

# Limit, micro and foot switches

Limit switches, K series. One bottom cable entry. Dimensions to EN 50047  
Two side cable entries. Dimensions compatible to EN 50047

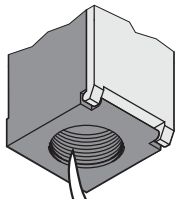
## Adjustable rod lever



KB L... - KM L...



KC L... - KN L...



### M20 CABLE ENTRY

For types with PG13.5 cable entry, add the letter P at the end of the order code while for 1/2 NPT, add N. E.g. KBL1S11P - KBL1S11N

Order code	Metal body	Contacts	Rod material	Qty per pkg	Wt
Plastic body				n°	[kg]

One bottom cable entry. Dimensions to EN 50047.

KB L1 S11	KM L1 S11	1NO+1NC	Plastic	5	⊕
KB L2 S11	KM L2 S11	Snap actionⓈ	Steel	5	⊕
KB L1 S02	KM L1 S02	2NC	Plastic	5	⊕
KB L2 S02	KM L2 S02	Snap actionⓈ	Steel	5	⊕
KB L1 A11	KM L1 A11	1NO+1NC	Plastic	5	⊕
KB L2 A11	KM L2 A11	Slow action make before breakⓈ	Steel	5	⊕
KB L1 L11	KM L1 L11	1NO+1NC	Plastic	5	⊕
KB L2 L11	KM L2 L11	Slow actionⓈ	Steel	5	⊕
KB L1 L02	KM L1 L02	2NC	Plastic	5	⊕
KB L2 L02	KM L2 L02	Slow actionⓈ	Steel	5	⊕
KB L1 L20	KM L1 L20	2NO	Plastic	5	⊕
KB L2 L20	KM L2 L20	Slow action	Steel	5	⊕
KB L1 L12	KM L1 L12	1NO+2NC	Plastic	5	⊕
KB L2 L12	KM L2 L12	Slow actionⓈ	Steel	5	⊕
KB L1 L21	KM L1 L21	2NO+1NC	Plastic	5	⊕
KB L2 L21	KM L2 L21	Slow actionⓈ	Steel	5	⊕
KB L1 L03	KM L1 L03	3NC	Plastic	5	⊕
KB L2 L03	KM L2 L03	Slow actionⓈ	Steel	5	⊕

Two side cable entries. Dimensions compatible to EN 50047.

KC L1 S11	KN L1 S11	1NO+1NC	Plastic	5	⊕
KC L2 S11	KN L2 S11	Snap actionⓈ	Steel	5	⊕
KC L1 S02	KN L1 S02	2NC	Plastic	5	⊕
KC L2 S02	KN L2 S02	Snap actionⓈ	Steel	5	⊕
KC L1 A11	KN L1 A11	1NO+1NC	Plastic	5	⊕
KC L2 A11	KN L2 A11	Slow action make before breakⓈ	Steel	5	⊕
KC L1 L11	KN L1 L11	1NO+1NC	Plastic	5	⊕
KC L2 L11	KN L2 L11	Slow actionⓈ	Steel	5	⊕
KC L1 L02	KN L1 L02	2NC	Plastic	5	⊕
KC L2 L02	KN L2 L02	Slow actionⓈ	Steel	5	⊕
KC L1 L20	KN L1 L20	2NO	Plastic	5	⊕
KC L2 L20	KN L2 L20	Slow action	Steel	5	⊕

BI-DIRECTIONAL.

One bottom cable entry. Dimensions to EN 50047.

KB L1 D02	KM L1 D02	2NC Ⓢ independent	PlasticⓈ	5	⊕
KB L2 D02	KM L2 D02	2NC Ⓢ independent	SteelⓈ	5	⊕

Ⓢ Direct (positive) opening action ⊖; safety function according to IEC/EN 60947-5-1.

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

## General characteristics

The LOVATO ELECTRIC limit switches have been designed to satisfy requirements comprising quick installation, easy wiring, simple setup, modularity, sturdiness and constant reliability.

The body cover is hinged at the bottom and removable. The innovative locking bayonet mechanism permits to remove and reposition the operating head in the required configuration with no tools. The heads have axial rotation of 90° angles (180° for KC and KN types). The auxiliary contact blocks are removable assuring remarkable wiring ease.

## Operational characteristics

- Maximum operating rate: 3600 cycles/h
- Switching speed: 0.5-1.5m/s
- Mechanical life: >10 million cycles
- IEC conventional thermal current Ith: 10A
- UL/CSA and IEC/EN 60947-5-1 designation:
  - A600 Q300 for KB-KC types
  - A300 Q300 for KM-KN types
- IEC rated insulation voltage Ui:
  - 690VAC for KB-KC types
  - 440VAC for KM-KN types
- IEC rated impulse withstand voltage Uimp:
  - 6kV for KB-KC types
  - 4kV for KM-KN types
- Class II insulation for KB-KC only
- Contact resistance: <10mΩ
- Short-circuit backup protection: 10A gG/SC quick fuse
- Operators of aluminium-zinc alloy
- Housing:
  - KB-KC types - Self-extinguishing double-insulation polymer thermoplastic
  - KM-KN types - Aluminium-zinc alloy
- Cable entry: M20 standard supplied; PG13.5 and 1/2 NPT available (see the side note for details)
- Operating head fixing: Locking bayonet insert
- Operating force: 3Ncm/4.25ozin
- Cable connection: Self-releasing screw terminal
- Tightening torque:
  - Switch fixing: 2.5Nm / 22.1lbin
  - Contact terminals: 0.8Nm / 7lbin
  - Body lid screw fixing: 0.8Nm / 7lbin
- Conductor section: 1 or 2 2.5mm<sup>2</sup> max / 16-14 AWG
- Ambient conditions:
  - Operating temperature: -25 ... +70°C
  - Storage temperature: -40 ... +70°C
  - Pollution degree: 3
  - IEC degree of protection: IP20 for terminals
  - IEC degree of protection: IP65 for body housing.

## Certifications and compliance

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

Compliant with standards: EN 50047, IEC/EN 60947-1, IEC/EN 60947-5-1, IEC/EN 60204-1, UL508, CSA C22.2 n° 14.

