

# RAFIX FS switching element universal PCB, silver, for THT LED, 2 NC



#### 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
illuminated Yes
Luminous elements LED

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

to standard

Lamp socket

Packaging unit 30 pcs. net weight 2.2 g

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

THT LED

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

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)

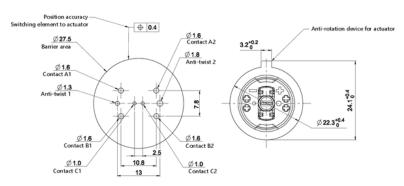
240 V / 0,27 A (IEC 60947)

Conditional short circuit current 1,000 A



## drawings

#### System drawing



Assembly side PCB THT

Variant	1NO	1NC	2NO	2NC	1NO+1NC	Plus 1
Contact A1/A2	1NO	-	1NO	1NC	1NO	1NC
Connection designation 1x	13 - 14		13 - 14	11-12	13 - 14	11-12
Contact B1/B2	-	1NC	1NO	1NC	1NC	1NC
Connection designation 2x		21-22	23-24	21-22	21-22	21-22
Contact C1/C2	LED*	LED*	LED*	LED*	LED*	1NO
Connection designation 1x	X1-X2	X1-X2	X1-X2	X1-X2	X1-X2	33-34
* Only if required	13 X1 000 X2	X1 000 X2 21 22	13 X1 23 24	11 X1 21 21 21 21 21 21 21 21 22	13 X1 21 21 21	11 33 21 21 21 21

