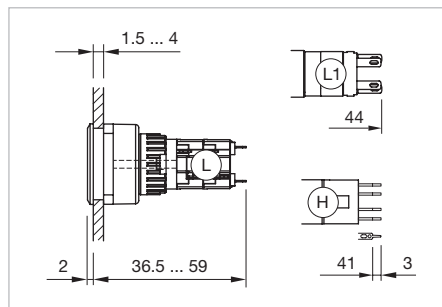
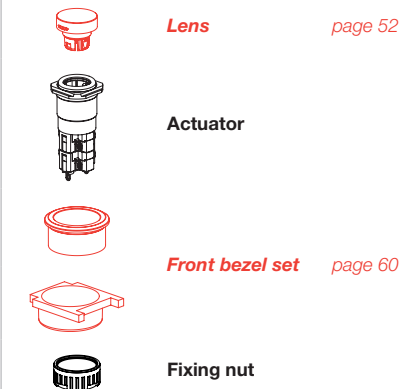


## Pushbutton round, IP 65

### Equipment consisting of (schematic overview)



Dimensions [mm]  
 H = Universal terminal 2.0 x 0.5 mm,  
 L = Solder terminal,  
 L1 = Solder terminal 2.8 x 0.5 mm



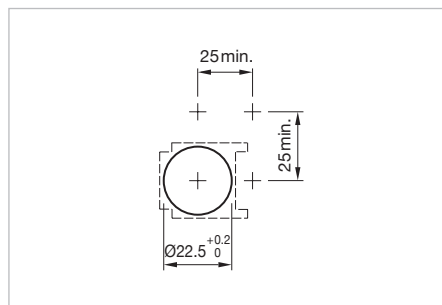
Product can differ from the current configuration.

### Additional Information


- For front dimension  $\varnothing 25$  mm

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.

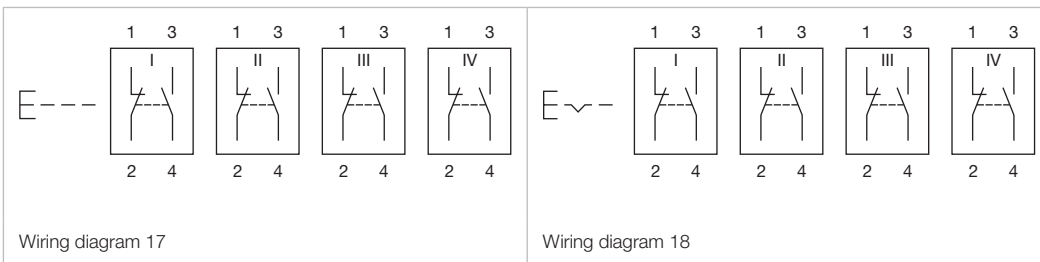
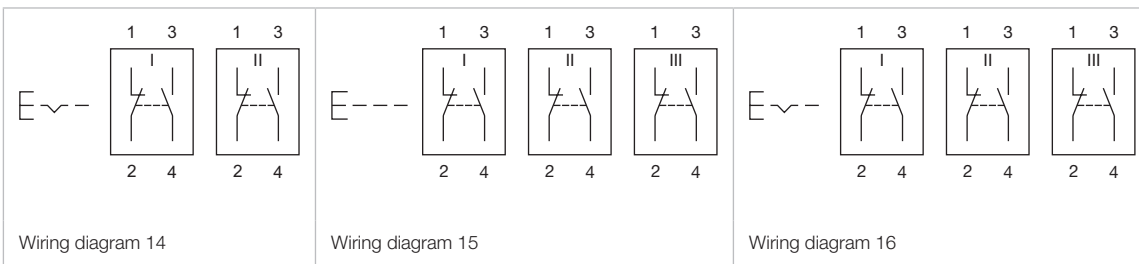
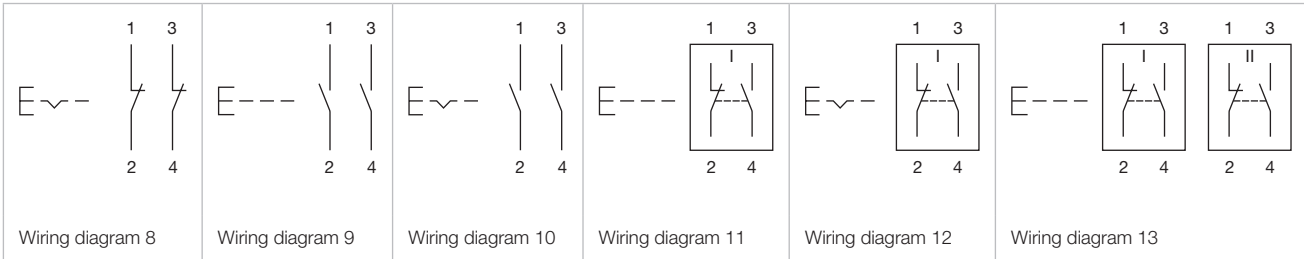
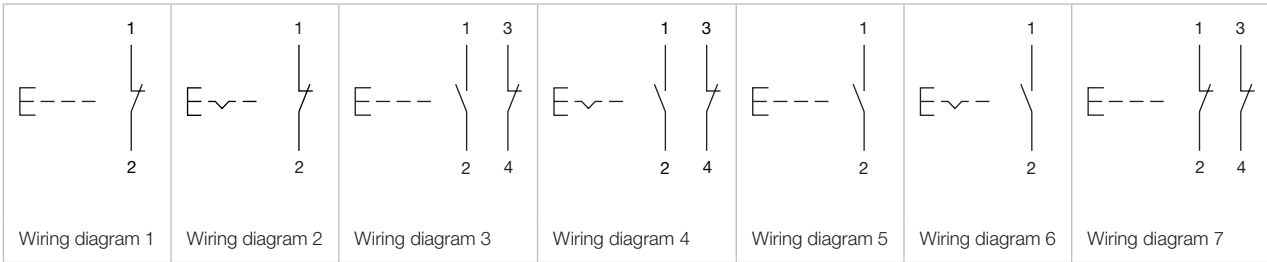


Mounting cut-outs [mm]

Switching system	Contacts	Switching action	Terminal	Part No.	Component layout	Wiring diagram	Weight
 <b>Illuminated pushbutton actuator round</b>							
Low-level element	1 NC	B	Universal 2.0 x 0.5 mm	<b>51-456.036F</b>	1	1	0.006 kg
		C	Universal 2.0 x 0.5 mm	<b>51-486.036F</b>	1	2	0.006 kg
	1 NC + 1 NO	B	Universal 2.0 x 0.5 mm	<b>51-453.036F</b>	1	3	0.006 kg
		C	Universal 2.0 x 0.5 mm	<b>51-483.036F</b>	1	4	0.006 kg
	1 NO	B	Universal 2.0 x 0.5 mm	<b>51-455.036F</b>	1	5	0.006 kg
		C	Universal 2.0 x 0.5 mm	<b>51-485.036F</b>	1	6	0.006 kg
	2 NC	B	Universal 2.0 x 0.5 mm	<b>51-452.036F</b>	1	7	0.006 kg
		C	Universal 2.0 x 0.5 mm	<b>51-482.036F</b>	1	8	0.006 kg
	2 NO	B	Universal 2.0 x 0.5 mm	<b>51-451.036F</b>	1	9	0.006 kg
		C	Universal 2.0 x 0.5 mm	<b>51-481.036F</b>	1	10	0.006 kg
Snap-action switching element	1 NC + 1 NO	B	Solder 2.8 x 0.5 mm	<b>51-151.022F</b>		11	0.007 kg
		B	Solder	<b>51-151.0252F</b>		11	0.005 kg
	1 NC + 1 NO	C	Solder 2.8 x 0.5 mm	<b>51-281.022F</b>		12	0.007 kg
		C	Solder	<b>51-281.0252F</b>		12	0.005 kg
	2 NC + 2 NO	B	Solder	<b>51-152.0252F</b>		13	0.008 kg
		C	Solder	<b>51-282.0252F</b>		14	0.008 kg
	3 NC + 3 NO	B	Solder	<b>51-153.0252F</b>		15	0.010 kg
		C	Solder	<b>51-283.0252F</b>		16	0.010 kg
	4 NC + 4 NO	B	Solder	<b>51-154.0252F</b>		17	0.012 kg
		C	Solder	<b>51-284.0252F</b>		18	0.012 kg

Contacts: NC = Normally closed, NO = Normally open  
 Switching action: B = Momentary, C = Maintained  
 The component layouts you will find from page 76

# 51 Flush design






# 51 Raised design

Front

## Lens flush design

### Additional Information




- Lens surface mat
- Lens profile flat

Product attribute	Dimension	Lens	Part No.	Weight
 <b>Lens plastic, flush design</b>				
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
 <b>Lens plastic, flush design</b>				
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
		white translucent	<b>61-9781.9</b>	0.002 kg
 <b>Lens plastic, flush design</b>				
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

**Lens plastic with symbol**

**Additional Information**


- Lens profile flat
- Illuminative
- 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, flush design</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, flush design</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, flush design</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

**Marking plate**

**Additional Information**


- Can be hot stamped
- Only applicable with lens round  
Part No. 61-9642.X

Marking plate	Part No.	Weight
 <p><b>Marking plate for lens plastic round, flush design</b></p>		
colourless transparent	<b>61-9707.7</b>	0.001 kg

## Lens metal with spot

### Additional Information



- Lens surface mat
- Lens profile flat
- Illuminative

Dimension	Lens	Part No.	Weight
 <p><b>Lens metal with spot, flush design</b></p>	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
	Ø 19.7 mm		

## Lens metal

### Additional Information

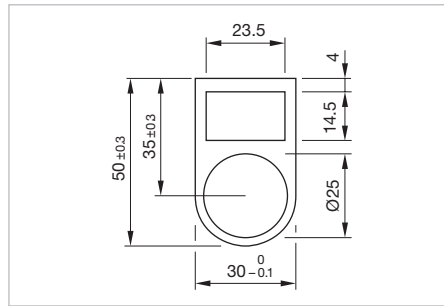
- Lens surface mat
- Non-illuminative
- The colour of anodized aluminium parts can vary due to technical production reasons

Product attribute	Dimension	Lens	Part No.	Weight	
 <p><b>Lens metal, flush design</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, flush design</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


**Legend frame**

**Additional Information**

- For devices with front dimension  $\varnothing 25$  mm, flush design
- The colour of anodized aluminium parts can vary due to technical production reasons




Dimensions [mm]

Dimension	Material	Colour	Mounting type	Part No.	Weight
 <p><b>Legend frame</b></p>					
30 x 50 x 0.75 mm	Aluminium	black anodized	adhesive	<b>61-9980.0</b>	0.001 kg

**Legend plate**

**Additional Information**




- For legend frame Part No. 61-9980.0
- The colour of anodized aluminium parts can vary due to technical production reasons

Dimension	Material	Colour	Mounting type	Part No.	Weight
 <p><b>Legend plate for legend frame</b></p>					
14.5 x 23.5 mm	Aluminium	natural anodized	adhesive	<b>704.968.0</b>	0.001 kg
		black anodized	adhesive	<b>704.968.1</b>	0.001 kg

## Front bezel set

### Additional Information

- The dimensions of the mounting cut-outs are shown in the product details
- 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	

# 51 Accessories

## Protective cover flush design, IP 65

### Additional Information

- The Dimensions [mm] of the Mounting cut-outs [mm] are shown in the product details
- Please note that bigger minimum distances are necessary



Dimensions [mm]

Product attribute	Dimension	Mounting cut-out	Material	Optics	Part No.	Weight
 <p><b>Protective cover flush design</b></p>						
hinged, with means for sealing	24 x 24 mm	21 x 21 mm	Plastic	transparent	<b>61-9921.0</b>	0.006 kg
 <p><b>Protective cover flush design</b></p>						
hinged, with means for sealing	24 x 30 mm	21 x 27 mm	Plastic	transparent	<b>61-9922.0</b>	0.006 kg
 <p><b>Protective cover flush design</b></p>						
slide by side, with means not for sealing	Ø 25 mm	Ø 22.5 mm	Plastic	transparent	<b>61-9924.0</b>	0.006 kg



**Protective cover raised design, IP 65**

**Additional Information**

- Hinged, with means for sealing
- The dimensions of the mounting cut-outs are shown in the product details
- Please note that bigger minimum distances are necessary



Dimensions [mm]

Dimension	Mounting cut-out	Material	Optics	Part No.	Weight
	<b>Protective cover raised design</b>				
18 x 18 mm	Ø 16 mm	Plastic	transparent	<b>51-920</b>	0.002 kg
	<b>Protective cover raised design</b>				
18 x 24 mm	Ø 16 mm	Plastic	transparent	<b>51-925</b>	0.002 kg

**Blind plug flush design**

**Additional Information**

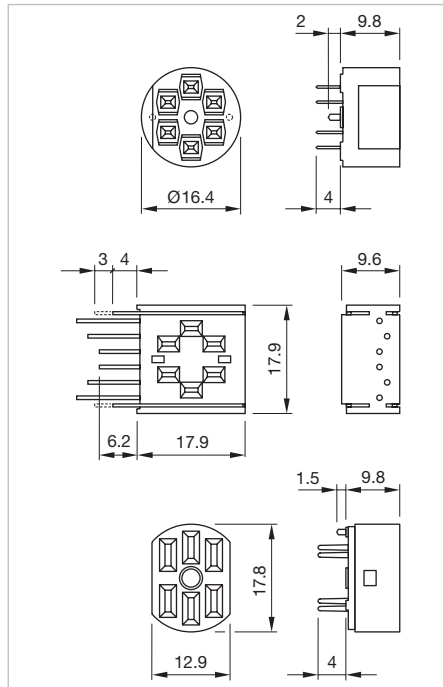
- The dimensions of the mounting cut-outs are shown in the product details

Dimension	Mounting cut-out	Material	Colour	Part No.	Weight
	<b>Blind plug flush design</b>				
24 x 24 mm	21 x 21 mm	Plastic	black	<b>61-9451.0</b>	0.006 kg
	<b>Blind plug flush design</b>				
24 x 30 mm	21 x 27 mm	Plastic	black	<b>61-9452.0</b>	0.006 kg
	<b>Blind plug flush design</b>				
Ø 25 mm	Ø 22.5 mm	Plastic	black	<b>61-9453.0</b>	0.006 kg




## PCB plug-in base

### Additional Information

- PCB plug-in base pins right-angle: With the extendable mounting the distance between plug-in base and PCB can be varied up to 3 mm


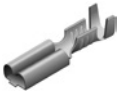



Dimensions




Product attribute	Pins	Terminal	Part No.	Component layout	Weight
 <p><b>PCB plug-in base</b> for low level switching element</p>	axial	PCB	<b>31-940</b>	3	0.002 kg
 <p><b>PCB plug-in base</b> for low level switching element</p>	right-angled	PCB	<b>31-941</b>	1	0.004 kg
 <p><b>PCB plug-in base</b> for snap-action switching element 2.8 mm</p>	axial	PCB	<b>31-942</b>	2	0.002 kg

The component layouts you will find from page 76


## Flat receptacle

Product attribute	Part No.	Weight
 <p><b>Flat receptacle</b></p>		
2.0 x 0.5 mm plug-in terminal	<b>31-945</b>	0.001 kg
 <p><b>Flat receptacle</b></p>		
2.8 x 0.5 mm plug-in terminal	<b>31-946</b>	0.001 kg
 <p><b>Flat receptacle</b></p>		
2.8 x 0.5 mm multi-plug housing	<b>51-943.1</b>	0.001 kg

## Insulation sleeve

Product attribute	Part No.	Weight
 <p><b>Insulation sleeve</b></p>		
Cover plug-in terminals for snap-action switching element 2.8 mm	<b>01-928</b>	0.001 kg
 <p><b>Insulation sleeve</b></p>		
for flat receptacle 2.0 mm	<b>31-928</b>	0.001 kg
 <p><b>Insulation sleeve</b></p>		
for flat receptacle 2.8 mm	<b>31-929</b>	0.001 kg

## Terminal cover



Part No.	Weight
 <p><b>Terminal cover for snap-action switching element 16</b></p>	
<b>01-929</b>	0.010 kg

## Mounting

### Fixing nut

#### Additional Information

- Special recommended for keylock switches

Material	Part No.	Weight
 <p><b>Fixing nut</b></p>		
Metal	<b>31-991</b>	0.005 kg
 <p><b>Fixing nut</b></p>		
Plastic	<b>51-991</b>	0.005 kg



### Anti-twist ring

#### Additional Information

- For key lock- and selector switch

Part No.	Weight
 <p><b>Anti-twist ring</b></p>	
<b>51-910</b>	0.001 kg

### Lens remover

Product attribute	Part No.	Weight
 <p><b>Lens remover</b></p>		
for raised design	<b>02-905</b>	0.011 kg
 <p><b>Lens remover</b></p>		
for flush design	<b>61-9730.0</b>	0.011 kg

