

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

Powering Business Worldwide*

Part no. LS-11-M12A Article no. 178129 Catalog No. LS-11-M12A

Delivery program

Delivery program		
Basic function		Position switches Safety position switches
Part group reference		LS(M)
Product range		Rounded plunger
Degree of Protection		IP66
Equipment supplied		with M12 connector
Features		Basic device, expandable
Ambient temperature	°C	-25 - +70
Contacts		
N/O = Normally open		1 N/O
N/C = Normally closed		1 NC →
Notes		e safety function, by positive opening to IEC/EN 60947-5-1
Contact sequence		$0 - \frac{13}{14} \begin{bmatrix} 21 \\ 22 \end{bmatrix}$
Contact travel = Contact closed = Contact open		0 4.3 6.1 13-14 NO 21-22 NC 3.0 Zw = 4.5 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		

Comacis/	SWILCIIII	iy capacit	Y

Rated impulse withstand voltage	U_{imp}	V AC	2500
Rated insulation voltage	Ui	V	250
Overvoltage category/pollution degree			III/3

Rated operational current	1	Α	
	l _e	А	
AC-15			
24 V	l _e	Α	6
115 V	l _e	Α	4
220 V 230 V 240 V	I _e	Α	1
380 V 400 V 415 V	l _e	Α	4
DC-13			
24 V	I _e	Α	3
110 V	I _e	Α	0.8
220 V	I _e	Α	0.3
Control circuit reliability			
at 24 V DC/5 mA	H _F	Fault probabilit	< 10 ⁻⁷ , < 1 fault in 107 operations cy
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
Contact temperature of roller head		°C	≦ ₁₀₀
Mechanical shock resistance (half-sinusoidal shock, 20 ms)			
Standard-action contact		g	25
Operating frequency	Operations/h		≦ ₆₀₀₀
Actuation			
Mechanical			
Actuating torque of rotary drives		Nm	0.2
Max. operating speed with DIN cam		m/s	1/0.5
Notes			for angle of actuation $\alpha=0^{\circ}/30^{\circ}$

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)

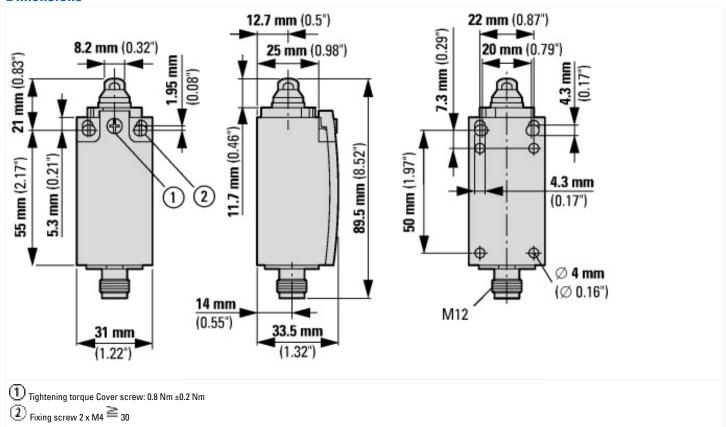
Number of safety auxiliary contacts

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])			
Width sensor	mm	31	
Diameter sensor	mm	0	
Height of sensor	mm	86	

Height of Sensor	111111	00
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	A	0.6
Rated operation current le at DC-13, 230 V	Α	0.3
Switching function		Slow-action switch
Output electronic		No
Forced opening		Yes

Number of contacts as normally open contact Number of contacts as change-over contact Type of interface Type of interface for safety communication Housing according to norm Construction type housing Material housing Coating housing Type of control element Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Anhient temperature during operating Type of coats a service demands and the control demands and the control safety category for dust Anhient temperature during operating Type of electric connection Type			
Number of contacts as change-over contact Type of interface For safety communication None Type of interface for safety communication None Housing according to norm Construction type housing Material housing Coating housing Type of control element Type of control element Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Ambient temperature during operating Type of electric connection Type of electric category for dust Ambient temperature during operating Type of electric connection Type of electric category for dust Ambient temperature during operating Type of electric category for dust Type of electric cat	Number of contacts as normally closed contact		1
Type of interface for safety communication Type of interface for safety communication None Housing according to norm Construction type housing Material housing Cating housing Coating housing Coating to control element Type of control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Annient temperature during operating Type of interface for safety communication None None None None None None None No	Number of contacts as normally open contact		1
Type of interface for safety communication Housing according to norm Construction type housing Material housing Coating housing Coating housing Type of control element Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for dust Anhient temperature during operating None None None None None Sc 25 - 70	Number of contacts as change-over contact		0
Housing according to norm Construction type housing Material housing Coating housing Coating housing Type of control element Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Ambient temperature during operating - Cuboid Cuboid Cuboid Plastic Plunger - Cu -	Type of interface		None
Construction type housing Material housing Coating housing Co	Type of interface for safety communication		None
Material housing Coating housing Type of control element Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Ambient temperature during operating Plastic Pla	Housing according to norm		
Coating housing Type of control element Alignment of the control element Type of electric connection Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating - Coating housing - Plunger - Coating housing -	Construction type housing		Cuboid
Type of control element Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Plunger - C - C No No No No Noe - C - 25 - 70	Material housing		Plastic
Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating - C No No No No None - C -25 - 70	Coating housing		
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	Type of control element		Plunger
With status indication Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating No No None CC -25 - 70	Alignment of the control element		
Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Yes None None 25 - 70	Type of electric connection		
Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating None **C	With status indication		No
Explosion safety category for dust Ambient temperature during operating °C -25 - 70	Suitable for safety functions		Yes
Ambient temperature during operating °C -25 - 70	Explosion safety category for gas		None
The state of the s	Explosion safety category for dust		None
Degree of protection (IP) IP65	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