

Platinum Pushbuttons and selector switches p4-1

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SIRENA



Quality Touch!



● LOW ACTUATOR PROFILE

The external actuator bezel has a low profile and reduced front thickness.



● CUSTOMISING CAPABILITY

To simplify stock management, the series includes actuators without cap or lens and separate caps and lenses for quick installation or replacement on spring return and push-push types; all these are sold as accessories.

● HIGH DEGREE OF PROTECTION IP66, IP67 and IP69K

The actuators have been tested to guarantee a degree of protection per IEC/EN IP66, IP67, IP69K and UL Type 4X, appropriate for use even in extreme ambient conditions.

● ELEGANT STYLE AND ERGONOMIC DESIGN

All the series elements have an ergonomic design and, at the same time, particular care has been given to minimum detail aesthetics.

● LONG ACTUATOR MECHANICAL LIFE

High performance characteristics assure 5,000,000 cycle mechanical life for spring-return actuators, 1,000,000 for double and triple touch units and 300,000 for emergency-stop types.

● MATERIALS RESISTANT TO OILS, SOLVENTS AND HYDROCARBONS

● USAGE AT EXTREME TEMPERATURE CONDITIONS

Operation temperature range between -25° and +70°C.

● cULus, EAC, RINA and CCC CERTIFICATIONS.

● QUICK AND EASY ACTUATOR INSTALLATION



- Actuator fixing on the mounting surface, through a Ø22mm/0.87" drilled hole, is obtained using its **threaded ring**, easily rotated by hand or by socket spanner/wrench.



- There is an **anti-rotation fastener**, duly sized to avoid actuator rotation on the mounting surface and to give an orientation reference point for users during panel installation and during contact fitting on the actuator.
- This anti-rotation fastener collapses inside the gasket to allow fitting also when drilled holes are round without reference index.
- The sealing gasket for the actuator mounting surface has a gripping action (suction effect) offering additional adhesion properties.

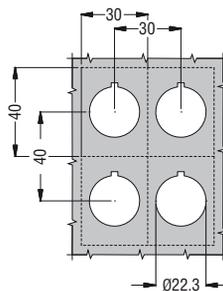


- The mounting adapter and the actuators each have **clearly visible reference** indications making the snap-on fitting between the two easy and intuitive.



- Electrical contacts and LED elements are **snapped onto** the mounting adapter.
- **The activation of the middle contacts is standard supplied** on all non-illuminated spring return and push-push button or selector switch actuators.

● REDUCED DIMENSIONS AND INTERAXIS



- Minimum pitch:
- 30x40mm/1.18x1.57" between drillings for two actuators on a mounting surface
 - 30x55mm/1.18x1.97" between drillings for two double and triple-touch actuators or when spring clamp contacts are used.



- Total depth, from the external mounting surface to the end of the first contact element is just 43mm/1.69".

● CONTACT ELEMENTS



- Miniaturised size
- High electric conductivity - 5V 1mA
- Up to 9 contact elements can be installed
- Available versions: Front and base mount with screw terminals while front-mount only with faston and spring-clamp terminals
- Contact operation: double breaking action, direct (positive) action operation and wiping effect.

● HIGH-LUMINOSITY LED ELEMENTS



- Miniaturised size
- Long electrical life: 100,000h
- Versions for base mounting and with screw or spring-clamp terminals
- Overvoltage protection
- Withstand vibrations
- Protection against stray currents in wiring
- Flickering phenomenon reduction
- Steady and flashing light versions
- Supply voltages:
 - 12-30VAC/DC
 - 85-140VAC
 - 185-265VAC
- Test elements installed beside and connected with the relative LED element allow checking if all LED elements of the installation are working properly.

CONTROL AND SIGNALLING UNITS

Pushbuttons and selector switches

PLatinum Ø22mm series



DOUBLE AND TRIPLE TOUCH ACTUATORS



- IEC IP66, IP67, IP69K degree of protection
- Double touch button actuators, with 2 flush or 1 flush and 1 extended buttons
- Triple touch button actuators with 2 flush and middle extended buttons
- Versions with or without indicator.

MECHANICAL RESET BUTTONS



- Rod adjustment directly on actuator front (1...4mm/0.04...0.16").



- Up to 6 contact elements can be mounted

ADAPTER FOR DIN RAIL MOUNTING



- Permits the fitting of the Platinum and 8 LM2T series buttons on DIN rail, in panels and modular boxes. Only 35mm wide (2 modules).

EMERGENCY STOP ACTUATORS



- Actuator structure suitable to warrant direct opening operation with mechanical latching for emergency stopping per ISO 13850 and IEC/EN 60947-5-5.
- Auto-monitor contact elements are available with functions to:
 - Constantly control the correct installation (mounting adapter and NC contact with the actuator) and proper operation of the NC contact
 - Open the circuit in the case of malfunctions (e.g. the contact detaches from the mounting adapter due to strong vibrations or shock).



- There is a green line around the actuator body to spot when the emergency stop is at rest or activated.
- Use of Ronis keys
- Various accessories available (e.g. yellow E-stop disks, padlockable protection and rubber actuator boots).

SHROUD



- Suitable for all Platinum and 8 LM2T mushroom-head latch buttons, guarantees protection against accidental on-board machinery contact.

SELECTOR SWITCH ACTUATORS



- Knob design assures excellent grip



- High visibility on front or side and actuator inscription shows exact switch position



- Use of Ronis keys



- Activation of the middle contacts is standard supplied on 2 and 3 position selector switches.

MONOBLOCK POTENTIOMETERS



- Potentiometer included in the product.
- Protection rating IP66, IP67 and IP69K.
- Resistance values from 1 to 500kΩ.

PILOT LIGHTS



- Protection rating IP66, IP67 and IP69K for LED monoblock pilot lights and pilot light heads.
- Long life and low consumption.

MONOBLOCK BUZZERS



- Continuous or pulse-tone monoblock buzzers in a single product.
- IP40 version (90dB/10cm) and IP66, IP67, IP69K version (80dB/10cm) available.

COMMUNICATION INTERFACES



- Protection rating IP65.
- USB and RJ45 for Ethernet types with data transmission in both directions.
- USB type 3.0 (backward compatible with USB 2.0).

PLASTIC CONTROL STATIONS



- IP66, IP67 and IP69K protection degrees.
- Empty pushbutton stations with 1 to 6 way option and complete control stations with various mushroom-head stop buttons
- Quick installation and wiring ease with the relative base-mount contact and LED elements, snap in place on the base
- Installation of screw and spring-clamp terminal contact and LED elements also on the internal cover surface.

Pushbutton actuators, spring return



LPC B10...



LPC B20...



LPC B30...

Order code	Colour	Qty per pkg	Wt
		n°	[kg]
Flush (without mounting adapter). Spring return.			
LPC B102	Black	10	0.025
LPC B103	Green	10	0.025
LPC B104	Red	10	0.025
LPC B105	Yellow	10	0.025
LPC B106	Blue	10	0.025
LPC B108	White	10	0.025
Extended (without mounting adapter). Spring return.			
LPC B202	Black	10	0.027
LPC B203	Green	10	0.027
LPC B204	Red	10	0.027
LPC B205	Yellow	1	0.027
LPC B206	Blue	1	0.027
LPC B208	White	1	0.027
Shrouded (without mounting adapter). Spring return.			
LPC B302	Black	10	0.027
LPC B303	Green	10	0.027
LPC B304	Red	10	0.027
LPC B305	Yellow	1	0.027
LPC B306	Blue	1	0.027
LPC B308	White	1	0.027

Push-push button actuators



LPC Q10...



LPC Q20...

Order code	Colour	Qty per pkg	Wt
		n°	[kg]
Flush (without mounting adapter). Push on-push off.			
LPC Q102	Black	10	0.025
LPC Q103	Green	10	0.025
LPC Q104	Red	10	0.025
LPC Q105	Yellow	1	0.025
LPC Q106	Blue	1	0.025
LPC Q108	White	1	0.025
Extended (without mounting adapter). Push on-push off.			
LPC Q202	Black	10	0.027
LPC Q203	Green	10	0.027
LPC Q204	Red	10	0.027
LPC Q205	Yellow	1	0.027
LPC Q206	Blue	1	0.027
LPC Q208	White	1	0.027

① Use contact elements LPX C10A (EM) and LPXC01 (NC) only. Contact elements LPX C10 (NO) and LPXC01D (LB) cannot be fitted on these actuators. For the number of contacts that can be fitted, see the indication here to the side.

Operational characteristics

- Any mounting position allowed
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - Per IEC/EN: IP66, IP67 and IP69K
 - Per UL/CSA: Type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

Polyamide.

Mechanical endurance

- Operating force: <0.5kg (actuator).
Mechanical life:
- Spring return actuators: 5,000,000 cycles
 - Push-push actuators: 500,000 cycles.

Mounting adapter

See page 4-19.

Type: LPX AU120.

Actuators are installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations.

The mounting adapter directly snaps onto the actuator.

Contact elements for spring-return button actuators

See page 4-19, 4-22 or 4-23.

Type	Termination
Front-mount types snap onto LPX AU120 mounting adapter (to purchase separately). Up to 9 contacts can be fitted: 3 each on the left, middle and right, one behind the other. They can also be fitted internally on the cover surface of LPZ control stations, up to 3 elements per actuator.	
1NO	LPX C10 Screw
	LPX CF10 Faston
	LPXCS10 Spring clamp
1EM	LPX C10A Screw
1NC	LPX C01 Screw
	LPX CF01 Faston
	LPX CS01 Spring clamp
1LB	LPX C01D Screw

Base mount types snap into LPZ control station base.

See example on page 4-26.

Up to 3 contacts can be fitted per control station actuator.

1NO	LPX CB10	Screw
1NC	LPX CB01	Screw

Contact elements for push-push button actuators

See page 4-19.

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

Contacts snap onto the adapter and also internally on the cover surface of LPZ control stations.

Up to 6 contacts can be fitted: 2 each on the left, middle and right, one behind of the other; up to 3 elements per control station actuator.

All these actuators are standard supplied with action plug for middle contacts.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA.

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

CONTROL AND SIGNALLING UNITS

Pushbuttons and selector switches

PLatinum Ø22mm series



Mechanical reset buttons, complete unit, spring return



LPC R1196

Order code	Colour	Qty	Wt
		per pkg	[kg]
		n°	[kg]
Flush (5.2mm/0.2" stroke). Adjustable length 0-150mm/5.9". Complete with shaft (without mounting adapter). Spring return.			
LPC R1002	Black	10	0.038
LPC R1003	Green	10	0.038
LPC R1004	Red	10	0.038
LPC R1006	Blue	10	0.038
LPC R1196	Blue (RESET)	10	0.038
Extended (5.2mm/0.2" stroke). Adjustable length 0-150mm/5.9". Complete with shaft (without mounting adapter). Spring return.			
LPC R2004	Red	1	0.040

① With "RESET" caption on actuator.
N.B. Not suitable for LPZ control stations.

Pushbutton actuators, spring return, with symbol



LPC B11...



LPC B21...



LPC B1502

Order code	Symbol	Colour	Qty	Wt
			per pkg	[kg]
			n°	[kg]
Flush (without mounting adapter). Spring return.				
LPC B1102	O	Black	10	0.025
LPC B1104		Red	10	0.025
LPC B1113	I	Green	10	0.025
LPC B1118		White	10	0.025
LPC B1123	II	Green	1	0.025
LPC B1128		White	1	0.025
LPC B1132	STOP	Black	1	0.025
LPC B1134		Red	10	0.025
LPC B1142	← ①	Black	10	0.025
LPC B1148		White	10	0.025
LPC B1152	↑ ②	Black	10	0.025
LPC B1158		White	10	0.025
LPC B1163	START	Green	10	0.025
LPC B1168		White	1	0.025
LPC B1176	R	Blue	1	0.025
LPC B1178		White	1	0.025
LPC B1196	RESET	Blue	10	0.025
LPC B1502	↔	Black	10	0.025
LPC B1512	↔	Black	10	0.025
Extended (without mounting adapter). Spring return.				
LPC B2102	O	Black	10	0.027
LPC B2104		Red	10	0.027
LPC B2132	STOP	Black	1	0.027
LPC B2134		Red	10	0.027

① Arrow symbol can be used to indicate right or left.
② Arrow symbol can be used to indicate up or down.

Operational characteristics

- Any mounting position allowed
- Fine rod adjustment (1-4mm/0.04-0.16") on front with screwdriver by removing actuator cap for mechanical reset buttons
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - Per IEC/EN: IP66, IP67 and IP69K
 - Per UL: Type 1, 2, 3R, 4, 4X, 12, 12K.

Mechanical endurance

Operating force: <0.5kg (actuator).
Mechanical life: 5,000,000 cycles.

Mounting adapter

See page 4-19.
Type: LPX AU120.
Actuators are installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations except for LPC R... types. The mounting adapter directly snaps onto the actuator.

Contact elements for mechanical reset buttons

See page 4-19 or 4-22.

Type	Termination	
Front mount types snap onto LPX AU120 mounting adapter (to purchase separately), if any contacts are needed. Up to 6 contacts can be fitted: 3 each on the left and right, one behind the other.		
1NO	LPX C10	Screw
	LPX CF10	Faston
	LPX CS10	Spring clamp
1EM	LPX C10A	Screw
1NC	LPX C01	Screw
	LPX CF01	Faston
	LPX CS01	Spring clamp
1LB	LPX C01D	Screw

Contact elements for spring-return button actuators

See pages 4-19, 4-22 or 4-23.

Type	Termination	
Front-mount types snap onto LPX AU120 mounting adapter (to purchase separately). Up to 9 contacts can be fitted: 3 each on the left, middle and right; one behind the other. They can also be fitted internally on the cover surface of control stations LPZ, up to 3 elements per actuator.		
1NO	LPX C10	Screw
	LPX CF10	Faston
	LPX CS10	Spring clamp
1EM	LPX C10A	Screw
1NC	LPX C01	Screw
	LPX CF01	Faston
	LPX CS01	Spring clamp
1LB	LPX C01D	Screw

Base-mount types snap into LPZ control station base. See example on page 4-26.

Up to 3 contacts can be fitted per control station actuator.

1NO	LPX CB10	Screw
1NC	LPX CB01	Screw

The LPC B... actuators are standard supplied with action plug for middle contacts.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

Pushbutton actuators, spring return, with symbol



LPC B1253

Order code	Symbol	Colour	Qty per pkg	Wt
			n°	[kg]
Spring return (without mounting adapter).				
LPCB010180		⊗	50	0.027
LPCB010200	OPEN	⊗	50	0.027
LPCB010210	CLOSED	⊗	50	0.027
LPCB010220		⊗	50	0.027
LPCB010230		⊗	50	0.027
LPCB010250	+	⊗	50	0.027
LPCB010260	-	⊗	50	0.027
LPCB010270		⊗	50	0.027
LPCB010280		⊗	50	0.027
LPCB010290		⊗	50	0.027
LPCB010300	AUTO	⊗	50	0.027
LPCB010310		⊗	50	0.027
LPCB010320		⊗	50	0.027
LPCB010330		⊗	50	0.027
LPCB010340	MAN	⊗	50	0.027
LPCB010350	AUTO	⊗	50	0.027
LPCB010380	TRIP	⊗	50	0.027
LPCB010390	TEST	⊗	50	0.027
LPCB010400		⊗	50	0.027
LPCB010410		⊗	50	0.027
LPCB010420		⊗	50	0.027
LPCB010430		⊗	50	0.027
LPCB010440		⊗	50	0.027
LPCB010450		⊗	50	0.027
LPCB010460		⊗	50	0.027
LPCB010470		⊗	50	0.027
LPCB010480		⊗	50	0.027
LPCB010490		⊗	50	0.027
LPCB010520		⊗	50	0.027
LPCB010530		⊗	50	0.027
LPCB010540		⊗	50	0.027
LPCB010550		⊗	50	0.027
LPCB010560	START STOP	⊗	50	0.027
LPCB010570	III	⊗	50	0.027
LPCB010580	IV	⊗	50	0.027
LPCB010590		⊗	50	0.027
LPCB010600		⊗	50	0.027
LPCB010610		⊗	50	0.027
LPCB010620		⊗	50	0.027
LPCB010630		⊗	50	0.027
LPCB010640		⊗	50	0.027
LPCB010650		⊗	50	0.027
LPCB010660		⊗	50	0.027
LPCB010670		⊗	50	0.027
LPCB010680		⊗	50	0.027
LPCB010690		⊗	50	0.027

- 1 Add letter "L" if illuminated type is required.
- 2 For the type of actuator, add: 1 for flush or 2 for extended.
- 3 Add the actuator colour: 2 black only for non-illuminated type; 3 green, 4 red, 5 yellow, 6 blue, 8 white or 7 transparent for illuminated version.
- 4 Products available on specific request for a minimum multiple quantity of 50 pieces per type.
- 5 Contact our Customer Service 1800 252 995 or sales@mechtric.com.au
- 6 Symbol indicating dangerous voltage (IEC 60417 5036-a).
Examples of complete order codes:
LPC B2 25 8 – extended non-illuminated white pushbutton with + symbol
LPC BL1 68 5 – flush illuminated yellow pushbutton actuator with symbol.

Operational characteristics

- Any mounting position allowed
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - Per IEC/EN: IP66, IP67 and IP69K
 - Per UL/CSA: Type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

Polyamide.

Mechanical endurance

Operating force: <0.5kg (actuator).
Mechanical life: 5,000,000 cycles.

Mounting adapter

See page 4-19.

Type: LPX AU120.

Actuators are installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations.

The mounting adapter directly snaps onto the actuator.

Contact elements

See page 4-19, 4-22 or 4-23.

Type	Termination	
1NO	LPX C10	Screw
	LPX CF10	Faston
	LPX CS10	Spring clamp
1EM	LPX C10A	Screw
1NC	LPX C01	Screw
	LPX CF01	Faston
	LPX CS01	Spring clamp
1LB	LPX C01D	Screw

Base-mount types snap into LPZ control station base. See example on page 4-26.

Up to 3 contacts can be fitted per control station actuator.

1NO	LPX CB10	Screw
1NC	LPX CB01	Screw

All these actuators are standard supplied with action plug for middle contacts.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14

CONTROL AND SIGNALLING UNITS

Pushbuttons and selector switches

PLatinum Ø22mm series



Mushroom head pushbutton actuators



LPC B614...



LPC B674...



LPC B6344



LPC B6634



LPC B6644



LPC B684...

Order code	Colour	Qty per pkg	Wt [kg]
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SPRING RETURN.
Ø40mm/1.6" (without mounting adapter).

LPC B6142	Black	10	0.033
LPC B6143	Green	10	0.033
LPC B6144	Red	10	0.033
LPC B6145	Yellow	10	0.033
LPC B6146	Blue	10	0.033

Ø60mm/2.4" (without mounting adapter).

LPC B6162	Black	10	0.038
LPC B6163	Green	10	0.038
LPC B6164	Red	10	0.038
LPC B6165	Yellow	10	0.038
LPC B6166	Blue	10	0.038

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

LPC B6742	Black	10	0.097
LPC B6744	Red	10	0.097

For emergency stopping, ISO 13850 compliant.

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

LPC B6342	Black	10	0.046
LPC B6344	Red	10	0.046

Ø30mm/1.2" (without mounting adapter).
For emergency stopping, ISO 13850 compliant.

LPC B6634	Red	10	0.079
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Ø40mm/1.6" (without mounting adapter).
For emergency stopping, ISO 13850 compliant.

LPC B6644	Red	10	0.079
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LATCH, TURN KEY TO RELEASE
Ø40mm/1.6" (without mounting adapter). Key code n° 455.
For normal stopping.

LPC B6842	Black	10	0.083
LPC B6842R	Black	1	0.083

For emergency stopping, ISO 13850 compliant.

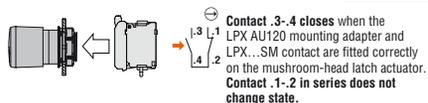
LPC B6844	Red	10	0.083
LPC B6844R	Red	1	0.083

① Versions with different key codes.
Complete with the numeric code of the key.
The following versions are available: 421E, 458A, 520E, 3131A, 3433E.
Example of complete code: LPC B6844R 421E.

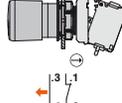
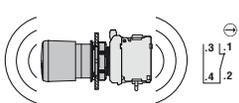
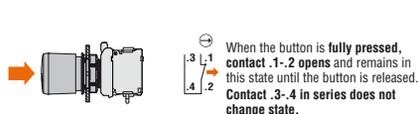
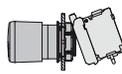
Normal operation of auto-monitor contact mounted on surface or on cover of control stations

In case of detachment of only the contact element and/or of the mounting adapter with contact element

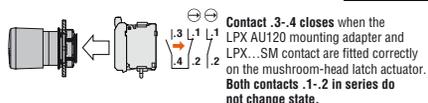
With contact type LPX C01SM



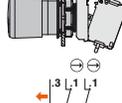
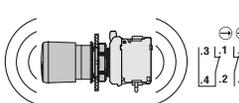
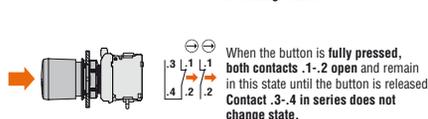
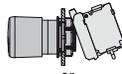
If the contact LPX C01SM detaches from the actuator due to **strong vibrations or shock**, the equipment can be restored to operating state only when proper mounting of the contact with the actuator is re-established resulting in **contact 3-4 closing**.



With contact type LPX C02SM



If the contact LPX C02SM detaches from the actuator due to **strong vibrations or shock**, the equipment can be restored to operating state only when proper mounting of the contact with the actuator is re-established resulting in **contact 3-4 closing**.



Operational characteristics

- Any mounting position allowed
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - Per IEC/EN: IP66, IP67 and IP69K
 - Per UL: Type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

Polyamide.

Mechanical endurance

Operating force: <0.5kg (actuator).

Mechanical life:

- Mushroom head spring return buttons: 5,000,000 cycles
- Mushroom head latch buttons: 300,000 cycles.

Mounting adapter

See page 4-19.

Type: LPX AU120.

Actuators are installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations.

The mounting adapter directly snaps onto the actuator.

Contact elements

See page 4-19, 4-22 or 4-23.

Type	Termination
------	-------------

Front-mount types snap onto LPX AU120 mounting adapter (to purchase separately).

For SPRING-RETURN types, up to 9 contacts can be fitted:

3 each on the left, middle and right, one behind the other.

For LATCH types, up to 6 contacts can be fitted: 2 each

on the left, middle and right, one behind the other.

They can also be fitted internally on the cover surface of LPZ control stations, up to 3 elements per actuator.

1NO	LPX C10	Screw
	LPX CF10	Faston
	LPXCS10	Spring clamp
1EM	LPX C10A	Screw
1NC	LPX C01	Screw
	LPX CF01	Faston
	LPX CS01	Spring clamp
1LB	LPX C01D	Screw

Base-mount types snap into LPZ control station base.

See example on page 4-26.

Up to 3 contacts can be fitted per control station actuator.

1NO	LPX CB10	Screw
1NC	LPX CB01	Screw

AUTO-MONITOR CONTACT with MUSHROOM-HEAD LATCH TYPES only: 2 elements max of this type can be mounted.

Extra two contacts can be fitted on the right.

Two elements per actuator can be fixed internally on the

cover surface of LPZ control stations of which one auto-

monitor type. No LED element can be installed.

Auto-monitor 1NC	LPX C01SM	Screw (2 stacked in the middle - LPX AU120 pos.1/3-4/6)
1NO	LPX C10	Screw (2 stacked on the right)
	LPX CF10	Faston (2 stacked on the right)
1NC	LPX C01	Screw (2 stacked on the right)
	LPX CF01	Faston (2 stacked on the right)

AUTO-MONITOR CONTACT with MUSHROOM-HEAD LATCH TYPES only: 2 elements max of this type can be mounted.

Only one of this type per actuator can be fixed internally on

the cover surface of LPZ control stations. No LED element

can be installed.

Auto-monitor 2NC	LPX C02SM	Screw (2 stacked)
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All these actuators are standard-supplied with action plug for middle contacts.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA.

Compliant with standards: IEC/EN 60947-1,

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

Double-touch actuators, spring return



LPC B71...



LPC B72...

Triple-touch actuators, spring return



LPC B73...

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

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

LPC B7112	Black/Red	—	5	0.030
LPC B7113	Green/Red	—	5	0.030
LPC B7114	White/Black	—	5	0.030
LPC B7122	Black/Red	I-O	5	0.030
LPC B7123	Green/Red	I-O	5	0.030
LPC B7124	White/Black	I-O	5	0.030
LPC B7133	Green/Red	Start/Stop	5	0.030

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

LPC B7212	Black/Red	—	1	0.030
LPC B7213	Green/Red	—	5	0.030
LPC B7214	White/Black	—	1	0.030
LPC B7222	Black/Red	I-O	5	0.030
LPC B7223	Green/Red	I-O	5	0.030
LPC B7224	White/Black	I-O	1	0.030
LPC B7233	Green/Red	Start/Stop	5	0.030

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

One middle extended buttons (without mounting adapter). Spring return.

LPC B7345		5	0.030
LPC B7355		5	0.030
LPC B7365		5	0.030
LPC B7375		5	0.030

Operational characteristics

- Any mounting position allowed
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - Per IEC/EN: IP66, IP67 and IP69K
 - Per UL: Type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

Polyamide.

Mechanical endurance

Operating force: <0.5kg (actuator).
Mechanical life: 1,000,000 cycles.

Mounting adapter

See page 4-19.

Type: LPX AU120.

Actuators are installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations.

The mounting adapter directly snaps onto the actuator.

Contact elements

See page 4-19, 4-22 or 4-23.

Type	Termination
------	-------------

Front-mount types snap onto LPX AU120 mounting adapter (to purchase separately).

For DOUBLE-TOUCH actuators, up to 6 contacts can be fitted: 3 on the left, 3 on the right.

For TRIPLE-TOUCH actuators, up to 9 contacts can be fitted: 3 each on the left, middle and right, one behind the other. They can also be fitted internally on the cover surface of LPZ control stations: 2 for double-touch and 3 elements for triple-touch.

1NO	LPX C10	Screw
	LPX CF10	Faston
	LPXCS10	Spring clamp
1EM	LPX C10A	Screw
1NC	LPX C01	Screw
	LPX CF01	Faston
	LPX CS01	Spring clamp
1LB	LPX C01D	Screw

Base-mount types snap into LPZ control station base. See example on page 4-26.

For DOUBLE-TOUCH actuators, 2 contacts need to be fitted, one on the left and one on the right.

For TRIPLE-TOUCH actuators, 3 contacts need to be fitted: one each on the left, middle and right.

1NO	LPX CB10	Screw
1NC	LPX CB01	Screw

Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA.

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

CONTROL AND SIGNALLING UNITS

Pushbuttons and selector switches

PLatinum Ø22mm series



Selector switch actuators lever



LPC S1...

Order code	Type of positions	Qty per pkg	Wt
		n°	[kg]
2 position (without mounting adapter).			
LPC S120	∇	10	0.037
LPC S121	∇	10	0.037
3 position (without mounting adapter).			
LPC S130	∇	10	0.037
LPC S131	∇	10	0.037
LPC S132	∇	10	0.037
LPC S133	∇	10	0.037

Selector switch actuators long lever



LPC S2...

Order code	Type of positions	Qty per pkg	Wt
		n°	[kg]
2 position (without mounting adapter).			
LPC S220	∇	10	0.040
LPC S221	∇	10	0.040
3 position (without mounting adapter).			
LPC S230	∇	10	0.040
LPC S231	∇	10	0.040
LPC S232	∇	10	0.040
LPC S233	∇	10	0.040

Selector switch actuators key

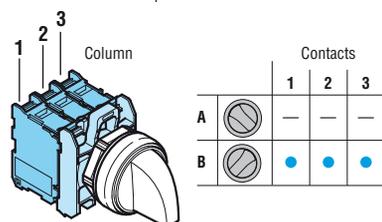


LPC S3...

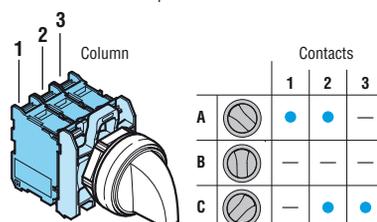
Order code	Type of position	Qty per pkg	Wt
		n°	[kg]
2 position (without mounting adapter).			
LPC S320	∇	10	0.060
LPC S320R①	∇	1	0.060
LPC S321	∇	10	0.060
LPC S321R①	∇	1	0.060
LPC S340	∇	10	0.060
LPC S340R①	∇	1	0.060
3 position (without mounting adapter).			
LPC S330	∇	10	0.060
LPC S330R①	∇	1	0.060
LPC S331	∇	10	0.060
LPC S331R①	∇	1	0.060
LPC S332②	∇	10	0.060
LPC S332R①②	∇	1	0.060
LPC S333②	∇	10	0.060
LPC S333R①②	∇	1	0.060
LPC S350	∇	10	0.060
LPC S350R①	∇	1	0.060
LPC S360	∇	10	0.060
LPC S360R①	∇	1	0.060
LPC S370②	∇	10	0.060
LPC S370R①②	∇	1	0.060
LPC S380②	∇	10	0.060
LPC S380R①②	∇	1	0.060
LPC S390②	∇	10	0.060
LPC S390R①②	∇	1	0.060

- ① Versions with different key codes. Complete with the numeric code of the key. The following versions are available: 421E, 458A, 520E, 3131A, 3433E. Example of complete code: LPC S320 R421E.
- ② Available only on specific request

Contact activation of 2-position selector switch



Contact activation of 3-position selector switch



Operational characteristics

- Any mounting position allowed
- Standard key types supplied with key code n° 455
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - Per IEC/EN: IP66, IP67 and IP69K
 - Per UL: Type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

Polyamide.

Mechanical endurance

Mechanical life: 1,000,000 cycles.

Mounting adapter

See page 4-19.

Type: LPX AU120.

Actuators are installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations.

The mounting adapter directly snaps onto the actuator.

Contact elements

See page 4-19, 4-22 or 4-23

Type	Termination
Front-mount types snap onto LPX AU120 mounting adapter (to purchase separately). Up to 6 contacts can be fitted: 2 each on the left, middle and right or 3 each on the left and right, one behind the other.	
They can also be fitted internally on the cover surface of LPZ control stations, up to 3 elements per actuator.	

1NO	LPX C10	Screw
	LPX CF10	Faston
	LPXCS10	Spring clamp
1EM	LPX C10A	Screw
	LPX C01	Screw
1NC	LPX CF01	Faston
	LPX CS01	Spring clamp
1LB	LPX C01D	Screw

Base-mount types snap into LPZ control station base. See example on page 4-26.

Up to 3 contacts can be fitted per control station actuator.

1NO	LPX CB10	Screw
1NC	LPX CB01	Screw

Activation of the middle contacts is coupled to the side contacts; the relative mechanism pins are standard supplied.

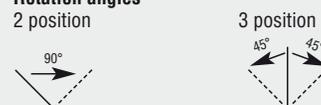


The middle contact activation, with respect to the right and left side contact, can be changed by the user, if required, by removing one or both mechanism pins.

Type of position

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

Rotation angles



Special versions

Versions with coloured keys are available upon request. Contact our Customer Service 1800 252 995 or sales@mechtronic.com.au

Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA. Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

Selector switch actuators knob

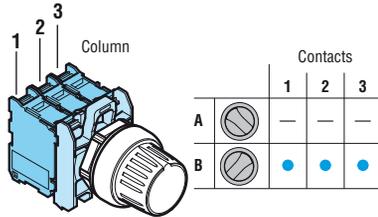


new

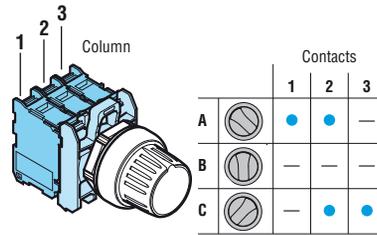
LPC S4...

Order code	Type of positions	Qty per pkg	Wt
		n°	[kg]
2 position (without mounting adapter).			
LPC S420	∇	10	0.037
LPC S421	∇	10	0.037
3 position (without mounting adapter).			
LPC S430	∇	10	0.037
LPC S431	∇	10	0.037
LPC S432	∇	10	0.037
LPC S433	∇	10	0.037

Contact activation of 2-position selector switch



Contact activation of 3-position selector switch



Operational characteristics

- Any mounting position allowed
- Standard key types supplied with key code n° 455
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - Per IEC/EN: IP66, IP67 and IP69K
 - Per UL: Type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

Polyamide.

Mechanical endurance

Mechanical life: 1,000,000 cycles.

Mounting adapter

See page 4-19.

Type: LPX AU120.

Actuators are installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations.

The mounting adapter directly snaps onto the actuator.

Contact elements

See page 4-19, 4-22 or 4-23.

Type	Termination	
1NO	LPX C10	Screw
	LPX CF10	Faston
	LPXCS10	Spring clamp
1EM	LPX C10A	Screw
1NC	LPX C01	Screw
	LPX CF01	Faston
	LPX CS01	Spring clamp
1LB	LPX C01D	Screw

Base-mount types snap into LPZ control station base. See example on page 4-26.

Up to 3 contacts can be fitted per control station actuator.

1NO	LPX CB10	Screw
1NC	LPX CB01	Screw

Activation of the middle contacts is coupled to the side contacts; the relative mechanism pins are standard supplied.



The middle contact activation, with respect to the right and left side contact, can be changed by the user, if required, by removing one or both mechanism pins.

Type of position

- ∇ Maintained position.
- ∇ Spring return position.

Rotation angles

2 position



3 position



Certifications and compliance

Certifications obtained: cULus, EAC, CCC (ongoing), RINA (ongoing).

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

CONTROL AND SIGNALLING UNITS

Pushbuttons and selector switches

PLatinum Ø22mm series



Illuminated button actuators, spring return



LPC BL10...



LPC BL20...

Order code	Colour	Qty per pkg	Wt
		n°	[kg]
Flush (without mounting adapter). Spring return.			
LPC BL103	Green	10	0.025
LPC BL104	Red	10	0.025
LPC BL105	Yellow	10	0.025
LPC BL106	Blue	10	0.025
LPC BL107	Transparent	10	0.025
Extended (without mounting adapter). Spring return.			
LPC BL203	Green	10	0.027
LPC BL204	Red	10	0.027
LPC BL205	Yellow	10	0.027
LPC BL206	Blue	10	0.027
LPC BL207	Transparent	10	0.027

Illuminated push-push button actuators



LPC QL10...



LPC QL20...

Order code	Colour	Qty per pkg	Wt
		n°	[kg]
Flush (without mounting adapter). Push on-push off.			
LPC QL103	Green	10	0.025
LPC QL104	Red	10	0.025
LPC QL105	Yellow	10	0.025
LPC QL106	Blue	10	0.025
LPC QL107	Transparent	10	0.025
Extended (without mounting adapter). Push on-push off.			
LPC QL203	Green	10	0.027
LPC QL204	Red	10	0.027
LPC QL205	Yellow	10	0.027
LPC QL206	Blue	10	0.027
LPC QL207	Transparent	10	0.027

Use contact elements LPX C10A (EM) and LPXC01 (NC) only.
Contact elements LPX C10 (NO) and LPX C01D (LB) cannot be fitted on these actuators.

Illuminated mushroom head button actuators



LPC BL614...



LPC BL664...

Order code	Colour	Qty per pkg	Wt
		n°	[kg]
SPRING RETURN. Ø40mm/1.6" (without mounting adapter).			
LPC BL6143	Green	10	0.035
LPC BL6144	Red	10	0.035
LPC BL6145	Yellow	10	0.035
LPC BL6146	Blue	10	0.035
LPC BL6148	White	1	0.035
LATCH, TURN TO RELEASE. Ø40mm/1.6" (without mounting adapter). For normal stopping.			
LPC BL6643	Green	1	0.040
LPC BL6645	Yellow	1	0.040
LPC BL6646	Blue	1	0.040
For emergency stopping, ISO 13850 compliant.			
LPC BL6644	Red	10	0.040

Operational characteristics

- Any mounting position allowed
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - Per IEC/EN: IP66, IP67 and IP69K
 - Per UL: Type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

Polyamide.

Mechanical endurance

- Operating force: <0.5kg (actuator).
Mechanical life:
- Spring-return actuators: 5,000,000 cycles
 - Push-push actuators: 500,000 cycles
 - Spring-return Mushroom-head actuator: 5,000,000 cycles
 - Latch mushroom-head actuators: 300,000 cycles.

Mounting adapter

See page 4-19.
Type: LPX AU120.
Actuators are installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations.
The mounting adapter directly snaps onto the actuator.

Contact elements for illuminated spring-return and mushroom-head latch actuators

See page 4-19, 4-22 or 4-23.

Type	Termination	
1NO	LPX C10	Screw
	LPX CF10	Faston
	LPX CS10	Spring clamp
1EM	LPX C10A	Screw
1NC	LPX C01	Screw
	LPX CF01	Faston
1LB	LPX CS01	Spring clamp
	LPX C01D	Screw

Base-mount types snap into LPZ control station base. See example on page 4-26.

Up to 2 contacts can be fitted per control station actuator in addition to the LED element in the middle position.

1NO	LPX CB10	Screw
1NC	LPX CB01	Screw

Contact elements for illuminated push-push button actuators

See page 4-17.
Type: LPX C10A (1EM)
LPX C01 (1NC)

Contacts snap onto LPX AU120 adapter and also internally on the cover surface of LPZ control stations. Up to 4 contacts can be fitted: 2 each on the left and right, one behind the other; up to 2 elements per control station actuator in addition to the LED element in the middle position.

LED light elements

See pages 4-21 to 4-23.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

Double-touch actuators, spring return, white indicator



LPC BL71...



LPC BL72...

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

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

LPC BL7112	Black/Red	—	5	0.030
LPC BL7113	Green/Red	—	5	0.030
LPC BL7114	White/Black	—	1	0.030
LPC BL7122	Black/Red	I-O	5	0.030
LPC BL7123	Green/Red	I-O	5	0.030
LPC BL7124	White/Black	I-O	5	0.030
LPC BL7133	Green/Red	Start/Stop	5	0.030

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

LPC BL7212	Black/Red	—	1	0.030
LPC BL7213	Green/Red	—	5	0.030
LPC BL7214	White/Black	—	1	0.030
LPC BL7222	Black/Red	I-O	1	0.030
LPC BL7223	Green/Red	I-O	5	0.030
LPC BL7224	White/Black	I-O	5	0.030
LPC BL7233	Green/Red	Start/Stop	5	0.030

Operational characteristics

- Any mounting position allowed
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - Per IEC/EN: IP66, IP67 and IP69K
 - Per UL: Type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

Polyamide.

Mechanical endurance

Operating force: <0.5kg (actuator).

Mechanical life:

- double-touch: 1,000,000 cycles.
- selectors: 1,000,000 cycles.

Mounting adapter

See page 4-19.

Type: LPX AU120.

Actuators are installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations.

The mounting adapter directly snaps onto the actuator.

Contact elements

See page 4-19, 4-22 or 4-23.

Type	Termination
1NO	LPX C10 Screw
	LPX CF10 Faston
	LPX CS10 Spring clamp
1EM	LPX C10A Screw
1NC	LPX C01 Screw
	LPX CF01 Faston
	LPX CS01 Spring clamp
1LB	LPX C01D Screw

Front-mount types snap onto LPX AU120 mounting adapter (to purchase separately).

For DOUBLE-TOUCH TYPES, up to 6 contacts can be fitted: 3 each on the left and right, one behind the other.

For SELECTOR SWITCHES, up to 4 contacts can be fitted: 2 each on the left and right, one behind the other.

They can also be fitted internally on the cover surface of LPZ control stations, up to 2 elements per actuator in addition to the LED element in the middle position.

Base-mount types snap into LPZ control station base. See example on page 4-26.

Up to 2 contacts can be fitted per control station actuator in addition to the LED element in the middle position.

1NO LPX CB10 Screw

1NC LPX CB01 Screw

Selector switch type of positions

∇ Maintained position.

∇ Spring return position.

Selector switch rotation angles

2 position 90°

3 position 45° 45°

LED light elements

See pages 4-21 to 4-23.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA.

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

Illuminated selector switch actuators



LPC SL1...

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

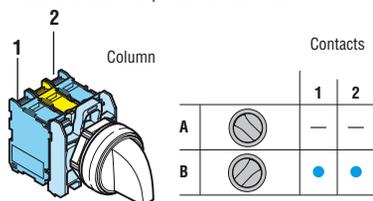
2 position (without mounting adapter).

LPC SL1203	Green	∇	10	0.025
LPC SL1204	Red		10	0.025
LPC SL1205	Yellow		10	0.025
LPC SL1206	Blue		10	0.025
LPC SL1208	White		10	0.025
LPC SL1213	Green	∇	10	0.025
LPC SL1214	Red		1	0.025
LPC SL1215	Yellow		1	0.025
LPC SL1216	Blue		1	0.025
LPC SL1218	White		10	0.025

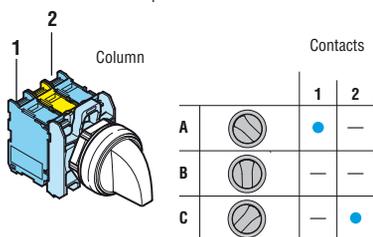
3 position (without mounting adapter).

LPC SL1303	Green	∇	10	0.025
LPC SL1304	Red		10	0.025
LPC SL1305	Yellow		10	0.025
LPC SL1306	Blue		10	0.025
LPC SL1308	White		10	0.025
LPC SL1313	Green	∇	10	0.025
LPC SL1314	Red		1	0.025
LPC SL1315	Yellow		1	0.025
LPC SL1316	Blue		1	0.025
LPC SL1318	White		10	0.025
LPC SL1323	Green	∇	10	0.025
LPC SL1324	Red		1	0.025
LPC SL1325	Yellow		1	0.025
LPC SL1326	Blue		1	0.025
LPC SL1328	White		10	0.025
LPC SL1333	Green	∇	10	0.025
LPC SL1334	Red		1	0.025
LPC SL1335	Yellow		1	0.025
LPC SL1336	Blue		1	0.025
LPC SL1338	White		10	0.025

Contact activation of 2-position selector switch



Contact activation of 3-position selector switch



Pilot light heads



LPL...

Order code	Colour	Qty per pkg	Wt
		n°	[kg]
Without mounting adapter.			
LPL 3	Green	10	0.024
LPL 4	Red	10	0.024
LPL 5	Yellow	10	0.024
LPL 6	Blue	10	0.024
LPL 7	Transparent	10	0.024
LPL 1187	Transparent ⚡	10	0.024

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

Operational characteristics

- Any mounting position allowed
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - Per IEC/EN: IP66, IP67 and IP69K
 - Per UL: Type 1, 2, 3R, 4, 4X, 12, 12K.

Materials

Polyamide.

Mounting adapter

See page 4-19.

Type: LPX AU120.

Pilot light heads are installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations, with LED element in central position.

The mounting adapter directly snaps onto the actuator.

LED light elements

See pages 4-21 to 4-23.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

LED integrated monoblock pilot lights steady light



LPM...



Order code	Rated auxiliary supply voltage	LED colour	Qty per pkg	Wt
			n°	[kg]
LPM LA3	12VAC/DC	Green	10	0.021
LPM LA4		Red	10	0.021
LPM LA5		Yellow	10	0.021
LPM LA6		Blue	10	0.021
LPM LA7		Transparent	10	0.021
LPM LB3	24VAC/DC	Green	10	0.021
LPM LB4		Red	10	0.021
LPM LB5		Yellow	10	0.021
LPM LB6		Blue	10	0.021
LPM LB7		Transparent	10	0.021
LPM LD3	48VAC/DC	Green	10	0.021
LPM LD4		Red	10	0.021
LPM LD5		Yellow	10	0.021
LPM LD6		Blue	10	0.021
LPM LD7		Transparent	10	0.021
LPM LE3	110VAC	Green	10	0.024
LPM LE4		Red	10	0.024
LPM LE5		Yellow	10	0.024
LPM LE6		Blue	10	0.024
LPM LE7		Transparent	10	0.024
LPM LM3	230VAC	Green	10	0.024
LPM LM4		Red	10	0.024
LPM LM5		Yellow	10	0.024
LPM LM6		Blue	10	0.024
LPM LM7		Transparent	10	0.024

Operational characteristics

- Nominal frequency: 50-60Hz
- Supply voltage: 12VAC/DC, 24VAC/DC, 48VAC/DC, 110VAC, 230VAC (-15%...+10% Ue)
- Consumption: ≤20mA
- Installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on cover of LPZ control stations
- Electrical life: >30,000 hours
- Screw termination
- Side cable entry
- Maximum tightening torque: 0.8Nm
- Ambient conditions:
 - Operating temperature: -5...+40°C
- Degree of protection:
 - per IEC/EN: IP66, IP67 and IP69K on front; IP20 at rear
 - per UL: Type 1, 2, 3R, 4, 4X, 12, 12K on front.

Materials

Polyamide.

Maximum conductor cross section

1 or 2 1.5mm² or AWG16 cables.

Wiring diagram



Certifications and compliance

Certifications obtained: cULus (ongoing), EAC, CCC (ongoing).
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

Monoblock potentiometers



LPC PA...



Order code	Resistance value	Qty per pkg. n°	Wt [kg]
LPC PA001	1kΩ	10	0.040
LPC PA002	2,5kΩ	10	0.040
LPC PA005	5kΩ	10	0.040
LPC PA010	10kΩ	10	0.040
LPC PA050	50kΩ	10	0.040
LPC PA100	100kΩ	10	0.040
LPC PA500	500kΩ	10	0.040

General characteristics

Monoblock potentiometers are typically used for regulating the parameters of many devices (e.g. the speed of the electric motors through static converters).

The monoblock body design permits direct use of the potentiometer by panel fitting with fixing ring and subsequent tightening of cables into the built-in terminal block.

The potentiometer is made with Cermet technology, which ensures stable, constant resistance values over time. The, UL-certified, range is made for resistance values from 1 to 500kΩ. All potentiometers are IP66, IP67 and IP69K, which means that they can be used in demanding ambient conditions.

Operational characteristics

- rated insulation voltage Ui: 250VAC
- impulse withstand voltage Uimp: 4kV
- potentiometer included in the product
- monoblock body with 1-turn graduated scale
- any fitting position permitted
- Installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations
- resistive material: cermet
- operation: linear
- resistance tolerance: ±10%
- max. power: 1W (70°C)
- mechanical endurance: 25,000 operations
- mechanical travel: 290°
- Side cable entry
- Ambient conditions:
 - Operational temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - per IEC/EN: IP66, IP67 and IP69K on front
 - per IEC/EN: IP20 at rear
 - per UL: type 1, 2, 3R, 4, 4X, 12, 12K on front.

Materials

Polyamide.

Maximum conductor cross section

Screw terminal connections with three separate connections:

- min. cable 0.5mm² / AWG24
- max. cable 2.5mm² / AWG14
- maximum tightening torque: 0.5Nm
- flat-head screwdriver: 0.6 x 3.5mm.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC (ongoing), RINA (ongoing).

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

Monoblock buzzers



LPC ZS...



LPC ZS...IP

Order code	Voltage	Sound intensity at 2800Hz	Qty per pkg.	Wt
	[V]	[dB/10cm]	n°	[kg]

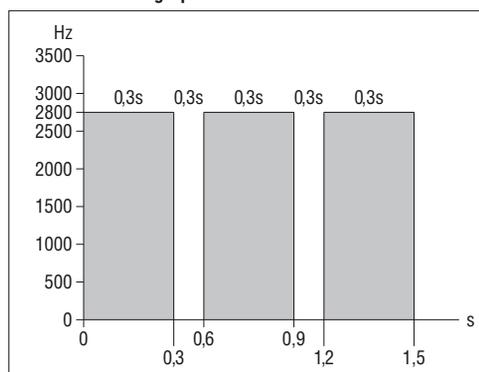
Continuous or pulse tone, IP40 version.

LPC ZSA	9...15VAC/DC	90	1	0.020
LPC ZSB	18...30VAC/DC	90	1	0.020
LPC ZSE	85...140VAC/DC	90	1	0.020
LPC ZSM	185...265VAC/DC	90	1	0.020

Continuous or pulse tone, IP66, IP67, IP69K version.

LPC ZSAIP	9...15VAC/DC	80	1	0.020
LPC ZSBIP	18...30VAC/DC	80	1	0.020
LPC ZSEIP	85...140VAC/DC	80	1	0.020
LPC ZSMIP	185...265VAC/DC	80	1	0.020

Pulse-tone sound graph



General characteristics

Monoblock buzzers are used as sound indicators in automation systems and on-board machinery in the production processes. Long life, low consumption values, compact size and the use of materials, in accordance with the North American market, are the main features of this product.

Operational characteristics

- Rated frequency: 50...60Hz
- Supply voltage: 9...15VAC/DC, 18...30VAC/DC, 85...140VAC/DC, 185...265VAC/DC
- Maximum absorption: 20mA-0,30W (type 9...15VAC/DC), 15mA-0,40W (type 18...30VAC/DC), 5,5mA-0,80W (type 85...140VAC/DC), 3,5mA-0,95W (type 185...265VAC/DC)
- minimum activation voltage: >4V (type 9...15VAC/DC), >8V (type 18...30VAC/DC), >15V (type 85...140VAC/DC), >25V (type 185...265VAC/DC)
- impulse withstand voltage Uimp: 4kV
- Installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations
- Service life: 30,000 hours (permanently powered)
- Side cable entry
- Ambient conditions:
 - Operational temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection (type LPC ZS...IP):
 - per IEC/EN: IP66, IP67, IP69K on front and IP20 at rear
 - per UL: type 1, 2, 3R, 4, 4X, 12, 12K on front.

Materials

Polyamide.

Maximum conductor cross section

Screw terminal connections with three separate connections:

- min. cable 0.5mm² / AWG24
- max. cable 2.5mm² / AWG14
- maximum tightening torque: 0.5Nm
- flat-head screwdriver: 0.6 x 3.5mm.

Certifications and compliance

Certifications obtained: cULus (ongoing), EAC, CCC (ongoing), RINA (ongoing).
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

USB and RJ45 communication interfaces



LPC D01



LPC D03



LPC D05

Order code	Description	Qty per pkg.	Wt
		n°	[kg]
LPC D01	USB interface, A/A female type connection	1	0.018
LPC D03	USB interface, A/B female type connection	1	0.018
LPC D05	USB interface, B/A female type connection	1	0.018
LPC D06	RJ45 interface, Ethernet connection type	1	0.026

General characteristics

USB and RJ45 communication interface connectors are used in industrial environments, which in recent years have seen an increase in the number of connections between machines, production lines, equipment and measuring instruments. These interfaces provide the transmission of data in both directions between the various devices.

Operational characteristics

- rated insulation voltage for LPCD01, LPCD03, LPCD05: 5VAC/DC
- rated insulation voltage for LPCD06: 24VAC
- interface mechanical endurance: ≥750 insertions
- Installed through a Ø22mm/0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm) also on the cover of LPZ control stations
- transmission characteristics for LPCD01, D03, D05: 5Gbps (625MB/sec)
- transmission characteristics for LPCD06: 10 Gigabit Ethernet IEEE 802.3an-2006
- rated current for LPCD01, LPCD03, LPCD05: 1.8A
- rated current for LPCD06: 1.5A
- insulation resistance: ≥100MΩ
- contact resistance for LPCD01, LPCD03, LPCD05: ≤30mΩ
- contact resistance for LPCD06: ≤40mΩ
- USB connector class: 3.0 (backward compatible with USB class 2.0)
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - per IEC/EN: IP65 on front (with cap mounted)
 - per IEC/EN: IP20 at rear
 - per UL: type 1, 2, 3R, 4, 4X, 12, 12K on front (with cap mounted)

Materials

Polyamide.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC (ongoing), RINA (ongoing).
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

Accessories and spare parts



LPX A130



LPX A140



LPX AU00



LPX P01



LPX B0



LPX B104



LPX B203



LPX BL105



LPX BL206

Order code	Description	Qty per pkg.	Wt [kg]
LPX A127	Transparent diffuser for double-touch buttons	10	0.001
LPX A130	Threaded plug for unused drilled holes (grey)	10	0.007
LPX A140	Action plug for centre contact	50	0.001
LPX A150	Rod for mechanical reset button (l=150mm)	10	0.006
LPX A170	Spare standard key set for selector switches or mushroom-head buttons, key code n° 455	10	0.008
LPX A170R ^①	Spare key set for selector switches or mushroom head buttons, LPC.. R type	1	0.008
LPX AU00	Threaded ring for actuator fixing	20	0.002
LPX P01	M20 cable gland with threaded ring for LPZ control stations	50	0.012
LPX B0	Flush-extended spring return actuator with no cap	10	0.013
LPX B3	Shrouded spring return actuator with no cap	10	0.014
LPX Q0	Flush-extended push-push actuator with no cap	10	0.013
LPX QLO	Illuminated flush-extended push-push actuator with no lens	10	0.013

Flush cap for spring-return actuators.

LPX B102	Black	10	0.002
LPX B103	Green	10	0.002
LPX B104	Red	10	0.002
LPX B105	Yellow	10	0.002
LPX B106	Blue	10	0.002
LPX B108	White	10	0.002

Extended cap for spring-return actuators.

LPX B202	Black	10	0.003
LPX B203	Green	10	0.003
LPX B204	Red	10	0.003
LPX B205	Yellow	10	0.003
LPX B206	Blue	10	0.003
LPX B208	White	10	0.003

Flush lens for illuminated spring-return actuators .

LPX BL103	Green	10	0.002
LPX BL104	Red	10	0.002
LPX BL105	Yellow	10	0.002
LPX BL106	Blue	10	0.002
LPX BL107	Transparent	10	0.002

Extended lens for illuminated spring-return actuators.

LPX BL203	Green	10	0.003
LPX BL204	Red	10	0.003
LPX BL205	Yellow	10	0.003
LPX BL206	Blue	10	0.003
LPX BL207	Transparent	10	0.003

^① Versions with different key code. Complete with the numeric code of the key. The following versions are available: 421E, 458A, 520E, 3131A, 3433E
Example of complete code: LPX A170R421E.

Accessories and spare parts



LPX AU100



LPX AU105



LPX AU108
LPX AU109



LPX AU158



8 LM2T A185



LPX AU159



LPX DIN

Order code	Description	Qty per pkg.	Wt
		n°	[kg]
LPX AU100	Label holder for engraved plastic LPX AU109 label	50	0.001
LPX AU109	Engravable silver plastic label to use with LPX AU100 holder	50	0.002
LPX AU105	Label holder for engraved plastic LPX AU108 label	50	0.003
LPX AU108	Engravable silver plastic label to use with LPX AU105 holder	50	0.002
LPX AU130 ^①	Rubber boot for flush button LPC B1/BL1/R1...	10	0.006
LPX AU140 ^②	Rubber boot for buttons LPC B2/3..., LPC BL2... and LPC R2...	10	0.009
LPX AU157	Rubber boot for double and triple-touch buttons, transparent	10	0.007
LPX AU167 ^③	Rubber boot for mushroom head buttons, LPC B63/B66/B67/BL66... transparent	10	0.012
LPX AU158 ^④	Padlockable protection, Ø5-8mm locks or buttons LPC B66/B67/B68/BL664...; for LPC B634... Ø5-6mm/0.2-0.24" locks only.	10	0.005
new LPX AU159 ^④	Shroud for buttons LPC B63..., LPC B66/67/68/BL666...	10	0.010
new LPX DIN	Adapter for mounting LPC... buttons on DIN rail 35mm wide (2 modules)	10	0.008

Other accessories

8 LM2T A161	Ø30mm/1.2" hole size adapter set for 22mm/0.87" (use 2 per hole)	10	0.002
8 LM2T A185	Yellow selector protection shroud for knob type only	10	0.004
8 LM2T A200	Socket spanner/wrench for fixing ring fitting, metal	1	0.184

- ① 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).
- ② Cannot be used when LPX AU100 or LPX AU105 is fitted.
- ③ Cannot be used when LPX AU158 is fitted.
- ④ Cannot be used when LPX AU167 is fitted.

Labels with text for LPX AU100 legend holder

STOP

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 printing ^①	1 ^②	0.005
8 LM2T AU208 ^③	Sheet with 108 customized text ^①	1 ^②	0.005
8 LM2T AI210	LATCH	50	0.001
8 LM2T AI211	OPEN	50	0.001
8 LM2T AI212	STOP	50	0.001
8 LM2T AI213	GENERAL STOP	50	0.001
8 LM2T AI214	STOP RESET	50	0.001
8 LM2T AI215	FORWARD	50	0.001
8 LM2T AI216	CLOSE	50	0.001
8 LM2T AI217	RIGHT	50	0.001
8 LM2T AI218	LOWER	50	0.001
8 LM2T AI219	DEACTIVATED	50	0.001
8 LM2T AI220	EMERGENCY	50	0.001
8 LM2T AI221	OFF	50	0.001
8 LM2T AI222	REVERSE	50	0.001
8 LM2T AI223	ON	50	0.001
8 LM2T AI237	INTERVENTO TERMICO	50	0.001
8 LM2T AI224	SLOW	50	0.001
8 LM2T AI225	START	50	0.001
8 LM2T AGB226	RESET	50	0.001
8 LM2T AI226	RESET	50	0.001
8 LM2T AI227	RAISE	50	0.001
8 LM2T AI228	LEFT	50	0.001
8 LM2T AI229	POWER ON	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 AI231	FAST	50	0.001
For selector switches.			
8 LM2T AI232	ARR-MAR	50	0.001
8 LM2T AI233	AUTO-MAN	50	0.001
8 LM2T AI234	AUTO-O-MAN	50	0.001
8 LM2T AI242	MAN-O-AUTO	50	0.001
8 LM2T AI235	FWD-O-REV	50	0.001
8 LM2T AI236	ON - OFF.	50	0.001
8 LM2T AI241	MAN-AUTO	50	0.001
8 LM2T AGB232	STOP-START	50	0.001
8 LM2T AGB236	OFF-ON	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 LPX AU109 label.
- ^② Sheet with 108 adhesive labels.
- ^③ Complete code with required label text.

General characteristics

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

Plastic disk for mushroom head pushbuttons



LPX AU113



LPX AU115



LPX AU110

Order code	Text	Qty per pkg.	Wt
		n°	[kg]
LPX AU113	EMERGENCY STOP Ø90mm/3.5"	10	0.005
LPX AU115	EMERGENCY STOP Ø60mm/2.4"	10	0.003
LPX AU110	Adhesive label EMERGENCY STOP (34.5x65mm/1.36x2.56") for LPC B63/663/664/ 67/68/BL66...buttons	12	0.001

General characteristics

The disks are made of non-adhesive plastic.
Plastic disks cannot be used with LPX AU158 and LPX AU159 protection.

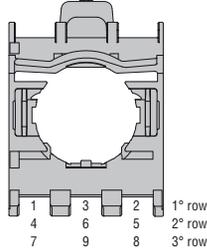
Mounting adapter



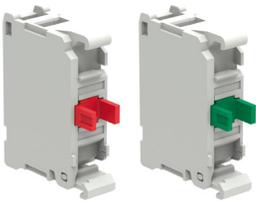
LPX AU120

Order code	Description	Qty per pkg	Wt
		n°	[kg]
LPX AU120	Mounting adapter	10	0.019

Rear view
(reference for element installation)



Contact elements



LPX C...

Order code	Function	Qty per pkg	Wt
		n°	[kg]

Screw termination.
Without mounting adapter.

LPX C10 [⊕]	1.3 NO [⊕]	10	0.011
LPX C10A	1.7 EM [⊕]	10	0.011
LPX C01 [⊖]	1.1 NC [⊖] 1.2	10	0.011
LPX C01D [⊕] ⊖	1.5 LB [⊕] ⊖ 1.6	10	0.011

Screw termination. Without mounting adapter.
Auto-monitor contact elements for non-illuminated latch mushroom-head pushbuttons.

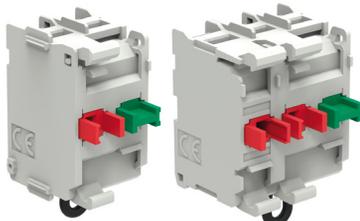
LPX C01SM [⊕] ⊖	1.3 L1 [⊕] 1NC [⊕] ⊖ 1.4 .2	1	0.022
LPX C02SM [⊕] ⊖	1.3 L1 [⊕] 1.1 2NC [⊕] ⊖ 1.4 .2	1	0.033

Screw termination.
With mounting adapter.

LPX E10 [⊕]	1.3 NO [⊕] 1.4	10	0.029
LPX E01 [⊖]	1.1 NC [⊖] 1.2	10	0.029

Faston termination.
Without mounting adapter.

LPX CF10 [⊕]	1.3 NO [⊕] 1.4	10	0.012
LPX CF01 [⊖]	1.1 NC [⊖] 1.2	10	0.012

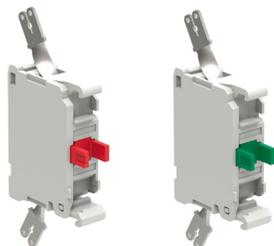


LPX C01SM

LPX C02SM



LPX E...

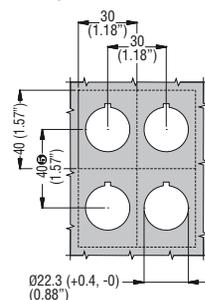


LPX CF01

LPX CF10

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

Drillings - Minimum recommended distances



- When using Faston, pitch is 85mm minimum.

Operational characteristics

- Any mounting position allowed.
- All LPX C... types snap onto LPX AU120 mounting adapter:
 - See the combinations given under "Contact elements" in the right-hand column for each type of pushbutton and selector switch.
 - A maximum of 3 contacts or 2 contacts and 1 LED element (LPX L... mounted in the middle position) can be fixed internally on the cover surface of LPZ control stations.
- A maximum of 2 LPX C...SM contacts can be installed on LPX AU120 adapter exclusively on non-illuminated mushroom-head latch actuators:
 - In pos. 1-3 (on the left side only of LPX AU120; refer to REAR VIEW drawing), one only LPX C01SM or LPX C02SM element can be fitted.
 - One extra LPX...SM can be installed in pos. 4-6 (stacked behind the LPX...SM on the LPX AU120)
 - With LPX C01SM, a maximum of two contacts LPX C0... or LPX C1... can be fitted on the right side in LPX AU120 pos. 2 and 5, one behind the other.
 - On the internal surface of LPZ control station covers, one only LPX C01SM or LPX C02SM contact can be mounted on LPX AU120 pos. 1 (on the left). With LPX C01SM, one extra element LPX C0... or LPX C1... can be fitted on the right (LPX AU120 pos. 2).
 - No LED element can be used with LPX C...SM types.
- Maximum tightening torque for screw terminals: 1Nm
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - IP20 for screw termination
 - IP00 for Faston termination.

General characteristics of contact elements

Wiping effect, dual scraping-oscillating action
IEC rated insulation voltage: 690V
IEC rated thermal current Ith: 10A
Conductivity: 5V 1mA
IEC/EN 60947-5-1 designation: A600 Q600.

IEC/EN operational characteristics in AC15 category:

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

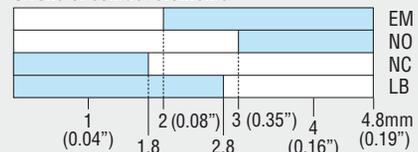
IEC/EN operational characteristics in DC13 category:

[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.
Contact resistance: ≤20mΩ.

Terminals : Clamp screw with washer.
Faston 1x6.35mm or 2x2.8mm.

Stroke of contact elements



Legend: Closed contact (blue), Open contact (white)

Maximum conductor cross section for screw terminals
1 or 2 2.5mm² or AWG14 cables.

Mechanical and electrical endurance

Operating force: ≤0.5kg (auxiliary contacts).
Electrical life: 1,000,000 cycles for LPXC10/01/E01/10, LPX C01SM/02SM, LPXCF10/01; 600,000 cycles for LPXC10A/01D.

Certifications and compliance

Certifications obtained: EAC, CULus, CCC, RINA.
Compliant with standard: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

Test elements for steady-light LED elements



LPX T1...

Order code	Description	Qty per pkg	Wt
		n°	[kg]
LPX T100 ^{①②}	Use with LED elements in AC/DC, types LPX LE... (all), LPX LFB..., LPX LPB and LPX LPSB...	10	0.011
LPX T101 ^②	Use with LED elements at 85-140VAC for types LPX LFE... LPX LPE... and LPX LPSE...	10	0.011
LPX T102 ^②	Use with LED elements at 185-265VAC for types LPX LFM..., LPX LPM... and LPX LPSM...	10	0.011

- ① Whenever test circuits include illuminated actuators connected with paralleled load, use two LPX T100 for each LED element. Refer to the wiring diagram below.
- ② With DC supply only for LPX T100 type, the LED element works at full voltage and brightness while with AC supply for all LPX T... types, the LED element works at half voltage so with reduced brightness level.

Operational characteristics

- Supply voltage:
 - LPX T100 test element:
 - 12...30VAC/DC for LPX LEB/LFB/LPB/LPSB...
 - 85...140VAC/DC for LPX LEE...
 - 185...265VAC/DC for LPX LEM...
 - LPX T101 test element: 85-140VAC
 - LPX T102 test element: 185-265VAC
- For use with LED elements LPX LPBB/LPBE/LPBM... types, contact our Customer Service 1800 252 995 or sales@mechtronic.com.au
- Electrical life: 100,000 hours
- Any mounting position allowed
- Snap onto LPX AU120 mounting adapter beside the LED element or stacked behind contact elements; also internally on the LPZ control station cover
- Maximum tightening torque for screw terminals: 1Nm
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection: IP20.

Mounting adapter

Type: LPX AU120. See page 4-19.
 The mounting adapter directly snaps onto the actuator fixed to the mounting surface.

Maximum conductor cross section

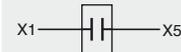
1 or 2 2.5mm² or AWG 12 cables.

Wiring Diagram

For LPX T100



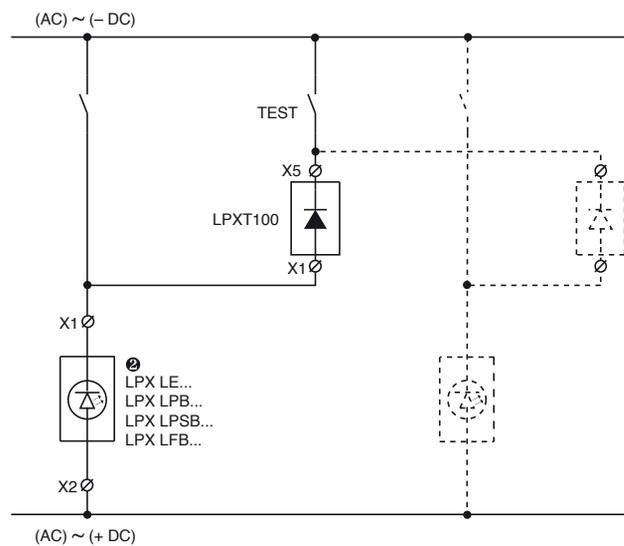
For LPX T101 - LPX T102



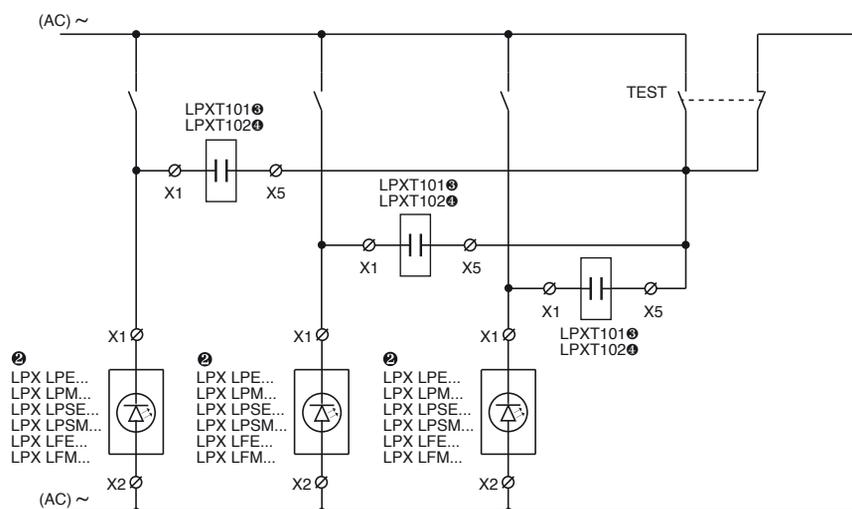
Certifications and compliance

Certifications obtained: cULus and EAC; CCC, RINA.
 Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

For LPX T100 test element



For LPX T101 and LPX T102 test elements



- ③ Use with LPX LFE..., LPX LPE... or LPX LPSE... type.
- ④ Use with LPX LFM..., LPX LPM... or LPX LPSM... type.

LED elements steady light



LPX LP...

Total protection against overvoltages and stray currents in wiring, to reduce of flickering phenomenon and withstand vibrations.

Order code	Rated supply voltage	LED colour	Qty per pkg.	Wt
	[V]		n°	[kg]
Steady light, screw termination. Supplied without mounting adapter.				
LPX LP B3	12-30V AC/DC	Green	10	0.016
LPX LP B4		Red	10	0.016
LPX LP B5		Yellow	10	0.016
LPX LP B6		Blue	10	0.016
LPX LP B8		White	10	0.016
LPX LP E3	85-140V AC	Green	10	0.016
LPX LP E4		Red	10	0.016
LPX LP E5		Yellow	10	0.016
LPX LP E6		Blue	10	0.016
LPX LP E8		White	10	0.016
LPX LP M3	185-265V AC	Green	10	0.016
LPX LP M4		Red	10	0.016
LPX LP M5		Yellow	10	0.016
LPX LP M6		Blue	10	0.016
LPX LP M8		White	10	0.016



LPX LE...

Simple protection against overvoltages and to withstand vibrations.

Order code	Rated supply voltage	LED colour	Qty per pkg.	Wt
	[V]		n°	[kg]
Steady light, screw termination. Supplied without mounting adapter.				
LPX LE B3	12-30V AC/DC	Green	10	0.016
LPX LE B4		Red	10	0.016
LPX LE B5		Yellow	10	0.016
LPX LE B6		Blue	10	0.016
LPX LE B8		White	10	0.016
LPX LE E3	85-140V AC/DC	Green	10	0.016
LPX LE E4		Red	10	0.016
LPX LE E5		Yellow	10	0.016
LPX LE E6		Blue	10	0.016
LPX LE E8		White	10	0.016
LPX LE M3	185-265V AC/DC	Green	10	0.016
LPX LE M4		Red	10	0.016
LPX LE M5		Yellow	10	0.016
LPX LE M6		Blue	10	0.016
LPX LE M8		White	10	0.016

LED elements flashing light



LPX LF...

Total protection against overvoltages and stray currents in wiring, to reduce of flickering phenomenon and withstand vibrations.

Order code	Rated supply voltage	LED colour	Qty per pkg.	Wt
	[V]		n°	[kg]
Flashing light, screw termination. Supplied without mounting adapter.				
LPX LF B3	18-30V AC/DC	Green	10	0.016
LPX LF B4		Red	10	0.016
LPX LF B5		Yellow	10	0.016
LPX LF B6		Blue	10	0.016
LPX LF B8		White	10	0.016
LPX LF E3	85-140V AC	Green	10	0.016
LPX LF E4		Red	10	0.016
LPX LF E5		Yellow	10	0.016
LPX LF E6		Blue	10	0.016
LPX LF E8		White	10	0.016
LPX LF M3	185-265V AC	Green	10	0.016
LPX LF M4		Red	10	0.016
LPX LF M5		Yellow	10	0.016
LPX LF M6		Blue	10	0.016
LPX LF M8		White	10	0.016

Operational characteristics

- rated frequency: 50-60Hz
- Rated supply voltage:
 - LPX LP... with steady light: 12...30VAC/DC; 85...140VAC; 185...265VAC
 - LPX LE... with steady light: 12...30VAC/DC; 85...140VAC/DC; 185...265VAC/DC
 - LPX LF... flashing light: 18...30VAC/DC; 85...140VAC; 185...265VAC
- Maximum consumption for:
 - LPX LP... steady light and LPX LF... flashing light: 17mA-0,50W (12...30VAC/DC); 20mA-0,40W (85...140VAC); 18mA-0,55W (185...265VAC)
 - LPX LE... steady light: 11mA-0,33W (12...30VAC/DC); 5mA-0,72W (85...140VAC/DC); 3mA-0,67W (185...265VAC/DC)
- Total protection for LPX LP... and LPX LF... types:
 - Against overvoltages
 - Against stray currents in wiring
 - To reduce flickering phenomenon
 - To withstand vibrations
- minimum activation voltage:
 - LPX LP... steady light: 4V-1mA (12...30VAC/DC); 30V-4mA (85...140VAC); 55V-4mA (185...265VAC)
 - LPX LE... steady light: 4V-0,5mA (12...30VAC/DC); 15V-0,4mA (85...140VAC/DC); 35V-0,3mA (185...265VAC/DC)
 - LPXLF... flashing light: 5V-1,5mA (18...30VAC/DC); 13V-1,5mA (85...140VAC); 25V-1,5mA (185...265VAC)
- Simple protection for LPX LE... types
 - Against overvoltages
 - 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
- Ambient conditions:
 - Operating temperature: -25...+70°C (-25...+60°C for LPX LE...)
 - Storage temperature: -40...+85°C
- Degree of protection: IP20

Mounting adapter

See page 4-19. Type: LPX AU120.
The mounting adapter directly snaps onto the actuator fixed to the mounting surface.

Maximum conductor cross section

1 or 2 2.5mm² or AWG12 cables.

Wiring diagram



Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

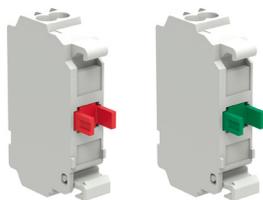
CONTROL AND SIGNALLING UNITS

Contact and light elements

PLatinum Ø22mm series



Contact elements with spring-clamp terminals



LPX CS01

LPX CS10

Order code	Function	Q.ty per pkg	Wt
		n°	[kg]
Spring-clamp termination. Without mounting adapter.			
LPX CS10	NO	10	0.010
LPX CS01	NC	10	0.010

① Not suitable for push-push actuators.
② Direct (positive) opening action in accordance with IEC/EN 60947-5-1

LED elements steady light with spring-clamp terminals



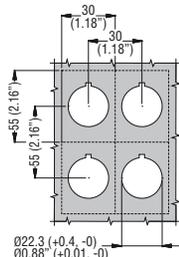
LPX LPS...

Order code	Rated supply voltage	LED colour	Q.ty per pkg	Wt
	[V]		n°	[kg]
Steady light, with spring-clamp termination. Without mounting adapter.				

LPX LPS B3	12-30VAC/DC	Green	10	0.015	
LPX LPS B4		Red	10	0.015	
LPX LPS B5		Yellow	10	0.015	
LPX LPS B6		Blue	10	0.015	
LPX LPS B8	85-140VAC	White	10	0.015	
LPX LPS E3		Green	10	0.015	
LPX LPS E4		Red	10	0.015	
LPX LPS E5		Yellow	10	0.015	
LPX LPS E6		Blue	10	0.015	
LPX LPS E8		White	10	0.015	
LPX LPS M3		185-265VAC	Green	10	0.015
LPX LPS M4			Red	10	0.015
LPX LPS M5	Yellow		10	0.015	
LPX LPS M6	Blue		10	0.015	
LPX LPS M8	White		10	0.015	

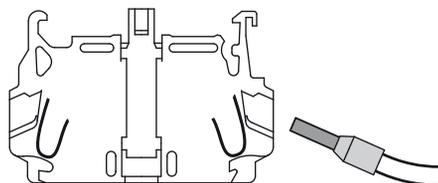
Total protection against overvoltages and stray currents in wiring, to reduce flickering phenomenon and withstand vibrations.

Drillings - Minimum recommended distances

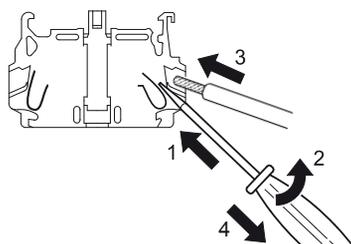


Push-in wiring technology for rigid cables or with ferrules only - no screwdriver needed
Cable retaining force guaranteed over time even in presence of vibrations and/or impacts

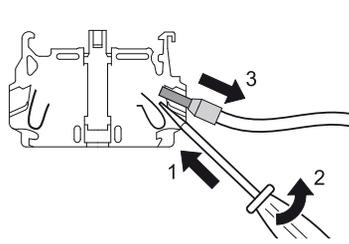
Push-in technology



Wiring with flat-blade screwdriver (for flexible bare cable without terminal)



Cable removal (always using flat-blade screwdriver)



Operational characteristics

- Any mounting position allowed
- Elements snap onto LPX AU120 adapter, also internally on LPZ control station cover with maximum of 3 LPX CS... contact or 2 LPX CS... contact and 1 LPX LPS... LED elements (in middle position) per actuator
- No other element can be stacked behind LED elements
- See the combinations given under "Contact elements" in the right-hand column for each type of pushbutton and selector switch
- Suitable for applications with vibration and/or impact work conditions; cable retaining force guaranteed over time in these conditions
- For use with the test elements, see page 4-20
- Wiring also possible after installation with stacked contacts
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection: IP20.

Mounting adapter

See page 4-19.

Type : LPX AU120.

The mounting adapter directly snaps onto the actuator fixed to the mounting surface.

General characteristics

CONTACT ELEMENTS

Wiping action and dual scaping-oscillating effect

IEC rated insulation voltage: 690V

IEC rated thermal current Ith: 10A

Conductivity: 1mA 5V

IEC/EN 60947-5-1 designation: A600 Q600.

IEC/EN operational characteristics in AC15 category:

[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/EN operational characteristics in DC13 category:

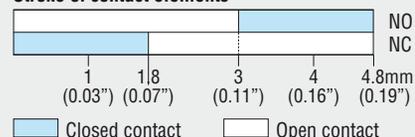
[V]	12	24	48	125	250	440	500	600
[A]	3	3	1.5	0.55	0.27	0.15	0.13	0.1

Short circuit protection fuse: max calibre: 10A gG.

Contact resistance: ≤20mΩ.

Terminals: Spring clamps.

Stroke of contact elements



Mechanical and electrical endurance of contact elements

Opening force: ≤0,5kg

Electrical life: 1.000.000 cycles for LPX CS10 and LPX CS01.

LED ELEMENTS

- rated frequency: 50-60Hz

- Supply voltage: 12...30VAC/DC; 85...140VAC; 185...265VAC

- Maximum consumption: 17mA-0,50W (12...30VAC/DC); 20mA-0,40W (85...140VAC); 18mA-0,55W (185...265VAC)

- Total protection:

- Against overvoltages
- Against stray currents in wiring
- To reduce flickering phenomenon
- To withstand vibrations

- minimum activation voltage:

4V-1mA (12...30VAC/DC); 30V-4mA (85...140VAC);

55V-4mA (185...265VAC)

- Electrical life: 100,000 hours.

Wiring diagram for LED elements



Maximum conductor cross section

1 or 2 2.5mm² or AWG14 cables. For 2.5mm² section, use rounded cable terminal with metal end at least 10mm

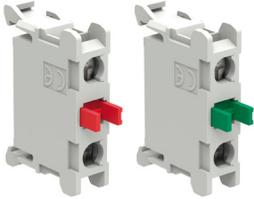
Certifications and compliance

Certifications obtained: EAC, cULus, CCC, RINA.

Compliant with standards: IEC/EN 60947-1,

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

Contact elements, base mount on LPZ control stations



LPX CB...

Order code	Function	Q.ty per pkg	Wt
		n°	[kg]
Screw termination. Direct snap-in mounting on LPZ control station base.			
LPX CB10 [⊕]	NO [⊕]	10	0.012
LPX CB01 [⊖]	NC [⊖]	10	0.012

- ⊕ Not suitable for push-push actuators.
- ⊖ Direct opening operation ⊖ in accordance with IEC/EN 60947-5-1.

LED elements, steady light base mount on LPZ control stations



LPX LPB...

Order code	Rated supply voltage	LED color	Qty per pkg.	Wt
	[V]		n°	[kg]
Screw termination. Steady light. Direct snap-on mounting on LPZ... control station base.				
LPX LPB B3	12...30V AC/DC	Green	10	0.016
LPX LPB B4		Red	10	0.016
LPX LPB B5		Yellow	10	0.016
LPX LPB B6		Blue	10	0.016
LPX LPB B8		White	10	0.016
LPX LPB E3	85...140V AC	Green	10	0.016
LPX LPB E4		Red	10	0.016
LPX LPB E5		Yellow	10	0.016
LPX LPB E6		Blue	10	0.016
LPX LPB E8		White	10	0.016
LPX LPB M3	185...265V AC	Green	10	0.016
LPX LPB M4		Red	10	0.016
LPX LPB M5		Yellow	10	0.016
LPX LPB M6		Blue	10	0.016
LPX LPB M8		White	10	0.016

Total protection against overvoltages and stray currents in wiring, to reduce flickering phenomenon and withstand vibrations.

Operational characteristics

- Any mounting position allowed
- Snap mount into fixing structures of LPZ control station base
- Maximum of 3 LPX CB... contact or 2 LPX CB... contact and 1 LPX LPB... LED elements (in middle pos. 3) for each actuator of LPZ control stations
- See the combinations given under "Contact elements" in the right-hand column for each type of pushbutton and selector switch
- For use with test elements, contact our Customer Service 1800 252 995 or sales@mechtric.com.au
- Maximum tightening torque for screw terminals: 1Nm
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection: IP20.

General characteristics

CONTACT ELEMENTS

Wiping action and dual scaping-oscillating effect
 IEC rated insulation voltage: 690V
 IEC rated thermal current Ith: 10A
 Conductivity: 5V 1mA
 IEC/EN 60947-5-1 designation: A600 Q600.

IEC/EN operational characteristics in AC15 category:

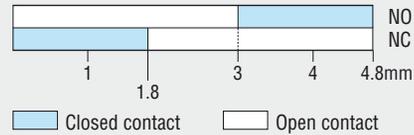
[V]	12	24	48	120	240	400	480	500	600
[A]	6	6	6	6	3	1.9	1.5	1.4	1.2

IEC/EN operational characteristics in DC13 category:

[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
 Contact resistance: ≤20mΩ
 Terminals: Clamp screw and washer.

Stroke of contact elements



Mechanical and electrical endurance of contact elements

Opening force: ≤0,5kg
 Electrical life: 1,000,000 cycles for LPX CB10 and LPX CB01.

LED ELEMENTS

- rated frequency: 50...60Hz
- Supply voltage: 12...30VAC/DC; 85...140VAC; 185...265VAC
- Maximum consumption: 17mA-0,50W (12...30VAC/DC); 20mA-0,40W (85...140VAC); 18mA-0,55W (185...265VAC)
- Total protection:
 - Against overvoltages
 - Against stray currents in wiring
 - To reduce flickering phenomenon
 - To withstand vibrations
- minimum activation voltage:
 - steady light LPX LPB.....: 4V-1mA (12...30VAC/DC); 30V-4mA (85...140VAC); 55V-4mA (185...265VAC)
- Electrical life: 100,000 hours.

Wiring diagram for LED elements

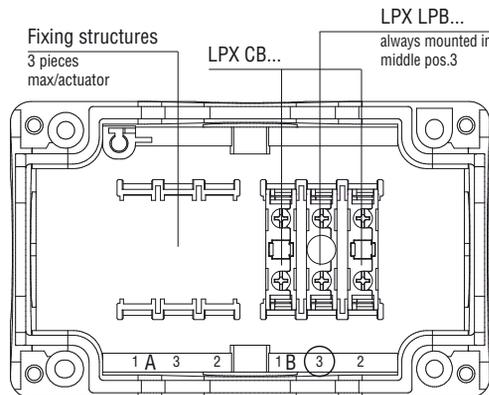


Maximum conductor cross section
 1 or 2 2.5mm² or AWG14 cables.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA.
 Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

Mounting position on the LPZ control station base



CONTROL AND SIGNALLING UNITS

Plastic control stations
PLatinum series



Without actuators



LPZ P1 A5



LPZ P2 A5



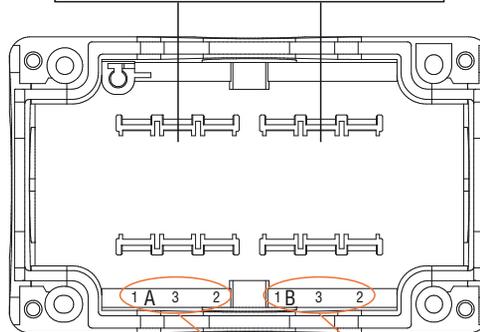
LPZ P3 A8

new

Order code	Description	Cover colour	Q.ty per pkg	Wt
			n°	[kg]
LPZ P1 A5	For 1 actuator	Yellow	1	0.107
LPZ P1 A8	For 1 actuator	Grey	1	0.107
LPZ P2 A5	For 2 actuators	Yellow	1	0.152
LPZ P2 A8	For 2 actuators	Grey	1	0.152
LPZ P3 A8	For 3 actuators	Grey	1	0.187
LPZ P4 A8	For 4 actuators	Grey	1	0.200
LPZ P5 A8	For 5 actuators	Grey	1	0.240
LPZ P6 A8	For 6 actuators	Grey	1	0.290

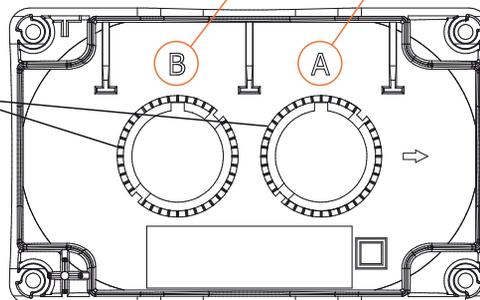
Control station base

Fixing structures for contact and/or LED elements
For each actuator: Maximum of 3 contacts or 2 contacts and 1 LED



Control station cover (inside view)

Easy identification reference
For actuator and corresponding contact and/or LED elements



Anti-loosening action
Anti-rotation indents to extend fixing ring gripping over time

General characteristics

CONTROL STATIONS WITHOUT ACTUATOR

- 1 to 6 ways
- Compact dimensions
- Easy wiring for base-mount contact and LED elements; possible use of screw and spring-clamp terminal contact or LED elements on the inside surface of the cover using LPX AU120 mounting adapter
- Numerous cable entries.

CONTROL STATIONS WITH ACTUATOR

Standard supplied with actuator, label holder and STOP legend label excluding types with yellow cover, and one base-mount NC contact.

Operational characteristics

- Cable entry:
 - LPZ P1... knockouts:
 - M16/PG11 (1 at rear and 1 on left side)
 - M20/M25/PG13,5/PG16 (1 each on top and bottom)
 - LPZ P2... knockouts:
 - M16/PG11 (2 at rear)
 - M20/PG13,5 (1 on each side)
 - M20/M25/PG13,5/PG16 (1 each on top and bottom)
 - LPZ P3/P4/P5/P6 A8 knockouts:
 - M16/PG11 (2 at rear)
 - M20/PG13,5 (2 on each side)
 - M20/M25/PG13,5/PG16 (1 each on top and bottom)
- Any mounting position allowed
- Tightening torque of cover screws Tmax: 1.8Nm
- Ambient conditions:
 - Operating temperature: -25...+70°C
 - Storage temperature: -40...+85°C
- Degree of protection:
 - Per IEC/EN: IP66, IP67 and IP69K
 - Per UL: type 1, 2, 3R, 4, 4X, 12K.

Materials

Polycarbonate.

Certifications and compliance

Certifications obtained: cULus, EAC, CCC, RINA.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508A for types without actuators / UL508 for types complete with actuator, CSA C22.2 n° 14.

With one actuator



LPZ P1 B8 02



LPZ P1 B5 03

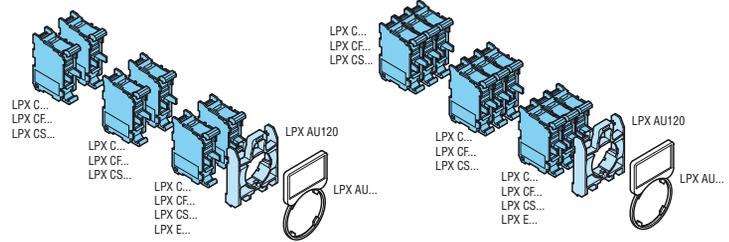
Order code	Control station description	Actuator description	Q.ty per pkg	Wt
			n°	[kg]
LPZ P1 B8 01	Grey, 1 way LPZ P1 A8	Mushroom-head button LPC B6744 with STOP legend	1	0.150
LPZ P1 B8 02	Grey, 1 way LPZ P1 A8	Mushroom-head button LPC B6344 with STOP legend	1	0.135
LPZ P1 B5 02	Yellow, 1 way LPZ P1 A5	Mushroom-head button LPC B6344	1	0.135
LPZ P1 B5 03	Yellow, 1 way LPZ P1 A5	Mushroom-head button LPC B6644	1	0.150

① Version with red emergency stop, turn to release and yellow cover to comply with ISO13850.

SPRING-RETURN BUTTONS



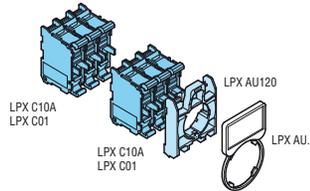
LPC B10...
LPC B11... LPC B20...
LPC B21... LPC B30...



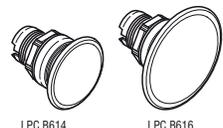
PUSH-PUSH BUTTONS



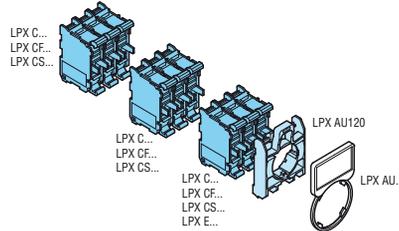
LPC Q10... LPC Q20...



MUSHROOM-HEAD SPRING-RETURN BUTTONS



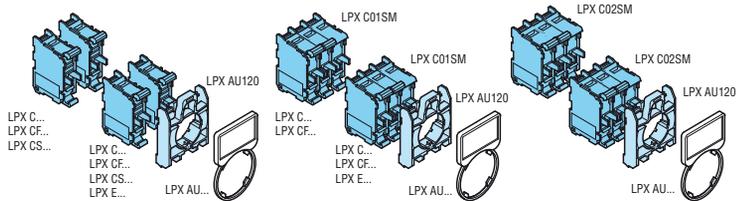
LPC B614... LPC B616...



MUSHROOM-HEAD LATCH BUTTONS



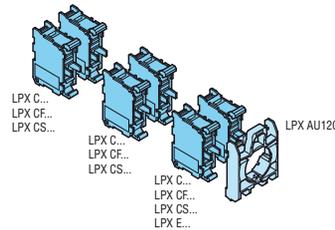
LPC B6634 LPC B634... LPC B664... LPC B674... LPC B684...



DOUBLE-TOUCH BUTTONS



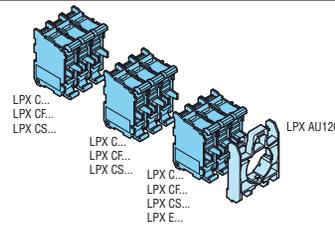
LPC B71... LPC B72...



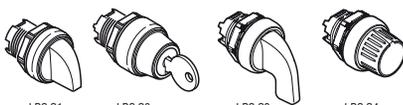
TRIPLE-TOUCH BUTTONS



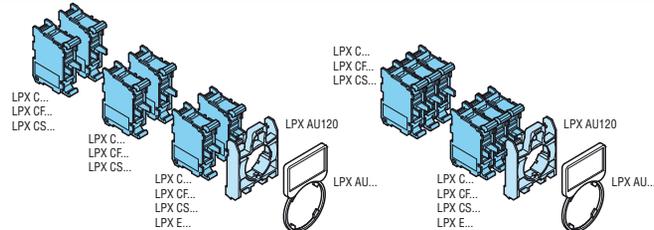
LPC B73...



SELECTOR SWITCHES



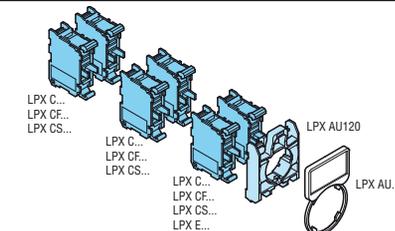
LPC S1... LPC S3... LPC S2... LPC S4...



MECHANICAL SPRING-RETURN RESET BUTTONS



LPC R1... LPC R2...



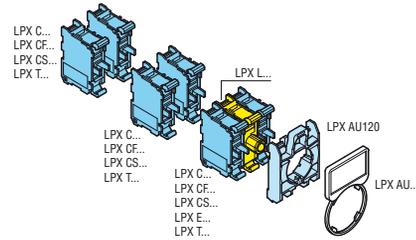
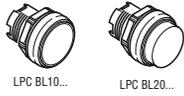
CONTROL AND SIGNALLING UNITS

Combinations for illuminated pushbuttons and selector switches

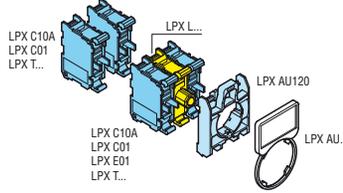
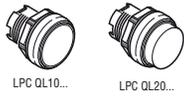
PLatinum Ø22mm series



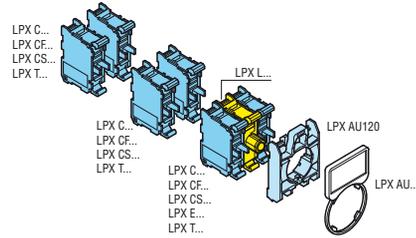
SPRING-RETURN BUTTONS



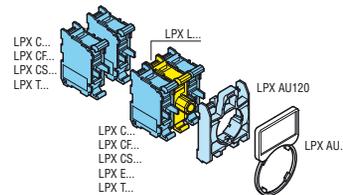
PUSH-PUSH BUTTONS



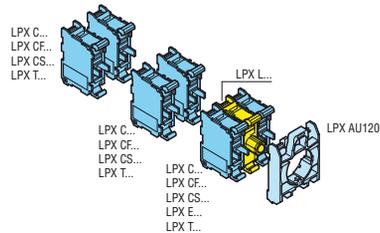
MUSHROOM-HEAD SPRING-RETURN BUTTON



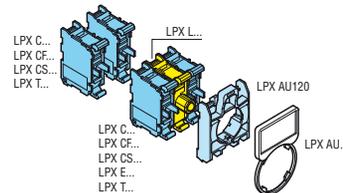
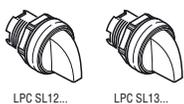
MUSHROOM-HEAD LATCH BUTTON



DOUBLE-TOUCH BUTTONS

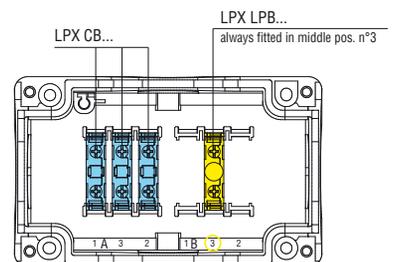
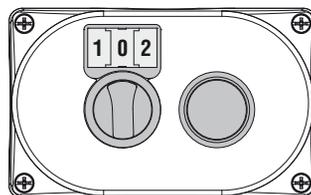


2 AND 3 POSITION SELECTOR SWITCHES



CONTROL STATIONS

Example of 2 way control station equipped with selector switch, label holder and label along with pilot light



Push-button 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

Push-button 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	○	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	←	Black	10	0.033
8 LM2T B1148	← ①	White	10	0.033
8 LM2T B1152	↑	Black	10	0.033
8 LM2T B1158	↑ ②	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	○	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.

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 (actuator).
 Mechanical life: 1,000,000 cycles.

Mounting adapter

See page 4-35.

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).

Auxiliary contacts

See page 4-35.

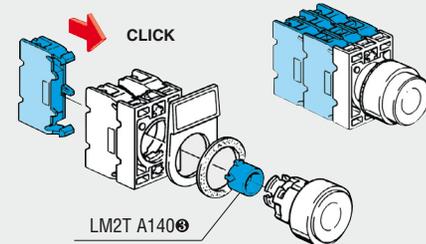
Type:

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

Auxiliary contacts snap onto the mounting adapter.

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

To mount the auxiliary contacts in the centre position, use the accessory: LM2T A140 (see page 4-38).



③ The action plug LM2T A140 for the centre position is not standard supplied and must be purchased separately.

Certifications and compliance

Certifications obtained: cULus, RINA, LROS, GOST, CCC.
 Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1; UL508; CSA C22.2 n° 14.

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 Use the early-make type, LM2T C10A only. 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.

Mushroom head push-button actuators



8 LM2T B614...



8 LM2T B616...



8 LM2T B624...



8 LM2T B634...



8 LM2T B654...



8 LM2T B664...

Order code	Colour	Qty per pkg	Wt
		n°	[kg]
Spring return. Ø 40mm (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. Ø 60mm (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. Ø 40mm (without mounting adapter).			
8 LM2T B6242	Black	10	0.105
8 LM2T B6244	Red	10	0.105
Latch, turn to release. Ø 40mm (without mounting adapter).			
8 LM2T B6342	Black	10	0.054
8 LM2T B6344	Red	10	0.054
Latch, turn key to release. Ø 40mm (without mounting adapter).			
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
Latch, turn to release, ISO 13850 (ex EN418) compliant. Ø 40mm (without mounting adapter).			
8 LM2T B6644	Red	10	0.087

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 (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 4-35.

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).

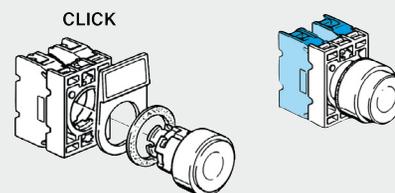
Auxiliary contacts for push-push button actuators

See page 4-35.

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

Auxiliary contacts snap onto the mounting adapter.

Up to 2 auxiliary contacts can be fitted on the mounting adapter: 1 each on the right and left.



Auxiliary contacts for mushroom-head button actuators

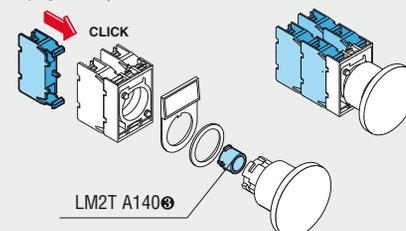
Type:

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

Auxiliary contacts snap onto the mounting adapter.

Up to 4 auxiliary contacts can be fitted on the mounting adapter with LM2T B624... and LM2T B6644 types: 2 on the right and 2 on the left only.

Up to 6 auxiliary contacts 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 auxiliary contacts in the centre position, use the accessory LM2T A140 (see page 4-38).



③ The action plug LM2T A140 for the centre position is not standard supplied and must be purchased separately.

Certifications and compliance

Certifications obtained: cULus, RINA, LROS, GOST, CCC. Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1; UL508; CSA C22.2 n° 14; also IEC/EN 60947-5-5 for LM2T B6644.

Mechanical reset buttons, complete unit, spring return



8 LM2T R1196

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

Flush (5.2mm stroke). Spring return.
Adjustable length 0-140mm max.

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 stroke). Spring return.
Adjustable length 0-140mm max.

8 LM2T R2004	Red	10	0.067
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Complete with mounting adapter as well as the rod.
 With "RESET" caption on actuator.

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	<p style="text-align: center;"> </p> <p style="text-align: center;">STOP</p> <p style="text-align: center;"> </p>	5	0.044
8 LM2T B7355	<p style="text-align: center;">↑</p> <p style="text-align: center;">STOP</p> <p style="text-align: center;">↓</p>	5	0.044
8 LM2T B7365	<p style="text-align: center;">→</p> <p style="text-align: center;">STOP</p> <p style="text-align: center;">←</p>	5	0.044
8 LM2T B7375	<p style="text-align: center;">↗</p> <p style="text-align: center;">STOP</p> <p style="text-align: center;">↖</p>	5	0.044

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...; for 8 LM2T B71... and 8 LM2T B72... 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 (actuator)
Mechanical life: 1,000,000 cycles

Mounting adapter

See page 4-35.
Type: LM2T AU120.

Actuators latch onto the mounting adapter by simple rotation.

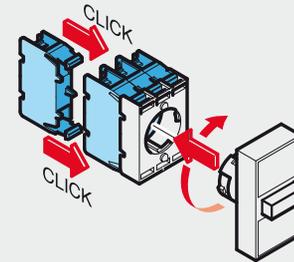
The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm).

Auxiliary contacts for touch actuators

See page 4-35.

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

Auxiliary contacts snap onto the mounting adapter.



DOUBLE-TOUCH ACTUATORS

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

TRIPLE-TOUCH ACTUATORS

Up to 6 auxiliary contacts 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: cULus, RINA, LROS, GOST, CCC.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1; UL508; CSA C22.2 n° 14.

Selector actuators knob



8 LM2T S1...

Order code	Type of positions	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 actuators lever



8 LM2T S2...

Order code	Type of positions	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 actuators key



8 LM2T S3...

Order code	Type of positions	Qty per pkg	Wt
		n°	[kg]
2 position (without mounting adapter).			
8 LM2T S320	∇	10	0.079
8 LM2T S320G①	∇	1	0.079
8 LM2T S321	∇	10	0.079
8 LM2T S321G①	∇	1	0.079
8 LM2T S340	∇	10	0.079
8 LM2T S340G①	∇	1	0.079
3 position (without mounting adapter).			
8 LM2T S330	∇	10	0.080
8 LM2T S330G①	∇	1	0.080
8 LM2T S331	∇	10	0.080
8 LM2T S331G①	∇	1	0.080
8 LM2T S332②	∇	10	0.080
8 LM2T S332G①②	∇	1	0.080
8 LM2T S333②	∇	10	0.080
8 LM2T S333G①②	∇	1	0.080
8 LM2T S350	∇	10	0.080
8 LM2T S350G①	∇	1	0.080
8 LM2T S360	∇	10	0.080
8 LM2T S360G①	∇	1	0.080
8 LM2T S370②	∇	10	0.080
8 LM2T S370G①②	∇	1	0.080
8 LM2T S380②	∇	10	0.080
8 LM2T S380G①②	∇	1	0.080
8 LM2T S390②	∇	10	0.080
8 LM2T S390G①②	∇	1	0.080

- ① 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.
- ② Available only on specific request.

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 4-35.

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).

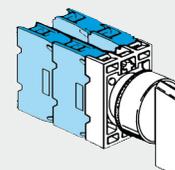
Auxiliary contacts

See page 4-35.

Type:

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

Auxiliary contacts snap onto the mounting adapter. Up to 4 auxiliary contacts can be fitted on the mounting adapter: 2 on the left and 2 on the right. For more, contact our Customer Service 1800 252 995 or sales@mechtronic.com.au for advice.



Positions

- ∇ Stay put position.
- ∇ Spring return position.
- ∇ • Key extraction position.

Angles

2 position



3 position



Special versions

Versions with coloured keys are available upon request. Contact our Customer Service 1800 252 995 or sales@mechtronic.com.au

Certifications and compliance

Certifications obtained: cULus, RINA, LROS, GOST, CCC. Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1; UL508; CSA C22.2 n° 14.

Illuminated button actuators, spring return



8 LM2T BL10...



8 LM2T BL20...

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

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

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

Illuminated button actuators push-push



8 LM2T QL10...



8 LM2T QL20...

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

Flush (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. Ø 40mm (without mounting adapter). ②

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. Ø 40mm (without mounting adapter). ③

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

- ② The number of auxiliary contacts to be mounted is given in the side notes.
③ A maximum of 2 auxiliary contacts can be mounted only.

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 (actuator).
Mechanical life:
- Push-push actuators: 500,000 cycles
 - Mushroom head latch buttons: 300,000 cycles
 - All others: 1,000,000 cycles.

Mounting adapter

See page 4-35.

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).

Auxiliary contacts for illuminated push-push actuators:

See page 4-35 to 4-37.

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

Auxiliary contacts snap onto the mounting adapter. Up to 2 auxiliary contacts 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 117).

With lamp-holder LM2T XL..., LM2T YL..., LM2T FL... or LM2T GL..., one auxiliary contact can be mounted only.

Auxiliary contacts for illuminated button or mushroom-head actuators:

See page 4-35.

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

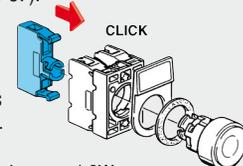
Auxiliary contacts snap onto the mounting adapter.

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 4-35 to 4-37).
- 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 4-36 to 4-37).

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 4-35 to 4-37)
- 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 4-35 to 4-37).



Lamp-holder elements

See page 4-35 to 4-37.

Bulbs

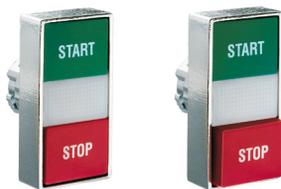
Maximum recommended power: 1.2W.

See page 4-38.

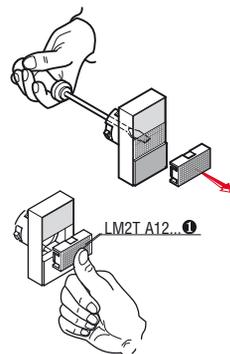
Certifications and compliance

Certifications obtained: cULus, RINA, LROS, GOST, CCC.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1; UL508; CSA C22.2 n° 14.

Double touch actuators, spring return, white indicator



8 LM2T BL711... 8 LM2T BL721...



❶ The actuator is standard supplied with a white diffuser. Coloured diffusers LM2T A12... can be purchased separately. Refer to page 4-38.

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

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

8 LM2T BL7212	Black/Red	none	5	0.044
8 LM2T BL7213	Green/Red	none	5	0.044
8 LM2T BL7214	White/Black	none	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

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 (double touch actuator).
Mechanical life: 300,000 cycles for selectors; 1,000,000 cycles for double-touch actuators.

Mounting adapter

See page 4-35.
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).

Auxiliary contacts

See page 4-35.
Type: LM2T C10 (1NO)
LM2T CF10 (1NO Faston)
LM2T C10A (EM)
LM2T C01 (1NC)
LM2T CF01 (1NC Faston)
LM2T C01D (LB)

Auxiliary contacts snap onto the mounting adapter.

DOUBLE-TOUCH ACTUATORS

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

SELECTOR ACTUATORS

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

- Up to 4 auxiliary contacts when the following types of lamp-holders are used: LM2T DL400, LM2T VL230, LM2T EL400, LM2T ZL230, LM2T L... or LM2T M... (See page 4-35 to 4-37).
- Up to 2 auxiliary contacts when the following types of lamp-holders are used: LM2T XL..., LM2T YL..., LM2T FL... or LM2T GL... (See page 4-35 to 4-37).

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

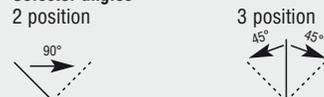
- Up to 4 auxiliary contacts when the following types of lamp-holders are used: LM2T DL400, LM2T VL230, LM2T EL400, LM2T ZL230, LM2T L... or LM2T M... (See page 4-35 to 4-37).

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

Selector positions

- ∨ Stay put position.
- ∩ Spring return position.

Selector angles



Lamp-holder elements for selector actuators

See page 4-35 to 4-37.

Lamp-holder elements for double-touch actuators

Use lamp-holder type LM2T DL400, LM2T EL400, LM2T VL230, LM2T ZL230, LM2T L... or LM2T M... See page 4-35 to 4-37.

Bulbs

Maximum recommended power: 1.2W.
See page 4-36.

Certifications and compliance

Certifications obtained: cULus, RINA, LROS, GOST, CCC.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1; UL508; CSA C22.2 n° 14.

Illuminated selector actuators



8 LM2T SL1...

Order code	Colour	Type of positions	Qty per pkg	Wt
			n°	[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

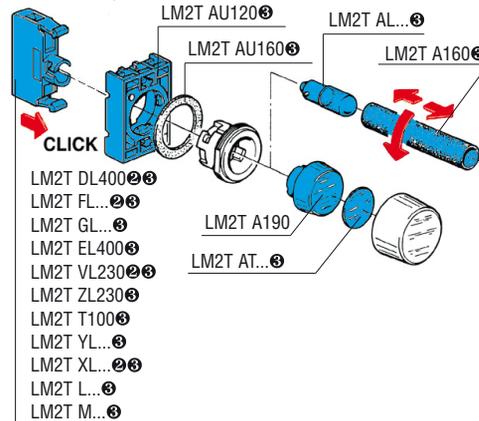
Pilot light head



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 60417 5036-a).



- ② The mounting adapter is standard supplied so there is no need to purchase it as a separate accessory.
- ③ Can be purchased separately. Refer to pages 4-38 and 4-39.

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 4-35.

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).

Lamp-holder elements

See page 4-36 and 4-37.

Bulbs

Maximum recommended power: 1.2W.

See page 4-38.

Certifications and compliance

Certifications obtained: cULus, RINA, LROS, GOST, CCC.

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

Potentiometer drive



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 P100②	With graduated scale	10	0.070
8 LM2T P110②	With variable index	10	0.070

② Potentiometer not included, for assembly by the user.

Operational characteristics

- Suitable for potentiometers with 6-6.3mm diameter shaft
- Minimum 40mm 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).

Certifications and compliance

Certifications obtained: GOST and CCC.

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

Joysticks

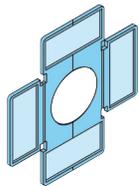


8 LM2T J...
without mechanical interlock



8 LM2T J...
with mechanical interlock

Accessories



8 LM2T AU101

Order code	Type of positions	N° auxiliary contacts	Qty per pkg	Wt [kg]
		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

Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed
- Degree of protection:
 - IP20 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 auxiliary contacts

Self-cleaning with dual effect, scraping and oscillating
 Rated insulation voltage: 690V
 Rated thermal current Ith: 10A.
 Designation according to IEC 60947-5-1 - A300 Q300.
 Operational power in AC15:

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

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
 Contact resistance: ≤20mΩ
 Terminals: Clamp screw with washer
 Maximum tightening torque: 1Nm

Mounting adapter and auxiliary contacts

The joystick is standard supplied with the mounting adapter and auxiliary contacts.

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).

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: GOST, CCC, cULus for auxiliary contacts.

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

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

Joystick positions and contact engraving

2 instable 2 stable
 4 instable 4 stable

	↑ A	↓ B	← C	→ D	N
LM2TCJ10	1	•			
LM2TCJ01	2		•		
LM2TCJ10	3			•	
LM2TCJ01	4				•

	↑ A	↓ B	N
LM2TCJ10	1	•	
	2		•

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
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Metal series actuators are supplied without mounting adapter. Plastic series actuators are supplied complete with mounting adapter (type LP2T AU120).

Contact elements



8 LM2T C...

Order code	Function	Qty per pkg	Wt
		n°	[kg]

Screw termination.
Without mounting adapter.

8 LM2T C10		10	0.011
8 LM2T C10A		10	0.011
8 LM2T C01		10	0.011
8 LM2T C01D		10	0.011

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

8 LM2T E10		10	0.029
8 LM2T E01		10	0.029

Faston termination.
Without mounting adapter.

8 LM2T CF10		10	0.012
8 LM2T CF01		10	0.012

- ① Not suitable for push-push actuators. Use LM2T C10A (EM) or LM2T C01 (NC) type only with push-push actuators.
- ② Normally open contact with early make operation.
- ③ Direct opening operation in accordance with IEC/EN 60947-5-1.
- ④ Normally closed contact with late break operation.

8 LM2T E...



8 LM2T CF01



8 LM2T CF10

Operational characteristics

- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Any mounting position is allowed
- Degree of protection:
 - IP20 for contacts elements with screw termination
 - IP00 for contact elements with Faston termination.

General characteristics of the auxiliary contacts

Self-cleaning with dual effect, scraping and oscillating
Rated insulation voltage: 690V
Rated thermal current Ith: 10A
Designation according to IEC 60947-5-1: A600 Q600
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

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

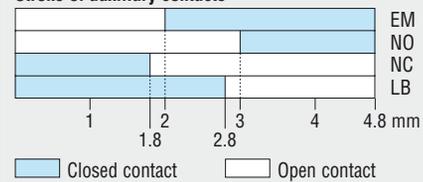
Contact resistance: ≤20mΩ

Terminals: Clamp screw with washer

Faston 1-6.35mm or 2-2.8mm

Maximum tightening torque: 1Nm (Faston excluded).

Stroke of auxiliary contacts



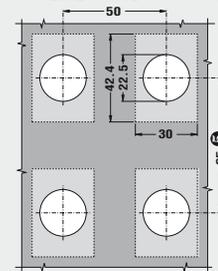
Maximum conductor section for screw termination

1 or 2.5 mm² or AWG12 cables.

Mechanical and electrical endurance

Operating force: 0.5 kg (auxiliary contacts).

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



⑤ When using Faston, vertical interaxes is 90mm minimum.

Certifications and compliance

Certifications obtained: cULus, RINA, LROS, GOST, CCC.

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

Lamp-holders elements without mounting adapter



8 LM2T EL400
8 LM2T ZL230



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

Order code	Rated 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

Lamp-holders elements with mounting adapter



8 LM2T DL400

Order code	Rated 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

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 5007	10	0.011

- 1 Filament bulb, BA9s U≤130VAC/DC max 2.6W (not supplied); maximum dimensions 11x28 mm.
For higher voltages, use neon bulbs.
- 2 Not suitable for 3-position selectors.
- 3 Filament bulb, BA9s (not supplied); maximum dimensions 11x28mm/0.4x1.1".
Use bulbs with rated voltage equal to that of the power supply.
Suitable for AC duty only.
E.g.: With 8 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 contact our Customer Service 1800 252 995 or sales@mechtric.com.au
- 6 In case of neon bulbs, contact our Customer Service 1800 252 995 or sales@mechtric.com.au
- 7 Only use with lamp-holder elements:
 - With direct supply
 - With resistor and diode
- 8 Not suitable for use with test element.

Operational characteristics

- Operating supply voltage limits for all types: -15...+10% Ue
- Any mounting position allowed
- The adapter is fixed to the mounting surface by means of incorporated screws (Tmax = 0.8Nm) also internally on LPZ control stations covers
- Lamp-holder elements snap onto the adapter
- Only lamp-holder elements LM2T DL400, LM2T EL400, LM2T T100 and LM2T ZL230 can be used with LPZ control stations
- Maximum tightening torque: 1Nm
- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Degree of protection: IP20.

Mounting adapter

See page 4-35.

Type : LM2T AU120 for LM2T EL400, LM2T ZL230, LM2T YL..., LM2T GL... and/or LM2T T100.

Maximum conductor cross section

1 or 2 2.5mm² or AWG 12 cables.

Wiring diagrams

Direct supply

LM2T EL400

LM2T DL400



With resistor and diode

LM2T ZL230

LM2T ZL230

LM2T ZL230

LM2T ZL230

LM2T ZL230

LM2T ZL230

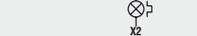
With transformer

LM2T YL...



Flashing

LM2T GL...



Test element

LM2T T100



Certifications and compliance

Certifications obtained: cULus, EAC, RINA, LROS, CCC.
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.

8 LM2T LB3Ⓢ	12...30VAC/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...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		185...265VAC	Green	10
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

Ⓢ 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.

8 LM2T MB3Ⓢ	18...30VAC/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...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		185...265VAC	Green	10
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

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

Operational characteristics

- rated frequency: 50-60Hz
- Supply voltage:
 - Steady light: 12...30VAC/DC; 85...140VAC; 185...265VAC
 - Flashing light: 18...30VAC/DC; 85...140VAC; 185...265VAC
- maximum consumption:
 - Steady and flashing light: 17mA-0,50W (12...30VAC/DC); 20mA-0,40W (85...140VAC); 18mA-0,55W (185...265VAC)
- Protection:
 - Against overvoltages
 - Against stray currents in wiring
 - To reduce flickering phenomenon
 - To withstand vibrations
- minimum activation voltage:
 - Steady light: 4V-1mA (12...30VAC/DC); 30V-4mA (85...140VAC); 55V-4mA (185...265VAC)
 - Flashing light: 5V-1,5mA (18...30VAC/DC); 13V-1,5mA (85...140VAC); 25V-1,5mA (185...265VAC)
- Electrical life: 100,000 hours
- Snap onto 8 LM2T 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
- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+85°C
- Degree of protection: IP20.

Mounting adapter

See page 4-35. Type: LM2T AU120.
The adapter is fixed on the mounting surface by means of incorporated screws (Tmax=0,8Nm).

Maximum conductor cross section

1 or 2 2.5mm² or AWG12 cables.

Wiring diagram



Certifications and compliance

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

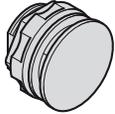
CONTROL AND SIGNALLING UNITS

Accessories and spare parts

8 LM Ø22mm metal series



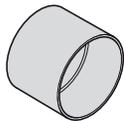
Accessories and spare parts



8 LM2T L...



8 LM2T M...



8 LM2T M...



8 LM2T M...

Order code	Description	Qty per pkg	Wt
		n°	[kg]
8 LM2T A12... ^①	Coloured diffuser for double touch buttons	10	0.001
8 LM2T A130	Threaded plug for unused drilled holes (black)	10	0.007
8 LM2T A140	Action plug for centre contact	50	0.001
8 LM2T A150	Rod for mechanical reset button (l=140mm/5.5")	10	0.006
8 LM2T A160	BA9s bulb extractor	10	0.004
8 LM2T A161	Hole size adapter set for Ø30mm/1.2" to 22mm/0.87" (2 per hole)	10	0.002
8 LM2T A170	Spare key set for selector or mushroom head button	1	0.008
8 LM2T A170G ^②	Spare key set for G series selector or mushroom-head button	1	0.008
8 LM2T A185	Selector protection shroud for short lever	10	0.004
8 LM2T A190	Diffuser for pilot light	10	0.003
8 LM2T ALA024	Filament bulb BA9s 24VAC/DC - 1,2W	100	0.002
8 LM2T ALB024	Filament bulb BA9s 24VAC/DC - 2W	100	0.003
8 LM2T ALB048	Filament bulb BA9s 48VAC/DC - 2W	100	0.003
8 LM2T ALB130	Filament bulb BA9s 130VAC/DC - 2W	100	0.003
8 LM2T ALL006 ^③	LED bulb BA9s 6VAC/DC	10	0.003
8 LM2T ALL024 ^③	LED bulb BA9s 24VAC/DC	10	0.003
8 LM2T ALL048 ^③	LED bulb BA9s 48VAC/DC	10	0.003
8 LM2T ALN130 ^④	Neon bulb ^⑤ BA9s 110...125VAC	100	0.003
8 LM2T ALN250 ^④	Neon bulb ^⑤ BA9s 220...250VAC	100	0.003
8 LM2T ALP130 ^④	Neon bulb ^⑥ BA9s 110...125VAC	100	0.003
8 LM2T ALP250 ^④	Neon bulb ^⑥ BA9s 220...250VAC	100	0.003

- ① Add the number of the selected colour: 3 (green); 4 (red); 5 (yellow); 6 (blue); 7 (transparent); 8 (white).
- ② 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; contact our Customer Service 1800 252 995 or sales@mechtronic.com.au
- ③ Add the number of the selected colour: 3 (green); 4 (red); 5 (yellow). It is advisable to use the same colour of bulb as of the actuator to obtain adequate light emission.
- ④ Neon bulbs emit an amber light and may not be suitable for use with green or blue pilot lights and illuminated actuators.
- ⑤ Glass with diffuser lens.
- ⑥ Plastic neon bulb.

Accessories and spare parts



8 LM2T AT...



8 LM2T AU100



8 LM2T AU105



8 LM2T AU108
8 LM2T AU106



8 LM2T AU170



8 LM2T AU159



LPX DIN

Order code	Description	Qty per pkg.	Wt [kg]
		n°	[kg]
8 LM2T AT...①	Printed label to be inserted in pilot lights and illuminated pushbuttons	50	0.001
8 LM2T AU100②	Legend holder	50	0.001
8 LM2T AU105②	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 AU13③	IP66 boot for pushbuttons LM2T B1/R1...	10	0.006
8 LM2T AU14③	IP66 boot for pushbuttons LM2T B2/B3//BL2/R2...	10	0.009
8 LM2T AU157	IP66 boot for double and triple buttons (transparent)	10	0.007
8 LM2T AU159	Shroud for buttons 8 LM2T B62/63/65/66..., 8 LM2T BL62...	10	0.010
LPX DIN	Adapter for mounting 8 LM2T... buttons on DIN rail 35mm wide (2 modules)	10	0.008
8 LM2T AU167	IP66 protective boot for mushroom head buttons LM2T B62/B63... (transparent)	10	0.012
8 LM2T AU170	Actuator gasket	10	0.006

new

new

- ① Available only on specific request, contact our Customer Service 1800 252 995 or sales@mechtric.com.au
- ② To preserve actuators degree of protection (IP65) 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).

CONTROL AND SIGNALLING UNITS

Accessories and spare parts

8 LM Ø22mm metal series



Labels with text for LM2T AU100 legend holder

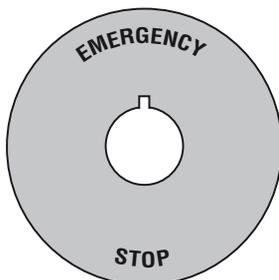


8 LM2T AGB230

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 printing ¹	1 ²	0.005
8 LM2T AU208 ³	Sheet with 108 laser-printed labels ¹	1 ²	0.005
8 LM2T AI210	LATCH	50	0.001
8 LM2T AI211	OPEN	50	0.001
8 LM2T AI212	STOP	50	0.001
8 LM2T AI213	GENERAL STOP	50	0.001
8 LM2T AI214	STOP RESET	50	0.001
8 LM2T AI215	FORWARD	50	0.001
8 LM2T AI216	CLOSE	50	0.001
8 LM2T AI217	RIGHT	50	0.001
8 LM2T AI218	LOWER	50	0.001
8 LM2T AI219	OFF	50	0.001
8 LM2T AI220	EMERGENCY	50	0.001
8 LM2T AI221	OFF	50	0.001
8 LM2T AI222	REVERSE	50	0.001
8 LM2T AI223	ON	50	0.001
8 LM2T AI237	THERMAL TRIP	50	0.001
8 LM2T AI224	SLOW	50	0.001
8 LM2T AI225	RUNNING	50	0.001
8 LM2T AGB226	RESET	50	0.001
8 LM2T AI226	RESET	50	0.001
8 LM2T AI227	RAISE	50	0.001
8 LM2T AI228	LEFT	50	0.001
8 LM2T AI229	POWER ON	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 AI231	FAST	50	0.001
For selector switches.			
8 LM2T AI232	STOP-START	50	0.001
8 LM2T AI233	AUTO-MAN	50	0.001
8 LM2T AI234	AUTO-O-MAN	50	0.001
8 LM2T AI242	MAN-O-AUTO	50	0.001
8 LM2T AI235	FWD-O-REV	50	0.001
8 LM2T AI236	ON - OFF	50	0.001
8 LM2T AI241	MAN-AUTO	50	0.001
8 LM2T AGB232	STOP-START	50	0.001
8 LM2T AGB236	OFF-ON	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

- ¹ Recommended use with LM2T AU206 blank label.
- ² Sheet with 108 adhesive labels.
- ³ Complete code with label text required.

Plastic disk for mushroom head pushbuttons



Ordering code	Text	Qty per pkg	Wt
		n°	[kg]
8 LM2T AU113	EMERGENCY STOP Ø90mm/3.5"	10	0.005
8 LM2T AU115	EMERGENCY STOP Ø60mm/2.4"	10	0.003

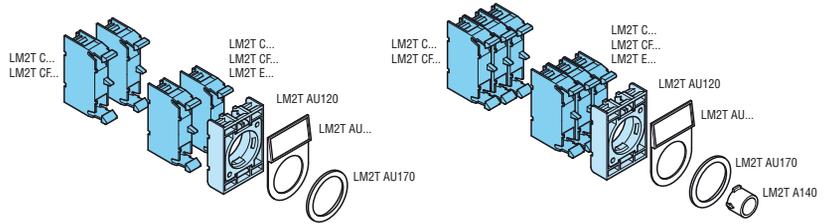
General characteristics

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

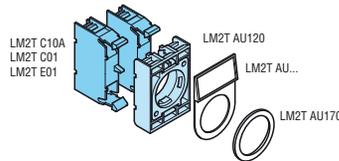
General characteristics

The disks are made of non-adhesive plastic. It is not possible use plastic disks with protection 8 LM2T AU159.

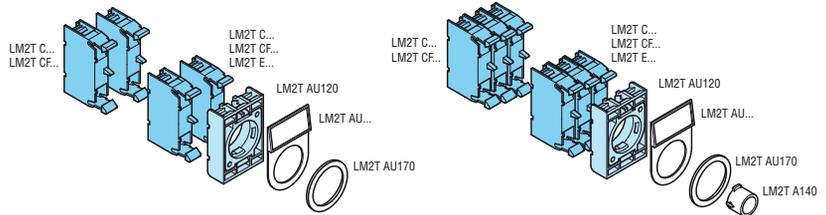
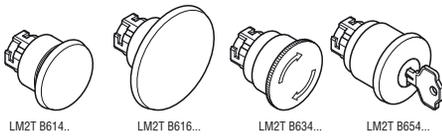
SPRING-RETURN BUTTONS



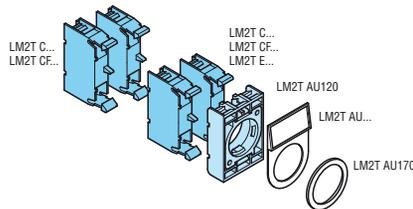
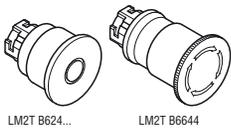
PUSH-PUSH BUTTONS



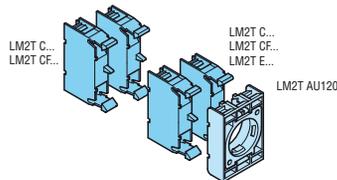
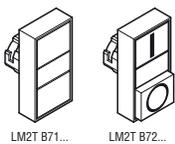
NORMAL STOPPING MUSHROOM-HEAD BUTTONS



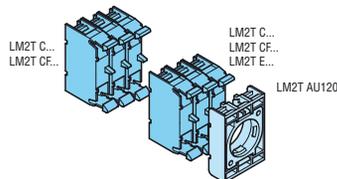
MUSHROOM-HEAD LATCH BUTTONS



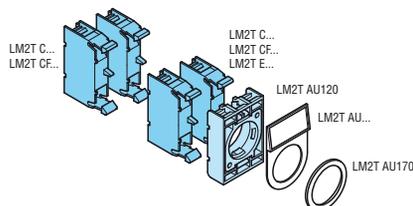
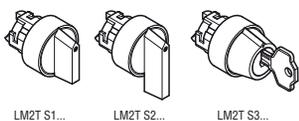
DOUBLE-TOUCH BUTTONS



TRIPLE-TOUCH BUTTONS



SELECTOR SWITCHES



ESS-22D Buzzers and Pilot Lights

- High output LED indicators
- Dual colour (red/green) versions
- Buzzer and buzzer LED combination
- 22mm panel cutout



ESSB22DB...



ESSB22DF...



ESSB22D...



ESSB22DS...

Specifications

LED pilot lights

Protection:	IP65 from front
Current:	less than 20mA
Temp Rating (°C):	-30 to +50
Cable Entry:	Screw terminals on Back
Rating:	Continuous
Construction:	Polycarbonate

Buzzer (buzzer/LED)

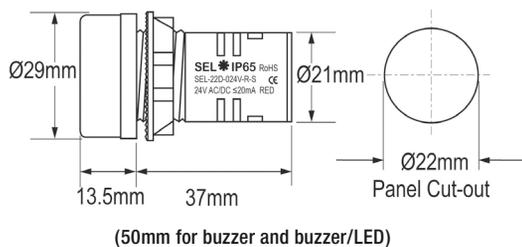
Current:	15-25mA
Sound Output:	80dB @ 10cm, intermittent tone

Certifications and compliance

Certifications obtained: CE and RoHS

Voltage	Order Code			
	Single colour LED	Dual colour red/green LED	Buzzer	Buzzer/LED
8-36V ac/dc	ESSB22D0636V*			
12VAC/DC		ESSB22DSPF1RG22	ESSB22DBDBZ012	ESSB22DFS012*
24VAC/DC		ESSB22DSPF1RG23	ESSB22DBDBZ024	ESSB22DFS024*
48VAC/DC		ESSB22DSPF1RG25	ESSB22DBDBZ048	ESSB22DFS048*
130VAC/DC	ESSB22D130V*	ESSB22DSPF1RG27	ESSB22DBDBZ130	ESSB22DFS130*
230VAC	ESSB22D230V*	ESSB22DSPF1RG31	ESSB22DBDBZ230	ESSB22DFS230*
Other voltages and special features available on request				* available in red or yellow only

* specify colour: A = amber, B = blue, C = clear, G = green, R = red, Y = yellow



Accessories

Order Code	Description
SOLSEL22DMT	Mounting tool for 22D pilot lights
SOLSEL22DLSLC	Silicon rubber lens cover for IP67

P40

- M30 panel mounting signals
- Multifunction LED beacon with 3 stage alarm (P40S) or steady beacon (P40J)
- Multi-Colour (red/amber green) LED beacon
- Piezo sounder with 2 stage alarm (P40A), or single continuous tone (P40AJ)
- Combined piezo sounder with LED beacon with 3 stage alarm

Sounder

Order Code	Model	Colour	Voltage	Stages/Sound Level	Weight (Kg)
SIR01P91208	P40AJ	Grey	12/24VAC/DC	Continuous tone 70dB @ 1m	0.04
SIR01P91210	P40AJ		90/240VAC		0.04
SIR01P91177	P40A	Grey	12/24VAC/DC	Continuous/intermittent tone 85dB@1m	0.04
SIR01P91179	P40A		48/240VAC		0.04

Beacon

SIR01P91221	P40J	Blue	12/24VAC/DC	Steady light	0.04
SIR01P91222	P40J	Amber			0.04
SIR01P91223	P40J	Red			0.04
SIR01P91224	P40J	Green			0.04
SIR01P91225	P40J	Yellow			0.04
SIR01P91226	P40J	White	48/240VAC	Steady light	0.04
SIR01P91241	P40J	Blue			0.04
SIR01P91242	P40J	Amber			0.04
SIR01P91243	P40J	Red			0.04
SIR01P91244	P40J	Green			0.04
SIR01P91245	P40J	Yellow	12/24VAC/DC	3 stages Steady/Flashing/Strobe	0.04
SIR01P91246	P40J	White			0.04
SIR01P91131	P40S	Blue			0.04
SIR01P91132	P40S	Amber			0.04
SIR01P91133	P40S	Red			0.04
SIR01P91134	P40S	Green	90/240VAC	3 stages Steady/Flashing/Strobe	0.04
SIR01P91135	P40S	Yellow			0.04
SIR01P91136	P40S	White			0.04
SIR01P91151	P40S	Blue			0.04
SIR01P91152	P40S	Amber			0.04
SIR01P91153	P40S	Red	12/24VAC/DC	Steady light	0.04
SIR01P91154	P40S	Green			0.04
SIR01P91155	P40S	Yellow			0.04
SIR01P91156	P40S	White			0.04

Multi-Colour Beacon

SIR01P91167	P40RGA	Red Amber Green	12/24VAC/DC	Steady light	0.04
SIR01P91171	P40RGA		48/240VAC		0.04
SIR01P91168	P40RGA	Red Amber Green	12/24VAC/DC	Flashing Light	0.04
SIR01P91172	P40RGA		48/240VAC		0.04

Sounder-beacon

SIR01P91181	P40ALED	Blue	12/24VAC/DC	3 stages Flashing light/Flashing light + intermittent sound/steady light + continuous sound	0.04
SIR01P91182	P40ALED	Amber			0.04
SIR01P91183	P40ALED	Red			0.04
SIR01P91184	P40ALED	Green			0.04
SIR01P91185	P40ALED	Yellow			0.04
SIR01P91186	P40ALED	White	48/240VAC	3 stages Flashing light/Flashing light + intermittent sound/steady light + continuous sound	0.04
SIR01P91201	P40ALED	Blue			0.04
SIR01P91202	P40ALED	Amber			0.04
SIR01P91203	P40ALED	Red			0.04
SIR01P91204	P40ALED	Green			0.04
SIR01P91205	P40ALED	Yellow			0.04
SIR01P91206	P40ALED	White	0.04		

General characteristics

Self-extinguishing poly carbonate body total protected against dust, water spray and vibrations. Standard housing colour is grey, black colour housing optional. Can be panel mounted through a $\phi 30$ mm hole.

Specifications

Rated voltage: 12/24V AC/DC, 48/240VAC (90-240VAC for P40J version)

Voltage tolerance: $\pm 10\%$

Rated current: 19mA to 130mA depending on model

Rated frequency: 50/60Hz

Sounder output: 85dB@1m (70dB for P40AJ)

Sounder tone: 3500+/-100Hz (3000Hz for P40AJ)

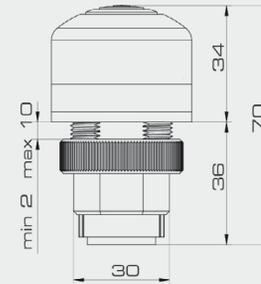
Protection: IP66 for beacons only, IP65 for sounders

Rating: Continuous

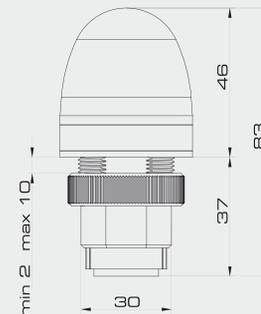
Operating Temp.: -30 to +50°C

Compliance and standards

Certifications obtained: CE, UL(type 3R), GOST



P40A - P40ALED dimensions



P40S-P40RGA dimensions

ELYPS



- Unique elliptical design 70mm x 50mm
- Choice of multi-function LED light modules with 4 flash patterns, steady LED light modules or high output strobe effect light modules
- Choice of light modules with colour lens, with clear lens and colour LED's for high ambient light applications, or low light output versions for close proximity.
- Choice of wiring modules with or without built in flash circuit. Modules allow up to maximum of 6 light modules + 1 audible module.
- 2 choices of audible modules
- Wide choice of mounting bases.
- Housings and mounting bases in black colour (optional grey or white)



ELYPS WIRING MODULE



ELYPS AUDIBLE MODULE

ELYPS WM Wiring Module includes top cap

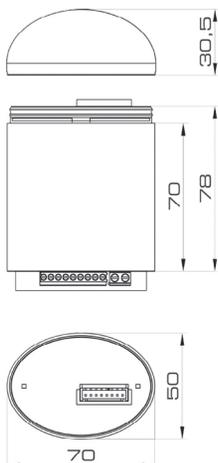
Order Code	Voltage	Description	Weight (Kg)
SIRT32458	12/24V ACDC	WM LT basic wiring module black colour	0.05
SIRT32321	120/240V AC	WM HT basic wiring module black colour	0.16
SIRT32468	12/24V ACDC	WM LT MULTI wiring module 4 light effects black colour	0.05
SIRT32327	120/240V AC	WM HT MULTI wiring module 4 light effects black colour	0.16

ELYPS LM Steady Light Module 110mA

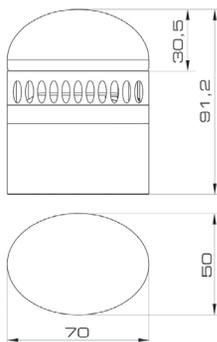
Colour	Order Code			Weight (Kg)
	Coloured Lens	Clear Lens Coloured LED	Proximity	
Blue	SIRT32331	SIRT32341	SIRT32411	0.04
Amber	SIRT32332	SIRT32342	SIRT32412	0.04
Red	SIRT32333	SIRT32343	SIRT32413	0.04
Green	SIRT32334	SIRT32344	SIRT32414	0.04
Yellow	SIRT32335	SIRT32345	SIRT32415	0.04
White	SIRT32336	SIRT32346	SIRT32416	0.04

Audible Module (Black Colour)

Order Code	Type	No. Tones	Sound Output (dB @ 1m)	Sound Frequency	Current	Weight (Kg)
SIRT32338	AM	1+1	87	3600Hz	130mA	0.08
SIRT32348	AMS	8+8	60-90 adjustable	490-2800Hz	450mA	0.09



Dimensions Elyps-WM



Dimensions Elyps-AM

General characteristics

WM Basic Wiring Module

With 7 electrical contacts, it allows assembly of maximum 7 modules: 6 light modules + 1 audible module (1 channel) or 5 light modules + 1 acoustic module (2 channels).

WM Multi-function Wiring Module

With the same main characteristics of the WM module, WM MULTI allows the possibility of generating a flashing sequence in any of the installed modules via the activation of a dedicated BLINK channel. With 4 light effects: single flash, double flash, triple flash and stroboscopic. The BLINK channel can be triggered independently for each module, allowing the change from steady to flashing light during the normal operations of the stacklight. The BLINK channel activation can be done directly as well as via PLC.

A top cap for closure of the stacklight when an acoustic module is not installed, is provided with each WM module.

LM Steady Light Module

Entry level LED light module available with choice of coloured lens or clear lens (with colour LED's) or proximity lens. Can be used with WM basic or WM multi-function wiring module.

LMS Steady Light Module

Higher output LED light module available with choice of coloured lens or clear lens (with colour LED's). Can be used with WM basic or WM multi-function wiring module.

LMS Multi Light Module

Multi-function high output LED light module with 4 flash effects (double flash, triple flash, strobe effect or random). Available with choice of coloured lens or clear lens (with colour LED's). Can be used with WM basic wiring module only.

LMX Multi Light Module

Super bright multi-function LED light module designed to replace xenon strobes, with 4 flash effects (double flash, triple flash, strobe effect or random). Available with coloured lens only. Can be used with WM basic wiring module only.

AM Audible Module

Audible module with 2 tones, intermittent or continuous. Either one or both tones can be selected by using one or two of the 7 available contacts in the wiring base. Can be used with WM basic or WM multi-function wiring module.

AMS Audible Module

Audible module with 16 tones, in groups of 8 with one tone each group selectable by DIP switches. Either one or both tones can be selected by using one or two of the 7 available contacts in the wiring base. Can be used with WM basic or WM multi-function wiring module.

Specifications:

Protection: IP65
 Temp Rating (°C): -30 to +50
 Cable Entry: Through mounting base unit.
 Rating: Continuous
 Construction: Polycarbonate
 For full dimensional details see www.mechtric.com.au

Compliance and standards

Certifications obtained: CE, UL, TUV

ELYPS



ELYPS LIGHT MODULE

ELYPS LM S High Brightness Steady Light Module 100mA

Colour	Order Code		Weight (Kg)
	Coloured Lens	Clear Lens Coloured LED	
Blue	SIRT32371	SIRT32381	0.04
Amber	SIRT32372	SIRT32382	0.04
Red	SIRT32373	SIRT32383	0.04
Green	SIRT32374	SIRT32384	0.04
Yellow	SIRT32375	SIRT32385	0.04
White	SIRT32376	SIRT32386	0.04

ELYPS LM S MULTI High Brightness Flashing Light Module 100mA

Colour	Order Code		Weight (Kg)
	Coloured Lens	Clear Lens Coloured LED	
Blue	SIRT32391	SIRT32401	0.04
Amber	SIRT32392	SIRT32402	0.04
Red	SIRT32393	SIRT32403	0.04
Green	SIRT32394	SIRT32404	0.04
Yellow	SIRT32395	SIRT32405	0.04
White	SIRT32396	SIRT32406	0.04

ELYPS LM X High Brightness Xenon Effect Light Module 100mA

Colour	Order Code	Weight (Kg)
	Coloured Lens	
Blue	SIRT32351	0.04
Amber	SIRT32352	0.04
Red	SIRT32353	0.04
Green	SIRT32354	0.04
Yellow	SIRT32355	0.04
White	SIRT32356	0.04

ELYPS MB Mounting Bases

Order Code	Description	Weight (Kg)
SIRT32358	Surface Mount Base black colour	0.05
SIRT32368	Wall Mount Base black colour	0.06
SIRT32388	Pole Mount Base 1/2" NPT-F black colour	0.08
SIRT32378	Extended Mounting Base 150mm black colour	0.07
SIRT32424	Stainless Steel Tube Mounting Base 141mm black colour	0.10
SIRT32425	Stainless Steel Tube Mounting Base 241mm black colour	0.14
SIRT32426	Stainless Steel Tube Mounting Base 341mm black colour	0.18
SIRT32427	Stainless Steel Tube Mounting Base 441mm black colour	0.22



SIRT32358



SIRT32368



SIRT32388



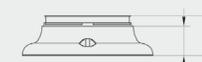
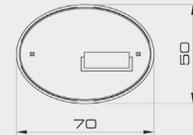
SIRT32378



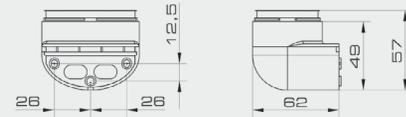
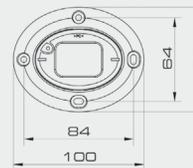
SIRT32424...



Dimensions Elyps-LM



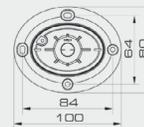
Dimensions SIRT32358



Dimensions SIRT32368



Dimensions SIRT32388



Dimensions SIRT32378



Dimensions SIRT32424



TWS



TWS BASE WIRING MODULE



TWS LIGHT MODULES

- Choice of multi-function LED light modules with 4 flash patterns, steady LED light modules, high output multi-function light modules, filament bulb modules and xenon modules.
- Choice of light modules with colour lens, with clear lens and colour LED's for high ambient light applications.
- Wide choice of mounting bases.
- Heavy duty IP69K stainless steel or anodized aluminum enclosures available
- Housings and mounting bases in black colour (optional grey).

TWS Base Wiring Module includes top cap

Order Code	Description	Weight (Kg)
SIRT27690	Base and cap module black colour	0.12

TWS LED STEADY Light Module 85mA

Voltage	Order Code			Weight (Kg)
	24V ACDC	110V AC	240V AC	
Colour	Coloured Lens			
Blue	SIRT36681	SIRT36691	SIRT36701	0.11
Amber	SIRT36682	SIRT36692	SIRT36702	0.11
Red	SIRT36683	SIRT36693	SIRT36703	0.11
Green	SIRT36684	SIRT36694	SIRT36704	0.11
Yellow	SIRT36685	SIRT36695	SIRT36705	0.11
White	SIRT36686	SIRT36696	SIRT36706	0.11
Colour	Clear Lens Coloured LED			
Blue	SIRT33151	SIRT33161	SIRT33171	0.11
Amber	SIRT33152	SIRT33162	SIRT33172	0.11
Red	SIRT33153	SIRT33163	SIRT33173	0.11
Green	SIRT33154	SIRT33164	SIRT33174	0.11
Yellow	SIRT33155	SIRT33165	SIRT33175	0.11
White	SIRT33156	SIRT33166	SIRT33176	0.11

TWS LED MULTI Light Module 85mA

Voltage	Order Code			Weight (Kg)
	24V ACDC	110V AC	240V AC	
Colour	Coloured Lens			
Blue	SIRT36711	SIRT36721	SIRT36731	0.11
Amber	SIRT36712	SIRT36722	SIRT36732	0.11
Red	SIRT36713	SIRT36723	SIRT36733	0.11
Green	SIRT36714	SIRT36724	SIRT36734	0.11
Yellow	SIRT36715	SIRT36725	SIRT36735	0.11
White	SIRT36716	SIRT36726	SIRT36736	0.11
Colour	Clear Lens Coloured LED			
Blue	SIRT33211	SIRT33221	SIRT33231	0.11
Amber	SIRT33212	SIRT33222	SIRT33232	0.11
Red	SIRT33213	SIRT33223	SIRT33233	0.11
Green	SIRT33214	SIRT33224	SIRT33234	0.11
Yellow	SIRT33215	SIRT33225	SIRT33235	0.11
White	SIRT33216	SIRT33226	SIRT33236	0.11

TWS S LED MULTI Super Bright Light Module 450mA

Voltage	Order Code		Weight (Kg)
	24V ACDC	24V ACDC	
Colour	Coloured Lens	Clear Lens Coloured LED	
Blue	SIRT33421	SIRT33441	0.11
Amber	SIRT33422	SIRT33442	0.11
Red	SIRT33423	SIRT33443	0.11
Green	SIRT33424	SIRT33444	0.11
Yellow	SIRT33425	SIRT33445	0.11
White	SIRT33426	SIRT33446	0.11

General characteristics

TWS Base and Cap Module

With 1 common and 5 electrical contacts, it allows assembly of maximum 5 light modules or 4 light modules + 1 audible module.

TWS LED Light Module

Integrated LED light module available in steady or multi-function with 4 light effects (steady, single flash, double flash or triple flash). Available with choice of coloured lens or clear lens (with colour LED's).

TWS S LED Light Module

Super bright LED light module 4 light effects (steady, flashing, strobe, or random). Available with choice of coloured lens or clear lens (with colour LED's. Only available in 24V ACDC.

TWS Incandescent Bulb Light Module

Economic option using Ba15d 5w bulb. Available in steady or flashing versions.

TWS X Xenon Light Module

High intensity flash with 2J xenon tube.

TWS PZO Audible Module

Audible module with 6 tones selectable by DIP switch, IP54.

TWS MDA Audible Module

High sound output audible module with 32 tones selectable by DIP switch, IP54.

TWS A Audible Module

Audible module with 16 tones selectable by DIP switch, IP65.

Specifications:

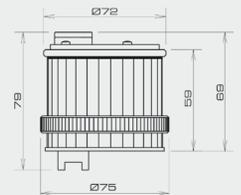
Protection: IP66 (without audible modules)
 Temp Rating (°C): -30 to +50 (-10 to +45 for xenon version)
 Cable Entry: Through mounting base unit.
 Rating: Continuous
 Construction: Polycarbonate
 For full dimensional details see www.mechtric.com.au

Compliance and standards

Certifications obtained: CE, UL, PCT



Dimensions TWS Base and Cap

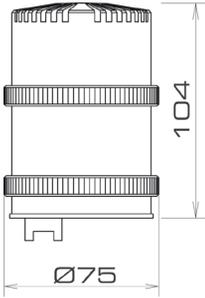


Dimensions TWS Light Module

TWS



TWS AUDIBLE MODULE



Dimensions
TWS Audible Module



SIRT27693



SIRT27691



SIRT27695



SIRT27692

TWS Filament Steady/Flashing Light Module 430mA TWS Xenon Light Module 280mA

Voltage	Order Code						Weight (Kg)
	Filament Bulb (bulbs not included)			Xenon 2J			
	12/240V ACDC	12/48V DC	24/240V AC	24V ACDC	110V AC	240V AC	
Colour	Steady	Flashing					
Blue	SIRT27631	SIRT27641	SIRT27651	SIRT27661	SIRT27671	SIRT27681	0.11
Amber	SIRT27632	SIRT27642	SIRT27652	SIRT27662	SIRT27672	SIRT27682	0.11
Red	SIRT27633	SIRT27643	SIRT27653	SIRT27663	SIRT27673	SIRT27683	0.11
Green	SIRT27634	SIRT27644	SIRT27654	SIRT27664	SIRT27674	SIRT27684	0.11
Yellow	SIRT27635	SIRT27645	SIRT27655	SIRT27665	SIRT27675	SIRT27685	0.11
White	SIRT27636	SIRT27646	SIRT27656	SIRT27666	SIRT27676	SIRT27686	0.11

Bulbs for TWS Filament Modules B15D 5W

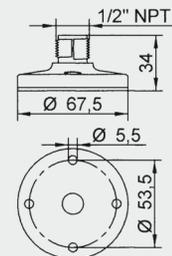
Voltage	12V	24V	48V	110V	240V	240V AC
Order Code	SIR3906012	SIR3906024	SIR3906048	SIR3906110	SIR3906130	SIR3906240

Audible Module (Black Colour)

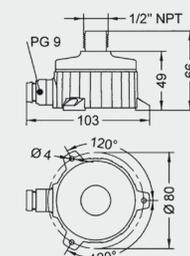
Order Code	Type	Voltage	No. Tones	Sound Output (dB @ 1m)	Sound Frequency	Current	Weight (Kg)
SIRT27625	PZO	12/48V ACDC	6	81	2800Hz	13mA	0.13
SIRT27628	PZO	110/240V AC	6	81	2800Hz	7mA	0.13
SIRT27794	MDA	12/24V ACDC	32	107	300-2850Hz	106mA	0.24
SIRT27796	MDA	110/240V AC	32	107	300-2850Hz	60mA	0.24
SIRT33402	A	12/24V ACDC	16	95	300-2850Hz	240mA	0.24
SIRT33403	A	110/240V AC	16	95	300-2850Hz	120mA	0.24

TWS Mounting Accessories and enclosures

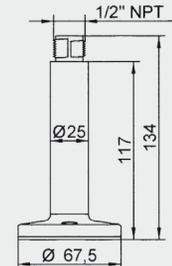
Order Code	Description	Weight (Kg)
SIRT27691	BS surface mount base black	0.03
SIRT27692	PR extension pole 100mm black	0.03
SIRT27695	Kit PR with BS black	0.06
SIRT27845	Kit BS base with 100mm stainless steel extension	0.14
SIRT27846	Kit BS base with 200mm stainless steel extension	0.18
SIRT27847	Kit BS base with 400mm stainless steel extension	0.28
SIRT27693	BP1 wall mount base black	0.04
SIRT33358	SB stainless steel wall mount bracket with cable gland	0.14
SIRT27778	Surface mount base with M16 cable gland black	0.10
SIRT33348	FJ swivel base for inclined surface black	0.11
SIRT27602	HD stainless steel 316 enclosure IP69K for 2 light stack	2.7
SIRT27677	HD stainless steel 316 enclosure IP69K for 3 light stack	2.7
SIRT27606	HD stainless steel 316 Enclosure IP69K for 4 light stack	2.7
SIRT27603	HD anodised aluminium enclosure IP69K for 2 light stack	1.1
SIRT27840	HD anodised aluminium enclosure IP69K for 3 light stack	1.1
SIRT27607	HD anodised aluminium Enclosure IP69K for 4 light stack	1.1
SIRT27679	HD stainless steel surface mount Base	
SIRT27841	HD aluminium surface mount base	
SIRT27678	HD stainless steel pole mount base	
SIRT27842	HD aluminium pole mount base	
SIRT27680	HD stainless steel side mount base	
SIRT27843	HD aluminium side mount base	



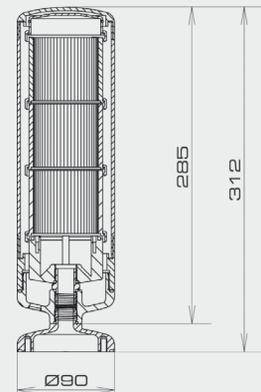
Dimensions TWS BS



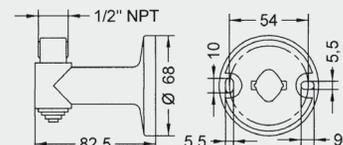
Dimensions TWS Box



Dimensions TWS Kit



Dimensions TWS HD



Dimensions TWS BP1