

LS-Titan Miniature DIN Switches



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LS-Titan Miniature DIN Switches

Product Description

Eaton's LS-Titan™ limit switch line is a complete offering of safety position switches designed for worldwide application. Economical insulated plastic or rugged metal enclosures and modular, plug-in operating heads and bodies make LS-Titan a flexible switching solution.

A highlight of the LS-Titan switch line is the world's first electronic position switch (LSE models). These switches feature freely programmable operating points that can be set individually at any time. Additional LSE models provide analog outputs proportional to the actuator position.

LS-Titan switches are suitable for use in safety applications designed to protect persons or processes.

Features

- Modular, plug-in system (head and body components)
- Positive opening NC contacts for safety applications
- Wide variety of economical plastic and rugged metal versions available
- Operating heads can be rotated 90 degrees to suit specific direction of operation
- Unique electronic safety position switches (LSE models) provide analog (0–10 Vdc or 4–20 mA) outputs proportional to the actuator position and allow for easy configuration of a custom trip point

- Can be ordered as separate components (head and body) or as completely assembled switches
- Screw and Cage Clamp® (standard on LSE models and optionally available on mechanical models) connections provide larger wiring areas for easier installation
- Approved for worldwide application

Standards and Certifications

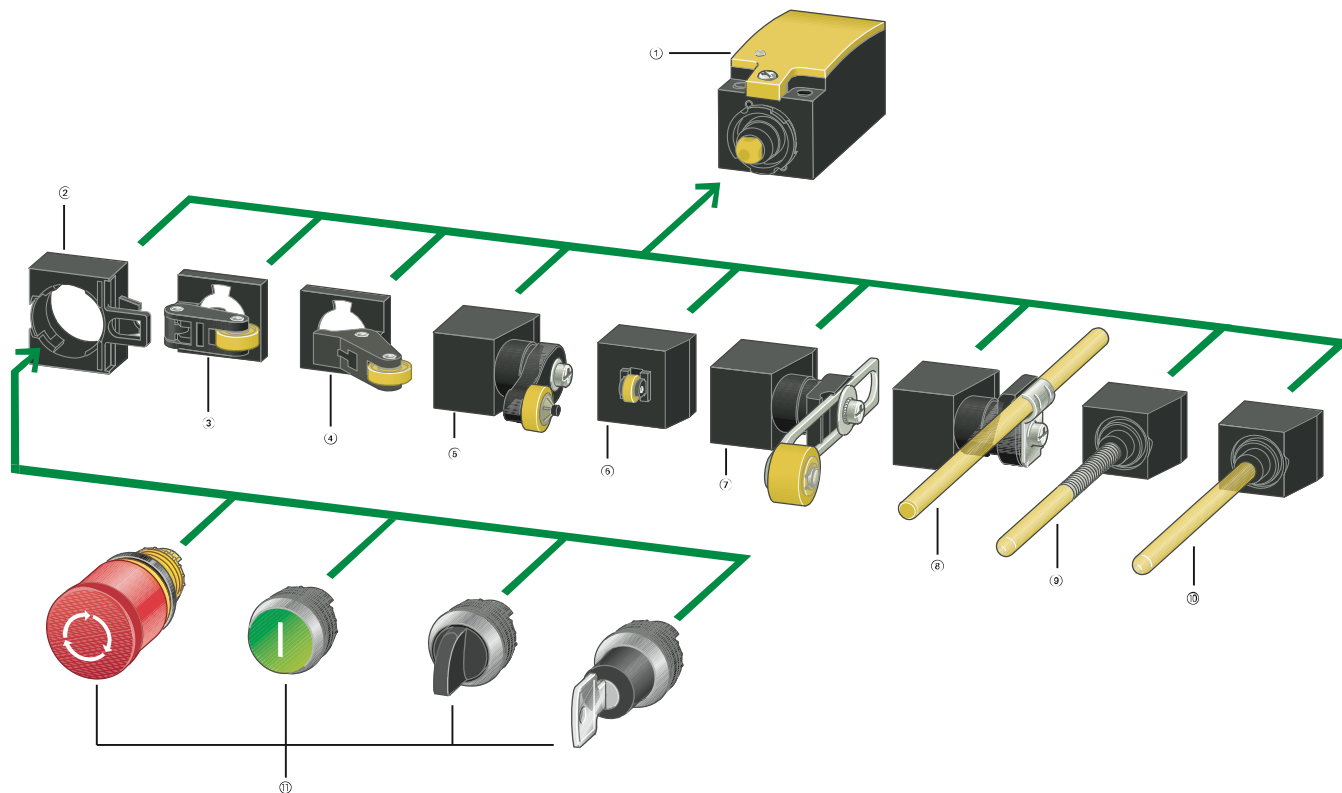
- Safety function by positive opening contacts per IEC/EN 60947-5-1 up to Category 4 per EN 954-1
- TÜV-Rheinland Certified for Functional-Safety (LSE models)
- CSA® certified
- UL® listed
- CE
- CCC



Note: Cage Clamp is a registered trademark of Wago Kontakttechnik, 32423 Minden, Germany.

For the most current information on this product, visit our web site: www.eaton.com

Product Identification



Notes

① **Basic device** (see Pages 4–12)

According to EN 50047
 With screw-on cover
 Contacts: 1NO-1NC, 2NO, 2NC
 Cage Clamp, screw terminal
 As snap-action or standard-action switch
 As electronic snap-action switch
 (individually adjustable)
 As 4–20 mA analog signal encoder
 As 0–10 Vdc analog signal encoder

② **Fixing adapter** (see Page 14)

Allows mounting of M22 pushbuttons

③ **Roller lever** (see Pages 4 and 7)

For one-sided operation with higher operating speed

④ **Angled roller lever**

(see Pages 4, 7 and 11)
 For actuation along the unit axis

⑥ **Rotary lever** (see Pages 4, 8 and 11)

For actuation from the side, for pendulum movements

⑦ **Roller plunger** (see Pages 4, 7 and 11)

For actuation from the side with low actuating force

⑧ **Adjustable roller lever**

(see Pages 5, 8, 9 and 11)
 For length adjustment as required

⑨ **Actuating rod** (see Pages 6, 10 and 12)

On conveyor belts for lightweight goods

⑩ **Spring-rod** (see Pages 6, 10 and 12)

For flexible actuation from all sides

j **Actuating rod** (see Pages 6, 10 and 12)

Withdrawable mechanism from front

k Pushbuttons from the M22 family; see M22 catalog (CA04716001E) or www.eaton.com/m22

Operating heads can be rotated by 90 degrees.

Product Selection

LS-Titan Plastic Safety Switches

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Plastic Safety Switch Body



Assembled Switch



Plastic Safety Switches

Switch Body Catalog Number

Output Function

Terminal Connection

Contact Sequence

Contact Travel

- = contact closed
- = contact open

Operating Head Type ⁽²⁾

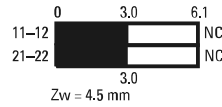
Head Only

Catalog Number

LS-S02

2NC with positive opening contacts

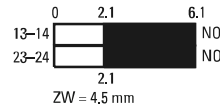
Screw terminal ⁽¹⁾



LS-S20A

2NO with slow make/break

Screw terminal ⁽¹⁾



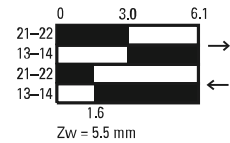
LS-S11S

1NO and 1NC with positive opening contact

Screw terminal ⁽¹⁾



Snap-action contact



Head Only

Catalog Number

Assembled Switch

Catalog Number

Top Push Roller Plunger



LS-XP

LS-S02-P

LS-S20A-P

LS-S11S-P

Long Roller Lever



LS-XL

LS-S02-L

LS-S20A-L

LS-S11S-L

Short Roller Lever



LS-XLS

LS-S02-LS

LS-S20A-LS

LS-S11S-LS

Large Roller Lever



LS-XLB

LS-S02-LB

LS-S20A-LB

LS-S11S-LB

Angled Roller



LS-XLA

LS-S02-LA

LS-S20A-LA

LS-S11S-LA

Rotary Lever



LS-XRL

LS-S02-RL

LS-S20A-RL

LS-S11S-RL

Notes

⁽¹⁾ Cage Clamp versions available. Contact Application Engineering.

⁽²⁾ For operating head dimensions, see **Page 21**.