

# LS3..M.., LS4..M.. and LS7..M.. Limit Switches

## Metal Casing IP66

### Applications

Easy to use, electromechanical limit switches offer specific qualities:

- Visible operation.
- Able to switch strong currents (10 A conventional thermal current).
- Electrically separated contacts.
- Contact blocks with positive opening operation of the "N.C." normally closed contact(s) (symbol ⊖).
- Precise operating points (consistency).
- Immune to electromagnetic disturbances.

They are exceptional detection devices thanks to these characteristics:

- Presence/absence.
- Positioning and travel limit.
- Objects passing/counting.

### Description

Limit switches, **LS3..M..** and **LS7..M..**, which are made of zinc alloy (zamack), have a degree of protection IP66.

Limit switches, **LS4..M..**, which are made of aluminium alloy, have a degree of protection IP66.

The casings come in 3 dimensions: **LS3..M...** 30 mm width, **LS4..M...** 40 mm width, **LS7..M...** 60 mm width.

**Cover:**

- Closed using 3 x M3 screws for 30 mm width
- Closed using 4 x M3 screws for 60 mm width
- Closed using 2 x M4 screws for 40 mm width

One piece sealing gasket to ensure tightness

**A variety of operating heads:**

- Plain plunger
- Roller plunger
- Roller lever, adjustable or not, etc.

Assembled using 4 x M3 screws for 30 & 60 mm width  
Assembled using 4 x M4 screws for 40 mm width

**Mounting the casing:**

- 2 x M4 screws for 30 mm width
- 2 or 4 x M5 screws for 40 mm width
- 2 or 4 x M4 screws for 60 mm width

**Casing:**

- 30 mm width with standardized dimensions according to EN 50047.
- 40 mm width with standardized dimensions according to EN 50041.
- 60 mm width compatible with EN 50047 (Fixing).

**Terminal for protective conductor placed near the cable inlet and marked: ⊕**

- M3.5 (+,-) pozidriv 2 screw (Screw head with captive cable clamp)

**Block of 2 contacts:**

- Contact configuration: 1 N.O. + 1 N.C. or 2 N.O. or 2 N.C.
- Positive opening operation ⊖
- Snap action or slow action
- The 2 contacts are electrically separated

**Electrical connection:**

- 1 (LS30M), 1 (LS40M) or 3 (LS70M) cable inlets for Pg 13.5 cable gland
- 1 (LS31M) or 3 (LS71M) cable inlets for Pg 11 cable gland
- 1 (LS32M) or 3 (LS72M) cable inlets for ISO 16 cable gland
- 1 (LS33M), 1 (LS43M) or 3 (LS73M) cable inlets for ISO 20 cable gland
- 1 (LS35M), 1 (LS45M) or 3 (LS75M) cable inlets for 1/2 NPT cable gland
- Suitable for conduit connection only with use of adaptor sleeve optionally provided by manufacturer. (on request)

**Connecting terminals:**

- M3.5 (+,-) pozidriv 2 screw (Screw head with captive cable clamp)
- Markings conform with IEC 60947-1, IEC 60947-5-1, EN 50005 and EN 50013 standards

**Type** Example: **L S 3 2 M 4 1 B 1 1**

Limit Switch.....	<b>LS</b>
Casing width: 30 mm.....	<b>3</b>
1 cable inlet for Pg 13.5 cable gland.....	<b>0</b>
1 cable inlet for Pg 11 cable gland.....	<b>1</b>
1 cable inlet M16 x 1.5 for ISO 16 cable gland.....	<b>2</b>
1 cable inlet M20 x 1.5 for ISO 20 cable gland.....	<b>3</b>
1 cable inlet for 1/2" NPT cable gland.....	<b>5</b>
Casing width: 40 mm.....	<b>4</b>
1 cable inlet for Pg 13.5 cable gland.....	<b>0</b>
1 cable inlet M20 x 1.5 for ISO 20 cable gland.....	<b>3</b>
1 cable inlet for 1/2" NPT cable gland.....	<b>5</b>
Casing width: 60 mm (new casing).....	<b>7</b>
3 cable inlets for Pg 13.5 cable gland.....	<b>0</b>
3 cable inlets for Pg 11 cable gland.....	<b>1</b>
3 cable inlets M16 x 1.5 for ISO 16 cable gland.....	<b>2</b>
3 cable inlets M20 x 1.5 for ISO 20 cable gland.....	<b>3</b>
3 cable inlets for 1/2" NPT cable gland.....	<b>5</b>

**Contact types:**

**11** ..... 1 N.O. + 1 N.C. contacts  
**20** ..... 2 N.O. contacts  
**02** ..... 2 N.C. contacts

**Snap action:**  
**B** ..... Zb Snap (except for 2 N.O. contacts)

**Dependent (slow) action:**  
**L** ..... Slow / Simultaneous  
**D** ..... Zb Non-overlapping late make  
**C** ..... Zb Overlapping early make

**Operating heads: (see panorama)**  
**10 ... 98** ..... Codes

**M** ..... Metal casing

# LS7..M.. Limit Switches

## Metal Casing IP66 - 60 mm Width



LS72M11B11

1SBC5 8603 4F0302



LS72M12B11

1SBC5 8604 4F0302



LS72M38B11

1SBC5 8607 4F0302



LS72M45B11

1SBC5 8610 4F0302



LS72M98B11-A

1SBC5 8620 5F0302

LS70M: 3 cable inlets for Pg 13.5 cable gland .....0 ..... 4 2  
 LS71M: 3 cable inlets for Pg 11 cable gland .....1 ..... 4 1  
 LS72M: 3 cable inlets for ISO 16 cable gland .....2 ..... 4 3  
 LS73M: 3 cable inlets for ISO 20 cable gland .....3 ..... 5 2  
 LS75M: 3 cable inlets for 1/2" NPT cable gland .....5 ..... 5 1

### Ordering Details

Contact blocks	Type	Order code	Weight kg
 B11	 D11	state cable inlet code □ □	Pack <sup>ing</sup> 1 piece

#### Steel plain plunger (zinc plated)

1	-	LS7 □ M11B11	1SBV01 □ □ 11R1211	0.270
-	1	LS7 □ M11D11	1SBV01 □ □ 11R1411	0.270

#### Steel roller plunger (zinc plated)

1	-	LS7 □ M12B11	1SBV01 □ □ 12R1211	0.280
-	1	LS7 □ M12D11	1SBV01 □ □ 12R1411	0.280

#### ø12.5 plastic (polyacetal) roller lever on steel plunger (zinc plated) horizontal action

1	-	LS7 □ M31B11	1SBV01 □ □ 31R1211	0.265
-	1	LS7 □ M31D11	1SBV01 □ □ 31R1411	0.265

#### ø22 plastic (polyacetal) roller lever on steel plunger (zinc plated)

1	-	LS7 □ M38B11	1SBV01 □ □ 38R1211	0.270
-	1	LS7 □ M38D11	1SBV01 □ □ 38R1411	0.270

#### ø18 plastic (polyacetal) roller with bent lever

1	-	LS7 □ M45B11	1SBV01 □ □ 45R1211	0.335
-	1	LS7 □ M45D11	1SBV01 □ □ 45R1411	0.335

#### Adjustable ø3 stainless steel rod lever

1	-	LS7 □ M71B11	1SBV01 □ □ 71R1211	0.380
-	1	LS7 □ M71D11	1SBV01 □ □ 71R1411	0.380

#### Spring rod

1	-	LS7 □ M91B11	1SBV01 □ □ 91R1211	0.315
-	1	LS7 □ M91D11	1SBV01 □ □ 91R1411	0.315

#### Pull action with ring

1	-	LS7 □ M98B11-A	1SBV01 □ □ 98R1211	0.350
-	1	LS7 □ M98D11-A	1SBV01 □ □ 98R1411	0.350