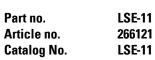


Safety position switch, electrically adjustable, 1N/O+1N/C, cat .3





Delivery programme

Derivery programme			
Basic function			Position switches Safety position switches
Part group reference			LSE
Product range			Position switch with electronically adjustable operating point
Degree of Protection			IP66, IP67
Features			Basic device, expandable
Ambient temperature		°C	-25 - +70
Description			Visual status indication comparable with positive opening function Device goes into safe state on high interference. Can be used in safety circuits partly short-circuit proof Restart after reset Individual operating point adjustment
Approval			TÜV Rhuleled Group
Contacts			
N/O = Normally open			1 N/O
N/C = Normally closed			1 NC
Contact sequence			$ \begin{array}{c} +U_{e} \\ \hline \\ Q_{1} \\ Q_{2} \\ 0 \\ V \end{array} $
Contact travel = Contact closed = Contact open			0 0.5 5.5 6.1 Q2 default = 3.0
Rated voltage	U _e	V DC	12 - 30
Colour			
Enclosure covers			Yellow
Enclosure covers			
Housing			Insulated material
Connection type			Cage Clamp
Notes			Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany. Accessories for the Cage-Clamp terminals from Wago:power comb, gray, Wago Article No. 264-402

Technical data

G	e	Π	e	Γā	I	

Climatic proofing			Damp heat, constant, to IEC 60068-2-78; damp heat, cyclical, to IEC 60068-2-30
Ambient temperature		°C	-25 - +70
Mounting position		0	As required
Degree of Protection			IP66, IP67
Terminal capacities		2	1600, 1607
		mm ²	
Solid		mm ²	1 x (0.5 - 2.5)
Flexible with ferrule		mm ²	1 x (0.5 - 1.5)
Power supply			
Rated voltage	Ue	V DC	12 - 30
Rated operational current	l _e	А	
12 V	le	А	0.015
24 V	I	mA	18
30 V	L	А	0.019
Contacts/switching capacity			
Overvoltage category/pollution degree			III/3
Rated operational current	l _e	А	
DC-13			
24 V	I _e	А	0.2
Repetition accuracy		mm	0.02
Mechanical variables			
Lifespan, mechanical	Operations	x 10 ⁶	3
Notes			(electronic)
Contact temperature of roller head		°C	≦ ₁₀₀
Mechanical shock resistance (half-sinusoidal shock, 20 ms)			
Basic unit		g	30
Operating frequency	Operations/h		≦ ₃₀₀₀
Switching point			0.5 - 5.5 mm, freely adjustable
Hysteresis		mm	0.4
Contact sequence (contact closed open Zw = positive opening clearance)		mm	0.04
Actuation			
Mechanical			
Actuating force at beginning/end of stroke		Ν	3.5/8.0
Actuating torque of rotary drives		Nm	0.2
Max. operating speed with DIN cam		m/s	1/0.5
Notes			for angle of actuation $\alpha = 0^{\circ}/30^{\circ}$
Electromagnetic compatibility (EMC)			
Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)		kV	
Air discharge		kV	8
Contact discharge		kV	4
Electromagnetic fields (RFI) to IEC EN 61000-4-3		V/m	10
Burst Impulse (IEC/EN 61000-4-4, Level 3)			
Supply cable		kV	2
Signal lines		kV	2
Power pulses (surge) (IEC/EN 61000-4-5)		kV	0.5
Immunity to line-conducted interference to (IEC/EN 61000-4-6)		V	10

Design verification as per IEC/EN 61439

Technical data for design verification			
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties	
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 6.0

Sensors (EG000026) / End switch (EC000030)

Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Position switch / Position switch (Type 1) (ecl@ss8.1-27-27-06-01 [AGZ382012])

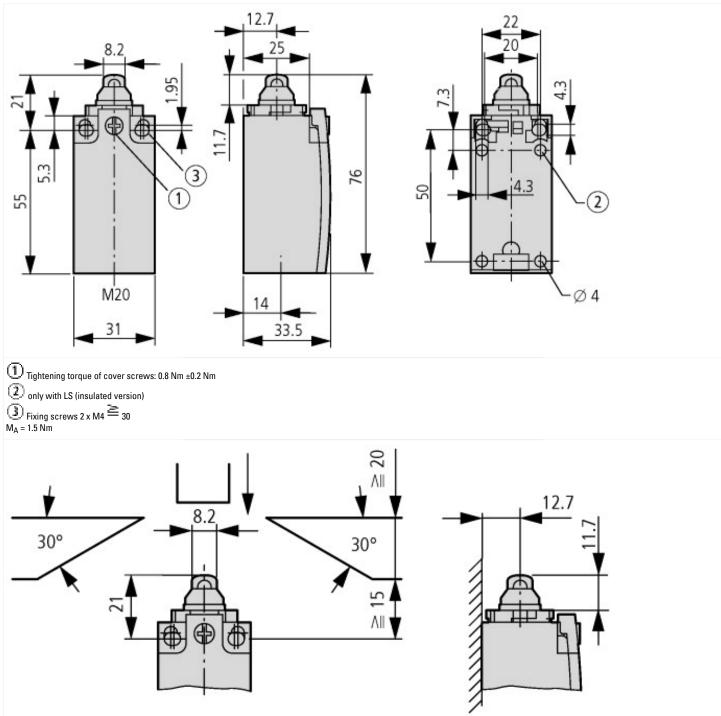
[AGZ382012])			
Width sensor	1	mm	31
Diameter sensor	1	mm	0
Height of sensor	I	mm	61
Length of sensor	I	mm	33.5
Rated operation current le at AC-15, 24 V		A	0
Rated operation current le at AC-15, 125 V		A	0
Rated operation current le at AC-15, 230 V		A	0
Rated operation current le at DC-13, 24 V		A	0.2
Rated operation current le at DC-13, 125 V	,	A	0
Rated operation current le at DC-13, 230 V		A	0
Switching function			Slow-action switch
Output electronic			Yes
Forced opening			No
Number of safety auxiliary contacts			0
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
Housing according to norm			
Construction type housing			Cuboid
Material housing			Plastic
Coating housing			
Type of control element			Plunger
Alignment of the control element			
Type of electric connection			
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)		IP67

Approvals

- pprovide a second sec	
Product Standards	IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14; CE marking
UL File No.	E29184
UL Category Control No.	NKCR
CSA File No.	12528
CSA Class No.	3211-03
North America Certification	UL listed, CSA certified
Degree of Protection	IEC: IP66, 67, UL/CSA Type 3R, 4X (indoor use only), 12, 13

Dimensions



Additional product information (links)

IL05208001Z (AWA1310-2349) Electronic position switch

IL05208001Z (AWA1310-2349) Electronic ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05208001Z2012_08.pdf position switch