

# **RAFIX FS switching element universal PCB, gold, 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
- 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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technical data sheet

# 1.20.126.004/0000



	Operating temperature, max.	85 °C	direct links
	Storage temperature, min.	-40 °C	
	Storage temperature, max.	85 °C	RAFI eCatalog
	illuminated	Yes	
	Luminous elements	LED	
	Lamp socket	THT LED	
	Soldering	Manual / wave	
	Solder heat resistance according to standard	DIN EN 60068-2-20	
	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	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	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 NC	
	Contact system	Bridge contact	
	Contact material	Gold	
	Fixing	Soldering	
	Solderability	Yes	
	Terminal on the rear	THT	
>	electrical data		
	Rated insulation voltage	50 V	
	Rated surge voltage	500 V	
	Rated voltage, min.	0.02 V	
	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	

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Conditional short circuit current

1,000 A

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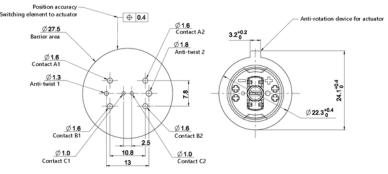
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## drawings

### 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 14 X2	X1 00 X2 21 22	13 X1 23	11 X1 21	13 X1 21 00 X2 22	11 33 21 21 21 21

Actuator with 3 switching positions

Actuator with 2 switching positions

0 1 (B1/B2) 2 (A1/A2)

1 (A1/A2; B1/B2)

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