

# Series 44

## Characteristics

The modular 22.5 mm Series 44 is especially suited for:

- Flush design
- Raised design

Up to three of these special switching elements can be arranged next to each other and can be combined in any way on up to two levels.

## Functions

The Series 44 incorporates the following functions:

- Indicator
- Pushbutton
- Illuminated pushbutton
- E-STOP switch
- Stop switch
- Mushroom-head pushbutton
- Keylock switch
- Selector switch
- Potentiometer

## Market segments

The EAO Series 44 is especially suited for applications in the segments:

- Machinery and Automation
- Construction machines and special-purpose vehicles
- Lifting and moving
- Panel building

Please refer to the EAO website to obtain detailed information regarding this series [www.products.eao.com](http://www.products.eao.com)  
Configure a product to your exact needs and request a quotation.

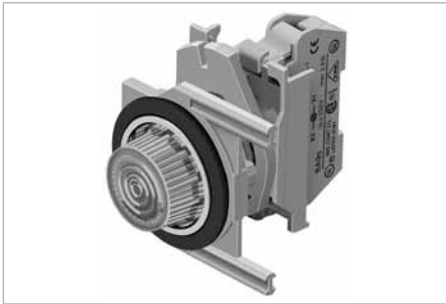




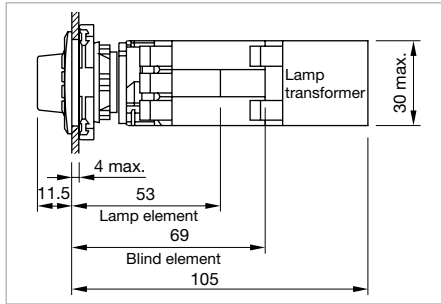
<b>Overview</b>		<b>01</b>
<b>Flush design</b>		<b>02</b>
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Keylock switch	392	<b>14</b>
Selector switch	393	<b>17</b>
Potentiometer	396	<b>18</b>
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# 44 Flush design

## Indicator full face illumination, IP 65

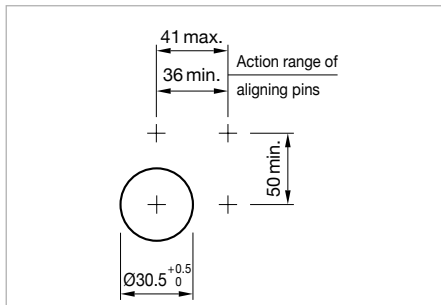


Product can differ from the current configuration.

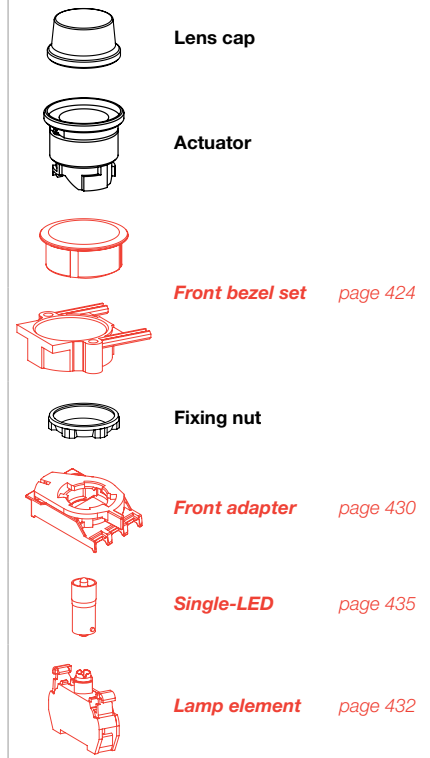


### Additional Information

- For front dimensions 36 x 36 mm, Ø 36 mm
- Non-markable




### Equipment consisting of (schematic overview)











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

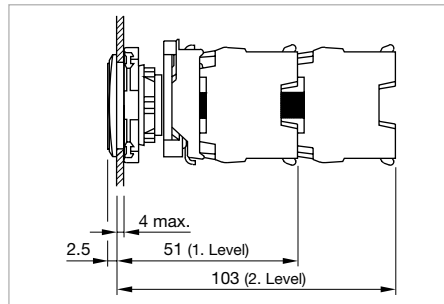
*To obtain a complete unit, please select the red components from the pages shown.*

Front ring	Lens cap	Part No.	Weight
 <p><b>Indicator actuator full-face illumination</b></p>	Plastic red	<b>44-750.62</b>	0.008 kg
	Plastic yellow	<b>44-750.64</b>	0.008 kg
	Plastic green	<b>44-750.65</b>	0.008 kg
	Plastic blue	<b>44-750.66</b>	0.008 kg
	Plastic colourless	<b>44-750.67</b>	0.008 kg
	Plastic matt chrome	Plastic red	<b>44-750.22</b>
Plastic yellow		<b>44-750.24</b>	0.008 kg
Plastic green		<b>44-750.25</b>	0.008 kg
Plastic blue		<b>44-750.26</b>	0.008 kg
Plastic colourless		<b>44-750.27</b>	0.008 kg

Indicator front illumination, IP 65

Equipment consisting of (schematic overview)

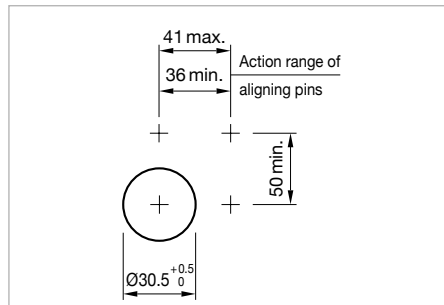
-  **Lens cap**
-  **Marking plate**
-  **Actuator**
-  **Front bezel set** *page 424*
-  **Fixing nut**
-  **Front adapter** *page 430*
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Dimensions [mm]



Product can differ from the current configuration.




Mounting cut-outs [mm]

**Additional Information**

- For front dimensions 36 x 36 mm, Ø 36 mm
- Markable with text plate translucent white

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.

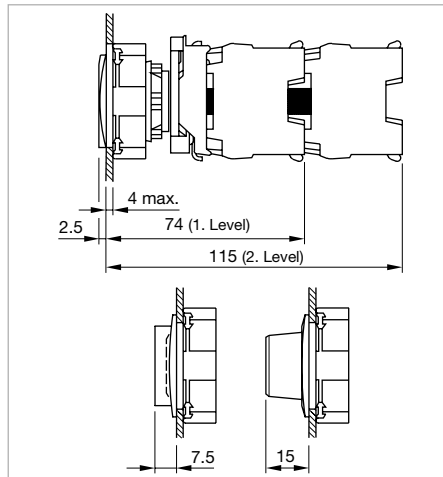
Front ring	Lens cap	Part No.	Weight
 <p><b>Indicator actuator front illumination</b></p>	Plastic red	<b>44-751.62</b>	0.007 kg
	Plastic yellow	<b>44-751.64</b>	0.007 kg
	Plastic green	<b>44-751.65</b>	0.007 kg
	Plastic blue	<b>44-751.66</b>	0.007 kg
	Plastic white	<b>44-751.69</b>	0.007 kg
Plastic matt chrome	Plastic red	<b>44-751.22</b>	0.007 kg
	Plastic yellow	<b>44-751.24</b>	0.007 kg
	Plastic green	<b>44-751.25</b>	0.007 kg

# 44 Flush design

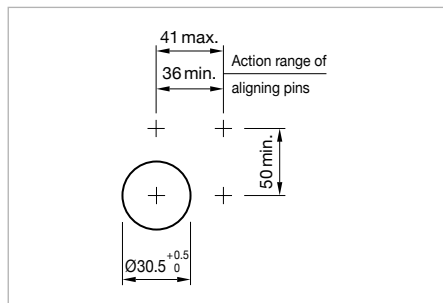
## Pushbutton, IP 65



Product can differ from the current configuration.



Dimensions [mm]

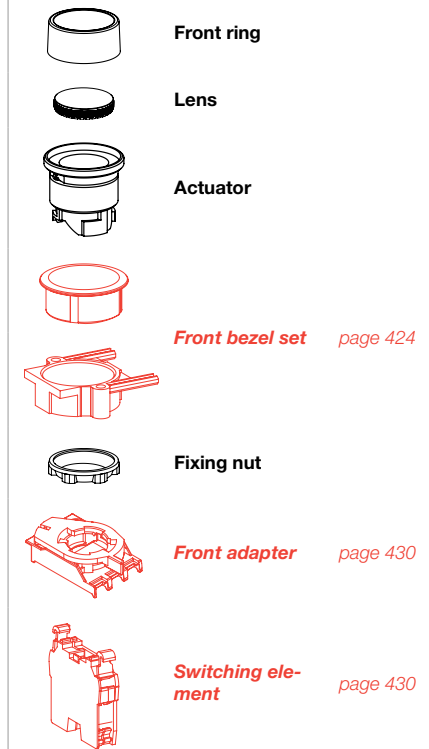


Mounting cut-outs [mm]

### Additional Information


- For front dimensions 36 x 36 mm, Ø 36 mm
- Non-markable
- Up to 3 switching elements with maintain action

### Equipment consisting of (schematic overview)



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 type	Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
 <p><b>Pushbutton actuator</b></p>	Plastic matt grey	Plastic black	B	<b>44-701.60</b>	1	0.013 kg
		Plastic red	B	<b>44-701.62</b>	1	0.013 kg
		Plastic yellow	B	<b>44-701.64</b>	1	0.013 kg
		Plastic green	B	<b>44-701.65</b>	1	0.013 kg
		Plastic blue	B	<b>44-701.66</b>	1	0.013 kg
		Plastic white	B	<b>44-701.69</b>	1	0.013 kg
	Plastic matt chrome	Plastic black	B	<b>44-701.20</b>	1	0.013 kg
		Plastic red	B	<b>44-701.22</b>	1	0.013 kg
		Plastic yellow	B	<b>44-701.24</b>	1	0.013 kg
		Plastic green	B	<b>44-701.25</b>	1	0.013 kg
		Plastic blue	B	<b>44-701.26</b>	1	0.013 kg
	Plastic matt grey	Plastic black	C	<b>44-701.29</b>	1	0.013 kg
		Plastic black	C	<b>44-702.60</b>	2	0.013 kg
		Plastic red	C	<b>44-702.62</b>	2	0.013 kg
		Plastic yellow	C	<b>44-702.64</b>	2	0.013 kg
	Plastic matt grey	Plastic green	C	<b>44-702.65</b>	2	0.013 kg
		Plastic blue	C	<b>44-702.66</b>	2	0.013 kg

Mounting type	Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
level with bezel	Plastic matt grey	Plastic white	C	<b>44-702.69</b>	2	0.013 kg
	Plastic matt chrome	Plastic black	C	<b>44-702.20</b>	2	0.013 kg
		Plastic red	C	<b>44-702.22</b>	2	0.013 kg
		Plastic yellow	C	<b>44-702.24</b>	2	0.013 kg
		Plastic green	C	<b>44-702.25</b>	2	0.013 kg
		Plastic blue	C	<b>44-702.26</b>	2	0.013 kg
		Plastic white	C	<b>44-702.29</b>	2	0.013 kg



**Pushbutton actuator**

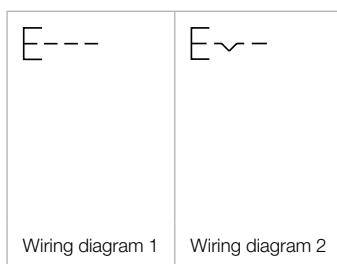
lower than bezel	Plastic matt grey	Plastic black	B	<b>44-703.60</b>	1	0.015 kg
		Plastic red	B	<b>44-703.62</b>	1	0.015 kg
		Plastic yellow	B	<b>44-703.64</b>	1	0.015 kg
		Plastic green	B	<b>44-703.65</b>	1	0.015 kg
		Plastic blue	B	<b>44-703.66</b>	1	0.015 kg
		Plastic white	B	<b>44-703.69</b>	1	0.015 kg
		Plastic matt chrome	Plastic black	B	<b>44-703.20</b>	1
	Plastic red		B	<b>44-703.22</b>	1	0.015 kg
	Plastic yellow		B	<b>44-703.24</b>	1	0.015 kg
	Plastic green		B	<b>44-703.25</b>	1	0.015 kg
	Plastic blue		B	<b>44-703.26</b>	1	0.015 kg
	Plastic white		B	<b>44-703.29</b>	1	0.015 kg



**Pushbutton actuator**

raised above bezel	Plastic matt grey	Plastic black	B	<b>44-704.60</b>	1	0.015 kg
		Plastic red	B	<b>44-704.62</b>	1	0.015 kg
		Plastic yellow	B	<b>44-704.64</b>	1	0.015 kg
		Plastic green	B	<b>44-704.65</b>	1	0.015 kg
		Plastic blue	B	<b>44-704.66</b>	1	0.015 kg
		Plastic white	B	<b>44-704.69</b>	1	0.015 kg
		Plastic matt chrome	Plastic black	B	<b>44-704.20</b>	1
	Plastic red		B	<b>44-704.22</b>	1	0.015 kg
	Plastic yellow		B	<b>44-704.24</b>	1	0.015 kg
	Plastic green		B	<b>44-704.25</b>	1	0.015 kg
	Plastic blue		B	<b>44-704.26</b>	1	0.015 kg
	Plastic white		B	<b>44-704.29</b>	1	0.015 kg

Switching action: B = Momentary, C = Maintain

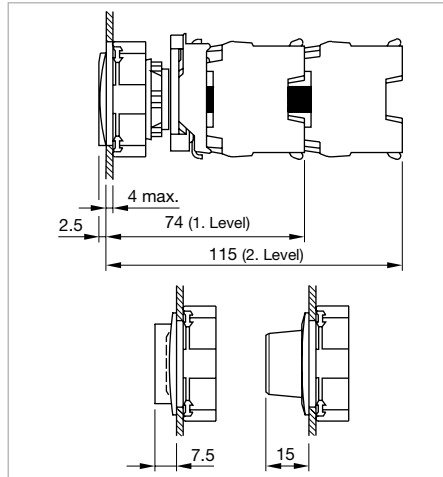


# 44 Flush design

## Pushbutton markable, IP 65



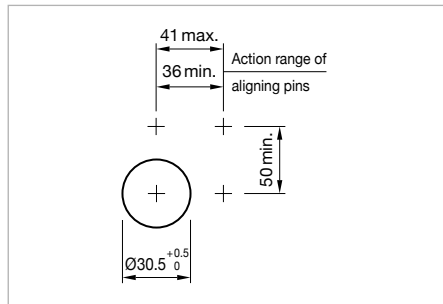
Product can differ from the current configuration.



Dimensions [mm]

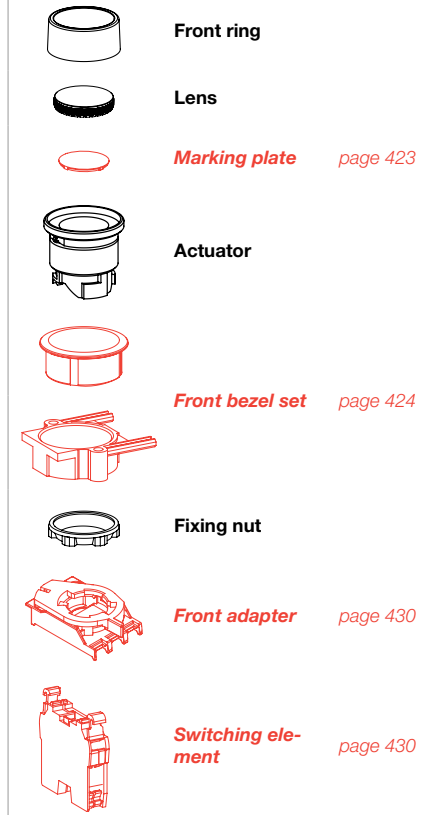
### Additional Information

- For front dimensions 36 x 36 mm, Ø 36 mm



Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)

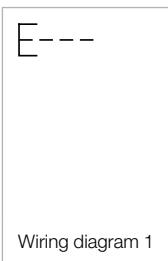


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

Product attribute	Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
<p><b>Pushbutton actuator markable</b></p>	Plastic matt chrome	Plastic colourless	B	<b>44-701.27</b>	1	0.012 kg

Switching action: B = Momentary



Wiring diagram 1



## Pushbutton lockable, IP 65

**Equipment consisting of (schematic overview)**

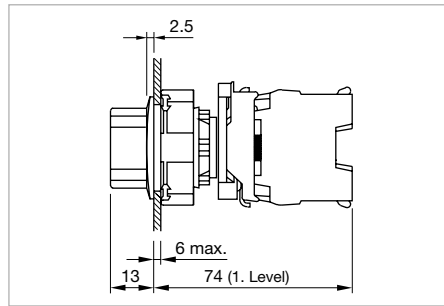
**Actuator**

**Front bezel set** page 424

**Fixing nut**

**Front adapter** page 430

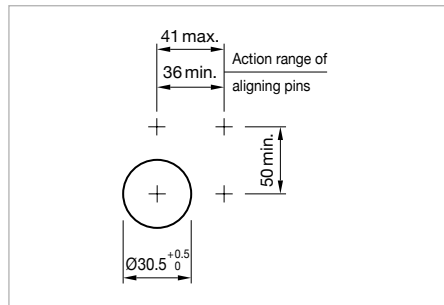
**Switching element** page 430



Dimensions [mm]



Product can differ from the current configuration.



Mounting cut-outs [mm]

### Additional Information

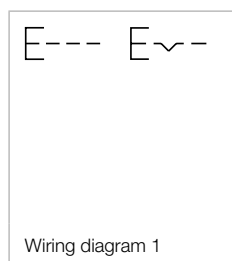
- For front dimensions 36 x 36 mm, Ø 36 mm
- In activated state locked by turning to the right, otherwise momentary action
- Up to 3 switching elements at 1. level

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.

Lever	Front ring	Switching action	Part No.	Wiring diagram	Weight
<b>Pushbutton actuator lockable</b>					
Plastic black	Plastic matt chrome	B - C	<b>44-742.20</b>	1	0.020 kg
Plastic red	Plastic matt chrome	B - C	<b>44-742.22</b>	1	0.02 kg

Switching action: B = Momentary, C = Maintain

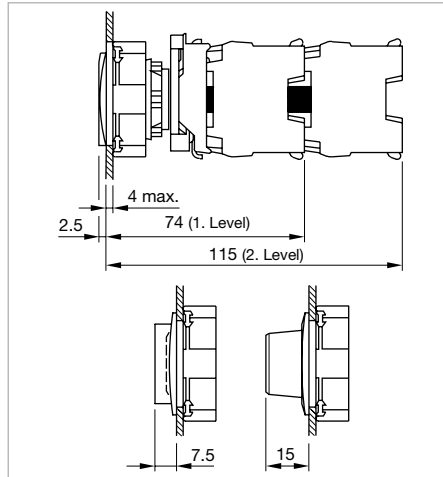


# 44 Flush design

## Illuminated pushbutton, IP 65



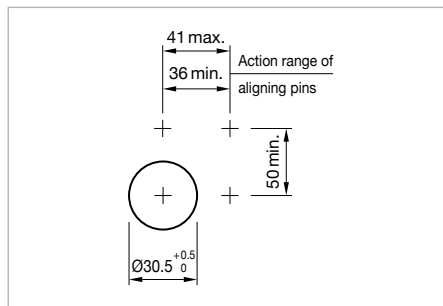
Product can differ from the current configuration.



Dimensions [mm]

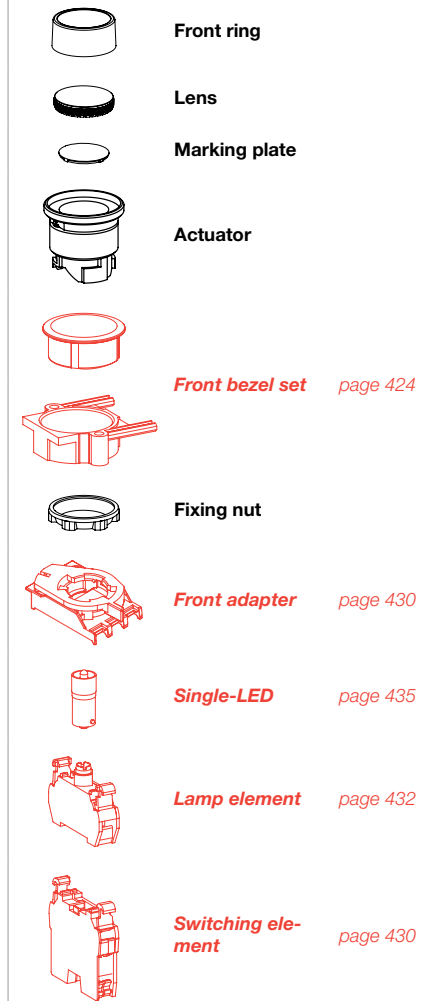
### Additional Information

- For front dimensions 36 x 36 mm, Ø 36 mm
- Markable with text plate translucent white
- Up to 3 switching elements with maintain action




Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)



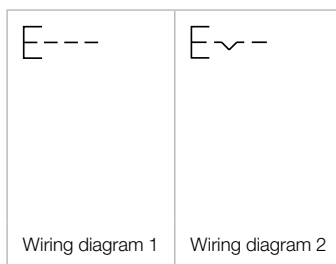
Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
 <b>Illuminated pushbutton actuator</b>	Plastic red	B	<b>44-746.62</b>	1	0.012 kg
	Plastic yellow	B	<b>44-746.64</b>	1	0.012 kg
	Plastic green	B	<b>44-746.65</b>	1	0.012 kg
	Plastic blue	B	<b>44-746.66</b>	1	0.012 kg
	Plastic white	B	<b>44-746.69</b>	1	0.012 kg
Plastic matt chrome	Plastic red	B	<b>44-746.22</b>	1	0.012 kg
	Plastic yellow	B	<b>44-746.24</b>	1	0.012 kg
	Plastic green	B	<b>44-746.25</b>	1	0.012 kg
	Plastic blue	B	<b>44-746.26</b>	1	0.012 kg
	Plastic white	B	<b>44-746.29</b>	1	0.012 kg

Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
Plastic matt grey	Plastic red	C	<b>44-747.62</b>	2	0.012 kg
	Plastic yellow	C	<b>44-747.64</b>	2	0.012 kg
	Plastic green	C	<b>44-747.65</b>	2	0.012 kg
	Plastic blue	C	<b>44-747.66</b>	2	0.012 kg
	Plastic white	C	<b>44-747.69</b>	2	0.012 kg
Plastic matt chrome	Plastic red	C	<b>44-747.22</b>	2	0.012 kg
	Plastic yellow	C	<b>44-747.24</b>	2	0.012 kg
	Plastic green	C	<b>44-747.25</b>	2	0.012 kg
	Plastic blue	C	<b>44-747.26</b>	2	0.012 kg
	Plastic white	C	<b>44-747.29</b>	2	0.012 kg

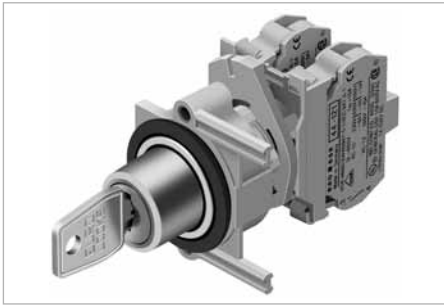
Switching action: B = Momentary, C = Maintain



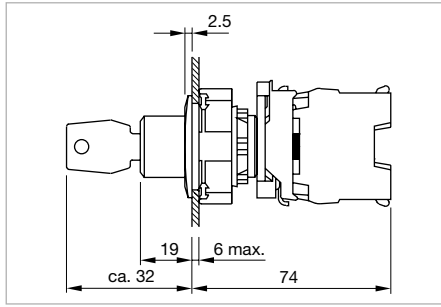
- 01
- 02
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- 44**
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- 61
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- 95
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- 99
- ST

# 44 Flush design

## Keylock switch 2 positions, IP 65

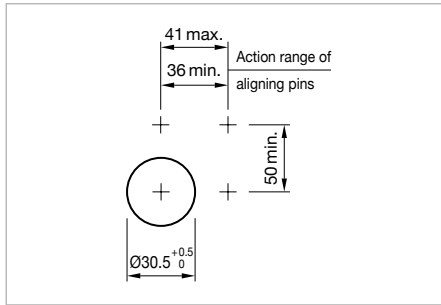


Product can differ from the current configuration.

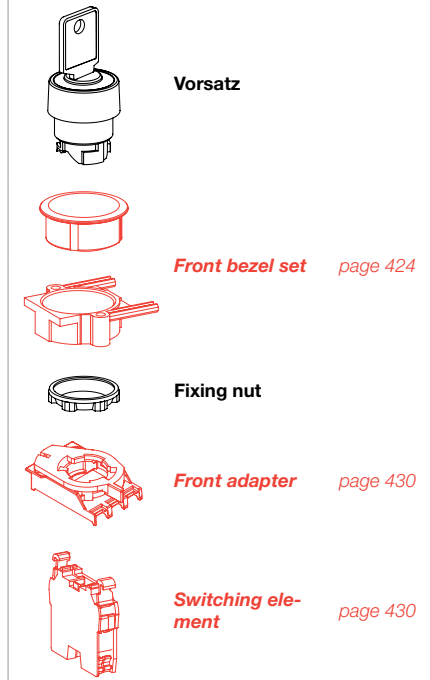


### Additional Information

- For front dimensions 36 x 36 mm, Ø 36 mm
- The standard lock: Euro-Locks 9500
- Two keys are supplied with each key lock switch
- Optional lock numbers on request
- Up to 3 switching elements at 1. level with maintain action

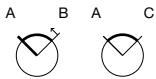


### Equipment consisting of (schematic overview)




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

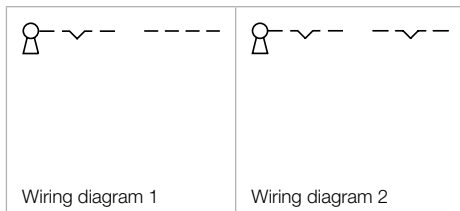
To obtain a complete unit, please select the red components from the pages shown.



Switching positions (A = Rest, B = Momentary, C = Maintained)

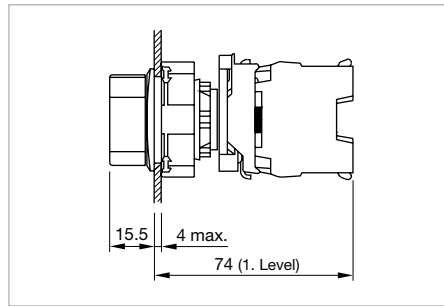
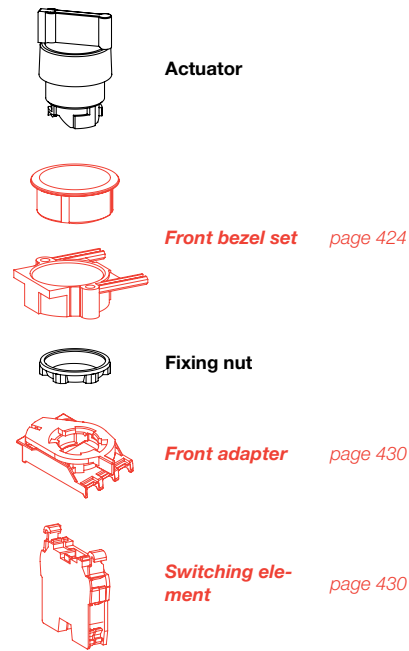
Front ring	Switching action	Switching angle	Key remove	Part No.	Component layout	Wiring diagram	Weight	
 <p><b>Keylock switch actuator 2 positions</b></p>	Plastic matt chrome	A - B	B = 90°	A	<b>44-732.21</b>	5	1	0.051 kg
	Plastic matt grey	A - B	B = 90°	A	<b>44-732.61</b>	5	1	0.051 kg
	Plastic matt chrome	A - C	C = 90°	A	<b>44-730.21</b>	5	2	0.051 kg
				A + C	<b>44-730.22</b>	5	2	0.051 kg
	Plastic matt grey	A - C	C = 90°	A	<b>44-730.61</b>	5	2	0.051 kg
				A + C	<b>44-730.62</b>	5	2	0.051 kg

Switching action: A = Rest, B = Momentary, C = Maintain  
The component layouts you will find from page 442

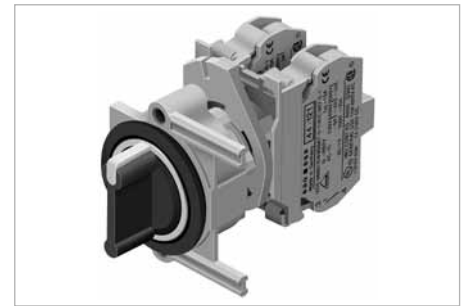


## Selector switch 2 positions, IP 65

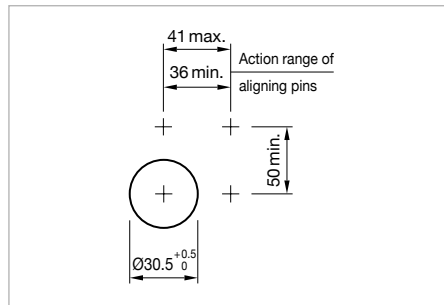
### Equipment consisting of (schematic overview)



Dimensions [mm]



Product can differ from the current configuration.



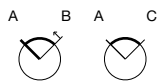
Mounting cut-outs [mm]

### Additional Information


- For front dimensions 36 x 36 mm, Ø 36 mm
- Up to 3 switching elements at 1. level

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

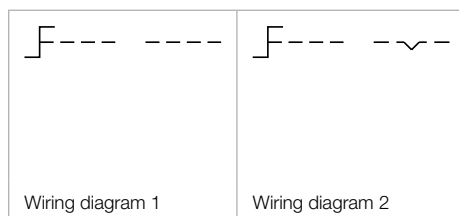
To obtain a complete unit, please select the red components from the pages shown.



Switching positions (A = Rest, B = Momentary, C = Maintained)

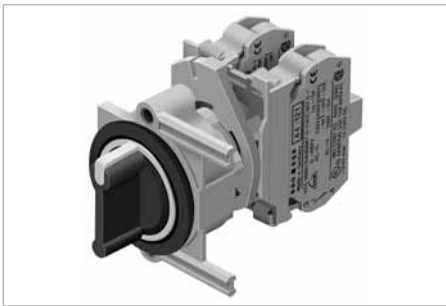
Lever	Front ring	Switching action	Switching angle	Part No.	Component layout	Wiring diagram	Weight
 <h3>Selector switch actuator 2 positions</h3>							
Plastic black	Plastic matt chrome	A - B	B = 90°	<b>44-722.20</b>	5	1	0.021 kg
Plastic grey	Plastic matt grey	A - B	B = 90°	<b>44-722.68</b>	5	1	0.021 kg
Plastic black	Plastic matt chrome	A - C	C = 90°	<b>44-720.20</b>	5	2	0.021 kg
Plastic red	Plastic matt chrome	A - C	C = 90°	<b>44-720.22</b>	5	2	0.021 kg
	Plastic matt grey	A - C	C = 90°	<b>44-720.62</b>	5	2	0.021 kg
Plastic grey	Plastic matt grey	A - C	C = 90°	<b>44-720.68</b>	5	2	0.021 kg

Switching action: A = Rest, B = Momentary, C = Maintain  
The component layouts you will find from page 442

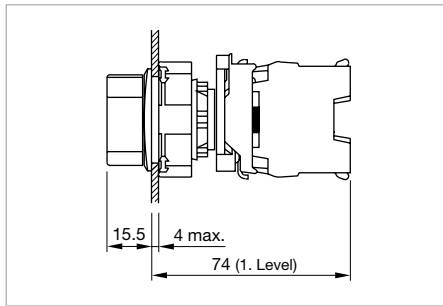


# 44 Flush design

## Selector switch 3 positions, IP 65



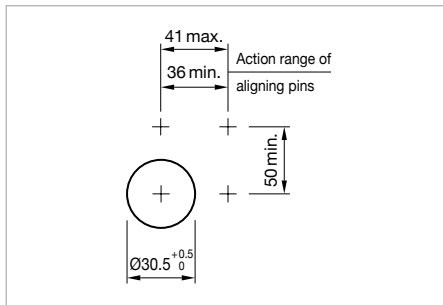
Product can differ from the current configuration.



Dimensions [mm]

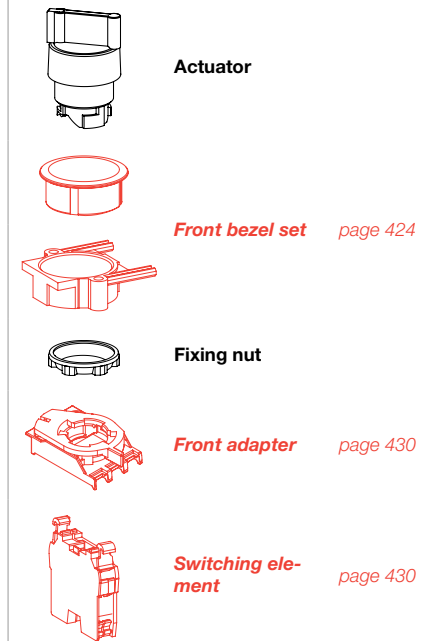
### Additional Information

- For front dimensions 36 x 36 mm, Ø 36 mm
- Up to 3 switching elements at 1. level



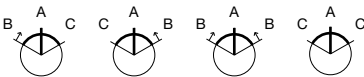
Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)




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

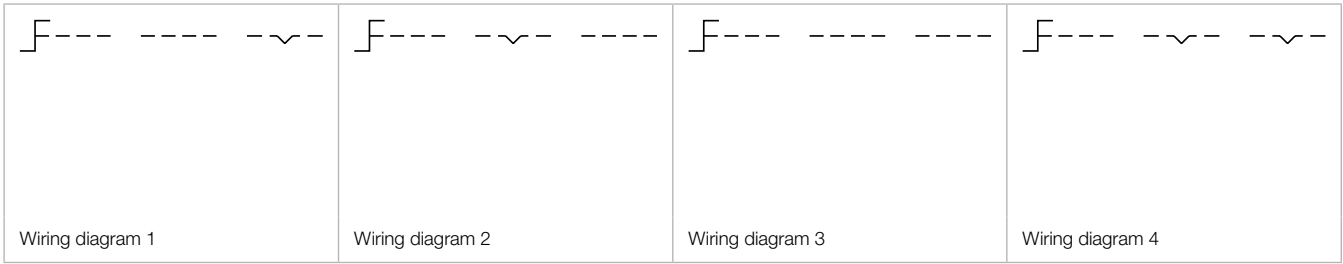
To obtain a complete unit, please select the red components from the page s shown.



Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Switching action	Switching angle	Part No.	Component layout	Wiring diagram	Weight
	<b>Selector switch actuator 3 positions</b>						
Plastic black	Plastic matt chrome	B - A - C	B = 60°, C = 60°	<b>44-727.20</b>	4	1	0.021 kg
Plastic grey	Plastic matt grey	B - A - C	B = 60°, C = 60°	<b>44-727.68</b>	4	1	0.021 kg
Plastic black	Plastic matt chrome	C - A - B	C = 60°, B = 60°	<b>44-726.20</b>	4	2	0.021 kg
Plastic grey	Plastic matt grey	C - A - B	C = 60°, B = 60°	<b>44-726.68</b>	4	2	0.021 kg
Plastic black	Plastic matt chrome	B - A - B	B = 60° / 60°	<b>44-725.20</b>	4	3	0.021 kg
Plastic grey	Plastic matt grey	B - A - B	B = 60° / 60°	<b>44-725.68</b>	4	3	0.021 kg
Plastic black	Plastic matt chrome	C - A - C	C = 60° / 60°	<b>44-724.20</b>	4	4	0.021 kg
Plastic grey	Plastic matt grey	C - A - C	C = 60° / 60°	<b>44-724.68</b>	4	4	0.021 kg

Switching action: A = Rest, B = Momentary, C = Maintain  
The component layouts you will find from page 442



- 01
- 02
- 03
- 04
- 10
- 14
- 17
- 18
- 19
- 22
- 31
- 41
- 44**
- 51
- 56
- 57
- 61
- 70
- 71
- 82
- 84
- 92
- 95
- 96
- 97
- 99
- ST

# 44 Flush design

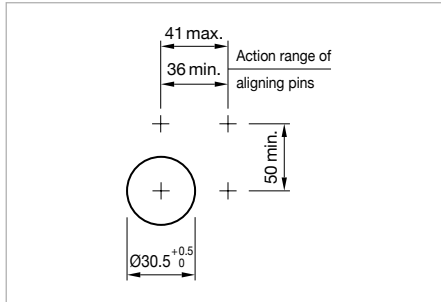
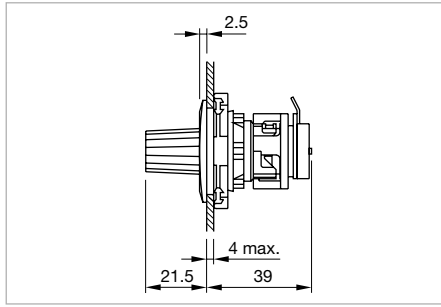
## Potentiometer, IP 65



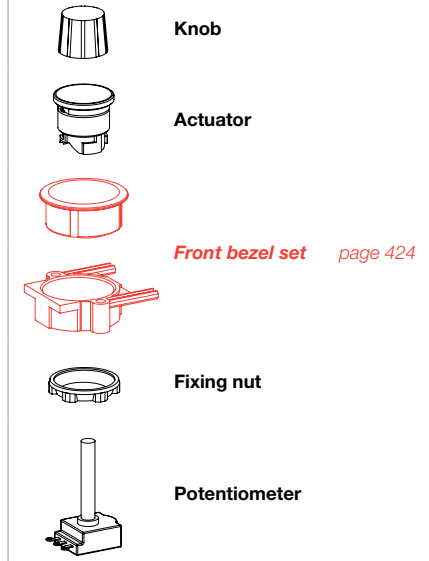
Product can differ from the current configuration.

### Additional Information

- For front dimensions 36 x 36 mm, Ø 36 mm
- Resistor 10 kOhm / linear, series E3
- Power 0.4 W
- Slewing range 300°




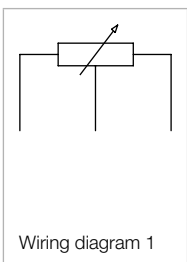
### Equipment consisting of (schematic overview)



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.*

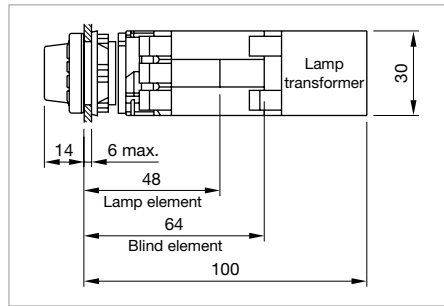
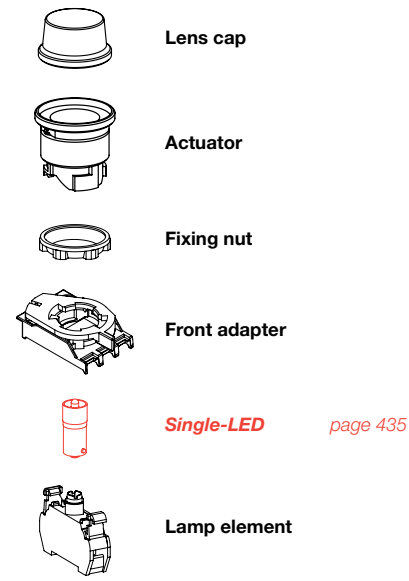
Product attribute	Front ring	Terminal	Part No.	Wiring diagram	Weight
 <b>Potentiometer</b>	Plastic matt chrome	Solder	<b>44-745.20-10K1</b>	1	0.030 kg
	Plastic matt grey	Solder	<b>44-745.60-10K1</b>	1	0.030 kg
without potentiometer, specification for potentiometer: Shaft = length 32 mm, shaft end = Form A, Ø = 6 mm	Plastic matt chrome		<b>44-744.20</b>		0.016 kg
	Plastic matt grey		<b>44-744.60</b>		0.016 kg





Indicator full-face illumination complete, IP 65

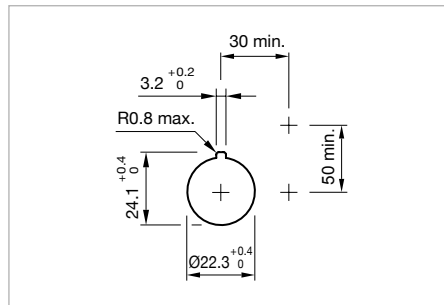
Equipment consisting of (schematic overview)



Dimensions [mm]



Product can differ from the current configuration.




Mounting cut-outs [mm]

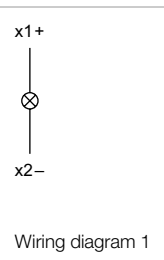
Additional Information

- Non-markable

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.

Front ring	Lens cap	Terminal	Part No.	Wiring diagram	Weight
 <p><b>Indicator full-face illumination complete, Front dimension Ø 28 mm</b></p>					
Plastic matt chrome	Plastic red	Screw	<b>44-750.22.000</b>	1	0.025 kg
	Plastic yellow	Screw	<b>44-750.24.000</b>	1	0.025 kg
	Plastic green	Screw	<b>44-750.25.000</b>	1	0.025 kg
	Plastic colourless	Screw	<b>44-750.27.000</b>	1	0.025 kg

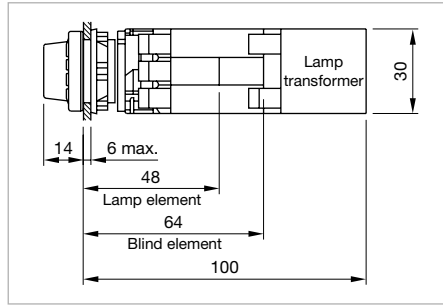


# 44 Raised design

## Indicator full face illumination, IP 65



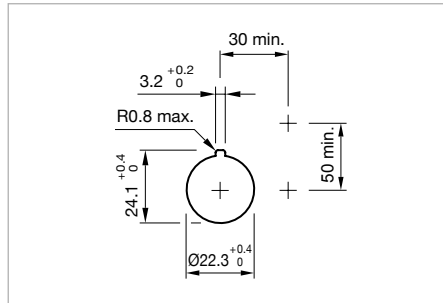
Product can differ from the current configuration.



Dimensions [mm]

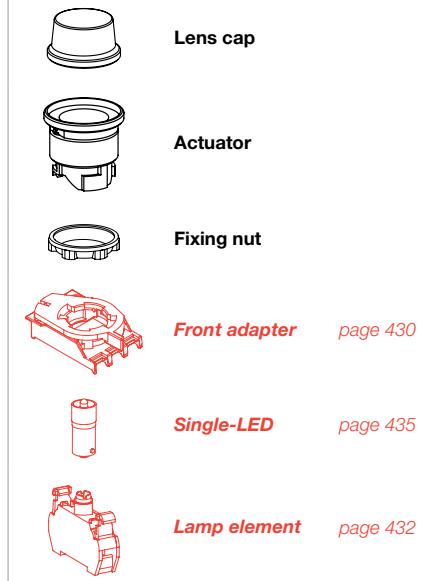
### Additional Information

- Non-markable




Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)







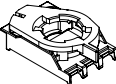


Each Part Number listed below includes all the black components shown in the 3D-drawing.

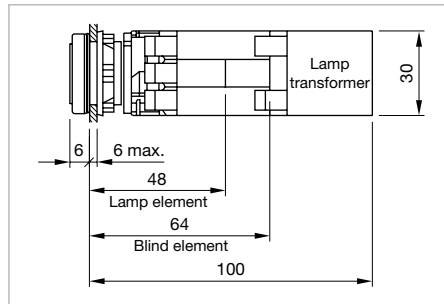
To obtain a complete unit, please select the red components from the pages shown.

Front ring	Lens cap	Part No.	Weight
 <p><b>Indicator actuator full-face illumination, Front dimension Ø 28 mm</b></p>	Plastic red	<b>44-750.62</b>	0.008 kg
	Plastic yellow	<b>44-750.64</b>	0.008 kg
	Plastic green	<b>44-750.65</b>	0.008 kg
	Plastic blue	<b>44-750.66</b>	0.008 kg
	Plastic colourless	<b>44-750.67</b>	0.008 kg
Plastic matt chrome	Plastic red	<b>44-750.22</b>	0.008 kg
	Plastic yellow	<b>44-750.24</b>	0.008 kg
	Plastic green	<b>44-750.25</b>	0.008 kg
	Plastic blue	<b>44-750.26</b>	0.008 kg
	Plastic colourless	<b>44-750.27</b>	0.008 kg

Indicator front illumination complete, IP 65

**Equipment consisting of (schematic overview)**

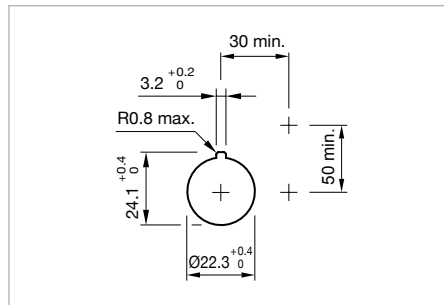
-  **Lens cap**
-  **Marking plate**
-  **Actuator**
-  **Fixing nut**
-  **Front adapter**
-  **Single-LED** *page 435*
-  **Lamp element**



Dimensions [mm]



Product can differ from the current configuration.




Mounting cut-outs [mm]

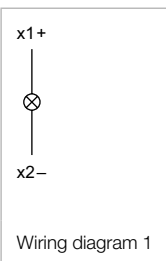
**Additional Information**

- Markable with text plate translucent white

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.

Front ring	Lens cap	Terminal	Part No.	Wiring diagram	Weight
 <p><b>Indicator front illumination complete, Front dimension Ø 28 mm</b></p>	Plastic matt chrome				
	Plastic red	Screw	<b>44-751.22.000</b>	1	0.025 kg
	Plastic yellow	Screw	<b>44-751.24.000</b>	1	0.025 kg
	Plastic green	Screw	<b>44-751.25.000</b>	1	0.025 kg
	Plastic white	Screw	<b>44-751.29.000</b>	1	0.025 kg

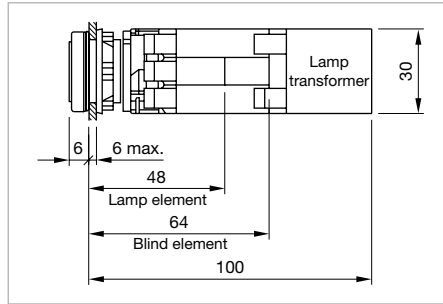


# 44 Raised design

## Indicator front illumination, IP 65

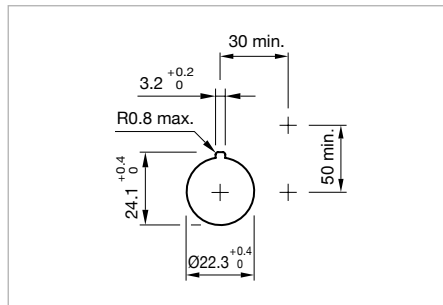


Product can differ from the current configuration.

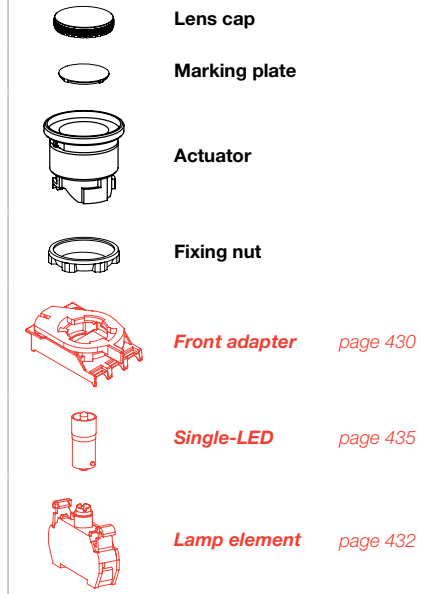


### Additional Information

- Markable with text plate translucent white




### Equipment consisting of (schematic overview)



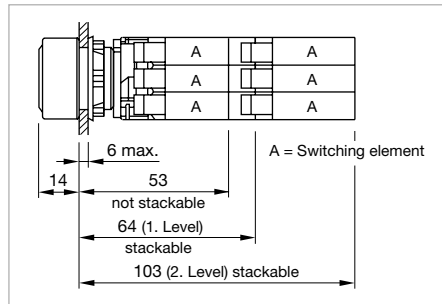
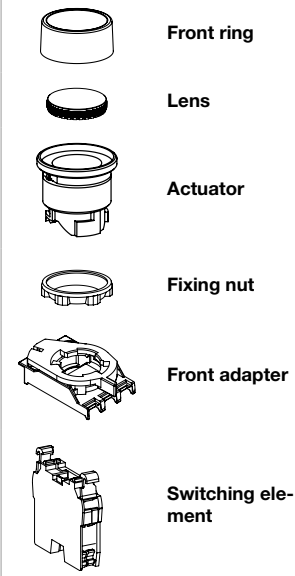
Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

Front ring	Lens cap	Part No.	Weight
 <b>Indicator actuator front illumination, Front dimension Ø 28 mm</b>	Plastic red	<b>44-751.62</b>	0.007 kg
	Plastic yellow	<b>44-751.64</b>	0.007 kg
	Plastic green	<b>44-751.65</b>	0.007 kg
	Plastic blue	<b>44-751.66</b>	0.007 kg
	Plastic white	<b>44-751.69</b>	0.007 kg
Plastic matt chrome	Plastic red	<b>44-751.22</b>	0.007 kg
	Plastic yellow	<b>44-751.24</b>	0.007 kg
	Plastic green	<b>44-751.25</b>	0.007 kg

Pushbutton complete, IP 65

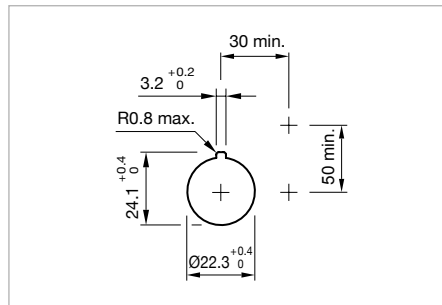
Equipment consisting of (schematic overview)



Dimensions [mm]



Product can differ from the current configuration.




Mounting cut-outs [mm]

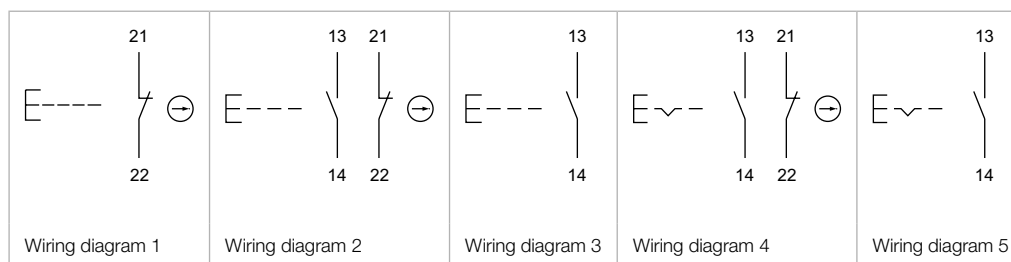
Additional Information

- Switching system slow-make element
- Non-markable

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

Front ring	Lens	Contacts	Switching action	Terminal	Part No.	Wiring diagram	Weight
 <p><b>Pushbutton complete, Front dimension Ø 28 mm</b></p>							
Plastic matt chrome	Plastic red	1 NC	B	Screw	<b>44-701.22.001</b>	1	0.030 kg
	Plastic black	1 NC + 1 NO	B	Screw	<b>44-701.20.100</b>	2	0.037 kg
	Plastic yellow	1 NO	B	Screw	<b>44-701.24.010</b>	3	0.030 kg
	Plastic green	1 NO	B	Screw	<b>44-701.25.010</b>	3	0.030 kg
	Plastic white	1 NO	B	Screw	<b>44-701.29.010</b>	3	0.030 kg
	Plastic black	1 NC + 1 NO	C	Screw	<b>44-702.20.100</b>	4	0.037 kg
	Plastic green	1 NO	C	Screw	<b>44-702.25.010</b>	5	0.030 kg

Contacts: NC = Normally closed, NO = Normally open  
Switching action: B = Momentary, C = Maintain

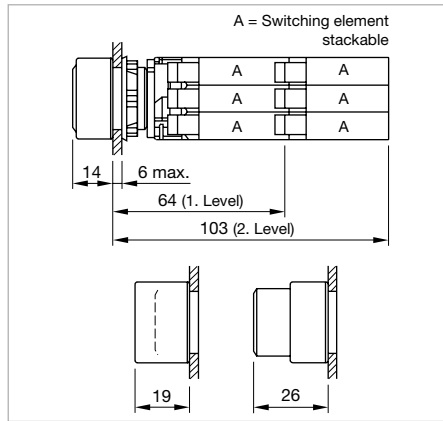


# 44 Raised design

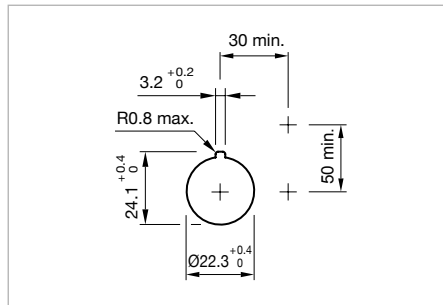
## Pushbutton, IP 65



Product can differ from the current configuration.

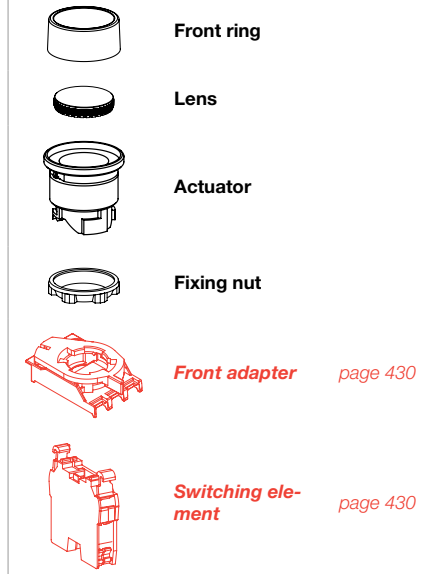


Dimensions [mm]



Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)




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.

### Additional Information

- Non-markable
- Up to 3 switching elements with maintain action

Mounting type	Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
 <p><b>Pushbutton actuator, Front dimension Ø 28 mm</b></p>	Plastic matt chrome	Plastic black	B	<b>44-701.20</b>	1	0.013 kg
		Plastic red	B	<b>44-701.22</b>	1	0.013 kg
		Plastic yellow	B	<b>44-701.24</b>	1	0.013 kg
		Plastic green	B	<b>44-701.25</b>	1	0.013 kg
		Plastic blue	B	<b>44-701.26</b>	1	0.013 kg
		Plastic white	B	<b>44-701.29</b>	1	0.013 kg
	Plastic matt grey	Plastic black	B	<b>44-701.60</b>	1	0.013 kg
		Plastic red	B	<b>44-701.62</b>	1	0.013 kg
		Plastic yellow	B	<b>44-701.64</b>	1	0.013 kg
		Plastic green	B	<b>44-701.65</b>	1	0.013 kg
		Plastic blue	B	<b>44-701.66</b>	1	0.013 kg
		Plastic white	B	<b>44-701.69</b>	1	0.013 kg
	Plastic matt chrome	Plastic black	C	<b>44-702.20</b>	2	0.013 kg
		Plastic red	C	<b>44-702.22</b>	2	0.013 kg
		Plastic yellow	C	<b>44-702.24</b>	2	0.013 kg
		Plastic green	C	<b>44-702.25</b>	2	0.013 kg
		Plastic blue	C	<b>44-702.26</b>	2	0.013 kg
		Plastic white	C	<b>44-702.29</b>	2	0.013 kg
	Plastic matt grey	Plastic black	C	<b>44-702.60</b>	2	0.013 kg
		Plastic red	C	<b>44-702.62</b>	2	0.013 kg
		Plastic yellow	C	<b>44-702.64</b>	2	0.013 kg

Mounting type	Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
level with bezel	Plastic matt grey	Plastic green	C	<b>44-702.65</b>	2	0.013 kg
		Plastic blue	C	<b>44-702.66</b>	2	0.013 kg
		Plastic white	C	<b>44-702.69</b>	2	0.013 kg



**Pushbutton actuator, Front dimension Ø 28 mm**

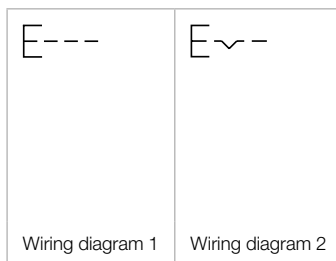
lower than bezel	Plastic matt chrome	Plastic black	B	<b>44-703.20</b>	1	0.013 kg
		Plastic red	B	<b>44-703.22</b>	1	0.013 kg
		Plastic yellow	B	<b>44-703.24</b>	1	0.013 kg
		Plastic green	B	<b>44-703.25</b>	1	0.013 kg
		Plastic blue	B	<b>44-703.26</b>	1	0.013 kg
		Plastic white	B	<b>44-703.29</b>	1	0.013 kg
	Plastic matt grey	Plastic black	B	<b>44-703.60</b>	1	0.013 kg
		Plastic red	B	<b>44-703.62</b>	1	0.013 kg
		Plastic yellow	B	<b>44-703.64</b>	1	0.013 kg
		Plastic green	B	<b>44-703.65</b>	1	0.013 kg
		Plastic blue	B	<b>44-703.66</b>	1	0.013 kg
		Plastic white	B	<b>44-703.69</b>	1	0.013 kg



**Pushbutton actuator, Front dimension Ø 28 mm**

raised above bezel	Plastic matt chrome	Plastic black	B	<b>44-704.20</b>	1	0.013 kg
		Plastic red	B	<b>44-704.22</b>	1	0.013 kg
		Plastic yellow	B	<b>44-704.24</b>	1	0.013 kg
		Plastic green	B	<b>44-704.25</b>	1	0.013 kg
		Plastic blue	B	<b>44-704.26</b>	1	0.013 kg
		Plastic white	B	<b>44-704.29</b>	1	0.013 kg
	Plastic matt grey	Plastic black	B	<b>44-704.60</b>	1	0.013 kg
		Plastic red	B	<b>44-704.62</b>	1	0.013 kg
		Plastic yellow	B	<b>44-704.64</b>	1	0.013 kg
		Plastic green	B	<b>44-704.65</b>	1	0.013 kg
		Plastic blue	B	<b>44-704.66</b>	1	0.013 kg
		Plastic white	B	<b>44-704.69</b>	1	0.013 kg

Switching action: B = Momentary, C = Maintain

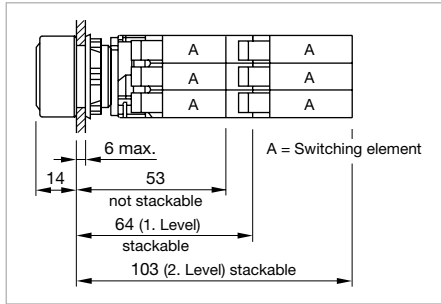


# 44 Raised design

## Pushbutton markable, IP 65



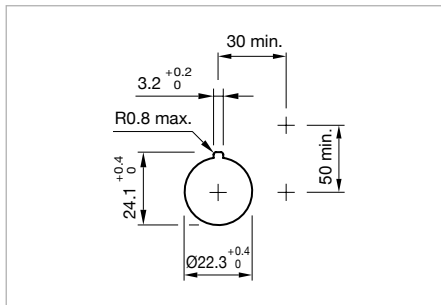
Product can differ from the current configuration.



Dimensions [mm]

### Additional Information

- Colour of lens is determined by the colour of text plate, up to 3 Switching elements max.



Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)



Front ring



Lens



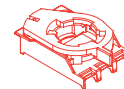
Marking plate [page 423](#)



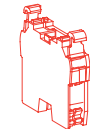
Actuator



Fixing nut



Front adapter [page 430](#)



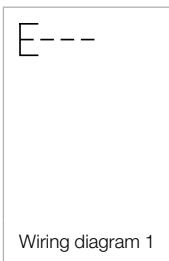
Switching element [page 430](#)

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.*

Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
<b>Pushbutton actuator markable, Front dimension Ø 28 mm</b>					
Plastic matt chrome	Plastic colourless	B	<b>44-701.27</b>	1	0,012 kg

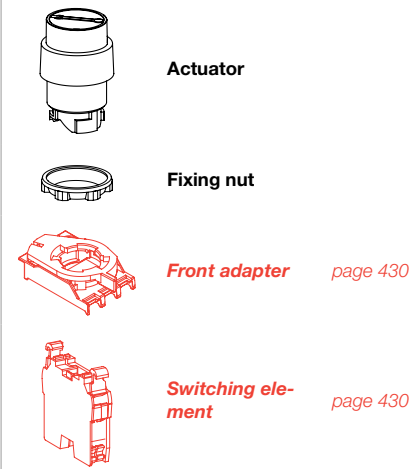
Switching action: B = Momentary





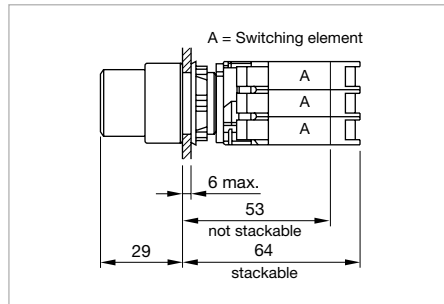
Pushbutton lockable, IP 65

Equipment consisting of (schematic overview)

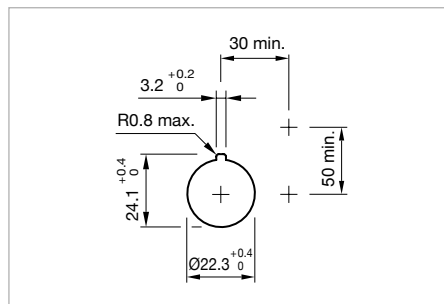


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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



Dimensions [mm]



Mounting cut-outs [mm]



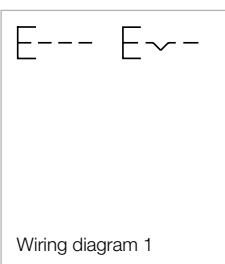
Product can differ from the current configuration.

Additional Information

- In activated state locked by turning to the right, otherwise momentary action
- Up to 3 switching elements at 1. level

Lever	Front ring	Switching action	Part No.	Wiring diagram	Weight
<b>Pushbutton actuator lockable, Front dimension Ø 28 mm</b>					
Plastic black	Plastic matt chrome	B - C	<b>44-742.20</b>	1	0.020 kg
Plastic red	Plastic matt chrome	B - C	<b>44-742.22</b>	1	0.020 kg

Switching action: B = Momentary, C = Maintain

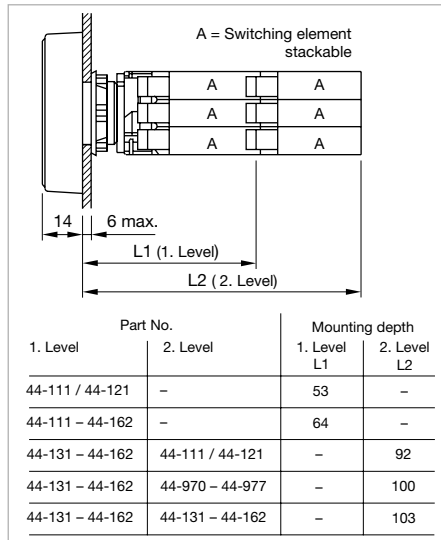


# 44 Raised design

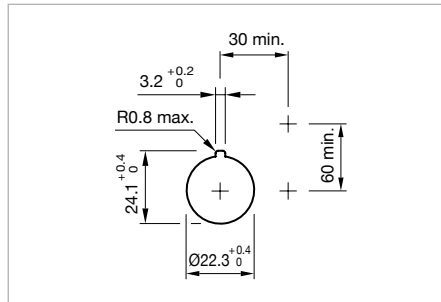
## Double pushbutton, IP 65



Product can differ from the current configuration.

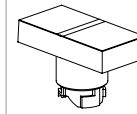


Dimensions [mm]



Mounting cut-outs [mm]

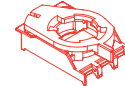
### Equipment consisting of (schematic overview)



**Actuator**



**Fixing nut**



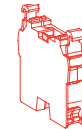
**Front adapter** *page 430*



**Single-LED** *page 435*



**Lamp element** *page 432*




**Switching element** *page 430*

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.*

### Additional Information

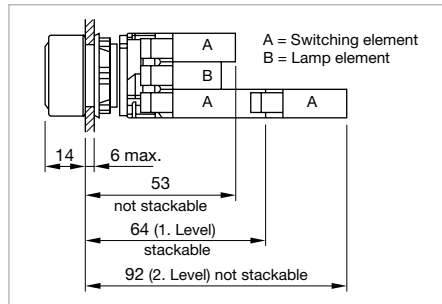
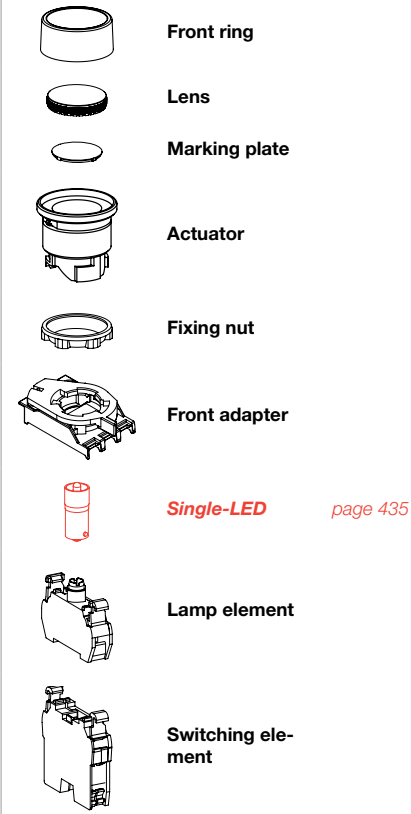
- With illuminative centre window

Front bezel	Lens	Marking	Switching action	Part No.	Component layout	Weight
 <p><b>Double pushbutton actuator, Front dimension 29.5 x 56 mm</b></p>	Plastic green-red		B	<b>44-770.2</b>	3	0.018 kg
		I - 0	B	<b>44-771.2</b>	3	0.018 kg
	Plastic white-black		B	<b>44-773.2</b>	3	0.018 kg
		I - 0	B	<b>44-774.2</b>	3	0.018 kg

Switching action: B = Momentary  
The component layouts you will find from page 442

## Illuminated pushbutton complete, IP 65

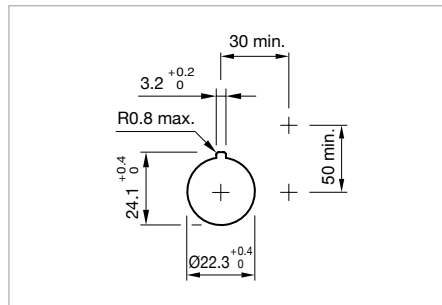
### Equipment consisting of (schematic overview)



Dimensions [mm]



Product can differ from the current configuration.




Mounting cut-outs [mm]

### Additional Information

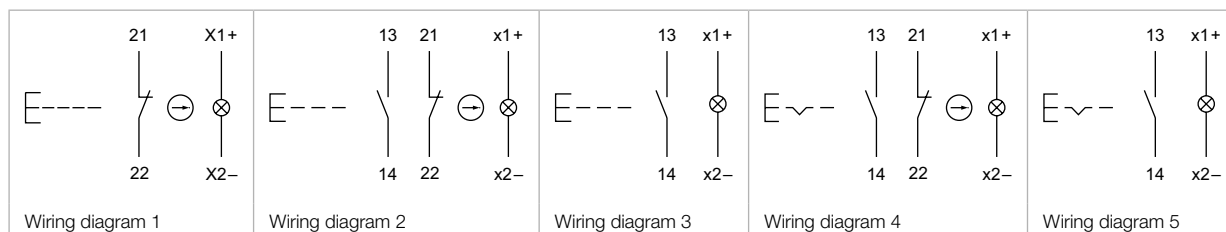
- Switching system slow-make element
- Markable

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.

Front ring	Lens	Contacts	Switching action	Terminal	Part No.	Wiring diagram	Weight
 <b>Illuminated pushbutton complete, Front dimension Ø 28 mm</b>							
Plastic matt chrome	Plastic red	1 NC	B	Screw	<b>44-746.22.001</b>	1	0.040 kg
	Plastic white	1 NC + 1 NO	B	Screw	<b>44-746.29.100</b>	2	0.047 kg
	Plastic yellow	1 NO	B	Screw	<b>44-746.24.010</b>	3	0.040 kg
	Plastic green	1 NO	B	Screw	<b>44-746.25.010</b>	3	0.040 kg
	Plastic white	1 NC + 1 NO	C	Screw	<b>44-747.29.100</b>	4	0.047 kg
	Plastic green	1 NO	C	Screw	<b>44-747.25.010</b>	5	0.040 kg

Contacts: NC = Normally closed, NO = Normally open  
Switching action: B = Momentary, C = Maintain

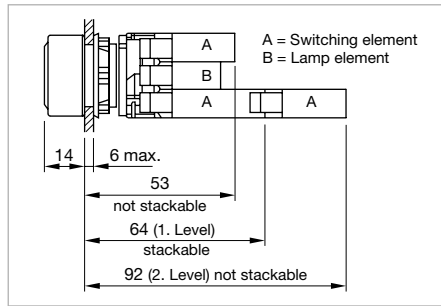


# 44 Raised design

## Illuminated pushbutton, IP 65



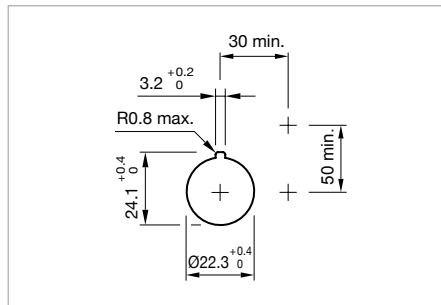
Product can differ from the current configuration.



Dimensions [mm]

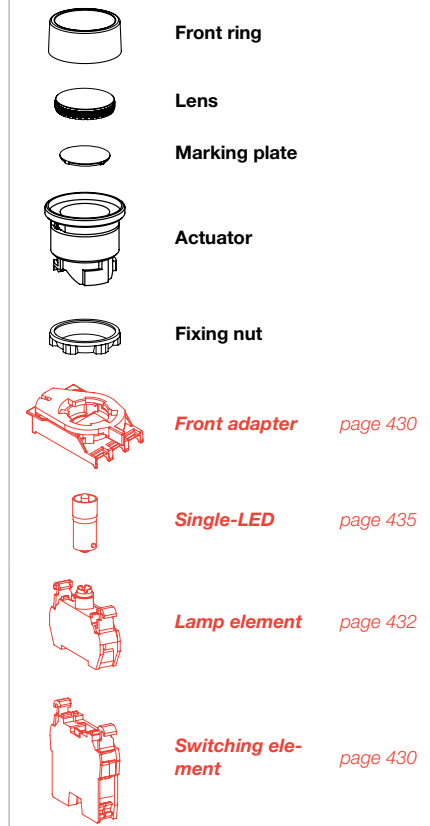
### Additional Information

- Markable with text plate translucent white
- Up to 3 switching elements with maintain action



Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)



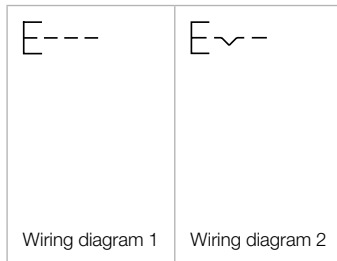
Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
<p><b>Illuminated pushbutton actuator, Front dimension Ø 28 mm</b></p>					
Plastic matt grey	Plastic red	B	<b>44-746.62</b>	1	0.012 kg
	Plastic yellow	B	<b>44-746.64</b>	1	0.012 kg
	Plastic green	B	<b>44-746.65</b>	1	0.012 kg
	Plastic blue	B	<b>44-746.66</b>	1	0.012 kg
	Plastic white	B	<b>44-746.69</b>	1	0.012 kg
Plastic matt chrome	Plastic red	B	<b>44-746.22</b>	1	0.012 kg
	Plastic yellow	B	<b>44-746.24</b>	1	0.012 kg
	Plastic green	B	<b>44-746.25</b>	1	0.012 kg
	Plastic blue	B	<b>44-746.26</b>	1	0.012 kg
	Plastic white	B	<b>44-746.29</b>	1	0.012 kg
Plastic matt grey	Plastic red	C	<b>44-747.62</b>	2	0.012 kg
	Plastic yellow	C	<b>44-747.64</b>	2	0.012 kg
	Plastic green	C	<b>44-747.65</b>	2	0.012 kg
	Plastic blue	C	<b>44-747.66</b>	2	0.012 kg

Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
Plastic matt grey	Plastic white	C	<b>44-747.69</b>	2	0.012 kg
Plastic matt chrome	Plastic red	C	<b>44-747.22</b>	2	0.012 kg
	Plastic yellow	C	<b>44-747.24</b>	2	0.012 kg
	Plastic green	C	<b>44-747.25</b>	2	0.012 kg
	Plastic blue	C	<b>44-747.26</b>	2	0.012 kg
	Plastic white	C	<b>44-747.29</b>	2	0.012 kg

Switching action: B = Momentary, C = Maintain



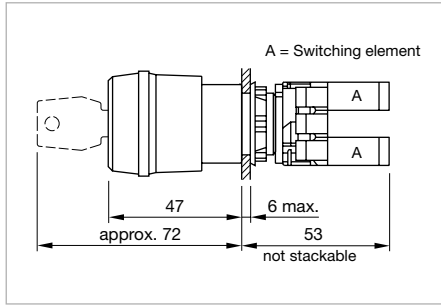
- 01
- 02
- 03
- 04
- 10
- 14
- 17
- 18
- 19
- 22
- 31
- 41
- 44**
- 51
- 56
- 57
- 61
- 70
- 71
- 82
- 84
- 92
- 95
- 96
- 97
- 99
- ST

# 44 Raised design

## Emergency-stop switch complete, foolproof EN IEC 60947-5-5, IP 65



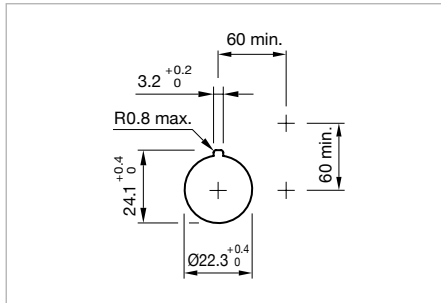
Product can differ from the current configuration.



Dimensions [mm]

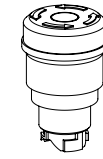
### Additional Information

- Switching system slow-make element
- Anwendung nach DIN EN ISO 13850 und EN 60204-1
- Shaft yellow
- The standard lock: Euro-Locks 9500
- Two keys are supplied with each key lock switch
- Optional lock numbers on request



Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)



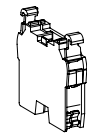
Vorsatz



Fixing nut





Front adapter

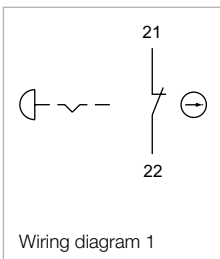


Switching element

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

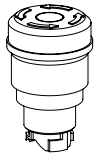
Product attribute	Lens	Contacts	Switching action	Terminal	Part No.	Wiring diagram	Weight
							
<b>Emergency-stop switch complete, foolproof EN IEC 60947-5-5, Front dimension Ø 37 mm</b>							
Twist to unlock anti-clockwise	Plastic red	1 NC	C	Screw	<b>44-712.001</b>	1	0.047 kg
							
<b>Emergency-stop switch complete, foolproof EN IEC 60947-5-5, Front dimension Ø 37 mm</b>							
Key to unlock anti-clockwise	Plastic red	1 NC	C	Screw	<b>44-713.001</b>	1	0.083 kg

Contacts: NC = Normally closed  
Switching action: C = Maintain



Emergency-stop switch foolproof, EN IEC 60947-5-5, IP 65

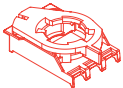
Equipment consisting of (schematic overview)



Actuator



Fixing nut



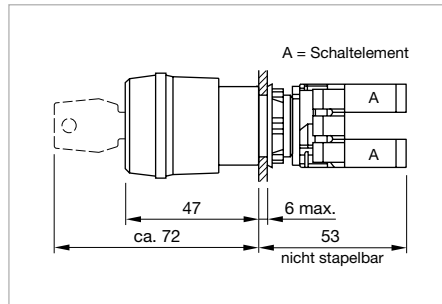
Front adapter *page 430*



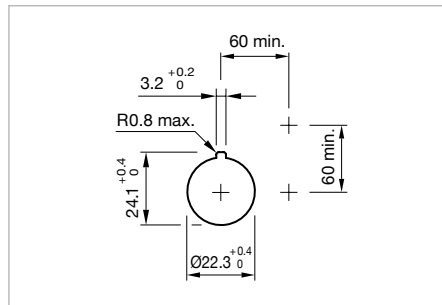
Switching element *page 430*

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.



Dimensions [mm]





Mounting cut-outs [mm]



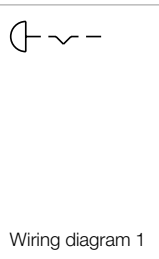
Product can differ from the current configuration.

Additional Information

- Application as per DIN EN ISO 13850 and EN 60204-1
- Shaft yellow
- The standard lock: Euro-Locks 9500
- Two keys are supplied with each key lock switch
- Optional lock numbers on request
- Up to 3 switching elements at 1. level

Product attribute	Lens	Switching action	Part No.	Wiring diagram	Weight
 <b>Emergency-stop switch actuator, foolproof EN IEC 60947-5-5, Front dimension Ø 37 mm</b>					
Twist to unlock anti-clockwise	Plastic red	C	<b>44-712</b>	1	0.040 kg
 <b>Emergency-stop switch actuator, foolproof EN IEC 60947-5-5, Front dimension Ø 37 mm</b>					
Key to unlock anti-clockwise	Plastic red	C	<b>44-713</b>	1	0.066 kg

Switching action: C = Maintain

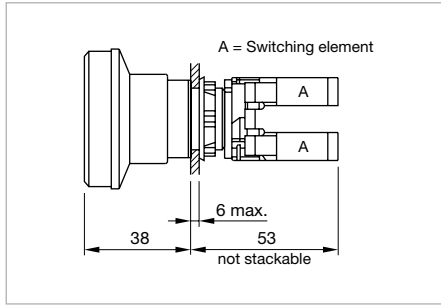


# 44 Raised design

## Stop switch complete, IP 65



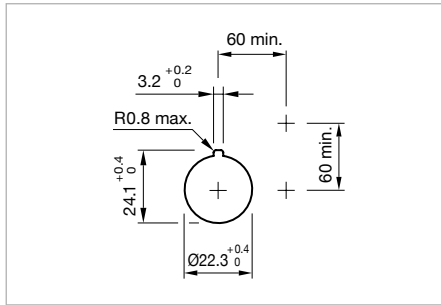
Product can differ from the current configuration.



Dimensions [mm]

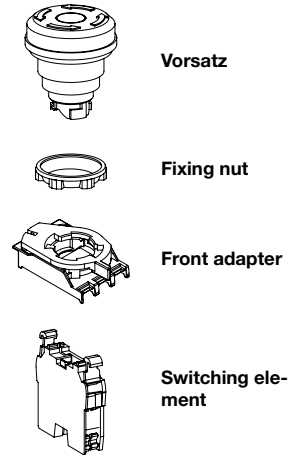
### Additional Information

- Switching system slow-make element
- Shaft yellow
- Twist to unlock anti-clockwise



Mounting cut-outs [mm]

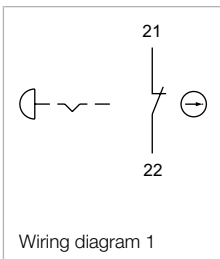
### Equipment consisting of (schematic overview)



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

Lens	Contacts	Switching action	Terminal	Part No.	Wiring diagram	Weight
<b>Stop switch complete, Front dimension Ø 50 mm</b>						
Plastic red	1 NC	C	Screw	<b>44-710.001</b>	1	0.057 kg

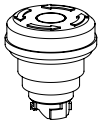
Contacts: NC = Normally closed  
Switching action: C = Maintain





Stop switch, IP 65

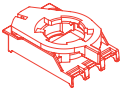
Equipment consisting of (schematic overview)



Actuator



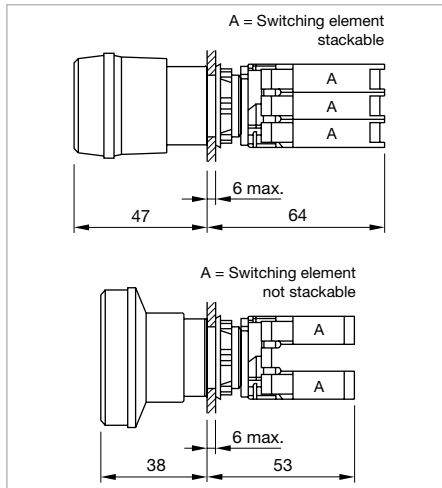
Fixing nut



Front adapter *page 430*



Switching element *page 430*



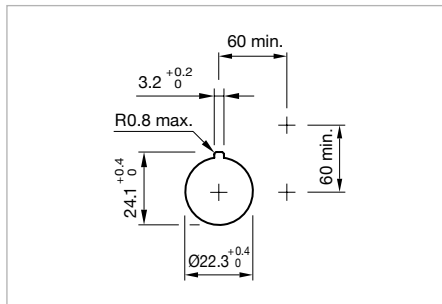
Dimensions [mm]



Product can differ from the current configuration.

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]

Additional Information

- Shaft yellow
- Twist to unlock anti-clockwise
- Up to 3 switching elements at 1. level

Lens	Switching action	Part No.	Wiring diagram	Weight
Plastic red	C	44-710	1	0.040 kg
Plastic red	C	44-711	1	0.035 kg

Switching action: C = Maintain

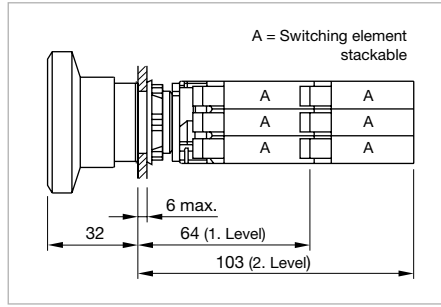


# 44 Raised design

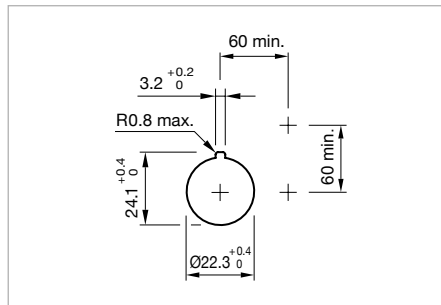
## Mushroom-head pushbutton, IP 65



Product can differ from the current configuration.

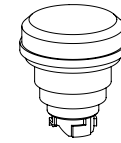


Dimensions [mm]



Mounting cut-outs [mm]

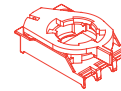
### Equipment consisting of (schematic overview)



Vorsatz



Fixing nut




Front adapter *page 430*



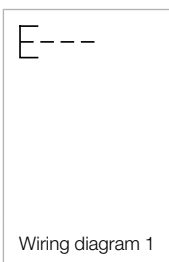
Switching element *page 430*

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.*

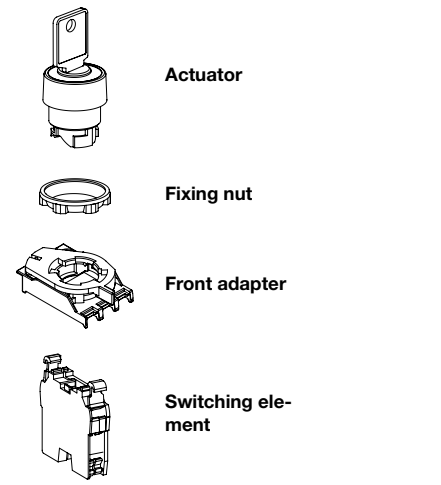
Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
 <p><b>Mushroom-head pushbutton actuator, Front dimension Ø 50 mm</b></p>					
Plastic matt chrome	Plastic black	B	<b>44-707.20</b>	1	0.028 kg
	Plastic red	B	<b>44-707.22</b>	1	0.028 kg
	Plastic green	B	<b>44-707.25</b>	1	0.028 kg

Switching action: B = Momentary

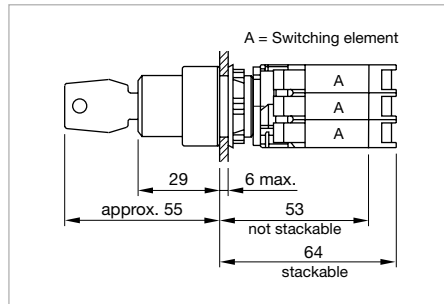


**Key lock switch 2 positions complete, IP 65**

**Equipment consisting of (schematic overview)**



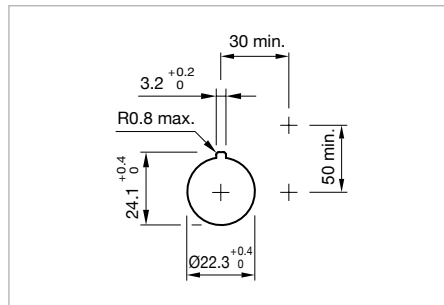
Each Part Number listed below includes all the black components shown in the 3D-drawing.



Dimensions [mm]



Product can differ from the current configuration.



Mounting cut-outs [mm]


**Additional Information**

- Switching system slow-make element
- Front ring plastic matchchrome
- The standard lock: Euro-Locks 9500
- Two keys are supplied with each key lock switch
- Optional lock numbers on request

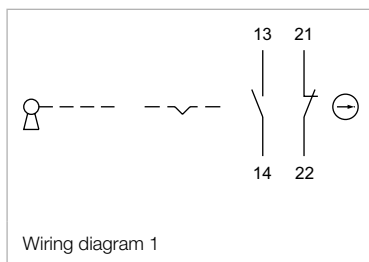
A C



Switching positions (A = Rest, C = Maintained)

Contacts	Switching action	Switching angle	Key remove	Terminal	Part No.	Wiring diagram	Weight
 <p><b>Key lock switch 2 positions complete, Front dimension Ø 28 mm</b></p>							
1 NC + 1 NO	A - C	C = 90°	A	Screw	<b>44-730.21.100</b>	1	0.075 kg
			A + C	Screw	<b>44-730.22.100</b>	1	0.075 kg

Contacts: NC = Normally closed, NO = Normally open  
Switching action: A = Rest, C = Maintain



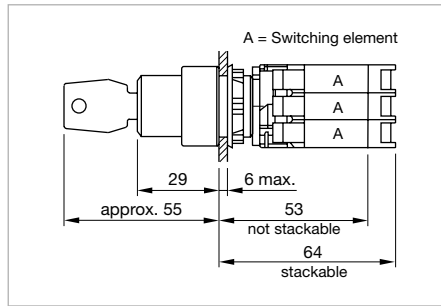
Wiring diagram 1

# 44 Raised design

## Keylock switch 2 positions, IP 65



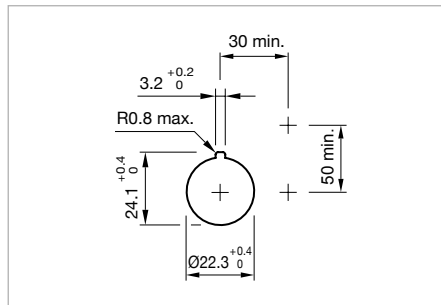
Product can differ from the current configuration.



Dimensions [mm]

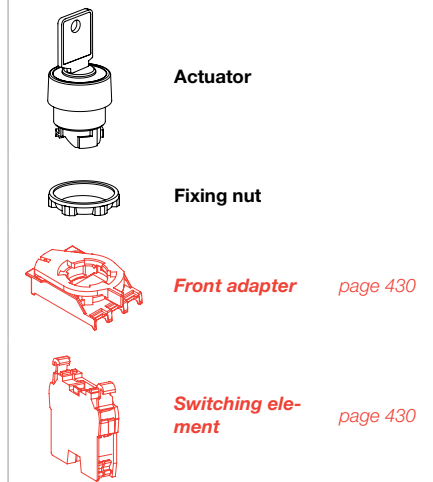
### Zusätzliche Informationen

- The standard lock: Euro-Locks 9500
- Two keys are supplied with each key lock switch
- Optional lock numbers on request
- Up to 3 switching elements at 1. level



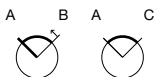
Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)




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

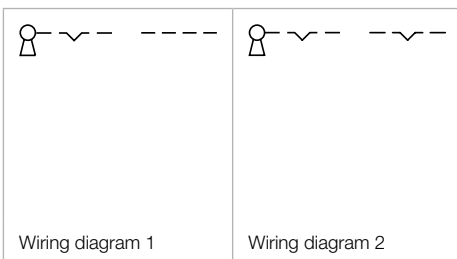
To obtain a complete unit, please select the red components from the page s shown.



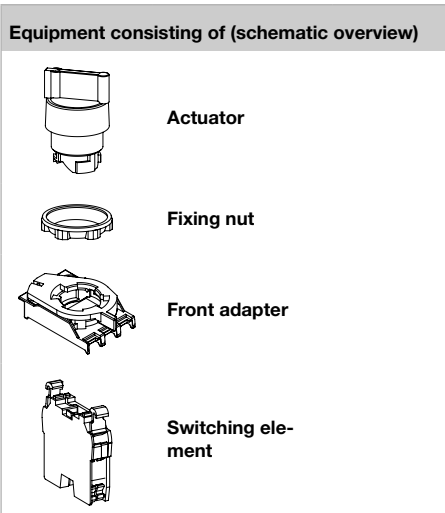
Switching positions (A = Rest, B = Momentary, C = Maintained)

Front ring	Switching action	Switching angle	Key remove	Part No.	Component layout	Wiring diagram	Weight
 <p><b>Keylock switch actuator 2 positions, Front dimension Ø 28 mm</b></p>							
Plastic matt chrome	A - B	B = 90°	A	<b>44-732.21</b>	5	1	0.051 kg
Plastic matt grey	A - B	B = 90°	A	<b>44-732.61</b>	5	1	0.051 kg
Plastic matt chrome	A - C	C = 90°	A	<b>44-730.21</b>	5	2	0.051 kg
			A + C	<b>44-730.22</b>	5	2	0.051 kg
Plastic matt grey	A - C	C = 90°	A	<b>44-730.61</b>	5	2	0.051 kg
			A + C	<b>44-730.62</b>	5	2	0.051 kg

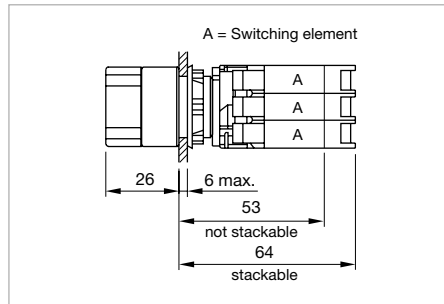
Switching action: A = Rest, B = Momentary, C = Maintain



**Selector switch 2 positions complete, IP 65**



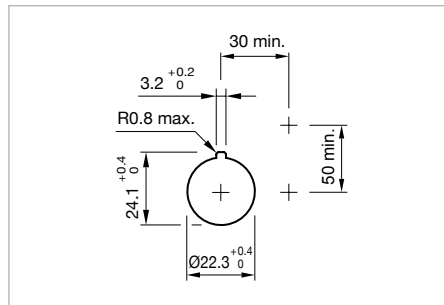
Each Part Number listed below includes all the black components shown in the 3D-drawing.



Dimensions [mm]



Product can differ from the current configuration.



Mounting cut-outs [mm]

**Additional Information**

- Switching system slow-make element

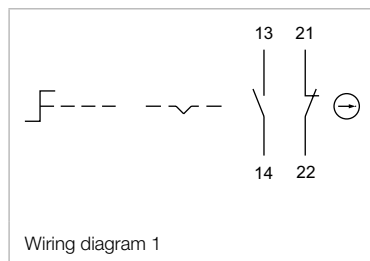
A C



Switching positions (A = Rest, C = Maintained)

Lever	Front ring	Contacts	Switching action	Switching angle	Terminal	Part No.	Wiring diagram	Weight
	<b>Selector switch 2 positions complete, Front dimension Ø 28 mm</b>							
Plastic black	Plastic matt chrome	1 NC + 1 NO	A - C	C = 90°	Screw	<b>44-720.20.100</b>	1	0.045 kg

Contacts: NC = Normally closed, NO = Normally open  
Switching action: A = Rest, C = Maintain

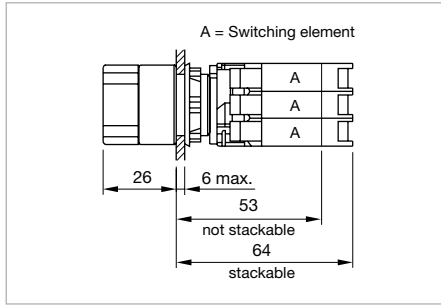


# 44 Raised design

## Selector switch 2 positions, IP 65



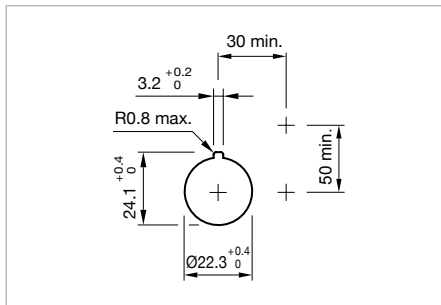
Product can differ from the current configuration.



Dimensions [mm]

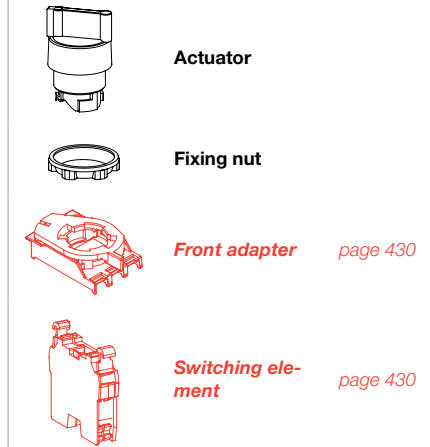
### Additional Information

- Up to 3 switching elements at 1. level



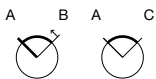
Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)



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

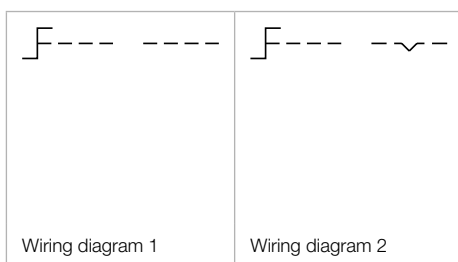
To obtain a complete unit, please select the red components from the pages shown.



Switching positions (A = Rest, B = Momentary, C = Maintained)

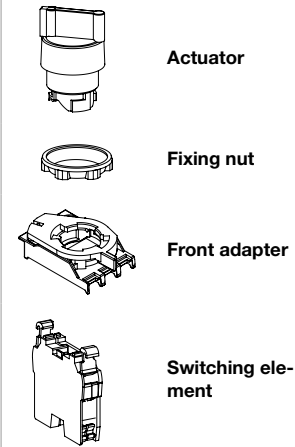
Lever	Front ring	Switching action	Switching angle	Part No.	Component layout	Wiring diagram	Weight
<p><b>Selector switch actuator 2 positions, Front dimension Ø 28 mm</b></p>							
Plastic black	Plastic matt chrome	A - B	B = 90°	<b>44-722.20</b>	5	1	0.021 kg
Plastic grey	Plastic matt grey	A - B	B = 90°	<b>44-722.68</b>	5	1	0.021 kg
Plastic black	Plastic matt chrome	A - C	C = 90°	<b>44-720.20</b>	5	2	0.021 kg
Plastic red	Plastic matt chrome	A - C	C = 90°	<b>44-720.22</b>	5	2	0.021 kg
	Plastic matt grey	A - C	C = 90°	<b>44-720.62</b>	5	2	0.021 kg
Plastic grey	Plastic matt grey	A - C	C = 90°	<b>44-720.68</b>	5	2	0.021 kg

Switching action: A = Rest, B = Momentary, C = Maintain  
The component layouts you will find from page 442

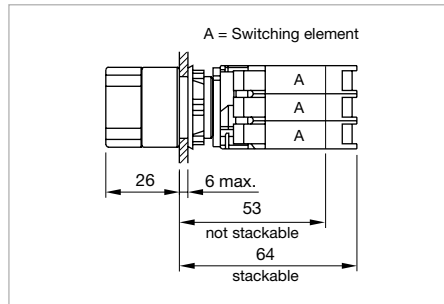


**Selector switch 3 positions complete, IP 65**

**Equipment consisting of (schematic overview)**



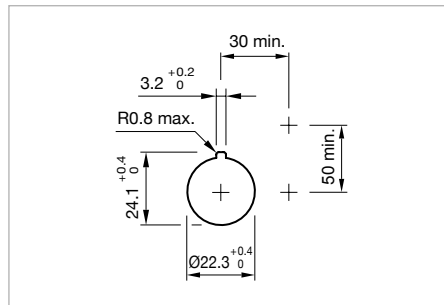
Each Part Number listed below includes all the black components shown in the 3D-drawing.



Dimensions [mm]



Product can differ from the current configuration.




Mounting cut-outs [mm]

**Additional Information**

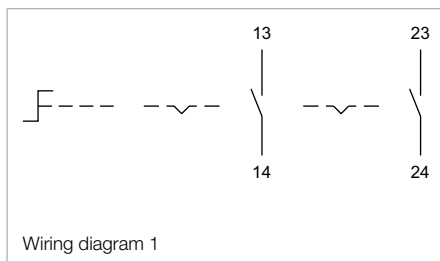
- Switching system slow-make element



Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Contacts	Switching action	Switching angle	Terminal	Part No.	Wiring diagram	Weight
 <p><b>Selector switch 3 positions complete, Front dimension Ø 28 mm</b></p>								
Plastic black	Plastic matt chrome	2 NO	C - A - C	C = 60° / 60°	Screw	<b>44-724.20.020</b>	1	0.048 kg

Contacts: 1 Normally open  
Switching action: A = Rest, C = Maintain



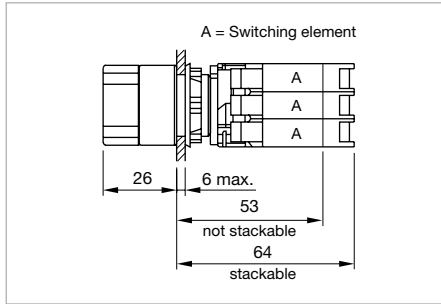
Wiring diagram 1

# 44 Raised design

## Selector switch 3 positions, IP 65



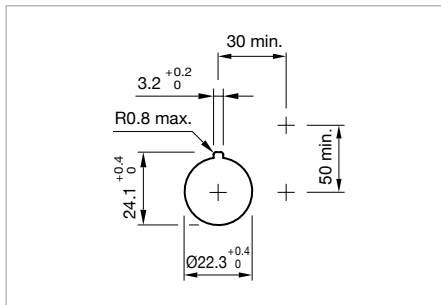
Product can differ from the current configuration.



Dimensions [mm]

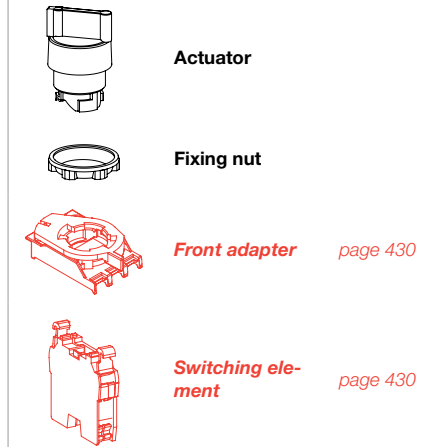
### Additional Information

- Up to 3 switching elements at 1. level



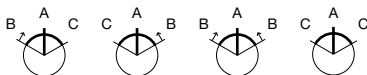
Mounting cut-outs [mm]

### Equipment consisting of (schematic overview)



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.



Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Switching action	Switching angle	Part No.	Component layout	Wiring diagram	Weight
<p><b>Selector switch actuator 3 positions, Front dimension Ø 28 mm</b></p>							
Plastic black	Plastic matt chrome	B - A - C	B = 60°, C = 60°	<b>44-727.20</b>	4	1	0.021 kg
Plastic grey	Plastic matt grey	B - A - C	B = 60°, C = 60°	<b>44-727.68</b>	4	1	0.021 kg
Plastic black	Plastic matt chrome	C - A - B	C = 60°, B = 60°	<b>44-726.20</b>	4	2	0.021 kg
Plastic grey	Plastic matt grey	C - A - B	C = 60°, B = 60°	<b>44-726.68</b>	4	2	0.021 kg
Plastic black	Plastic matt chrome	B - A - B	B = 60° / 60°	<b>44-725.20</b>	4	3	0.021 kg
Plastic grey	Plastic matt grey	B - A - B	B = 60° / 60°	<b>44-725.68</b>	4	3	0.021 kg
Plastic black	Plastic matt chrome	C - A - C	C = 60° / 60°	<b>44-724.20</b>	4	4	0.021 kg
Plastic grey	Plastic matt grey	C - A - C	C = 60° / 60°	<b>44-724.68</b>	4	4	0.021 kg

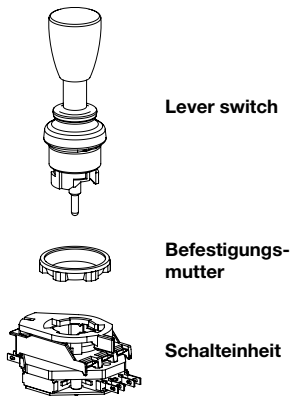
Switching action: A = Rest, B = Momentary, C = Maintain  
The component layouts you will find from page 442

Wiring diagram 1	Wiring diagram 2	Wiring diagram 3	Wiring diagram 4

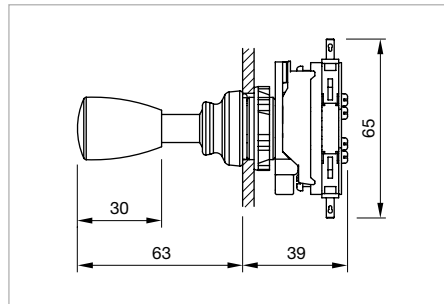


Lever switch, IP 65

Equipment consisting of (schematic overview)



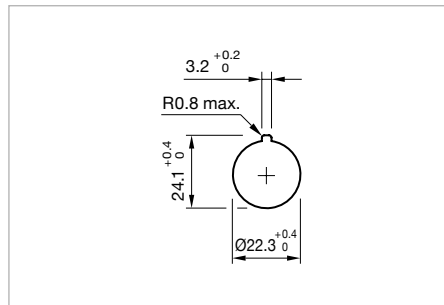
Each Part Number listed below includes all the black components shown in the 3D-drawing.



Dimensions [mm]




Product can differ from the current configuration.



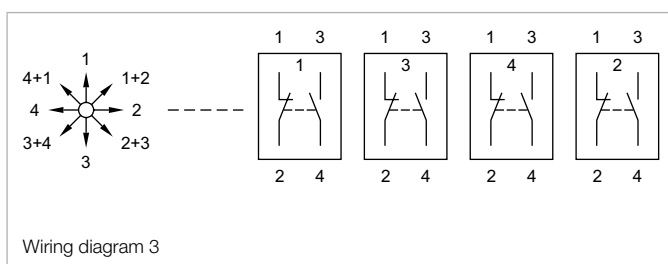
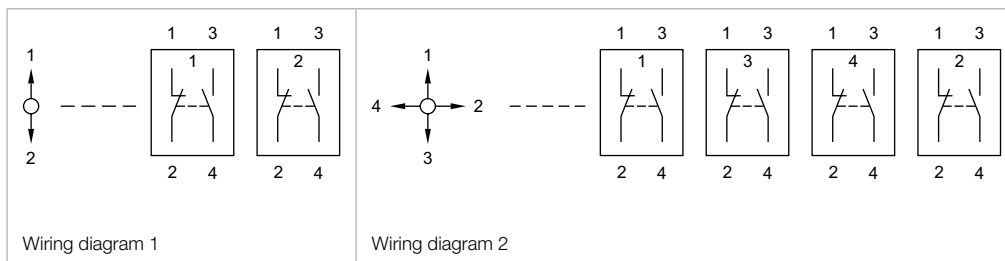
Mounting cut-outs [mm]

Additional Information

- Lever plastic black
- With flat receptacle, VDE 0630 (SEV) specify use of insulating sleeve Part No. 280-0010-00

Product attribute	Switching system	Contacts	Switching action	Terminal	Part No.	Component layout	Wiring diagram	Weight
								
<b>Lever switch complete, Front dimension Ø 22 mm</b>								
2 positions without latch position	Snap-action switching element	2 NC + 2 NO	B	Solder 2.8 x 0.5 mm	<b>44-800.2</b>	1	1	0.080 kg
4 positions without latch position	Snap-action switching element	4 NC + 4 NO	B	Solder 2.8 x 0.5 mm	<b>44-800.4</b>	2	2	0.085 kg
8 positions without latch position and lever guidance (omni directional)	Snap-action switching element	4 NC + 4 NO	B	Solder 2.8 x 0.5 mm	<b>44-800.8</b>	2	3	0.085 kg

Contacts: NC = Normally closed, NO = Normally open  
 Switching action: B = Momentary  
 The component layouts you will find from page 442

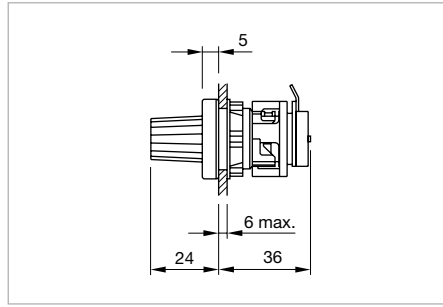


# 44 Raised design

## Potentiometer, IP 65



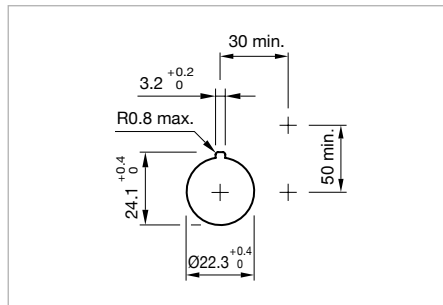
Product can differ from the current configuration.



Dimensions [mm]

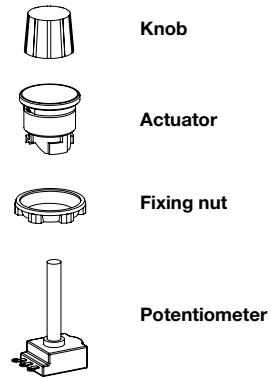
### Additional Information

- Resistor 10 kOhm / linear, series E3
- Power 0.4 W
- Slewing range 300°




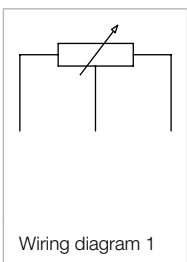
Mounting cut-outs [mm]

### Gerät besteht aus (schematische Übersicht)



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

Product attribute	Front ring	Terminal	Part No.	Wiring diagram	Weight
 <p><b>Potentiometer, Front dimension Ø 28 mm</b></p>	Plastic matt chrome	Solder	<b>44-745.20-10K1</b>	1	0.03 kg
	Plastic matt grey	Solder	<b>44-745.60-10K1</b>	1	0.03 kg
without potentiometer, specification for potentiometer: Shaft = length 32 mm, shaft end = Form A, Ø = 6 mm	Plastic matt chrome	Solder	<b>44-744.20</b>		0.016 kg
	Plastic matt grey	Solder	<b>44-744.60</b>		0.016 kg




Front

Lens

Additional Information


- For indicator and illuminated pushbutton with front illumination und pushbutton markable

Dimension	Lens	Part No.	Weight
 <p><b>Lens</b></p> <p>Ø 23 mm</p>	Plastic red transparent	<b>44-966.2</b>	0.001 kg
	Plastic yellow transparent	<b>44-966.4</b>	0.001 kg
	Plastic green transparent	<b>44-966.5</b>	0.001 kg
	Plastic blue transparent	<b>44-966.6</b>	0.001 kg
	Plastic colourless transparent	<b>44-966.7</b>	0.001 kg

Marking plate for lens

Additional Information

- Marking information see «Marking»


Product attribute	Marking plate	Part No.	Weight
 <p><b>Marking plate for lens</b></p> <p>for pushbutton markable</p>	black opaque	<b>44-961.0</b>	0.001 kg
	red opaque	<b>44-961.2</b>	0.001 kg
	yellow opaque	<b>44-961.4</b>	0.001 kg
	green opaque	<b>44-961.5</b>	0.001 kg
	blue opaque	<b>44-961.6</b>	0.001 kg
	for indicator and illuminated pushbutton with front illumination und pushbutton markable	white translucent	<b>44-962.9</b>

# 44 Accessories

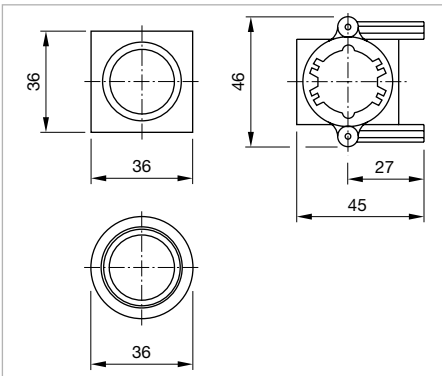
## Lens cap

### Additional Information



- For indicator with full face illumination, with sealing ring

Dimension	Lens cap	Part No.	Weight
 <p><b>Lens cap</b></p> <p>Ø 23 mm</p>	Plastic red transparent	<b>44-965.2</b>	0.003 kg
	Plastic yellow transparent	<b>44-965.4</b>	0.003 kg
	Plastic green transparent	<b>44-965.5</b>	0.003 kg
	Plastic blue transparent	<b>44-965.6</b>	0.003 kg
	Plastic colourless transparent	<b>44-965.7</b>	0.003 kg

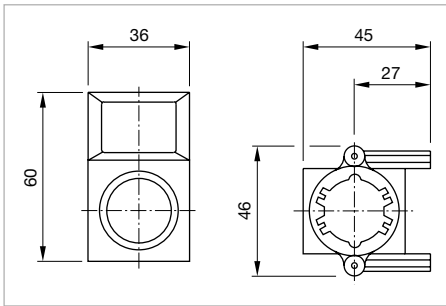
## Front bezel set without legend




Dimensions [mm]

Product attribute	Mounting cut-out	Front bezel	Part No.	Weight
 <p><b>Front bezel set without legend support, flush design, Front dimension 36 x 36 mm</b></p>				
for indicator and potentiometer, the mounting depth extends for 3 mm	Ø 30.5 mm	Plastic black	<b>44-946.01</b>	0.006 kg
for illuminated pushbutton and pushbutton, selector- and keylock switch, interlocking pushbutton, the mounting depth extends for 12 mm	Ø 30.5 mm	Plastic black	<b>44-946.03</b>	0.010 kg
 <p><b>Front bezel set without legend support, flush design, Front dimension Ø 36 mm</b></p>				
for indicator and potentiometer, the mounting depth extends for 3 mm	Ø 30.5 mm	Plastic black	<b>44-946.01-A</b>	0.006 kg
for illuminated pushbutton and pushbutton, selector- and keylock switch, interlocking pushbutton, the mounting depth extends for 12 mm	Ø 30.5 mm	Plastic black	<b>44-946.03-A</b>	0.010 kg

**Front bezel set with legend**




Dimensions [mm]

Product attribute	Mounting cut-out	Front bezel	Part No.	Weight
 <p><b>Front bezel set with legend support, flush design, Front dimension 36 x 60 mm</b></p>				
for indicator and potentiometer, the mounting depth extends for 3 mm	Ø 30.5 mm	Plastic black	<b>44-946.02</b>	0.007 kg
for illuminated pushbutton and pushbutton, selector- and keylock switch, interlocking pushbutton, the mounting depth extends for 12 mm	Ø 30.5 mm	Plastic black	<b>44-946.04</b>	0.011 kg

**Legend plate for legend support**

**Additional Information**

- Marking information see «Marking»

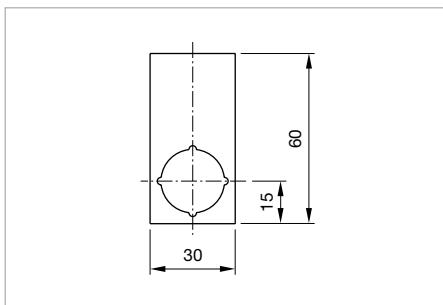
Dimension	Material	Colour	Mounting type	Part No.	Weight
 <p><b>Legend plate for front bezel set with legend support, flush design</b></p>					
27 x 18 mm	plastic, double layer	aluminium/black	adhesive	<b>44-946</b>	0.001 kg
		black/white	adhesive	<b>44-946.0</b>	0.001 kg

# 44 Accessories


## Legend plate, IP 40

### Additional Information

- For engraving
- The colour of anodized aluminium parts can vary due to technical production reasons



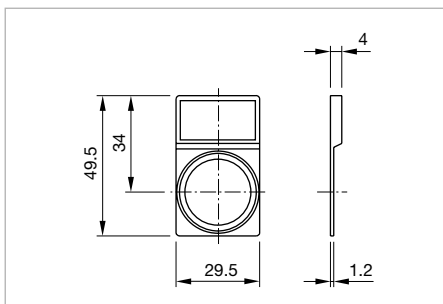
Dimensions [mm]

Dimension	Material	Colour	Part No.	Weight
 <b>Legend plate</b>				
30 x 60 mm	Aluminium	natural anodized	<b>44-955</b>	0.001 kg

## Legend support without legend

### Additional Information

- Label to be ordered separately Part No. 44-960
- Remove sealing ring from actuator



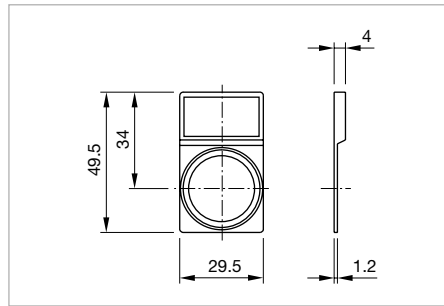
Dimensions [mm]

Dimension	Material	Colour	Part No.	Weight
 <b>Legend support without legend</b>				
29.5 x 49.5 mm	Plastic	black	<b>44-944.00</b>	0.002 kg
		grey	<b>44-944.08</b>	0.002 kg

**Legend support with legend**

**Additional Information**

- Label unmarked, remove sealing ring from actuator



Dimensions [mm]

Dimension	Material	Colour	Part No.	Weight
 <p><b>Legend support with legend</b></p>	Plastic	black	<b>44-945.00</b>	0.002 kg
		grey	<b>44-945.08</b>	0.002 kg
		29.5 x 49.5 mm		

**Legend plate for legend support**

**Additional Information**

- Marking information see «Marking»
- The colour of anodized aluminium parts can vary due to technical production reasons

Dimension	Material	Colour	Part No.	Weight
 <p><b>Legend plate for legend support with legend</b></p>	Aluminium	black anodized	<b>44-960</b>	0.001 kg
		13 x 26 mm		

**Front ring**

**Additional Information**

- For illuminated pushbutton- and pushbutton actuator

Front ring	Part No.	Weight
 <p><b>Front ring</b></p>	<b>44-967.2</b>	0.002 kg
	<b>44-967.6</b>	0.002 kg
Plastic matt chrome		
Plastic matt grey		

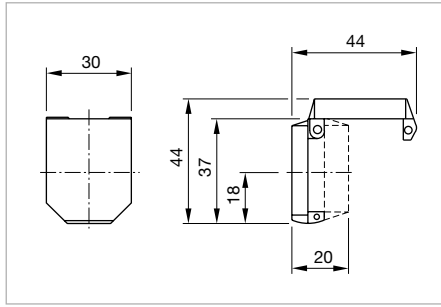
01  
02  
03  
04  
10  
14  
17  
18  
19  
22  
31  
41  
44  
51  
56  
57  
61  
70  
71  
82  
84  
92  
95  
96  
97  
99  
ST

# 44 Accessories

## Protective cover, IP 65

### Additional Information

- Hinged, with means for sealing
- Front panel thickness up to 3 mm max
- Remove anti-twisting nose from the actuator
- The dimensions of the mounting cut-outs are shown in the product details
- Please note that bigger minimum distances are necessary




Dimensions [mm]

Front protection	Mounting cut-out	Material	Optics	Part No.	Weight
 <p><b>Protective cover</b></p>					
IP 65	Ø 22.5 mm	Plastic	transparent	<b>44-922</b>	0.007 kg

## Front protective cap, IP 68

### Additional Information

- Only in connection with flush front ring. Protection when used under adverse ambient conditions. Remove gasket from the actuator. Cannot be used with the label support.

Material	Colour	Optics	Part No.	Weight
 <p><b>Front protective cap</b></p>				
Silicone	colourless	transparent	<b>44-917.07</b>	0.002 kg



**Keylock cap**

**Additional Information**

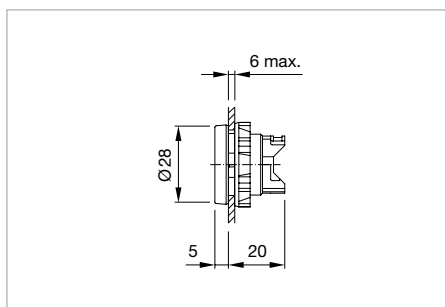
- For keylock pushbutton raised design. Protection when used under adverse ambient conditions
- Remove sealing ring from actuator
- Can not be used with the label support

Material	Colour	Part No.	Weight
 <b>Keylock cap</b> Plastic	black	<b>44-921.00</b>	0.004 kg
	grey	<b>44-921.08</b>	0.004 kg

**Blind plug**

**Additional Information**

- Lamp transformer can be mounted with front adaptor
- The dimensions of the mounting cut-outs are shown in the product details



Dimensions [mm]

Mounting cut-out	Material	Colour	Part No.	Weight
 <b>Blind plug</b> Ø 22.5 mm	Plastic	grey	<b>44-915</b>	0.008 kg

**Spare key**

**Zusätzliche Informationen**

- For standard lock: Euro-Locks 9500
- Optional lock numbers on request

Part No.	Weight
 <b>Spare key</b> 44-919	0.007 kg

01  
02  
03  
04  
10  
14  
17  
18  
19  
22  
31  
41  
**44**  
51  
56  
57  
61  
70  
71  
82  
84  
92  
95  
96  
97  
99  
ST

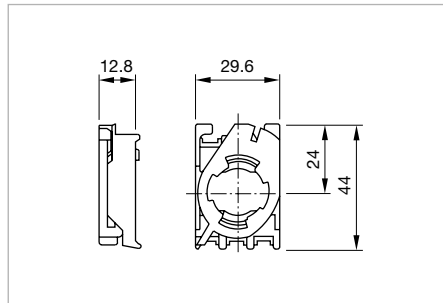
# 44 Accessories

## Rear side


## Front adapter front mounting

### Additional Information

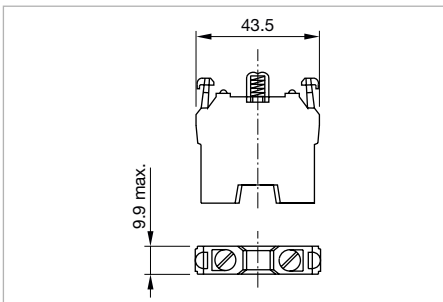
- Front adaptor marking: Terminal marking and distinctive number as per DIN EN 50013. The operating characters are marked on the switching elements beside the screw terminals




Dimensions [mm]

Product attribute	Marking	Part No.	Weight
 <b>Front adapter front mounting</b>			
for switching element or lamp element	without	<b>44-900</b>	0.007 kg
for switching elements in 1. level		<b>44-901</b>	0.007 kg
for switching elements in 2. level		<b>44-902</b>	0.007 kg
for switching elements in 3. level		<b>44-903</b>	0.007 kg

## Slow-make element stackable

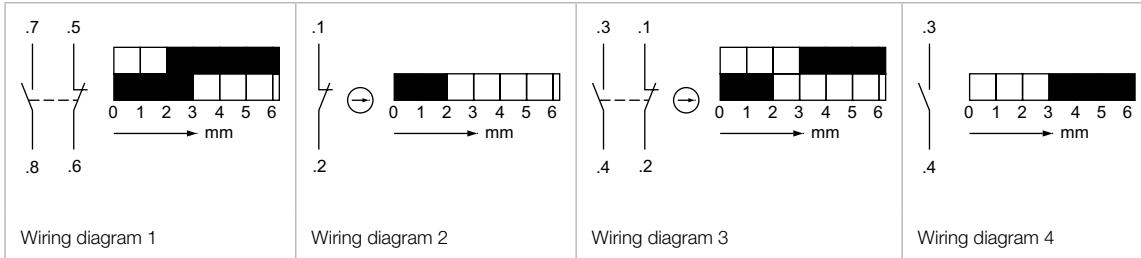


Dimensions [mm]

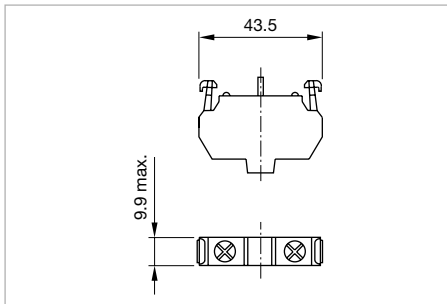
Product attribute	Switching voltage	Switching current	Contacts	Contact material	Terminal	Part No.	Wiring diagram	Weight
 <b>Slow-make switching element front mounting stackable</b>								
overlapping, not to use with EMERGENCY-STOP switch	500 VAC	10 A	1 NC + 1 NO	Silver	Screw	<b>44-141</b>	1	0.017 kg
Zwangsöffnung nach EN IEC 60947-5-1	500 VAC	10 A	1 Ö + 1 S	Silber	Schraub	<b>44-131</b>	3	0.017 kg
				Gold	Screw	<b>44-132</b>	3	0.017 kg
			1 NC	Silver	Screw	<b>44-151</b>	2	0.014 kg

Product attribute	Switching voltage	Switching current	Contacts	Contact material	Terminal	Part No.	Wiring diagram	Weight
Forced opening as per EN IEC 947-5-1	500 VAC	10 A	1 NC	Gold	Screw	<b>44-152</b>	2	0.014 kg
			1 NO	Silver	Screw	<b>44-161</b>	4	0.014 kg
				Gold	Screw	<b>44-162</b>	4	0.014 kg


Contacts: NC = Normally closed, NO = Normally open



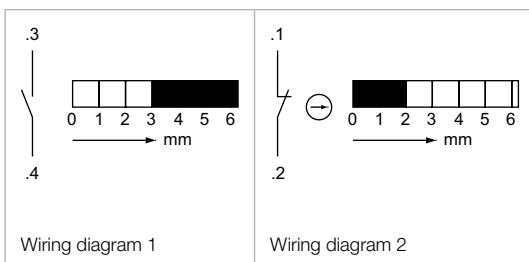
## Slow make element non-stackable



Dimensions [mm]

Product attribute	Switching voltage	Switching current	Contacts	Contact material	Terminal	Part No.	Wiring diagram	Weight
 <b>Slow-make switching element front mounting non-stackable</b>	500 VAC	10 A	1 NC	Silver	Screw	<b>44-111</b>	2	0.010 kg
	500 VAC	10 A	1 NO	Silver	Screw	<b>44-121</b>	1	0.010 kg

Contacts: NC = Normally closed, NO = Normally open

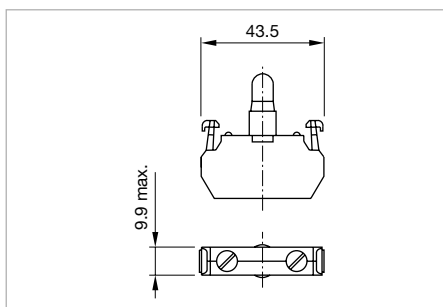


# 44 Accessories


## Lamp element front mounting

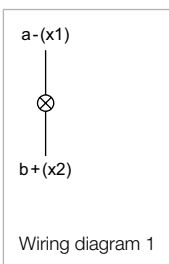
### Additional Information

- Lamp socket BA9s, max. 2.6 W



Dimensions [mm]


Terminal	Part No.	Wiring diagram	Weight
			
<b>Lamp element front mounting</b>			
Screw	44-524	1	0.011 kg



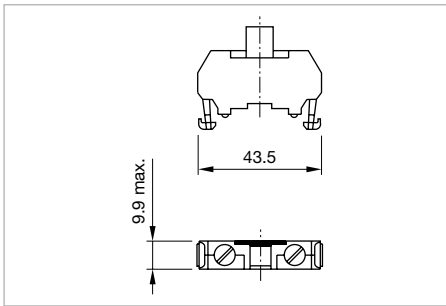
## Base adaptor

### Additional Information


- Front adaptor marking: Terminal marking and distinctive number as per DIN EN 50013. The operating characters are marked on the switching elements beside the screw terminals

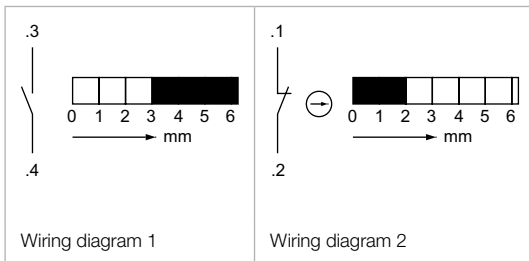
Marking	Part No.	Weight
		
<b>Base adaptor</b>		
	44-905	0.006 kg

Slow-make element base mountingung



Dimensions [mm]

Product attribute	Switching voltage	Switching current	Contacts	Contact material	Terminal	Part No.	Wiring diagram	Weight
 <p><b>Slow-make switching element base mounting non-stackable</b></p>								
Forced opening as per EN IEC 947-5-1	500 VAC	10 A	1 NC	Silver	Screw	<b>44-211</b>	2	0.010 kg
	500 VAC	10 A	1 NO	Silver	Screw	<b>44-221</b>	1	0.010 kg



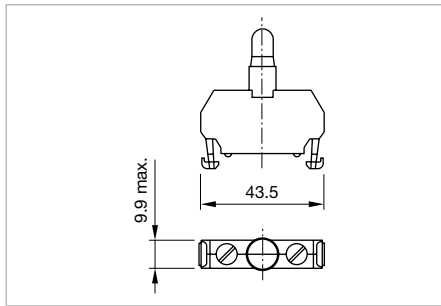
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# 44 Accessories


## Lamp base mounting

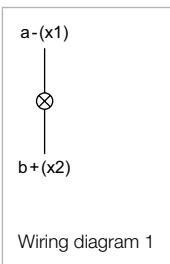
### Additional Information

- Lamp socket BA9s, max. 2.6 W



Dimensions [mm]

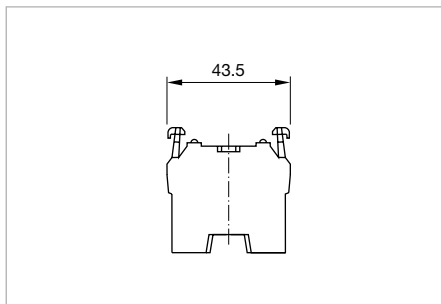
Terminal	Part No.	Wiring diagram	Weight
 <b>Lamp base mounting</b>			
Screw	44-525	1	0.011 kg




## Blind element

### Additional Information

- For mounting of lamp transformer



Dimensions [mm]

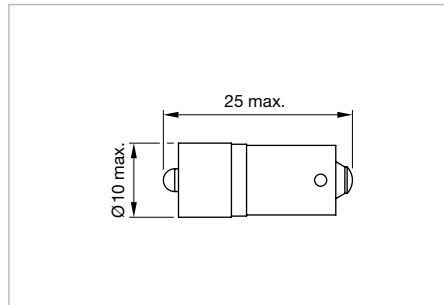
Part No.	Weight
 <b>Blind element</b>	
44-940	0.008 kg

**Illumination**

**Single-LED, BA9s**

**Additional Information**

- Luminous intensity data of the LEDs on direct voltage
- Electrical and optical data are measured at 25 °C
- The specified 6 VDC, 130 VAC, 130 DC und 230 VAC versions are built with a protection diode
- The specified 12, 24, 28, 48 VAC/DC versions are built with a bridge rectifier
- Luminosity and wave length scattering caused by LED manufacturing processes may cause slight variations in the illumination
- The specified 130 VAC types are developed to run on a supply voltage of 130 VAC only. An operation at a higher supply voltage using commercial lampholders with integrated resistors, is not approved



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 %	17 mA±15 %	400 mcd	630 nm	<b>10-2506.1082</b>	0.002 kg
	12 VAC/DC +10 %	16 mA±15 %	390 mcd	630 nm	<b>10-2509.1142</b>	0.002 kg
	24 VAC/DC +10 %	15 mA±15 %	350 mcd	630 nm	<b>10-2512.1142</b>	0.002 kg
	28 VAC/DC +10 %	13 mA±15 %	300 mcd	630 nm	<b>10-2513.1142</b>	0.002 kg
	48 VAC/DC +10 %	8 mA±15 %	200 mcd	630 nm	<b>10-2519.1052</b>	0.002 kg
	130 VDC +10 %	3 mA±15 %	120 mcd	630 nm	<b>10-2524.3042</b>	0.002 kg
	130 VAC +10 %	5 mA±15 %	180 mcd	630 nm	<b>10-2H24.2052</b>	0.002 kg
	230 VAC +10 %	3 mA±15 %	120 mcd	630 nm	<b>10-2H25.2042</b>	0.002 kg
yellow	6 VDC +10 %	17 mA±15 %	340 mcd	587 nm	<b>10-2506.1084</b>	0.002 kg
	12 VAC/DC +10 %	16 mA±15 %	340 mcd	587 nm	<b>10-2509.1144</b>	0.002 kg
	24 VAC/DC +10 %	15 mA±15 %	300 mcd	587 nm	<b>10-2512.1144</b>	0.002 kg
	28 VAC/DC +10 %	13 mA±15 %	270 mcd	587 nm	<b>10-2513.1144</b>	0.002 kg
	48 VAC/DC +10 %	8 mA±15 %	180 mcd	587 nm	<b>10-2519.1054</b>	0.002 kg
	130 VDC +10 %	3 mA±15 %	110 mcd	587 nm	<b>10-2524.3044</b>	0.002 kg
	130 VAC +10 %	5 mA±15 %	160 mcd	587 nm	<b>10-2H24.2054</b>	0.002 kg
	230 VAC +10 %	3 mA±15 %	110 mcd	587 nm	<b>10-2H25.2044</b>	0.002 kg
green	6 VDC +10 %	7 mA±15 %	1050 mcd	525 nm	<b>10-2506.1085</b>	0.002 kg
	12 VAC/DC +10 %	7 mA±15 %	1050 mcd	525 nm	<b>10-2509.1145</b>	0.002 kg
	24 VAC/DC +10 %	7 mA±15 %	1050 mcd	525 nm	<b>10-2512.1145</b>	0.002 kg
	28 VAC/DC +10 %	7 mA±15 %	1050 mcd	525 nm	<b>10-2513.1145</b>	0.002 kg
	48 VAC/DC +10 %	4 mA±15 %	600 mcd	525 nm	<b>10-2519.1055</b>	0.002 kg
	130 VDC +10 %	2 mA±15 %	300 mcd	525 nm	<b>10-2524.3045</b>	0.002 kg
	130 VAC +10 %	3 mA±15 %	450 mcd	525 nm	<b>10-2H24.2055</b>	0.002 kg
	230 VAC +10 %	2 mA±15 %	300 mcd	525 nm	<b>10-2H25.2045</b>	0.002 kg

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# 44 Accessories

LED colour	Operating voltage	Operation current	Lumi. intensity	Dom. wavelength	Part No.	Weight
blue	6 VDC +10 %	17 mA±15 %	780 mcd	470 nm	<b>10-2506.1086</b>	0.002 kg
	12 VAC/DC +10 %	16 mA±15 %	720 mcd	470 nm	<b>10-2509.1146</b>	0.002 kg
	24 VAC/DC +10 %	15 mA±15 %	680 mcd	470 nm	<b>10-2512.1146</b>	0.002 kg
	28 VAC/DC +10 %	13 mA±15 %	590 mcd	470 nm	<b>10-2513.1146</b>	0.002 kg
	48 VAC/DC +10 %	8 mA±15 %	400 mcd	470 nm	<b>10-2519.1056</b>	0.002 kg
	130 VDC +10 %	3 mA±15 %	200 mcd	470 nm	<b>10-2524.3046</b>	0.002 kg
	130 VAC +10 %	5 mA±15 %	230 mcd	470 nm	<b>10-2H24.2056</b>	0.002 kg
	230 VAC +10 %	3 mA±15 %	200 mcd	470 nm	<b>10-2H25.2046</b>	0.002 kg
white	6 VDC +10 %	5 mA ±15 %	750 mcd	x0.31/y0.32 nm	<b>10-2506.1089</b>	0.002 kg
	12 VAC/DC +10 %	8 mA ±15 %	1200 mcd	x0.31/y0.32 nm	<b>10-2509.1149</b>	0.002 kg
	24 VAC/DC +10 %	7 mA ±15 %	1050 mcd	x0.31/y0.32 nm	<b>10-2512.1149</b>	0.002 kg
	28 VAC/DC +10 %	5 mA ±15 %	750 mcd	x0.31/y0.32 nm	<b>10-2513.1149</b>	0.002 kg
	48 VAC/DC +10 %	5 mA ±15 %	750 mcd	x0.31/y0.32 nm	<b>10-2519.1059</b>	0.002 kg
	130 VDC +10 %	1.5 mA ±15 %	225 mcd	x0.31/y0.32 nm	<b>10-2524.3049</b>	0.002 kg
	130 VAC +10 %	2 mA ±15 %	300 mcd	x0.31/y0.32 nm	<b>10-2H24.2059</b>	0.002 kg
	230 VAC +10 %	1.5 mA ±15 %	225 mcd	x0.31/y0.32 nm	<b>10-2H25.2049</b>	0.002 kg

## Filament lamp, BA9s

### Additional Information

- The max. overall length of the lamp may not exceed 28 mm

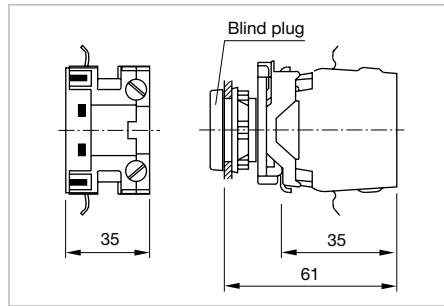
Operating voltage	Operation current	Part No.	Weight
 <p><b>Filament lamp</b></p>			
6 VAC/DC	200 mA ±10 %	<b>10-1406.1369</b>	0.002 kg
12 VAC/DC	100 mA ±10 %	<b>10-1409.1329</b>	0.002 kg
24 VAC/DC	50 mA ±10 %	<b>10-1412.1279</b>	0.002 kg
36 VAC/DC	56 mA ±10 %	<b>10-1416.1289</b>	0.002 kg
48 VAC/DC	42 mA ±10 %	<b>10-1419.1249</b>	0.002 kg
60 VAC/DC	33 mA ±10 %	<b>10-1420.1219</b>	0.002 kg
110 VAC/DC	22 mA ±10 %	<b>10-1422.1179</b>	0.002 kg
130 VAC/DC	20 mA ±10 %	<b>10-1424.1179</b>	0.002 kg




**Lamp transformer**

**Additional Information**

- Short-circuit proof, 1.2 VA, 50/60 Hz, for front or base mounting



Dimensions [mm]

Operating voltage	Terminal	Part No.	Weight
 <p><b>Lamp transformer</b></p>			
230 / 24 VAC	Screw	<b>44-976</b>	0.102 kg
400 / 24 VAC	Screw	<b>44-977</b>	0.102 kg

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# 44 Accessories

## Emergency-stop switch

## Emergency-stop legend

### Additional Information

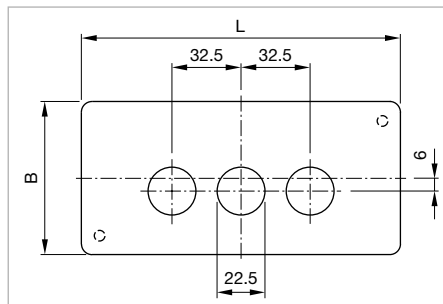
- Front protection IP 65 only ensured after protection foil is removed

Dimension	Marking	Colour	Mounting type	Part No.	Weight
 <p><b>Emergency-stop legend</b></p>					
Ø 45 x 1 mm	without	yellow	adhesive	<b>44-951</b>	0.002 kg
	NOT-AUS	yellow	adhesive	<b>44-951.1</b>	0.002 kg
	EMERGENCY-STOP	yellow	adhesive	<b>44-951.2</b>	0.002 kg
	ARRET-D'URGENCE	yellow	adhesive	<b>44-951.3</b>	0.002 kg
	NOT - HALT	yellow	adhesive	<b>44-951.4</b>	0.002 kg
Ø 60 x 1 mm	without	yellow	adhesive	<b>44-950</b>	0.004 kg
	NOT-AUS	yellow	adhesive	<b>44-950.1</b>	0.004 kg
	EMERGENCY-STOP	yellow	adhesive	<b>44-950.2</b>	0.004 kg
	ARRET-D'URGENCE	yellow	adhesive	<b>44-950.3</b>	0.004 kg
	NOT - HALT	yellow	adhesive	<b>44-950.4</b>	0.004 kg
Ø 90 x 1 mm	without	yellow	adhesive	<b>44-949</b>	0.009 kg
	NOT-AUS	yellow	adhesive	<b>44-949.1</b>	0.009 kg
	EMERGENCY-STOP	yellow	adhesive	<b>44-949.2</b>	0.009 kg
	ARRET-D'URGENCE	yellow	adhesive	<b>44-949.3</b>	0.009 kg
	NOT - HALT	yellow	adhesive	<b>44-949.4</b>	0.009 kg

## Emergency-stop enclosure

### Additional Information


- 1 mounting hole, with adaptor for base mounting



Dimensions [mm]

Dimension	Colour	Part No.	Weight
 <p><b>Emergency-stop enclosure</b></p>			
L 84 x B 72 x H 64 mm	yellow	<b>44-001.4</b>	0.174 kg

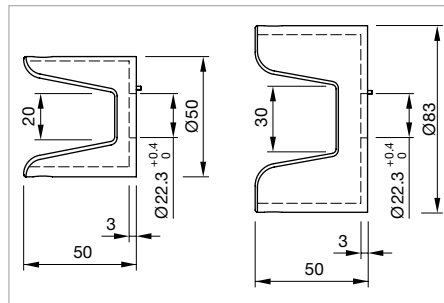
**Cable gland, IP 68**

Product attribute	Thread	Material	Colour	Part No.	Weight
 <p><b>Cable gland</b></p>					
with nut and sealing, clamping range $\varnothing$ 7 ... 13 mm, thread length 10 mm	M20 x 1.5	Plastic	grey	<b>44-956</b>	0.009 kg

**E-stop protective shroud, IP 65**

**Additional Information**

- Use only for Part No. 44-712, 44-713, 44-712.001 and 44-713.001
- The protection shroud is not suitable for a proper use of emergency-stop. It can obstruct a spontaneous operation of the emergency-stop



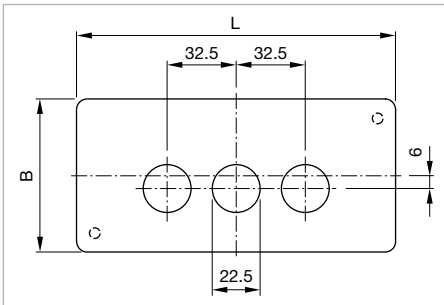
Dimensions [mm]

Dimension	Material	Colour	Standard	Part No.	Weight
 <p><b>E-stop protective shroud</b></p>					
Ø 50 mm	Plastic	yellow		<b>704.927.8</b>	0.052 kg
 <p><b>E-stop protective shroud</b></p>					
Ø 83 mm	Plastic	yellow	SEMI S2-93/12.4.c	<b>704.927.9</b>	0.067 kg


# 44 Accessories

## Mounting

## Enclosure




Dimensions [mm]

Product attribute	Dimension	Colour	Part No.	Weight
 <b>Enclosure</b>				
1 mounting hole, with adaptor for base mounting	L 84 x B 72 x H 64 mm	light grey	<b>44-001.8</b>	0.175 kg
2 mounting holes, with adaptor for base mounting	L 117 x B 72 x H 64 mm	light grey	<b>44-002.8</b>	0.199 kg
3 mounting holes, with adaptor for base mounting	H 150 x B 72 x H 64 mm	light grey	<b>44-003.8</b>	0.252 kg
5 mounting holes, with adaptor for base mounting	L 215 x B 72 x H 64 mm	light grey	<b>44-005.8</b>	0.332 kg


## Legend for enclosure

### Additional Information

- Not marked

Dimension	Material	Mounting type	Part No.	Weight
 <b>Legend for enclosure</b>				
19 x 19 mm	plastic / aluminium plated (natural)	adhesive	<b>44-963</b>	0.001 kg


## Cable gland, IP 68

Product attribute	Thread	Material	Colour	Part No.	Weight
 <b>Cable gland</b>					
with nut and sealing, clamping range $\varnothing$ 7 ... 13 mm, thread length 10 mm	M20 x 1.5	Plastic	grey	<b>44-956</b>	0.009 kg

**Reducing ring**

**Additional Information**


- For mounting of Ø 22.5 mm device into Ø 30.5 mm mounting cut-out
- The colour of anodized aluminium parts can vary due to technical production reasons

Material	Colour	Part No.	Weight
 <p><b>Reducing ring</b></p>			
Aluminium	natural anodized	<b>44-925</b>	0.003 kg

**Mounting tool**

**Additional Information**

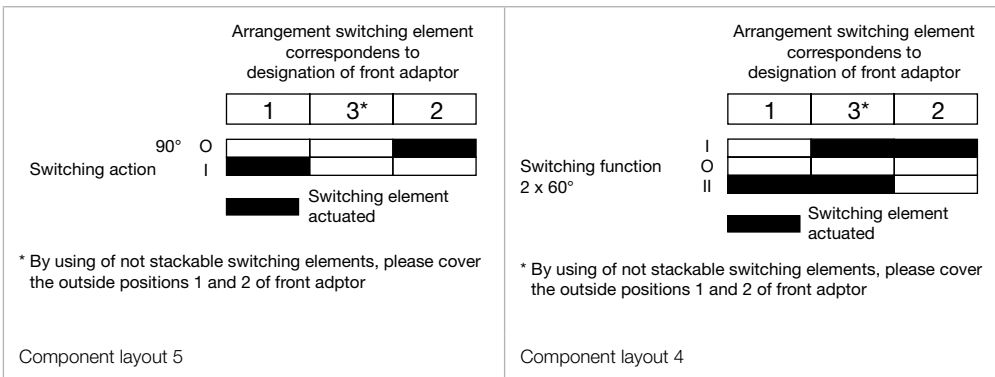
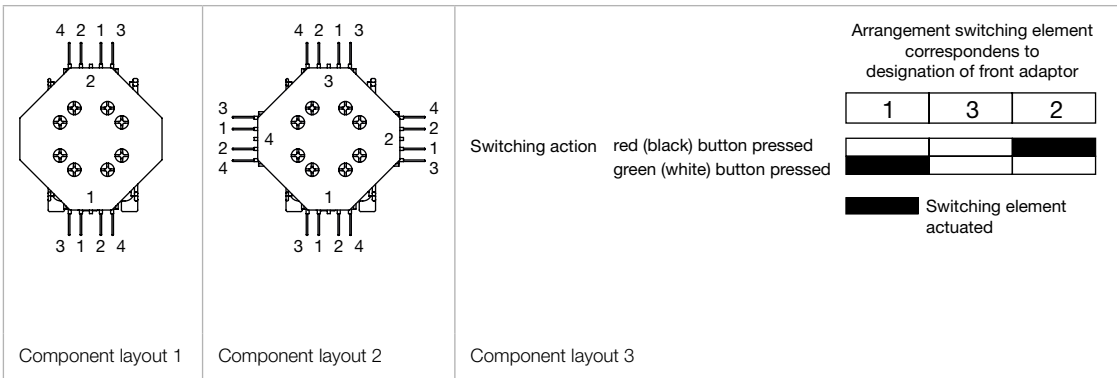
- For fixing nut, transparent lens, lens caps and illumination

Part No.	Weight
 <p><b>Mounting tool</b></p>	
<b>44-935</b>	0.037 kg

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# 44 Drawings

## Drawings



**Snap-action switching element Control Switch**
**Switching system**

Is equipped with double-break jump contacts. Owing to the large cleaning path, outstanding self-cleaning is possible. The multilayer contacts are designed for universal use. They are gilded with a 2 µm gold coating. Each snap-action switching element comprises a NC (normally closed contact) and a NO (normally open contact).

**Material**
**Housing**

Polyethylene terephthalate (PETP), as per UL 94 V0

**Contacts**

AgNi, 2 µm gold plated

**Contact carrier**

Brass or CuBe

**Mechanical characteristics**
**Terminals**

Soldering terminal (also pluggable 2.8 x 0.5 mm), Brass gold plated  
Wire cross-section 1.0 mm<sup>2</sup> max.

**Actuating force**

For each snap-action switching element approx. 2 N

**Rebound time**

typically 0.5 µs

**Contact opening width**

2 x 0.65 mm

**Contact cleaning path**

2 x 0.6 mm

**Mechanical lifetime**

2 million cycles of operation

**Electrical characteristics**
**Contact resistance**

New state with gold plated contact ≤ 50 mΩ, statically

**Electrical life**

> 10 000 cycles of operation

**Switch rating**

as per EN IEC 61058-1

250 VAC, 5 A cos φ 0.7 ... 0.8

250 VDC, 0.5 A

110 VDC, 2 A

75 VDC, 5 A

5 VAC/DC, 1 mA min.

**Protection class**

Indicators and switches, fit for mounting into devices with protection class II

**Approvals**
**Approbations**

CSA

ENEC (EN 61058)

UL

VDE

**Declaration of conformity**

CE

**Slow-make switching element**
**Switching system**

The double-break switching system can be supplied for the following switching functions: 1 normally closed, 1 normally open or 1 changeover contact with or without overlap.

The normally closed contacts have forced opening according to DIN 0660, IEC 60947-5-1 and DIN VDE 0113.

The switching element exhibits high reliability due to its H-contact system with relative friction. The normally open and normally closed contacts can be used electrically separated.

The standard version is ideal for high breaking capacities. For lower capacities a special version can be supplied.

**Material**
**Material of contact**

Standard version: Ag-Ni alloy

special version: Gold/Silver

**Plastics**

UL listed, Cd-free

**Switching element**

PC, PA 6.6 self-extinguishing

**Mechanical characteristics**
**Actuating force**

per switching element ≤ 5 N

Illuminated pushbutton actuator ≤ 10 N

Stop pushbutton actuator ≤ 20 N

Emergency-stop pushbutton actuator foolproof ≤ 70 N

Double pushbutton ≤ 12 N per contact surface

**Actuating travel**

approx. 6 mm

# 44 Technical data

## Mechanical lifetime

Slow-make switching element	10 x 10 <sup>6</sup> switching operations
Pushbutton momentary action	5 x 10 <sup>6</sup> switching operations
Pushbutton maintained action	1 x 10 <sup>6</sup> cycles of operation
Illuminated pushbutton momentary action	3 x 10 <sup>6</sup> switching operations
Illuminated pushbutton maintained action	1 x 10 <sup>6</sup> cycles of operation
Interlocking pushbutton	2 x 10 <sup>5</sup> switching operations
Stop pushbutton not foolproof	1 x 10 <sup>5</sup> cycles of operation
Emergency-stop foolproof	> 6050 cycles of operation
Keylock switch	2 x 10 <sup>5</sup> cycles of operation
Selector switch	2 x 10 <sup>5</sup> cycles of operation
Double pushbutton	2 x 10 <sup>5</sup> switching operations per contact surface

## Electrical characteristics

### Rated Insulation Voltage U<sub>i</sub>

Slow-make switching element	660V
Lamp element	250V
Lamp transformer	660V

### Rated Operational Voltage U<sub>e</sub>

AC 15 (inductive)	120V, ~6A
	230V, ~6A
	400V, ~4A
	500V, ~3A
	600V, ~1.2A
DC 13	24V, 3A
	60V, 1.3A
	120V, 0.6A
	250V, 0.3A

### Rated Impulse Withstand Voltage U<sub>imp</sub>

Lamp element	2.5 kV
Lamp transformer	6 kV
Slow-make switching element	6 kV
Between the electrically separated normally closed contacts and normally open contacts for slow-make switching elements.	
1 NC + 1 NO without overlap	
U <sub>e</sub> > 400V, same polarity	
U <sub>imp</sub> = 4000V	
1 NC + 1 NO with overlap	
U <sub>e</sub> > 250V, same polarity	
U <sub>imp</sub> = 4000V	

### Rated Operational Current I<sub>e</sub>

AC-12 (resistive)	500V, ~5A
DC-12	24V, 10A
	60V, 8A
	125V, 3A
	250V, 1A

### Contact resistance

Starting value (initial) ≤ 50 mΩ

## Electrical life

AC-15  
400V, ~2A, 1 x 10<sup>6</sup> switching operations

## Conventional free air thermal current

I<sub>in2</sub> = 10A

## Short-circuit protection

max. series fuse to be provided 10A gL  
lamp transformer is short-circuit-protected

## Switch rating

Ag-Ni alloy	
(Standard version)	minimal 6V, 20mA minimal 12V, 10mA
Gold/Silver	
(Special version)	minimal 5V, 1mA maximum 42V, 100mA

## Degree of pollution

3, as per EN IEC 60947-1

## Protection class

Indicators and switches, fit for mounting into devices with protection class II

## Environmental conditions

### Storage temperature

-40 °C ... +70 °C

### Operating temperature

-25 °C, as per EN IEC 60068-2-1  
+60 °C, as per EN IEC 60068-2-2

### Protection degree

Actuators at front and enclosure IP 65, as per EN IEC 60529

### Shock resistance

40 g (duration 6 ms), as per EN IEC 60 68-2-27

### Vibration resistance

sinusoidal, 5 g at 10–500 Hz, as per EN IEC 60068-2-6

### Climate resistance

Humidity and heat constant, as per EN IEC 60068-2-3  
Humidity and heat cyclic, as per EN IEC 60068-2-30

## Approvals

### Approbations

CSA  
Germanischer Lloyd  
UL  
VDE

### Declaration of conformity

CE



**Control Switch**

**General**

**Design**

Modular, Actuator and Switch part separated

**Operation**

2-/4-/8-positions, each approx. 12°

**Mounting position**

In any way

**Mechanical characteristics**

**Mechanical lifetime**

2 million cycles of operation

**Environmental conditions**

**Storage temperature**

-40 °C ... +85 °C, as per EN IEC 60068

**Operating temperature**

-25 °C ... +55 °C, as per EN IEC 60068-2

**Protection degree**

IP 65 front side, as per IEC 60529

**Shock resistance**

40g, 6ms regarding mechanical destruction

**Climate resistance**

Damp heat state/cyclic as per EN IEC 60068-2

**Actuator**

**Material**

**Adapter and enclosure**

PC

**Front parts**

PA 6, PA 12, PC, chromium-plated ABS

*EAO reserves the right to alter specifications without further notice.*

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# 44 Marking



















## Label marking for label support

Label black anodized

Standard text	Text-No.	Standard text	Text-No.	Standard text	Text-No.
0	T 01	Forwards	T 14	Set up	T 22
I	T 02	Revers	T 15	Raise	T 23
0 I	T 03	Right	T 16	Lower	T 24
I 0 II	T 04	Left	T 17	Hand	T 25
OFF	T 10	Halt	T 18	STOP	T 26
ON	T 11	Close	T 19	START	T 27
Up	T 12	Fast	T 20	HAND/AUTO	T 28
Down	T 13	Slow	T 21	OFF/ON	T 29


## Standard texts for marking plates and marking caps for Indicator and Illuminated Pushbutton

Height of letters 6 mm































 <b>Part No. 44-962.9-T1</b>	 <b>Part No. 44-962.9-T2</b>	 <b>Part No. 44-962.9-T3</b>	 <b>Part No. 44-962.9-T4</b>
 <b>Part No. 44-962.9-T5</b>	 <b>Part No. 44-962.9-T6</b>	 <b>Part No. 44-962.9-T7</b>	 <b>Part No. 44-962.9-T8</b>
 <b>Part No. 44-962.9-T9</b>	 <b>Part No. 44-962.9-T10</b>	 <b>Part No. 44-962.9-T11</b>	 <b>Part No. 44-962.9-T12</b>
 <b>Part No. 44-962.9-T13</b>	 <b>Part No. 44-962.9-T14</b>	 <b>Part No. 44-962.9-T15</b>	 <b>Part No. 44-962.9-T16</b>
 <b>Part No. 44-962.9-T17</b>	 <b>Part No. 44-962.9-T18</b>		

## Symbols for marking plates and marking caps for Indicator and Illuminated Pushbutton

All marking plates with the printed Part Numbers are available for flat lenses, marking cap only on request.

 <b>Part No. 44-962.9-1</b> Direction of linear rectilinear motion (also for → ↓↑)	 <b>Part No. 44-962.9-2</b> Linear motion in 2 directions (also for ↓)	 <b>Part No. 44-962.9-3</b> Interrupted linear motion ↑↓ (also for ← ← ↓↓)	 <b>Part No. 44-962.9-4</b> Limited linear motion (also for ← ↓↓)
 <b>Part No. 44-962.9-5</b> Limited linear motion and return	 <b>Part No. 44-962.9-6</b> Oscillating linear motion (continuous)	 <b>Part No. 44-962.9-7</b> Direction of continuous rotation (right)	 <b>Part No. 44-962.9-7.1</b> Direction of continuous rotation (left)
 <b>Part No. 44-962.9-8</b> Rotation in 2 directions	 <b>Part No. 44-962.9-9</b> Direction of interrupted rotation (right)	 <b>Part No. 44-962.9-9.1</b> Direction of interrupted rotation (left)	 <b>Part No. 44-962.9-10</b> Limited rotation (right)
 <b>Part No. 44-962.9-10.1</b> Limited rotation (left)	 <b>Part No. 44-962.9-11</b> Limited rotation and return	 <b>Part No. 44-962.9-12</b> Oscillating rotary movement (continuous)	 <b>Part No. 44-962.9-13</b> Direction of spindle rotation
 <b>Part No. 44-962.9-14</b> One revolution	 <b>Part No. 44-962.9-15</b> Number of revolutions per minute (spindle speed)	 <b>Part No. 44-962.9-16</b> Feed	 <b>Part No. 44-962.9-17</b> Feed per revolution
 <b>Part No. 44-962.9-18</b> Feed per minute	 <b>Part No. 44-962.9-19</b> Reduced feed	 <b>Part No. 44-962.9-20</b> Rapid feed	 <b>Part No. 44-962.9-21</b> Normal feed
 <b>Part No. 44-962.9-22</b> Direction of feed (orientation not specified)	 <b>Part No. 44-962.9-24</b> Transverse feed	 <b>Part No. 44-962.9-25</b> Vertical feed	 <b>Part No. 44-962.9-26</b> Rapid traverse
 <b>Part No. 44-962.9-27</b> Threading	 <b>Part No. 44-962.9-28</b> Increase of value (speed, for instance)	 <b>Part No. 44-962.9-29</b> Decrease of value (speed, for instance)	 <b>Part No. 44-962.9-30</b> Speed of planing cut
 <b>Part No. 44-962.9-31</b> Speed of turning cut	 <b>Part No. 44-962.9-32</b> Speed of drilling cut	 <b>Part No. 44-962.9-33</b> Speed of milling cut (similar symbol for speed of grinding)	 <b>Part No. 44-962.9-34</b> Conventional milling
 <b>Part No. 44-962.9-35</b> Climb milling (down milling)	 <b>Part No. 44-962.9-41</b> Electric motor	 <b>Part No. 44-962.9-42</b> Rectangular work table or slide element	 <b>Part No. 44-962.9-43</b> Round work table or rotating element
 <b>Part No. 44-962.9-44</b> Turning spindle	 <b>Part No. 44-962.9-45</b> Drilling spindle	 <b>Part No. 44-962.9-46</b> Milling spindle	 <b>Part No. 44-962.9-47</b> Schleifscheibenfutter
 <b>Part No. 44-962.9-48</b> Pump (general symbol)	 <b>Part No. 44-962.9-49</b> Cooling pump	 <b>Part No. 44-962.9-50</b> Lubricant pump	 <b>Part No. 44-962.9-51</b> Hydraulic system pump
 <b>Part No. 44-962.9-52</b> Hydraulic motor	 <b>Part No. 44-962.9-53</b> Tracer	 <b>Part No. 44-962.9-61</b> Stepless regulation	 <b>Part No. 44-962.9-62</b> Adjustable

# 44 Marking

 <b>Part No. 44-962.9-63.1</b> Lock or tighten	 <b>Part No. 44-962.9-63.2</b> Lock or tighten	 <b>Part No. 44-962.9-64.1</b> Unlock, unclamp	 <b>Part No. 44-962.9-64.2</b> Unlock, unclamp
 <b>Part No. 44-962.9-65</b> Brake on	 <b>Part No. 44-962.9-66</b> Brake off	 <b>Part No. 44-962.9-67</b> Automatic (or semi-automatic) cycle	 <b>Part No. 44-962.9-68</b> Hand control
 <b>Part No. 44-962.9-69</b> Start, on	 <b>Part No. 44-962.9-70</b> Stop, off	 <b>Part No. 44-962.9-71</b> Start and stop with same button	 <b>Part No. 44-962.9-72</b> In action as long as button is operated
 <b>Part No. 44-962.9-74</b> Engaging (mechanical start)	 <b>Part No. 44-962.9-75</b> Disengaging (mechanical stop)	 <b>Part No. 44-962.9-76</b> Close lock-nut	 <b>Part No. 44-962.9-77</b> Open lock-nut
 <b>Part No. 44-962.9-78</b> Engage sensor	 <b>Part No. 44-962.9-79</b> Disengage sensor	 <b>Part No. 44-962.9-80</b> Change speed only in stopped position	 <b>Part No. 44-962.9-81</b> Change speed only in motion
 <b>Part No. 44-962.9-91</b> Shear pin construction	 <b>Part No. 44-962.9-92</b> Danger (high voltage)!	 <b>Part No. 44-962.9-93</b> Caution!	 <b>Part No. 44-962.9-94</b> Main switch
 <b>Part No. 44-962.9-101</b> Coolant fluid	 <b>Part No. 44-962.9-102</b> Machine lighting	 <b>Part No. 44-962.9-103</b> Weight	 <b>Part No. 44-962.9-104</b> Filter opening
 <b>Part No. 44-962.9-105</b> Overflow	 <b>Part No. 44-962.9-106</b> Drain	 <b>Part No. 44-962.9-107</b> Oil, lubricant	 <b>Part No. 44-962.9-108</b> Blast
 <b>Part No. 44-962.9-109</b> Suction			

**Suppressor circuits**

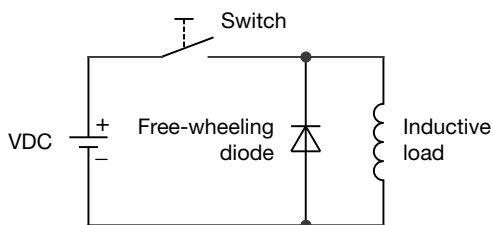
When switching inductive loads such as relays, DC motors, and DC solenoids, it is always important to absorb surges (e.g. with a diode) to protect the contacts. When these inductive loads are switched off, a counter emf can severely damage switch contacts and greatly shorten lifetime.

Fig. 1 shows an inductive load with a free-wheeling diode connected in parallel. This free-wheeling diode provides a path for the inductor current to flow when the current is interrupted by the switch. Without this free-wheeling diode, the voltage across the coil will be limited only by dielectric breakdown voltages of the circuit or parasitic elements of the coil. This voltage can be kilovolts in amplitude even when nominal circuit voltages are low (e.g. 12VDC) see Fig. 2.

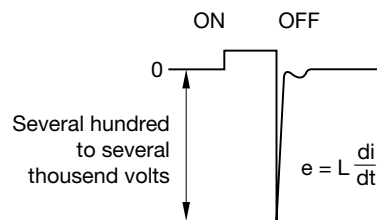
The free-wheeling diode should be chosen so that the reverse breakdown voltage is greater than the voltage driving the inductive load. The DC blocking voltage ( $V_R$ ) of the free-wheeling diode can be found in the datasheet of a diode. The forward current should be equal or greater than the maximum current flowing through the load.

**To get an efficient protection, the free-wheeling diode must be connected as close as possible to the inductive load!**

Switching with inductive load  
Fig. 1



Counter EMF  
over load without free-wheeling diode  
Fig. 2







Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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