Accessories and spare parts
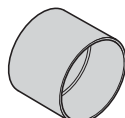
8 LM2T A130

8 LM2T A140

7

8 LM2T A185

8 LM2T AL...

Order code	Description	Qty per pkg	Wt
		n°	[kg]
8 LM2T A12❶	Coloured diffuser for double touch 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 ❺ BA9s 110/125VAC 10x28mm	50	0.003
8 LM2T ALN250❹	Neon bulb ❺ BA9s 220/250VAC 10x28mm	50	0.003
8 LM2T ALP130❹	Neon bulb ❻ BA9s 110/125VAC 10x28mm	50	0.003
8 LM2T ALP250❹	Neon bulb ❻ BA9s 220/250VAC 10x28mm	50	0.003

❶ Complete the order coide 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.

Dimensions
page 7-48

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	Wt
		n°	[kg]
8 LM2T AT…❶	Printed label to be inserted in pilot lights and illuminated pushbuttons	50	0.001
8 LM2T AU100❷	Legend holder	50	0.001
8 LM2T AU105❷	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 AU13❸	IP66 boot for pushbuttons LM2T B1/BL1/R1…	10	0.006
8 LM2T AU14❸	IP66 boot for extended pushbuttons LM2T B2/BL2/B3/R2…	10	0.009
8 LM2T AU157	IP66 boot for double and triple 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

❶ Available only on specific request, consult Customer Service; see contact details on inside front cover.
❷ To preserve actuators degree of protection (IEC IP65 / UL Type 4X), place their gasket between legend holder and mounting surface.
❸ 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).

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Labels with text for LM2T AU100 legend holder

8 LM2T AGB230

Order 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 printing❶	1❷	0.005
8 LM2T AU208❸	Sheet with 108 laser-printed labels❶	1❷	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 pushbuttons.			
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

❶ Recommended use with LM2T AU206 blank label.
❷ Sheet with 108 adhesive labels.
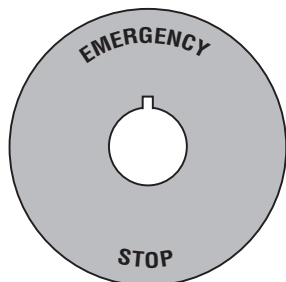❸ Complete code with label text required.

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.
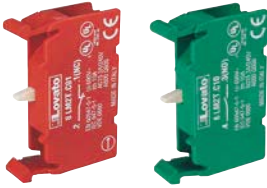Consult Customer Service; see contact details on inside front cover.

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 C10❶	NO❶	10	0.011
8 LM2T C10A	EM❷	10	0.011
8 LM2T C01 ⊖	⊖ NC❸	10	0.011
8 LM2T C01D❶	LB❶❹	10	0.011
Screw termination. With mounting adapter for metal series LM2T actuators.			
8 LM2T E10❶	NO❶	10	0.029
8 LM2T E01 ⊖	⊖ NC❸	10	0.029
Faston termination. Without mounting adapter.			
8 LM2T CF10❶	NO❶	10	0.012
8 LM2T CF01 ⊖	⊖ NC❸	10	0.012

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

Drillings - Minimum recommended distances
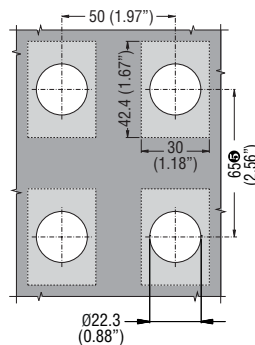
❺ When using Faston, pitch is 90mm/3.5" minimum.

Operational characteristics
– Any mounting position allowed
– The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm/0.59lbft) also internally on LPZ control stations covers
– Contact elements snap onto the adapter
– Tightening torque: 1Nm/1.57lbft max (except Faston)
– Ambient conditions:
  • Operating temperature: -25...+60°C
  • Storage temperature: -40...+70°C
– Degree of protection per IEC/EN:
  • IP20 for contacts elements with screw termination
  • IP00 for contact elements with Faston termination

General characteristics of contact elements
Wiping action and dual scraping and oscillating effect,
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:

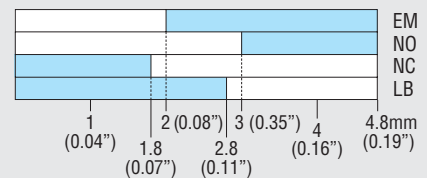| [V]	12	24	48	125	250	440	500	600
[A]	3	3	1.5	0.55	0.27	0.15	0.13	0.1

Short-circuit protection fuse: max. calibre 10A gG/SC
Contact resistance: ≤20mΩ
Terminals: Clamp screw with washer
        Faston 1-6.35mm/0.25" or 2-2.8mm/0.11".

Stroke of contact elements

EM
NO
NC
LB

1 (0.04")   2 (0.08")   3 (0.35")   4.8mm (0.19")
  1.8 (0.07")   2.8 (0.11")   4 (0.16")

☐ Closed contact   ☐ Open contact

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.

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

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Lamp-holders elements without mounting adapter

8 LM2T EL400
8 LM2T ZL230

8 LM2T YL…
8 LM2T GL…

Order code	Rated auxiliary supply voltage	Type of bulb supplied	Qty per pkg	Wt
	[V] 50/60Hz		n°	[kg]
Direct supply.				
8 LM2T EL400❶	≤415VAC/DC	No	10	0.011
With resistor and diode.				
8 LM2T ZL230❹	230VAC	Yes 130V, 2W	10	0.015
With transformer❽.				
8 LM2T YL110❷	110-120VAC	Yes 24V, 1.2W	1	0.086
8 LM2T YL230❷	220-240VAC	Yes 24V, 1.2W	1	0.084
8 LM2T YL400❷	380-415VAC	Yes 24V, 1.2W	1	0.087
Flashing❽.				
8 LM2T GL048❷❸	24-48VAC	No	1	0.027
8 LM2T GL230❷❸	110-230VAC	No	1	0.027

Lamp-holders elements 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 DL400❶	≤415VAC/DC	No	10	0.029
With resistor and diode.				
8 LM2T VL230❹	230VAC	Yes 130V, 2W	10	0.032
With transformer❽.				
8 LM2T XL110❷	110-120VAC	Yes 24V, 1.2W	1	0.105
8 LM2T XL230❷	220-240VAC	Yes 24V, 1.2W	1	0.103
8 LM2T XL400❷	380-415VAC	Yes 24V, 1.2W	1	0.106
Flashing❽.				
8 LM2T FL048❷❸	24-48VAC	No	1	0.046
8 LM2T FL230❷❸	110-230VAC	No	1	0.046

Test element for lamp-holders without mounting adapter

8 LM2T T100

Order code	Description	Qty per pkg	Wt
		n°	[kg]
Test element for lamp-holders.			
8 LM2T T100	Test element ❺❻❼	10	0.011

❶ Filament bulb, BA9s U≤130VAC/DC max 2.6W (not supplied); maximum dimensions 11x28 mm (0.4x1.1"). For higher voltages, use neon bulbs.
❷ Not suitable for 3-position selectors.
❸ Filament bulb, BA9s (not supplied); maximum dimensions 11x28mm (0.4x1.1"). 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.
❹ MultiLED bulbs must not be fitted.
❺ 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.
❻ In case of neon bulbs, consult Customer Service; see contact details on inside front cover.
❼ Only use with lamp-holder elements:
• With direct supply
• With resistor and diode
• LED LM2T LB… and LM2T MB… types.
❽ Not suitable for use with test element.

Operational characteristics
– Operating supply voltage limits for all types: -15…+10% Ue
– Any mounting position allowed
– Lamp-holder elements snap onto the adapter
– Only lamp-holder elements LM2T DL400, LM2T VL230, LM2T EL400 and LM2T ZL230 can be used with LPZ control stations
– Maximum tightening torque: 1Nm/1.57lbft
– Ambient conditions:
  • Operating temperature: -25...+60°C
  • Storage temperature: -40...+70°C
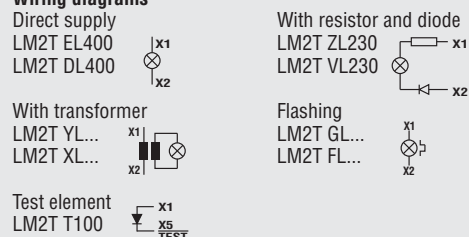– Degree of protection per IEC/EN: IP20.

Mounting adapter
See page 7-39.
Type: 8 LM2T AU120.
The adapter is fixed on the mounting surface by means of incorporated screws (Tmax = 0.8Nm/0.59lbft) also internally on LPZ control station covers.

Maximum conductor cross section
1 o 2 2.5mm² or AWG 12 cables.

Wiring diagrams

Direct supply
LM2T EL400
LM2T DL400
X1 X2

With resistor and diode
LM2T ZL230
LM2T VL230
X1 X2

With transformer
LM2T YL…
LM2T XL…
X1 X2

Flashing
LM2T GL…
LM2T FL…
X1 X2

Test element
LM2T T100
X1 X5 TEST

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

LED elements steady light

8 LM2T L…

Order code	Supply voltage	LED colour	Qty per pkg	Wt
	[V]		n°	[kg]

Screw termination.
Supplied without mounting adapter.

Order code	Supply voltage	LED colour	Qty per pkg	Wt
8 LM2T LB3❶	18-30VAC/DC	Green	10	0.016
8 LM2T LB4❶		Red	10	0.016
8 LM2T LB5❶		Yellow	10	0.016
8 LM2T LB6❶		Blue	10	0.016
8 LM2T LB8❶		White	10	0.016
8 LM2T LE3	85-140VAC	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	187-265VAC	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

❶ Only LM2T LB… type is suitable for use with LM2T T100 test element.

LED elements flashing light

8 LM2T M…

Order code	Supply voltage	LED colour	Qty per pkg	Wt
	[V]		n°	[kg]

Screw termination.
Supplied without mounting adapter.

Order code	Supply voltage	LED colour	Qty per pkg	Wt
8 LM2T MB3❷	18-30VAC/DC	Green	10	0.016
8 LM2T MB4❷		Red	10	0.016
8 LM2T MB5❷		Yellow	10	0.016
8 LM2T MB6❷		Blue	10	0.016
8 LM2T MB8❷		White	10	0.016
8 LM2T ME3	85-140VAC	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	187-265VAC	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

❷ Only LM2T MB… type is suitable for use with LM2T T100 test element.

Operational characteristics
– Supply voltage:
  • 8 LM2T L… types:
    12-30VAC/DC; 85-140VAC; 187-265VAC
  • 8 LM2T M… types:
    18-30VAC/DC; 85-140VAC; 187-265VAC
– Maximum consumption:
  17mA (12-30 / 18-30VAC/DC); 20mA (85-140VAC);
  17mA (185-265VAC)
– Protection:
  • Against overvoltages
  • Against stray currents in wiring
  • To reduce flickering phenomenon
  • To withstand vibrations
– Electrical life: 100,000 hours
– Snap onto LPX AU120 mounting adapter in the middle
  position for each illuminated actuator, also internally
  on the LPZ control station cover
– No other element can be stacked behind LED elements
– Any mounting position allowed
– Maximum tightening torque: 1Nm/1.57lbft
– Ambient conditions:
  • Operating temperature: -25...+60°C
  • Storage temperature: -40...+70°C
– Degree of protection: IP20.

Mounting adapter
See page 7-39.
Type: 8 LM2T AU120.
The adapter is fixed on the mounting surface by means of
incorporated screws (Tmax = 0.8Nm/0.59lbft) also
internally on LPZ control station covers.

Maximum conductor cross section
1 o 2 2.5mm² or AWG12 cables.

Wiring diagram

X2 ——————— X1

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