 °C

Part no. LSE-02
266122
EL Number 4356041
(Norway)

General specifications		
Product name		Eaton Moeller® series LSE Safety position switch
Part no.		LSE-02
EAN		4015082661229
Product Length/Depth		33.5 millimetre
Product height		76.5 millimetre
Product width		31 millimetre
Product weight		0.048 kilogram
Compliances		CE Marked
Certifications		CSA Std. C22.2 No. 14 IEC 60947-5 UL 508 EN 60947-5 IEC/EN 61000-4 IEC/EN 60947 UL UL File No.: E29184 CE IEC/EN 60947-5 CSA CSA Class No.: 3211-03 CSA-C22.2 No. 14 CSA File No.: 012528 UL Category Control No.: NKCR
Product Tradename		LSE
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 comparable with positive opening function Device goes into safe state on high interference. Individual operating point adjustment partly short-circuit proof Restart after reset
Features & Functions		
Electric connection type		Cable entry metrical
Enclosure color		Yellow Cover
Enclosure material		Plastic Insulated material
Features		Expandable
Fitted with:		Status indication
Functions		Output electronic
Indication		Visual status indication
Material		Plastic housing
Switch function type		Slow-action switch
General information		
Connection type		Cage Clamp
Degree of protection		IP66/IP67 NEMA Other
Lifespan		3,000,000 electrical Operations 3,000,000 mechanical Operations
Operating frequency		3000 Operations/h
Overvoltage category		III
Pollution degree		3

Product category		Position switch
Rated switching distance (Sn) - min		0.5 mm
Rated switching distance (Sn) - max		5.5 mm
Repetition accuracy		0.02 mm (Contacts/switching capacity)
Suitable for		Safety functions
Switching hysteresis of Sn		0.4 %
Type		Safety position switch
Ambient conditions, mechanical		
Mounting position		As required
Shock resistance		30 g, Basic unit, 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
Electro magnetic compatibility		
Air discharge		8 kV, according to IEC/EN 61000-4-2, Level 3, ESD
Burst impulse		2 kV, Signal cable, according to IEC/EN 61000-4-4, Level 3 2 kV, Supply cable, according to IEC/EN 61000-4-4, Level 3
Contact discharge		4 kV, according to IEC/EN 61000-4-2, Level 3, ESD
Electromagnetic fields		10 V/m (according to IEC EN 61000-4-3)
Immunity to line-conducted interference		10 V (according to IEC/EN 61000-4-6)
Surge rating		0.5 kV, Power pulses (Surge), according to IEC/EN 61000-4-5, EMC
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 breaking capacity		0.019 A (30 V DC)
Rated operational current (Ie) at AC-15, 220 V, 230 V, 240 V		0 A
Rated operational current (Ie) at AC-15, 24 V		0 A
Rated operational current (Ie) at DC-1, 12 V		0.015 A
Rated operational current (Ie) at DC-1, 24 V		18 A
Rated operational current (Ie) at DC-13, 125 V		0 A
Rated operational current (Ie) at DC-13, 220 V, 230 V		0 A
Rated operational current (Ie) at DC-13, 24 V		0.2 A
Rated operational voltage		12 - 30 V DC
Actuator		
Actuating force at beginning/end of stroke		3.5 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		
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 Pvid		0 W
Heat dissipation capacity Pdiss		0 W
Heat dissipation per pole, current-dependent Pvid		0.15 W
Rated operational current for specified heat dissipation (In)		0.2 A

Static heat dissipation, non-current-dependent Pvs		0.4 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@ss13-27-26-01 [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	0
Rated operation current I _e at AC-15, 125 V	A	0
Rated operation current I _e at AC-15, 230 V	A	0
Rated operation current I _e at DC-13, 24 V	A	0.2
Rated operation current I _e at DC-13, 125 V	A	0
Rated operation current I _e at DC-13, 230 V	A	0
Switching function		Slow-action switch
Switching function latching		No
Output electronic		Yes
Forced opening		No
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		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			Yes
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