LS-11/P - Position switch, Roller plunger, Complete unit, 1 N/O, 1 NC, Cage Clamp, Yellow, Insulated material, -25 - +70 °C, EN 50047 Form C

266112 LS-11/P

Overview Specifications Resources

266112 LS-11/P

Position switch, Roller plunger, Complete unit, 1 N/O, 1 NC, Cage Clamp, Yellow, Insulated material, -25 - +70 °C, EN 50047 Form C

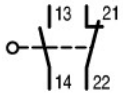
Alternate Catalog No.	LS-11/P
EL-Nummer (Norway)	4356123

Position switch, Basic function: Position switches, Safety position switches, Part group reference: LS(M)-…, Product range: Roller plunger, Degree of Protection: IP66, IP67, Features: Complete unit, Ambient temperature: -25 - +70 °C, Design: EN 50047 Form C, Contacts N/O = Normally open: 1 N/O, Contacts N/C = Normally closed: 1 NC, Notes: □ = safety function, by positive opening to IEC/EN 60947-5-1, Positive opening (ZW): yes, Colour Enclosure covers: Yellow, Housing: Insulated material, Connection type: Cage Clamp, 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, Standards: IEC/EN 60947

- Delivery program
- Technical data
- Design verification as per IEC/EN 61439
- Technical data ETIM 7.0
- Approvals
- Dimensions

Delivery program

Basic function
Position switches
Safety position switches
Part group reference
LS(M)-…
Product range
Roller plunger
Degree of Protection
IP66, IP67
Features
Complete unit
Ambient temperature
-25 - +70 °C
Design
EN 50047 Form C
Contacts
N/O = Normally open
1 N/O
N/C = Normally closed
1 NC □
Notes
□ = safety function, by positive opening to IEC/EN 60947-5-1
Contact sequence



Contact travel ■ = Contact closed □ = Contact open

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
Notes
The operating head can be rotated at 90° intervals to adapt to the specified approach direction.

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
-25 - +70 °C
Mounting position
As required
Degree of Protection
IP66, IP67
Terminal capacities Solid
1 x (0.5 - 2.5) mm²
Terminal capacities Flexible with ferrule
1 x (0.5 - 1.5) mm²
Repetition accuracy
0.15 mm
Contacts/switching capacity
Rated impulse withstand voltage [U_{imp}]
4000 V AC
Rated insulation voltage [U_i]
400 V
Overvoltage category/pollution degree
III/3
Rated operational current [I_e] AC-15 24 V [I_e]
6 A
Rated operational current [I_e] AC-15 220 V 230 V 240 V [I_e]
6 A
Rated operational current [I_e] AC-15 380 V 400 V 415 V [I_e]
4 A
Rated operational current [I_e] DC-13 24 V [I_e]
3 A
Rated operational current [I_e] DC-13 110 V [I_e]
0.6 A
Rated operational current [I_e] DC-13 220 V [I_e]
0.3 A
Control circuit reliability at 24 V DC/5 mA [H_F]
< 10^{-7}, < 1 fault in 10^7 operations Fault probability
Control circuit reliability at 5 V DC/1 mA [H_F]
< 5×10^{-6}, < 1 failure at 5×10^6 operations Fault probability
Supply frequency
max. 400 Hz
Short-circuit rating to IEC/EN 60947-5-1 max. fuse
6 A gG/gL
Rated conditional short-circuit current
1 kA
Mechanical variables
Lifespan, mechanical [Operations]
8×10^6
Mechanical shock resistance (half-sinusoidal shock, 20 ms) Standard-action contact
25 g
Operating frequency [Operations/h]
□ 6000
Actuation
Mechanical Actuating force at beginning/end of stroke
1.0/8.0 N
Mechanical Actuating torque of rotary drives
0.2 Nm
Mechanical Max. operating speed with DIN cam
1/1 m/s
Mechanical **Notes**
for angle of actuation α = 0°/30°

Design verification as per IEC/EN 61439

Technical data for design verification
Rated operational current for specified heat dissipation [I_n]
6 A
Heat dissipation per pole, current-dependent [P_{vid}]
0.17 W
Equipment heat dissipation, current-dependent [P_{vid}]
0 W
Static heat dissipation, non-current-dependent [P_{vs}]
0 W
Heat dissipation capacity [P_{diss}]
0 W

Operating ambient temperature min.
-25 °C
Operating ambient temperature max.
+70 °C
IEC/EN 61439 design verification
10.2 Strength of materials and parts10.2.2 Corrosion resistance
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.3.1 Verification of thermal stability of enclosures
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.3.2 Verification of resistance of insulating materials to normal heat
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.4 Resistance to ultra-violet (UV) radiation
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.5 Lifting
Does not apply, since the entire switchgear needs to be evaluated.
10.2 Strength of materials and parts10.2.6 Mechanical impact
Does not apply, since the entire switchgear needs to be evaluated.
10.2 Strength of materials and parts10.2.7 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 properties10.9.2 Power-frequency electric strength
Is the panel builder's responsibility.
10.9 Insulation properties10.9.3 Impulse withstand voltage
Is the panel builder's responsibility.
10.9 Insulation properties10.9.4 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 7.0

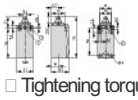
Sensors (EG000026) / End switch (EC000030)
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Position switch / Position switch (Type 1) (ecl@ss10.0.1-27-27-06-01 [AGZ382015])
Width sensor
31 mm
Diameter sensor
0 mm
Height of sensor
61 mm
Length of sensor
33.5 mm
Rated operation current Ie at AC-15, 24 V
6 A
Rated operation current Ie at AC-15, 125 V
6 A
Rated operation current Ie at AC-15, 230 V
6 A
Rated operation current Ie at DC-13, 24 V
3 A
Rated operation current Ie at DC-13, 125 V
0.8 A
Rated operation current Ie at DC-13, 230 V
0.3 A
Switching function
Slow-action switch
Switching function latching
No
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
Construction type housing
Cuboid
Material housing
Plastic
Coating housing
Other
Type of control element
Roller cam
Alignment of the control element
Other
Type of electric connection
Other
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
25 - 70 °C
Degree of protection (IP)
IP67
Degree of protection (NEMA)
4X

Approvals

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

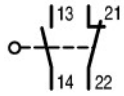


□ Tightening torque Cover screw: 0.8 Nm ±0.2 Nm
□ only with LS (insulated version)
□ Fixing screw 2 x M4 □ 30
M_A = 1.5 Nm

CAD data

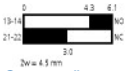
- Product-specific CAD data
  (Web)
- 3D Preview
  (Web)
- DA-CD-ls_p
  CAD data
  DWG files
  (Web)
- DA-CE-ETN.LS-11_P
  CAD data
  edz files
  (Web)
- DA-CS-ls_p
  CAD data
  Step files
  (Web)

Wiring diagram

- 

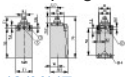
Contact sequence
Wiring diagram
Line drawing
1 make contact, 1 break contact

Contact travel diagram

- 

Contact diagram
Contact travel diagram
Coordinate visualization
Contact travel diagram, plunger, roller plunger

Dimensions single product

- □
131X111
Dimensions single product
Line drawing
Roller plunger
- 
131X117
Dimensions single product
Line drawing
Roller plunger
□ Tightening torque of cover screws: 0.8 Nm±0.2 Nm
□ only with LS (insulated version)
□ Fixing screws 2 x M4 □ 30

3D drawing

- □
131I007
3D drawing
Line drawing
Form C roller plunger
- □
131I193
3D drawing
Line drawing
Roller plunger

Product photo

- 
Photo
Product photo
Photo
Roller plunger

Instruction Leaflet

- LS-Titan Position switches: Basic device (IL053001ZU)
Instruction Leaflet
(PDF, 06/2018, Language independent)

Symbol

-
Enclosure covers
Symbol
Graphic
Button plate, yellow

Declaration of Conformity

- DA-DC-00003068
Declaration of Conformity
(PDF)

Download-Center

- Download-Center (this item)
  Eaton EMEA Download-Center - download data for this item
- Download-Center
  Eaton EMEA Download-Center

Generate data sheet in PDF format

Generate data sheet in Excel format

Write a comment