

# RAFIX FS switching element universal PCB, silver, for SMT LED, 1 NC, with light guide



#### 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 Feature

with light guide

Disassembly possible no

Color black
Operating temperature, min. -40 °C

Operating temperature, max.  $85 \,^{\circ}\text{C}$ Storage temperature, min.  $-40 \,^{\circ}\text{C}$ Storage temperature, max.  $85 \,^{\circ}\text{C}$ 

illuminated Yes
Luminous elements LED

Lamp socket SMT 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

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

130.000 (2A / 250V AC) cycles 40.000 (4A / 250V AC) 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

50 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 17.3 mm
Outside dimension, width 17.3 mm
Outside dimension, height 16.9 mm
Mounting depth 9.2 mm

> mechanical data

Contact function 1 NC

Contact system Bridge contact

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

## > electrical data

The information in this data sheet only contains general descriptions and / or performance features, which may not apply precisely as described to the respective application, and which my change due to further product enhancements. The technical data, illustrations and other information about our products are the mere results of individual technical testing. These descriptions and other product features are only binding if they expressly agreed upon at the time of the conclusion of a binding contract. In all other cases, we reserve the right to make technical changes as well as changes of availability. Pictures and other graphic illustrations are approximations only. All product names may be trademarks or brand names of the RAFI Group or any other sub-supplier of RAFI. The use of such by any third parties for their own purposes may infringe the rights of the respective entity holding those rights.

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RAFI GmbH & Co. KG

Ravensburger Str. 128-134 88276 Berg / Ravensburg Germany www.rafi-group.com, info.headquarters@rafi-group.com



Rated insulation voltage 250 V 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)

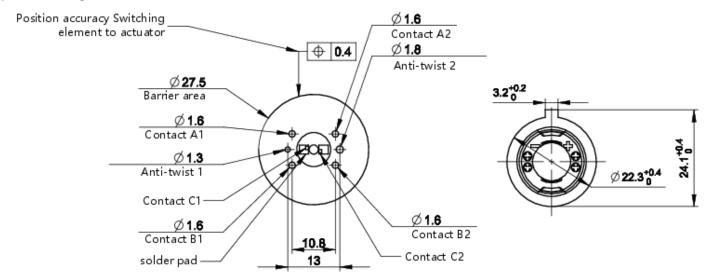
240 V / 0,27 A (IEC 60947)

Conditional short circuit current 1,000 A



## drawings

### System drawing



#### System drawing

Variant	1S / 1NO	1Ö / 1NC	2S / 2NO	2Ö / 2NC	1S + 1Ö / 1NO + 1NC
Contact A1/A2	18 / 1NO	-	18 / 1NO	1Ö / 1NC	1S / 1NO
Connection designation	13 - 14		13 - 14	11-12	13 - 14
Contact B1/B2	-	1Ö / 1NC	18 / 1NO	1Ö / 1NC	10 / 1NC
Connection designation		21-22	23-24	21-22	21-22
Contact C1/C2* Connection designation	LED*	LED*	LED*	LED*	LED*

\*LED assignment when actuator is illuminated

