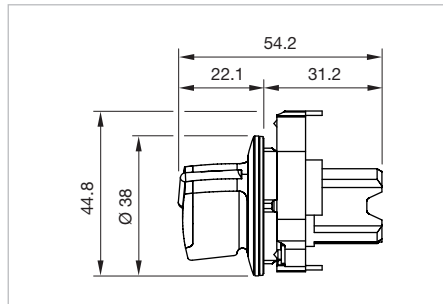


45 Flush design

Selector switch actuator 2 positions short lever, IP66, IP67, IP69K



Product can differ from the current configuration.



Dimensions [mm]

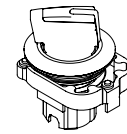
Additional Information

- It is advisable to choose a white illumination
- Front panel thickness 1-6 mm
- Illumination elements are optional

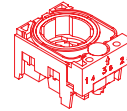


Mounting cut-outs [mm]

Equipment consisting of (schematic overview)

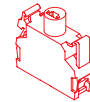


Actuator



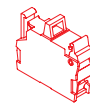
Holder

Page 111



Illumination element

Page 113



Switching element





Page 112



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.


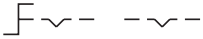


Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 2 positions, short lever, Front dimension Ø 38 mm					
Plastic red	Metal sandgrey	A - B	B = 45°	45-2844.4C20.006	1	0.055 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 38 mm					
Plastic green	Metal sandgrey	A - B	B = 45°	45-2844.4C50.006	1	0.055 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 38 mm					
Plastic white	Metal sandgrey	A - B	B = 45°	45-2844.4C90.006	1	0.055 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 38 mm					
Plastic red	Metal sandgrey	A - C	C = 90°	45-2828.4C20.001	2	0.055 kg

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring diagram	Weight
 <p>Selector switch actuator 2 positions, short lever, Front dimension Ø 38 mm</p>						
Plastic green	Metal sandgrey	A - C	C = 90°	45-2828.4C50.001	2	0.055 kg
 <p>Selector switch actuator 2 positions, short lever, Front dimension Ø 38 mm</p>						
Plastic white	Metal sandgrey	A - C	C = 90°	45-2828.4C90.001	2	0.055 kg

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

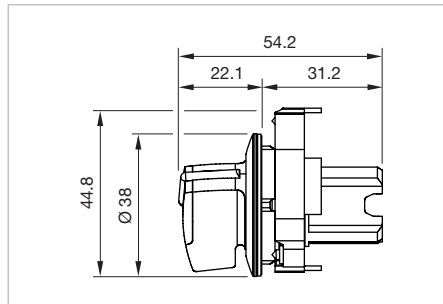
	
Wiring diagram 1	Wiring diagram 2

45 Flush design

Selector switch 2 positions long lever, IP66, IP67, IP69K



Product can differ from the current configuration.



Dimensions [mm]

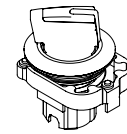
Additional Information

- It is advisable to choose a white illumination
- Front panel thickness 1-6 mm
- Illumination elements are optional

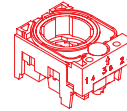


Mounting cut-outs [mm]

Equipment consisting of (schematic overview)

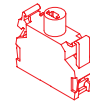


Actuator



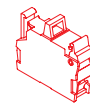
Holder

Page 111



Illumination element

Page 113



Switching element





Page 112



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.

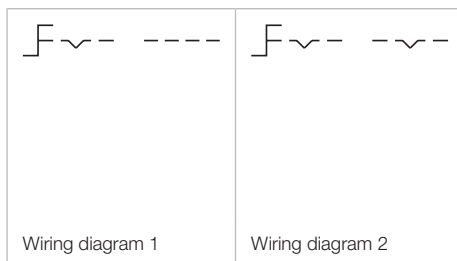


Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 2 positions, long lever, Front dimension Ø 38 mm					
Plastic red	Metal sandgrey	A - B	B = 45°	45-2844.4D20.006	1	0.055 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 38 mm					
Plastic green	Metal sandgrey	A - B	B = 45°	45-2844.4D50.006	1	0.055 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 38 mm					
Plastic white	Metal sandgrey	A - B	B = 45°	45-2844.4D90.006	1	0.055 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 38 mm					
Plastic red	Metal sandgrey	A - C	C = 90°	45-2828.4D20.001	2	0.055 kg

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring diagram	Weight
 <p>Selector switch actuator 2 positions, long lever, Front dimension Ø 38 mm</p>						
Plastic green	Metal sandgrey	A - C	C = 90°	45-2828.4D50.001	2	0.055 kg
 <p>Selector switch actuator 2 positions, long lever, Front dimension Ø 38 mm</p>						
Plastic white	Metal sandgrey	A - C	C = 90°	45-2828.4D90.001	2	0.055 kg

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



45 Flush design

Selector switch 3 positions short lever, IP66, IP67, IP69K



Product can differ from the current configuration.



Dimensions [mm]

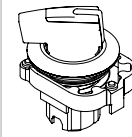
Additional Information

- It is advisable to choose a white illumination
- Front panel thickness 1-6 mm
- Illumination elements are optional

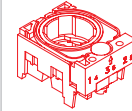


Mounting cut-outs [mm]

Equipment consisting of (schematic overview)

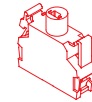


Actuator



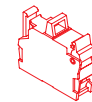
Holder

Page 111



Illumination element

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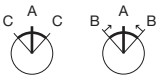


Switching element





Page 112



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.

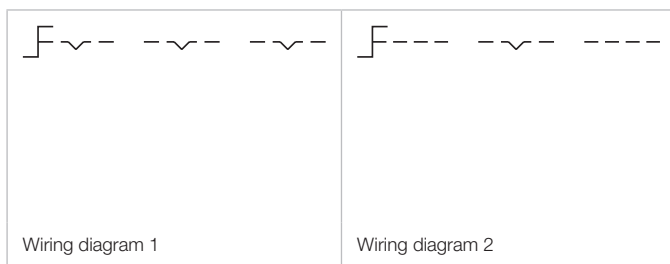


Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 3 positions, short lever, Front dimension Ø 38 mm					
Plastic red	Metal sandgrey	C - A - C	C = 45°	45-2819.4C20.003	1	0.055 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 38 mm					
Plastic green	Metal sandgrey	C - A - C	C = 45°	45-2819.4C50.003	1	0.055 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 38 mm					
Plastic white	Metal sandgrey	C - A - C	C = 45°	45-2819.4C90.003	1	0.055 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 38 mm					
Plastic red	Metal sandgrey	B - A - B	B = 45°	45-280S.4C20.003	2	0.055 kg

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring diagram	Weight
 <p>Selector switch actuator 3 positions, short lever, Front dimension Ø 38 mm</p>						
Plastic green	Metal sandgrey	B - A - B	B = 45°	45-280S.4C50.003	2	0.055 kg
 <p>Selector switch actuator 3 positions, short lever, Front dimension Ø 38 mm</p>						
Plastic white	Metal sandgrey	B - A - B	B = 45°	45-280S.4C90.003	2	0.055 kg

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

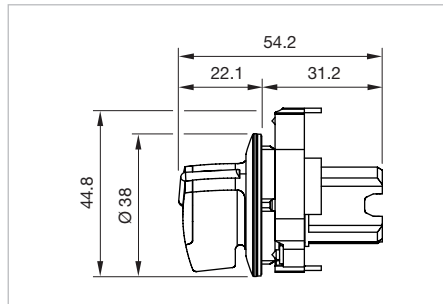


45 Flush design

Selector switch 3 positions long lever, IP66, IP67, IP69K



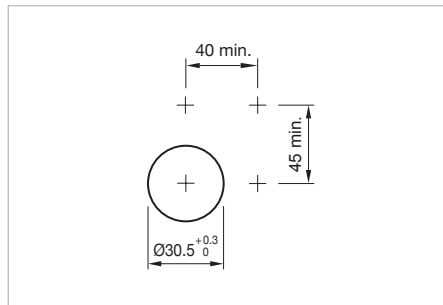
Product can differ from the current configuration.



Dimensions [mm]

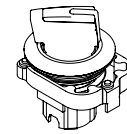
Additional Information

- It is advisable to choose a white illumination
- Front panel thickness 1-6 mm
- Illumination elements are optional

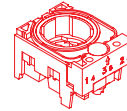


Mounting cut-outs [mm]

Equipment consisting of (schematic overview)

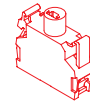


Actuator



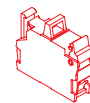
Holder

Page 111



Illumination element

Page 113

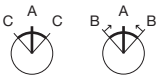


Switching element





Page 112



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.

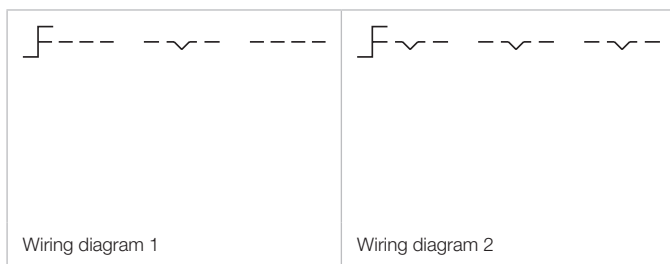


Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 3 positions, long lever, Front dimension Ø 38 mm					
Plastic red	Metal sandgrey	C - A - C	C = 45°	45-2819.4D20.003	1	0.055 kg
	Selector switch actuator 3 positions, long lever, Front dimension Ø 38 mm					
Plastic green	Metal sandgrey	C - A - C	C = 45°	45-2819.4D50.003	1	0.055 kg
	Selector switch actuator 3 positions, long lever, Front dimension Ø 38 mm					
Plastic white	Metal sandgrey	C - A - C	C = 45°	45-2819.4D90.003	1	0.055 kg
	Selector switch actuator 3 positions, long lever, Front dimension Ø 38 mm					
Plastic red	Metal sandgrey	B - A - B	B = 45°	45-280S.4D20.003	2	0.055 kg

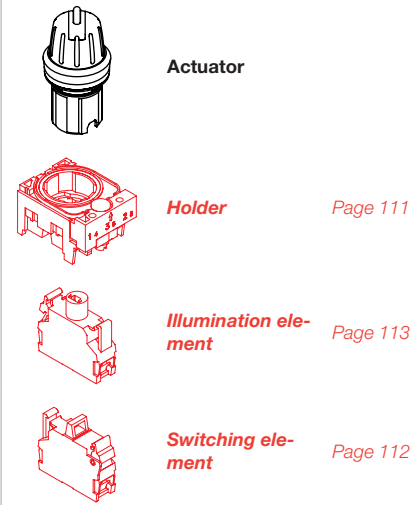
Lever	Front ring	Switching action	Switching angle	Part No.	Wiring diagram	Weight
 <p>Selector switch actuator 3 positions, long lever, Front dimension Ø 38 mm</p>						
Plastic green	Metal sandgrey	B - A - B	B = 45°	45-280S.4D50.003	2	0.055 kg
 <p>Selector switch actuator 3 positions, long lever, Front dimension Ø 38 mm</p>						
Plastic white	Metal sandgrey	B - A - B	B = 45°	45-280S.4D90.003	2	0.055 kg

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



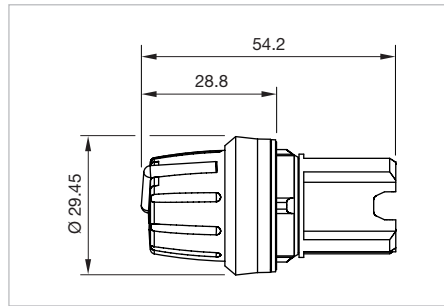
Selector switch actuator 2 positions round lever, IP66, IP67, IP69K

Equipment consisting of (schematic overview)



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

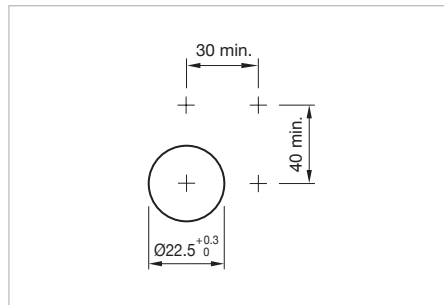
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]



Product can differ from the current configuration.



Mounting cut-outs [mm]

A C



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

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
<p>Selector switch actuator 2 positions, round lever, Front dimension Ø 29.45 mm</p>							
Plastic red	Plastic black	Plastic	A - C	C = 90°	45-2828.1E20.001	1	0.023 kg
Plastic white	Plastic black	Plastic	A - C	C = 90°	45-2828.1E90.001	1	0.023 kg
<p>Selector switch actuator 2 positions, round lever, Front dimension Ø 29.45 mm</p>							
Plastic red	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3E20.001	1	0.023 kg
Plastic white	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3E90.001	1	0.023 kg

Switching action: A = Rest, C = Maintain

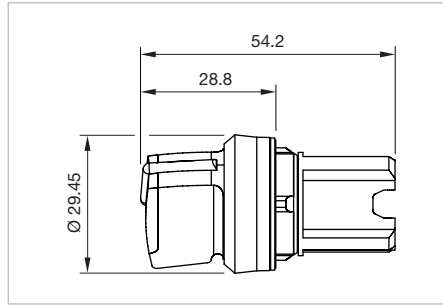


45 Raised design

Selector switch actuator 2 positions short lever, IP66, IP67, IP69K



Product can differ from the current configuration.



Dimensions [mm]

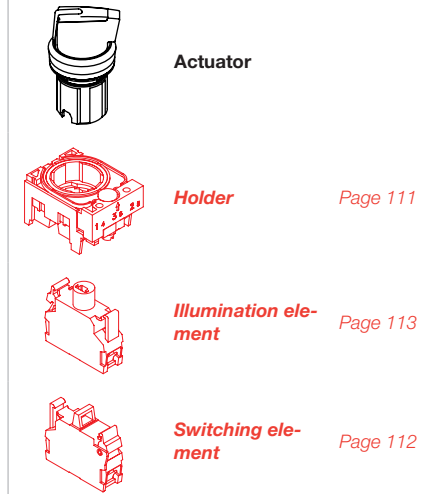
Additional Information

- External diameter of the short lever 32.3 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.



















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

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Plastic black	Plastic	A - B	B = 45°	45-2844.1C20.006	1	0.022 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Plastic black	Plastic	A - B	B = 45°	45-2844.1C40.006	1	0.022 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Plastic black	Plastic	A - B	B = 45°	45-2844.1C50.006	1	0.022 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Plastic black	Plastic	A - B	B = 45°	45-2844.1C60.006	1	0.022 kg

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal sandgrey	Plastic	A - B	B = 45°	45-2844.1C90.006	1	0.022 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Metal sandgrey	Plastic	A - B	B = 45°	45-2844.3C20.006	1	0.029 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Metal sandgrey	Plastic	A - B	B = 45°	45-2844.3C40.006	1	0.029 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Metal sandgrey	Plastic	A - B	B = 45°	45-2844.3C50.006	1	0.029 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Metal sandgrey	Plastic	A - B	B = 45°	45-2844.3C60.006	1	0.029 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal sandgrey	Plastic	A - B	B = 45°	45-2844.3C90.006	1	0.029 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Metal silver	Metal	A - B	B = 45°	45-2844.2C20.006	1	0.044 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Metal silver	Metal	A - B	B = 45°	45-2844.2C40.006	1	0.044 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Metal silver	Metal	A - B	B = 45°	45-2844.2C50.006	1	0.044 kg

45 Raised design

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Metal silver	Metal	A - B	B = 45°	45-2844.2C60.006	1	0.044 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	A - B	B = 45°	45-2844.2C90.006	1	0.044 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Plastic black	Plastic	A - C	C = 90°	45-2828.1C20.001	2	0.022 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Plastic black	Plastic	A - C	C = 90°	45-2828.1C40.001	2	0.022 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Plastic black	Plastic	A - C	C = 90°	45-2828.1C50.001	2	0.022 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Plastic black	Plastic	A - C	C = 90°	45-2828.1C60.001	2	0.022 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Plastic black	Plastic	A - C	C = 90°	45-2828.1C90.001	2	0.022 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3C20.001	2	0.029 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3C40.001	2	0.029 kg

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3C50.001	2	0.029 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3C60.001	2	0.029 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3C90.001	2	0.029 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Metal silver	Metal	A - C	C = 90°	45-2828.2C20.001	2	0.044 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic amber	Metal silver	Metal	A - C	C = 90°	45-2828.2C30.001	2	0.044 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Metal silver	Metal	A - C	C = 90°	45-2828.2C50.001	2	0.044 kg
	Selector switch actuator 2 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	A - C	C = 90°	45-2828.2C90.001	2	0.044 kg

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

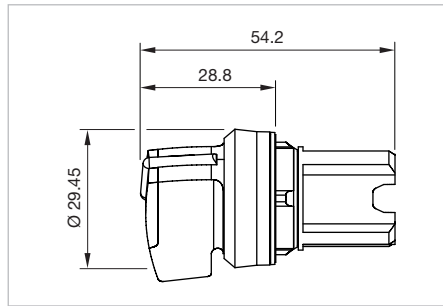


45 Raised design

Selector switch 2 positions long lever, IP66, IP67, IP69K



Product can differ from the current configuration.



Dimensions [mm]

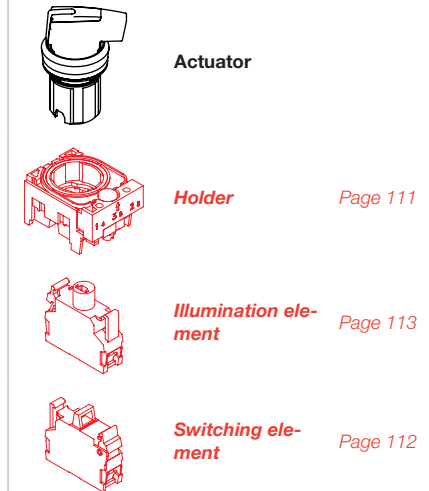
Additional Information

- External diameter of the long lever 44.8 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.



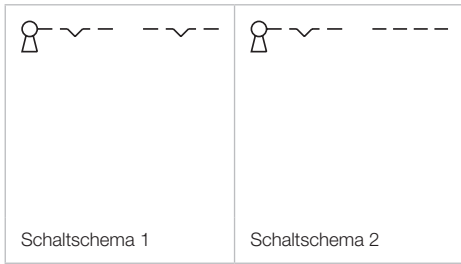
Switching positions (A = Rest, B = Momentary, C = Maintained)

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic red	Plastic black	Plastic	A - C	C = 90°	45-2828.1D20.001	1	0.022 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic white	Plastic black	Plastic	A - C	C = 90°	45-2828.1D90.001	1	0.022 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic red	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3D20.001	1	0.029 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic white	Metal sandgrey	Plastic	A - C	C = 90°	45-2828.3D90.001	1	0.029 kg

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic red	Metal silver	Metal	A - C	C = 90°	45-2828.2D20.001	1	0.029 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic yellow	Metal silver	Metal	A - C	C = 90°	45-2828.2D40.001	1	0.052 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic green	Metal silver	Metal	A - C	C = 90°	45-2828.2D50.001	1	0.052 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic blue	Metal silver	Metal	A - C	C = 90°	45-2828.2D60.001	1	0.052 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	A - C	C = 90°	45-2828.2D90.001	1	0.052 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic yellow	Metal silver	Metal	A - B	B = 45°	45-2844.2D40.006	2	0.044 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic green	Metal silver	Metal	A - B	B = 45°	45-2844.2D50.006	2	0.044 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic blue	Metal silver	Metal	A - B	B = 45°	45-2844.2D60.006	2	0.044 kg
	Selector switch actuator 2 positions, long lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	A - B	B = 45°	45-2844.2D90.006	2	0.044 kg

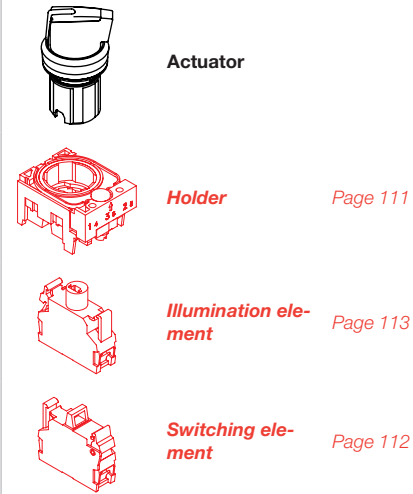
Switching action: A = Rest, B = Momentary, C = Maintain

45 Raised design



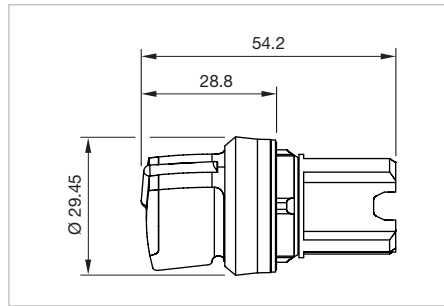
Selector switch 3 positions short lever, IP66, IP67, IP69K

Equipment consisting of (schematic overview)

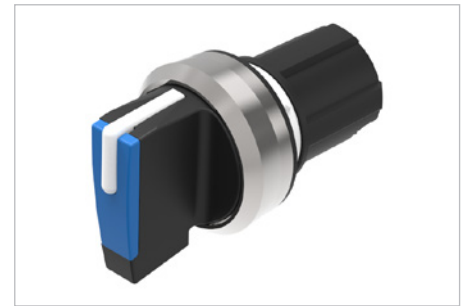


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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



Dimensions [mm]



Product can differ from the current configuration.







Mounting cut-outs [mm]

Additional Information











- External diameter of the short lever 32.3 mm













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











Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Plastic black	Plastic	C - A - C	C = 45°	45-2819.1C20.003	1	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Plastic black	Plastic	C - A - C	C = 45°	45-2819.1C40.003	1	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Plastic black	Plastic	C - A - C	C = 45°	45-2819.1C50.003	1	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Plastic black	Plastic	C - A - C	C = 45°	45-2819.1C60.003	1	0.022 kg











45 Raised design

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Plastic black	Plastic	C - A - C	C = 45°	45-2819.1C90.003	1	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Plastic black	Plastic	B - A - B	B = 45°	45-280S.1C20.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Plastic black	Plastic	B - A - B	B = 45°	45-280S.1C40.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Plastic black	Plastic	B - A - B	B = 45°	45-280S.1C50.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Plastic black	Plastic	B - A - B	B = 45°	45-280S.1C60.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Plastic black	Plastic	B - A - B	B = 45°	45-280S.1C90.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Plastic black	Plastic	C - A - B	C = 45°, B = 45°	45-2816.1C20.003	3	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Plastic black	Plastic	C - A - B	C = 45°, B = 45°	45-2816.1C40.003	3	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Plastic black	Plastic	C - A - B	C = 45°, B = 45°	45-2816.1C50.003	3	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Plastic black	Plastic	C - A - B	C = 45°, B = 45°	45-2816.1C60.003	3	0.022 kg










Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Plastic black	Plastic	C - A - B	C = 45°, B = 45°	45-2816.1C90.003	3	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Plastic black	Plastic	B - A - C	B = 45°, C = 45°	45-280X.1C20.003	4	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Plastic black	Plastic	B - A - C	B = 45°, C = 45°	45-280X.1C40.003	4	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Plastic black	Plastic	B - A - C	B = 45°, C = 45°	45-280X.1C50.003	4	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Plastic black	Plastic	B - A - C	B = 45°, C = 45°	45-280X.1C60.003	4	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Plastic black	Plastic	B - A - C	B = 45°, C = 45°	45-280X.1C90.003	4	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Metal sandgrey	Plastic	C - A - C	C = 45°	45-2819.3C20.003	1	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Metal sandgrey	Plastic	C - A - C	C = 45°	45-2819.3C40.003	1	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Metal sandgrey	Plastic	C - A - C	C = 45°	45-2819.3C50.003	1	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Metal sandgrey	Plastic	C - A - C	C = 45°	45-2819.3C60.003	1	0.022 kg

45 Raised design


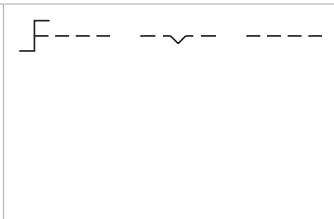
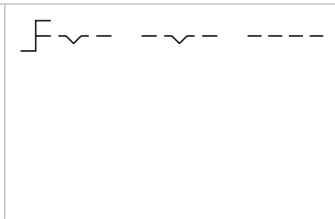

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal sandgrey	Plastic	C - A - C	C = 45°	45-2819.3C90.003	1	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Metal sandgrey	Plastic	B - A - B	B = 45°	45-280S.3C20.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Metal sandgrey	Plastic	B - A - B	B = 45°	45-280S.3C40.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Metal sandgrey	Plastic	B - A - B	B = 45°	45-280S.3C50.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Metal sandgrey	Plastic	B - A - B	B = 45°	45-280S.3C60.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal sandgrey	Plastic	B - A - B	B = 45°	45-280S.3C90.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Metal sandgrey	Plastic	C - A - B	C = 45°, B = 45°	45-2816.3C20.003	3	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Metal sandgrey	Plastic	C - A - B	C = 45°, B = 45°	45-2816.3C40.003	3	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Metal sandgrey	Plastic	C - A - B	C = 45°, B = 45°	45-2816.3C50.003	3	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Metal sandgrey	Plastic	C - A - B	C = 45°, B = 45°	45-2816.3C60.003	3	0.022 kg

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal sandgrey	Plastic	C - A - B	C = 45°, B = 45°	45-2816.3C90.003	3	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Metal sandgrey	Plastic	B - A - C	B = 45°, C = 45°	45-280X.3C20.003	4	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Metal sandgrey	Plastic	B - A - C	B = 45°, C = 45°	45-280X.3C40.003	4	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Metal sandgrey	Plastic	B - A - C	B = 45°, C = 45°	45-280X.3C50.003	4	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Metal sandgrey	Plastic	B - A - C	B = 45°, C = 45°	45-280X.3C60.003	4	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal sandgrey	Plastic	B - A - C	B = 45°, C = 45°	45-280X.3C90.003	4	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Metal silver	Metal	C - A - C	C = 45°	45-2819.2C20.003	1	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Metal silver	Metal	C - A - C	C = 45°	45-2819.2C40.003	1	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Metal silver	Metal	C - A - C	C = 45°	45-2819.2C50.003	1	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	C - A - C	C = 45°	45-2819.2C90.003	1	0.022 kg

45 Raised design

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Metal silver	Metal	B - A - B	B = 45°	45-280S.2C20.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic amber	Metal silver	Metal	B - A - B	B = 45°	45-280S.2C30.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic yellow	Metal silver	Metal	B - A - B	B = 45°	45-280S.2C40.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Metal silver	Metal	B - A - B	B = 45°	45-280S.2C50.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic blue	Metal silver	Metal	B - A - B	B = 45°	45-280S.2C60.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	B - A - B	B = 45°	45-280S.2C90.003	2	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic red	Metal silver	Metal	C - A - B	C = 45°, B = 45°	45-2816.2C20.003	3	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic green	Metal silver	Metal	C - A - B	C = 45°, B = 45°	45-2816.2C50.003	3	0.022 kg
	Selector switch actuator 3 positions, short lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	C - A - B	C = 45°, B = 45°	45-2816.2C90.003	3	0.022 kg
			B - A - C	B = 45°, C = 45°	45-280X.2C90.003	4	0.022 kg

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

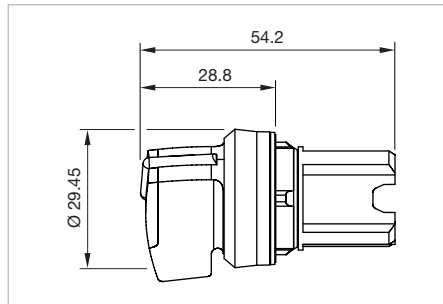
 <p>Wiring diagram 1</p>	 <p>Wiring diagram 2</p>	 <p>Wiring diagram 3</p>	 <p>Wiring diagram 4</p>
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45 Raised design

Selector switch 3 positions long lever, IP66, IP67, IP69K



Product can differ from the current configuration.



Dimensions [mm]

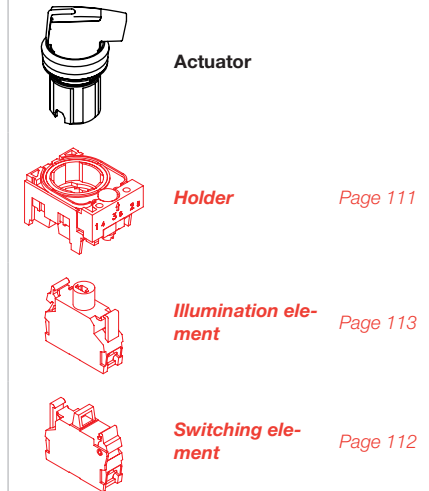
Additional Information

- External diameter of the long lever 44.8 mm



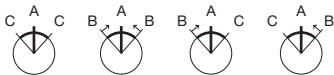
Mounting cut-outs [mm]

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.







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

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm						
Plastic red	Metal silver	Metal	C - A - C	C = 45°	45-2819.2D20.003	1	0.022 kg
	Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm						
Plastic green	Metal silver	Metal	C - A - C	C = 45°	45-2819.2D50.003	1	0.022 kg
	Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	C - A - C	C = 45°	45-2819.2D90.003	1	0.022 kg
	Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm						
Plastic red	Metal silver	Metal	B - A - B	B = 45°	45-280S.2D20.003	2	0.022 kg

Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm						
Plastic green	Metal silver	Metal	B - A - B	B = 45°	45-280S.2D50.003	2	0.022 kg
	Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	B - A - B	B = 45°	45-280S.2D90.003	2	0.022 kg
	Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm						
Plastic red	Metal silver	Metal	C - A - B	C = 45°, B = 45°	45-2816.2D20.003	3	0.022 kg
	Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	C - A - B	C = 45°, B = 45°	45-2816.2D90.003	3	0.022 kg
	Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm						
Plastic red	Metal silver	Metal	B - A - C	B = 45°, C = 45°	45-280X.2D20.003	4	0.022 kg
	Selector switch actuator 3 positions, long lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	B - A - C	B = 45°, C = 45°	45-280X.2D90.003	4	0.022 kg

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

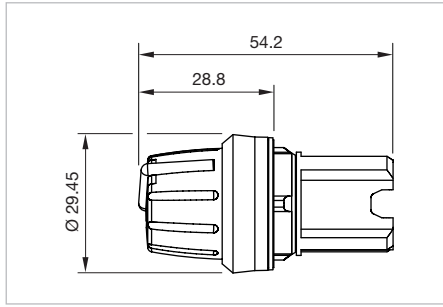
			
Wiring diagram 1	Wiring diagram 2	Wiring diagram 3	Wiring diagram 4

45 Raised design

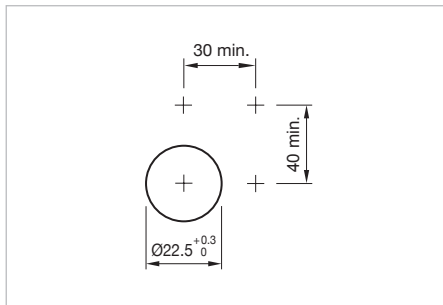
Selector switch actuator 4 positions round lever, IP66, IP67, IP69K



Product can differ from the current configuration.

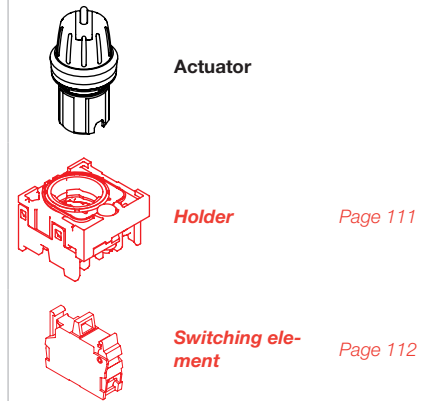


Dimensions [mm]






Mounting cut-outs [mm]

Equipment consisting of (schematic overview)

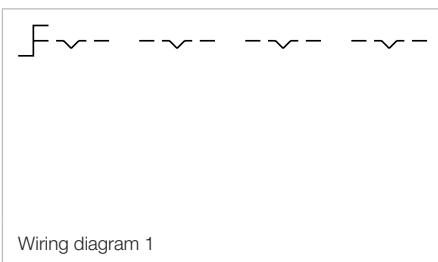


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

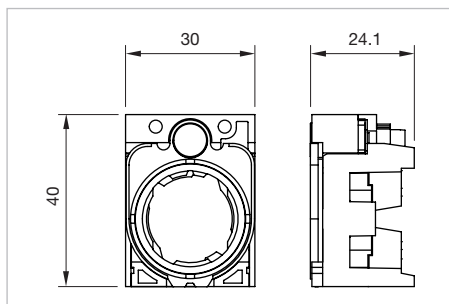
Lever	Front ring	Housing material	Switching action	Switching angle	Part No.	Wiring diagram	Weight
	Selector switch actuator 4 positions, round lever, Front dimension Ø 29.45 mm						
Plastic white	Plastic black	Plastic	C	C = 90°	45-2845.1E90.002	1	0.023 kg
	Selector switch actuator 4 positions, round lever, Front dimension Ø 29.45 mm						
Plastic white	Metal sandgrey	Plastic	C	C = 90°	45-2845.3E90.002	1	0.023 kg
	Selector switch actuator 4 positions, round lever, Front dimension Ø 29.45 mm						
Plastic white	Metal silver	Metal	C	C = 90°	45-2845.2E90.002	1	0.023 kg

Switching action: C = Maintain





Rear side

Holder for 3 elements

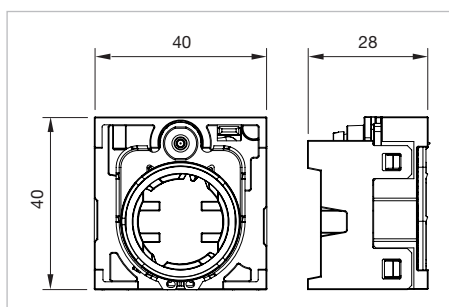


Dimensions [mm]


Material	Part No.	Component layout	Weight
 <p>Holder for 3 switching elements</p>			
Plastic	45-2300.1000.000	2	0.028 kg
 <p>Holder for 3 switching elements</p>			
Metal	45-2300.2000.000	2	0.046 kg

The component layouts you will find from Page 116


Holder for 4 elements



Dimensions [mm]

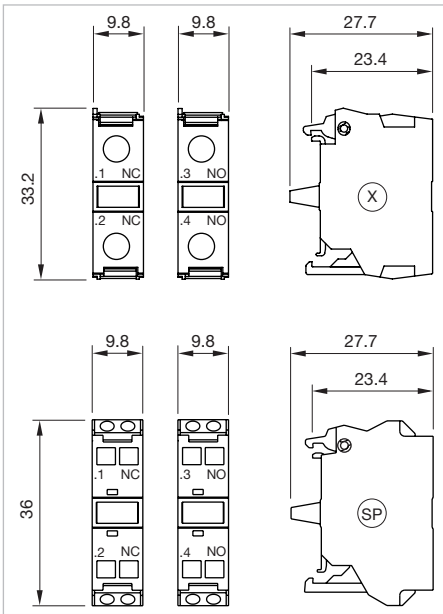
Material	Part No.	Component layout	Weight
 <p>Holder for 4 switching elements</p>			
Plastic	45-2400.1000.000	3	0.028 kg

45 Accessories

Material	Part No.	Component layout	Weight
 <p>Holder for 4 switching elements</p>			
Metal	45-2400.2000.000	3	0.046 kg



The component layouts you will find from Page 116

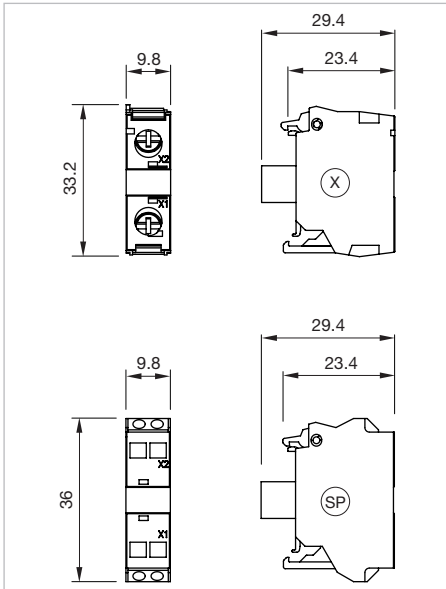
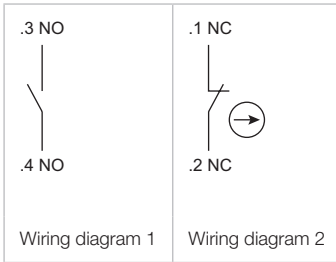
Switching element front mounting




Dimensions [mm]

X = Screw terminal, SP = Spring-type terminal

Switching current	Contacts	Contact material	Terminal	Part No.	Wiring diagram	Weight
 <p>Switching element</p>						
10 A	1 NO	Silver	Screw	45-311.1Z10	1	0.010 kg
10 A	1 NC	Silver	Screw	45-312.1Z10	2	0.010 kg
 <p>Switching element</p>						
10 A	1 NO	Silver	Spring-type terminal	45-311.1Z40	1	0.010 kg
10 A	1 NC	Silver	Spring-type terminal	45-312.1Z40	2	0.010 kg



Dimensions [mm]
 X = Screw terminal, SP = Spring-type terminal

LED colour	Operating voltage	Terminal	Part No.	Wiring diagram	Weight
 Illumination element					
red	24 VAC/DC	Screw	45-320.1E16	1	0.009 kg
amber	24 VAC/DC	Screw	45-320.1F16	1	0.009 kg
yellow	24 VAC/DC	Screw	45-320.1G16	1	0.009 kg
green	24 VAC/DC	Screw	45-320.1H16	1	0.009 kg
blue	24 VAC/DC	Screw	45-320.1J16	1	0.009 kg
white	24 VAC/DC	Screw	45-320.1N16	1	0.009 kg
red	230 VAC	Screw	45-320.1E18	1	0.010 kg
amber	230 VAC	Screw	45-320.1F18	1	0.010 kg
yellow	230 VAC	Screw	45-320.1G18	1	0.010 kg
green	230 VAC	Screw	45-320.1H18	1	0.010 kg
blue	230 VAC	Screw	45-320.1J18	1	0.010 kg
white	230 VAC	Screw	45-320.1N18	1	0.010 kg
red	24-240 VAC/DC	Screw	45-320.1E12	1	0.010 kg
amber	24-240 VAC/DC	Screw	45-320.1F12	1	0.010 kg
yellow	24-240 VAC/DC	Screw	45-320.1G12	1	0.010 kg
green	24-240 VAC/DC	Screw	45-320.1H12	1	0.010 kg
blue	24-240 VAC/DC	Screw	45-320.1J12	1	0.010 kg
white	24-240 VAC/DC	Screw	45-320.1N12	1	0.010 kg

Keylock switch actuator

Material

Actuator element

Metal

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Operating frequency

max. 1800/h

Mechanical lifetime

1 000 000 switching cycles

Vibration resistance

according to IEC 60068-2-6

10 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27

Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

-25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

during operation according to IEC 60721:

3K6, 3C3,3S2, 3M6

Selector switch actuator

Material

Actuator element

Round lever, plastic, illuminable

Short lever, plastic, illuminable

Long lever, plastic, illuminable

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Operating frequency

max. 1800/h

Mechanical lifetime

1 000 000 switching cycles

Vibration resistance

according to IEC 60068-2-6

10 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27

Sinusoidal half-wave 50 g /11 ms

Environmental conditions

Operating temperature

-25 °C ... +70 °C

Storage temperature

-40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

during operation according to IEC 60721:

3K6, 3C3,3S2, 3M6

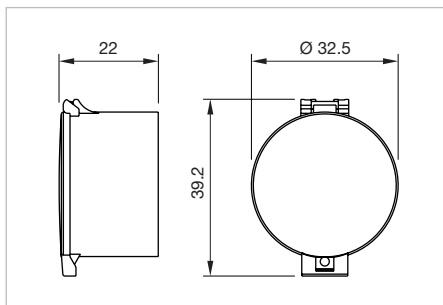
45 Accessories

Product attribute	Material	Colour	Part No.	Weight
 <p>Legend support without legend for toggle stick</p>				
for legend plate 27 x 27 mm	Plastic	black	45-572.1105	0.002 kg



Protective cover, IP66, IP67

Additional Information



- Hinged, with means for sealing
- Please note that bigger minimum distances are necessary







Dimensions [mm]

Front protection	Material	Colour	Optics	Part No.	Weight
 <p>Protective cover</p>					
IP66, IP67	Plastic	black	opaque	45-555.1100	0.012 kg
 <p>Protective cover</p>					
IP66, IP67	Plastic	colourless	transparent	45-555.1K00	0.012 kg

Protective cap, IP66, IP67

Product attribute	Front protection	Material	Colour	Optics	Part No.	Weight
 <p>Protective cap for pushbutton</p>						
for lens raised above bezel	IP66, IP67	Silicone	colourless	transparent	45-544.1K00	0.008 kg
for lens flush	IP66, IP67	Silicone	colourless	transparent	45-545.1K00	0.008 kg
 <p>Protective cap for</p>						
for selector switch, short lever	IP66, IP67	Silicone	colourless	transparent	45-546.1K00	0.006 kg



45 Raised design

Product attribute	Dimension	Material	Colour	Part No.	Weight
 Legend plate					
for sticking or snapping in place	27 x 12.5 mm	Plastic	black	45-573.1102	0.001 kg
			red	45-573.1202	0.001 kg
			silver	45-573.1A02	0.001 kg
 Legend plate					
for sticking or snapping in place	27 x 17.5 mm	Plastic	black	45-573.1103	0.001 kg
			silver	45-573.1A03	0.001 kg
 Legend plate					
for sticking or snapping in place	27 x 27 mm	Plastic	black	45-573.1105	0.001 kg
			silver	45-573.1A05	0.001 kg
 Legend plate					
for sticking or snapping in place	22 x 22 mm	Plastic	silver	45-573.1A04	0.001 kg

Emergency stop legend

Additional Information

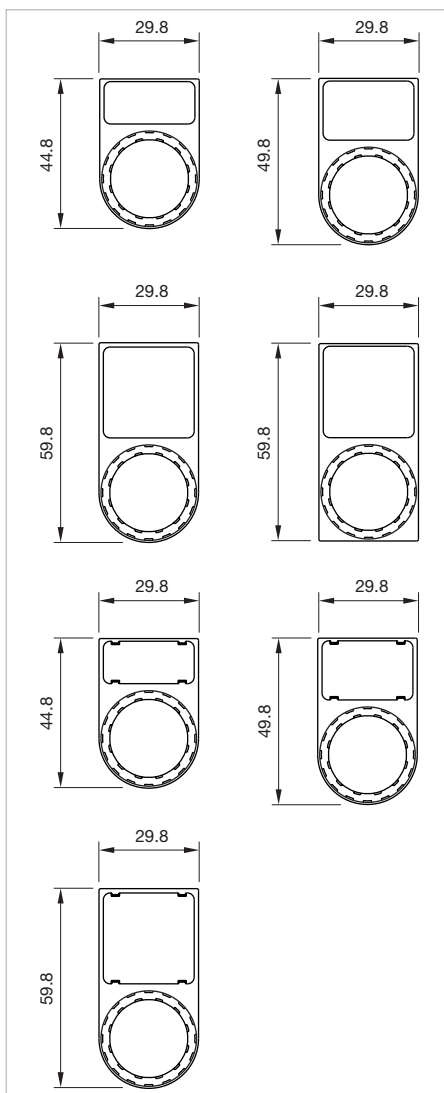
- Front panel thickness 3 mm max.

Dimension	Mounting cut-out	Marking	Colour	Product attribute	Part No.	Weight
 Emergency stop legend						
Ø 45 x 1 mm	Ø 22.5 mm	without marking	yellow		45-50K.1407	0.005 kg
 Emergency stop legend						
Ø 75 x 1 mm	Ø 22.5 mm	without marking	yellow		45-50K.1408	0.010 kg




Legend support without legend

Additional Information

- For sticking or snapping in place



Dimensions [mm]

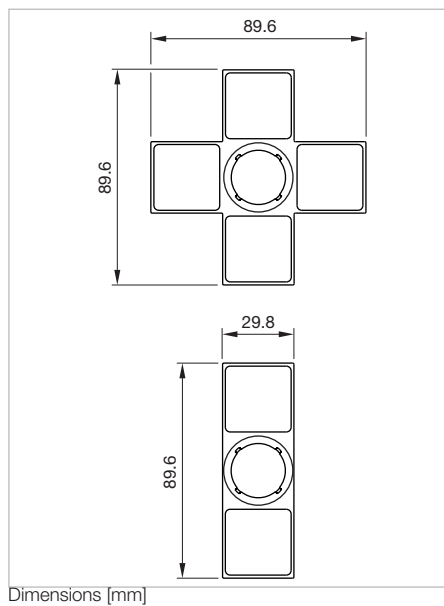
Product attribute	Material	Colour	Part No.	Weight
 <p>Legend support without legend</p>				
for legend plate 27 x 12.5 mm	Plastic	black	45-564.1102	0.002 kg
 <p>Legend support without legend</p>				
for legend plate 27 x 17.5 mm	Plastic	black	45-567.1103	0.002 kg
 <p>Legend support without legend</p>				
for legend plate 27 x 27 mm	Plastic	black	45-569.1105	0.002 kg

Product attribute	Material	Colour	Part No.	Weight
 Legend support without legend				
for legend plate 27 x 27 mm	Plastic	black	45-570.1105	0.002 kg
 Legend support without legend				
for legend plate 27 x 12.5 mm	Plastic	black	45-564.1110	0.002 kg
 Legend support without legend				
for legend plate 27 x 17.5 mm	Plastic	black	45-567.1111	0.002 kg
 Legend support without legend				
for legend plate 27 x 27 mm	Plastic	black	45-569.1112	0.002 kg

Legend support without legend for toggle stick

Additional Information

- For sticking or snapping in place



Product attribute	Material	Colour	Part No.	Weight
 Legend support without legend for toggle stick				
for legend plate 27 x 27 mm	Plastic	black	45-571.1105	0.002 kg