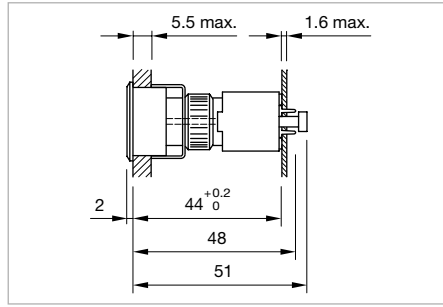


# 71 Flush design

## Indicator square, IP 65



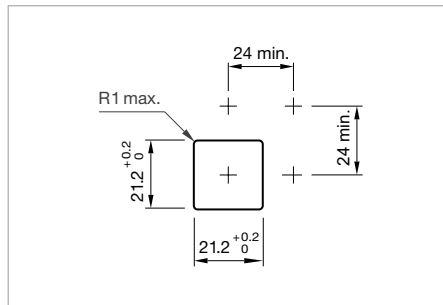
Product can differ from the current configuration.



Dimensions [mm]








### Additional Information

- For front dimension 24 x 24 mm
- Pitch of the front plate mounting cut-outs must agree with the printed circuit board holes Ø 3.5




Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)

	<b>Lens</b>	page 715
	<b>Single-LED</b>	page 730
	<b>Actuator</b>	
	<b>Front bezel set</b>	page 720
	<b>Fixing nut</b>	
	<b>Lamp element</b>	page 727
	<b>Interlocking pin</b>	








Each Part Number listed below includes all the black components shown in the 3D-drawing.

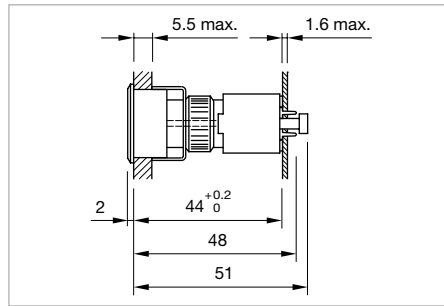
*To obtain a complete unit, please select the red components from the pages shown.*

Part No.	Weight
 <b>Indicator actuator square</b>	
71-600.0	0.005 kg

## Indicator rectangular, IP 65

### Equipment consisting of (schematic overview)

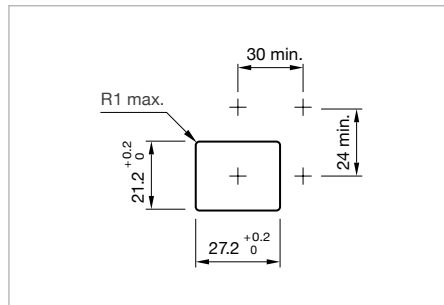
-  **Lens** page 715
-  **Single-LED** page 730
-  **Actuator**
-  **Front bezel set** page 720
-  **Fixing nut**
-  **Lamp element** page 727
-  **Interlocking pin**



Dimensions [mm]



Product can differ from the current configuration.



Mounting cut-outs [mm]

### Additional Information

- For front dimension 24 x 30 mm
- Pitch of the front plate mounting cut-outs must agree with the printed circuit board holes  $\varnothing 3.5$

Each Part 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 page s shown.

Part No.	Weight
 <p><b>Indicator actuator rectangular</b></p>	
71-600.0	0.005 kg

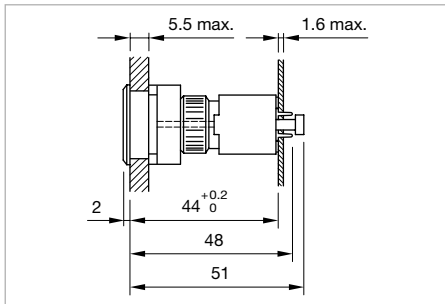
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# 71 Flush design

## Indicator round, IP 65



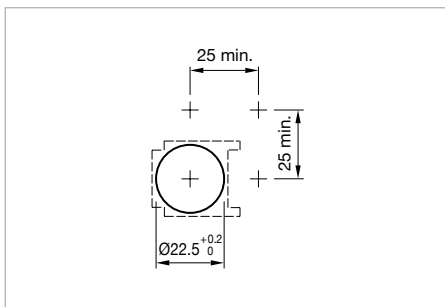
Product can differ from the current configuration.



Dimensions [mm]

### Additional Information

- For front dimension  $\varnothing 25$  mm
- Pitch of the front plate mounting cut-outs must agree with the printed circuit board holes  $\varnothing 3.5$



Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)

	<b>Lens</b>	page 715
	<b>Single-LED</b>	page 730
	<b>Actuator</b>	
	<b>Front bezel set</b>	page 720
	<b>Fixing nut</b>	
	<b>Lamp element</b>	page 727
	<b>Interlocking pin</b>	

Each Part 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.*

Part No.	Weight
<p><b>Indicator actuator round</b></p>	
71-600.0	0.005 kg

Front

Lens plastic

Additional Information

- Lens surface mat
- Lens profile flat




Product attribute	Dimension	Lens	Part No.	Weight
 <p><b>Lens plastic, flush design</b></p>				
illuminative	18 x 18 mm	smoked transparent	<b>61-9671.1</b>	0.002 kg
		red transparent	<b>61-9671.2</b>	0.002 kg
		orange transparent	<b>61-9671.3</b>	0.002 kg
		yellow transparent	<b>61-9671.4</b>	0.002 kg
		green transparent	<b>61-9671.5</b>	0.002 kg
		blue transparent	<b>61-9671.6</b>	0.002 kg
		colourless transparent	<b>61-9671.7</b>	0.002 kg
non-illuminative	18 x 18 mm	black opaque	<b>61-9771.0</b>	0.002 kg
		grey opaque	<b>61-9771.8</b>	0.002 kg
		white translucent	<b>61-9771.9</b>	0.002 kg
 <p><b>Lens plastic, flush design</b></p>				
illuminative	18 x 24 mm	smoked transparent	<b>61-9681.1</b>	0.002 kg
		red transparent	<b>61-9681.2</b>	0.002 kg
		orange transparent	<b>61-9681.3</b>	0.002 kg
		yellow transparent	<b>61-9681.4</b>	0.002 kg
		green transparent	<b>61-9681.5</b>	0.002 kg
		blue transparent	<b>61-9681.6</b>	0.002 kg
		colourless transparent	<b>61-9681.7</b>	0.002 kg
non-illuminative	18 x 24 mm	black opaque	<b>61-9781.0</b>	0.002 kg
		grey opaque	<b>61-9781.8</b>	0.002 kg
		white translucent	<b>61-9781.9</b>	0.002 kg
 <p><b>Lens plastic, flush design</b></p>				
illuminative	Ø 19.7 mm	smoked transparent	<b>61-9642.1</b>	0.002 kg
		red transparent	<b>61-9642.2</b>	0.002 kg
		orange transparent	<b>61-9642.3</b>	0.002 kg
		yellow transparent	<b>61-9642.4</b>	0.002 kg
		green transparent	<b>61-9642.5</b>	0.002 kg
		blue transparent	<b>61-9642.6</b>	0.002 kg
		colourless transparent	<b>61-9642.7</b>	0.002 kg

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## Lens plastic with symbol

### Additional Information


- Illuminative
- Lens surface mat
- Lens profile flat
- The silvery coat is being applied on the lens (screen print) with an additional protective lacquer. Further information see «Technical data»

Dimension	Lens	Symbol	Part No.	Weight
 <p><b>Lens plastic with symbol</b></p>				
Ø 19.7 mm	red transparent	Ring	<b>61-9643.201</b>	0.002 kg
	orange transparent	Ring	<b>61-9643.301</b>	0.002 kg
	yellow transparent	Ring	<b>61-9643.401</b>	0.002 kg
	green transparent	Ring	<b>61-9643.501</b>	0.002 kg
	blue transparent	Ring	<b>61-9643.601</b>	0.002 kg
	colourless transparent	Ring	<b>61-9643.701</b>	0.002 kg
 <p><b>Lens plastic with symbol</b></p>				
Ø 19.7 mm	red transparent	ON/OFF	<b>61-9643.202</b>	0.002 kg
	green transparent	ON/OFF	<b>61-9643.502</b>	0.002 kg
	blue transparent	ON/OFF	<b>61-9643.602</b>	0.002 kg
	colourless transparent	ON/OFF	<b>61-9643.702</b>	0.002 kg
 <p><b>Lens plastic with symbol</b></p>				
Ø 19.7 mm	red transparent	Stand by	<b>61-9643.203</b>	0.002 kg
	green transparent	Stand by	<b>61-9643.503</b>	0.002 kg
	blue transparent	Stand by	<b>61-9643.603</b>	0.002 kg
	colourless transparent	Stand by	<b>61-9643.703</b>	0.002 kg

**Lens metal with dot**

**Additional Information**



- Illuminative
- Lens surface mat
- Lens profile flat
- The colour of anodized aluminium parts can vary due to technical production reasons

Dimension	Lens	Part No.	Weight
 <p><b>Lens metal with dot</b></p>			
Ø 19.7 mm	Aluminium black anodized	<b>61-9841.0A</b>	0.002 kg
	Aluminium red anodized	<b>61-9841.2A</b>	0.002 kg
	Aluminium gold anodized	<b>61-9841.4A</b>	0.002 kg
	Aluminium olive-green anodized	<b>61-9841.5A</b>	0.002 kg
	Aluminium blue anodized	<b>61-9841.6A</b>	0.002 kg
	Aluminium natural anodized	<b>61-9841.8A</b>	0.002 kg

**Lens metal**

**Additional Information**

- Non-illuminative
- Lens surface mat
- The colour of anodized aluminium parts can vary due to technical production reasons




Product attribute	Dimension	Lens	Part No.	Weight
 <p><b>Lens metal</b></p>				
flat	Ø 19.7 mm	Aluminium black anodized	<b>61-9841.0</b>	0.002 kg
		Aluminium red anodized	<b>61-9841.2</b>	0.002 kg
		Aluminium gold anodized	<b>61-9841.4</b>	0.002 kg
		Aluminium olive-green anodized	<b>61-9841.5</b>	0.002 kg
		Aluminium blue anodized	<b>61-9841.6</b>	0.002 kg
		Aluminium natural anodized	<b>61-9841.8</b>	0.002 kg
 <p><b>Lens metal</b></p>				
convex (domed)	Ø 19.7 mm	Aluminium black anodized	<b>61-9842.0</b>	0.003 kg
		Aluminium red anodized	<b>61-9842.2</b>	0.003 kg
		Aluminium olive-green anodized	<b>61-9842.5</b>	0.003 kg
		Aluminium blue anodized	<b>61-9842.6</b>	0.003 kg
		Aluminium natural anodized	<b>61-9842.8</b>	0.003 kg

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## Front bezel set pushbutton

### Additional Information



- The dimensions of the mounting cut-outs are shown in the product details
- Pitch of the front plate mounting cut-outs must agree with the printed circuit board holes Ø 3.5
- The colour of anodized aluminium parts can vary due to technical production reasons

Mounting cut-out	Front bezel	Part No.	Weight
 <p><b>Front bezel set for indicator and illuminated pushbutton, flush design, Front dimension 24 x 24 mm</b></p>			
21 x 21 mm	Plastic black	<b>61-9930.0</b>	0.008 kg
	Plastic silver	<b>61-9930.4</b>	0.008 kg
 <p><b>Front bezel set for indicator and illuminated pushbutton, flush design, Front dimension 24 x 30 mm</b></p>			
21 x 27 mm	Plastic black	<b>61-9931.0</b>	0.008 kg
	Plastic silver	<b>61-9931.4</b>	0.008 kg
 <p><b>Front bezel set for indicator and illuminated pushbutton, flush design, Front dimension Ø 25 mm</b></p>			
Ø 22.5 mm	Aluminium natural anodized	<b>61-9933.0</b>	0.006 kg
	Aluminium black anodized	<b>61-9933.1</b>	0.006 kg
	Aluminium red anodized	<b>61-9933.2</b>	0.006 kg
	Aluminium gold anodized	<b>61-9933.4</b>	0.006 kg
	Aluminium olive-green anodized	<b>61-9933.5</b>	0.006 kg
	Aluminium blue anodized	<b>61-9933.6</b>	0.006 kg
	Plastic black	<b>61-9933.10</b>	0.008 kg

**Front bezel set selector switch**

**Additional Information**



- The dimensions of the mounting cut-outs are shown in the product details
- Pitch of the front plate mounting cut-outs must agree with the printed circuit board holes Ø 3.5
- With the round front bezel sets Ø 25 mm the anti-twist ring is part of the sales-package
- The colour of anodized aluminium parts can vary due to technical production reasons

Mounting cut-out	Front bezel	Part No.	Weight
 <p><b>Front bezel set for selector switch, flush design, Front dimension 24 x 24 mm</b></p>			
21 x 21 mm	Plastic black	<b>61-9936.0</b>	0.007 kg
 <p><b>Front bezel set for selector switch, flush design, Front dimension Ø 25 mm</b></p>			
Ø 22.5 mm	Aluminium natural anodized	<b>61-9932.0</b>	0.006 kg
	Aluminium black anodized	<b>61-9932.1</b>	0.006 kg
	Aluminium red anodized	<b>61-9932.2</b>	0.006 kg
	Aluminium gold anodized	<b>61-9932.4</b>	0.006 kg
	Aluminium olive-green anodized	<b>61-9932.5</b>	0.006 kg
	Aluminium blue anodized	<b>61-9932.6</b>	0.006 kg
	Plastic black	<b>61-9932.10</b>	0.008 kg

**Front protective cap, IP 68**

**Additional Information**

- When using the front protection cover for push buttons the external sealing in the front bezel set and the silicone bellows in the actuator are to be removed

Product attribute	Material	Colour	Optics	Part No.	Weight
 <p><b>Front protective cap</b></p>					
for front bezel set 24 x 30 mm, flush design	Silicone	colourless	transparent	<b>61-9927.2</b>	0.001 kg
 <p><b>Front protective cap</b></p>					
for front bezel set Ø 25 mm, flush design	Silicone	colourless	transparent	<b>84-9103.7</b>	0.001 kg

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Rear side

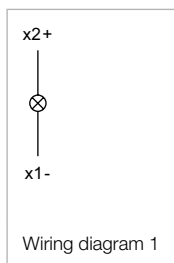
Lamp element

Additional Information

- Including locking pin

Terminal	Part No.	Component layout	Wiring diagram	Weight
 <p><b>Lamp element</b></p>				
PCB	<b>71-670.006</b>	1	1	0.005 kg


The component layouts you will find from page 733



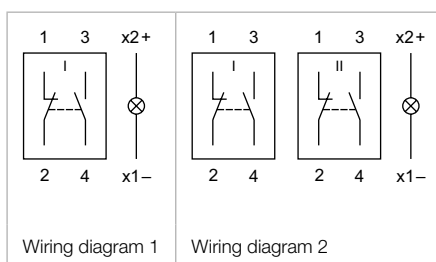
Switching element pushbutton

Additional Information

- Including locking pin

Contacts	Terminal	Part No.	Component layout	Wiring diagram	Weight
 <p><b>Switching element for illuminated pushbutton and mushroom-head pushbutton</b></p>					
1 NC + 1 NO	PCB	<b>71-671.026</b>	1	1	0.005 kg
2 NC + 2 NO	PCB	<b>71-672.026</b>	1	2	0.005 kg

Contacts: NC = Normally closed, NO = Normally open  
The component layouts you will find from page 733



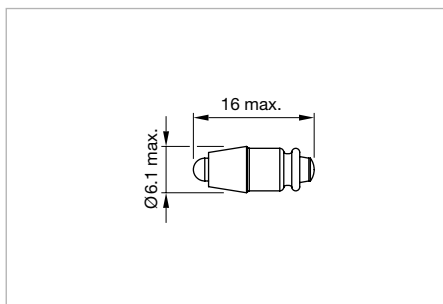
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## Illumination

### Single-LED, T1 3/4 MG

#### Additional Information


- Luminous intensity data of the LEDs on direct voltage
- Electrical and optical data are measured at 25 °C
- The specified versions are built with a protection diode (half wave rectifier) in series and the LED
- When using AC/DC types with AC operation, slight flickering can occur
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination
- For supply voltages above 48V, a voltage reduction element (external series resistor or transformer) must be used



Dimensions [mm]


LED colour	Operating voltage	Operation current	Lumi. intensity	Dom. wavelength	Part No.	Weight
 <p><b>Single-LED</b></p>						
red	6 VDC +10 %	15 mA ±15 %	350 mcd	630 nm	<b>10-2J06.3142</b>	0.002 kg
	12 VAC/DC +10 %	7/14 mA ±15 %	330 mcd	630 nm	<b>10-2J09.1062</b>	0.002 kg
	24 VAC/DC +10 %	7/14 mA ±15 %	330 mcd	630 nm	<b>10-2J12.1062</b>	0.002 kg
	28 VAC/DC +10 %	7/14 mA ±15 %	330 mcd	630 nm	<b>10-2J13.1062</b>	0.002 kg
	48 VAC/DC +10 %	4/8 mA ±15 %	200 mcd	630 nm	<b>10-2J19.1042</b>	0.002 kg
yellow	6 VDC +10 %	15 mA ±15 %	300 mcd	587 nm	<b>10-2J06.3144</b>	0.002 kg
	12 VAC/DC +10 %	7/14 mA ±15 %	280 mcd	587 nm	<b>10-2J09.1064</b>	0.002 kg
	24 VAC/DC +10 %	7/14 mA ±15 %	280 mcd	587 nm	<b>10-2J12.1064</b>	0.002 kg
	28 VAC/DC +10 %	7/14 mA ±15 %	280 mcd	587 nm	<b>10-2J13.1064</b>	0.002 kg
	48 VAC/DC +10 %	4/8 mA ±15 %	180 mcd	587 nm	<b>10-2J19.1044</b>	0.002 kg
green	6 VDC +10 %	7 mA ±15 %	1050 mcd	525 nm	<b>10-2J06.3145</b>	0.002 kg
	12 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2J09.1065</b>	0.002 kg
	24 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2J12.1065</b>	0.002 kg
	28 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2J13.1065</b>	0.002 kg
	48 VAC/DC +10 %	2/4 mA ±15 %	600 mcd	525 nm	<b>10-2J19.1045</b>	0.002 kg
blue	6 VDC +10 %	15 mA ±15 %	680 mcd	470 nm	<b>10-2J06.3146</b>	0.002 kg
	12 VAC/DC +10 %	7/14 mA ±15 %	650 mcd	470 nm	<b>10-2J09.1066</b>	0.002 kg
	24 VAC/DC +10 %	7/14 mA ±15 %	650 mcd	470 nm	<b>10-2J12.1066</b>	0.002 kg
	28 VAC/DC +10 %	7/14 mA ±15 %	650 mcd	470 nm	<b>10-2J13.1066</b>	0.002 kg
	48 VAC/DC +10 %	4/8 mA ±15 %	400 mcd	470 nm	<b>10-2J19.1046</b>	0.002 kg
white	6 VDC +10 %	6 mA ±15 %	900 mcd	x0.31/y0.32 nm	<b>10-2J06.3149</b>	0.002 kg
	12 VAC/DC +10 %	3/6 mA ±15 %	900 mcd	x0.31/y0.32 nm	<b>10-2J09.1069</b>	0.002 kg
	24 VAC/DC +10 %	2.5/5 mA ±15 %	750 mcd	x0.31/y0.32 nm	<b>10-2J12.1069</b>	0.002 kg
	28 VAC/DC +10 %	2.5/5 mA ±15 %	750 mcd	x0.31/y0.32 nm	<b>10-2J13.1069</b>	0.002 kg
	48 VAC/DC +10 %	2/5 mA ±15 %	600 mcd	x0.31/y0.32 nm	<b>10-2J19.1049</b>	0.002 kg

**Filament lamp, T1 3/4 MG**

Operating voltage	Operation current	Part No.	Weight
 <p><b>Filament lamp</b></p>			
6 VAC/DC	120 mA±10 %	<b>10-1306.1349</b>	0.001 kg
6.3 VAC/DC	200 mA±10 %	<b>10-1307.1369</b>	0.001 kg
12 VAC/DC	75 mA±10 %	<b>10-1309.1309</b>	0.001 kg
14 VAC/DC	80 mA±10 %	<b>10-1310.1319</b>	0.001 kg
18 VAC/DC	40 mA±10 %	<b>10-1311.1249</b>	0.001 kg
24 VAC/DC	35 mA±10 %	<b>10-1312.1229</b>	0.001 kg
28 VAC/DC	30 mA±10 %	<b>10-1313.1209</b>	0.001 kg
	40 mA±10 %	<b>10-1313.1249</b>	0.001 kg
36 VAC/DC	20 mA±10 %	<b>10-1316.1179</b>	0.001 kg
	30 mA±10 %	<b>10-1316.1209</b>	0.001 kg
48 VAC/DC	20 mA±10 %	<b>10-1319.1179</b>	0.001 kg
	25 mA±10 %	<b>10-1319.1199</b>	0.001 kg

**Series resistor**
**Additional Information**

- Only for filament lamp 48 VAC, 25 mA
- For lamp voltage reduction
- Keep to the country specific safety instructions
- Due to high surface temperatures, the surface resistors must be soldered directly to the terminals of the equipment (use a terminal plate)

Operating voltage	Resistance	Part No.	Weight
 <p><b>Series resistor</b></p>			
110 VAC	2.7 kOhm	<b>02-904.0</b>	0.003 kg
125 VAC	3.3 kOhm	<b>02-904.1</b>	0.003 kg
145 VAC	4.7 kOhm	<b>02-904.3</b>	0.003 kg
240 VAC	10 kOhm	<b>02-904.7</b>	0.003 kg


# 71 Accessories

## Mounting

### Anti-twist ring

Mounting cut-out	Part No.	Weight
 <b>Anti-twist ring</b>		
Ø 22.5 mm	<b>61-9912.0</b>	0.002 kg


### Lens remover

Part No.	Weight
 <b>Lens remover</b>	
<b>61-9730.0</b>	0.011 kg


### Lamp remover

#### Additional Information

▲ **Caution:** A switching process might be released when replacing the lamp

Part No.	Weight
 <b>Lamp remover</b>	
<b>61-9740.0</b>	0.003 kg

### Mounting tool

Part No.	Weight
 <b>Mounting tool</b>	
<b>01-907</b>	0.02 kg