

## Selector switch actuators knob



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 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

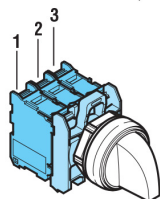


LPC S3...

| Order code                             | Type of position | Qty per pkg | Wt    |
|--|------------------|-------------|-------|
|  |                  | n°          | [kg]  |
| 2 position (without mounting adapter). |                  |             |       |
| LPC S320                               | ∇                | 10          | 0.060 |
| LPC S320RⓂ                             | ∇                | 1           | 0.060 |
| LPC S321                               | ∇                | 10          | 0.060 |
| LPC S321RⓂ                             | ∇                | 1           | 0.060 |
| LPC S340                               | ∇                | 10          | 0.060 |
| LPC S340RⓂ                             | ∇                | 1           | 0.060 |
| 3 position (without mounting adapter). |                  |             |       |
| LPC S330                               | ∇                | 10          | 0.060 |
| LPC S330RⓂ                             | ∇                | 1           | 0.060 |
| LPC S331                               | ∇                | 10          | 0.060 |
| LPC S331RⓂ                             | ∇                | 1           | 0.060 |
| LPC S332Ⓜ                              | ∇                | 10          | 0.060 |
| LPC S332RⓂⓂ                            | ∇                | 1           | 0.060 |
| LPC S333Ⓜ                              | ∇                | 10          | 0.060 |
| LPC S333RⓂⓂ                            | ∇                | 1           | 0.060 |
| LPC S350                               | ∇                | 10          | 0.060 |
| LPC S350RⓂ                             | ∇                | 1           | 0.060 |
| LPC S360                               | ∇                | 10          | 0.060 |
| LPC S360RⓂ                             | ∇                | 1           | 0.060 |
| LPC S370Ⓜ                              | ∇                | 10          | 0.060 |
| LPC S370RⓂⓂ                            | ∇                | 1           | 0.060 |
| LPC S380Ⓜ                              | ∇                | 10          | 0.060 |
| LPC S380RⓂⓂ                            | ∇                | 1           | 0.060 |
| LPC S390Ⓜ                              | ∇                | 10          | 0.060 |
| LPC S390RⓂⓂ                            | ∇                | 1           | 0.060 |

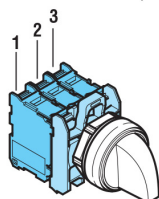
① Versions with different key codes. Complete with the numeric code of the key. The following versions are available: 421E, 458A, 520E, 3131A, 3433E. Example of complete code: LPC S320R 421E.  
 Ⓜ Available only on specific request.

Contact activation of 2-position selector switch



|   |   | Contacts |   |   |
|---|---|----------|---|---|
|   |   | 1        | 2 | 3 |
| A | ∇ | —        | — | — |
| B | ∇ | •        | • | • |

Contact activation of 3-position selector switch



|   |   | Contacts |   |   |
|---|---|----------|---|---|
|   |   | 1        | 2 | 3 |
| A | ∇ | •        | • | — |
| B | ∇ | —        | — | — |
| C | ∇ | —        | • | • |

### 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/CSA: Type 1, 2, 3R, 4, 4X, 12, 12K.

### Materials

Polyamide.

### Mechanical endurance

Mechanical life: 1,000,000 cycles.

### Mounting adapter

Type: LPX AU120.

Actuators are installed through a Ø22mm/Ø0.89" drilling with a threaded fixing ring (Tmax = 2.3Nm / 1.69lbf) also on the cover of LPZ control stations.

The mounting adapter directly snaps onto the actuator.

### Contact elements

| 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 7-25.

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. Consult the relative instructions available online in the Downloads section in [www.LovatoElectric.com](http://www.LovatoElectric.com).

### Type of position

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

### Rotation angles

2 position



3 position



### Special versions

Versions with coloured keys are available upon request. Consult Customer Service; see contact details on inside front cover.

### 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 for all; cULus, EAC, CCC for LPC S2... types. Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, UL508, CSA C22.2 n° 14.

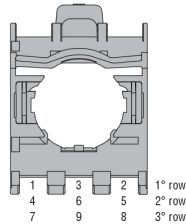
## Mounting adapter



LPX AU120

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

Screw termination.  
Without mounting adapter.

|            |  |    |       |
|------------|--|----|-------|
| LPX C10⊕   |  | 10 | 0.011 |
| LPX C10A   |  | 10 | 0.011 |
| LPX C01⊖   |  | 10 | 0.011 |
| LPX C01D⊖⊕ |  | 10 | 0.011 |

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

|             |  |   |       |
|-------------|--|---|-------|
| LPX C01SM⊖⊕ |  | 1 | 0.022 |
| LPX C02SM⊖⊕ |  | 1 | 0.033 |

Screw termination.  
With mounting adapter.

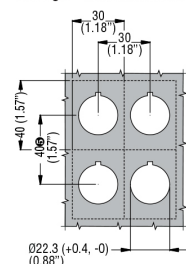
|          |  |    |       |
|----------|--|----|-------|
| LPX E10⊕ |  | 10 | 0.029 |
| LPX E01⊖ |  | 10 | 0.029 |

Faston termination.  
Without mounting adapter.

|           |  |    |       |
|-----------|--|----|-------|
| LPX CF10⊕ |  | 10 | 0.012 |
| LPX CF01⊖ |  | 10 | 0.012 |

- ⊕ 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/3.35" 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/0.74lbf
- 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  
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 |

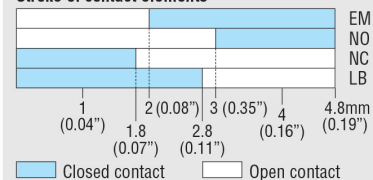
IEC/EN operational characteristics in DC13 category:

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

Short-circuit protection fuse: max calibre: 10A gG/SC.  
Contact resistance: ≤20mΩ.

Terminals: Clamp screw with washer.  
Faston 1x6.35mm(0.25") or 2x2.8mm(0.11").

## Stroke of contact elements



Maximum conductor cross section for screw terminals  
1 or 2 2.5mm<sup>2</sup> or AWG14 cables.

## Mechanical and electrical endurance

Operating force: ≤0.5kg/1.1lb (auxiliary contacts).  
Electrical life: 1,000,000 cycles for LPXC10/01/E10/01, LPX C01SM/02SM, LPXCF10/01; 600,000 cycles for LPXC10A/01D.

## Certifications and compliance

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