

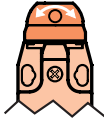
Position and safety switches

KB plastic series and KM metal series limit switches dimensions to EN 50047

Hinge operating



KB P1 L
KM P1 L

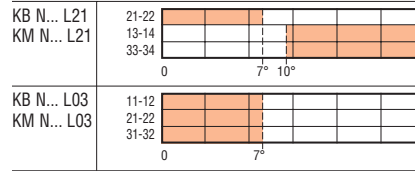
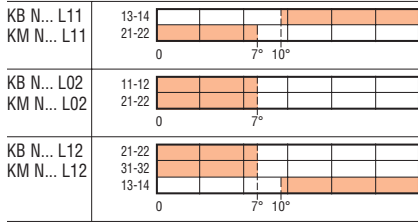


Contacts	Shaft features	Catalog number ^②	
		Plastic body	Metal body
1NO+1NC Slow break ^①	Short cylinder	KB P1 L11	KM P1 L11
2NC Slow break ^①	Short cylinder	KB P1 L02	KM P1 L02
1NO+2NC Slow break ^①	Short cylinder	KB P1 L12	KM P1 L12
2NO+1NC Slow break ^①	Short cylinder	KB P1 L21	KM P1 L21
3NC Slow break ^①	Short cylinder	KB P1 L03	KM P1 L03

^① Direct (positive) operating operation \ominus ; safety function according to IEC/EN 60947-5-1.

^② Contact Sales & Technical Support for details and pricing.

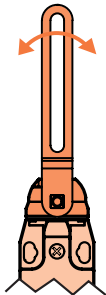
▶ Forward travel of snap action contacts open
◀ Return travel of snap action contacts closed



Slotted lever



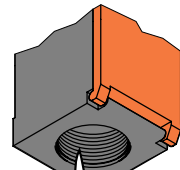
KB Q1 L...
KM Q1 L...



Contacts	Catalog number ^②	
	Plastic body	Metal body
1NO+1NC Slow break ^①	KB Q1 L11	KM Q1 L11
2NC Slow break ^①	KB Q1 L02	KM Q1 L02
1NO+2NC Slow break ^①	KB Q1 L12	KM Q1 L12
2NO+1NC Slow break ^①	KB Q1 L21	KM Q1 L21
3NC Slow break ^①	KB Q1 L03	KM Q1 L03

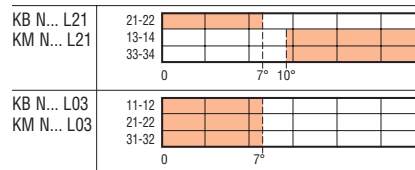
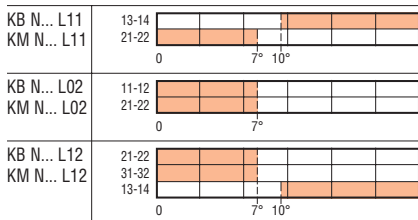
^① Direct (positive) operating operation \ominus ; safety function according to IEC/EN 60947-5-1.

^② Contact Sales & Technical Support for details and pricing.



M20 ENTRY
For types with 1/2 NPT entry, add the letter N at the end of the catalog number.
E.g. KB Q1 L11N

▶ Forward travel of snap action contacts open
◀ Return travel of snap action contacts closed



General characteristics

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

The body cover has a captive closing screw and is hinged at the bottom and removable. The innovative locking bayonet mechanism consents 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 simplicity. The heads are made of metal while the body housing of self-extinguishing polymer thermoplastic for the KB types or of aluminum-zinc alloy (zama) for the KM types.

Operational characteristics

- Maximum operating rate: 3600 cy/h
- Switching time: 0.5-1.5m/s
- Mechanical life: >10 million cycles
- Rated thermal current I_{th}: 10A
- UL designation: A600 Q300
- Rated insulation voltage U_i: 690V
- Rated impulse withstand voltage U_{imp}: 6kV
- Class II insulation
- Contact capacity: <10mΩ
- Short-circuit backup protection:
 - slow-blow fuse: 10A aM maximum admissible size
 - quick fuse: 16A gG maximum admissible size
- Wire connection: Self-releasing screw terminal
- Degree of protection:
 - IP20 for terminals
 - IP65 for body housing
- Operators of aluminum-zinc alloy
- Housing:
 - KB series - Self-extinguishing double-insulation polymer thermoplastic
 - KM series - Aluminum-zinc alloy
- Wire entry: M20 standard supplied; 1/2 NPT available (see the side note for details)
- Operating head fixing: Locking bayonet insert
- Operating force: 135 in oz / 15Ncm
- Operating temperature: -13° to +160°F (-25 to +70°C)
- Storage temperature: -40° to +160°F (-40 to +70°C)
- Pollution degree: 3 (suitable for dirty ambient).

Certifications and compliance

Certifications: cULus pending.
Compliant with standards: IEC/EN 60947-5-1, EN 50047, IEC/EN 60204-1, IEC/EN 60081-1.