

# Limit, micro and foot switches

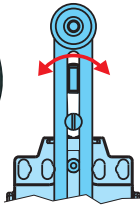
## Limit switches, K series.

Two side cable entries. Dimensions compatible to EN 50047

### Adjustable roller lever

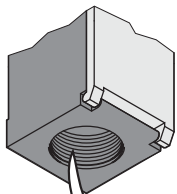


KC F... - KN F...



Order code Plastic body	Metal body	Contacts	Roller material	Qty per pkg	Wt [kg]
Two side cable entries. Dimensions compatible to EN 50047.					
KC F1 S11	KN F1 S11	1NO+1NC Snap action <sup>Ⓢ</sup>	Plastic <sup>①</sup>	5	④
KC F2 S11	KN F2 S11		Metal <sup>①</sup>	5	④
KC F3 S11	KN F3 S11		Rubber <sup>②</sup>	5	④
KC F4 S11	KN F4 S11		Rubber off. align. <sup>②</sup>	5	④
KC F1 S02	KN F1 S02	2NC Snap action <sup>Ⓢ</sup>	Plastic <sup>①</sup>	5	④
KC F2 S02	KN F2 S02		Metal <sup>①</sup>	5	④
KC F3 S02	KN F3 S02		Rubber <sup>②</sup>	5	④
KC F4 S02	KN F4 S02		Rubber off. align. <sup>②</sup>	5	④
KC F1 A11	KN F1 A11	1NO+1NC Slow action make before break <sup>Ⓢ</sup>	Plastic <sup>①</sup>	5	④
KC F2 A11	KN F2 A11		Metal <sup>①</sup>	5	④
KC F3 A11	KN F3 A11		Rubber <sup>②</sup>	5	④
KC F4 A11	KN F4 A11		Rubber off. align. <sup>②</sup>	5	④
KC F1 L11	KN F1 L11	1NO+1NC Slow action <sup>Ⓢ</sup>	Plastic <sup>①</sup>	5	④
KC F2 L11	KN F2 L11		Metal <sup>①</sup>	5	④
KC F3 L11	KN F3 L11		Rubber <sup>②</sup>	5	④
KC F4 L11	KN F4 L11		Rubber off. align. <sup>②</sup>	5	④
KC F1 L02	KN F1 L02	2NC Slow action <sup>Ⓢ</sup>	Plastic <sup>①</sup>	5	④
KC F2 L02	KN F2 L02		Metal <sup>①</sup>	5	④
KC F3 L02	KN F3 L02		Rubber <sup>②</sup>	5	④
KC F4 L02	KN F4 L02		Rubber off. align. <sup>②</sup>	5	④
KC F1 L20	KN F1 L20	2NO Slow action	Plastic <sup>①</sup>	5	④
KC F2 L20	KN F2 L20		Metal <sup>①</sup>	5	④
KC F3 L20	KN F3 L20		Rubber <sup>②</sup>	5	④
KC F4 L20	KN F4 L20		Rubber off. align. <sup>②</sup>	5	④

- ① Ø19x5mm = Ø0.75x0.2".
  - ② Ø50x10mm = Ø1.97x0.34".
  - Ⓢ Direct (positive) opening action  $\ominus$ ; safety function according to IEC/EN 60947-5-1.
  - ④ Consult Customer Service for information; see contact details on inside front cover.
- off. align. = offset alignment.



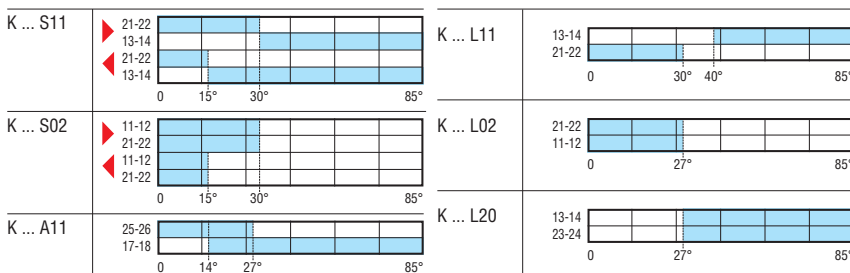
#### M20 CABLE ENTRY

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. KCF1S11P - KCF1S11N

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

□ open

■ closed



### 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 180° 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 KC types
  - A300 Q300 for KN types
- IEC rated insulation voltage Ui:
  - 690VAC for KC types
  - 440VAC for KN types
- IEC rated impulse withstand voltage Uimp:
  - 6kV for KC types
  - 4kV for KN types
- Class II insulation for KC only
- Contact resistance: <10mΩ
- Short-circuit backup protection: 10A gG/SC quick fuse
- Operators of aluminium-zinc alloy
- Housing:
  - KC types - Self-extinguishing double-insulation polymer thermoplastic
  - 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.