

# Limit, micro and foot switches

## Limit switches, K series.

### Accessories and spare parts for KB - KC - KM and KN type limit switches

#### Contact blocks



KXB...

Order code	Contacts	Qty per pkg	Wt
		n°	[kg]
KX B S11	1NO+1NC Snap action①②	10	0.021
KX B S02	2NC Snap action①②	10	0.021
KX B A11	1NO+1NC Slow action make before break①②	10	0.021
KX B L11	1NO+1NC Slow action②	10	0.021
KX B L02	2NC Slow action②	10	0.021
KX B L20	2NO Slow action	10	0.021
KX B L12	1NO+2NC Slow action②③	10	0.026
KX B L21	2NO+1NC Slow action②③	10	0.026
KX B L03	3NC Slow action②③	10	0.026

① Not suitable for key operated KBN / KCN, hinged operating KBP / KCP / KMP / KNP and slotted lever KBQ / KCQ / KMQ / KNQ types.

② Direct (positive) opening action ➞; safety function according to IEC/EN 60947-5-1.

③ Not suitable for KC and KN types, KG and KR foot switches.

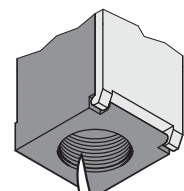
#### Body complete with contact block



KX CB... - KX CM...



KX CC... - KX CN...



#### 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. KXCCL11P - KXCCL11N

Order code	Plastic body	Metal body	Contacts	Qty per pkg	Wt
				n°	[kg]

One bottom cable entry. Dimensions to EN 50047.

KX CB S11	KX CM S11	1NO+1NC Snap action①②	10	④
KX CB S02	KX CM S02	2NC Snap action①②	10	④
KX CB A11	KX CM A11	1NO+1NC Slow action make before break①②	10	④
KX CB L11	KX CM L11	1NO+1NC Slow action②	10	④
KX CB L02	KX CM L02	2NC Slow action②	10	④
KX CB L20	KX CM L20	2NO Slow action	10	④
KX CB L12	KX CM L12	1NO+2NC Slow action②③	10	④
KX CB L21	KX CM L21	2NO+1NC Slow action②③	10	④
KX CB L03	KX CM L03	3NC Slow action②③	10	④

Two side cable entries. Dimensions compatible to EN 50047.

KX CC S11	KX CN S11	1NO+1NC Snap action①②	10	④
KX CC S02	KX CN S02	2NC Snap action①②	10	④
KX CC A11	KX CN A11	1NO+1NC Slow action make before break①②	10	④
KX CC L11	KX CN L11	1NO+1NC Slow action②	10	④
KX CC L02	KX CN L02	2NC Slow action②	10	④
KX CC L20	KX CN L20	2NO Slow action	10	④

① Not suitable for key operated KBN / KCN, hinged operating KBP / KCP / KMP / KNP and slotted lever KBQ / KCQ / KMQ / KNQ types.

② Direct (positive) opening action ➞; safety function according to IEC/EN 60947-5-1.

③ Not suitable for KC and KN types.

④ Consult Customer Service for information; see contact details on inside front cover.

#### General characteristics

The KXB contact blocks can be used with the K series of limit switches. Combinations of 2 contacts with slow or snap action and, for KB and KM types only, 3 slow action contacts are available.

The NC contacts have direct opening operation, a specific safety principle.

The particular four-point contacts warrant high conductivity in any sort of application. The removal of the contacts from the limit switch body provides remarkable wiring ease and reduces installation time as well.

The KX C... bodies, complete with auxiliary contacts, can be used as spare parts for the K series limit switches or coupled with the KX A... operating heads, to obtain complete limit switches in the required configurations.

The body cover is hinged at the bottom and removable to have the best access. Each body includes the innovative locking bayonet mechanism of the operating head. Plastic and metal types are available.

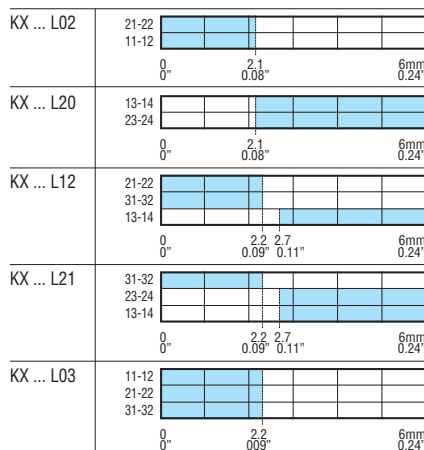
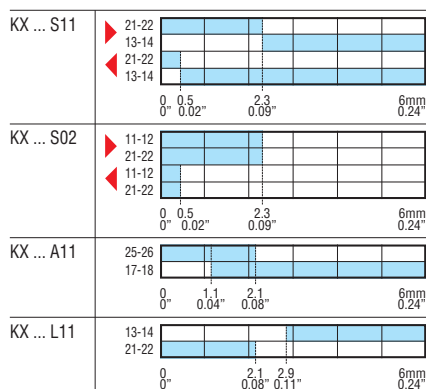
#### Operational characteristics

- Mechanical life: >10 million cycles
- IEC conventional thermal current Ith: 10A
- UL/CSA and IEC/EN 60947-5-1 designation:
  - A600 Q300 for KX CB-KX CC types
  - A300 Q300 for KX CM-KX CN types
- IEC rated insulation voltage Ui:
  - 690VAC for KX CB-KX CC types
  - 440VAC for KX CM-KX CN types
- IEC rated impulse withstand voltage Uimp:
  - 6kV for KX CB-KX CC types
  - 4kV for KX CM-KX CN types
- Class II insulation for KX CB-KX CC only
- Contact resistance: <10mΩ
- Short-circuit backup protection: 10A gG/SC quick fuse
- Housing:
  - KX CB-KX CC types - Self-extinguishing double-insulation polymer thermoplastic
  - KX CM-KX CN 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
- 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 for all, UL Listed for US and Canada (File E93601), as Auxiliary Devices for KX C... body types only. UL Recognized for USA and Canada (cURus - File E93601) as component - Auxiliary devices for auxiliary contacts only; products having this type of marking are intended for use as components of complete workshop-assembled equipment.  
Comply with standards: EN50047, IEC/EN 60947-1, IEC/EN60947-5-1, IEC/EN 60204-1, UL508, CSA C22.2 n° 14.

- Forward travel of snap action contacts  
◄ Return travel of snap action contacts
- open  
■ closed



# Limit, micro and foot switches

## Limit switches, K series.

### Accessories and spare parts for KB, KC, KM and KN type limit switches

#### Operating heads



Order code	Description	Qty per pkg	Wt
		n°	[kg]
KX A A1	Top push rod plunger	5	0.013
KX A B1	Plastic top roller push plunger	5	0.020
KX A B2	Metal top roller push plunger	5	0.020
KX A C1	Plastic roller centre push lever	5	0.020
KX A C2	Metal roller centre push lever	5	0.020
KX A D1	Plastic roller side push lever	5	0.020
KX A D2	Metal roller side push lever	5	0.023
KX A E1	Plastic roller lever plunger	5	0.039
KX A E2	Metal roller lever plunger	5	0.048
KX A E3	Rubber Ø50x10mm roller lever plunger	5	0.055
KX A F1	Adjustable plastic roller lever Ø19x5mm	5	0.055
KX A F2	Adjustable metal roller lever Ø19x5mm	5	0.065
KX A F3	Adjustable rubber Ø50x10mm roller lever	5	0.065
KX A F4	Adjustable offset rubber Ø50x10mm roller lever	5	0.081
KX A H1	Ceramic rod lever	5	0.056
KX A L1	Adjustable plastic rod lever	5	0.043
KX A L2	Adjustable stainless steel rod lever	5	0.050
KX A M1	Flexible wobble stick	5	0.032
KX A M2	Semirigid wobble stick	5	0.025

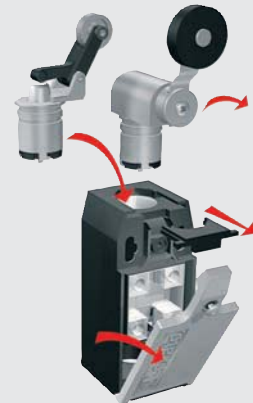
#### General characteristics

The KX A... operating heads can be used as spare parts for the K series limit switches or coupled with the KX C... bodies to obtain complete limit switches in the required configurations.

The heads are made of metal and warrant sturdiness and operating reliability in all conditions.

The shape of the coupling section with the body of the K series switches permits to orient the head in any 45° angle position while the initial lever and rod position can be adjusted 360° at 15° angle positions.

The head fixing to the body is achieved by the innovative locking bayonet mechanism so there is no need of tools. Tightening torque for eventual operating head actuator fixing is 0.8Nm/7lbin.



#### Cable glands and cable conduit



Order code	Description	Qty per pkg	Wt
		n°	[kg]
KX P01	M20 cable gland	50	0.009
KX P02	PG13.5 cable gland	50	0.009
KX P03	M20 rubber cable conduit	50	0.004

#### General characteristics

The cable glands are in plastic with either M20 or PG13.5 thread and provide to keep the cable in place and maintain the proper IP protection of the limit switch after installation.

#### Operational characteristics for cable gland

- Material: Self-extinguishing polyamide
- IEC degree of protection: IP68
- Gland seal with cable diameter: 6-12mm/0.24-0.47".

#### Certifications and compliance

Certifications obtained: EAC.  
Compliant with standards: EN 50262, UL508.