

## **Accessories and** spare parts

















LPX B0









Order code	Description	Qty per pkg	Wt
		n°	[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 (I=150mm/5.91in)	10	0.006
LPX A170	Spare standard key set for selector switches or mushroom-head buttons, key code n° 455	10	0.008
LPX A170RO	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 BO	Flush-extended spring return actuator with no cap or lens	10	0.013
LPX B3	Shrouded spring return actuator with no cap or lens	10	0.014
LPX Q0	Flush-extended push-push actuator with no cap	10	0.013
LPX QL0	Illuminated flush-extended push-push actuator with no lens	10	0.013

ridon dup for opring return detautors.			
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.			
I PX R202	Black	10	0.003

LI X DZUZ	DIACK	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

,,,			0.000
Extended lens for illuminated spring-return actuators.			
LPX BL203	Green	10	0.003
LPX BL204	Red	10	0.003
LPX BL205	LPX BL205 Yellow		0.003
LPX BL206	Blue	10	0.003
LPX BL207	Transparent	10	0.003

<sup>•</sup> 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 AU108 LPX AU109



LPX AU158



8 LM2T A185

Order code	Description	Qty per pkg	Wt	
		n°	[kg]	
LPX AU100	Label holder for blank or 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 blank or engraved LPX AU108 label	50	0.003	
LPX AU108	Engravable silver plastic label to use with LPX AU105 holder	50	0.002	
LPX AU1300	Rubber boot for flush button LPC B1/BL1/R1	10	0.006	
LPX AU1400	Rubber boot for buttons LPC B2/B3/BL2/R2	10	0.009	
LPX AU157	Rubber boot for double and triple-touch buttons, transparent	10	0.007	
LPX AU167@8	Rubber boot for mush- room head buttons, LPC B63/B66/B67/BL66 transparent	10	0.012	
LPX AU158@@	Padlockable protection, Ø5-8mm/0.2-0.31" locks for buttons LPC B66/B67/B68/BL66; for LPC B34 Ø5-6mm/ 0.2-0.24" locks only	10	0.005	
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	Selector protection shroud for knob type only	10	0.004	
8 LM2T A200	Socket spanner/wrench for fixing ring fitting, metal	1	0.184	

- For flush and extended push buttons, comple 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).

  Cannot be used when LPX AU100 or LPX AU105 is fitted.
- Cannot be used when LPX AU158 is fitted.
   Cannot be used when LPX AU157 is fitted.



## **Labels with text for** LPX AU100 legend holder

8 LM2T AGB230

Ordering code	Text	Qty per pkg	Wt
		n°	[kg]
General use.			
8 LM2T AU206	Blank for writing	50	0.001
8 LM2T AU207	Sheet with 108 labels for laser printing •	10	0.005
8 LM2T AU208€	Sheet with 108 laser-printed labels	10	0.005
8 LM2T AGB216	CLOSE	50	0.001
8 LM2T AGB220	EMERGENCY	50	0.001
8 LM2T AGB231	FAST	50	0.001
8 LM2T AGB263	FAULT	50	0.001
8 LM2T AGB215	FORWARD	50	0.001
8 LM2T AGB228	LEFT	50	0.001
8 LM2T AGB218	LOWER	50	0.001
8 LM2T AGB221	OFF	50	0.001
8 LM2T AGB223	ON	50	0.001
8 LM2T AGB211	OPEN	50	0.001
8 LM2T AGB229	POWER ON	50	0.001
8 LM2T AGB227	RAISE	50	0.001
8 LM2T AGB226	RESET	50	0.001
8 LM2T AGB222	REVERSE	50	0.001
8 LM2T AGB217	RIGHT	50	0.001
8 LM2T AGB241	RUNNING	50	0.001
8 LM2T AGB224	SLOW	50	0.001
8 LM2T AGB225	START	50	0.001
8 LM2T AGB230	STOP	50	0.001
8 LM2T AGB214	STOP RESET	50	0.001
8 LM2T AGB240	THERMAL FAULT	50	0.001
8 LM2T AGB237	TRIP	50	0.001
For selector switch	nes.		
8 LM2T AI233	AUTO-MAN	50	0.001
8 LM2T AI234	AUTO-O-MAN	50	0.001
8 LM2T AI241	MAN-AUTO	50	0.001
8 LM2T AI242	MAN-O-AUTO	50	0.001
8 LM2T AGB235	FWD-0-REV	50	0.001
8 LM2T AGB236	OFF-ON	50	0.001
8 LM2T AGB232	STOP-START	50	0.001
International labels	for push-buttons.		
8 LM2T AU200	0	50	0.001
8 LM2T AU201	1	50	0.001
8 LM2T AU202	II	50	0.001
International labels	for selector switches.		
8 LM2T AU203	0-1	50	0.001
8 LM2T AU204	1-11	50	0.001
8 LM2T AU205	I-0-II	50	0.001

- Recommended use with LPX AU109 blank label.
  Sheet with 108 adhesive labels.
  Complete code with required label text.

## **General characteristics**

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

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



## **Plastic disk for mushroom** head pushbuttons



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 AU118	ARRET D'URGENCE / NOT-AUS/ PARO EMERGENCIA Ø60mm / 2.4"	10	0.003
LPX AU110	EMERGENCY STOP adhesive label, size 34.5x65mm/1.36x2.56"	12	0.001

## General characteristics

The disks are made of non-adhesive plastic except

LPX AU110.
Plastic disks cannot be used with LPX AU158 padlockable protection.



LPX AU115



## **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 auxi- liary supply voltage	LED colour	Qty per pkg	Wt
	[V]		n°	[kg]

Steady light, screw termination. Supplied without mounting adapter

LPX LP B3	10.001/			
	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	85-140VAC	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	185-265VAC	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

Order code	Rated auxi- liary supply voltage	LED colour	Qty per pkg	Wt
	[V]		n°	[kg]

Steady light screw termination Supplied without mounting adapter

Supplied without mounting adapter.					
LPX LE B3	12-30V	Green	10	0.016	
LPX LE B4	AC/DC	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	Green	10	0.016	
LPX LE E4	AC/DC	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	Green	10	0.016	
LPX LE M4	AC/DC	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	



LPX LE...

Simple protection and to withstand

## **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 auxi- liary supply voltage	LED colour	Qty per pkg	Wt
	[V]		n°	[ka]

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	85-140VAC	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	185-265VAC	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

- Auxiliary supply voltage:

  LPX LP... with steady light
  12-30VAC/DC; 85-140VAC; 180-265VAC
- LPX LE... with steady light
   12-30VAC/DC; 85-140VAC/DC; 180-265VAC/DC
- LPX LF... flashing light 18-30VAC/DC; 85-140VAC; 180-265VAC
- Maximum consumption for:
   LPX LP... steady light and LPX LF... flashing light: 17mA (12/18-30VAC/DC); 20mA (85-140VAC); 17mA (185-265VAC)
- LPX LE... steady light: 11mA (12-30VAC/DC); 5mA (85-140VAC/DC); 3mA (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
- 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 / 0.74lbft
- Ambient conditions:
  - Operating temperature: -25...+70°C (-25...+60°C for LPX LE...)
  - Storage temperature: -40...+85°C
- Degree of protection per IEC/EN: IP20.

## **Mounting adapter**

See page 7.18. Type: LPX AU120.

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

## Maximum conductor cross section

1 o 2 2.5mm<sup>2</sup> or AWG12 cables.

## Wiring diagram



## Certifications and compliance

Certifications obtained: UL listed for USA and Canada (cULus - File E93601), as Auxiliary Devices; EAC, CCC. Pending at time of catalogue printing: RINA. Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

## **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 CS100	\.4 NO <b>①</b>	10	0.010
LPX CS01⊖	l.1 /⊖ NC❷	10	0.010

- 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...

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

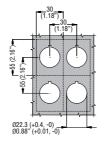
vibrations.

Order code	Rated auxi- liary supply voltage	LED colour	Q.ty per pkg	Wt
	[V]		n°	[kg]

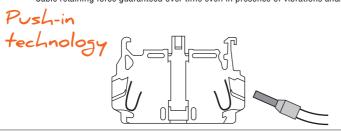
Steady light, with screw-clamp termination. Without mounting adapter.

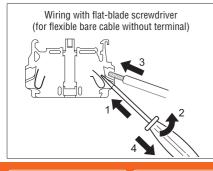
Trimout mounting adaption						
LPX LPS B3	12-30VAC/DC	Green	10	0.015		
LPX LPS B4		Red	10	0.015		
LPX LPS B5		Yellow	10	0.015		
LPX LPS B6		Blue	10	0.015		
LPX LPS B8		White	10	0.015		
LPX LPS E3	85-140VAC	Green	10	0,015		
LPX LPS E4		Red	10	0.015		
LPX LPS E5		Yellow	10	0.015		
LPX LPS E6		Blue	10	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		

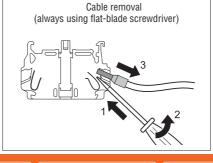
Drillings - Minimum recommended distances



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







#### 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
- Suitable for applications with vibration and/or impact work conditions; cable retaining force guaranteed over time in these conditions
- Wiring also possible after installation with stacked contacts
- Ambient conditions:
  - Operating temperature: -25...+70°C
  - Storage temperature: -40...+85°C
- Degree of protection IEC/EN: IP20.

#### **Mounting adapter**

See page 7-18. 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 UL/CSA and 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	2	4	48	125	250	440	500	600
[A]	3	3	,	1.5	0.55	0.27	0.15	0.13	0.1

Short circuit protection fuse: max calibre 10A gG/SC Contact resistance:  $\leq 20 \text{m}\Omega$ 

Terminals: Spring clamps.

## Stroke of contact elements



#### Mechanical and electrical endurance of contact elements

Opening force: ≤0.5kg / 1.1lb

Electrical life: 1.000.000 cycles for LPX CS10/CS01.

## LED ELEMENTS

- Supply voltage
- 12-30VAC/DC; 85-140VAC; 185-265VAC
- Maximum consumption: 17mA (12-30VAC/DC); 20mA (85-140VAC); 17mA (185-265VAC)
- Total protection:
  - Against overvoltages
  - Against stray currents in wiring
  - · To withstand vibrations
- To reduce flickering phenomenon
   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 / 0.39in long.

## **Certifications and compliance**

Certifications obtained: UL Listed for USA and Canada (cULus - File E93601), as Auxiliary Devices; EAC,CCC; pending for 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...

 $\begin{array}{c|c} \text{Order code} & \text{Function} & \begin{array}{c|c} \text{O.ty} & \text{Wt} \\ \text{per} & \text{pkg} \end{array} \\ \hline & n^{\circ} & [\text{kg}] \\ \end{array}$ 

Screw termination.

Direct snap-in mounting on LPZ control station base.

LPX CB10€	\ .3 \ .4	10	0.012
LPX CB01 →	L:1 /⊕ NC❷	10	0.012

• Not suitable for push-push actuators.

② Direct opening operation → in accordance with IEC/EN 60947-5-1.

# LED elements, steady light base mount on LPZ control stations





LPX LPB...

Total protection against overvoltages and stray currents in wiring, to reduce flickering

phenomenon and withstand vibrations.

Order code	Rated auxi- liary supply voltage	LED colour	Q.ty per pkg	Wt
	[V]		n°	[kg]

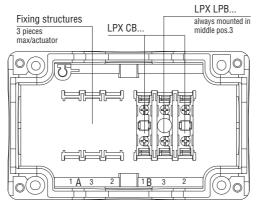
Screw termination.

Steady light.

Direct snap-on mounting on LPZ... control station base.

LPX LPB B3	12-30VAC/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	85-140VAC	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	185-265VAC	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		

## Mounting position on the LPZ control station base



#### 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
- Wiring done directly in the base, so there is none with or directly in the cover
  - Tightening torque Tmax: 1Nm/9lbin
- Ambient conditions:
  - Operating temperature: -25...+70°C
  - Storage temperature: -40...+85°C
- Degree of protection IEC/EN IP20.

#### **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

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

IEC/EN operational characteristics in AC15 category:

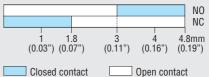
[V]	12	24	48	120	240	400	480	500	600	
[A]	6	6	6	6	3	1.9	1.5	1.4	1.2	
IEC/EN operational characteristics in DC13 category:										
[V]	12	2	4	48	125	250	440	500	600	
[A]	3	3	3	1.5	0.55	0.27	0.15	0.13	0.1	
OI.	Chart simult anatostica from many solibus 104 a0/00									

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

Contact resistance: ≤20mΩ

Terminals: Clamp screw and washer.

#### Stroke of contact elements



# Mechanical and electrical endurance of contact elements

Opening force:  $\leq$ 0.5kg / 1.1lb

Electrical life: 1,000,000 cycles for LPX CB10/CB01.

#### LED ELEMENTS

- Supply voltage:
  - 12-30VAC/DC; 85-140VAC; 185-265VAC
- Maximum consumption: 17mA (12-30VAC/DC);
   20mA (85-140VAC); 17mA (185-265VAC)
- Total protection:
  - Against overvoltages
  - · Against stray currents in wiring
  - To reduce flickering phenomenon
  - To withstand vibrations
- Electrical life: 100,000 hours.

#### Wiring diagram for LED elements



## Maximum conductor cross section

1 or 2 2.5mm<sup>2</sup> or AWG14 cables.

**Certifications and compliance** 

Certifications obtained: UL Listed for USA and Canada (cULus – File E93601), as Auxiliary Devices.; EAC, CCC; pending: RINA.

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