2

General data

RAFIX 16 control component range
- For a mounting hole diameter of 16.2 mm to IEC 60947
- 250V/6A max.
- Water-jet proof IP65
- Contact blocks: Gold and silver contacts with quick-connect terminals 2.8 x 0.8 mm; Option: PCB plug-in socket
- 3 collar shapes, low-profile design
- The lamps of the pushbuttons can be replaced from the front or rear.
- The contact blocks snap directly onto the actuators without a coupling element and can be easily removed by turning = cost reducing assembly.

The specified data apply only if actuators/signal indicators are combined with contact blocks and lamp sockets within the same product range.

Content

Control components

Stock items are marked
by **bold printed** order numbers.

2

RAFIX 16

Stock items are marked
by **bold printed** order numbers.

Control components

General information

▬ ▬ ▬ ▬ ▬ ▬ ▬ ▬ ▬ ▬ ▬ ▬ ▬ ▬

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 ø 16.2 mm to DIN EN 50 007
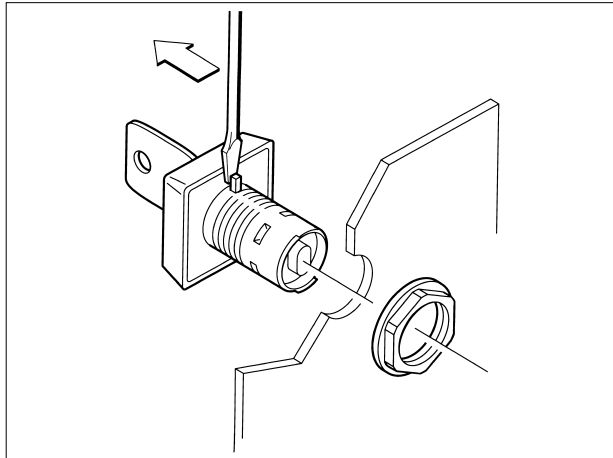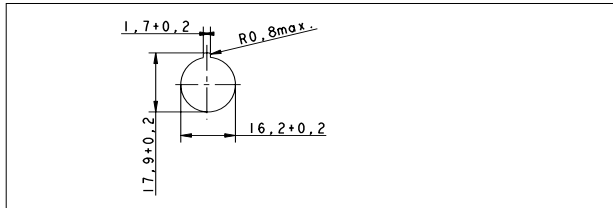
– Locating lug (easily removable).
   The locating lug can be easily removed using a screw-driver.

– 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-effectiv 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

2

CE-Conformity RAFIX® 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	●	–

2

RAFIX 16
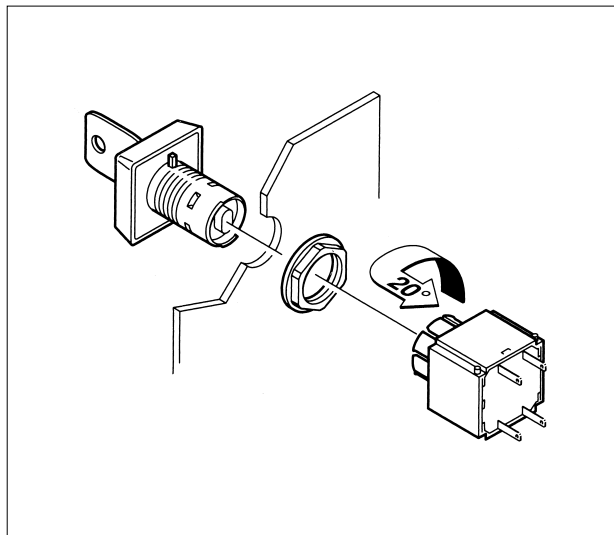
Assembly/Disassembly

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, conntact 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.

Control Components

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 push-buttons 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

2

Control Components

RAFIX 16 pushbutton

Pict.: red   Pict.: with contact block   panel cut-out

8,20   36,50

1,7+0,2   R0,8max

17,9+0,2   16,2+0,2

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		**1.20.122.001/0000**	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		**1.20.122.021/0000**	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		**1.90.690.365/0000**	5 - 16
Disassembly tool for LUMOTAST 25, RAFIX 16		**5.05.800.042/0000**	2 - 74 5 - 26
Label holder, flush, for square collar		5.07.620.004/0000	2 - 76

Stock items are marked
by **bold printed** order numbers.   Control components

Accessories RAFIX 16 pushbutton

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

RAFIX 16 pushbutton, flush lens, square collar
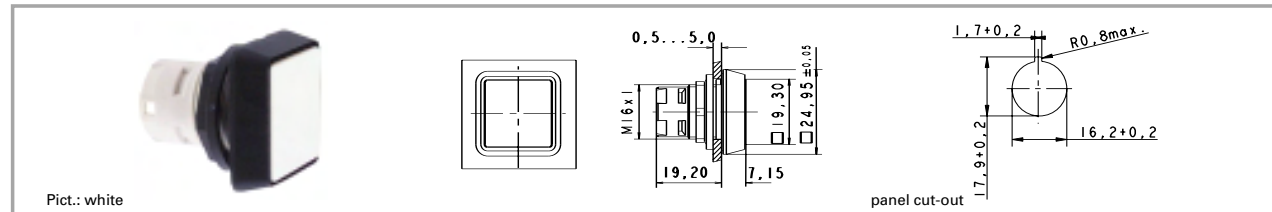
Illuminability	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
yes	transparent colourless	1.30.070.001/1002	**1.30.070.501/0000**	5.49.077.011/1002
yes	transparent red	1.30.070.001/1306	**1.30.070.501/0000**	5.49.077.011/1306
yes	transparent yellow	1.30.070.001/1403	**1.30.070.501/0000**	5.49.077.011/1403
yes	transparent green	1.30.070.001/1505	**1.30.070.501/0000**	5.49.077.011/1505
yes	transparent blue	1.30.070.001/1607	**1.30.070.501/0000**	5.49.077.011/1607
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.

Stock items are marked
by **bold printed** order numbers.

RAFIX 16 pushbutton, protruding lens, square collar

Pict.: yellow

panel cut-out

Illuminability	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
yes	transparent colourless	1.30.070.051/1002	1.30.070.551/0000	**5.49.077.012/1002**
yes	transparent red	1.30.070.051/1306	1.30.070.551/0000	**5.49.077.012/1306**
yes	transparent yellow	1.30.070.051/1403	1.30.070.551/0000	**5.49.077.012/1403**
yes	transparent green	1.30.070.051/1505	1.30.070.551/0000	**5.49.077.012/1505**
yes	transparent blue	1.30.070.051/1607	1.30.070.551/0000	**5.49.077.012/1607**
no	opaque black	1.30.070.301/0100		
no	opaque white	1.30.070.301/0200		
no	opaque red	1.30.070.301/0300		
no	opaque yellow	1.30.070.301/0400		
no	opaque green	1.30.070.301/0500		
no	opaque blue	1.30.070.301/0600		

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.

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 pushbutton, protruding collar, square collar

Pict.: yellow

panel cut-out

Illuminability	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
yes	transparent colourless	1.30.070.101/1002	1.30.070.601/0000	**5.49.077.011/1002**
yes	transparent red	1.30.070.101/1306	1.30.070.601/0000	**5.49.077.011/1306**
yes	transparent yellow	1.30.070.101/1403	1.30.070.601/0000	**5.49.077.011/1403**
yes	transparent green	1.30.070.101/1505	1.30.070.601/0000	**5.49.077.011/1505**
yes	transparent blue	1.30.070.101/1607	1.30.070.601/0000	**5.49.077.011/1607**
no	opaque black	1.30.070.351/0100	1.30.070.851/0000	5.05.510.640/0100
no	opaque white	1.30.070.351/0200	1.30.070.851/0000	5.05.510.640/0200
no	opaque red	1.30.070.351/0300	1.30.070.851/0000	5.05.510.640/0300
no	opaque yellow	1.30.070.351/0400	1.30.070.851/0000	5.05.510.640/0400
no	opaque green	1.30.070.351/0500	1.30.070.851/0000	5.05.510.640/0500
no	opaque blue	1.30.070.351/0600	1.30.070.851/0000	5.05.510.640/0600

2

RAFIX
16

Technical data see page 2 - 8

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

The protruding collar offers protection against inadvertent operation and thereby fulfils the safety requirements of various machinery manufacturers, particularly in the printing industry.
For the "latching" function, please use the standard contact block with "latching" function.

Stock items are marked
by **bold printed** order numbers.

RAFIX 16 pushbutton, flush lens, round collar

Pict.: blue

panel cut-out

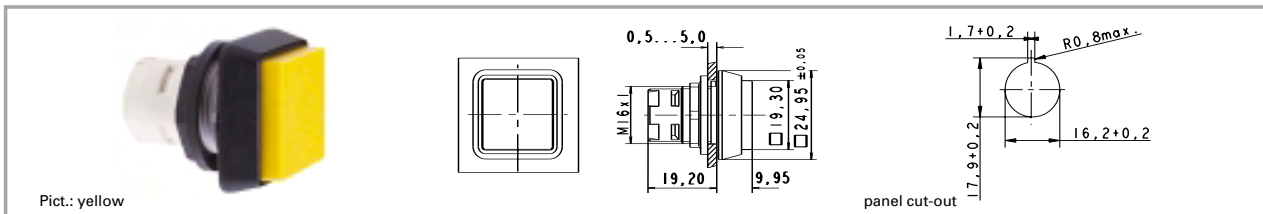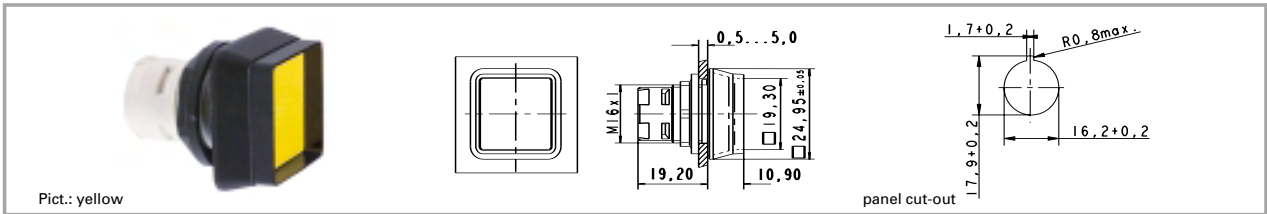| Illuminability	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
yes	transparent colourless	1.30.070.021/1002	**1.30.070.521/0000**	**5.49.259.017/1002**
yes	transparent red	1.30.070.021/1306	**1.30.070.521/0000**	**5.49.259.017/1306**
yes	transparent yellow	1.30.070.021/1403	**1.30.070.521/0000**	**5.49.259.017/1403**
yes	transparent green	1.30.070.021/1505	**1.30.070.521/0000**	**5.49.259.017/1505**
yes	transparent blue	1.30.070.021/1607	**1.30.070.521/0000**	**5.49.259.017/1607**
no	opaque black	1.30.070.271/0100	1.30.070.771/0000	5.05.510.641/0100
no	opaque white	1.30.070.271/0200	1.30.070.771/0000	5.05.510.641/0200
no	opaque red	1.30.070.271/0300	1.30.070.771/0000	5.05.510.641/0300
no	opaque yellow	1.30.070.271/0400	1.30.070.771/0000	5.05.510.641/0400
no	opaque green	1.30.070.271/0500	1.30.070.771/0000	5.05.510.641/0500
no	opaque blue	1.30.070.271/0600	1.30.070.771/0000	5.05.510.641/0600

Technical data see page 2 - 8

Accessories:
Legend insert, blank, use only for transparent lenses: 5.70.637.000/2000

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

2

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 pushbutton IP66 with protective cap

Pict.: yellow

panel cut-out

Illuminability	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
yes	transparent colourless	1.30.070.026/1002		
yes	transparent red	1.30.070.026/1306		
yes	transparent yellow	1.30.070.026/1403		
yes	transparent green	1.30.070.026/1505		
yes	transparent blue	1.30.070.026/1607		
no	opaque black	1.30.070.276/0100		
no	opaque white	1.30.070.276/0200		
no	opaque red	1.30.070.276/0300		
no	opaque yellow	1.30.070.276/0400		
no	opaque green	1.30.070.276/0500		
no	opaque blue	1.30.070.276/0600		

2

RAFIX 16

Technical data see page 2 - 8

Accessories:
Legend insert, blank, use only for transparent lenses: 5.70.637.000/2000

Pushbutton for use in hostile environments. A transparent protective cap ensures a degree of protection of IP 66 to DIN/IEC. Operating life: 500,000 operations.
For the "latching" function, please use the standard contact block with "latching" function.

Control components

Stock items are marked by **bold printed** order numbers.

2 - 13

RAFIX 16 pushbutton, protruding lens, round collar

Pict.: red   panel cut-out

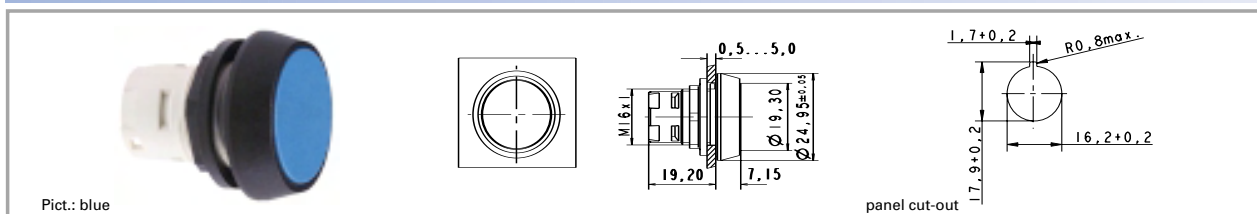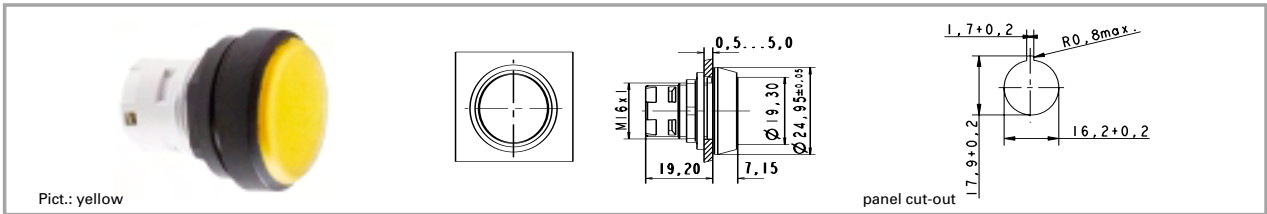| Illuminability	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
yes	transparent colourless	1.30.070.071/1002	1.30.070.571/0000	5.49.259.018/1002
yes	transparent red	1.30.070.071/1306	1.30.070.571/0000	5.49.259.018/1306
yes	transparent yellow	1.30.070.071/1403	1.30.070.571/0000	5.49.259.018/1403
yes	transparent green	1.30.070.071/1505	1.30.070.571/0000	5.49.259.018/1505
yes	transparent blue	1.30.070.071/1607	1.30.070.571/0000	5.49.259.018/1607
no	opaque black	1.30.070.321/0100		
no	opaque white	1.30.070.321/0200		
no	opaque red	1.30.070.321/0300		
no	opaque yellow	1.30.070.321/0400		
no	opaque green	1.30.070.321/0500		
no	opaque blue	1.30.070.321/0600		

Technical data see page 2 - 8

Accessories:
Legend insert, blank, use only for transparent lenses: 5.70.637.000/2000

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

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 pushbutton, protruding collar, round collar

Pict.: red

panel cut-out

Illuminability	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
yes	transparent colourless	1.30.070.121/1002	1.30.070.621/0000	**5.49.259.017/1002**
yes	transparent red	1.30.070.121/1306	1.30.070.621/0000	**5.49.259.017/1306**
yes	transparent yellow	1.30.070.121/1403	1.30.070.621/0000	**5.49.259.017/1403**
yes	transparent green	1.30.070.121/1505	1.30.070.621/0000	**5.49.259.017/1505**
yes	transparent blue	1.30.070.121/1607	1.30.070.621/0000	**5.49.259.017/1607**
no	opaque black	1.30.070.371/0100	1.30.070.871/0000	5.05.510.641/0100
no	opaque white	1.30.070.371/0200	1.30.070.871/0000	5.05.510.641/0200
no	opaque red	1.30.070.371/0300	1.30.070.871/0000	5.05.510.641/0300
no	opaque yellow	1.30.070.371/0400	1.30.070.871/0000	5.05.510.641/0400
no	opaque green	1.30.070.371/0500	1.30.070.871/0000	5.05.510.641/0500
no	opaque blue	1.30.070.371/0600	1.30.070.871/0000	5.05.510.641/0600

Technical data see page 2 - 8

Accessories:
Legend insert, blank, use only for transparent lenses: 5.70.637.000/2000

The protruding collar offers protection against inadvertent operation and thereby fulfils the safety requirements of various machinery manufacturers, particularly in the printing industry.
For the "latching" function, please use the standard contact block with "latching" function.

2

RAFIX
16

Stock items are marked
by bold printed order numbers.

RAFIX 16 pushbutton, flush lens, square collar, alignable without gaps

Pict.: black

panel cut-out

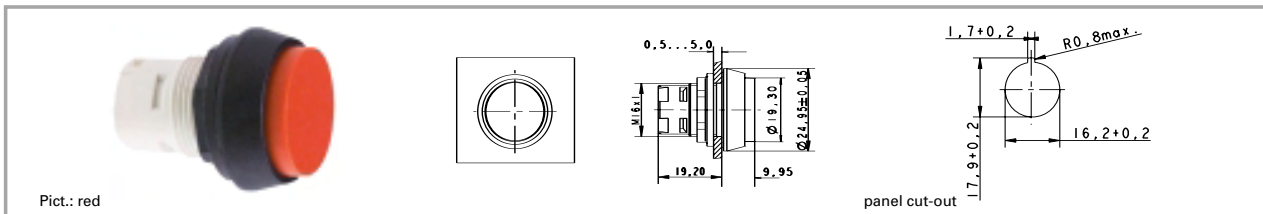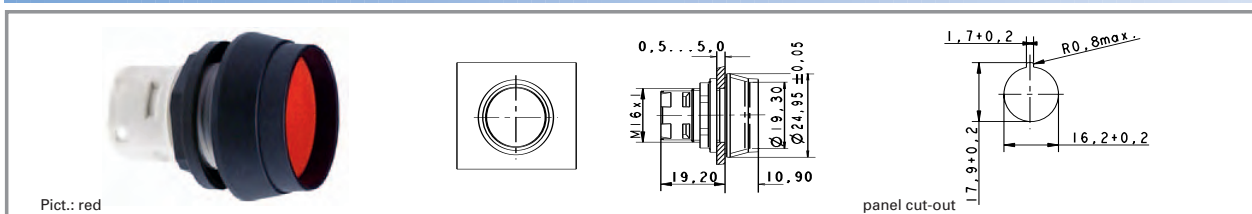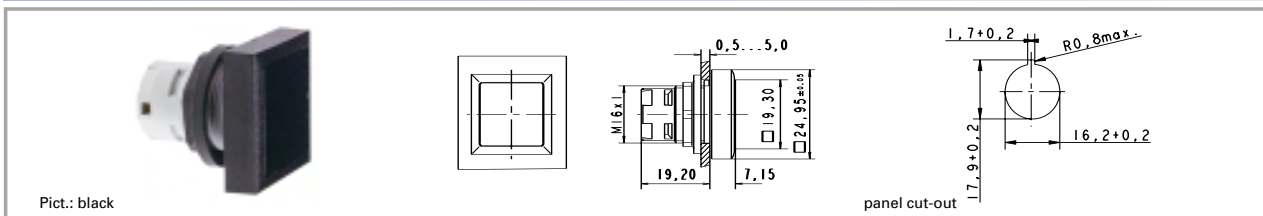| Illuminability	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
yes	transparent colourless	1.30.070.201/1002	**1.30.070.701/0000**	**5.49.077.011/1002**
yes	transparent red	1.30.070.201/1306	**1.30.070.701/0000**	**5.49.077.011/1306**
yes	transparent yellow	1.30.070.201/1403	**1.30.070.701/0000**	**5.49.077.011/1403**
yes	transparent green	1.30.070.201/1505	**1.30.070.701/0000**	**5.49.077.011/1505**
yes	transparent blue	1.30.070.201/1607	**1.30.070.701/0000**	**5.49.077.011/1607**
no	opaque black	1.30.070.451/0100	1.30.070.951/0000	5.05.510.640/0100
no	opaque white	1.30.070.451/0200	1.30.070.951/0000	5.05.510.640/0200
no	opaque red	1.30.070.451/0300	1.30.070.951/0000	5.05.510.640/0300
no	opaque yellow	1.30.070.451/0400	1.30.070.951/0000	5.05.510.640/0400
no	opaque green	1.30.070.451/0500	1.30.070.951/0000	5.05.510.640/0500
no	opaque blue	1.30.070.451/0600	1.30.070.951/0000	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.

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 selector switch

Pict.: Handle marking opaque white

Panel cut-out
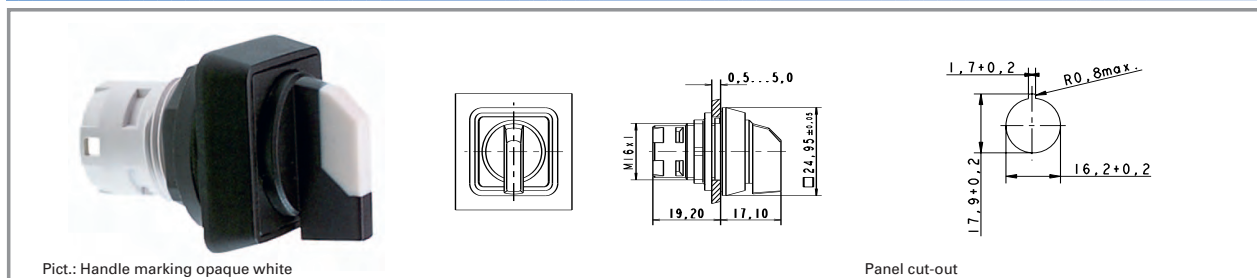
Technical data

General information

Form of lens	handle
Marking of handle	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	17.1 mm
Mounting depth	44.7 mm
Mounting hole	16.2 mm

Mechanical design

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

Mechanical characteristics

Torque max.	1.3 Nm

Other specifications

Operating life	30000
Degree of protection from front side	IP65
Ambient temp. operating min.	-25 °C
Ambient temp. operating without lamp max.	+70 °C
Ambient temp. operating with lamp max.	+55 °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 selector switch

Description	Photo	Order no.	Page
RAFIX 16 universal contact block, 1 NC + 1 NO, momentary, silver contacts, with lamp socket		**1.20.123.001/0000**	2 - 65
RAFIX 16 universal contact block, 1 NC + 1 NO, momentary, gold contacts, with lamp socket		1.20.123.011/0000	2 - 61
Label holder, flush, for square collar		5.07.620.004/0000	2 - 76
Fixing spanner for hexagon nut		**5.58.002.034/0000**	2 - 75

For suitable LEDs, filament lamps and other contact blocks, refer to the chapter „RAFIX 16 contact blocks"; for additional accessories, refer to the chapter „RAFIX 16 special accessories".

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 selector switch, square collar

Pict.: Handle marking translucent   Panel cut-out

Illuminability	Contact function	Rotating angle		Marking of handle	Order no. complete
yes	momentary	1 x 40°		translucent white	1.30.073.551/2000
yes	momentary	2 x 40°		translucent white	1.30.073.651/2000
yes	latching	L, 1 x 90°		translucent white	1.30.073.501/2000
yes	latching	V, 1 x 90°		translucent white	1.30.073.601/2000
yes	latching	2 x 60°		translucent white	1.30.073.701/2000
yes	latching 1 x 90° and momentary 1 x 40°	latching 90°/momentary 40°		translucent white	1.30.073.751/2000
no	momentary	1 x 40°		opaque white	1.30.073.550/0200
no	momentary	2 x 40°		opaque white	1.30.073.650/0200
no	latching	L, 1 x 90°		opaque white	**1.30.073.500/0200**
no	latching	V, 1 x 90°		opaque white	**1.30.073.600/0200**
no	latching	2 x 60°		opaque white	1.30.073.700/0200
no	latching 1 x 90° and momentary 1 x 40°	latching 90°/momentary 40°		opaque white	1.30.073.750/0200

Technical data see page 2 - 18

Only use contact blocks with "momentary" contact function.
For versions with clockwise and counterclockwise rotation, use universal contact blocks only!
Other handle marking colours available on request.

2

RAFIX
16

Control components

Stock items are marked
by **bold printed** order numbers.

RAFIX 16 selector switch, round collar

Pict.: handle opaque

Panel cut-out

Illuminability	Contact function	Rotating angle		Marking of handle	Order no. complete
yes	momentary	1 x 40°		translucent white	1.30.073.571/2000
yes	momentary	2 x 40°		translucent white	1.30.073.671/2000
yes	latching	L, 1 x 90°		translucent white	1.30.073.521/2000
yes	latching	V, 1 x 90°		translucent white	1.30.073.621/2000
yes	latching	2 x 60°		translucent white	1.30.073.721/2000
yes	latching 1 x 90° and momentary 1 x 40°	latching 90°/momentary 40°		translucent white	1.30.073.771/2000
no	momentary	1 x 40°		opaque white	1.30.073.570/0200
no	momentary	2 x 40°		opaque white	1.30.073.670/0200
no	latching	L, 1 x 90°		opaque white	1.30.073.520/0200
no	latching	V, 1 x 90°		opaque white	**1.30.073.620/0200**
no	latching	2 x 60°		opaque white	**1.30.073.720/0200**
no	latching 1 x 90° and momentary 1 x 40°	latching 90°/momentary 40°		opaque white	1.30.073.770/0200

Technical data see page 2 - 18

Only use contact blocks with "momentary" contact function.
For versions with clockwise and counterclockwise rotation, use universal contact blocks only!
Other handle marking colours available on request.

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 selector switch, square collar, alignable without gaps

Pict.: handle opaque white

Panel cut-out

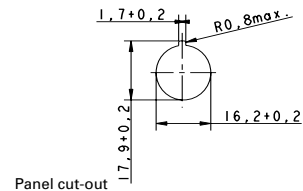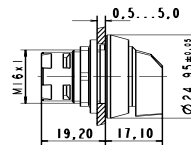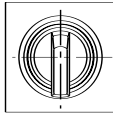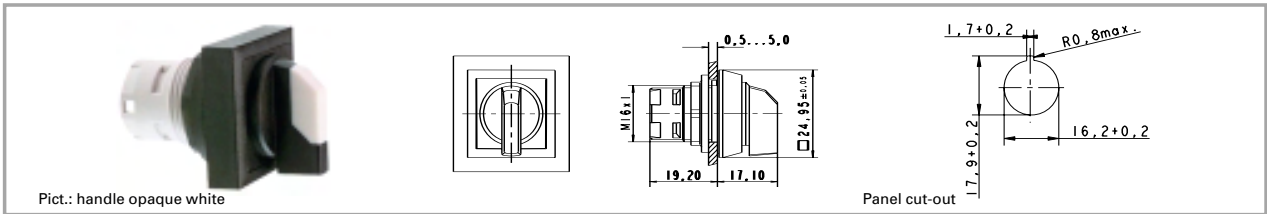| Illuminability	Contact function	Rotating angle		Marking of handle	Order no. complete
yes	momentary	1 x 40°		translucent white	1.30.073.591/2000
yes	momentary	2 x 40°		translucent white	1.30.073.691/2000
yes	latching	L, 1 x 90°		translucent white	1.30.073.541/2000
yes	latching	V, 1 x 90°		translucent white	1.30.073.641/2000
yes	latching	2 x 60°		translucent white	1.30.073.741/2000
yes	latching 1 x 90° and momentary 1 x 40°	latching 90°/momentary 40°		translucent white	1.30.073.791/2000
no	momentary	1 x 40°		opaque white	1.30.073.590/0200
no	momentary	2 x 40°		opaque white	1.30.073.690/0200
no	latching	L, 1 x 90°		opaque white	1.30.073.540/0200
no	latching	V, 1 x 90°		opaque white	**1.30.073.640/0200**
no	latching	2 x 60°		opaque white	1.30.073.740/0200
no	latching 1 x 90° and momentary 1 x 40°	latching 90°/momentary 40°		opaque white	1.30.073.790/0200

Technical data see page 2 - 18

Only use contact blocks with "momentary" contact function.
For versions with clockwise and counterclockwise rotation, use universal contact blocks only!
Other handle marking colours available on request.

2

RAFIX
16

Stock items are marked
by **bold printed** order numbers.

RAFIX 16 keylock switch MICROMEC

Panel cut-out

2
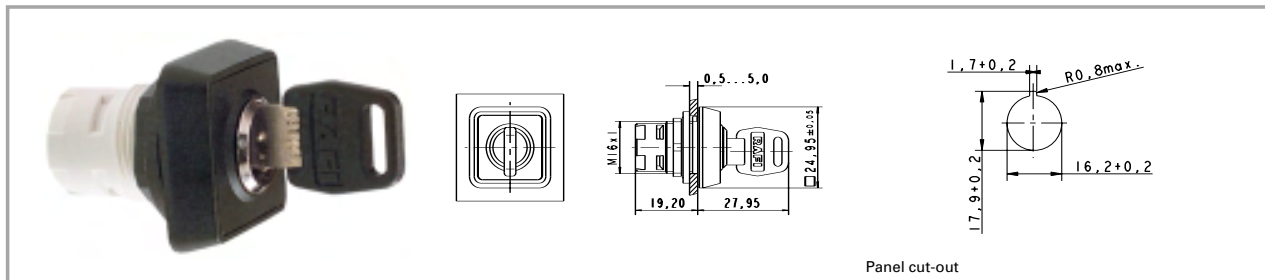
Technical data

General information
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	27.95 mm
Mounting depth	44.7 mm
Mounting hole	16.2 mm

Mechanical design
Mounting	ring nut
Contact function	see order block
Contact arrangement	according to contact block
Illuminability	no
Lock	Micromec
Wafers	5
Lock type	001
Number of locking positions	500
Main key	yes
Symmetric key	no
Rotating angle	see order block
Key removal position	see order block
Group key	yes
General key	yes

Mechanical characteristics
Torque max.	1.3 Nm

Electrical characteristics
Protection class	II

Other specifications
ESD-strength lock / contact	15 kV
ESD strength key/ front panel	8 kV
Operating life	65000
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 keylock switch MICROMEC

Description	Photo	Order no.	Page
RAFIX 16 universal contact block, 1 NC + 1 NO, momentary, silver contacts, without lamp socket		**1.20.123.021/0000**	2 - 65
RAFIX 16 universal contact block, 1 NC + 1 NO, momentary, gold contacts, without lamp socket		**1.20.123.031/0000**	2 - 61
Label holder, flush, for square collar		5.07.620.004/0000	2 - 76
Fixing spanner for hexagon nut		**5.58.002.034/0000**	2 - 75

Stock items are marked
by **bold printed** order numbers.

Control components

Accessories RAFIX 16 keylock switch MICROMEC

Description	Photo	Order no.	Page
Spare key, black		5.58.007.001/0000	

For other contact blocks, refer to the chapter „RAFIX 16 contact blocks"; for additional accessories, refer to the chapter „RAFIX 16 special accessories".

RAFIX 16 keylock switch MICROMEC, square collar
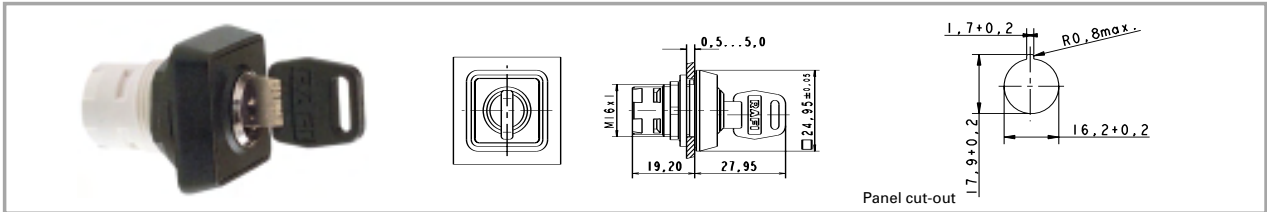
Panel cut-out

Contact function	Rotating angle	Key removal position		Order no. complete
momentary	1 x 40°	0		1.30.076.501/0000
momentary	2 x 40°	0		1.30.076.701/0000
latching	L, 1 x 90°	0		**1.30.076.001/0000**
latching	L, 1 x 90°	0+1		**1.30.076.051/0000**
latching	V, 1 x 90°	0		**1.30.076.101/0000**
latching	V, 1 x 90°	0+1		1.30.076.151/0000
latching	2 x 90°	0		1.30.076.301/0000
latching	2 x 90°	0+1+2		1.30.076.401/0000
latching 1 x 90° and momentary 1 x 40°	latching 1 x 90°/ momentary 1 x 40°	2		1.30.076.901/0000

Technical data see page 2 - 22

Only use contact blocks with "momentary" contact function. For versions with clockwise and counterclockwise rotation, use universal contact block only.
Included: 2 keys.

RAFIX 16 keylock switch MICROMEC, round collar
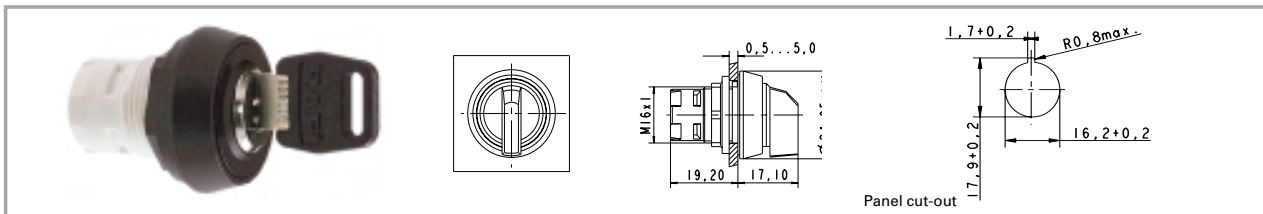
Panel cut-out

Contact function	Rotating angle	Key removal position		Order no. complete
momentary	1 x 40°	0		1.30.076.521/0000
momentary	2 x 40°	0		1.30.076.721/0000
latching	L, 1 x 90°	0		**1.30.076.021/0000**
latching	L, 1 x 90°	0+1		1.30.076.071/0000
latching	V, 1 x 90°	0		**1.30.076.121/0000**
latching	V, 1 x 90°	0+1		1.30.076.171/0000
latching	2 x 90°	0		1.30.076.321/0000
latching	2 x 90°	0+1+2		1.30.076.421/0000
latching 1 x 90° and momentary 1 x 40°	latching 1 x 90°/ momentary 1 x 40°	2		1.30.076.921/0000

Technical data see page 2 - 22

Only use contact blocks with "momentary" contact function. For versions with clockwise and counterclockwise rotation, use universal contact block only.
Included: 2 keys.

Stock items are marked by **bold printed** order numbers.

Control components

RAFIX 16 keylock switch MICROMEC, square collar, alignable without gaps

Panel cut-out

Contact function	Rotating angle	Key removal position		Order no. complete
momentary	1 x 40°	0		1.30.076.541/0000
momentary	2 x 40°	0		1.30.076.741/0000
latching	L, 1 x 90°	0		1.30.076.041/0000
latching	L, 1 x 90°	0+1		1.30.076.091/0000
latching	V, 1 x 90°	0		1.30.076.141/0000
latching	V, 1 x 90°	0+1		1.30.076.191/0000
latching	2 x 90°	0		1.30.076.341/0000
latching	2 x 90°	0+1+2		1.30.076.441/0000
latching 1 x 90° and momentary 1 x 40°	latching 1 x 90°/ momentary 1 x 40°	2		1.30.076.941/0000

Technical data see page 2 - 22

Only use contact blocks with "momentary" contact function. For versions with clockwise and counterclockwise rotation, use universal contact block only.
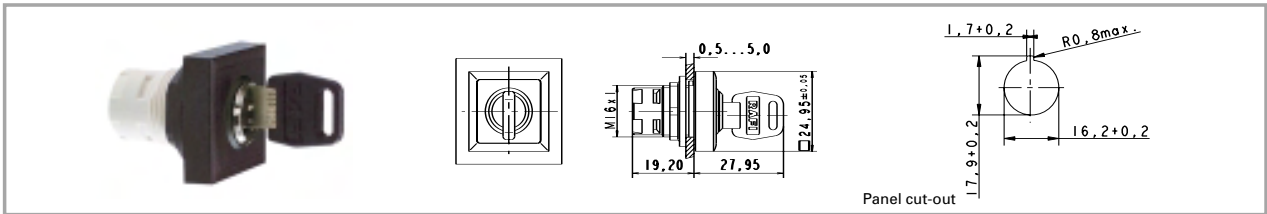Included: 2 keys.

2

RAFIX 16 keylock switch, RONIS

Panel cut-out

2

Technical data

General information
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   20.9 mm
Mounting depth   44.7 mm
Mounting hole   16.2 mm

Mechanical design
Mounting   ring nut
Contact function   see order block
Contact arrangement   according to contact block
Illuminability   no
Lock   Ronis
Wafers   4
Lock type   455
Number of locking
positions   200
Main key   no
Symmetric key   no
Rotating angle   see order block
Key removal position   see order block
Group key   no
General key   no

Mechanical characteristics
Robustness min.   100 N

Electrical characteristics
Protection class   II

Other specifications
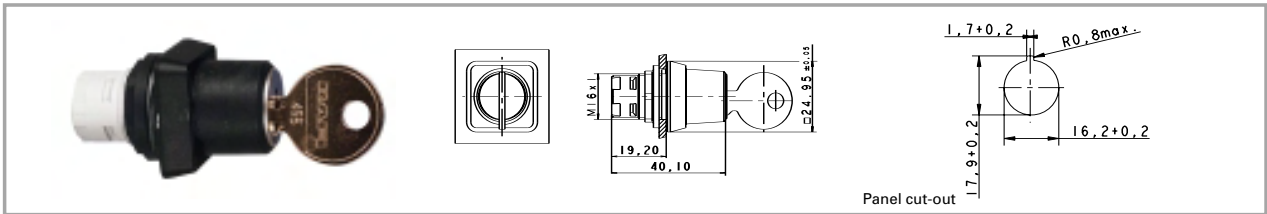ESD-strength lock /
contact   15 kV
ESD strength key/ front
panel   4 kV
Operating life   65000
Degree of protection
from front side   IP65
Ambient temp. operating
min.   -25 °C
Ambient temp. operating
max.   +70 °C
Storage temperature min.   -40 °C
Storage temperature max.   +85 °C
Resistance to constant
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 Keylock switch, RONIS

Description	Photo	Order no.	Page
RAFIX 16 universal contact block, 1 NC + 1 NO, momentary, silver contacts, without lamp socket		**1.20.123.021/0000**	2 - 65
RAFIX 16 universal contact block, 1 NC + 1 NO, momentary, gold contacts, without lamp socket		**1.20.123.031/0000**	2 - 61
Label holder, flush, for square collar		5.07.620.004/0000	2 - 76
Fixing spanner for hexagon nut		**5.58.002.034/0000**	2 - 75

For other contact blocks, refer to the chapter „RAFIX 16 contact blocks"; for additional accessories, refer to the chapter „RAFIX 16 special accessories".

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 keylock switch, RONIS, square collar

Contact function	Rotating angle	Key removal position		Order no. complete
momentary	1 x 40°	0		1.30.176.501/0000
momentary	2 x 40°	0		1.30.176.701/0000
latching	L, 1 x 90°	0		1.30.176.001/0000
latching	L, 1 x 90°	0+1		1.30.176.051/0000
latching	V, 1 x 90°	0		1.30.176.101/0000
latching	V, 1 x 90°	0+1		1.30.176.151/0000
latching	2 x 90°	0		1.30.176.301/0000
latching	2 x 90°	0+1+2		1.30.176.401/0000

Technical data see page 2 - 26

Only use contact blocks with "momentary" contact function. For versions with clockwise and counterclockwise rotation, use universal contact block only.
Included: 2 keys.
Other lock variants available on request.

2

RAFIX 16

Control components

RAFIX 16 keylock switch, RONIS, round collar
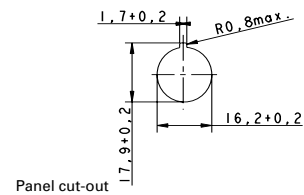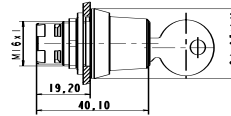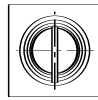
Panel cut-out

Contact function	Rotating angle	Key removal position		Order no. complete
momentary	1 x 40°	0		1.30.176.521/0000
momentary	2 x 40°	0		1.30.176.721/0000
latching	L, 1 x 90°	0		**1.30.176.021/0000**
latching	L, 1 x 90°	0+1		1.30.176.071/0000
latching	V, 1 x 90°	0		1.30.176.121/0000
latching	V, 1 x 90°	0+1		1.30.176.171/0000
latching	2 x 90°	0		1.30.176.321/0000
latching	2 x 90°	0+1+2		1.30.176.421/0000

Technical data see page 2 - 26

Only use contact blocks with "momentary" contact function. For versions with clockwise and counterclockwise rotation, use universal contact block only.
Included: 2 keys.

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 keylock switch, RONIS, square collar, alignable without gaps

Panel cut-out
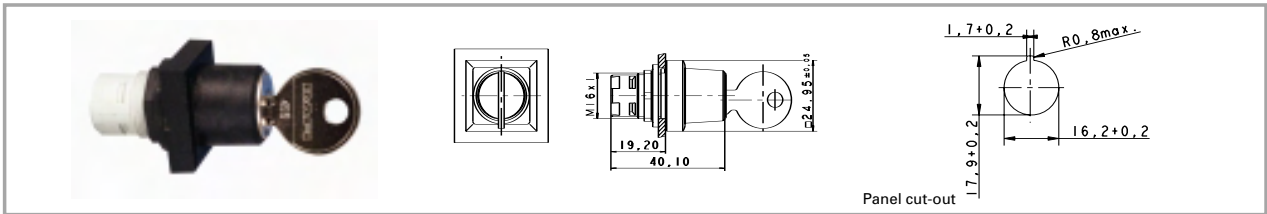
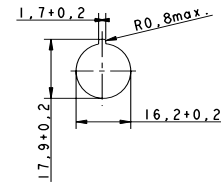| Contact function	Rotating angle	Key removal position		Order no. complete
momentary	1 x 40°	0		1.30.176.541/0000
momentary	2 x 40°	0		1.30.176.741/0000
latching	L, 1 x 90°	0		1.30.176.041/0000
latching	L, 1 x 90°	0+1		1.30.176.091/0000
latching	V, 1 x 90°	0		1.30.176.141/0000
latching	V, 1 x 90°	0+1		1.30.176.191/0000
latching	2 x 90°	0		1.30.176.341/0000
latching	2 x 90°	0+1+2		1.30.176.441/0000

Technical data see page 2 - 26

Only use contact blocks with "momentary" contact function. For versions with clockwise and counterclockwise rotation, use universal contact block only.
Included: 2 keys.

Control components

Stock items are marked
by **bold printed** order numbers.

RAFIX 16 mushroom-headed pushbutton

Pict.: red

panel cut-out

2

Technical data

General information

Form of lens	protruding lens
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	12.1 mm
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	no

Mechanical characteristics

Operating travel	3 mm
Robustness min.	100 Nm

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 mushroom-headed pushbutton

Description	Photo	Order no.	Page
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, silver contacts, without lamp socket		**1.20.122.021/0000**	2 - 64
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, gold contacts, without lamp socket		1.20.122.031/0000	2 - 60
Label holder, flush, for square collar		5.07.620.004/0000	2 - 76
Fixing spanner for hexagon nut		**5.58.002.034/0000**	2 - 75

For other contact blocks, refer to the chapter „RAFIX 16 contact blocks"; for additional accessories, refer to the chapter „RAFIX 16 special accessories".

Stock items are marked by **bold printed** order numbers.

Control components

RAFIX 16 mushroom-headed pushbutton, square collar

Pict.: red

panel cut-out

Illuminability	Colour of lens	Order no. complete
no	opaque black	1.30.071.001/0100
no	opaque red	1.30.071.001/0300

Technical data see page 2 - 30

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

2

RAFIX 16 mushroom-headed pushbutton, round collar

Pict.: red

panel cut-out
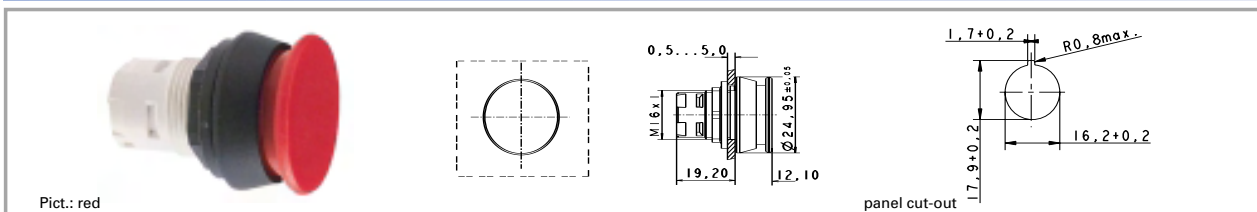
Illuminability	Colour of lens	Order no. complete
no	opaque black	1.30.071.021/0100
no	opaque red	1.30.071.021/0300

Technical data see page 2 - 30

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

Stock items are marked
by **bold printed** order numbers.

RAFIX 16 mushroom-headed pushbutton, square collar, alignable without gaps

Pict.: red

panel cut-out
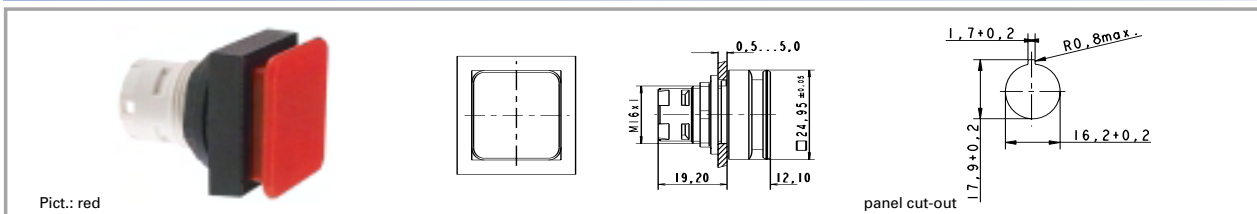
Illuminability	Colour of lens	Order no. complete
no	opaque black	1.30.071.041/0100
no	opaque red	1.30.071.041/0300

Technical data see page 2 - 30

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

Stock items are marked
by **bold printed** order numbers.

RAFIX 16 emergency stop pushbutton
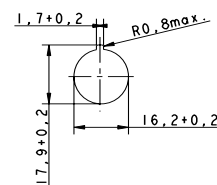
panel cut-out

Technical data

General information

Form of button	see order block
Colour of button	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	latching
Contact arrangement	according to contact block
Illuminability	see order block

Mechanical characteristics

Robustness min.	100 N
Robustness	acc. IEC 60947-5-5

Other specifications

|	
Operating life	30000
Degree of protection from front side	IP65
Ambient temp. operating min.	-25 °C
Ambient temp. operating without lamp max.	+70 °C
Ambient temp. operating with lamp max.	+55 °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
Corresponding to CE Ma-Dir. 89/392	yes
Approvals	IEC 60204, IEC 73

Accessories RAFIX 16 emergency stop pushbutton

Description	Photo	Order no.	Page
RAFIX 16 universal contact block, 1 NC, momentary, silver contacts, without lamp socket		**1.20.123.022/0000**	2 - 65
RAFIX 16 universal contact block, 1 NC, momentary, gold contacts, without lamp socket		**1.20.123.032/0000**	2 - 61
Fixing spanner for hexagon nut		**5.58.002.034/0000**	2 - 75
Emergency stop label, yellow, round 60 mm, PVC adhesive, without legend		**5.76.204.400/0400**	2 - 77

For suitable LEDs, filament lamps and other contact blocks, refer to the chapter „RAFIX 16 contact blocks"; for additional accessories, refer to the chapter „RAFIX 16 special accessories".

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 emergency stop pushbutton, square collar, illuminated
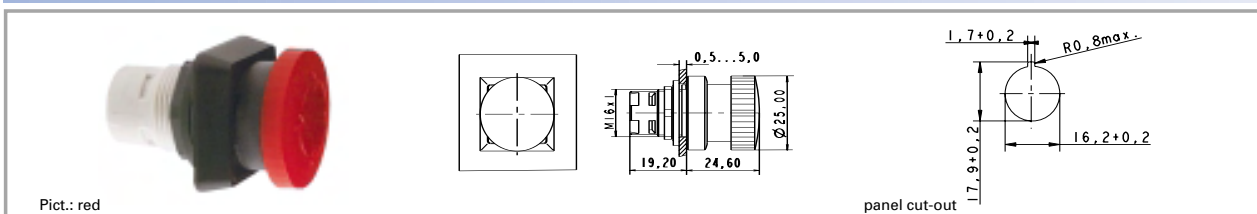
Illuminability	Colour of button	Order no. complete
yes	translucent red	1.30.074.501/0304

Technical data see page 2 - 34

Only use universal contact blocks.

RAFIX 16 emergency stop pushbutton, square collar, dupe-proof
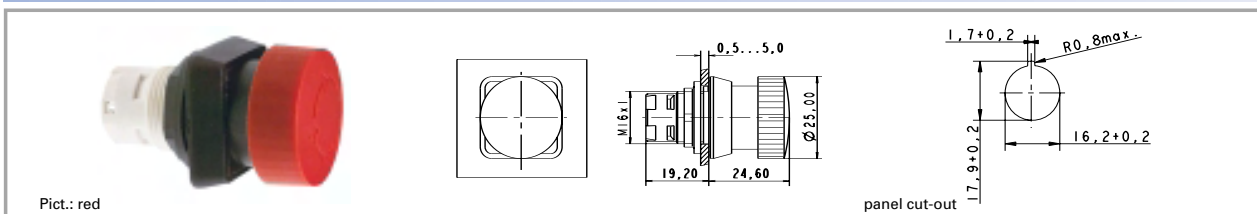
Illuminability	Colour of button	Order no. complete
no	opaque red	1.30.074.101/0301

Technical data see page 2 - 34

Only use universal contact blocks.
The positively driven mechanical arrangement is dupe-proof to EN 418.

Control components

Stock items are marked
by **bold printed** order numbers.

2 - 35

RAFIX 16 emergency stop pushbutton, round collar, illuminated

Pict.: red

panel cut-out

Illuminability	Colour of button	Order no. complete
yes	translucent red	**1.30.074.521/0304**

Technical data see page 2 - 34

Only use universal contact blocks.

2

RAFIX 16 emergency stop pushbutton, round collar, dupe-proof

Pict.: red

panel cut-out

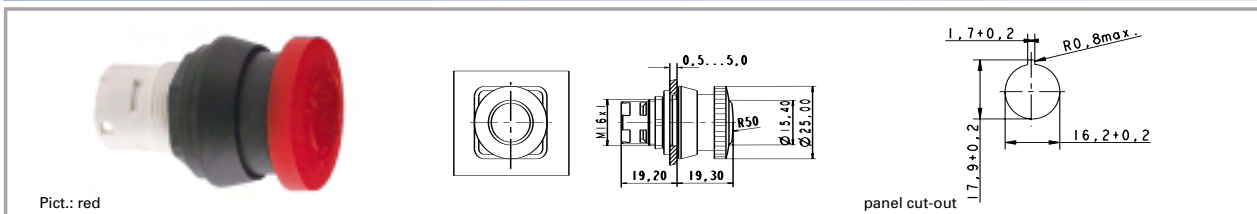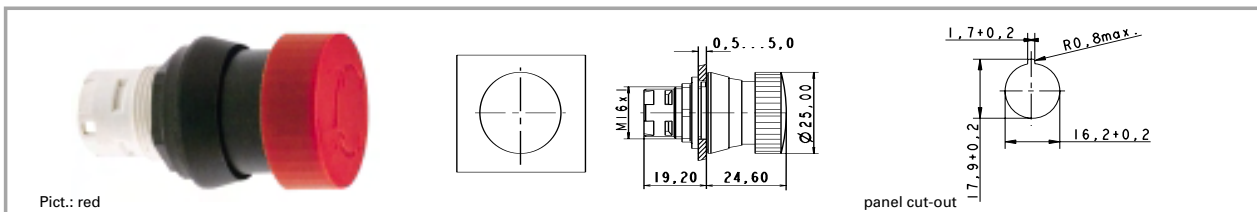| Illuminability	Colour of button	Order no. complete
no	opaque red	**1.30.074.121/0301**

Technical data see page 2 - 34

Only use universal contact blocks.
The positively driven mechanical arrangement is dupe-proof to EN 418.

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 emergency stop pushbutton, square collar, alignable without gaps, illuminated

Pict.: red

panel cut-out

Illuminability	Colour of button	Order no. complete
yes	translucent red	1.30.074.541/0304

Technical data see page 2 - 34

Only use universal contact blocks.

RAFIX 16 emergency stop pushbutton, square collar, alignable without gaps, dupe-proof

Pict.: red

panel cut-out
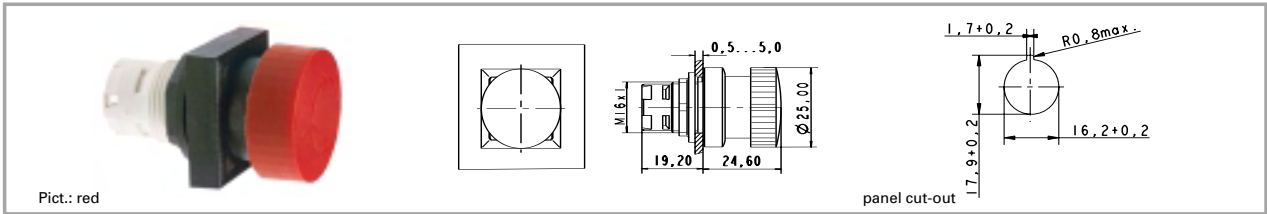
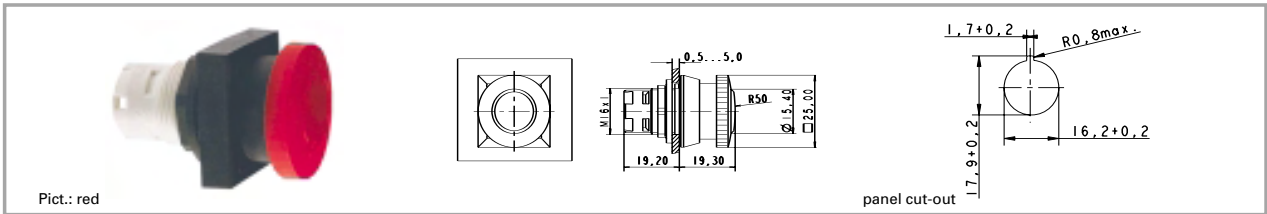| Illuminability	Colour of button	Order no. complete
no	opaque red	1.30.074.141/0301

Technical data see page 2 - 34

Only use universal contact blocks.
The positively driven mechanical arrangement is dupe-proof to EN 418.

2

Control components

RAFIX 16 safety emergency stop pushbutton, round collar, dupe-proof, non-blocking

panel cut-out
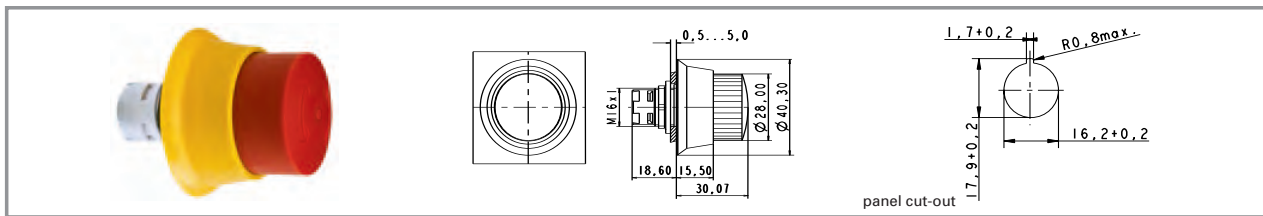
Illuminability	Colour of button	Order no. complete
no	opaque red, collar yellow	**1.30.074.821/0000**

Technical data see page 2 - 34

Only use universal contact blocks.
The positively driven mechanical arrangement is dupe-proof to EN 418.
Special shape prevents blocking: Actuation cannot be interrupted by any jamming objects.

RAFIX 16 safety emergency stop pushbutton, round collar, conical, dupe-proof, non-blocking

panel cut-out

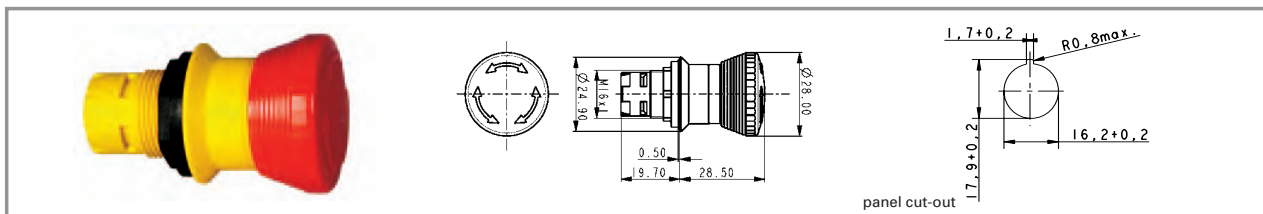| Illuminability	Colour of button	Order no. complete
no	opaque red, collar yellow	**1.30.074.281/0300**

Technical data see page 2 - 34

Only use universal contact blocks.
The positively driven mechanical arrangement is dupe-proof to EN 418.

Control components

2

RAFIX 16

RAFIX 16 toggle switch

Pict.: red

Panel cut-out

2
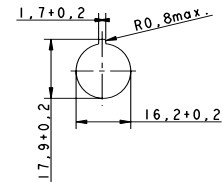
Technical data

General information

Form of lens	toggle
Colour of toggle	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	18.4 mm
Mounting depth	44.7 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Contact function	latching
Contact arrangement	according to contact block
Illuminability	no

Mechanical characteristics

Robustness min.	100 N

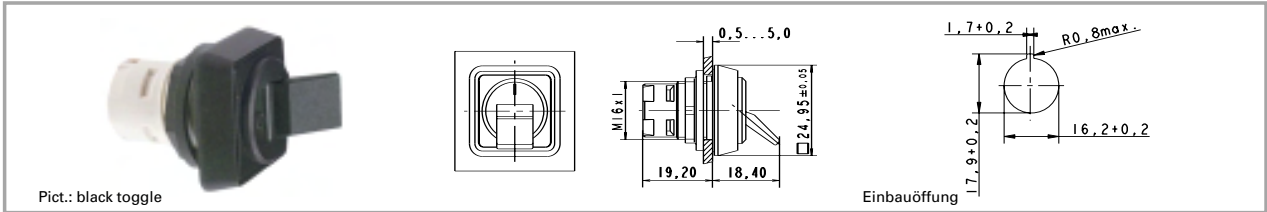**Other specifications**

Degree of protection from front side	IP65
Ambient temp. operating min.	-25 °C
Ambient temp. operating without lamp max.	+70 °C
Ambient temp. operating with lamp max.	+55 °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
Operating life (operations)	300000

Accessories RAFIX 16 toggle switch

Description	Photo	Order no.	Page
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, silver contacts, without lamp socket		**1.20.122.021/0000**	2 - 64
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, gold contacts, without lamp socket		1.20.122.031/0000	2 - 60
Label holder, flush, for square collar		5.07.620.004/0000	2 - 76
Fixing spanner for hexagon nut		**5.58.002.034/0000**	2 - 75

For other contact blocks, refer to the chapter „RAFIX 16 contact blocks"; for additional accessories, refer to the chapter „RAFIX 16 special accessories".

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 toggle switch, square collar

Pict.: black toggle

Einbauöffung

Contact function	Illuminability	Colour of toggle	Order no. complete
latching	no	opaque black	1.30.075.001/0100
latching	no	opaque red	1.30.075.001/0300

Technical data see page 2 - 40

Only use contact blocks with "momentary" contact function.

RAFIX 16 toggle switch, round collar
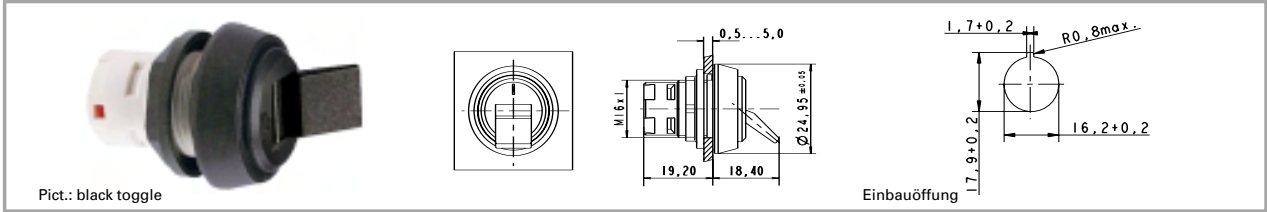
Pict.: black toggle

Einbauöffung

Contact function	Illuminability	Colour of toggle	Order no. complete
latching	no	opaque black	1.30.075.021/0100
latching	no	opaque red	1.30.075.021/0300

Technical data see page 2 - 40

Only use contact blocks with "momentary" contact function.

Control components

RAFIX 16 toggle switch, square collar, alignable without gaps

Pict.: red toggle

Einbauöffung

Contact function	Illuminability	Colour of toggle	Order no. complete
latching	no	opaque black	1.30.075.041/0100
latching	no	opaque red	1.30.075.041/0300

Technical data see page 2 - 40
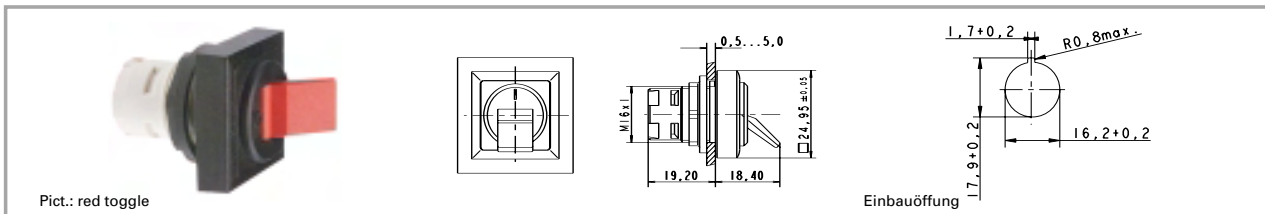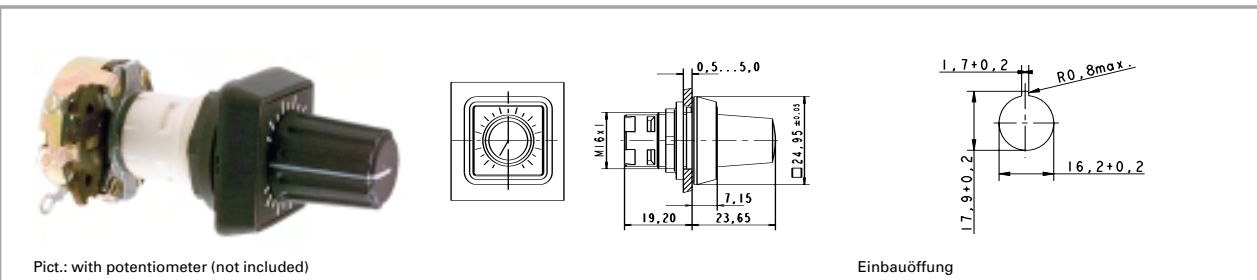
Only use contact blocks with "momentary" contact function.

2

Control components

RAFIX 16 potentiometer drive

Pict.: with potentiometer (not included)   Einbauöffnung

Technical data

General information
Form of lens	handle
Colour of handle	black
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	23.65 mm
Mounting depth	19.2 mm
Mounting hole	16.2 mm

Mechanical design
Mounting	ring nut

Other specifications
Degree of protection from front side	IP65
Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Resistance to constant environment	IEC 600 68-2-3 and 2-30
Resistance at variable environment	IEC 600 68-2-14 and 2-33

Accessories Potentiometer drive

Description	Photo	Order no.	Page
Label holder, flush, for square collar		5.07.620.004/0000	2 - 76
Fixing spanner for hexagon nut		**5.58.002.034/0000**	2 - 75

For additional accessories, refer to the chapter „RAFIX 16 special accessories".

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 potentiometer drive, square collar

Pict.: with potentiometer (not included)

Einbauöffung
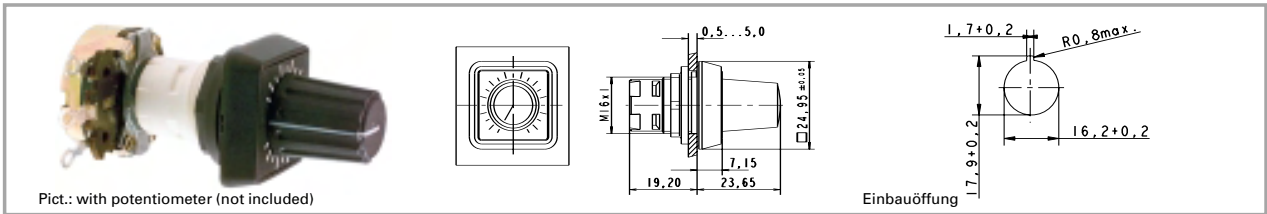
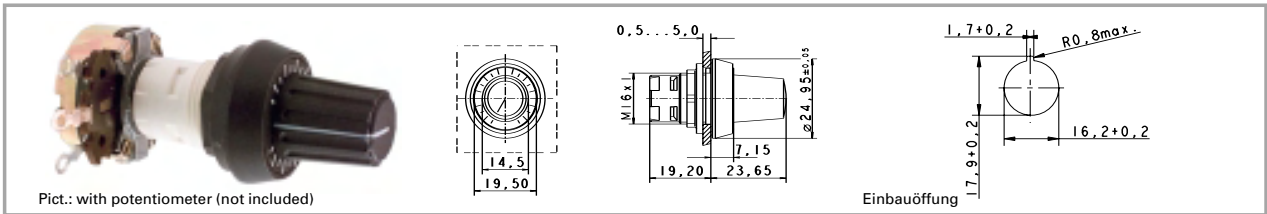| Form of lens	Form of collar	Colour of handle	Order no. complete
handle	square	black	1.30.077.001/0000

Technical data see page 2 - 44

To operate potentiometers with a shaft diameter of 6 mm.
Suitable for potentiometers to DIN 41 450 with a shaft length of 32 mm.
Potentiometer not included.

RAFIX 16 potentiometer drive, round collar

Pict.: with potentiometer (not included)

Einbauöffung

Form of lens	Form of collar	Colour of handle	Order no. complete
handle	round	black	1.30.077.021/0000

Technical data see page 2 - 44

To operate potentiometers with a shaft diameter of 6 mm.
Suitable for potentiometers to DIN 41 450 with a shaft length of 32 mm.
Potentiometer not included.

2

RAFIX
16

Control components

Stock items are marked
by **bold printed** order numbers.

2 - 45

RAFIX 16 potentiometer drive, square collar, alignable without gaps

Einbauöffung

Form of lens	Form of collar	Colour of handle	Order no. complete
handle	square alignable	black	1.30.077.041/0000

Technical data see page 2 - 44

To operate potentiometers with a shaft diameter of 6 mm.
Suitable for potentiometers to DIN 41 450 with a shaft length of 32 mm.
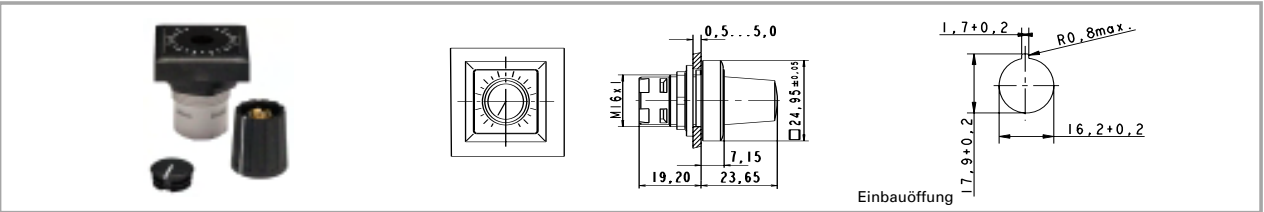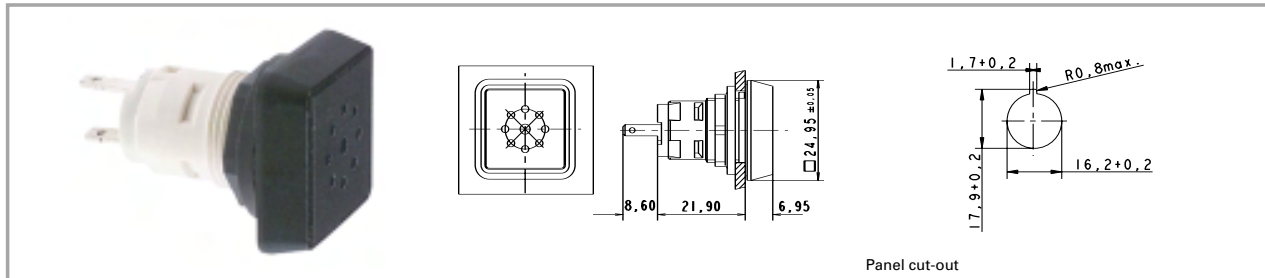Potentiometer not included.

2

RAFIX
16

Control components

RAFIX 16 buzzer

Panel cut-out

2

Technical data

General information
Form of lens	flat lens
Colour of lens	opaque black
Form of collar	see order block
Sound	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	6.95 mm
Mounting depth	30.5 mm
Mounting hole	16.2 mm

Mechanical design
Mounting	ring nut

Acoustic characteristics
Sonic pressure, 1 m distance min.	see order block

Electrical characteristics
Operating voltage DC	24 V
Input current	see order block

Mechanical characteristics
Robustness min.	100 N

Other specifications
Degree of protection from front side	IP65
Ambient temp. operating min.	-25 °C
Ambient temp. operating 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 buzzer

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

For additional accessories, refer to the chapter „RAFIX 16 special accessories".

Control components

RAFIX 16 buzzer, square collar
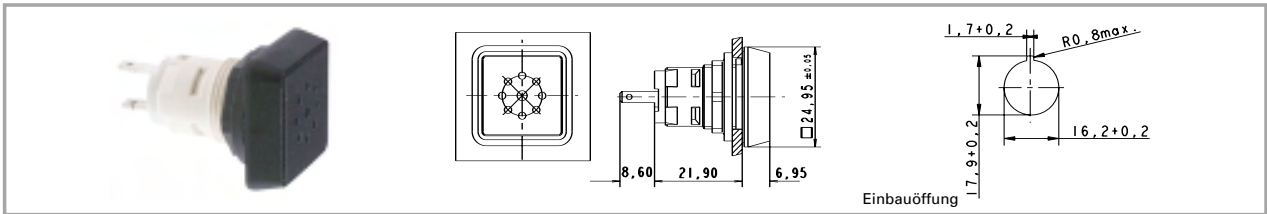
Sound	Operating voltage DC	Input current	Sonic pressure, 1 m distance min.	Order no. complete
continuos beep	24 V	25 mA	70 dB	1.30.078.001/0100

Technical data see page 2 - 48

12 V DC available on request.

RAFIX 16 buzzer, round collar
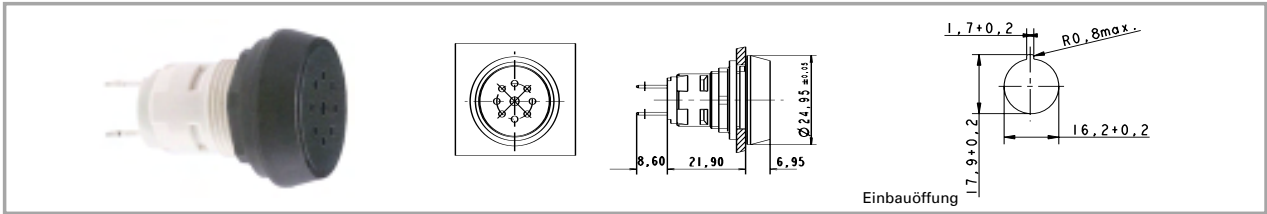
Sound	Operating voltage DC	Input current	Sonic pressure, 1 m distance min.	Order no. complete
continuos beep	24 V	25 mA	70 dB	1.30.078.021/0100

Technical data see page 2 - 48

12 V DC available on request.

2

RAFIX
16

RAFIX 16 buzzer, square collar, alignable without gaps
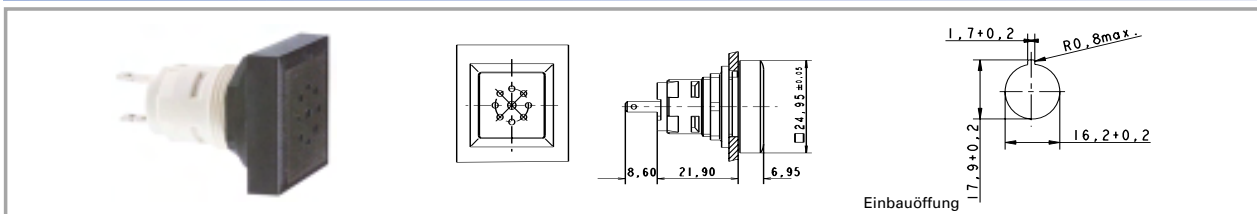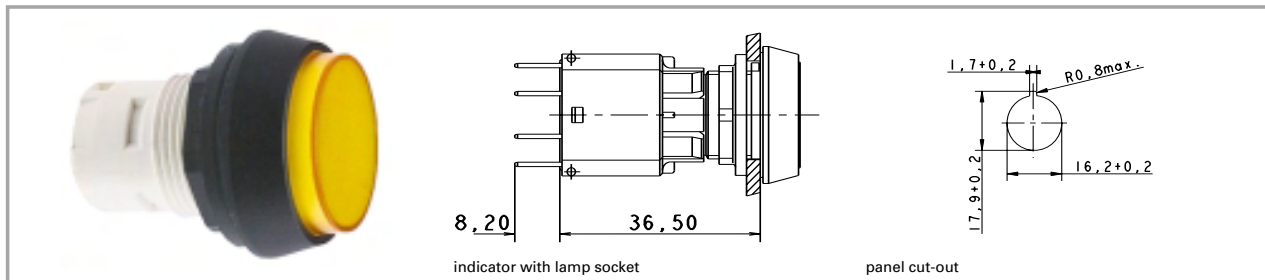
Einbauöffung

Sound	Operating voltage DC	Input current	Sonic pressure, 1 m distance min.	Order no. complete
continuos beep	24 V	25 mA	70 dB	1.30.078.041/0100

Technical data see page 2 - 48

12 V DC available on request.

2

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 signal indicator

| 8,20 | 36,50 | 1,7+0,2 R0,8max. |
| indicator with lamp socket | | panel cut-out |

17,9+0,2   16,2+0,2

2

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	30.5/44.7 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Illuminability	yes

Mechanical characteristics

Robustness min.	100 N

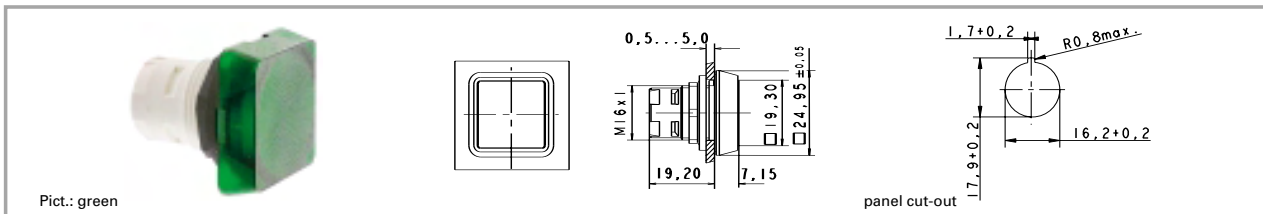**Other specifications**

Degree of protection from front side	IP65
Ambient temp. operating min.	-25 °C
Ambient temp. operating without lamp max.	+70 °C
Ambient temp. operating with lamp max.	+55 °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 signal indicator

Description	Photo	Order no.	Page
RAFIX 16 lamp socket W 2 x 4.6 d		**1.71.212.001/0000**	2 - 67
RAFIX 16 lamp socket W 2 x 4.6 d		**1.71.212.011/0000**	2 - 68
LED W 2 x 4.6d superbright, white, 24 V		**1.90.690.365/0000**	5 - 16
Disassembly tool for LUMOTAST 25, RAFIX 16		**5.05.800.042/0000**	2 - 74 5 - 26
Label holder, flush, for square collar		5.07.620.004/0000	2 - 76
Fixing spanner for hexagon nut		**5.58.002.034/0000**	2 - 75

For suitable LEDs and filament lamps, refer to the chapter „RAFIX 16 lamp sockets"; for additional accessories, refer to the chapter „RAFIX 16 special accessories".

Stock items are marked by **bold printed** order numbers.

Control components

RAFIX 16 signal indicator, square lens

Pict.: green

panel cut-out

Form of lens	Form of collar	Colour of lens	Order no. complete	Order no. single parts	
				Housing	Lens
lens square		transparent colourless	1.65.124.001/1002	**1.65.124.101/0000**	5.49.263.006/1002
lens square		transparent red	1.65.124.001/1306	**1.65.124.101/0000**	5.49.263.006/1306
lens square		transparent yellow	1.65.124.001/1403	**1.65.124.101/0000**	5.49.263.006/1403
lens square		transparent green	1.65.124.001/1505	**1.65.124.101/0000**	5.49.263.006/1505
lens square		transparent blue	1.65.124.001/1607	**1.65.124.101/0000**	5.49.263.006/1607

Technical data see page 2 - 52

Legending can only be made externally on a label holder.

2

RAFIX 16

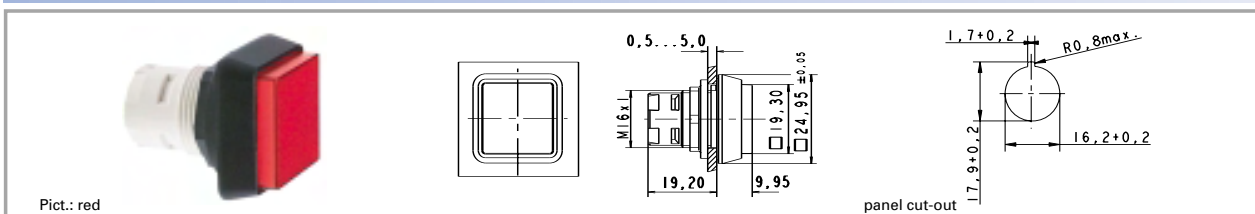## RAFIX 16 signal indicator, square collar, flush lens
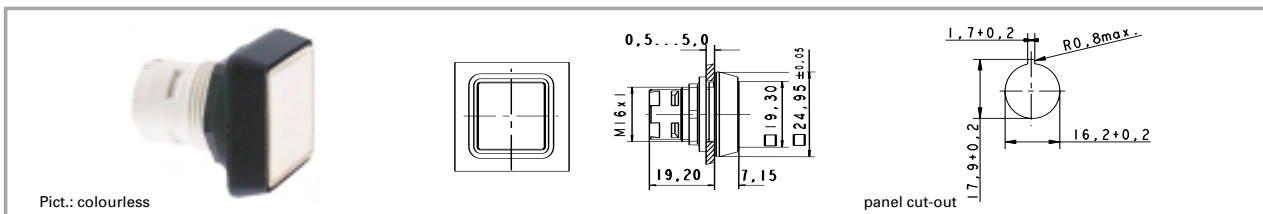
Pict.: colourless

panel cut-out

Form of lens	Form of collar	Colour of lens	Order no. complete	Order no. single parts	
				Housing	Lens
flat lens	square	transparent colourless	1.65.124.301/1002	**1.65.124.401/0000**	**5.49.077.011/1002**
flat lens	square	transparent red	1.65.124.301/1306	**1.65.124.401/0000**	**5.49.077.011/1306**
flat lens	square	transparent yellow	1.65.124.301/1403	**1.65.124.401/0000**	**5.49.077.011/1403**
flat lens	square	transparent green	1.65.124.301/1505	**1.65.124.401/0000**	**5.49.077.011/1505**
flat lens	square	transparent blue	1.65.124.301/1607	**1.65.124.401/0000**	**5.49.077.011/1607**

Technical data see page 2 - 52

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

Control components

Stock items are marked
by **bold printed** order numbers.

RAFIX 16 signal indicator, square collar, protruding lens

Pict.: red

panel cut-out

Form of lens	Form of collar	Colour of lens	Order no. complete	Order no. single parts	
				Housing	**Lens**
protruding lens	square	transparent colourless	1.65.124.351/1002	**1.65.124.451/0000**	5.49.077.012/1002
protruding lens	square	transparent red	1.65.124.351/1306	**1.65.124.451/0000**	5.49.077.012/1306
protruding lens	square	transparent yellow	1.65.124.351/1403	**1.65.124.451/0000**	5.49.077.012/1403
protruding lens	square	transparent green	1.65.124.351/1505	**1.65.124.451/0000**	5.49.077.012/1505
protruding lens	square	transparent blue	1.65.124.351/1607	**1.65.124.451/0000**	5.49.077.012/1607

Technical data see page 2 - 52

Accessories:
Legend insert, blank, use only for transparent lenses: 5.70.635.000/2000
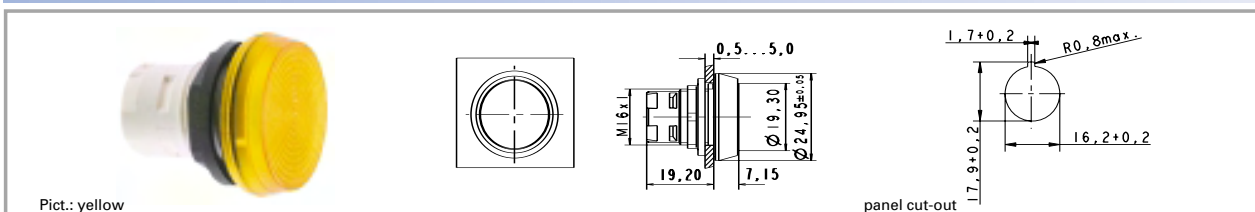
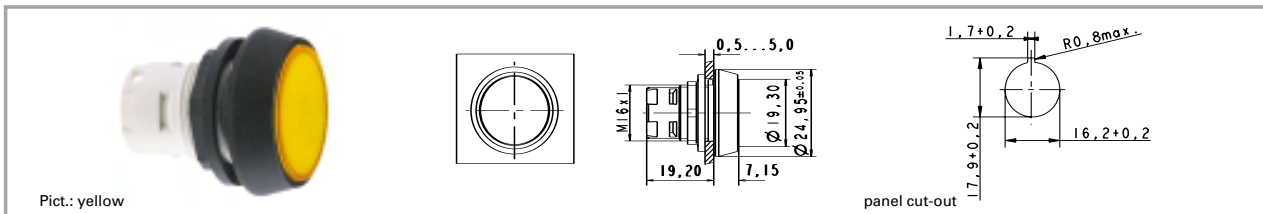## RAFIX 16 signal indicator, round lens

Pict.: yellow

panel cut-out

Form of lens	Form of collar	Colour of lens	Order no. complete	Order no. single parts	
				Housing	**Lens**
lens round	round	transparent colourless	1.65.124.021/1002	**1.65.124.101/0000**	5.49.263.007/1002
lens round	round	transparent red	1.65.124.021/1306	**1.65.124.101/0000**	5.49.263.007/1306
lens round	round	transparent yellow	1.65.124.021/1403	**1.65.124.101/0000**	5.49.263.007/1403
lens round	round	transparent green	1.65.124.021/1505	**1.65.124.101/0000**	5.49.263.007/1505
lens round	round	transparent blue	1.65.124.021/1607	**1.65.124.101/0000**	5.49.263.007/1607

Technical data see page 2 - 52

Accessories:
Legending can only be made externally on a label holder.

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 signal indicator, round collar, flush lens

Pict.: yellow

panel cut-out

Form of lens	Form of collar	Colour of lens	Order no. complete	Order no. single parts	
				Housing	Lens
flat lens	round	transparent colourless	1.65.124.321/1002	1.65.124.421/0000	**5.49.259.017/1002**
flat lens	round	transparent red	1.65.124.321/1306	1.65.124.421/0000	**5.49.259.017/1306**
flat lens	round	transparent yellow	1.65.124.321/1403	1.65.124.421/0000	**5.49.259.017/1403**
flat lens	round	transparent green	1.65.124.321/1505	1.65.124.421/0000	**5.49.259.017/1505**
flat lens	round	transparent blue	1.65.124.321/1607	1.65.124.421/0000	**5.49.259.017/1607**

Technical data see page 2 - 52

Accessories:
Legend insert, blank, use only for transparent lenses: 5.70.637.000/2000

2

## RAFIX 16 signal indicator, round collar, protruding lens
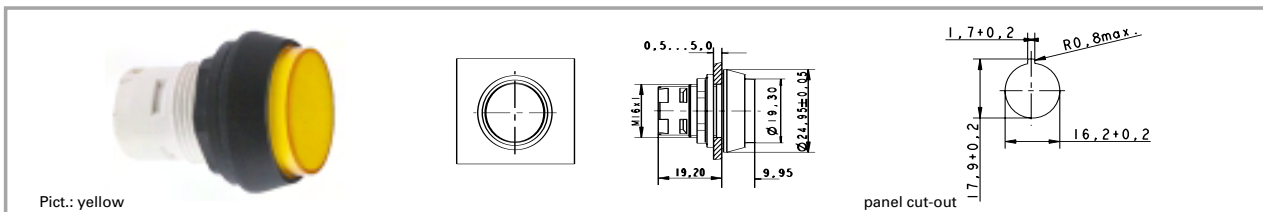
Pict.: yellow

panel cut-out

Form of lens	Form of collar	Colour of lens	Order no. complete	Order no. single parts	
				Housing	Lens
protruding lens	round	transparent colourless	1.65.124.371/1002	1.65.124.471/0000	5.49.259.018/1002
protruding lens	round	transparent red	1.65.124.371/1306	1.65.124.471/0000	5.49.259.018/1306
protruding lens	round	transparent yellow	1.65.124.371/1403	1.65.124.471/0000	5.49.259.018/1403
protruding lens	round	transparent green	1.65.124.371/1505	1.65.124.471/0000	5.49.259.018/1505
protruding lens	round	transparent blue	1.65.124.371/1607	1.65.124.471/0000	5.49.259.018/1607

Technical data see page 2 - 52

Accessories:
Legend insert, blank, use only for transparent lenses: 5.70.637.000/2000

## RAFIX 16 signal indicator, square collar, alignable without gaps, flush lens
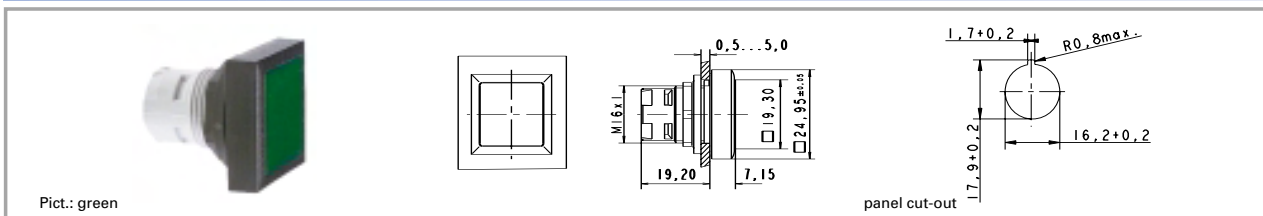
Pict.: green

panel cut-out

Form of lens	Form of collar	Colour of lens	Order no. complete	Order no. single parts	
				Housing	Lens
flat lens	square alignable	transparent colourless	1.65.124.551/1002	1.65.124.651/0000	**5.49.077.011/1002**
flat lens	square alignable	transparent red	1.65.124.551/1306	1.65.124.651/0000	**5.49.077.011/1306**
flat lens	square alignable	transparent yellow	1.65.124.551/1403	1.65.124.651/0000	**5.49.077.011/1403**
flat lens	square alignable	transparent green	1.65.124.551/1505	1.65.124.651/0000	**5.49.077.011/1505**
flat lens	square alignable	transparent blue	1.65.124.551/1607	1.65.124.651/0000	**5.49.077.011/1607**

Technical data see page 2 - 52

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

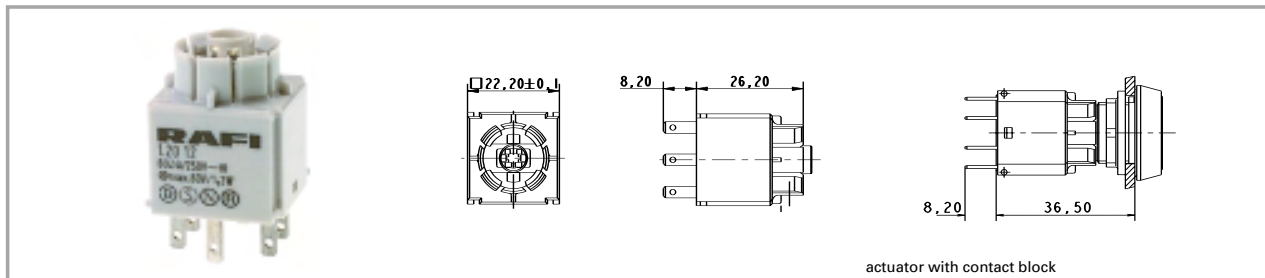## RAFIX 16 signal indicator, square collar, alignable without gaps, protruding lens
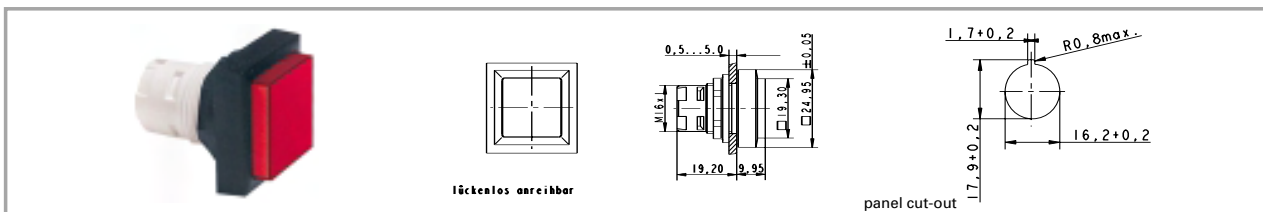
lückenlos anreihbar

panel cut-out

Form of lens	Form of collar	Colour of lens	Order no. complete	Order no. single parts	
				Housing	Lens
protruding lens	square alignable	transparent colourless	1.65.124.501/1002	1.65.124.661/0000	**5.49.077.012/1002**
protruding lens	square alignable	transparent red	1.65.124.501/1306	1.65.124.661/0000	**5.49.077.012/1306**
protruding lens	square alignable	transparent yellow	1.65.124.501/1403	1.65.124.661/0000	**5.49.077.012/1403**
protruding lens	square alignable	transparent green	1.65.124.501/1505	1.65.124.661/0000	**5.49.077.012/1505**
protruding lens	square alignable	transparent blue	1.65.124.501/1607	1.65.124.661/0000	**5.49.077.012/1607**

Technical data see page 2 - 52

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

Stock items are marked by **bold printed** order numbers.

Control components

RAFIX 16 contact blocks with gold contacts

actuator with contact block

Technical data

Dimensions

Length	22.2 mm
Width	22.2 mm
Height	34.4 mm
Mounting depth (with actuator / indicator)	44.7 mm

Mechanical design

Mounting	snap on actuator
Contact system	bridgecontact self cleaning
Contact materials	Au
Contact arrangement	see order block
Contact function	see order block
Lamp socket	see order block
Terminals	quick connector 2.8 x 0.8
Terminal marking	according to DIN 50013, X1 = +, X2 = -
Operating travel	3 mm
Robustness	100 N

Mechanical characteristics

Robustness	acc. IEC 60947-5-5

Electrical characteristics

Rated voltage min.	0.02 V
Rated voltage max. (AC/DC)	42 V
Rated current min.	0.001 A
Rated current max.	0.25 A

Operating life switching element (momentary)	2000000
Contact resistance when new max.	50 mΩ

Other specifications

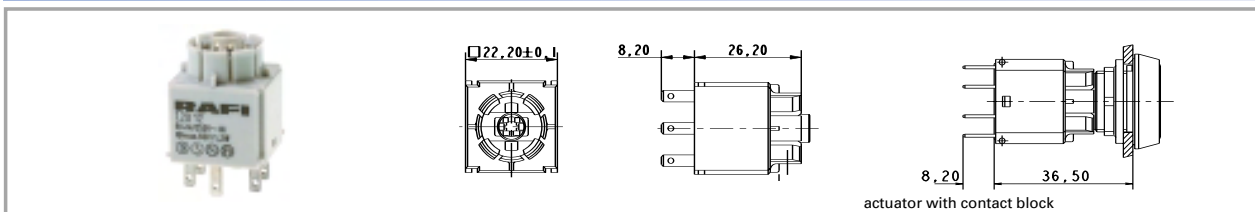|	
Protection class	II
Shock resistance acc. to IEC 60068-2-27	amplitude < 50g, 11ms, half sinusoidal
Ambient temp. operating min.	-25 °C
Ambient temp. operating without lamp max.	+70 °C
Ambient temp. operating with lamp max.	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Colour code	white bottom
Resistance to constant environment	IEC 600 68-2-3 and 2-30
Resistance at variable environment	IEC 600 68-2-14 and 2-33
Mechanical operating life latching (operations)	see order block
Resistance to vibrations acc. to IEC 60068-2-6	10 g at 20 ... 500 Hz

Accessories RAFIX 16 contact blocks with gold contacts

Description	Photo	Order no.	Page
Filament lamp, W 2 x 4.6d base, 24 - 30 V		**1.90.120.005/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 60 V		**1.90.120.009/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 48 V		**1.90.120.010/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 24 V		**1.90.120.011/0000**	5 - 4

Stock items are marked by **bold printed** order numbers.

Control components

Accessories RAFIX 16 contact blocks with gold contacts

Description	Photo	Order no.	Page
Filament lamp, W 2 x 4.6d base, 12 V		**1.90.120.012/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 6 V		**1.90.120.013/0000**	5 - 4
LED W 2 x 4.6d superbright, red, 24 V		**1.90.690.361/0000**	5 - 16
LED W 2 x 4.6d superbright, green, 24 V		**1.90.690.362/0000**	5 - 16
LED W 2 x 4.6d superbright, yellow, 24 V		**1.90.690.363/0000**	5 - 16
LED W 2 x 4.6d superbright, blue, 24 V		**1.90.690.364/0000**	5 - 16
LED W 2 x 4.6d superbright, white, 24 V		**1.90.690.365/0000**	5 - 16
Multipole connector		**5.05.510.421/0000**	2 - 71
PCB plug-in socket, 10 contacts (universal application)		**5.05.510.644/0000**	2 - 70
Female quick-connect terminal DIN 46340-B 2.8-1-MS		5.37.540.024/8622	2 - 71
Plug distributor		5.37.540.029/6000	2 - 72
Protection against contact		5.55.103.105/0100	2 - 72

2

**RAFIX
16**

Control components

Stock items are marked
by **bold printed** order numbers.

RAFIX 16 standard contact block, gold contacts, with lamp socket

actuator with contact block

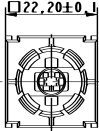| Contact function	Contact arrangement	Lamp socket	Rated voltage max. (AC/DC)	Rated current max.	Order no. complete
momentary	1 NC + 1 NO	W 2 x 4.6d	42 V	0.25 A	1.20.122.011/0000
momentary	2 NO	W 2 x 4.6d	42 V	0.25 A	**1.20.122.012/0000**
momentary	2 NC	W 2 x 4.6d	42 V	0.25 A	1.20.122.013/0000
latching	1 NC + 1 NO	W 2 x 4.6d	42 V	0.25 A	1.20.122.051/0000
latching	2 NO	W 2 x 4.6d	42 V	0.25 A	1.20.122.052/0000

Technical data see page 2 - 58

Standard contact blocks have one common contact chamber and one actuator plunger.
Contact blocks with "latching" contact function are used as switches.
When combined with pushbuttons and mushroom actuators, the switching position is visible, releasing is effected by actuating again.

RAFIX 16 standard contact block, gold contacts, without lamp socket

actuator with contact block

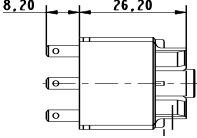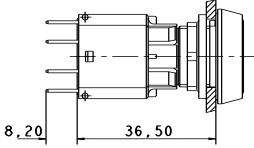| Contact function	Contact arrangement	Lamp socket	Rated voltage max. (AC/DC)	Rated current max.	Order no. complete
momentary	1 NC + 1 NO		42 V	0.25 A	1.20.122.031/0000
momentary	2 NO		42 V	0.25 A	1.20.122.032/0000
momentary	2 NC		42 V	0.25 A	1.20.122.033/0000
latching	1 NC + 1 NO		42 V	0.25 A	1.20.122.071/0000
latching	2 NO		42 V	0.25 A	1.20.122.072/0000

Technical data see page 2 - 58

Standard contact blocks have one common contact chamber and one actuator plunger.
Contact blocks with "latching" contact function are used as switches.
When combined with pushbuttons and mushroom actuators, the switching position is visible, releasing is effected by actuating again.
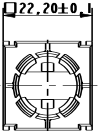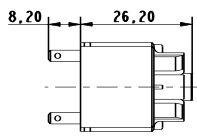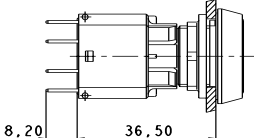
Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 universal contact block, gold contacts, with lamp socket

actuator with contact block

Contact function	Contact arrangement	Lamp socket	Rated voltage max. (AC/DC)	Rated current max.	Order no. complete
momentary	1 NC + 1 NO	W 2 x 4.6d	42 V	0.25 A	1.20.123.011/0000
momentary	1 NC	W 2 x 4.6d	42 V	0.25 A	1.20.123.012/0000
momentary	1 NO	W 2 x 4.6d	42 V	0.25 A	1.20.123.013/0000
momentary	2 NC	W 2 x 4.6d	42 V	0.25 A	1.20.123.014/0000
momentary	2 NO	W 2 x 4.6d	42 V	0.25 A	1.20.123.015/0000

Technical data see page 2 - 58

Universal contact blocks have two separate contact chambers and two actuator plungers for alternating actuation directions.
Two different polarities can be switched. The NC contacts are positive opening contacts to IEC 60947-5-1.

RAFIX 16 universal contact block, gold contacts, without lamp socket

actuator with contact block

Contact function	Contact arrangement	Lamp socket	Rated voltage max. (AC/DC)	Rated current max.	Order no. complete
momentary	1 NC + 1 NO		42 V	0.25 A	**1.20.123.031/0000**
momentary	1 NC		42 V	0.25 A	**1.20.123.032/0000**
momentary	1 NO		42 V	0.25 A	**1.20.123.033/0000**
momentary	2 NC		42 V	0.25 A	**1.20.123.034/0000**
momentary	2 NO		42 V	0.25 A	**1.20.123.035/0000**

Technical data see page 2 - 58

Universal contact blocks have two separate contact chambers and two actuator plungers for alternating actuation directions.
Two different polarities can be switched. The NC contacts are positive opening contacts to IEC 60947-5-1.
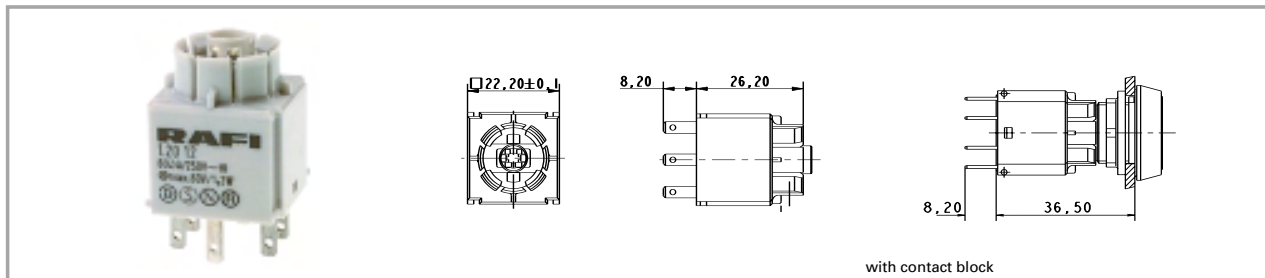
2

RAFIX 16

Control components

Stock items are marked by **bold printed** order numbers.

RAFIX 16 contact blocks with silver contacts

with contact block

Technical data

Dimensions

Length	22.2 mm
Width	22.2 mm
Height	34.4 mm
Mounting depth (with actuator / indicator)	44.7 mm

Mechanical design

Mounting	snap on actuator
Contact system	bridgecontact self cleaning
Contact materials	Ag
Contact arrangement	see order block
Contact function	see order block
Lamp socket	see order block
Terminals	quick connector 2.8 x 0.8
Terminal marking	according to DIN 50013, X1 = +, X2 = -
Operating travel	3 mm
Robustness	100 N

Mechanical characteristics

Robustness	acc. IEC 60947-5-5

Electrical characteristics

Rated insulation voltage acc. to VDE 0110, AC	250 V
Rated insulation voltage acc. to VDE 0110, DC	300 V
Ohmic rated current I_R	6 A
Rated motor current $I_{M\,nenn}$	4 A
Application category acc. to VDE 0660 Teil 200	AC 15B 300 V
Application category acc. to VDE 0660 Teil 200	DC 13Q 300 V
Rated insulation voltage U_I , AC	250 V
Rated insulation voltage U_I , DC	300 V
Rated voltage U_E / Rated current I_E , AC	250 V/1,5 A, 120 V/3,0 A V
Rated voltage U_E / Rated current I_E ,DAC	250 V/0,27 A, 125 V/0,55 A, 60 V/1 A, 24 V/2 A V

Thermic rated current I_{the} , AC	5 A
Thermic rated current I_{the} , DC	2.5 A
Operating life switching element AC	100000 at 6A, 800000 at 2A
Operating life switching element DC	250000 at 220 V/0.2 A, 1000000 at 24 V/2 A
Rated power DC	10 x I_E
Rated power AC	1.1 x I_E
Contact resistance when new max.	20 mΩ

Other specifications

Protection class	II
Approvals	ENEC 25 T 70 (55), UL, CSA
Corresponding to EU directive N 72/73	yes
Shock resistance acc. to IEC 60068-2-27	amplitude < 50g, 11ms, half sinusoidal
Ambient temp. operating min.	-25 °C
Ambient temp. operating without lamp max.	+70 °C
Ambient temp. operating with lamp max.	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Colour code	grey bottom
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
Mechanical operating life latching (operations)	100000
Resistance to vibrations acc. to IEC 60068-2-6	10 g at 20 ... 500 Hz
Flame class acc. to UL 94	V 0
Hot wire ignition acc. to IEC 60695-2-1	yes

Stock items are marked by **bold printed** order numbers.

Control components

Accessories RAFIX 16 contact blocks with silver contacts

Description	Photo	Order no.	Page
Filament lamp, W 2 x 4.6d base, 24 - 30 V		**1.90.120.005/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 60 V		**1.90.120.009/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 48 V		**1.90.120.010/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 24 V		**1.90.120.011/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 12 V		**1.90.120.012/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 6 V		**1.90.120.013/0000**	5 - 4
LED W 2 x 4.6d superbright, red, 24 V		**1.90.690.361/0000**	5 - 16
LED W 2 x 4.6d superbright, green, 24 V		**1.90.690.362/0000**	5 - 16
LED W 2 x 4.6d superbright, yellow, 24 V		**1.90.690.363/0000**	5 - 16
LED W 2 x 4.6d superbright, blue, 24 V		**1.90.690.364/0000**	5 - 16
LED W 2 x 4.6d superbright, white, 24 V		**1.90.690.365/0000**	5 - 16
Multipole connector		**5.05.510.421/0000**	2 - 71
PCB plug-in socket, 10 contacts (universal application)		**5.05.510.644/0000**	2 - 70
Female quick-connect terminal DIN 46340-B 2.8-1-MS		5.37.540.024/8622	2 - 71
Plug distributor		5.37.540.029/6000	2 - 72
Protection against contact		5.55.103.105/0100	2 - 72

2

RAFIX 16

RAFIX 16 standard contact block, silver contacts, with lamp socket

actuator with contact block

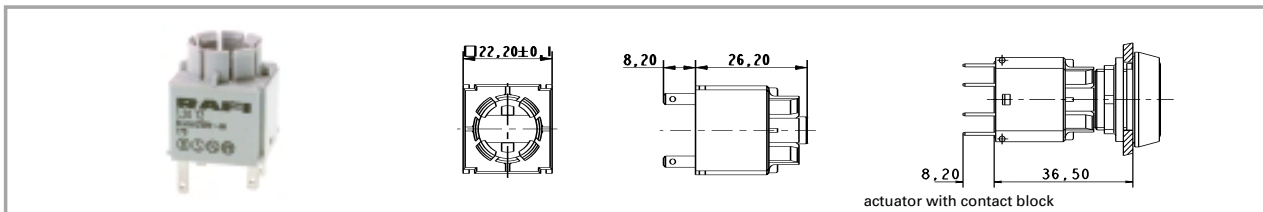| Contact function	Contact arrangement	Lamp socket	Rated insulation voltage U$_I$, AC	Ohmic rated current I$_R$	Order no. complete
momentary	1 NC + 1 NO	W 2 x 4.6d	250 V	6 A	**1.20.122.001/0000**
momentary	2 NO	W 2 x 4.6d	250 V	6 A	**1.20.122.002/0000**
momentary	2 NC	W 2 x 4.6d	250 V	6 A	1.20.122.003/0000
latching	1 NC + 1 NO	W 2 x 4.6d	250 V	6 A	**1.20.122.041/0000**
latching	2 NO	W 2 x 4.6d	250 V	6 A	**1.20.122.042/0000**

Technical data see page 2 - 62

Standard contact blocks have one common contact chamber and one actuator plunger.
Contact blocks with „latching" contact function are used as switches. When combined with pushbuttons and mushroom actuators, the switching position is visible, releasing is effected by actuating again.

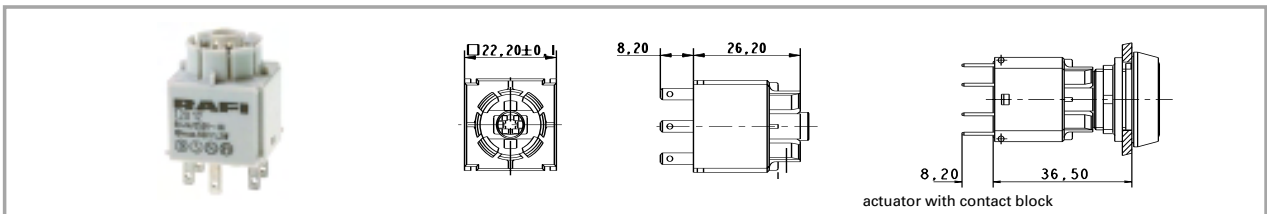## RAFIX 16 standard contact block, silver contacts, without lamp socket

actuator with contact block

Contact function	Contact arrangement	Lamp socket	Rated insulation voltage U$_I$, AC	Ohmic rated current I$_R$	Order no. complete
momentary	1 NC + 1 NO		250 V	6 A	**1.20.122.021/0000**
momentary	2 NO		250 V	6 A	**1.20.122.022/0000**
momentary	2 NC		250 V	6 A	**1.20.122.023/0000**
latching	1 NC + 1 NO		250 V	6 A	**1.20.122.061/0000**
latching	2 NO		250 V	6 A	**1.20.122.062/0000**

Technical data see page 2 - 62

Standard contact blocks have one common contact chamber and one actuator plunger.
Contact blocks with „latching" contact function are used as switches. When combined with pushbuttons and mushroom actuators, the switching position is visible, releasing is effected by actuating again.

Stock items are marked by **bold printed** order numbers.

Control components

RAFIX 16 universal contact block, silver contacts, with lamp socket

actuator with contact block

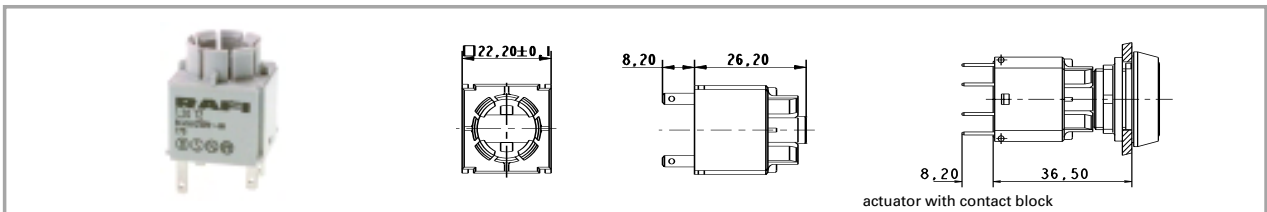| Contact function	Contact arrangement	Lamp socket	Rated insulation voltage U_I, AC	Ohmic rated current I_R	Order no. complete
momentary	1 NC + 1 NO	W 2 x 4.6d	250 V	6 A	**1.20.123.001/0000**
momentary	1 NC	W 2 x 4.6d	250 V	6 A	1.20.123.002/0000
momentary	1 NO	W 2 x 4.6d	250 V	6 A	**1.20.123.003/0000**
momentary	2 NC	W 2 x 4.6d	250 V	6 A	**1.20.123.004/0000**
momentary	2 NO	W 2 x 4.6d	250 V	6 A	1.20.123.005/0000

Technical data see page 2 - 62

Universal contact blocks have two separate contact chambers and two actuator plungers. This makes it possible to switch two different polarities. The NC contacts are positive opening contacts to IEC 60947-5-1.

RAFIX 16 universal contact block, silver contacts, without lamp socket

actuator with contact block

Contact function	Contact arrangement	Lamp socket	Rated insulation voltage U_I, AC	Ohmic rated current I_R	Order no. complete
momentary	1 NC + 1 NO		250 V	6 A	**1.20.123.021/0000**
momentary	1 NC		250 V	6 A	**1.20.123.022/0000**
momentary	1 NO		250 V	6 A	**1.20.123.023/0000**
momentary	2 NC		250 V	6 A	**1.20.123.024/0000**
momentary	2 NO		250 V	6 A	**1.20.123.025/0000**

Technical data see page 2 - 62

Universal contact blocks have two separate contact chambers and two actuator plungers. This makes it possible to switch two different polarities. The NC contacts are positive opening contacts to IEC 60947-5-1.

Control components

Stock items are marked by **bold printed** order numbers.

RAFIX 16 lamp socket

indicator with lamp socket

2

Technical data

Dimensions
Length   see order block
Width   see order block
Height   see order block
Mounting depth   see order block

Mechanical design
Mounting   see order block
Lamp socket   wedge-base W 2 x 4.6d
Terminals   quick connector 2.8 x 0.8
Terminal marking   X1 = anode, X2 = cathode
Robustness   100 N

Electrical characteristics
Rated voltage max.   60 V
Rated power max.   1.2 W

Other specifications
Approvals   ENEC 25 T 70 (55), UL, CSA

Shock resistance acc. to
IEC 60068-2-27   amplitude < 50g, D 11ms, half sinusoidal

Ambient temp. operating
min.   -25 °C
Ambient temp. operating
with lamp max.   +55 °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

Flame class acc. to UL 94   V 0
Hot wire ignition acc.
to IEC 60695-2-1   yes
Resistance to vibrations
acc. to IEC 60068-2-6   10 g at 20 ... 500 Hz

## Accessories RAFIX 16 lamp socket

Description	Photo	Order no.	Page
Filament lamp, W 2 x 4.6d base, 24 - 30 V		**1.90.120.005/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 60 V		**1.90.120.009/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 48 V		**1.90.120.010/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 24 V		**1.90.120.011/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 12 V		**1.90.120.012/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 6 V		**1.90.120.013/0000**	5 - 4
LED W 2 x 4.6d superbright, red, 24 V		**1.90.690.361/0000**	5 - 16

Stock items are marked
by **bold printed** order numbers.

Control components

Accessories RAFIX 16 lamp socket

| Description	Photo	Order no.	Page
LED W 2 x 4.6d superbright, green, 24 V		**1.90.690.362/0000**	5 - 16
LED W 2 x 4.6d superbright, yellow, 24 V		**1.90.690.363/0000**	5 - 16
LED W 2 x 4.6d superbright, blue, 24 V		**1.90.690.364/0000**	5 - 16
LED W 2 x 4.6d superbright, white, 24 V		**1.90.690.365/0000**	5 - 16
PCB plug-in socket, 2 contacts (lamp socket)		5.05.510.649/0000	2 - 70
Protection against contact		5.55.103.105/0100	2 - 72

RAFIX 16 lamp socket W 2 x 4.6 d
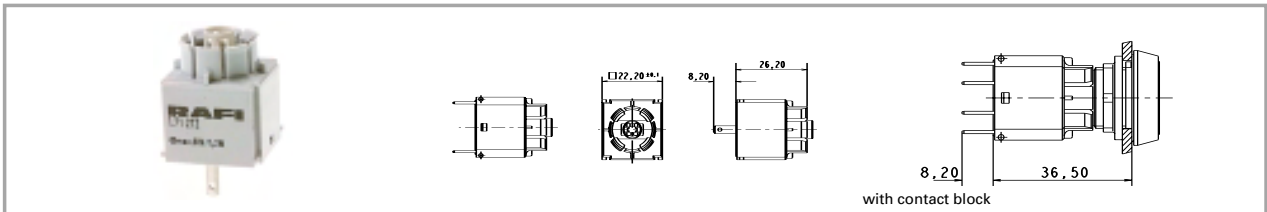
□22,20 +x,1   8,20   26,20   8,20   36,50

with contact block

Rated voltage max.	Rated power max.	Lamp socket	Mounting	Mounting depth	Order no. complete
60 V	1.2 W	wedge-base W 2 x 4.6d	click on signal indicator	44.7 mm	**1.71.212.001/0000**

Technical data see page 2 - 66

A notch on the lamp socket identifies the cathode side.

RAFIX 16 lamp socket W 2 x 4.6 d
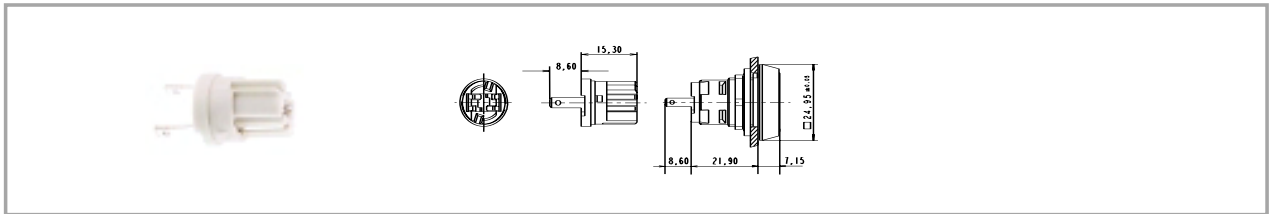
Rated voltage max.	Rated power max.	Lamp socket	Mounting	Mounting depth	Order no. complete
60 V	1.2 W	wedge-base W 2 x 4.6d	snap into signal indicator	30.5 mm	**1.71.212.011/0000**

Technical data see page 2 - 66

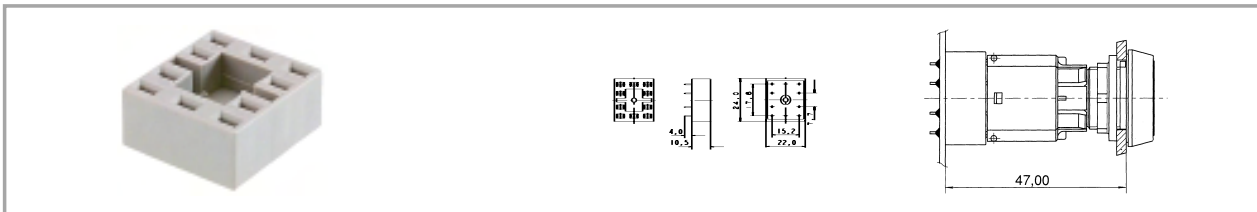A notch on the lamp socket identifies the cathode side.

Control components

RAFIX 16 special accessories

PCB plug-in socket

Short text	Feature 1	Feature 2	Order no.
PCB plug-in socket, 10 contacts (universal application)	22 mm	24 mm	**5.05.510.644/0000**
PCB plug-in socket, 6 contacts (2 NO, lamp socket)	22 mm	24 mm	**5.05.510.645/0000**
PCB plug-in socket, 6 contacts (1 NC, 1 NO, lamp socket)	22 mm	24 mm	**5.05.510.646/0000**
PCB plug-in socket, 6 contacts (2 NC, lamp socket)	22 mm	24 mm	5.05.510.647/0000
PCB plug-in socket, 4 contacts (2 NC)	22 mm	24 mm	5.05.510.648/0000
PCB plug-in socket, 2 contacts (lamp socket)	22 mm	24 mm	5.05.510.649/0000

For soldering onto PCBs. The PCB carrying the plug-in sockets is plugged onto the contact blocks/lamp sockets. Additional fixing of the PCB to the contact block is not required. Solder terminals for PCB 3.5 mm long, for 1.3 mm hole.

Control components

Multipole connector
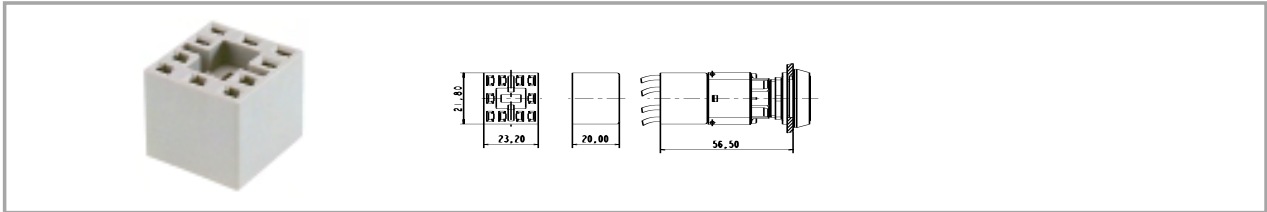
Short text	Feature 1	Feature 2	Order no.
Multipole connector	21.8 mm	23.2 mm	**5.05.510.421/0000**

Makes it possible to simultaneously connect all terminals of a contact block. Can be fitted with 2.8 mm female quick-connect terminals.

Female quick-connect terminal DIN 46340-B 2.8-1-MS

Short text	Feature 1	Feature 2	Order no.
Female quick-connect terminal DIN 46340-B 2.8-1-MS			5.37.540.024/8622

With latching detent for mating with a multipole connector.

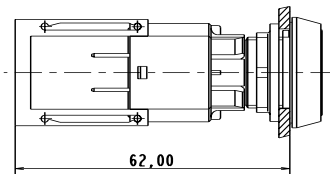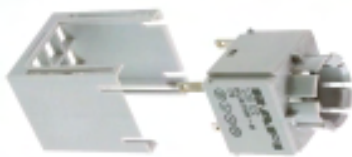Control components

Stock items are marked
by **bold printed** order numbers.

Plug distributor

Short text	Feature 1	Feature 2	Order no.
Plug distributor			5.37.540.029/6000

For mounting on the quick-connect terminals of contact blocks. The double number of contacts facilitates loop-through.

Protection against contact

62,00

Short text	Feature 1	Feature 2	Order no.
Protection against contact			5.55.103.105/0100

Assembly sequence: Snap the protection against contact onto the contact block, connect wires to quick-connect terminals of contact block, pull protection against contact over the terminals; this ensures finger-proof condition to VBG 4.

Stock items are marked
by **bold printed** order numbers.

Control components

Protection against contact

Short text	Feature 1	Feature 2	Order no.
Protection against contact (VBG 4 with lamp socket 1.71.212.011)			5.55.103.134/0700

You can use the protection against contact to cover the terminals of the lamp socket 1.71.212.011/0000 so that they are finger-proof to VBG 4.
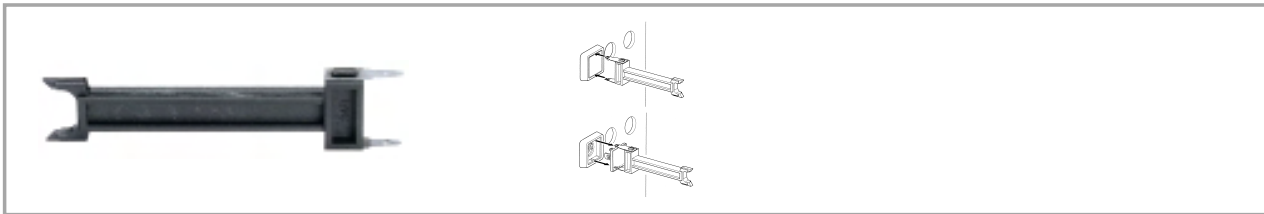
Series capacitor

Short text	Feature 1	Feature 2	Order no.
Series capacitor, 125 V/48 V~, 50 Hz, 25 mA			5.03.771.333/0000
Series capacitor, 230 V/48 V~, 50 Hz, 25 mA			5.03.771.334/0000

Fully encapsulated, with a 2.8 x 0.8 mm quick-connect tab in a touch-proof arrangement.

2

RAFIX
16

Disassembly tool

Short text	Feature 1	Feature 2	Order no.
Disassembly tool for LUMOTAST 25, RAFIX 16			**5.05.800.042/0000**

For replacing pushbutton and signal indicator lenses.

2

Protective cover, suitable for lead seal, for pushbuttons, alignable without gaps

Short text	Feature 1	Feature 2	Order no.
Protective cover, suitable for lead seal			5.05.800.055/0000

To prevent inadvertent operation. The legend is easily visible even when the cap is closed.
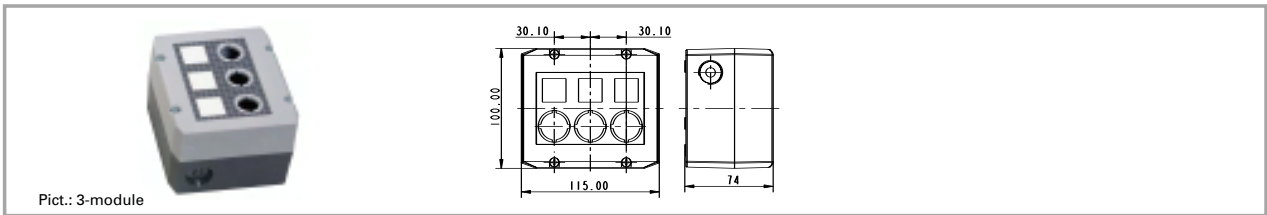
Stock items are marked
by **bold printed** order numbers.

Control components

Fixing spanner for hexagon nut

Short text	Feature 1	Feature 2	Order no.
Fixing spanner for hexagon nut			**5.58.002.034/0000**

RAFIX 16 insulating housing

Pict.: 3-module

Short text	Feature 1	Feature 2	Order no.
RAFIX 16 insulating housing, 1-module, light grey/dark grey	55 mm	100 mm	1.20.810.001/0000
RAFIX 16 insulating housing, 1-module, yellow/yellow	55 mm	100 mm	1.20.810.002/0000
RAFIX 16 insulating housing, 2-module, light grey/dark grey	115 mm	100 mm	1.20.820.001/0000
RAFIX 16 insulating housing, 3-module, light grey/dark grey	115 mm	100 mm	1.20.830.001/0000
RAFIX 16 insulating housing, 4-module, light grey/dark grey	145 mm	100 mm	1.20.840.001/0000
Label sheet for housings			5.40.451.283/0000

• Attractive plastic housing to accommodate up to 4 control components
• 2 cable entries prepared: 1-,2-,3-part: M20x1,5, 4-part: M25x1,5
• Degree of protection IP 65 to DIN
• All grey housings with overlay, legending possible with legend inserts
• Wall mounting with 2 screws through housing bottom prepared
• Dimensions x (feature 1) x 100 mm x 74 mm
• Accessories: 50 pre-perforated legend inserts on a DIN A4 sheet for printing with a PC printer

RAFIX 16 label holder, flush, for square collar
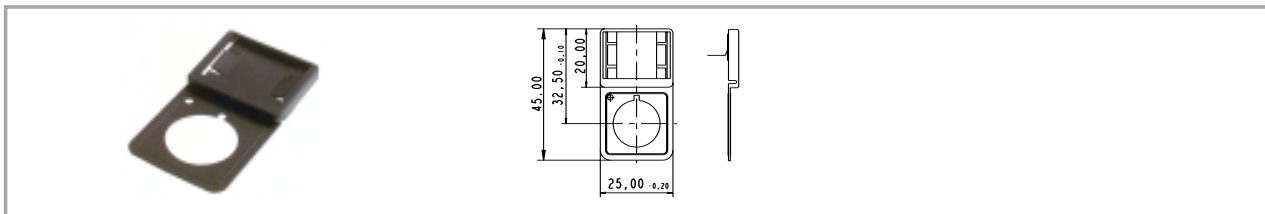
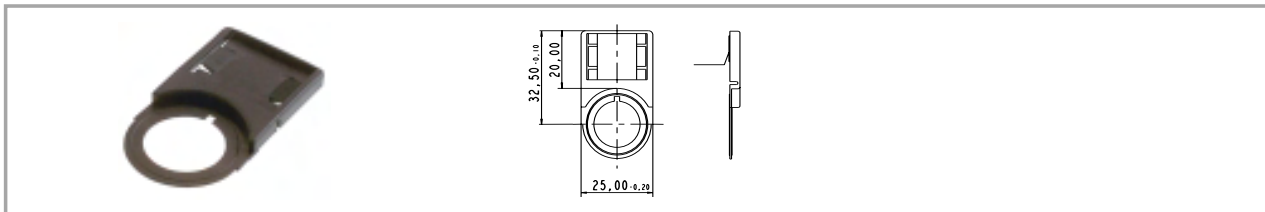| Short text	Feature 1	Feature 2	Order no.
Label holder, flush, for square collar			5.07.620.004/0000

Accessories:
Legend label 23 x 16 for label holder, without legend: 5.73.111.000/0000

Legending available on request.

RAFIX 16 label holder, flush, for round collar

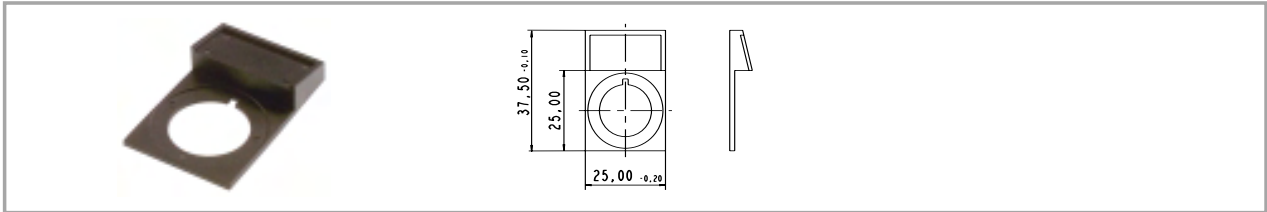| Short text	Feature 1	Feature 2	Order no.
Label holder, flush, for round collar			5.07.620.006/0000

Accessories:
Legend label 23 x 16 for label holder, without legend: 5.73.111.000/0000

Legending available on request.

Stock items are marked
by **bold printed** order numbers.

Control components

RAFIX 16 label holder, protruding, for square flush fitting collar

Short text	Feature 1	Feature 2	Order no.
Label holder, protruding, for square flush fitting collar			5.07.620.007/0000

Accessories:
Legend label 23 x 16, without legend: 5.73.112.000/0000

Legending available on request.

Emergency stop label, yellow, round 60 mm, PVC adhesive

Short text	Feature 1	Feature 2	Order no.
Emergency stop label, yellow, round 60 mm, PVC adhesive, without legend	60 mm		**5.76.204.400/0400**
Emergency stop label, yellow, round 60 mm, PVC adhesive, with legend "NOT-AUS"	60 mm		**5.76.204.401/0400**
Emergency stop label, yellow, round 60 mm, PVC adhesive, with legend "EMERGENCY STOP"	60 mm		**5.76.204.403/0400**

2

RAFIX 16

Control components

Stock items are marked
by **bold printed** order numbers.