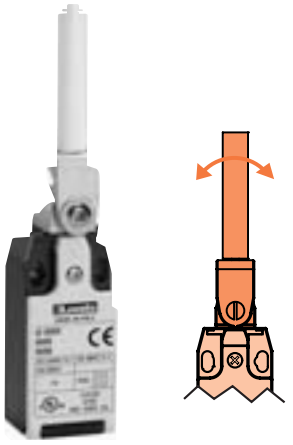
Position and safety switches

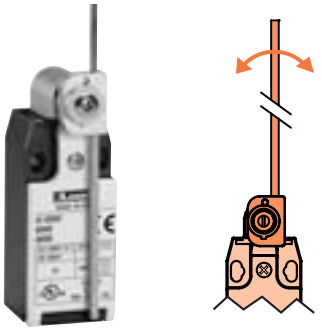
KB plastic series and KM metal series limit switches dimensions to EN 50047

Ceramic rod lever

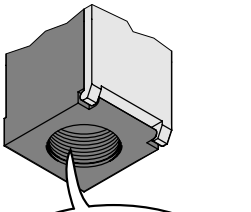


KB H1 S, KB H1 A, KB H1 L
KM H1 S, KM H1 A, KM H1 L

Adjustable rod lever



KB L1..., KB L2...
KM L1..., KM L2...

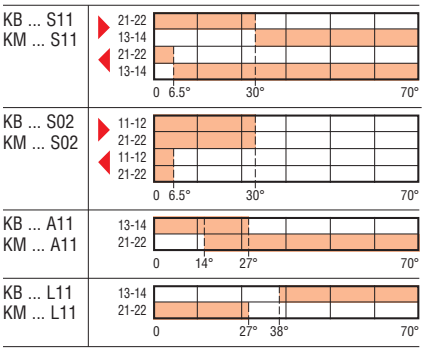


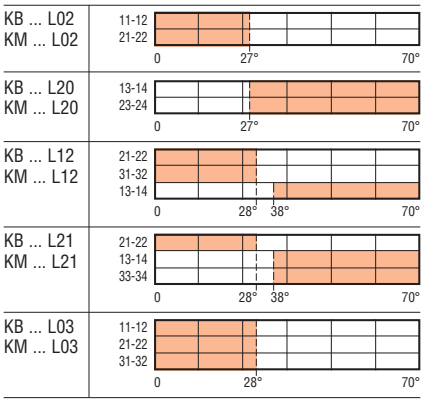
M20 ENTRY
For types with 1/2 NPT entry, add the letter N at the end of the catalog number.
E.g. KB L1 S11N

Contacts	Rod material	Catalog number❷ Plastic body	Metal body
Ceramic rod lever.			
1NO+1NC Snap action❶	Ceramic	**KB H1 S11**	**KM H1 S11**
2NC Snap action❶	Ceramic	**KB H1 S02**	**KM H1 S02**
1NO+1NC Slow break make before break❶	Ceramic	**KB H1 A11**	**KM H1 A11**
1NO+1NC Slow break❶	Ceramic	**KB H1 L11**	**KM H1 L11**
2NC Slow break❶	Ceramic	**KB H1 L02**	**KM H1 L02**
2NO Slow break	Ceramic	**KB H1 L20**	**KM H1 L20**
1NO+2NC Slow break❶	Ceramic	**KB H1 L12**	**KM H1 L12**
2NO+1NC Slow break❶	Ceramic	**KB H1 L21**	**KM H1 L21**
3NC Slow break❶	Ceramic	**KB H1 L03**	**KM H1 L03**
Adjustable rod lever.			
1NO+1NC Snap action❶	Plastic	**KB L1 S11**	**KM L1 S11**
	Metal	**KB L2 S11**	**KM L2 S11**
2NC Snap action❶	Plastic	**KB L1 S02**	**KM L1 S02**
	Metal	**KB L2 S02**	**KM L2 S02**
1NO+1NC Slow break make before break❶	Plastic	**KB L1 A11**	**KM L1 A11**
	Metal	**KB L2 A11**	**KM L2 A11**
1NO+1NC Slow break❶	Plastic	**KB L1 L11**	**KM L1 L11**
	Metal	**KB L2 L11**	**KM L2 L11**
2NC Slow break❶	Plastic	**KB L1 L02**	**KM L1 L02**
	Metal	**KB L2 L02**	**KM L2 L02**
2NO Slow break	Plastic	**KB L1 L20**	**KM L1 L20**
	Metal	**KB L2 L20**	**KM L2 L20**
1NO+2NC Slow break❶	Plastic	**KB L1 L12**	**KM L1 L12**
	Metal	**KB L2 L12**	**KM L2 L12**
2NO+1NC Slow break❶	Plastic	**KB L1 L21**	**KM L1 L21**
	Metal	**KB L2 L21**	**KM L2 L21**
3NC Slow break❶	Plastic	**KB L1 L03**	**KM L1 L03**
	Metal	**KB L2 L03**	**KM L2 L03**

❶ Direct (positive) operating operation ⊖; safety function according to IEC/EN 60947-5-1.
❷ Contact Sales & Technical Support for details and pricing.

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, 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 Ith: 10A
- UL designation: A600 Q300
- Rated insulation voltage Ui: 690V
- Rated impulse withstand voltage Uimp: 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: 27 in oz / 3Ncm
- Lever inclination, 360° adjustment at 15° angle positions
- 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.