RAFIX FS Technology Contact Blocks

Combination with actuators
The RAFIX FS contact blocks can be combined with appropriate actuators from the following product families:
- RAFIX 22 FS+
- RAFIX 22 FSR
- RAFIX 30 FS+

PCB contact blocks

PCB contact blocks are arranged with other components on a common printed circuit board. The unit can then be attached behind the front panel with the actuators and signal indicators. This allows the contact blocks to "float" right below the actuators on the printed circuit board, leaving plenty of room for other components. In the centre channel of the contact blocks, either light conductors are integrated to allow usage of SMT LEDs, or 3 mm THT LEDs can be mounted to provide illumination.

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

QC contact blocks

QC contact blocks can be easily snapped into the actuators without tools. Male quick-connect terminals are used directly for wiring in a conventional manner. This is a fast and efficient variant for applications where a printed circuit board is not cost-effective.

QC mounting depths
- 26.8 mm for RAFIX 22 FS+ and RAFIX 22 FSR
- 32.8 mm for RAFIX 30 FS+

Contact materials / data (PCB & QC)

The Au / Ag versions of the PCB and QC variants are distinguished by the colouring scheme of the housing:

- Gold contacts for low voltages up to 35 V / 100 mA: grey housing
- Silver contacts up to 250 V / 4 A: black housing

Contact assignments (PCB & QC)

The assignments are indicated with different plunger colours:
- Normally-closed contact (NC) = red
- Normally-open contact (NO) = green
- NC + NO for emergency stop = yellow

The following contact assignments are available:
- 1 normally-closed contact (1 NC)
- 1 normally-open contact (1 NO)
- 2 normally-closed contacts (2 NC)
- 2 normally-open contacts (2 NO)
- 1 normally-closed contact and 1 normally-open contact (1 NC + 1 NO)
- 2 normally-closed contacts and 1 normally-open contact (2 NC + 1 NO), only emergency stop “Plus 1”

Universal / emergency stop versions (PCB & QC)

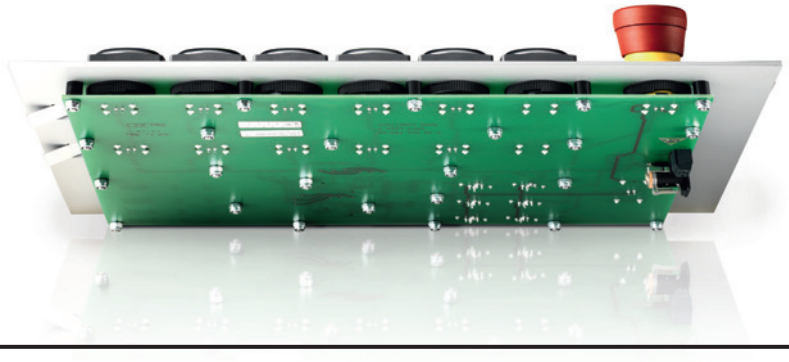
The universal and emergency stop versions differ in terms of the position of the plungers:
- Universal = plunger outside
- Emergency stop = plunger inside

As a result, only the following combinations are possible:
- Universal contact blocks with pushbutton, selector switch and keylock switch
- Emergency stop contact blocks with emergency stop and mushroom pushbutton

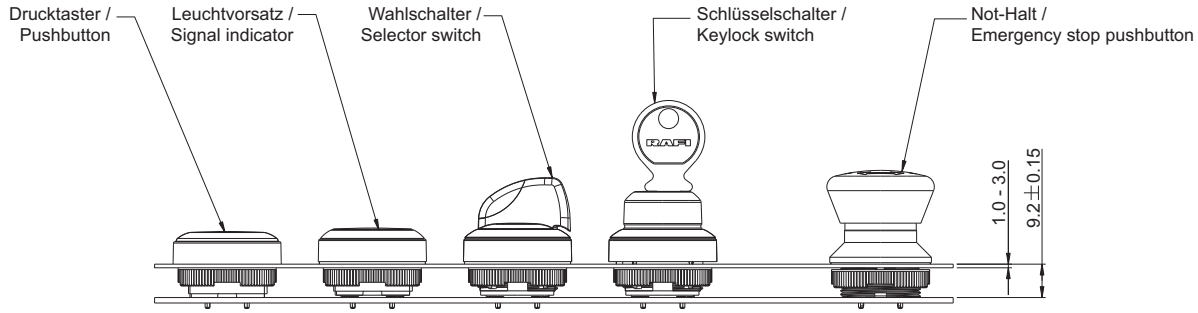
Illumination / LED types (for PCB version only)

- Version with light conductor for SMT LED
- Version without light conductor for 3 mm THT LED

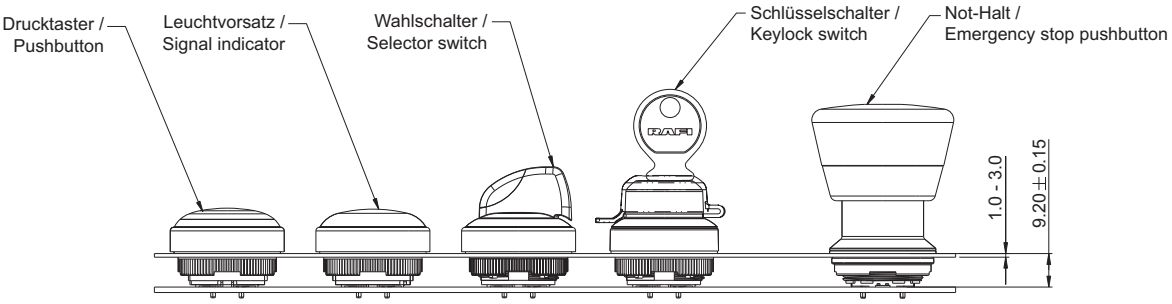
RAFIX 22 FS+ PCB



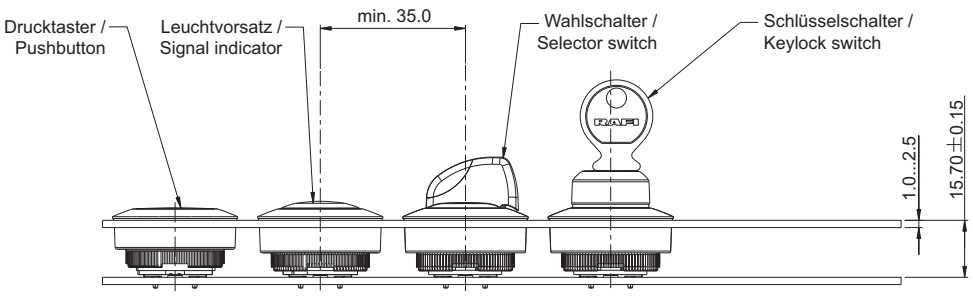
Dimensional drawing RAFIX 22 FS+, PCB



Dimensional drawing RAFIX 22 FSR, PCB

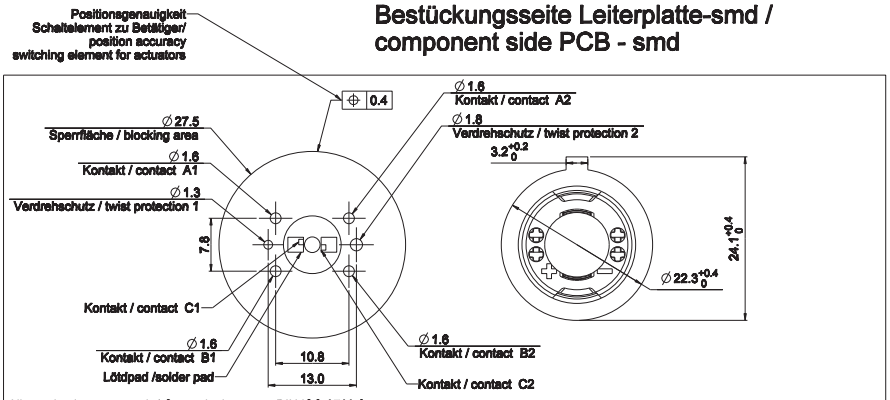


Dimensional drawing RAFIX 30 FS+, PCB



RAFIX 22 FS+ PCB

PCB hole pattern SMT LED
View on component side



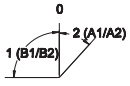
Allgemeintoleranzen nach / General tolerances: DIN ISO 2768-f

Variante / variant	1S / 1NO	1Ö / 1NC	2S / 2NO	2Ö / 2NC	1S + 1Ö / 1NO + 1NC
Kontakt / contact A1/A2 Anschlussbezeichnung / connection designation	1S / 1NO 13 - 14	-	1S / 1NO 13 - 14	1Ö / 1NC 11-12	1S / 1NO 13 - 14
Kontakt / contact B1/B2 Anschlussbezeichnung / connection designation	-	1Ö / 1NC 21-22	1S / 1NO 23-24	1Ö / 1NC 21-22	1Ö / 1NC 21-22
Kontakt / contact C1/C2* Anschlussbezeichnung / connection designation	LED*	LED*	LED*	LED*	LED*

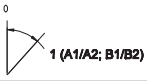
Die Schaltung der Kontakte erfolgt nach folgendem Schema: /
The contact circuits are carried out according to the following scheme:

* LED Belegung bei Beleuchtung des Betätigers /
LED pinning to illuminate an actuator

Betätiger mit 3 Schaltstellungen
Actuator with 3 switch positions



Betätiger mit 2 Schaltstellungen
Actuator with 2 switch positions

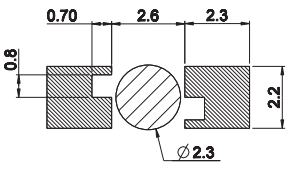


Solder pad design SMT LED
View on component side

Empfohlenes Lötpaddesign

bei Verwendung
pointLED OSRAM
Selektionsklasse: T1-U1

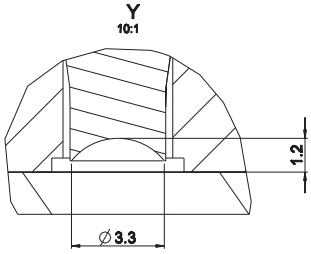
recommended solder pad
for using
pointLED OSRAM
selectionclass: T1-U1

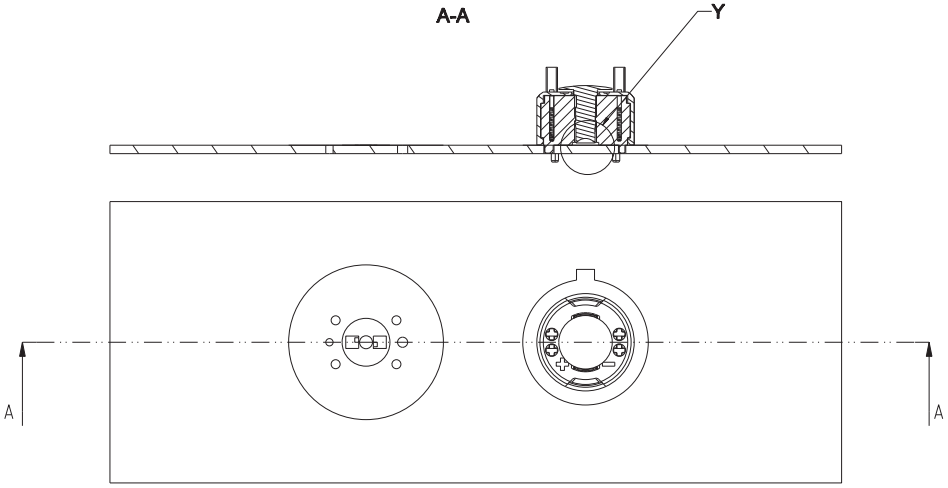


Lötstoplack/Solder resist

Kein Lötstoplack; kein Kupfer
No solder resist; no cooper pad

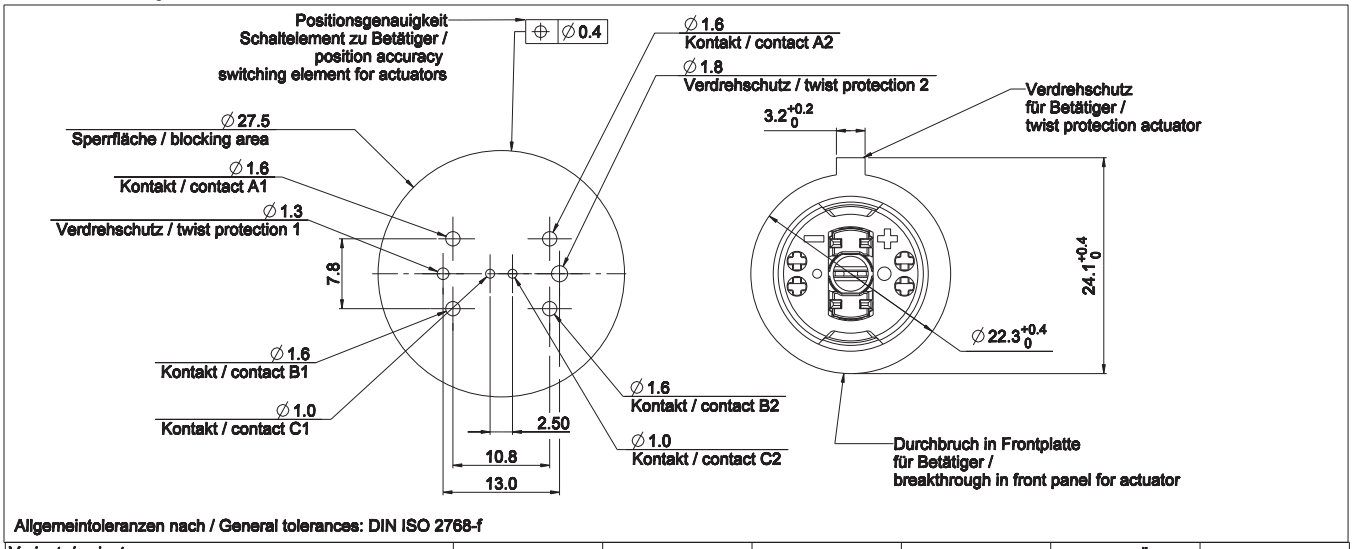
Allgemeiner Bauraum / general space
LED Type 1206
max. Höhe: siehe Schaubild "x" /
max. high: view figure "x"





RAFIX 22 FS+ PCB, THT

PCB hole pattern THT LED
View on component side

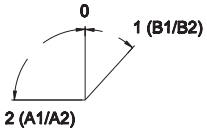


Allgemeintoleranzen nach / General tolerances: DIN ISO 2768-f

Variante/variant	1S / 1NO	1Ö / 1NC	2S / 2NO	2Ö / 2NC	1S + 1Ö / 1NO + 1NC	Plus 1
Kontakt/contact A1/A2 Anschlussbezeichnung/connection designation 1x	1S / 1NO 13 - 14	-	1S / 1NO 13 - 14	1Ö / 1NC 11-12	1S / 1NO 13 - 14	1Ö / 1NC 11-12
Kontakt/contact B1/B2 Anschlussbezeichnung/connection designation 2x	-	1Ö / 1NC 21-22	1S / 1NO 23-24	1Ö / 1NC 21-22	1Ö / 1NC 21-22	1Ö / 1NC 21-22
Kontakt/contact C1/C2 Anschlussbezeichnung/connection designation	LED* X1-X2	LED* X1-X2	LED* X1-X2	LED* X1-X2	LED* X1-X2	1S / 1NO 33-34
*:Nur bei Bedarf/only if required						

Die Schaltung der Kontakte erfolgt nach folgendem Schema: /
The contact circuits are carried out according to the following scheme:

Betätiger mit 3 Schaltstellungen
Actuator with 3 switch positions



Betätiger mit 2 Schaltstellungen
Actuator with 2 switch positions