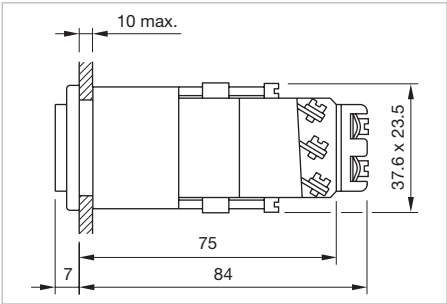


# 02 Flush design

## Pushbutton, IP 40



Product can differ from the current configuration.



Dimensions [mm]

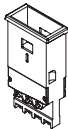
### Equipment consisting of (schematic overview)



**Front bezel** *page 13*



**Lens** *page 11*



**Actuator**



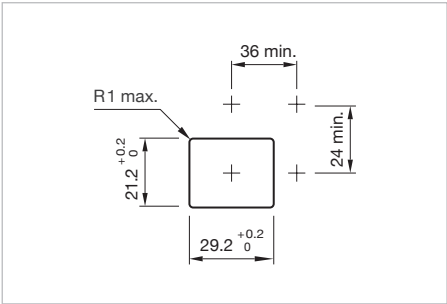
**Fixing bezel**

Each article number listed below includes all the black components shown in the 3D-drawing.


*To obtain a complete unit, please select the red components from the pages shown.*

### Additional Information

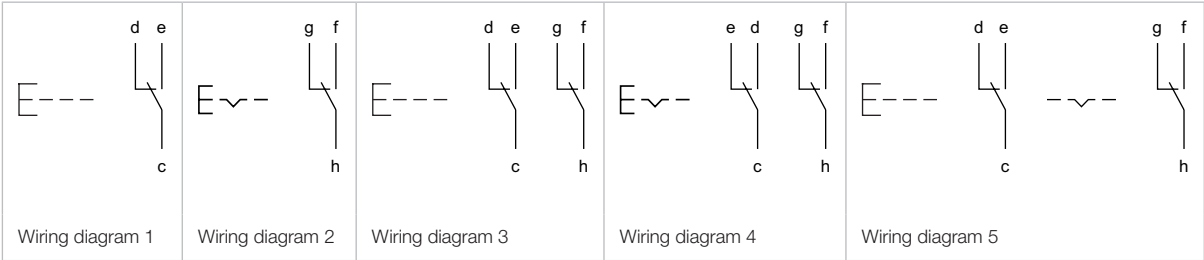
- For front dimension 24 x 36 mm



Mounting cut-outs [mm]


Contacts	Switching action	Terminal	Part No.	Wiring diagram	Weight
	A	Screw	<b>02-611.011</b>	1	0.045 kg
	C	Screw	<b>02-613.011</b>	2	0.045 kg
2 C	A	Screw	<b>02-612.011</b>	3	0.050 kg
	C	Screw	<b>02-614.011</b>	4	0.050 kg
	B - C	Screw	<b>02-615.011</b>	5	0.050 kg

Contacts: C = Changeover  
Switching action: B = Momentary, C = Maintain



**Front****Lens****Additional Information**

- Material plastic

Product attribute	Dimension	Lens	Part No.	Weight
 <b>Lens</b>				
illuminative, not suitable for film insert, ripped	17.5 x 25.4 mm	smoked translucent	<b>02-901.1</b>	0.004 kg
		red translucent	<b>02-901.2</b>	0.004 kg
		orange translucent	<b>02-901.3</b>	0.004 kg
		yellow translucent	<b>02-901.4</b>	0.004 kg
		green translucent	<b>02-901.5</b>	0.004 kg
		blue translucent	<b>02-901.6</b>	0.004 kg
		colourless transparent	<b>02-901.7</b>	0.004 kg
		white translucent	<b>02-901.9</b>	0.004 kg
illuminative, use holder for film insert	17.5 x 25.4 mm	red translucent	<b>02-902.2</b>	0.004 kg
		green translucent	<b>02-902.5</b>	0.004 kg
		colourless transparent	<b>02-902.7</b>	0.004 kg
non-illuminative	17.5 x 25.4 mm	black opaque	<b>02-901.0</b>	0.004 kg
		grey opaque	<b>02-901.8</b>	0.004 kg


**Keylock front bezel****Additional Information**

- Keylock number YB1
- Further lock numbers see «Technical data»

Product attribute	Dimension	Material	Colour	Part No.	Weight
 <b>Keylock front bezel</b>					
	17.5 x 25.5 mm	Plastic	grey	<b>02-980.1</b>	0.002 kg
for keylock switch Part No. 02-695	17.5 x 25.5 mm	Plastic	grey	<b>02-982.1</b>	0.002 kg

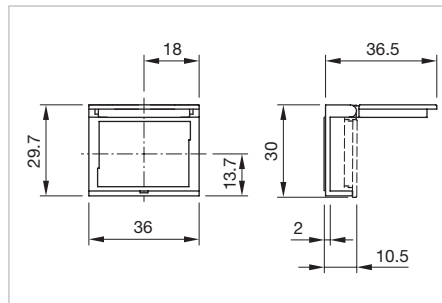
**Front bezel raised****Additional Information**

- Lens only removable with lens remover  
Part No. 98-969


Front bezel	Part No.	Weight
 <b>Front bezel raised, Front dimension 24 x 36 mm</b>		
Pastic black	<b>02-967.0</b>	0.001 kg

**Protective cover, IP 65****Additional Information**

- Please note that bigger minimum distances are necessary
- Use only flush front bezel
- Hinged, with means for sealing
- Front panel thickness reduces by 2 mm



Dimensions [mm]


Product attribute	Material	Optics	Dimension	Part No.	Weight
 <b>Protective cover</b>					
for button with mounting cut-out 21.2 x 29.2 mm	Plastic	transparent	36 x 29.7 mm	<b>22-925</b>	0.004 kg

# 02 Accessories

## Spare key

Additional Information

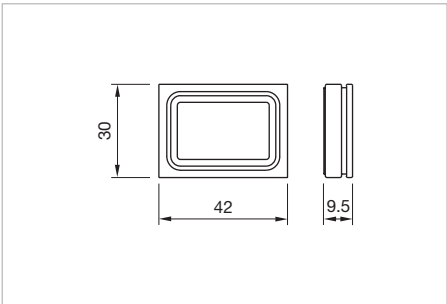
- Keylock number YB1

Part No.	Weight
<div></div> <div>Spare key</div>	
02-989.001	0.001 kg

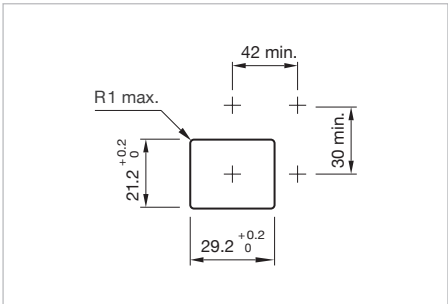
## Front protective cap, IP 65

Additional Information


- Use only flush front bezel
- Three-part



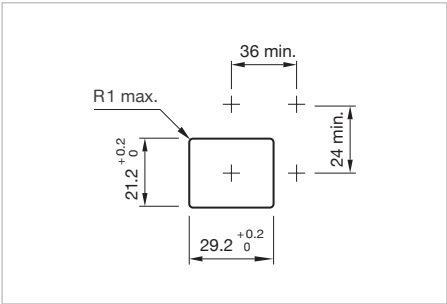
Dimensions [mm]



Mounting cut-outs [mm]

Material	Colour	Optics	Temperature	Part No.	Weight
<div></div> <div>Front protective cap</div>					
PVC	colourless	transparent	-20 ... +60 °	02-924	0.005 kg
			-25 ... +85 °	02-935	0.005 kg

Blind plug



Mounting cut-outs [mm]


Dimension	Material	Colour	Part No.	Weight
 Blind plug	Plastic			
		black	02-949.0	0.004 kg
		grey	02-949.8	0.004 kg

Backside

Terminal cover

Additional Information

- For all connection methods
- Not suitable for indicators with built-in series resistor with lamp

Part No.	Weight
<div><div>Terminal cover</div></div>	
02-929	0.005 kg

## Actuator with snap-action switching element

### Switching system

1 or 2 self-cleaning, snap-action switching elements.  
1 or 2 double-throw contacts.

### Material

#### Material of contact

Standard version:  
Silver ( $U > 20V$ )  
Special versions: (on request)  
Gold/Silver 700Au/300Ag ( $U < 50V$ )  
Silver/Palladium 700Ag/300Pd ( $U > 20V$ ) for atmospheres containing sulphur

#### Switch housing

Thermosetting material, heat-resistant

#### Indicator housing with reduced length

Polyamide

### Mechanical characteristics

#### Terminals

Screw terminal (with self-lifting clip):  
max. wire cross-section,  $2 \times 2.5 \text{ mm}^2$   
max. wire cross-section of stranded cable,  $2 \times 1.5 \text{ mm}^2$

#### Tightening torque

For fixing sleeve max. 20Ncm  
For screw terminal max. 80Ncm

#### Actuating force

6N ... 12N

#### Actuating travel

5mm

#### Mechanical lifetime

Momentary action 2 million operations  
Maintained action 1 million operations

### Electrical characteristics

#### Standards

The switches comply with the "Standards for low-voltage switching devices" IEC 60947-5-1

#### Rated insulation voltage

400VAC/440VDC, as per IEC 60947-5-1

### Conventional free air thermal current

10A

The maximum current in continuous operation and at ambient temperature not exceeding the quoted maximum values.

### Switch rating

400VAC, 10A,  $\cos\phi$  0.95, as per IEC 60947-5-1  
250VAC, 10A, as per UL

### Electric strength

2500VAC, 50Hz, 1 min. between all terminals and earth, as per IEC 60947-5-1

### Environmental conditions

#### Storage temperature

$-30^\circ\text{C} \dots +85^\circ\text{C}$

#### Service temperature

$-25^\circ\text{C} \dots +55^\circ\text{C}$

For indicators and illuminated pushbuttons mounted as a block, make sure the heat can escape freely.

#### Protection degree

Front side IP 40, IP 65 with spray cover, as per IEC 60529

#### Shock resistance

15g for 11 ms, as per IEC 60068-2-27

#### Vibration resistance

10g at 10 ... 2000Hz, amplitude 1.0mm, as per IEC 60068-2-6

### Approvals

#### Approbations

CB (IEC 60947-5-1)  
CSA  
Germanischer Lloyd  
UL

#### Declaration of conformity

CE