

# RAFIX FS+ switching element universal PCB, gold, for THT LED, 2 NO

#### **COMING SOON**



#### 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 can therefore only be combined with pushbuttons, selector switches and key switches.

The PCB switching elements are placed on a common printed circuit board with other components. These can be attached behind the front panel with the actuating components and light indicators. Behind the front panel, the switching elements "float" directly under the actuating components on the PCB, leaving plenty of space for other components.

#### > Mounting depths PCB:

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

Either short or long light conductors for the use of SMT LEDs (RGB or single color) are integrated in the middle channel of the switching elements. Alternatively, 3 mm THT LEDs can be installed for lighting without light conductors.

#### The NC contacts of these switching elements are forcibly separated according to IEC 60947-5-1.

- > 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
- > Gold contacts (= grey 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



#### technical data

> general

Disassembly possible no

Color dark gray

Operating temperature, min. -40 °C Operating temperature, max. 85 °C -40 °C Storage temperature, min. 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 1.9 g

Operating life electrical 1.000.000 (10mA / 24V DC) cycles B10 electrical 1.300.000 (10mA / 24V DC) cycles

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

15 g at 11 ms amplitude semi-sinusoidal

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 16.73 mm Outside dimension, width 16.73 mm Outside dimension, height 16.85 mm 9.2 mm Mounting depth

> mechanical data

Operating force, max. 100 N 2 NO Contact function

Contact system Bridge contact

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

> electrical data

Rated insulation voltage 250 V 500 V Rated surge voltage Rated voltage, min. 0.02 V direct links

> RAFI eCatalog

Germany

88276 Berg / Ravensburg



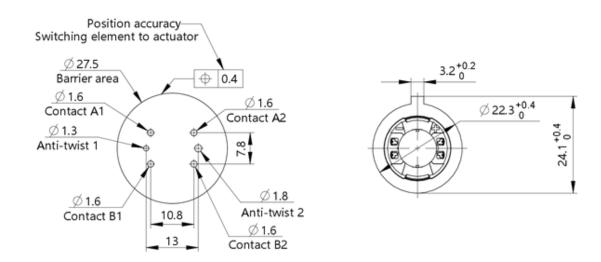
Rated voltage, max. 35 V Rated current, min. 0.001 A Rated current, max. 0.1 A Rated power, max. 0.25 W Categories of use AC-15 DC-13

Conditional short circuit current 1,000 A



## drawings

## **PCB** drawing



#### **Connection drawing**

Variant	1NO	1NC	2NO	2NC	1NO + 1NC	Plus 1
Contact A1/A2	1NO	-	1NO	1NC	1NO	1NC
Connection designation	13 - 14		13 - 14	11 - 12	13 - 14	11 - 12
Contact B1/B2	-	1NC	1NO	1NC	1NC	1NC
Connection designation		21 - 22	23 - 24	21 - 22	21 - 22	21 - 22
Contact C1/C2	LED*	LED*	LED*	LED*	LED*	LED*
Connection designation	X1 - X2	X1 - X2	X1 - X2	X1 - X2	X1 - X2	X1 - X2
Wiring diagram	13 X1 00 X2	X1 00 X2 21 22	13 X1 23 24	11 0 12 X1 0 X2 21 22	13 X1 21 22 21	11 12 33 X1 22 X2 34 21 22
Contact D1/D2 Connection designation	-	-	-	-	-	1NO 33 - 34

<sup>\*</sup> Only if required

RAFI GmbH & Co. KG