

RAFIX FS switching element universal PCB, silver, for THT LED, 2 NO



fields of application

- > Measurement-control-regulation
- > Electrical engineering
- > Mechanical and system engineering
- > Signalling systems
- > Vehicle construction
- > Agricultural and forestry machinery
- > Construction machinery
- > Handheld terminals
- > Industrial robots



description

These switching elements have external plungers and therefore can only be combined with pushbuttons, selector switches and keylock switches.

The PCB switching elements are positioned on a PCB shared with other components. These can subsequently be mounted behind the front panel together with the actuators and signal indicators. The switching elements "float" directly underneath the actuators on the PCB behind the front panel and leave plenty of space for other components.

In the center channel of the switching element, there are either light conductors for the use of SMT-LEDs, or 3 mm THT LEDs can be installed for illumination.

PCB mounting depths

- 9.2 mm for RAFIX 22 FS+ and RAFIX 22 FSR
- 15.7 mm for RAFIX 30 FS+:

PCB contact block for RAFIX 22 FS+, RAFIX FSR and RAFIX 30 FS

Only suitable for pushbuttons, selector and key switches, not for mushroom pushbutton and emergency stop Silver contacts (= black housing)

Mounting: Soldering on printed circuit board

Version with light guide for SMT LED, without light guide for THT LED

marking:

- normally closed contacts = red plungers
- normally open contacts = green plungers
- N/C and N/O contacts = yellow plungers



direct links

> RAFI eCatalog

technical data

> general

Disassembly possible no

Color black

Operating temperature, min. -40 °C
Operating temperature, max. 85 °C
Storage temperature, min. -40 °C
Storage temperature, max. 85 °C

Storage temperature, max. 85 °C illuminated Yes Luminous elements LED Lamp socket THT LED

Soldering Manual / wave
Solder heat resistance according DIN EN 60068-2-20

to standard

Packaging unit 30 pcs. net weight 2.2 g

Operating life electrical 1,000,000 (1A / 250V AC) cycles

100,000 (2A / 250V AC) cycles 30,000 (4A / 250V AC) cycles 1.300.000 (1A / 250V AC) cycles

B10 electrical 1.300.000 (1A / 250V AC) cycles 130.000 (2A / 250V AC) cycles

40.000 (4A / 250V AC) cycles

50 g at 11 ms amplitude semi-sinusoidal

Environment resistance IEC 60068-2-14

IEC 60068-2-30 IEC 60068-2-33 IEC 60068-2-78

Shock resistance according to

standard IEC 60068-2-27

Vibration-resistance according to

standard IEC 60068-2-6

5 g at 10 - 500 Hz

MOQ order 30 pcs.

RoHS compliant Yes

REACH compliant Yes

> mounting diameters

Outside dimension, length 17.3 mm
Outside dimension, width 17.3 mm
Outside dimension, height 16.9 mm
Mounting depth 9.2 mm

> mechanical data

Contact function 2 NO

Contact system Bridge contact

Contact material Silver
Fixing Soldering
Solderability Yes
Terminal on the rear THT

> electrical data

Rated insulation voltage 250 V

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Rated surge voltage 2,500 V Rated voltage, min. 10 V Rated voltage, max. 250 V Operating current, min. 1 mA Rated current, min. 0.01 A Rated current, max. 4 A Rated power, min. 0.5 W

Category of use AC-15 / B300 120 V / 3 A (IEC 60947)

240 V / 1,5 A (IEC 60947)

Categories of use AC-15 / B300

DC-13 / Q300

Category of use DC-13 / Q300 120 V / 0,55 A (IEC 60947)

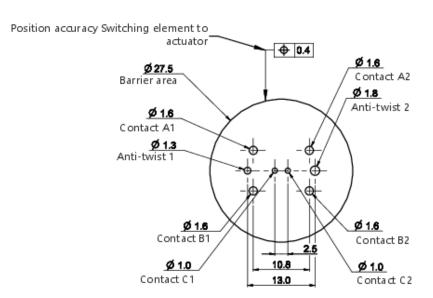
240 V / 0,27 A (IEC 60947)

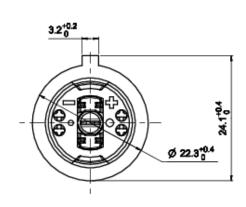
Conditional short circuit current 1,000 A



drawings

System drawing





System drawing

Variant	1NO	1NC	2NO	2NC	1NO + 1NC	Plus 1
Contact A1/A2	1NO	-	1NO	1NC	1NO	1NC
Connection designation 1×	13 - 14		13 - 14	11 - 12	13 - 14	11 - 12
Connection designation 2×	-	1NC	1NO	1NC	1NC	1NC
Contact B1/B2		21 - 22	23 - 24	21 - 22	21 - 22	21 - 22
Contact C1/C2	LED*	LED*	LED*	LED*	LED*	1NO
Connection designation	X1-X2	X1-X2	X1-X2	X1-X2	X1-X2	33 - 34
LED assignment when the actuator is illuminated	13 14 X1 00 X2	XI 000 X2	13 14 X1 22 23 24	XI XI XZ 21 22	13 14 X1 22 21 22	33 33 34 21 22

The contacts are connected according to the following scheme:

