

PCB KEY SWITCHES

KN 19 - SHORT-TRAVEL MAIN SWITCH



KN 19

Short-travel main switch

Short-travel main switch for use in membrane keyboards under the overlay or with RK 90 keycaps, 250V, 4A max. A cut-out in the overlay is not required!

- All products are RoHS compliant.

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Content

KN 19 - Short-travel main switches
KN 19 - Short-travel main switch

4 - 103
4 - 104

4

KN 19

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→ The KN 19 makes it possible to implement a power switch directly in a low-profile data entry system. This eliminates the need for extra switches on the device and additional openings in the overlay. In this way, you can achieve an optimum of safety and a consistent design.

The contact opening widths comply with the VDE standards. The KN 19 can also be employed underneath RK 90 keycaps. Other actuation functions (momentary, latching/momentary) available on request.



Technical Data

→ General information

Recommended key grid 19.05 x 38.1 mm

→ Dimensions

Length 37.8 mm
Width 18.8 mm
Overall height 9.7 mm

→ Mechanical design

Mounting on PCB
Terminals THT solder terminals
Contact system snap-action bridge contact
Contact arrangement see order block
Contact materials Ag
Illumination 1 LED (max. 3 mm) possible
Degree of protection IP40 (DIN EN 60529)
Hot wire ignition acc. to IEC 60695-2-1 850 °C

→ Mechanical characteristics

Operating force max. 9^{±3} N
Operating travel 0.55^{±0.15} mm
Robustness max. 100 N

→ Electrical characteristics

Rated voltage AC min. 12 V
Rated voltage DC min. 12 V
Rated voltage AC max. 250 V
Rated voltage DC max. 50 V
Ohmic load AC 6 A
Ohmic load DC max. 10 A
Ohmic load DC min. 0.1 A
Contact resistance when new max. 50 mΩ
Capacity input current AC max. 100 A
Rated motor current AC 4 A
Rated filament lamp current AC 2.4 A
Bouncing time max. 10 ms

→ Other specifications

Ambient temp. operating min. -25 °C
Ambient temp. operating max. +70 °C
Environmental resistance acc. to IEC 60068-2-14, -30, -33 and -78
Operating life AC AC 250 V: 200.000 /2A; 100.000 /6A
Operating life DC 50,000(10 A / 50 V=)
Soldering time max. 3 s
Soldering temperature max. 350 °C
Flame class acc. to UL 94 UL 94 VO
ROHS compliant yes
REACH compliant yes

Approvals



IEC 61058

UL 508, C22.2 No. 14-M91

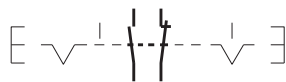
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Accessories KN 19 - Short-travel main switch

→ Description	Photo	Order no.	Additional accessories see page
KN19 - Absorption rubber		5.30.729.009/0000	-

Circuit diagrams

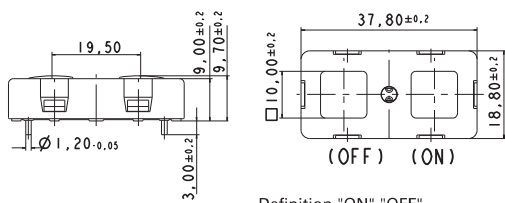


1 NC + 1 NO



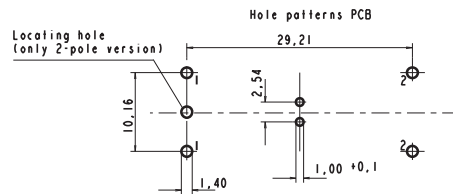
2 NC/2 NO

Dimensional drawing



Definition "ON" "OFF"
only valid for 2-pole version.

PCB hole pattern



Locating hole only version 2 NO/2 NC

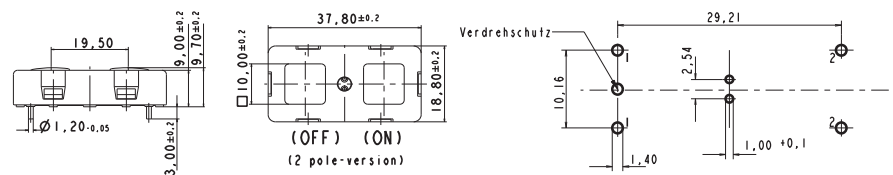
View on component side

4



KN 19 Short-travel main switch

Technical data see page 4 - 103



PCB footprint

→ Contact arrangement	Rated voltage AC max.	Order no.
1 NC + 1 NO	250 V	1.12.000.001/0000
2 NC / 2 NO	250 V	1.12.000.501/0000

For keycaps, refer to RK 90 system design.

Positive opening NC contacts to IEC 60 947-5-1.

1-LED spot-illumination (max. 3 mm) possible.

Accessoires:

KN19 - Absorption rubber: 5.30.729.009/0000