

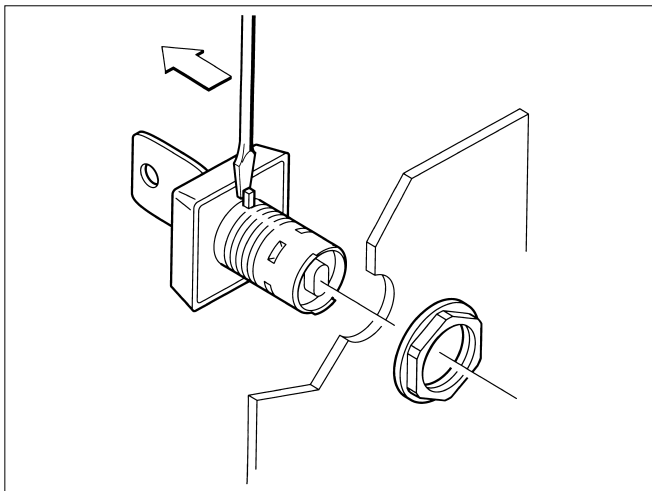
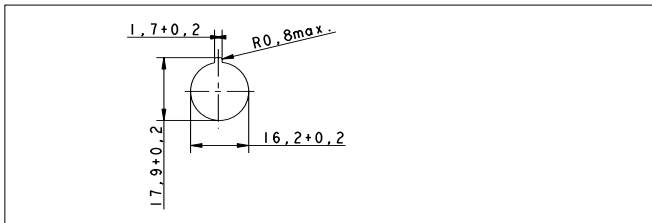
# General information

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RAFIX 16 is a complete control component series for a mounting hole diameter of 16.2 mm. It enables you to design attractive control panels with a minimum of space requirements and at the same time sufficiently large actuating areas.

## Actuators

- Mounting hole  $\varnothing$  16.2 mm to DIN EN 50 007



- Locating lug (easily removable).  
The locating lug can be easily removed using a screwdriver.
- Degree of protection IP 65 on panel.  
This is achieved by a reliable, tried and tested special seal.
- Grid spacing 25 x 25 mm
- Low-profile design, 7 mm height from front panel
- Three collar shapes, in black
  - Square 25 x 25 mm
  - Round 25 mm
  - Square 25 x 25 mm, alignable in flush fitting rows, which avoids accumulation of dirt between the collars.

## Contact blocks

- Standard (for actuators with one-way operation)
  - with latching mechanism (latching switch)
  - without latching mechanism (momentary switch)
- Universal (for actuators with two-way operation, e. g. selector switches)
  - without latching mechanism

## Contact material

- Silver contacts for mains voltage
- Gold contacts for electronic circuits

## Illumination

- Wedge base lamp W 2 x 4.6 d

## Assembly

- Single-handed cost-effective assembly method
- Panel thickness 0.5 ... 5 mm
- Fixing with hexagon nut
- Starting torque 1.2 Nm max.

## Shock-resistance according to IEC 600 68-2-27

- Shock amplitude:  $\leq$  50 g
- Shock time: 11 ms
- Shock type: half sinusoidal

## Environment conditions

- Constant environment: acc. to IEC 600 68-2-3 and 2-30
- Variable environment: acc. to IEC 600 68-2-14 and 2-33

## Temperature range

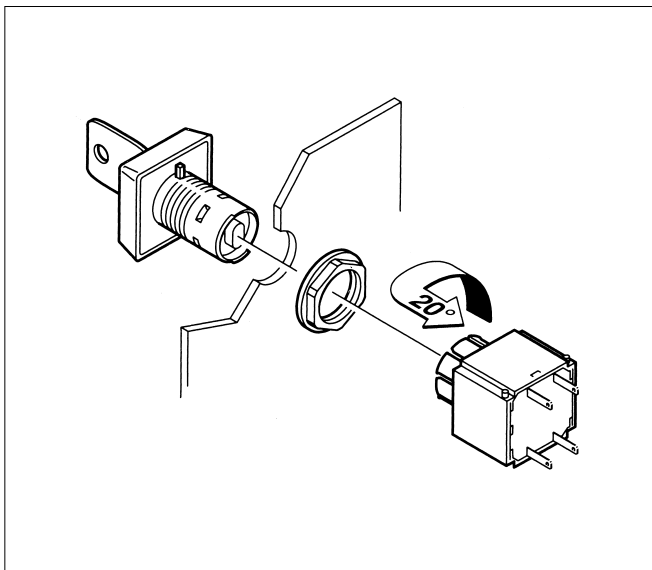
- Operating temperature:
  - non-illuminated: - 25 ... + 70 ° C
  - illuminated: - 25 ... + 55° C
- Storage temperature: - 40 ... + 85° C

## CE-Conformity RAFX® 16

Combination actuator and contact block	Order no.	Limit	EU-Directive	
			NSR 73/23	Ma. Dir. 89/392
All actuators All contact blocks with silver contacts	1.3007-.-.- 1.2012-.-.-	6(4) A/250 V AC	●	-
Emergency stop Contact blocks with silver contacts	1.30074.-.- 1.20123.-.-	6(4) A/250 V AC	●	●
Emergency stop, Universal contact blocks with gold contacts	1.30074.-.- 1.20123.-.-	250 mA/42 V AC/DC	-	●
Signal indicator lamp socket	1.62124.-.- 1.71212.-.-	1,2 W/60 V AC/DC	●	-

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Assembly/Disassembly

### Assembly

- Insert the actuator through the panel cut-out from the front.  
If there is no locating indent provided in the cut-out, first remove the locating lug using a screwdriver.
- Screw the hexagon nut onto the actuator or signal indicator from the rear and tighten it using a fixing spanner.
- Slide the contact block onto the actuator from the rear with an audible click.
- Install protection against accidental contact, if applicable.
- Connect quick-connect terminals.
- Alternatively, connect crimped female quick-connect terminals to multipole connector and plug it onto the contact block.
- Alternatively, connect the plug-in socket soldered onto

### Disassembly

- Turn the contact block by approx. 20° to the left or right – the latches open.
  - Pull the contact block off towards the rear (commercially available flat nose pliers recommended).
- To dismount a PCB, pull the PCB with the soldered plug-in sockets off the mounted contact blocks.

## Legending

All elements can be labelled using a separate label holder. The label holder is mounted together with the actuator/signal indicator. For order numbers and standard legend, refer to the section "Legending". Non-illuminated pushbuttons and mushroom-headed pushbuttons can be printed or laser engraved.

All illuminated pushbuttons and the majority of the signal indicators can be labelled by means of legend inserts. The legend inserts are fitted between actuator body and lens and can be easily changed.

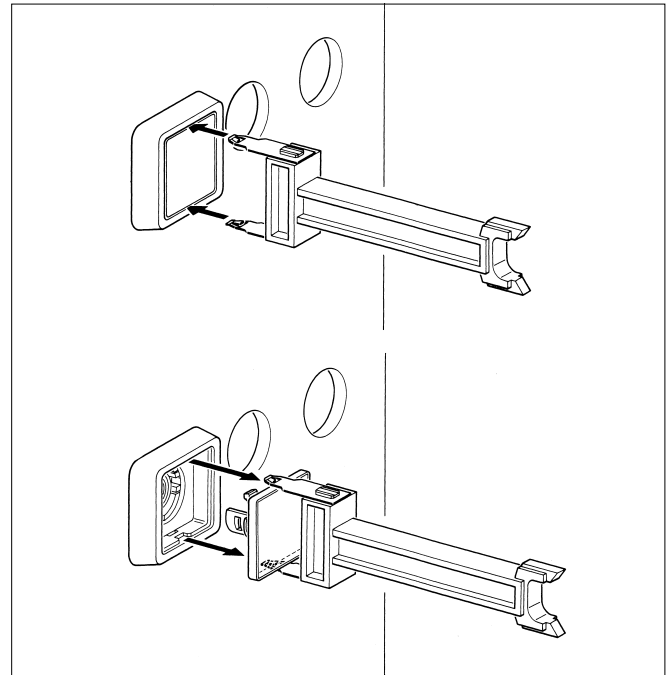
Rafi can also provide you custom legending. Price and delivery on request.

## Lamp replacement from front

Use the disassembly tool to grasp the actuator body and pull it towards the front with the lens.

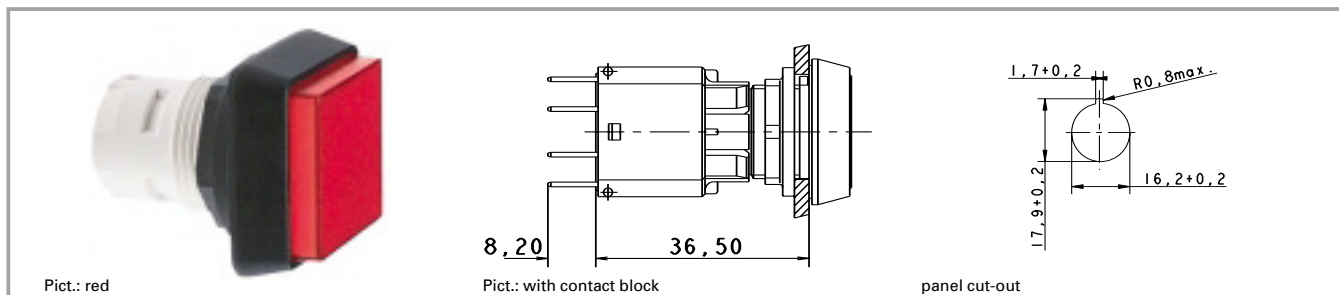
Alternatively, you can use a screwdriver in place of the disassembly tool. In this case, insert the screwdriver between actuator body and collar and carefully raise the actuator body.

Replace the lamp using a lamp extractor or a suitable insulation sleeve.



Lamp replacement from front

## RAFIX 16 pushbutton



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### Technical data

#### General information

Form of lens see order block  
 Colour of lens see order block  
 Form of collar see order block

#### Dimensions

Length of collar see order block  
 Diameter of collar see order block  
 Key grid 25 x 25 mm  
 Width of collar see order block  
 Overall height see order block  
 Mounting depth 44.7 mm  
 Mounting hole 16.2 mm

#### Mechanical design

Mounting ring nut  
 Contact function according to contact block  
 Contact arrangement according to contact block  
 Illuminability see order block

#### Mechanical characteristics

Operating travel 3 mm  
 Robustness min. 100 N

#### Other specifications

Operating life 2000000  
 Degree of protection from front side IP65  
 Ambient temp. operating min. -25 °C  
 Ambient temp. operating without lamp max. +70 °C  
 Storage temperature min. -40 °C  
 Storage temperature max. +85 °C  
 Resistance to constant environment according to IEC 600 68-2-3 and 2-30  
 Resistance at variable environment according to IEC 600 68-2-14 and 2-33

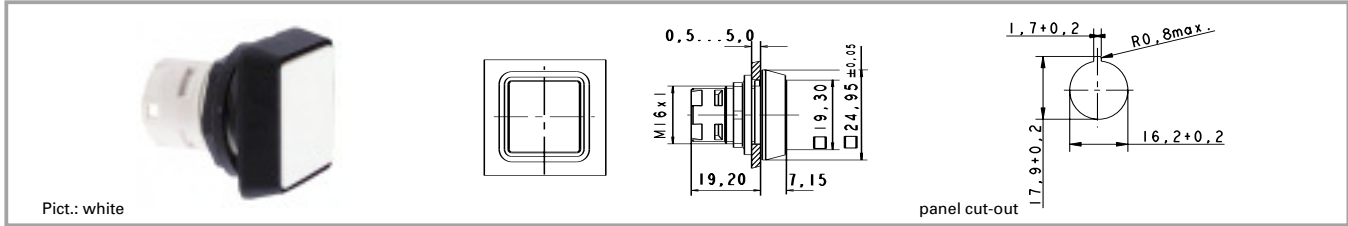
### Accessories RAFIX 16 pushbutton

Description	Photo	Order no.	Page
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, silver contacts, with lamp socket		<b>1.20.122.001/0000</b>	2 - 64
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, gold contacts, with lamp socket		1.20.122.011/0000	2 - 60
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, silver contacts, without lamp socket		<b>1.20.122.021/0000</b>	2 - 64
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, gold contacts, without lamp socket		1.20.122.031/0000	2 - 60
LED W 2 x 4.6d superbright, white, 24 V		<b>1.90.690.365/0000</b>	5 - 16
Disassembly tool for LUMOTAST 25, RAFIX 16		<b>5.05.800.042/0000</b>	2 - 74 5 - 26
Label holder, flush, for square collar		5.07.620.004/0000	2 - 76

**Accessories RAFX 16 pushbutton**

Description	Photo	Order no.	Page
Fixing spanner for hexagon nut		<b>5.58.002.034/0000</b>	2 - 75

**RAFIX 16 pushbutton, flush lens, square collar**



Illuminability	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
yes	transparent colourless	1.30.070.001/1002	<b>1.30.070.501/0000</b>	<b>5.49.077.011/1002</b>
yes	transparent red	1.30.070.001/1306	<b>1.30.070.501/0000</b>	<b>5.49.077.011/1306</b>
yes	transparent yellow	1.30.070.001/1403	<b>1.30.070.501/0000</b>	<b>5.49.077.011/1403</b>
yes	transparent green	1.30.070.001/1505	<b>1.30.070.501/0000</b>	<b>5.49.077.011/1505</b>
yes	transparent blue	1.30.070.001/1607	<b>1.30.070.501/0000</b>	<b>5.49.077.011/1607</b>
no	opaque black	1.30.070.251/0100	1.30.070.751/0000	5.05.510.640/0100
no	opaque white	1.30.070.251/0200	1.30.070.751/0000	5.05.510.640/0200
no	opaque red	1.30.070.251/0300	1.30.070.751/0000	5.05.510.640/0300
no	opaque yellow	1.30.070.251/0400	1.30.070.751/0000	5.05.510.640/0400
no	opaque green	1.30.070.251/0500	1.30.070.751/0000	5.05.510.640/0500
no	opaque blue	1.30.070.251/0600	1.30.070.751/0000	5.05.510.640/0600

Technical data see page 2 - 8

**Accessories:**

Legend insert, blank, use only for transparent lenses: 5.70.635.000/2000

For the „latching“ function, please use the standard contact block with „latching“ function.