

**Position switch, Rounded plunger, Basic device, expandable, 2 N/O,  
Screw terminal, Yellow, Insulated material, -25 - +70 °C, version B**

**Part no.**                    **LS-S20B**  
**116707**  
**EL Number**            **4315230**  
**(Norway)**

Product name	Eaton Moeller® series LS Position switch
Part no.	LS-S20B
EAN	4015081164523
Product Length/Depth	33.5 millimetre
Product height	76.5 millimetre
Product width	31 millimetre
Product weight	0.051 kilogram
Certifications	CE UL 508 CSA-C22.2 No. 14 UL File No.: E29184 UL Category Control No.: NKCR CSA Class No.: 3211-03 IEC/EN 60947-5 UL IEC/EN 60947 CSA File No.: 012528 CSA
Product Tradename	LS
Product Type	Position switch
Product Sub Type	None
Electric connection type	Cable entry metrical
Enclosure color	Yellow Cover
Enclosure material	Plastic Insulated material
Features	Expandable
Switch function type	Slow-action switch
Connection type	Screw terminal
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
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
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 capacity (flexible with ferrule)	1 x (0.5 - 1.5) mm²
Terminal capacity (solid)	1 x (0.5 - 2.5) mm²

Rated conditional short-circuit current (I <sub>q</sub> )		1 kA
Rated insulation voltage (U <sub>i</sub> )		400 V
Rated operational current (I <sub>e</sub> ) at AC-15, 220 V, 230 V, 240 V		6 A
Rated operational current (I <sub>e</sub> ) at AC-15, 24 V		6 A
Rated operational current (I <sub>e</sub> ) at AC-15, 380 V, 400 V, 415 V		4 A
Rated operational current (I <sub>e</sub> ) at DC-13, 110 V		0.6 A
Rated operational current (I <sub>e</sub> ) at DC-13, 125 V		0.8 A
Rated operational current (I <sub>e</sub> ) at DC-13, 220 V, 230 V		0.3 A
Rated operational current (I <sub>e</sub> ) at DC-13, 24 V		3 A
Short-circuit protection rating		Max. 6 A gG/gL, Fuse, Contacts
Supply frequency		Max. 400 Hz, Contacts
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°
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)		0
Number of contacts (normally open contacts)		2
Explosion safety category for gas		None
Explosion safety category for dust		None
Equipment heat dissipation, current-dependent P <sub>vid</sub>		0 W
Heat dissipation capacity P <sub>diss</sub>		0 W
Heat dissipation per pole, current-dependent P <sub>vid</sub>		0.17 W
Rated operational current for specified heat dissipation (I <sub>n</sub> )		6 A
Static heat dissipation, non-current-dependent P <sub>vs</sub>		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.
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## Technical data ETIM 8.0

Sensors (EG000026) / End switch (EC000030)			
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Safety-related position switch / Safety position switch (Type 1) (ecI@ss10.0.1-27-27-26-01 [AKE640013])			
Width sensor		mm	31
Diameter sensor		mm	0
Height of sensor		mm	61
Length of sensor		mm	33.5
Rated operation current I <sub>e</sub> at AC-15, 24 V		A	6
Rated operation current I <sub>e</sub> at AC-15, 125 V		A	6
Rated operation current I <sub>e</sub> at AC-15, 230 V		A	6
Rated operation current I <sub>e</sub> at DC-13, 24 V		A	3
Rated operation current I <sub>e</sub> at DC-13, 125 V		A	0.8
Rated operation current I <sub>e</sub> 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
Material housing			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