

Limit, micro and foot switches

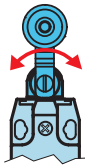
Limit switches, K series.

One bottom cable entry. Dimensions to EN 50047

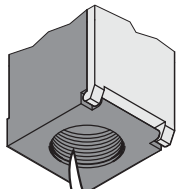
Roller lever plunger



KB E1... - KB E2...
KM E1... - KM E2...



KB E3... - KM E3...



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. KBE1S11P - KBE1S11N

Order code Plastic body	Metal body	Contacts	Roller material	Qty per pkg	Wt [kg]
One bottom cable entry. Dimensions to EN 50047.					
KB E1 S11	KM E1 S11	1NO+1NC	Plastic①	5	④
KB E2 S11	KM E2 S11	Snap action③	Metal①	5	④
KB E3 S11	KM E3 S11		Rubber②	5	④
KB E1 S02	KM E1 S02	2NC	Plastic①	5	④
KB E2 S02	KM E2 S02	Snap action③	Metal①	5	④
KB E3 S02	KM E3 S02		Rubber	5	④
KB E1 A11	KM E1 A11	1NO+1NC	Plastic①	5	④
KB E2 A11	KM E2 A11	Slow action make before break⑤	Metal①	5	④
KB E3 A11	KM E3 A11		Rubber②	5	④
KB E1 L11	KM E1 L11	1NO+1NC	Plastic①	5	④
KB E2 L11	KM E2 L11	Slow action③	Metal①	5	④
KB E3 L11	KM E3 L11		Rubber②	5	④
KB E1 L02	KM E1 L02	2NC	Plastic①	5	④
KB E2 L02	KM E2 L02	Slow action③	Metal①	5	④
KB E3 L02	KM E3 L02		Rubber②	5	④
KB E1 L20	KM E1 L20	2NO	Plastic①	5	④
KB E2 L20	KM E2 L20	Slow action	Metal①	5	④
KB E3 L20	KM E3 L20		Rubber②	5	④
KB E1 L12	KM E1 L12	1NO+2NC	Plastic①	5	④
KB E2 L12	KM E2 L12	Slow action③	Metal①	5	④
KB E3 L12	KM E3 L12		Rubber②	5	④
KB E1 L21	KM E1 L21	2NO+1NC	Plastic①	5	④
KB E2 L21	KM E2 L21	Slow action③	Metal①	5	④
KB E3 L21	KM E3 L21		Rubber②	5	④
KB E1 L03	KM E1 L03	3NC	Plastic①	5	④
KB E2 L03	KM E2 L03	Slow action③	Metal①	5	④
KB E3 L03	KM E3 L03		Rubber②	5	④

BI-DIRECTIONAL.

One bottom cable entry. Dimensions to EN 50047.

KB E1 D02	KM E1 D02	2NC ⑥ independent	Plastic①	5	⑤
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① Ø19x5mm = Ø0.75x0.2"

② Ø50x10mm = Ø1.97"x0.39"

③ Direct (positive) opening action ⊕; safety function according to IEC/EN 60947-5-1.

④ 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 45° angles.

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 types
 - A300 Q300 for KM types
- IEC rated insulation voltage Ui:
 - 690V for KB types
 - 440V for KM types
- IEC rated impulse withstand voltage Uimp:
 - 6kVAC for KB types
 - 4kVAC for KM types
- Class II insulation for KB only
- Contact resistance: <10mΩ
- Short-circuit backup protection: 10A gG/SC quick fuse
- Operators of aluminium-zinc alloy
- Housing:
 - KB types - Self-extinguishing double-insulation polymer thermoplastic
 - KM 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 torque: 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 2.5mm² 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.

- ▶ Forward travel of snap action contacts
- ◀ Return travel of snap action contacts

□ open
■ closed

