

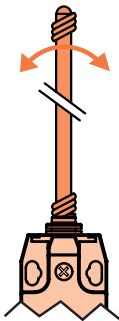
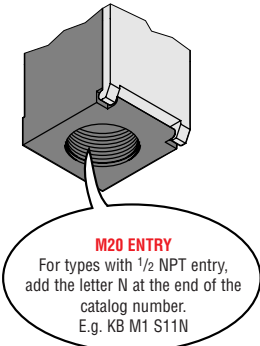
# Position and safety switches

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

### Wobble stick, omnidirectional



KB M1, KB M2  
KM M1, KM M2



Contacts	Rod material	Catalog number <sup>①</sup>	
		Plastic body	Metal body
1NO+1NC Snap action	Flexible	KB M1 S11	KM M1 S11
	Semirigid	KB M2 S11	KM M2 S11
2NC Snap action	Flexible	KB M1 S02	KM M1 S02
	Semirigid	KB M2 S02	KM M2 S02
1NO+1NC Slow break make before break	Flexible	KB M1 A11	KM M1 A11
	Semirigid	KB M2 A11	KM M2 A11
1NO+1NC Slow break	Flexible	KB M1 L11	KM M1 L11
	Semirigid	KB M2 L11	KM M2 L11
2NC Slow break	Flexible	KB M1 L02	KM M1 L02
	Semirigid	KB M2 L02	KM M2 L02
2NO Slow break	Flexible	KB M1 L20	KM M1 L20
	Semirigid	KB M2 L20	KM M2 L20
1NO+2NC Slow break	Flexible	KB M1 L12	KM M1 L12
	Semirigid	KB M2 L12	KM M2 L12
2NO+1NC Slow break	Flexible	KB M1 L21	KM M1 L21
	Semirigid	KB M2 L21	KM M2 L21
3NC Slow break	Flexible	KB M1 L03	KM M1 L03
	Semirigid	KB M2 L03	KM M2 L03

① Contact Sales & Technical Support for details and pricing.

### 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 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 plastic
  - 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: 9 in oz / 1Ncm
- 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.

