

Pushbutton actuators, spring return



8 LM2T B10...



8 LM2T B20...



8 LM2T B30...

| Order code | Colour | Qty per pkg | Wt |
|------------|--------|-------------|------|
| | | n° | [kg] |

Flush (without mounting adapter). Spring return.

| | | | |
|-------------|--------|----|-------|
| 8 LM2T B102 | Black | 10 | 0.033 |
| 8 LM2T B103 | Green | 10 | 0.033 |
| 8 LM2T B104 | Red | 10 | 0.033 |
| 8 LM2T B105 | Yellow | 10 | 0.033 |
| 8 LM2T B106 | Blue | 10 | 0.033 |
| 8 LM2T B108 | White | 10 | 0.033 |

Extended (without mounting adapter). Spring return.

| | | | |
|-------------|--------|----|-------|
| 8 LM2T B202 | Black | 10 | 0.035 |
| 8 LM2T B203 | Green | 10 | 0.035 |
| 8 LM2T B204 | Red | 10 | 0.035 |
| 8 LM2T B205 | Yellow | 10 | 0.035 |
| 8 LM2T B206 | Blue | 10 | 0.035 |
| 8 LM2T B208 | White | 10 | 0.035 |

Shrouded (without mounting adapter). Spring return.

| | | | |
|-------------|--------|----|-------|
| 8 LM2T B302 | Black | 10 | 0.035 |
| 8 LM2T B303 | Green | 10 | 0.035 |
| 8 LM2T B304 | Red | 10 | 0.035 |
| 8 LM2T B305 | Yellow | 10 | 0.035 |
| 8 LM2T B306 | Blue | 10 | 0.035 |
| 8 LM2T B308 | White | 10 | 0.035 |

Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed.
- Degree of protection:
 - Per IEC/EN: IP65
 - Per UL: type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

An aluminium and zinc alloy (zama) is used for the metal part whereas plastic parts are made of polyamide and polycarbonate.

Mechanical endurance

Operating force: 0.8kg / 1.71b (actuator).
Mechanical life: 1,000,000 cycles.

Mounting adapter

See page 7-28.

Type: LM2T AU120.

Actuators latch onto the mounting adapter by simple rotation.

The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm / 0.59lbf ft).

Contact elements

See page 7-28.

Type: LM2T C10 (1NO)
LM2T CF10 (1NO Faston)
LM2T C10A (1EM)
LM2T C01 (1NC)
LM2T CF01 (1NC Faston)
LM2T C01D (1LB)

Contact elements snap onto the mounting adapter.

Up to 6 contact elements can be fitted on the mounting adapter: 2 on the left, 2 at the centre and 2 on the right.

To mount the contact elements in the centre position, use the accessory: LM2T A140; see page 7-33.

Certifications and compliance

Certifications obtained: RINA, LROS, GOST, CCC, UL Listed, for USA and Canada (File E93601), as Auxiliary Devices.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

Pushbutton actuators, spring return, with symbol



8 LM2T B11...



8 LM2T B21...

| Order code | Symbol | Colour | Qty per pkg | Wt |
|------------|--------|--------|-------------|------|
| | | | n° | [kg] |

Flush (without mounting adapter). Spring return.

| | | | | |
|--------------|-------|-------|----|-------|
| 8 LM2T B1102 | 0 | Black | 10 | 0.033 |
| 8 LM2T B1104 | | Red | 10 | 0.033 |
| 8 LM2T B1113 | I | Green | 10 | 0.033 |
| 8 LM2T B1118 | | White | 10 | 0.033 |
| 8 LM2T B1123 | II | Green | 10 | 0.033 |
| 8 LM2T B1128 | | White | 10 | 0.033 |
| 8 LM2T B1132 | STOP | Black | 10 | 0.033 |
| 8 LM2T B1134 | | Red | 10 | 0.033 |
| 8 LM2T B1142 | ← ① | Black | 10 | 0.033 |
| 8 LM2T B1148 | | White | 10 | 0.033 |
| 8 LM2T B1152 | ↑ ② | Black | 10 | 0.033 |
| 8 LM2T B1158 | | White | 10 | 0.033 |
| 8 LM2T B1163 | START | Green | 10 | 0.033 |
| 8 LM2T B1168 | | White | 10 | 0.033 |
| 8 LM2T B1176 | R | Blue | 10 | 0.033 |
| 8 LM2T B1178 | | White | 10 | 0.033 |
| 8 LM2T B1196 | RESET | Blue | 10 | 0.033 |
| 8 LM2T B1502 | ↔ | Black | 10 | 0.033 |
| 8 LM2T B1512 | → ← | Black | 10 | 0.033 |

Extended (without mounting adapter). Spring return.

| | | | | |
|--------------|------|-------|----|-------|
| 8 LM2T B2102 | 0 | Black | 10 | 0.035 |
| 8 LM2T B2104 | | Red | 10 | 0.035 |
| 8 LM2T B2132 | STOP | Black | 10 | 0.035 |
| 8 LM2T B2134 | | Red | 10 | 0.035 |

① Arrow symbol can be used to indicate right or left.

② Arrow symbol can be used to indicate up or down.

Push-push button actuators



8 LM2T Q10...



8 LM2T Q20...

| Order code | Colour | Qty per pkg | Wt |
|------------|--------|-------------|------|
| | | n° | [kg] |

Flush (without mounting adapter). Push on-push off.

| | | | |
|-------------|--------|----|-------|
| 8 LM2T Q102 | Black | 10 | 0.033 |
| 8 LM2T Q103 | Green | 10 | 0.033 |
| 8 LM2T Q104 | Red | 10 | 0.033 |
| 8 LM2T Q105 | Yellow | 10 | 0.033 |
| 8 LM2T Q106 | Blue | 10 | 0.033 |
| 8 LM2T Q108 | White | 10 | 0.033 |

Extended (without mounting adapter). Push on-push off.

| | | | |
|-------------|--------|----|-------|
| 8 LM2T Q202 | Black | 10 | 0.035 |
| 8 LM2T Q203 | Green | 10 | 0.035 |
| 8 LM2T Q204 | Red | 10 | 0.035 |
| 8 LM2T Q205 | Yellow | 10 | 0.035 |
| 8 LM2T Q206 | Blue | 10 | 0.035 |
| 8 LM2T Q208 | White | 10 | 0.035 |

① Contact elements NO (8LM2T C10) and LB (8LM2T C01D) cannot be fitted on these actuators.
Use contact elements EM (8 LM2T C10A) and NC (8LM2T C01) only.

Mushroom head pushbutton actuators



8 LM2T B614...



8 LM2T B616...



8 LM2T B624...



8 LM2T B634...



8 LM2T B654...



8 LM2T B654...

| Order code | Colour | Qty per pkg | Wt |
|------------|--------|-------------|------|
| | | n° | [kg] |

SPRING RETURN.
Ø40mm/1.6in (without mounting adapter).

| | | | |
|--------------|--------|----|-------|
| 8 LM2T B6142 | Black | 10 | 0.037 |
| 8 LM2T B6143 | Green | 10 | 0.037 |
| 8 LM2T B6144 | Red | 10 | 0.037 |
| 8 LM2T B6145 | Yellow | 10 | 0.037 |
| 8 LM2T B6146 | Blue | 10 | 0.037 |

SPRING RETURN.
Ø60mm/2.4in (without mounting adapter).

| | | | |
|--------------|--------|----|-------|
| 8 LM2T B6162 | Black | 10 | 0.043 |
| 8 LM2T B6163 | Green | 10 | 0.043 |
| 8 LM2T B6164 | Red | 10 | 0.043 |
| 8 LM2T B6165 | Yellow | 10 | 0.043 |
| 8 LM2T B6166 | Blue | 10 | 0.043 |

LATCH, PULL TO RELEASE.
Ø40mm/1.6in (without mounting adapter).
For normal stopping.

| | | | |
|--------------|-------|----|-------|
| 8 LM2T B6242 | Black | 10 | 0.105 |
| 8 LM2T B6244 | Red | 10 | 0.105 |

LATCH, TURN TO RELEASE.
Ø40mm/1.6in (without mounting adapter).
For normal stopping.

| | | | |
|--------------|-------|----|-------|
| 8 LM2T B6342 | Black | 10 | 0.054 |
| 8 LM2T B6344 | Red | 10 | 0.054 |

LATCH, TURN TO RELEASE.
Ø40mm/1.6in (without mounting adapter).
For emergency stopping, ISO 13850 compliant.

| | | | |
|--------------|-----|----|-------|
| 8 LM2T B6644 | Red | 10 | 0.087 |
|--------------|-----|----|-------|

LATCH, TURN KEY TO RELEASE.
Ø40mm/1.6in (without mounting adapter).
For normal stopping.

| | | | |
|---------------|-------|----|-------|
| 8 LM2T B6542 | Black | 10 | 0.091 |
| 8 LM2T B6542G | | 1 | 0.091 |
| 8 LM2T B6544 | Red | 10 | 0.091 |
| 8 LM2T B6544G | | 1 | 0.091 |

② Versions with different key codes.
Complete with the numeric code of the key. The following versions are available: 501, 502, 503, 504, 505, 506, 507, 508, 509, 510.
Example of complete code: 8 LM2T B6542G505.

Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed.
- Degree of protection:
 - Per IEC/EN: IP65 for push-push and LM2T B654 actuators; IP66 for others.
 - Per UL: type 1, 2, 3R, 4, 4X, 12, 12K except for 8 LM2T B616 which is type 1, 2, 3R, 12, 12K.

Materials

An aluminium and zinc alloy (zama) is used for the metal part whereas plastic parts are made of polyamide and polycarbonate.

Mechanical endurance

- Operating force: 0.8kg / 1.7lb (actuator).
Mechanical life:
- Push-push actuators: 500,000 cycles
 - Mushroom head buttons: 1,000,000 cycles
 - Mushroom head latch buttons: 300,000 cycles.

Mounting adapter

See page 7-28.
Type: LM2T AU120.
Actuators latch onto the mounting adapter by simple rotation.
The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm/0.59lbf).

Contact elements for push-push button actuators

See page 7-28.
Type: LM2T C10A (1EM)
LM2T C01 (1NC)
Contact elements snap onto the mounting adapter.
Up to 2 contact elements can be fitted on the mounting adapter: 1 each on the right and left.

Contact elements for spring-return mushroom-head button actuators

See page 7-28.
Type: LM2T C10 (1NO)
LM2T CF10 (1NO Faston)
LM2T C10A (1EM)
LM2T C01 (1NC)
LM2T CF01 (1NC Faston)
LM2T C01D (1LB)
Contact elements snap onto the mounting adapter.
Up to 6 contact elements can be fitted on the mounting adapter with all the other types: 2 on the left, 2 at the centre 2 on the right. To mount the contact elements in the centre position, use the accessory LM2T A140; see page 7-33.

Contact elements for latch mushroom-head button actuators

See page 7-28.
Type: LM2T C10 (1NO)
LM2T CF10 (1NO Faston)
LM2T C10A (1EM)
LM2T C01 (1NC)
LM2T CF01 (1NC Faston)
LM2T C01D (1LB)
Contact elements snap onto the mounting adapter.
Up to 6 contact elements can be fitted on the mounting adapter for all the other types: 2 on the left, 2 at the centre 2 on the right; for LM2T B624... and LM2T B6644 a maximum of 4 contacts only can be installed.

Certifications and compliance

Certifications obtained: RINA, LROS, GOST, CCC, UL Listed, for USA and Canada (File E93601), as Auxiliary Devices.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

Mechanical reset button, complete unit, spring return



8 LM2T R1196

| Order code | Colour | Qty per pkg | Wt |
|------------|--------|-------------|------|
| | | n° | [kg] |

Flush (5.2mm/0.2" stroke). Adjustable length 0-140mm/5.5". Spring return (complete with shaft and mounting adapter).

| | | | |
|--------------|--------------|----|-------|
| 8 LM2T R1002 | Black | 10 | 0.065 |
| 8 LM2T R1003 | Green | 10 | 0.065 |
| 8 LM2T R1004 | Red | 10 | 0.065 |
| 8 LM2T R1006 | Blue | 10 | 0.065 |
| 8 LM2T R1196 | Blue (RESET) | 10 | 0.065 |

Extended (5.2mm/0.2" stroke). Adjustable length 0-140mm/5.5". Spring return (complete with shaft and mounting adapter).

| | | | |
|--------------|-----|----|-------|
| 8 LM2T R2004 | Red | 10 | 0.067 |
|--------------|-----|----|-------|

① With "RESET" caption on actuator.

Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed.
- Degree of protection:
 - Per IEC/EN: IP65 for mechanical reset buttons; IP40 for double and triple-touch actuators.
 - Per UL: type 1, 2, 3R, 4, 4X, 12, 12K for 8 LM2T R...; type 1 for 8 LM2T B71... and 8 LM2T B72...

Materials

An aluminium and zinc alloy (zama) is used for the metal part whereas plastic parts are made of polyamide and polycarbonate.

Mechanical endurance

Operating force: 0.8kg / 1.7lb (actuator)
Mechanical life: 1,000,000 cycles.

Mounting adapter

See page 7-28.

Type: LM2T AU120.

Actuators latch onto the mounting adapter by simple rotation.

The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm/0.59lbf).

Contact elements for double and triple-touch actuators

See page 7-28.

Type: LM2T C10 (1NO)
LM2T CF10 (1NO Faston)
LM2T C10A (EM)
LM2T C01 (1NC)
LM2T CF01 (1NC Faston)
LM2T C01D (LB)

Contact elements snap onto the mounting adapter.

DOUBLE-TOUCH ACTUATORS

Up to 4 contact elements can be fitted on the mounting adapter: 2 on the left and 2 on the right.

TRIPLE-TOUCH ACTUATORS

Up to 6 contact elements can be fitted on the mounting adapter: 2 on the left, 2 in the centre and 2 on the right.

Certifications and compliance

Certifications obtained: RINA, LROS, GOST, CCC, UL Listed, for USA and Canada (File E93601), as Auxiliary Devices.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

7 Double-touch actuators, spring return



8 LM2T B71...



8 LM2T B72...

| Order code | Colour | Symbols | Qty per pkg | Wt |
|------------|--------|---------|-------------|------|
| | | | n° | [kg] |

Two flush push-buttons (without mounting adapter). Both spring return.

| | | | | |
|--------------|-------------|------------|---|-------|
| 8 LM2T B7112 | Black/Red | none | 5 | 0.044 |
| 8 LM2T B7113 | Green/Red | none | 5 | 0.044 |
| 8 LM2T B7114 | White/Black | none | 5 | 0.044 |
| 8 LM2T B7122 | Black/Red | I-O | 5 | 0.044 |
| 8 LM2T B7123 | Green/Red | I-O | 5 | 0.044 |
| 8 LM2T B7124 | White/Black | I-O | 5 | 0.044 |
| 8 LM2T B7133 | Green/Red | Start/Stop | 5 | 0.044 |

One extended and one flush push-buttons (without mounting adapter). Both spring return.

| | | | | |
|--------------|-------------|------------|---|-------|
| 8 LM2T B7212 | Black/Red | none | 5 | 0.044 |
| 8 LM2T B7213 | Green/Red | none | 5 | 0.044 |
| 8 LM2T B7214 | White/Black | none | 5 | 0.044 |
| 8 LM2T B7222 | Black/Red | I-O | 5 | 0.044 |
| 8 LM2T B7223 | Green/Red | I-O | 5 | 0.044 |
| 8 LM2T B7224 | White/Black | I-O | 5 | 0.044 |
| 8 LM2T B7233 | Green/Red | Start/Stop | 5 | 0.044 |

Triple-touch actuators, spring return



8 LM2T B73...

| Order code | Symbols | Qty per pkg | Wt |
|------------|---------|-------------|------|
| | | n° | [kg] |

Two external flush and one middle extended buttons (without mounting adapter). All spring return.

| | | | |
|--------------|----------------|---|-------|
| 8 LM2T B7345 | STOP | 5 | 0.044 |
| 8 LM2T B7355 | ↑ STOP ↓ | 5 | 0.044 |
| 8 LM2T B7365 | → STOP ← | 5 | 0.044 |
| 8 LM2T B7375 | ↗ STOP ↖ | 5 | 0.044 |

Selector switch actuators knob



8 LM2T S1...

| Order code | Type of position | Qty per pkg | Wt |
|--|------------------|-------------|-------|
| | | n° | [kg] |
| 2 position (without mounting adapter). | | | |
| 8 LM2T S120 | | 10 | 0.049 |
| 8 LM2T S121 | | 10 | 0.049 |
| 3 position (without mounting adapter). | | | |
| 8 LM2T S130 | | 10 | 0.049 |
| 8 LM2T S131 | | 10 | 0.049 |
| 8 LM2T S132 | | 10 | 0.049 |
| 8 LM2T S133 | | 10 | 0.049 |

Selector switch actuators lever



8 LM2T S2...

| Order code | Type of position | Qty per pkg | Wt |
|--|------------------|-------------|-------|
| | | n° | [kg] |
| 2 position (without mounting adapter). | | | |
| 8 LM2T S220 | | 10 | 0.050 |
| 8 LM2T S221 | | 10 | 0.050 |
| 3 position (without mounting adapter). | | | |
| 8 LM2T S230 | | 10 | 0.050 |
| 8 LM2T S231 | | 10 | 0.050 |
| 8 LM2T S232 | | 10 | 0.050 |
| 8 LM2T S233 | | 10 | 0.050 |

Selector switch actuators key



8 LM2T S3...

| Order code | Type of position | Qty per pkg | Wt |
|--|------------------|-------------|-------|
| | | n° | [kg] |
| 2 position (without mounting adapter). | | | |
| 8 LM2T S320 | | 10 | 0.079 |
| 8 LM2T S320G⓪ | | 1 | 0.079 |
| 8 LM2T S321 | | 10 | 0.079 |
| 8 LM2T S321G⓪ | | 1 | 0.079 |
| 8 LM2T S340 | | 10 | 0.079 |
| 8 LM2T S340G⓪ | | 1 | 0.079 |
| 3 position (without mounting adapter). | | | |
| 8 LM2T S330 | | 10 | 0.080 |
| 8 LM2T S330G⓪ | | 1 | 0.080 |
| 8 LM2T S331 | | 10 | 0.080 |
| 8 LM2T S331G⓪ | | 1 | 0.080 |
| 8 LM2T S332⓪ | | 10 | 0.080 |
| 8 LM2T S332G⓪⓪ | | 1 | 0.080 |
| 8 LM2T S333⓪ | | 10 | 0.080 |
| 8 LM2T S333G⓪⓪ | | 1 | 0.080 |
| 8 LM2T S350 | | 10 | 0.080 |
| 8 LM2T S350G⓪ | | 1 | 0.080 |
| 8 LM2T S360 | | 10 | 0.080 |
| 8 LM2T S360G⓪ | | 1 | 0.080 |
| 8 LM2T S370⓪ | | 10 | 0.080 |
| 8 LM2T S370G⓪⓪ | | 1 | 0.080 |
| 8 LM2T S380⓪ | | 10 | 0.080 |
| 8 LM2T S380G⓪⓪ | | 1 | 0.080 |
| 8 LM2T S390⓪ | | 10 | 0.080 |
| 8 LM2T S390G⓪⓪ | | 1 | 0.080 |

Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed.
- Degree of protection:
 - Per IEC/EN: IP65
 - Per UL: type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

An aluminium and zinc alloy (zama) is used for the metal part whereas plastic parts are made of polyamide and polycarbonate.

Mechanical endurance

Mechanical life: 300,000 cycles.

Mounting adapter

See page 7-28.

Type: LM2T AU120.

Actuators latch onto the mounting adapter by simple rotation.

The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm / 0.59in).

Contact elements

See page 7-28.

- Type:
- LM2T C10 (1NO)
 - LM2T CF10 (1NO Faston)
 - LM2T C10A (1EM)
 - LM2T C01 (1NC)
 - LM2T CF01 (1NC Faston)
 - LM2T C01D (1LB)

Contact elements snap onto the mounting adapter.

Up to 4 contact elements can be fitted on the mounting adapter: 2 on the left and 2 on the right. For more, consult Customer Service for advice; see contact details on inside front cover.

Type of positions

- Maintained position.
- Spring return position.
- Key extraction position.

Rotation angles

2 position



3 position



Special versions

Versions with coloured keys are available upon request. Contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).

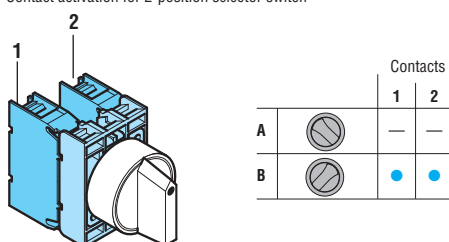
Certifications and compliance

Certifications obtained: RINA, LROS, GOST, CCC, UL Listed, for USA and Canada (File E93601), as Auxiliary Devices.

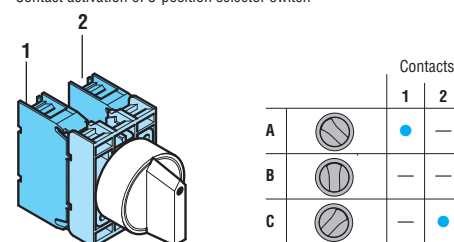
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

- ⓪ Versions with different key codes. Complete with the numeric code of the key. The following versions are available: 501, 502, 503, 504, 505, 506, 507, 508, 509, 510. Example of complete code: 8 LM2T S320G505.
- ⓪ Available only on specific request.

Contact activation for 2-position selector switch



Contact activation of 3-position selector switch



Illuminated button actuators, spring return



8 LM2T BL10...



8 LM2T BL20...

| Order code | Colour | Qty per pkg | Wt |
|------------|--------|-------------|------|
| | | n° | [kg] |

Flush with side visibility (without mounting adapter).
Spring return.

| | | | |
|--------------|-------------|----|-------|
| 8 LM2T BL103 | Green | 10 | 0.033 |
| 8 LM2T BL104 | Red | 10 | 0.033 |
| 8 LM2T BL105 | Yellow | 10 | 0.033 |
| 8 LM2T BL106 | Blue | 10 | 0.033 |
| 8 LM2T BL107 | Transparent | 10 | 0.033 |

Extended (without mounting adapter). Spring return.

| | | | |
|--------------|-------------|----|-------|
| 8 LM2T BL203 | Green | 10 | 0.035 |
| 8 LM2T BL204 | Red | 10 | 0.035 |
| 8 LM2T BL205 | Yellow | 10 | 0.035 |
| 8 LM2T BL206 | Blue | 10 | 0.035 |
| 8 LM2T BL207 | Transparent | 10 | 0.035 |

Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed.
- Degree of protection:
 - Per IEC/EN: IP65
 - Per UL: type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

An aluminium and zinc alloy (zama) is used for the metal part whereas plastic parts are made of polyamide and polycarbonate.

Mechanical endurance

- Operating force: 0.8kg / 1.7lb (actuator).
Mechanical life:
- Spring return buttons: 1,000,000 cycles
 - Push-push buttons: 500,000 cycles.

Mounting adapter

See page 7-28.

Type: LM2T AU120.

Actuators latch onto the mounting adapter by simple rotation.

The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm/0.59lbf).

Contact elements for illuminated push-push actuators:

See page 7-28.

Type: LM2T C10A (EM)
LM2T C01 (1NC)

Contact elements snap onto the mounting adapter.

Up to 2 contact elements can be fitted on the mounting adapter in a row, 1 each on the right and left, along with the lamp-holder in the centre position, of which LM2T DL400, LM2T EL400, LM2T VL230, LM2T ZL230, LM2T L... or LM2T M... (see page 7-35).

With lamp-holder LM2T XL..., LM2T YL..., LM2T FL... or LM2T GL..., one only contact element can be mounted; see page 7-35.

Contact elements for illuminated spring-return button and mushroom-head actuators:

See page 7-28.

Type: LM2T C10 (1NO)
LM2T CF10 (1NO Faston)
LM2T C10A (EM)
LM2T C01 (1NC)
LM2T CF01 (1NC Faston)
LM2T C01D (LB)

Contact elements snap onto the mounting adapter.

On LM2T BL1, LM2T BL2 or LM2T BL61 actuators, the following can be fitted on the mounting adapter:

- Up to 4 contacts, 2 each on the left and right, when one of the following lamp-holders is used: LM2T DL400, LM2T EL400, LM2T VL230, LM2T ZL230, LM2T L or LM2T M (see page 7-35).
- Up to 2 contacts, one on top of the other of the same type only, when one of the following lamp-holders is used: LM2T XL, LM2T YL, LM2T FL or LM2T GL (see page 7-35).

On LM2T BL62... actuator, the following can be fitted on the mounting adapter:

- Up to 2 contacts, 1 each on the right and left, when one of the following lamp-holders is used: LM2T DL400, LM2T EL400, LM2T VL230, LM2T ZL230, LM2T L or LM2T M (see page 7-35)
- Up to 2 contacts, one on top of the other of the same type only, when one of the following lamp-holders is used: LM2T XL, LM2T YL, LM2T FL or LM2T GL (see page 7-35).

Lamp-holder elements

See page 7-29 and 30.

Lamps

Maximum recommended power: 1.2W.
See page 7-33.

Certifications and compliance

Certifications obtained: RINA, LROS, GOST, CCC, UL Listed, for USA and Canada (File E93601), as Auxiliary Devices.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

7

Push-push button actuators



8 LM2T QL10...



8 LM2T QL20...

| Order code | Colour | Qty per pkg | Wt |
|------------|--------|-------------|------|
| | | n° | [kg] |

Flush with side visibility (without mounting adapter).
Push on-push off.

| | | | |
|--------------|-------------|----|-------|
| 8 LM2T QL103 | Green | 10 | 0.033 |
| 8 LM2T QL104 | Red | 10 | 0.033 |
| 8 LM2T QL105 | Yellow | 10 | 0.033 |
| 8 LM2T QL106 | Blue | 10 | 0.033 |
| 8 LM2T QL107 | Transparent | 10 | 0.033 |

Extended (without mounting adapter).
Push on-push off.

| | | | |
|--------------|-------------|----|-------|
| 8 LM2T QL203 | Green | 10 | 0.035 |
| 8 LM2T QL204 | Red | 10 | 0.035 |
| 8 LM2T QL205 | Yellow | 10 | 0.035 |
| 8 LM2T QL206 | Blue | 10 | 0.035 |
| 8 LM2T QL207 | Transparent | 10 | 0.035 |

- ① Use only the early-make type, LM2T C10A.
No normally open contact element, LM2T C10, must be used with this type of button actuators.
A maximum of 2 contact elements can be mounted only.

Illuminated mushroom head button actuators



8 LM2T BL614...



8 LM2T BL624...

| Order code | Colour | Qty per pkg | Wt |
|------------|--------|-------------|------|
| | | n° | [kg] |

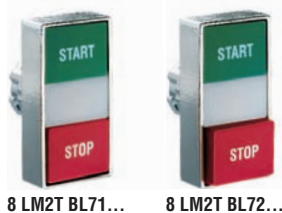
SPRING RETURN.
Ø40mm (without mounting adapter).

| | | | |
|---------------|--------|----|-------|
| 8 LM2T BL6143 | Green | 10 | 0.043 |
| 8 LM2T BL6144 | Red | 10 | 0.043 |
| 8 LM2T BL6145 | Yellow | 10 | 0.043 |
| 8 LM2T BL6146 | Blue | 10 | 0.043 |
| 8 LM2T BL6148 | White | 10 | 0.043 |

LATCH, PULL TO RELEASE.
Ø40mm (without mounting adapter).

| | | | |
|---------------|--------|----|-------|
| 8 LM2T BL6243 | Green | 10 | 0.105 |
| 8 LM2T BL6244 | Red | 10 | 0.105 |
| 8 LM2T BL6245 | Yellow | 10 | 0.105 |
| 8 LM2T BL6246 | Blue | 10 | 0.105 |
| 8 LM2T BL6248 | White | 10 | 0.105 |

Double touch actuators, spring return, white indicator



| Order code | Colour | Symbol | Qty per pkg n° | Wt [kg] |
|------------|--------|--------|-------------------|------------|
|------------|--------|--------|-------------------|------------|

Two flush pushbuttons (without mounting adapter). Both spring return.

| | | | | |
|---------------|-------------|------------|---|-------|
| 8 LM2T BL7112 | Black/Red | none | 5 | 0.044 |
| 8 LM2T BL7113 | Green/Red | none | 5 | 0.044 |
| 8 LM2T BL7114 | White/Black | none | 5 | 0.044 |
| 8 LM2T BL7122 | Black/Red | I-O | 5 | 0.044 |
| 8 LM2T BL7123 | Green/Red | I-O | 5 | 0.044 |
| 8 LM2T BL7124 | White/Black | I-O | 5 | 0.044 |
| 8 LM2T BL7133 | Green/Red | Start/Stop | 5 | 0.044 |

One extended and one flush pushbuttons (without mounting adapter). Both spring return.

| | | | | |
|---------------|-------------|------------|---|-------|
| 8 LM2T BL7212 | Black/Red | — | 5 | 0.044 |
| 8 LM2T BL7213 | Green/Red | — | 5 | 0.044 |
| 8 LM2T BL7214 | White/Black | — | 5 | 0.044 |
| 8 LM2T BL7222 | Black/Red | I-O | 5 | 0.044 |
| 8 LM2T BL7223 | Green/Red | I-O | 5 | 0.044 |
| 8 LM2T BL7224 | White/Black | I-O | 5 | 0.044 |
| 8 LM2T BL7233 | Green/Red | Start/Stop | 5 | 0.044 |

Illuminated selector switch actuators



8 LM2T SL1...

| Order code | Colour | Type of positions | Qty per pkg n° | Wt [kg] |
|------------|--------|-------------------|-------------------|------------|
|------------|--------|-------------------|-------------------|------------|

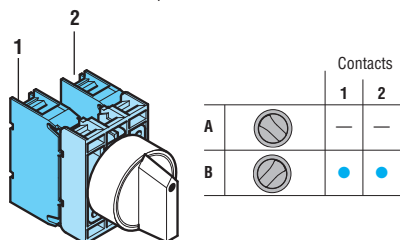
2 position (without mounting adapter).

| | | | | |
|---------------|--------|---|----|-------|
| 8 LM2T SL1203 | Green | ✓ | 10 | 0.025 |
| 8 LM2T SL1204 | Red | | 10 | 0.025 |
| 8 LM2T SL1205 | Yellow | | 10 | 0.025 |
| 8 LM2T SL1206 | Blue | | 10 | 0.025 |
| 8 LM2T SL1208 | White | | 10 | 0.025 |
| 8 LM2T SL1213 | Green | ∩ | 10 | 0.025 |
| 8 LM2T SL1214 | Red | | 10 | 0.025 |
| 8 LM2T SL1215 | Yellow | | 10 | 0.025 |
| 8 LM2T SL1216 | Blue | | 10 | 0.025 |
| 8 LM2T SL1218 | White | | 10 | 0.025 |

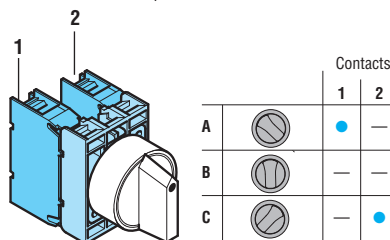
3 position (without mounting adapter).

| | | | | |
|---------------|--------|---|----|-------|
| 8 LM2T SL1303 | Green | ∇ | 10 | 0.025 |
| 8 LM2T SL1304 | Red | | 10 | 0.025 |
| 8 LM2T SL1305 | Yellow | | 10 | 0.025 |
| 8 LM2T SL1306 | Blue | | 10 | 0.025 |
| 8 LM2T SL1308 | White | | 10 | 0.025 |
| 8 LM2T SL1313 | Green | ∩ | 10 | 0.025 |
| 8 LM2T SL1314 | Red | | 10 | 0.025 |
| 8 LM2T SL1315 | Yellow | | 10 | 0.025 |
| 8 LM2T SL1316 | Blue | | 10 | 0.025 |
| 8 LM2T SL1318 | White | | 10 | 0.025 |
| 8 LM2T SL1323 | Green | ∇ | 10 | 0.025 |
| 8 LM2T SL1324 | Red | | 10 | 0.025 |
| 8 LM2T SL1325 | Yellow | | 10 | 0.025 |
| 8 LM2T SL1326 | Blue | | 10 | 0.025 |
| 8 LM2T SL1328 | White | | 10 | 0.025 |
| 8 LM2T SL1333 | Green | ∩ | 10 | 0.025 |
| 8 LM2T SL1334 | Red | | 10 | 0.025 |
| 8 LM2T SL1335 | Yellow | | 10 | 0.025 |
| 8 LM2T SL1336 | Blue | | 10 | 0.025 |
| 8 LM2T SL1338 | White | | 10 | 0.025 |

Contact activation of 2-position selector switch



Contact activation of 3-position selector switch



Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed.
- Degree of protection:
 - Per IEC/EN: IP65 for selectors; IP40 for double-touch actuators.
 - Per UL: type 1, 2, 3R, 4, 4X, 12, 12K except for 8 LM2T BL71... and 8 LM2T BL72... which are type 1.

Materials

An aluminium and zinc alloy (zama) is used for the metal part whereas plastic parts are made of polyamide and polycarbonate.

Mechanical endurance

Operating force: 0.8kg / 1.7lb (double touch actuator).

Mechanical life:

- double-touch actuators: 1,000,000 cycles;
- selector switches: 300,000 cycles.

Mounting adapter

See page 7-28.

Type: LM2T AU120.

Actuators latch onto the mounting adapter by simple rotation.

The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm/0.59lbf).

Contact elements

See page 7-28.

- Type:
- LM2T C10 (1NO)
 - LM2T CF10 (1NO Faston)
 - LM2T C10A (1EM)
 - LM2T C01 (1NC)
 - LM2T CF01 (1NC Faston)
 - LM2T C01D (1LB)

Contact elements snap onto the mounting adapter.

DOUBLE-TOUCH ACTUATORS

Up to 4 contact elements can be fitted on the mounting adapter: 2 on the left and 2 on the right.

SELECTOR SWITCH ACTUATORS

On 2 or 3-position illuminated selectors, the following can be fitted on the mounting adapter:

- Up to 4 contact elements when the following types of lamp-holders are used: LM2T DL400, LM2T VL230, LM2T EL400, LM2T ZL230, LM2T L... or LM2T M... (see page 7-35).
- Up to 2 contact elements when the following types of lamp-holders are used: LM2T XL..., LM2T YL..., LM2T FL... or LM2T GL... (see page 7-35).

On 3-position illuminated selectors, the following can be fitted on the mounting adapter:

- Up to 4 contact elements when the following types of lamp-holders are used: LM2T DL400, LM2T VL230, LM2T EL400, LM2T ZL230, LM2T L... or LM2T M... (see page 7-35).

NOTE: The following lamp-holders cannot be mounted: LM2T XL..., LM2T YL..., LM2T FL... or LM2T GL...

Selector switch type of positions

✓ Maintained position.

∩ Spring return position.

Selector switch rotation angles

2 position



3 position



Lamp-holder elements

See page 7-29 and 30.

Lamps

Maximum recommended power: 1.2W.
See page 7-33.

Certifications and compliance

Certifications obtained: RINA, LROS, GOST, CCC, UL Listed, for USA and Canada (File E93601), as Auxiliary Devices.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

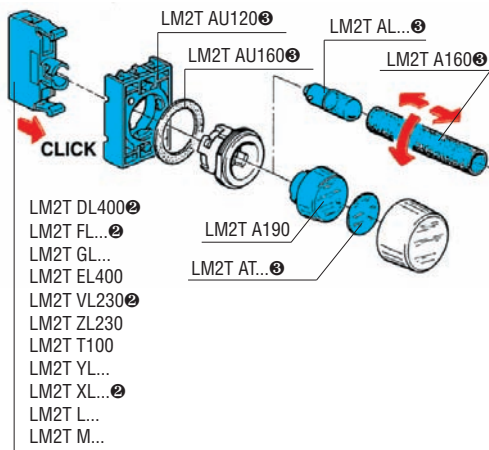
Pilot light heads



8 LM2T IL10...

| Order code | Colour | Qty per pkg | Wt |
|---------------------------|-------------|-------------|-------|
| | | n° | [kg] |
| Without mounting adapter. | | | |
| 8 LM2T IL103 | Green | 10 | 0.024 |
| 8 LM2T IL104 | Red | 10 | 0.024 |
| 8 LM2T IL105 | Yellow | 10 | 0.024 |
| 8 LM2T IL106 | Blue | 10 | 0.024 |
| 8 LM2T IL107 | Transparent | 10 | 0.024 |
| 8 LM2T IL1187 | Transparent | 10 | 0.024 |

With symbol indicating dangerous voltage (IEC/EN 60417 5036-a).



The mounting adapter is standard supplied so there is no need to purchase it as a separate accessory.
 Can be purchased separately. Refer to page 7-33.

Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed.
- Degree of protection:
 - Per IEC/EN: IP65
 - Per UL: type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

An aluminium and zinc alloy (zama) is used for the metal part whereas plastic parts are made of polyamide and polycarbonate.

Mounting adapter

See page 7-28.

Type: LM2T AU120.

Actuators latch onto the mounting adapter by simple rotation.

The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm/0.59lbf).

Lamp-holder elements

See page 7-29 and 30.

Lamps

Maximum recommended power: 1.2W.

See page 7-33.

Certifications and compliance

Certifications obtained: RINA, LROS, GOST, CCC, UL Listed, for USA and Canada (File E93601), as Auxiliary Devices.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

7

Potentiometer drives



8 LM2T P100
(complete with mounting adapter)



8 LM2T P110
(complete with mounting adapter)

| Order code | Characteristics | Qty per pkg | Wt |
|-------------|----------------------|-------------|-------|
| | | n° | [kg] |
| 8 LM2T P100 | With graduated scale | 10 | 0,070 |
| 8 LM2T P110 | With variable index | 10 | 0,070 |

Potenzimetro non fornito.

Operational characteristics

- Suitable for potentiometers with 6-6.3mm/0.24-0.25in diameter shaft
- Minimum 40mm/1.6in shaft length
- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed.
- Degree of protection: IP65 (warranted by potentiometers with a cylindrical shaft).

Materials

An aluminium and zinc alloy (zama) is used for the metal part whereas plastic parts are made of polyamide and polycarbonate.

Mechanical endurance

Mechanical life: 300,000 cycles.

Mounting adapter

Standard supply with actuator.

Actuators latch onto the mounting adapter by simple rotation.

The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm/0.59lbf).

Certifications and compliance

Certifications obtained: CCC and GOST.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1.

Joysticks

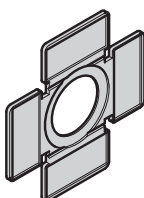


8 LM2T J...
(without mechanical interlock)



8 LM2T J...
(with mechanical interlock)

Accessories



8 LM2T AU101

| Order code | Type of positions | N° contact elements | Qty per pkg | Wt |
|------------|-------------------|---------------------|-------------|------|
| | | NO | n° | [kg] |

Without mechanical interlock. Label holder excluded.
Complete with auxiliary contacts.

| | | | | |
|-------------|--|---|---|-------|
| 8 LM2T J200 | | 2 | 1 | 0.082 |
| 8 LM2T J201 | | 2 | 1 | 0.082 |
| 8 LM2T J400 | | 4 | 1 | 0.104 |
| 8 LM2T J401 | | 4 | 1 | 0.104 |

With mechanical interlock in centre position.
Label holder excluded. Complete with auxiliary contacts.

| | | | | |
|-------------|--|---|---|-------|
| 8 LM2T J210 | | 2 | 1 | 0.082 |
| 8 LM2T J211 | | 2 | 1 | 0.082 |
| 8 LM2T J410 | | 4 | 1 | 0.104 |
| 8 LM2T J411 | | 4 | 1 | 0.104 |

| Order code | Description | Qty per pkg | Wt |
|--------------|---|-------------|-------|
| | | n° | [kg] |
| 8 LM2T AU101 | 2-4 directional holder for adhesive legends | 10 | 0.004 |

Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
 - Any mounting position is allowed.
 - Degree of protection:
 - IEC IP20 / UL type 1 for contact elements
- On front:
- Per IEC/EN: IP65
 - Per UL: type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

An aluminium and zinc alloy (zama) is used for the metal parts whereas plastic parts are made of polyamide and polycarbonate.
The sealing boot is made of NBR rubber.

Mechanical endurance

Mechanical life: 1,000,000 cycles.

General characteristics of contact elements

Self-cleaning with dual effect, scraping and oscillating
IEC rated insulation voltage: 690V
IEC rated thermal current Ith: 10A.
UL/CSA and IEC/EN 60947-5-1 designation: A300 Q300.
IEC operational power in AC15:

| [V] | 12 | 24 | 48 | 120 | 240 |
|-----|----|----|----|-----|-----|
| [A] | 6 | 6 | 6 | 6 | 3 |

IEC operational power in DC13:

| [V] | 12 | 24 | 48 | 125 | 250 |
|-----|------|------|------|------|------|
| [A] | 0.55 | 0.55 | 0.55 | 0.55 | 0.27 |

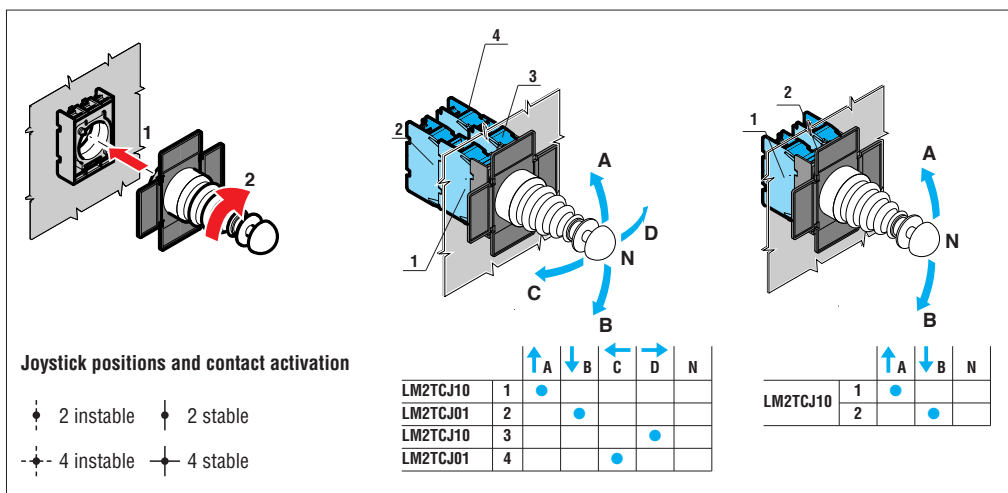
Short circuit protection fuse: max calibre 10A gG/SC
Contact resistance: ≤20mΩ
Terminals: Clamp screw with washer
Maximum tightening torque: 1Nm / 0.74lbf.

Mounting adapter and contact elements

The joystick is standard supplied with the mounting adapter and contact elements.
The joystick latches onto the mounting adapter by simple rotation.
The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm/0.59lbf).
Auxiliary contacts snap onto the mounting adapter.
Two LM2T CJ... contacts are mounted with the LM2T J2... types while four on the LM2T J4... versions.

Certifications and compliance

Certifications obtained: CCC, GOST, UL Listed, for USA and Canada (File E93601), as Auxiliary Devices.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.



Mounting adapter



8 LM2T AU120

| Order code | Description | Qty per pkg | Wt |
|----------------------------------|------------------|-------------|-------|
| | | n° | [kg] |
| Only for metal series actuators. | | | |
| 8 LM2T AU120 | Mounting adapter | 10 | 0.019 |

Contact elements



8 LM2T C...



8 LM2T E...



8 LM2T CF01



8 LM2T CF10

| Order code | Function | Qty per pkg | Wt |
|------------|----------|-------------|------|
| | All SPST | n° | [kg] |

Screw termination.
Without mounting adapter.

| | | | |
|--------------|------|----|-------|
| 8 LM2T C10⊕ | NO⊕ | 10 | 0.011 |
| 8 LM2T C10A | EM⊕ | 10 | 0.011 |
| 8 LM2T C01⊖ | NC⊖ | 10 | 0.011 |
| 8 LM2T C01D⊕ | LB⊕⊕ | 10 | 0.011 |

Screw termination.
With mounting adapter for actuators metal series LM2T... only.

| | | | |
|-------------|-----|----|-------|
| 8 LM2T E10⊕ | NO⊕ | 10 | 0.029 |
| 8 LM2T E01⊖ | NC⊖ | 10 | 0.029 |

Faston termination
Without mounting adapter.

| | | | |
|--------------|-----|----|-------|
| 8 LM2T CF10⊕ | NO⊕ | 10 | 0.012 |
| 8 LM2T CF01⊖ | NC⊖ | 10 | 0.012 |

- ⊕ Not suitable for push-push actuators. Use LM2T C10A (EM) or LM2T C01 (NC) type only with push-push actuators.
- ⊖ Normally open contact with early make operation.
- ⊖ Direct opening operation ⊖ in accordance with IEC/EN 60947-5-1.
- ⊕ Normally closed contact with late break operation.

Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed.
- Degree of protection per IEC/EN:
 - IP20 for contacts elements with screw termination
 - IP00 for contact elements with Faston termination
- Tightening torque: 1Nm/1.57lbf max (except Faston).

General characteristics of the contact elements

Self-cleaning with dual effect, scraping and oscillating
IEC rated insulation voltage: 690V
IEC rated thermal current Ith: 10A
Conductivity: 5V 10mA.

UL/CSA and IEC/EN 60947-5-1 designation: A600 Q600

IEC operational power in AC15:

| | | | | | | | | | |
|-----|----|----|----|-----|-----|-----|-----|-----|-----|
| [V] | 12 | 24 | 48 | 120 | 240 | 400 | 480 | 500 | 600 |
| [A] | 6 | 6 | 6 | 6 | 3 | 1.9 | 1.5 | 1.4 | 1.2 |

IEC operational power in DC13:

| | | | | | | | | |
|-----|----|----|-----|------|------|------|------|-----|
| [V] | 12 | 24 | 48 | 125 | 250 | 440 | 500 | 600 |
| [A] | 3 | 3 | 1.5 | 0.55 | 0.27 | 0.15 | 0.13 | 0.1 |

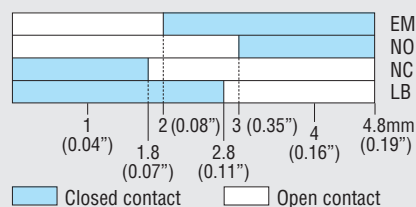
Short-circuit protection fuse: max. calibre 10A gG/SC

Contact resistance: ≤20mΩ

Terminals: Clamp screw with washer

Faston 1-6.35mm/0.25in or 2-2.8mm/0.11in.

Stroke of contact elements



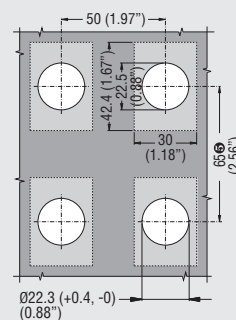
Maximum conductor cross section for screw terminals

1 o 2 2.5mm² or AWG12 cables.

Mechanical and electric endurance

Operating force: 0.5kg / 1.1lb (contact elements).

| | | |
|------------------|-----------|------------------|
| Electrical life: | LM2T C10 | 1,000,000 cycles |
| | LM2T CF10 | 1,000,000 cycles |
| | LM2T C01 | 1,000,000 cycles |
| | LM2T CF01 | 1,000,000 cycles |
| | LM2T C10A | 600,000 cycles |
| | LM2T C01D | 600,000 cycles. |



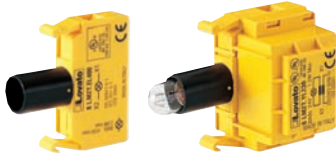
⊕ When using Faston, pitch is 90mm minimum.

Certifications and compliance

Certifications obtained: RINA, LROS, GOST, CCC, UL Listed, for USA and Canada (File E93601), as Auxiliary Devices.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

Lamp-holders without mounting adapter



8 LM2T EL400
8 LM2T ZL230

8 LM2T YL...
8 LM2T GL...



8 LM2T T100

| Order code | Rated auxiliary supply voltage | Type of bulb supplied | Qty per pkg | Wt |
|--------------------------------|--------------------------------|-----------------------|-------------|-------|
| | [V] 50/60Hz | | n° | [kg] |
| Direct supply. | | | | |
| 8 LM2T EL400 | ≤415VAC/DC | No | 10 | 0.011 |
| With resistor and diode. | | | | |
| 8 LM2T ZL230 | 230VAC | Yes 130V, 2W | 10 | 0.015 |
| With transformer. | | | | |
| 8 LM2T YL110 | 110-120VAC | Yes 24V, 1.2W | 1 | 0.086 |
| 8 LM2T YL230 | 220-240VAC | Yes 24V, 1.2W | 1 | 0.084 |
| 8 LM2T YL400 | 380-415VAC | Yes 24V, 1.2W | 1 | 0.087 |
| Flashing. | | | | |
| 8 LM2T GL048 | 24-48VAC | No | 1 | 0.027 |
| 8 LM2T GL230 | 110-230VAC | No | 1 | 0.027 |
| Test element for lamp-holders. | | | | |
| 8 LM2T T100 | Test element | ⑥⑦ | 10 | 0.011 |

Lamp-holders with mounting adapter



8 LM2T DL400 - 8 LM2T VL230



8 LM2T XL... - 8 LM2T FL...

| Order code | Rated auxiliary supply voltage | Type of bulb supplied | Qty per pkg | Wt |
|--------------------------|--------------------------------|-----------------------|-------------|-------|
| | [V] 50/60Hz | | n° | [kg] |
| Direct supply. | | | | |
| 8 LM2T DL400 | ≤415VAC/DC | No | 10 | 0.029 |
| With resistor and diode. | | | | |
| 8 LM2T VL230 | 230VAC | Yes 130V, 2W | 10 | 0.032 |
| With transformer. | | | | |
| 8 LM2T XL110 | 110-120VAC | Yes 24V, 1.2W | 1 | 0.105 |
| 8 LM2T XL230 | 220-240VAC | Yes 24V, 1.2W | 1 | 0.103 |
| 8 LM2T XL400 | 380-415VAC | Yes 24V, 1.2W | 1 | 0.106 |
| Flashing. | | | | |
| 8 LM2T FL048 | 24-48VAC | No | 1 | 0.046 |
| 8 LM2T FL230 | 110-230VAC | No | 1 | 0.046 |

- ① Filament bulb, BA9s U_s≤130VAC/DC max 2.6W (not supplied); maximum dimensions 11x28 mm (0.4x1.1in). For higher voltages, use neon bulbs.
- ② Not suitable for 3-position selectors.
- ③ Filament bulb, BA9s (not supplied); maximum dimensions 11x28mm (0.4x1.1in). Suitable for AC duty only.
Use bulbs with rated voltage equal to that of the power supply.
E.g.: With LM2T FL230 use 110VAC bulbs if power supply is 110VAC and 230VAC bulbs if power supply 230VAC. 2.6W max bulb rating.
- ④ MultiLED bulbs must not be fitted.
- ⑤ In case of test circuits for lamp-holders having load in parallel, two LM2T T100 elements are required for each bulb.
Refer to the wiring diagram attached to the product or consult Customer Service; see contact details on inside front cover.
- ⑥ In case of neon bulbs, contact our consult Customer Service; see contact details on inside front cover.
- ⑦ Luminosity is reduced during testing of lamp-holder LM2T L... and LM2T M... types.

Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed.
- Degree of protection per IEC/EN: IP20
- Maximum tightening torque: 1Nm/1.57lbf.

Maximum conductor cross section

1 o 2 2.5mm² or AWG 12 cables.

Wiring diagrams

Direct supply

LM2T EL400
LM2T DL400



With resistor and diode

LM2T ZL230
LM2T VL230



With transformer

LM2T YL...
LM2T XL...



Flashing

LM2T GL...
LM2T FL...



Test element

LM2T T100



Certifications and compliance

Certifications obtained: RINA, LROS, GOST, CCC, UL Listed, for UA and Camada (File E93601), as Auxiliary Devices.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

LED integrated lamp-holder steady or flashing light



8 LM2T LM3

7

| Order code for steady light | Rated aux supply voltage ^① | LED colour | Qty per pkg | Wt |
|------------------------------------|---------------------------------------|------------|-------------|-------|
| | [V] | | n° | [kg] |
| Supplied without mounting adapter. | | | | |
| 8 LM2T LB3 | 18-30V AC/DC | Green | 10 | 0.016 |
| 8 LM2T LB4 | | Red | 10 | 0.016 |
| 8 LM2T LB5 | | Yellow | 10 | 0.016 |
| 8 LM2T LB6 | | Blue | 10 | 0.016 |
| 8 LM2T LB8 | | White | 10 | 0.016 |
| 8 LM2T LE3 | 85-140V AC | Green | 10 | 0.016 |
| 8 LM2T LE4 | | Red | 10 | 0.016 |
| 8 LM2T LE5 | | Yellow | 10 | 0.016 |
| 8 LM2T LE6 | | Blue | 10 | 0.016 |
| 8 LM2T LE8 | | White | 10 | 0.016 |
| 8 LM2T LM3 | 187-265V AC | Green | 10 | 0.016 |
| 8 LM2T LM4 | | Red | 10 | 0.016 |
| 8 LM2T LM5 | | Yellow | 10 | 0.016 |
| 8 LM2T LM6 | | Blue | 10 | 0.016 |
| 8 LM2T LM8 | | White | 10 | 0.016 |

① Steady-light 9-15VAC/DC types are available on request; consult Customer Service; see contact details on inside front cover.

② Luminosity is reduced during test with test element LM2T T100.

| Order code for flashing light | Rated aux supply voltage | LED colour | Qty per pkg | Wt |
|------------------------------------|--------------------------|------------|-------------|-------|
| | [V] | | n° | [kg] |
| Supplied without mounting adapter. | | | | |
| 8 LM2T MB3 | 18-30V AC/DC | Green | 10 | 0.016 |
| 8 LM2T MB4 | | Red | 10 | 0.016 |
| 8 LM2T MB5 | | Yellow | 10 | 0.016 |
| 8 LM2T MB6 | | Blue | 10 | 0.016 |
| 8 LM2T MB8 | | White | 10 | 0.016 |
| 8 LM2T ME3 | 85-140V AC | Green | 10 | 0.016 |
| 8 LM2T ME4 | | Red | 10 | 0.016 |
| 8 LM2T ME5 | | Yellow | 10 | 0.016 |
| 8 LM2T ME6 | | Blue | 10 | 0.016 |
| 8 LM2T ME8 | | White | 10 | 0.016 |
| 8 LM2T MM3 | 187-265V AC | Green | 10 | 0.016 |
| 8 LM2T MM4 | | Red | 10 | 0.016 |
| 8 LM2T MM5 | | Yellow | 10 | 0.016 |
| 8 LM2T MM6 | | Blue | 10 | 0.016 |
| 8 LM2T MM8 | | White | 10 | 0.016 |

② Luminosity is reduced during test with test element LM2T T100.

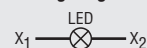
Operational characteristics

- Rated auxiliary supply voltage: 18-30VAC/DC; 85-140VAC; 187-265VAC
- Maximum consumption: 33mA (18-30VAC/DC)
28mA (85-140VAC)
25mA (187-265VAC)
- Electrical life: 100,000 hours
- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed
- Degree of protection: IP20
- Maximum tightening torque: 1Nm.

Maximum conductor cross section

1 o 2 2.5mm² or AWG12 cables.

Wiring diagram



Certifications and compliance

Certifications obtained: GOST, CCC, UL Listed, for USA and Canada (File E93601), as Auxiliary Devices. Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14-95.

Accessories and spare parts



8 LM2T AT...



8 LM2T AU100



8 LM2T AU105



8 LM2T AU108
8 LM2T AU106



8 LM2T AU170

| Order code | Description | Qty per pkg n° | Wt [kg] |
|---------------------------|--|-------------------|------------|
| 8 LM2T AT... ^① | Printed label to be inserted in pilot lights and push-buttons | 50 | 0.001 |
| 8 LM2T AU100 ^② | Legend holder | 50 | 0.001 |
| 8 LM2T AU105 ^② | Legend holder (for 8 LM2T AU106 paper or 8 LM2T AU108 plastic labels) | 50 | 0.003 |
| 8 LM2T AU106 | Blank paper label for writing (for LM2T AU105) | 50 | 0.002 |
| 8 LM2T AU107 | Transparent protection for LM2T AU106 label | 50 | 0.001 |
| 8 LM2T AU108 | Blank plastic label for engraving (for LM2T AU105) | 50 | 0.002 |
| 8 LM2T AU13 ^③ | IP66 boot for flush and illuminated push-buttons | 10 | 0.006 |
| 8 LM2T AU14 ^③ | IP66 boot for extended and illuminated push-buttons | 10 | 0.009 |
| 8 LM2T AU157 | IP66 boot for double and triple push buttons (transparent) | 10 | 0.007 |
| 8 LM2T AU167 | IP66 protective boot for mushroom head buttons LM2T B624... and LM2T B634... (transparent) | 10 | 0.012 |
| 8 LM2T AU170 | Actuator gasket | 10 | 0.006 |

- ① Available only on specific request consult Customer Service; see contact details on inside front cover.
- ② To preserve actuators degree of protection (IEC IP65 / UL tupe 4X), place their gasket between legend holder and mounting surface.
- ③ For flush and extended push-buttons, complete the order code by adding the digit of the required colour:
2 (black); 3 (green); 4 (red); 5 (yellow); 6 (blue); 7 (transparent); 8 (white).
For illuminated push-buttons, add only digit 7 (transparent).

Pushbuttons and selector switches

8 LM2T Ø22mm metal series

Labels with text for LM2T AU100 legend holder



8 LM2T AGB230

| Ordering code | Text | Qty per pkg | Wt |
|---------------|------|-------------|------|
| | | n° | [kg] |

General use.

| | | | |
|---------------------------|---|----------------|-------|
| 8 LM2T AU206 | Blank for writing | 50 | 0.001 |
| 8 LM2T AU207 | Sheet with 108 labels for laser printing ^① | 1 ^② | 0.005 |
| 8 LM2T AU208 ^③ | Sheet with 108 laser-printed labels ^① | 1 ^② | 0.005 |
| 8 LM2T AGB216 | CLOSE | 50 | 0.001 |
| 8 LM2T AGB220 | EMERGENCY | 50 | 0.001 |
| 8 LM2T AGB231 | FAST | 50 | 0.001 |
| 8 LM2T AGB263 | FAULT | 50 | 0.001 |
| 8 LM2T AGB215 | FORWARD | 50 | 0.001 |
| 8 LM2T AGB228 | LEFT | 50 | 0.001 |
| 8 LM2T AGB218 | LOWER | 50 | 0.001 |
| 8 LM2T AGB221 | OFF | 50 | 0.001 |
| 8 LM2T AGB223 | ON | 50 | 0.001 |
| 8 LM2T AGB211 | OPEN | 50 | 0.001 |
| 8 LM2T AGB229 | POWER ON | 50 | 0.001 |
| 8 LM2T AGB227 | RAISE | 50 | 0.001 |
| 8 LM2T AGB226 | RESET | 50 | 0.001 |
| 8 LM2T AGB222 | REVERSE | 50 | 0.001 |
| 8 LM2T AGB217 | RIGHT | 50 | 0.001 |
| 8 LM2T AGB241 | RUNNING | 50 | 0.001 |
| 8 LM2T AGB224 | SLOW | 50 | 0.001 |
| 8 LM2T AGB225 | START | 50 | 0.001 |
| 8 LM2T AGB230 | STOP | 50 | 0.001 |
| 8 LM2T AGB214 | STOP RESET | 50 | 0.001 |
| 8 LM2T AGB240 | THERMAL FAULT | 50 | 0.001 |
| 8 LM2T AGB237 | TRIP | 50 | 0.001 |

For selector switches.

| | | | |
|---------------|------------|----|-------|
| 8 LM2T AI233 | AUTO-MAN | 50 | 0.001 |
| 8 LM2T AI234 | AUTO-O-MAN | 50 | 0.001 |
| 8 LM2T AI241 | MAN-AUTO | 50 | 0.001 |
| 8 LM2T AI242 | MAN-O-AUTO | 50 | 0.001 |
| 8 LM2T AGB235 | FWD-O-REV | 50 | 0.001 |
| 8 LM2T AGB236 | OFF-ON | 50 | 0.001 |
| 8 LM2T AGB232 | STOP-START | 50 | 0.001 |

International labels for push-buttons.

| | | | |
|--------------|----|----|-------|
| 8 LM2T AU200 | O | 50 | 0.001 |
| 8 LM2T AU201 | I | 50 | 0.001 |
| 8 LM2T AU202 | II | 50 | 0.001 |

International labels for selector switches.

| | | | |
|--------------|--------|----|-------|
| 8 LM2T AU203 | O-I | 50 | 0.001 |
| 8 LM2T AU204 | I-II | 50 | 0.001 |
| 8 LM2T AU205 | I-O-II | 50 | 0.001 |

^① Recommended use with LM2T AU206 blank label.

^② Sheet with 108 adhesive labels.

^③ Complete code with label text required.

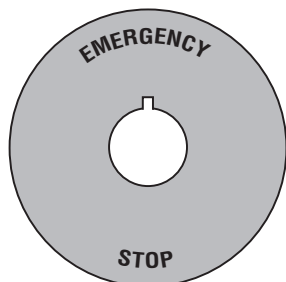
General characteristics

The labels have indelible scratch-proof black lettering on metalised grey polycarbonate background (adhesive).

Special versions

Labels in different languages are available. Consult Customer Service; see contact details on inside front cover.

Plastic disk for mushroom head pushbuttons



| Ordering code | Text | Qty per pkg | Wt |
|---------------|------|-------------|------|
| | | n° | [kg] |

| | | | |
|--------------|--|----|-------|
| 8 LM2T AU113 | EMERGENCY STOP Ø90mm / 3.5in | 10 | 0.005 |
| 8 LM2T AU115 | EMERGENCY STOP Ø60mm / 2.4in | 10 | 0.005 |
| 8 LM2T AU118 | NOT AUS / ARRET D'URGENCE / PARO EMERGENCIA Ø60mm / 2.4in | 10 | 0.005 |

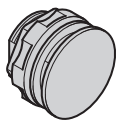
General characteristics

The disks are made of non-adhesive plastic. There is a 2x2mm / 0.08x0.08in index.

Special versions

The disk text in different languages is available. Consult Customer Service; see contact details on inside front cover.

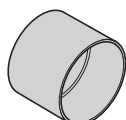
Accessories and spare parts



8 LM2T A130



8 LM2T A140



8 LM2T A185



8 LM2T AL...

- ❶ Complete the order code by adding the digit of the selected colour: 3 (green); 4 (red); 5 (yellow); 6 (blue); 7 (transparent); 8 (white).
- ❷ Versions with different key code. Complete with the numeric code of the key. The following versions are available: 501, 502, 503, 504, 505, 506, 507, 508, 509, 510.
Example of complete code: 8 LM2T A170G505. Coloured key versions are available on request; consult Customer Service; see contact details on inside front cover.
- ❸ Add the digit of the selected colour: 3 (green); 4 (red); 5 (yellow). Bulb size: 0.4x1.1in. It is advisable to use the same colour of bulb as of the actuator to obtain adequate light emission. Not suitable for resistor-diode lamp holders.
- ❹ Neon bulbs emit an amber light and may not be suitable for use with green or blue pilot lights and illuminated actuators. Bulb size: 0.4x1.1in.
- ❺ Glass with diffuser lens.
- ❻ Plastic neon bulb.

| Order code | Description | Qty per pkg n° | Wt [kg] |
|----------------|---|-------------------|------------|
| 8 LM2T A12❶ | Coloured diffuser for double push-buttons | 10 | 0.001 |
| 8 LM2T A130 | Threaded plug for unused drilled holes | 10 | 0.007 |
| 8 LM2T A140 | Action plug for centre contact | 50 | 0.001 |
| 8 LM2T A150 | Rod for mechanical reset button (l=140mm/5.5in max) | 10 | 0.006 |
| 8 LM2T A160 | BA9s bulb extractor | 10 | 0.004 |
| 8 LM2T A161 | 30mm/1.2in hole size adapter set for 22mm/0.87in (use 2 per hole) | 10 | 0.002 |
| 8 LM2T A170 | Spare key set for selector or mushroom head button | 1 | 0.008 |
| 8 LM2T A170G❷ | Spare key set for G series selector or mushroom-head button | 1 | 0.008 |
| 8 LM2T A185 | Selector protection shroud for knob types only | 10 | 0.004 |
| 8 LM2T A190 | Diffuser for pilot light | 10 | 0.003 |
| 8 LM2T ALA024 | Filament bulb BA9s 24VAC/DC 1.2W, size 10x28mm/0.4x1.1in | 50 | 0.002 |
| 8 LM2T ALB024 | Filament bulb BA9s 24VAC/DC 2W, size 10x28mm/0.4x1.1in | 50 | 0.003 |
| 8 LM2T ALB048 | Filament bulb BA9s 48VAC/DC 2W, size 10x28mm/0.4x1.1in | 50 | 0.003 |
| 8 LM2T ALB130 | Filament bulb BA9s 130VAC/DC 2W, size 10x28mm/0.4x1.1in | 50 | 0.003 |
| 8 LM2T ALL006❸ | MultiLED bulb BA9s 6VAC/DC 10x28mm | 10 | 0.003 |
| 8 LM2T ALL024❸ | MultiLED bulb BA9s 24VAC/DC 10x28mm | 10 | 0.003 |
| 8 LM2T ALL048❸ | MultiLED bulb BA9s 48VAC/DC 10x28mm | 10 | 0.003 |
| 8 LM2T ALN130❹ | Neon bulb ❹ BA9s 110/125VAC 10x28mm | 50 | 0.003 |
| 8 LM2T ALN250❹ | Neon bulb ❹ BA9s 220/250VAC 10x28mm | 50 | 0.003 |
| 8 LM2T ALN400❹ | Neon bulb ❹ BA9s 380/400VAC 10x28mm | 50 | 0.003 |
| 8 LM2T ALP130❹ | Neon bulb ❹ BA9s 110/125VAC 10x28mm | 50 | 0.003 |
| 8 LM2T ALP250❹ | Neon bulb ❹ BA9s 220/250VAC 10x28mm | 50 | 0.003 |
| 8 LM2T ALP400❹ | Neon bulb ❹ BA9s 380/400VAC 10x28mm | 50 | 0.003 |