

Limit, micro and foot switches

Limit switches, K series

One bottom entry. Two side entries

Top push rod plunger

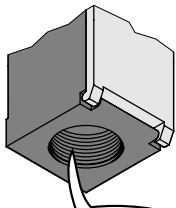


KB A - KM A



KC A - KN A

8



1/2 NPT ENTRY

For types with M20 entry, remove the letter N at the end of the catalog number. E.g. KB A1 S11

Contacts	Plunger material	Catalog number		Price	
		Plastic body		Metal body	
			\$ each		\$ each

One bottom entry. Dimensions to EN 50047.

1NO+1NC Snap action Ⓢ	Metal	KB A1 S11N	29.00	KM A1 S11N	38.00
2NC Snap action Ⓢ	Metal	KB A1 S02N	38.00	KM A1 S02N	47.00
1NO+1NC Slow break make before break Ⓢ	Metal	KB A1 A11N	27.00	KM A1 A11N	36.00
1NO+1NC Slow break Ⓢ	Metal	KB A1 L11N	27.00	KM A1 L11N	36.00
2NC Slow break Ⓢ	Metal	KB A1 L02N	29.00	KM A1 L02N	38.00
2NO Slow break	Metal	KB A1 L20N	29.00	KM A1 L20N	38.00
1NO+2NC Slow break Ⓢ	Metal	KB A1 L12N	40.00	KM A1 L12N	49.00
2NO+1NC Slow break Ⓢ	Metal	KB A1 L21N	40.00	KM A1 L21N	49.00
3NC Slow break Ⓢ	Metal	KB A1 L03N	40.00	KM A1 L03N	49.00

Two side entries. Dimensions compatible to EN 50047.

1NO+1NC Snap action Ⓢ	Metal	KC A1 S11N	34.00	KN A1 S11N	42.00
2NC Snap action Ⓢ	Metal	KC A1 S02N	42.00	KN A1 S02N	51.00
1NO+1NC Slow break make before break Ⓢ	Metal	KC A1 A11N	32.00	KN A1 A11N	40.00
1NO+1NC Slow break Ⓢ	Metal	KC A1 L11N	32.00	KN A1 L11N	40.00
2NC Slow break Ⓢ	Metal	KC A1 L02N	34.00	KN A1 L02N	42.00
2NO Slow break	Metal	KC A1 L20N	34.00	KN A1 L20N	42.00

Ⓢ Direct (positive-guided) opening operation Ⓢ safety function per IEC/EN 60947-5-1.

General characteristics

The LOVATO ELECTRIC limit switches have been designed to satisfy requirements for quick installation, wiring ease, simple setup, modularity, sturdiness and reliability. The body cover is hinged at the bottom and removable. The innovative locking bayonet mechanism provides for easy removal and repositioning of the operating head in the required configuration without tools. The heads have axial rotation of 45° angles. The auxiliary contact blocks are removable assuring wiring simplicity. The heads are made of metal while the body housing of self-extinguishing polymer thermoplastic for the KB and KC types or of aluminum-zinc alloy (zama) for the KM and KN types.

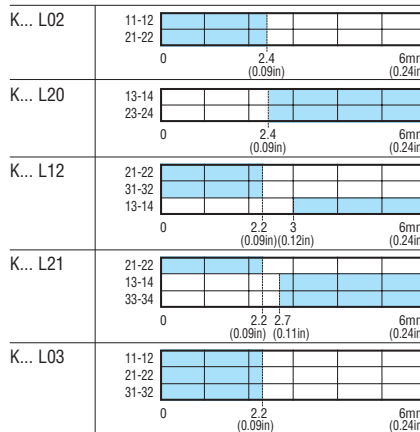
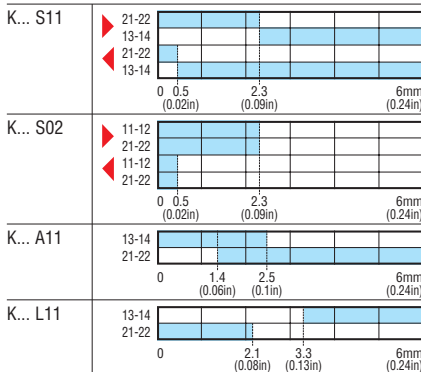
Operational characteristics

- Maximum operating rate: 3600 cycles/h
- Switching time: 0.5-1.5m/s
- Mechanical life: >10 million cycles
- Conventional thermal current Ith: 10A
- UL designation:
 - A600 Q300 for KB-KC types
 - A300 Q300 for KM-KN types
- Rated insulation voltage Ui:
 - 690VAC for KB-KC types
 - 440VAC for KM-KN types
- Rated impulse withstand voltage Uimp:
 - 6kV for KB-KC types
 - 4kV for KM-KN types
- Class II insulation for KB-KC only
- Contact resistance: <10mΩ
- Short-circuit backup protection: 10A SC/gG quick fuse
- Wire connection: Self-releasing screw terminal
- Degree of protection:
 - IP20 for terminals
 - IP65 for body housing
- Operators of aluminum-zinc alloy
- Housing:
 - KB-KC types - Self-extinguishing double-insulation polymer thermoplastic
 - KM-KN types - Aluminum-zinc alloy
- Wire entry: 1/2 NPT standard supplied; M20 available (see the side note for details)
- Operating head fixing: Locking bayonet insert
- Operating force: 9 oz / 2.5N
- Tightening torque for switch fixing: 1.8lbf / 2.5Nm
- Ambient conditions:
 - Operating temperature: -13... +160°F (-25...+70°C)
 - Storage temperature: -40...+160°F (-40...+70°C)
 - Suitable for pollution degree: 3.

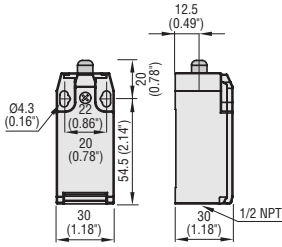
Certifications and compliance

UL listed for USA and Canada, file E93601 for KB and KM types; pending for KC and KN types. Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-5-1, EN 50047, IEC/EN 60204-1. Tripping / resetting points and fixing centers of the KC and KN types comply with EN 50047.

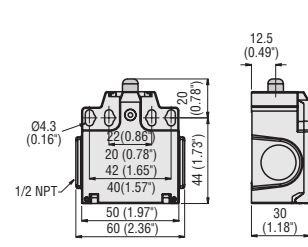
▶ Forward travel of snap action contacts □ open
 ◀ Return travel of snap action contacts ■ closed



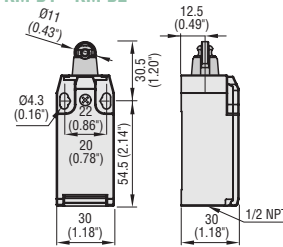
KB A1
KM A1



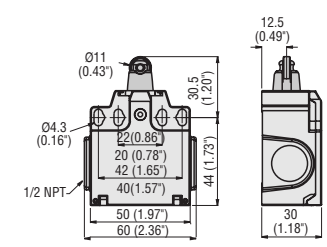
KC A1
KN A1



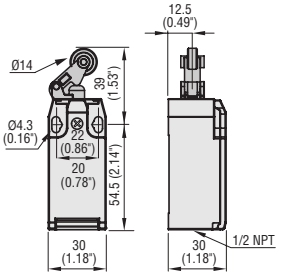
KB B1 - KB B2
KM B1 - KM B2



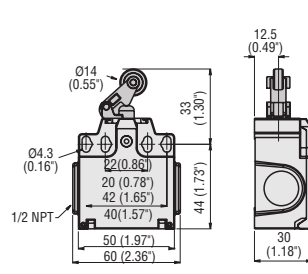
KC B1 - KC B2
KN B1 - KN B2



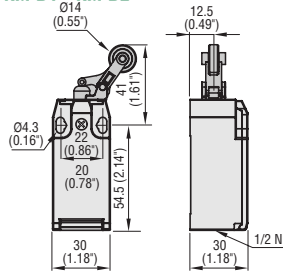
KB C1 - KB C2
KM C1 - KM C2



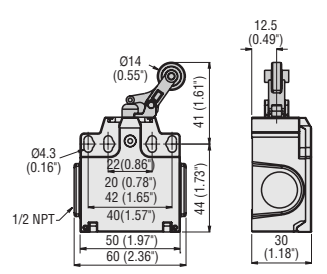
KC C1 - KC C2
KN C1 - KN C2



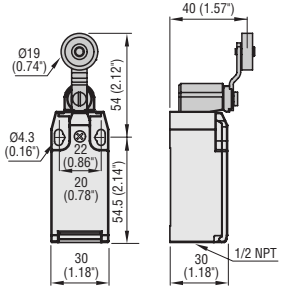
KB D1 - KB D2
KM D1 - KM D2



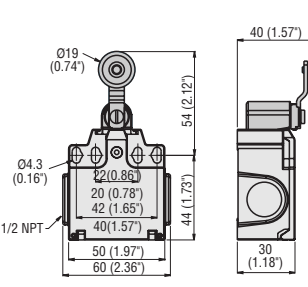
KC D1 - KC D2
KN D1 - KN D2



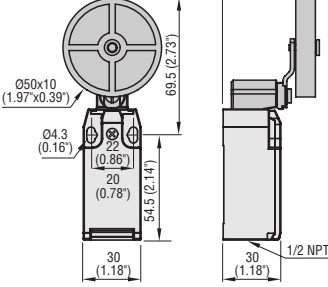
KB E1 - KB E2
KM E1 - KM E2



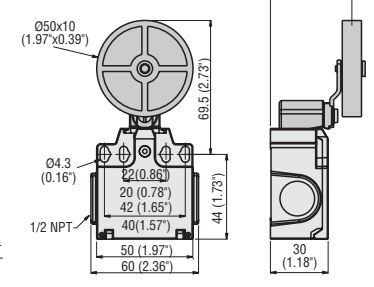
KC E1 - KC E2
KN E1 - KN E2



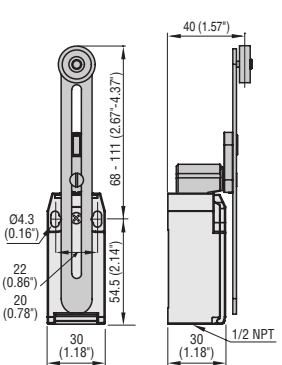
KB E3
KM E3



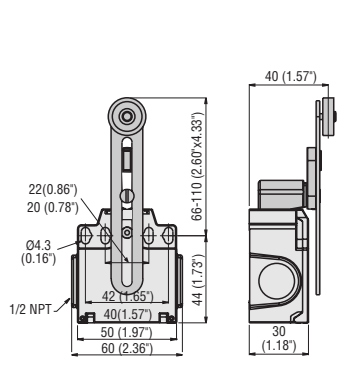
KC E3
KN E3



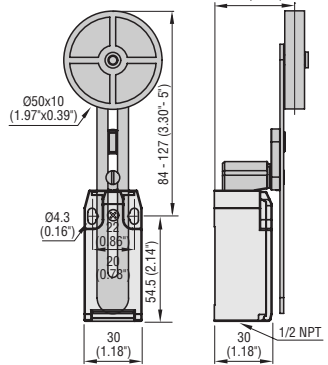
KB F1 - KB F2
KM F1 - KM F



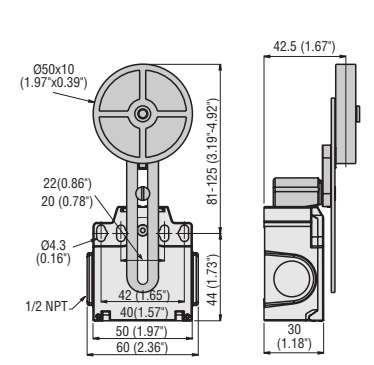
KC F1 - KC F2
KN F1 - KN F2



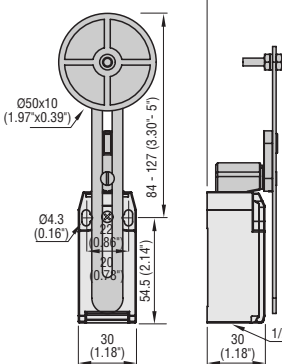
KB F3
KM F3



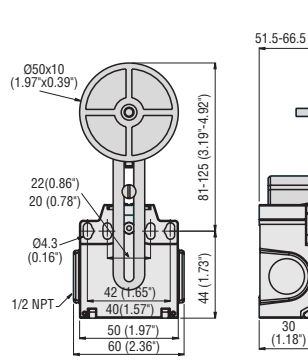
KC F3
KN F3



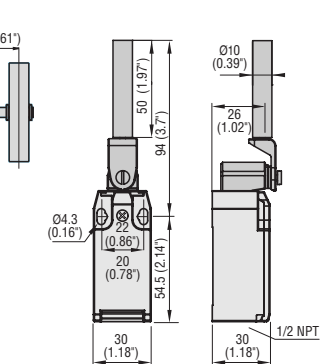
KB F4
KM F4



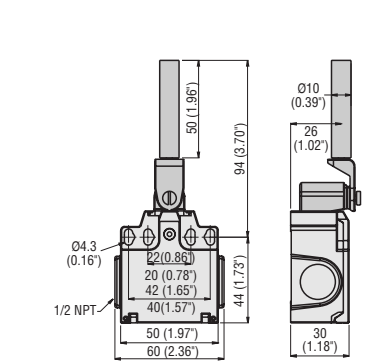
KC F4
KN F4

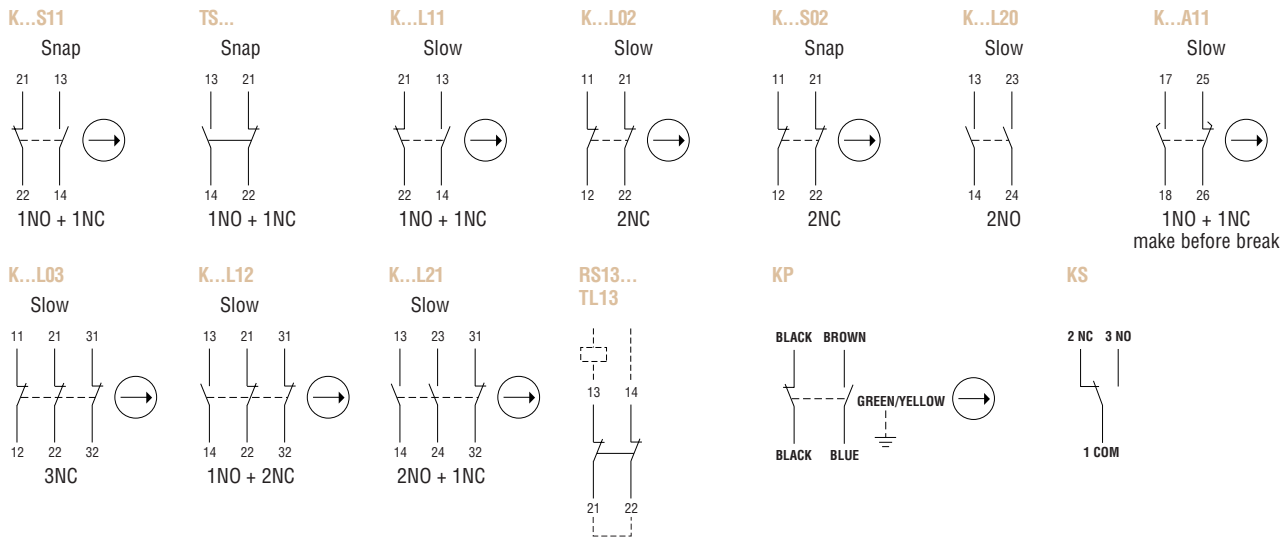


KB H1
KM H1



KC H1
KN H1





Rotary cam switches - Circuit schemes

