

# RAFIX FS switching element universal PCB, gold, for SMT LED, 1 NO, with light guide

## DISCONTINUED



# 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				
Feature	with light guide	direct links		
Disassembly possible	no	> RAFI eCatalog		
Color	dark gray			
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			
Lamp socket	SMT LED			
Soldering	Manual / wave			

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### technical data sheet





	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			
	Minimum order quantity (MOQ)	30 pcs.			
	RoHS compliant	Yes			
	REACH compliant	Yes			
	country of origin	HU			
>	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	1 NO			
	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			
	Conditional short circuit current 1,000 A				
>	> Specifications according to IEC 60947-5-1				
	Rated surge voltage	500 V			

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# Use according to UL:

RAFIX control devices are defined at RAFI as modular elements, consisting of an actuating element, if necessary a coupling and an individual contact or lighting unit.

Actuating elements (such as pushbuttons, emergency stop actuators, etc.) have the intended tactility, reset and function only when assembled with the appropriate switching elements.

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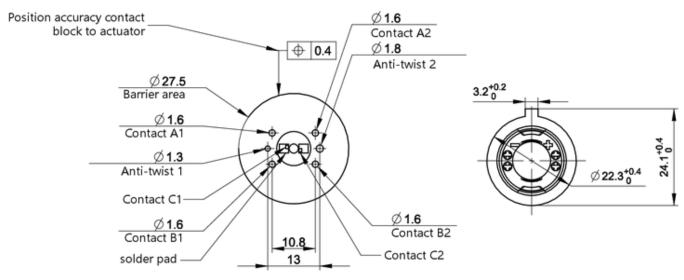
### technical data sheet





# drawings

### System drawing



### System drawing

Variant	1S / 1NO	1Ö / 1NC	28 / 2NO	2Ö / 2NC	1\$ + 1Ö / 1NO + 1NC
Contact A1/A2	1S / 1NO	-	1S / 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*

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

Actuator with 3 switching positions

1 (A1/A2; B1/B2)

Actuator with 2 switching positions

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\*LED assignment when actuator is illuminated

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