

RAFIX FS switching element universal PCB, gold, 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
- 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

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85 °C Operating temperature, max.

Storage temperature, min. -40 °C

85 °C Storage temperature, max.

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 (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

Vibration-resistance according to

standard IEC 60068-2-6

5 g at 10 - 500 Hz

15 g at 11 ms amplitude semi-sinusoidal

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

Operating force, max. 100 N Contact function 2 NO

Contact system Bridge contact

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

> electrical data

Rated insulation voltage 50 V 500 V Rated surge voltage Rated voltage, min. 0.02 V Rated voltage, max. 35 V 0.001 A Rated current, min. Rated current, max. 0.1 A Rated power, max. 0.25 W AC-15 Categories of use DC-13

direct links

> RAFI eCatalog

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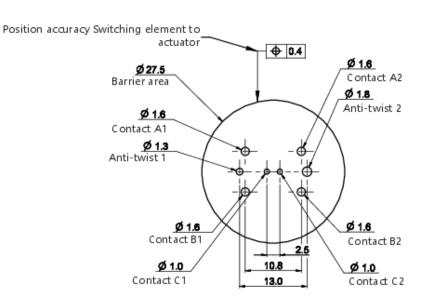


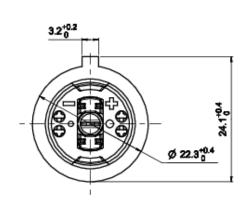
Conditional short circuit current 1,000 A



drawings

System drawing





System drawing

Variant	1NO	1NC	2NO	2NC	1NO + 1NC	Plus 1
C ontact A1/A2	1NO	-	1NO	1NC	1NO	1NC
C onnection 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 X1000 X2	X1 000 X2 21 22	13 14 X1 22 X2 23 24	XI 2 X2 X2 22	13 14 X1 00 X2 21 22	33 33 21 34 22

The contacts are connected according to the following scheme:

