

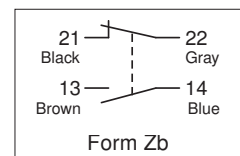
# KP LC Series

## Sealed Miniature Position Switch

- Compact and totally sealed
- Degree of protection IP67 (IEC 60529)
- Plunger, roller plunger and roller lever actuators
- Snap action contacts mechanism 1NO+1NC
- Positive opening operating of NC contact (⊕) (IEC 60947-5-1)
- Double insulated □
- NO and NC contacts electrically insulated
- Mechanical life expectancy up to 20 million operations
- In conformity with Low Voltage Directive 2006/95/EC
- UL approved product (File E131787 - model NF)



Circuitry (IEC 60947-5-1)



### Approval UL

|                      |                                      |
|----------------------|--------------------------------------|
| Utilization Category | R300 pilot duty (28 VA 125-250 Vdc)  |
|                      | B300 pilot duty (360 VA 120-240 Vac) |
| Enclosure Type       | 1, 4X "indoor use only"              |

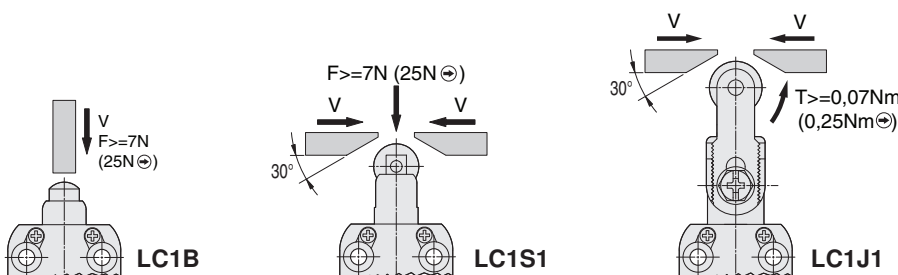


### Specifications

|   |   |  |
|---|---|--|
| Utilization Category (IEC 60947-5-1)        | AC-15   | DC-13  |
| Rated Operational Voltage (Ue)              | 250 V   | 125 V  |
| Rated Operational Current (Ie)              | 3 A   | 0,4 A  |
| Rated Insulation Voltage (Ui)               | 250 Vac   |  |
| Conventional free air thermal current (Ith) | 10 A  |  |
| Contact Resistance                          | 50 mΩ maximum initial (without cable at 1 A 5 Vcc)  |  |
| Ambient Temperature                         | -25° C...+70° C (fixed cable)   | -5° C...+70° C (mobile cable)                |
| Degree of Protection                        | IP67 (IEC 60529)  |  |
| Internal Switch                             | Circuit Form Zb (IEC 60947-5-1): NO and NC contacts electrically insulated<br>With positive opening operation on NC contact (IEC 60947-5-1): obtained by the minimum course (⊕) described in the diagrams |  |
| Mechanical Life Expectancy                  | 20.000.000 cycles at 60 cycles/min max.   |  |
| Cable (colors: see Circuitry)               | 4 x 0,75 mm <sup>2</sup> wires length 2 m   |  |
| Materials                                   | Enclosure:  | Glass-reinforced polymer, self-extinguishing |
|   | Plunger:  | Nickel plated brass                          |
|   | Roller:   | Stainless steel                              |
|   | Lever actuator:   | Lever: Stainless steel<br>Roller: Polymer    |

Subject to change without prior notice

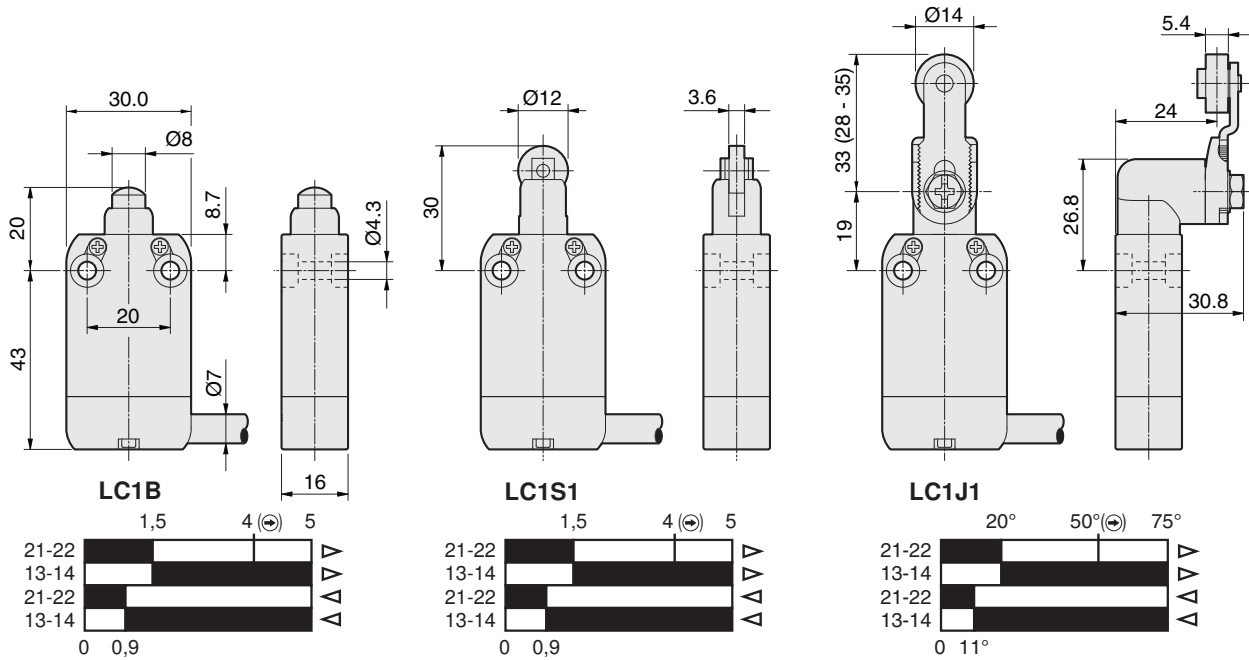
### Direction and Actuation Speed



| Model | V <sub>min.</sub> (mm/s) | V <sub>max.</sub> (m/s) |
|-------|--------------------------|-------------------------|
| LC1B  | 0,01                     | 0,5                     |
| LC1S1 | 0,02                     | 0,5                     |
| LC1J1 | 0,07                     | 1,5                     |



KAP COMPONENTES ELÉTRICOS Ltda.



## Characteristics

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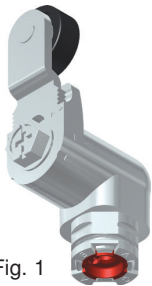


Fig. 1

- 1- (Fig. 1) LC1J1: angular head provided with ring dial (positioned at its base). Turning the ring to set up a new direction to operation the lever. The following operations are possible:
- Position **A**: left-right (standard)
  - Position **B**: only left
  - Position **C**: only right

- 2- (Fig. 2) LC1J1: the lever can be mounted 10° to 10°.
- 3- (Fig. 3) **All** the heads can be mounted in the enclosure in 4 positions 90° to 90°. Necessary tool to do this: Screwdriver *Torx T6*.
- 4- (Fig. 4) The wired connector is provided with a notch to allow the cable bending up to 90°. So the cable can be face down.
- 5- (Fig. 5) The lever can be mounted on both sides. This way it's possible to obtain two options to the work plan.

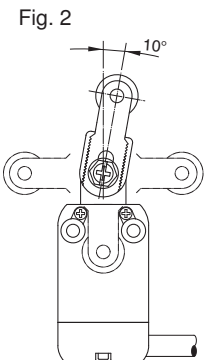
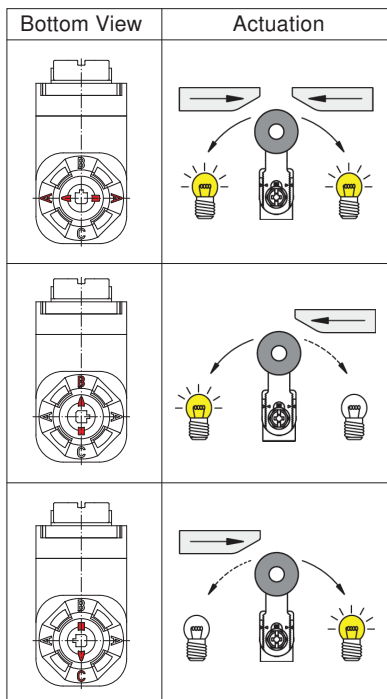


Fig. 2



- 6- The shape of the enclosure, and of its fixing holes besides the possibility of rotating the head, makes this switch perfectly symmetrical. As the cable output can not be changed, it can rotate around the enclosure holding the actuator in position.

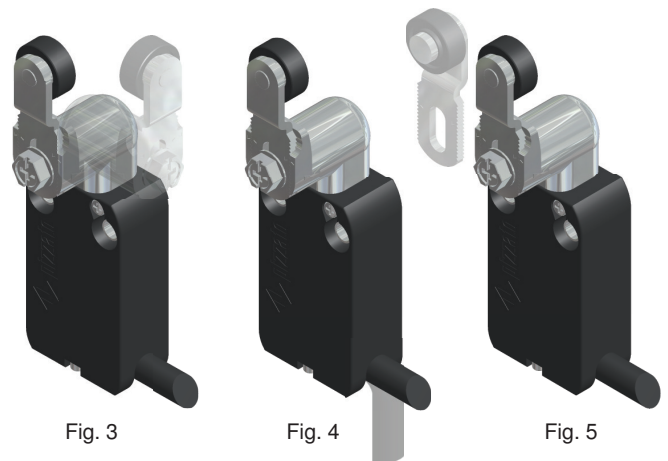


Fig. 3

Fig. 4

Fig. 5