

Position switches; 1N/O+1N/C; roller plunger; M12A

Powering Business Worldwide*

Part no. LS-11S/P-M12A Article no. 178141 Catalog No. LS-11S/P-M12A

Delivery program

Delivery program		
Basic function		Position switches Safety position switches
Part group reference		LS(M)
Product range		Roller plunger
Degree of Protection		IP66
Equipment supplied		with M12 connector
Features		Complete device
Ambient temperature	°C	-25 - +70
Design		EN 50047 Form C
Snap-action contact		Yes
Contacts		
N/O = Normally open		1 N/0
N/C = Normally closed		1 NC ⊕
Notes		e safety function, by positive opening to IEC/EN 60947-5-1
Contact sequence		0-\frac{13}{14} \frac{1}{22}
Contact travel = Contact closed = Contact open		0 3.0 6.1 21-22 13-14 21-22 13-14 1.6 Zw = 5.5 mm →
Positive opening (ZW)		yes
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

General		
Standards		IEC/EN 60947
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		As required
Degree of Protection		IP66
Terminal capacities	mm ²	
Solid	mm^2	1 x (0.5 - 2.5)
Flexible with ferrule	mm^2	1 x (0.5 - 1.5)

Contacts/switching canacity

Contacts/switching capacity			
Rated impulse withstand voltage	U _{imp}	V AC	2500
Rated insulation voltage	Ui	V	250
Overvoltage category/pollution degree			III/3
Rated operational current	l _e	Α	
AC-15			
24 V	l _e	Α	6
115 V	l _e	Α	4
220 V 230 V 240 V	l _e	Α	1
380 V 400 V 415 V	le	Α	4
DC-13			
24 V	l _e	Α	3
110 V	l _e	Α	0.8
220 V	l _e	Α	0.3
Control circuit reliability			
at 24 V DC/5 mA	H _F	Fault probabilit	< 10 ⁻⁷ , < 1 fault in 107 operations y
at 5 V DC/1 mA	H _F	Fault probabilit	< 10 ⁻⁶ , < 1 failure at 5 x 10 ⁶ operations
Supply frequency		Hz	max. 400
Short-circuit rating to IEC/EN 60947-5-1			
max. fuse		A gG/gL	4
Repetition accuracy		mm	0.15
Rated conditional short-circuit current		kA	1
Mechanical variables			
Lifespan, mechanical	Operations	x 10 ⁶	8
Mechanical shock resistance (half-sinusoidal shock, 20 ms)			
Standard-action contact		g	25
Operating frequency	Operations/h		≦ 6000
Actuation			

Lifespan, mechanical	Operations	x 10 ⁶	8
Mechanical shock resistance (half-sinusoidal shock, 20 ms)			
Standard-action contact		g	25
Operating frequency	Operations/h		≦ ₆₀₀₀

Mechanical		
Actuating torque of rotary drives	Nm	0.2
Max. operating speed with DIN cam	m/s	1/1
Notes		for angle of actuation $\alpha=0^{\circ}/30^{\circ}$

Design verification as per IEC/EN 61439

Technical data for design verification		
Operating ambient temperature min.	°C	-25
Operating ambient temperature max.	°C	70

Technical data ETIM 6.0

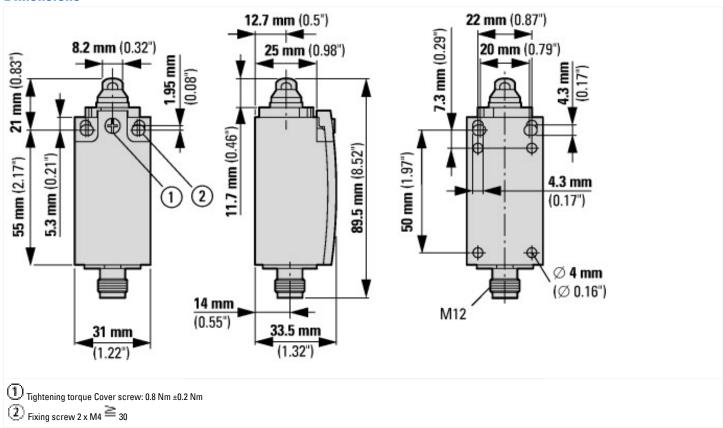
Sensors (EG000026) / End switch (EC000030)

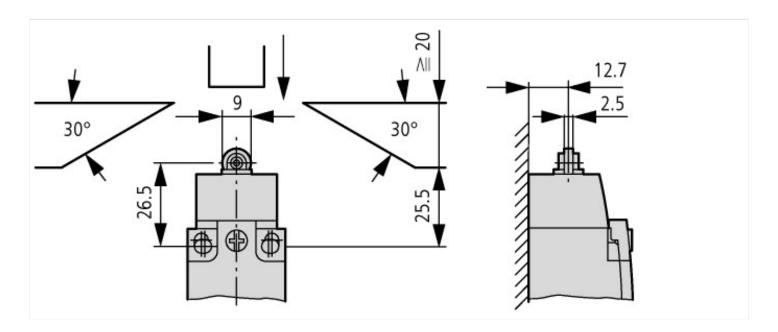
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Position switch / Position switch (Type 1) (ecl@ss8.1-27-27-06-01 [AGZ382012])

[A02302012])		
Width sensor	mm	31
Diameter sensor	mm	0
Height of sensor	mm	86
Length of sensor	mm	33.5
Rated operation current le at AC-15, 24 V	Α	6
Rated operation current le at AC-15, 125 V	Α	6
Rated operation current le at AC-15, 230 V	Α	6
Rated operation current le at DC-13, 24 V	Α	3
Rated operation current le at DC-13, 125 V	Α	0.6
Rated operation current le at DC-13, 230 V	Α	0.3
Switching function		Quick-break switch
Output electronic		No

Forced opening		Yes
Number of safety auxiliary contacts		1
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		Roller lever
Alignment of the control element		-
Type of electric connection		-
With status indication		No
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)		IP65

Dimensions





Additional product information (links)

IL053001ZU LS-Titan position switch: basic device

IL053001ZU LS-Titan position switch: basic device

 $ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL053001ZU2013_08.pdf$