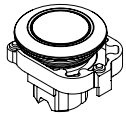
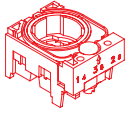


Pushbutton, IP66, IP67, IP69K

Equipment consisting of (schematic overview)

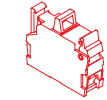


Actuator



Holder

Page 111

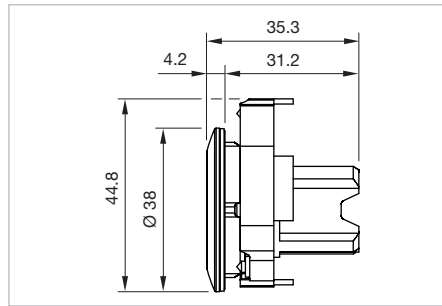


Switching element

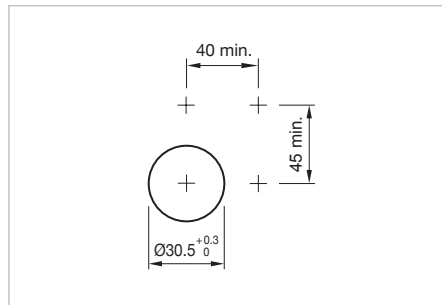
Page 112

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.



Dimensions [mm]



Mounting cut-outs [mm]










Product can differ from the current configuration.

Additional Information

- Front panel thickness 1-6 mm

Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
	Pushbutton actuator, Momentary, Front dimension Ø 38 mm				
Metal sandgrey	Plastic black	B	45-2131.4F10.000	1	0.048 kg
	Pushbutton actuator, Momentary, Front dimension Ø 38 mm				
Metal sandgrey	Plastic red	B	45-2131.4F20.000	1	0.048 kg
	Pushbutton actuator, Momentary, Front dimension Ø 38 mm				
Metal sandgrey	Plastic yellow	B	45-2131.4F40.000	1	0.048 kg
	Pushbutton actuator, Momentary, Front dimension Ø 38 mm				
Metal sandgrey	Plastic green	B	45-2131.4F50.000	1	0.048 kg
	Pushbutton actuator, Momentary, Front dimension Ø 38 mm				
Metal sandgrey	Plastic blue	B	45-2131.4F60.000	1	0.048 kg

45 Flush design

Front ring	Lens	Switching action	Part No.	Wiring diagram	Weight
	Pushbutton actuator, Momentary, Front dimension Ø 38 mm				
Metal sandgrey	Plastic white	B	45-2131.4F90.000	1	0.048 kg
	Pushbutton actuator, Maintain, Front dimension Ø 38 mm				
Metal sandgrey	Plastic black	C	45-2134.4F10.000	2	0.048 kg
	Pushbutton actuator, Maintain, Front dimension Ø 38 mm				
Metal sandgrey	Plastic red	C	45-2134.4F20.000	2	0.048 kg
	Pushbutton actuator, Maintain, Front dimension Ø 38 mm				
Metal sandgrey	Plastic yellow	C	45-2134.4F40.000	2	0.048 kg
	Pushbutton actuator, Maintain, Front dimension Ø 38 mm				
Metal sandgrey	Plastic green	C	45-2134.4F50.000	2	0.048 kg
	Pushbutton actuator, Maintain, Front dimension Ø 38 mm				
Metal sandgrey	Plastic blue	C	45-2134.4F60.000	2	0.048 kg
	Pushbutton actuator, Maintain, Front dimension Ø 38 mm				
Metal sandgrey	Plastic white	C	45-2134.4F90.000	2	0.048 kg

Switching action: B = Momentary, C = Maintain

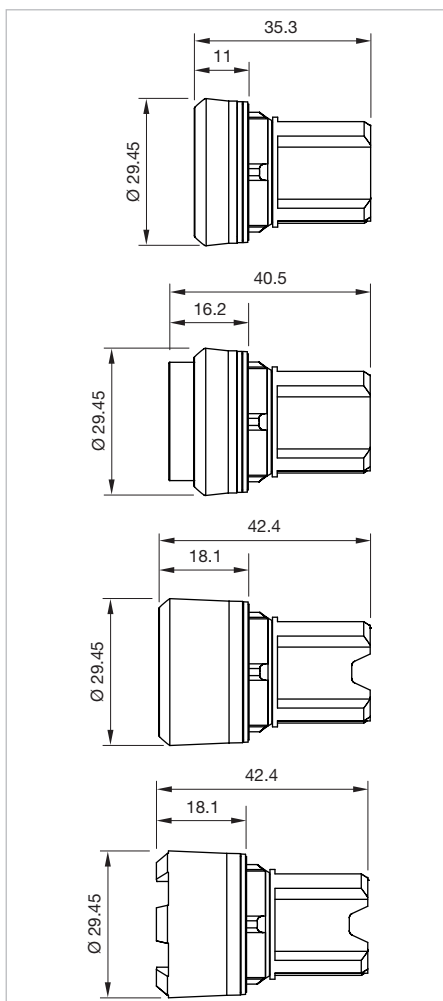
E---	E~--
Wiring diagram 1	Wiring diagram 2

45 Raised design

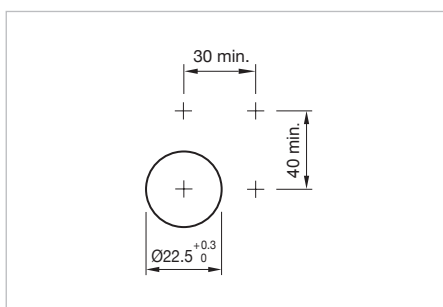
Pushbutton, IP66, IP67, IP69K



Product can differ from the current configuration.



Dimensions [mm]

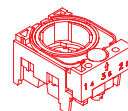


Mounting cut-outs [mm]

Equipment consisting of (schematic overview)

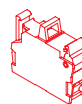


Actuator



Holder

Page 111













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.

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring diagram	Weight
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens level with front ring	Plastic black	Plastic black	Plastic	B	45-2131.1110.000	1	0.013 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens level with front ring	Plastic black	Plastic red	Plastic	B	45-2131.1120.000	1	0.013 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens level with front ring	Plastic black	Plastic yellow	Plastic	B	45-2131.1140.000	1	0.013 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens level with front ring	Plastic black	Plastic green	Plastic	B	45-2131.1150.000	1	0.013 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens level with front ring	Plastic black	Plastic blue	Plastic	B	45-2131.1160.000	1	0.013 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens level with front ring	Plastic black	Plastic grey	Plastic	B	45-2131.1180.000	1	0.013 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens level with front ring	Plastic black	Plastic white	Plastic	B	45-2131.1190.000	1	0.013 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens level with front ring	Plastic black	Plastic colourless	Plastic	B	45-2131.11K0.000	1	0.013 kg
	Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm						
Lens level with front ring	Plastic black	Plastic black	Plastic	C	45-2134.1110.000	2	0.013 kg
	Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm						
Lens level with front ring	Plastic black	Plastic red	Plastic	C	45-2134.1120.000	2	0.013 kg










45 Raised design

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring diagram	Weight
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Plastic black	Plastic yellow	Plastic	C	45-2134.1140.000	2	0.013 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Plastic black	Plastic green	Plastic	C	45-2134.1150.000	2	0.013 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Plastic black	Plastic blue	Plastic	C	45-2134.1160.000	2	0.013 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Plastic black	Plastic white	Plastic	C	45-2134.1190.000	2	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic black	Plastic	B	45-2131.3110.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic red	Plastic	B	45-2131.3120.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic yellow	Plastic	B	45-2131.3140.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic green	Plastic	B	45-2131.3150.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic blue	Plastic	B	45-2131.3160.000	1	0.021 kg










Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring diagram	Weight
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic grey	Plastic	B	45-2131.3180.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic white	Plastic	B	45-2131.3190.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic colourless	Plastic	B	45-2131.31K0.000	1	0.021 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic black	Plastic	C	45-2134.3110.000	2	0.021 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic red	Plastic	C	45-2134.3120.000	2	0.021 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic yellow	Plastic	C	45-2134.3140.000	2	0.021 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic green	Plastic	C	45-2134.3150.000	2	0.021 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic blue	Plastic	C	45-2134.3160.000	2	0.021 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal sandgrey	Plastic white	Plastic	C	45-2134.3190.000	2	0.021 kg










45 Raised design

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring diagram	Weight
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic black	Metal	B	45-2131.2110.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic red	Metal	B	45-2131.2120.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic yellow	Metal	B	45-2131.2140.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic green	Metal	B	45-2131.2150.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic blue	Metal	B	45-2131.2160.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic grey	Metal	B	45-2131.2180.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic white	Metal	B	45-2131.2190.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic colourless	Metal	B	45-2131.21K0.000	1	0.048 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic black	Metal	C	45-2134.2110.000	2	0.048 kg










Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring diagram	Weight
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic red	Metal	C	45-2134.2120.000	2	0.048 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic yellow	Metal	C	45-2134.2140.000	2	0.048 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic green	Metal	C	45-2134.2150.000	2	0.048 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic blue	Metal	C	45-2134.2160.000	2	0.048 kg
 <p>Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm</p>							
Lens level with front ring	Metal silver	Plastic white	Metal	C	45-2134.2190.000	2	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Plastic black	Plastic black	Plastic	B	45-2131.1210.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Plastic black	Plastic red	Plastic	B	45-2131.1220.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Plastic black	Plastic yellow	Plastic	B	45-2131.1240.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Plastic black	Plastic green	Plastic	B	45-2131.1250.000	1	0.013 kg










45 Raised design

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring diagram	Weight
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Plastic black	Plastic blue	Plastic	B	45-2131.1260.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Plastic black	Plastic white	Plastic	B	45-2131.1290.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Metal sandgrey	Plastic black	Plastic	B	45-2131.3210.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Metal sandgrey	Plastic red	Plastic	B	45-2131.3220.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Metal sandgrey	Plastic yellow	Plastic	B	45-2131.3240.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Metal sandgrey	Plastic green	Plastic	B	45-2131.3250.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Metal sandgrey	Plastic blue	Plastic	B	45-2131.3260.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Metal sandgrey	Plastic white	Plastic	B	45-2131.3290.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens raised above front ring	Metal silver	Plastic black	Metal	B	45-2131.2210.000	1	0.021 kg




Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring diagram	Weight
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens raised above front ring	Metal silver	Plastic red	Metal	B	45-2131.2220.000	1	0.048 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens raised above front ring	Metal silver	Plastic yellow	Metal	B	45-2131.2240.000	1	0.048 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens raised above front ring	Metal silver	Plastic green	Metal	B	45-2131.2250.000	1	0.048 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens raised above front ring	Metal silver	Plastic blue	Metal	B	45-2131.2260.000	1	0.048 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens raised above front ring	Metal silver	Plastic white	Metal	B	45-2131.2290.000	1	0.048 kg
	Pushbutton actuator, Maintain, Front dimension Ø 29.45 mm						
Lens raised above front ring	Metal silver	Plastic red	Metal	C	45-2134.2220.000	2	0.048 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens lower than front ring	Plastic black	Plastic black	Plastic	B	45-2131.1310.000	1	0.013 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens lower than front ring	Plastic black	Plastic red	Plastic	B	45-2131.1320.000	1	0.013 kg
	Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm						
Lens lower than front ring	Plastic black	Plastic yellow	Plastic	B	45-2131.1340.000	1	0.013 kg

45 Raised design



Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring diagram	Weight
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Plastic black	Plastic green	Plastic	B	45-2131.1350.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Plastic black	Plastic blue	Plastic	B	45-2131.1360.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Plastic black	Plastic white	Plastic	B	45-2131.1390.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal sandgrey	Plastic black	Plastic	B	45-2131.3310.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal sandgrey	Plastic red	Plastic	B	45-2131.3320.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal sandgrey	Plastic yellow	Plastic	B	45-2131.3340.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal sandgrey	Plastic green	Plastic	B	45-2131.3350.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal sandgrey	Plastic blue	Plastic	B	45-2131.3360.000	1	0.021 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal sandgrey	Plastic white	Plastic	B	45-2131.3390.000	1	0.021 kg

Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring diagram	Weight
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal silver	Plastic black	Metal	B	45-2131.2310.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal silver	Plastic red	Metal	B	45-2131.2320.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal silver	Plastic yellow	Metal	B	45-2131.2340.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal silver	Plastic green	Metal	B	45-2131.2350.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal silver	Plastic blue	Metal	B	45-2131.2360.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring	Metal silver	Plastic white	Metal	B	45-2131.2390.000	1	0.048 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring, with castellation	Plastic black	Plastic black	Plastic	B	45-2131.1410.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring, with castellation	Plastic black	Plastic red	Plastic	B	45-2131.1420.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring, with castellation	Plastic black	Plastic yellow	Plastic	B	45-2131.1440.000	1	0.013 kg

45 Raised design

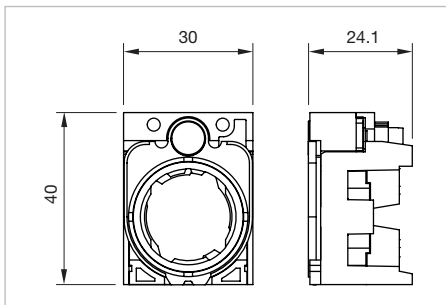
Product attribute	Front ring	Lens	Housing material	Switching action	Part No.	Wiring diagram	Weight
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring, with castellation	Plastic black	Plastic green	Plastic	B	45-2131.1450.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring, with castellation	Plastic black	Plastic blue	Plastic	B	45-2131.1460.000	1	0.013 kg
 <p>Pushbutton actuator, Momentary, Front dimension Ø 29.45 mm</p>							
Lens lower than front ring, with castellation	Plastic black	Plastic white	Plastic	B	45-2131.1490.000	1	0.013 kg

Switching action: B = Momentary, C = Maintain



	
Wiring diagram 1	Wiring diagram 2

Rear side

Holder for 3 elements

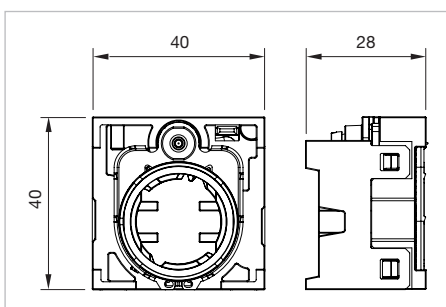


Dimensions [mm]


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


The component layouts you will find from Page 116

Holder for 4 elements



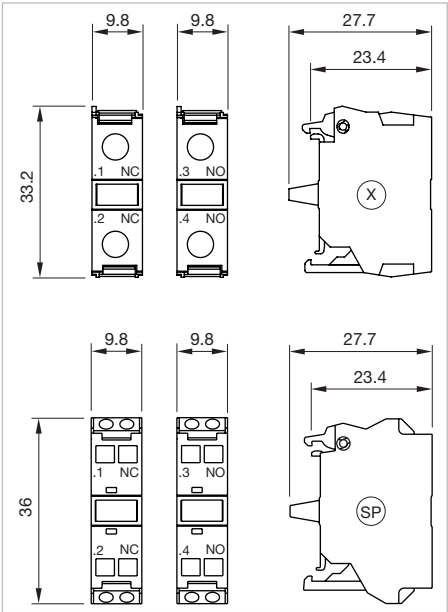
Dimensions [mm]

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



Material	Part No.	Compo- nent layout	Weight
<div></div> <div>Holder for 4 switching elements</div>			
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 diagramm	Weight
<div></div> <div>Switching element</div>						
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
<div></div> <div>Switching element</div>						
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



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

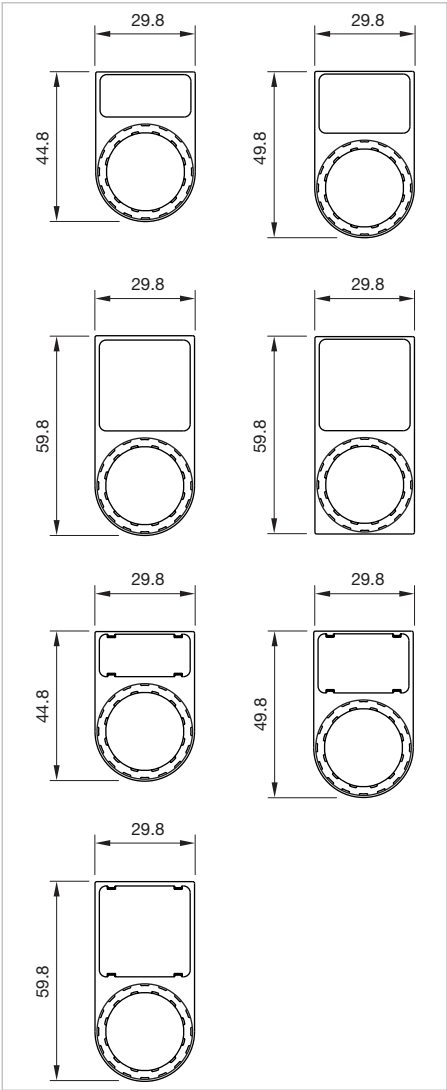
- Front panel thickness 3 mm max.

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]

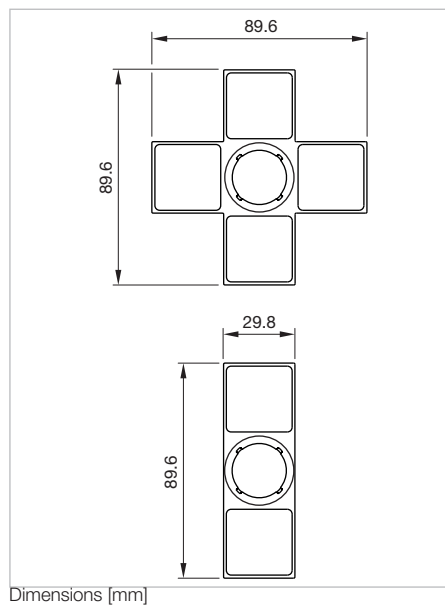
Product attribute	Material	Colour	Part No.	Weight
 Legend support without legend				
for legend plate 27 x 12.5 mm	Plastic	black	45-564.1102	0.002 kg
 Legend support without legend				
for legend plate 27 x 17.5 mm	Plastic	black	45-567.1103	0.002 kg
 Legend support without legend				
for legend plate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

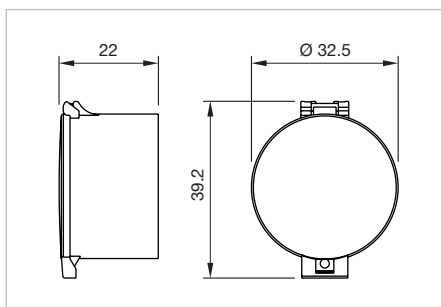
45 Accessories

Product attribute	Material	Colour	Part No.	Weight
 Legend support without legend for toggle stick				
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
 Protective cover					
IP66, IP67	Plastic	black	opaque	45-555.1100	0.012 kg
 Protective cover					
IP66, IP67	Plastic	colourless	transparent	45-555.1K00	0.012 kg

Protective cap, IP66, IP67

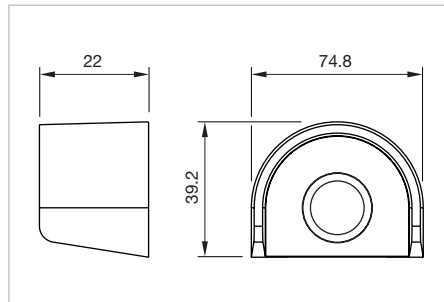
Product attribute	Front protection	Material	Colour	Optics	Part No.	Weight
 Protective cap for pushbutton						
for lens raised above bezel	IP66, IP67	Silicone	colourless	transparent	45-544.1K00	0.008 kg
for lens flush	IP66, IP67	Silicone	colourless	transparent	45-545.1K00	0.008 kg
 Protective cap for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

Product attribute	Front protection	Material	Colour	Optics	Part No.	Weight
 Protective cap for Mushroom-head pushbutton						
for Mushroom-head pushbutton Ø 40	IP66, IP67	Silicone	colourless	transparent	45-543.1K00	0.006 kg


Emergency stop protective shroud

Additional Information

- The protection shroud is not suitable for a proper use of emergency-stop. It can obstruct a spontaneous operation of the emergency-stop



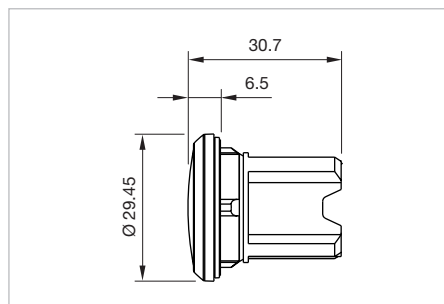
Dimensions [mm]

Material	Colour	Part No.	Weight
 Emergency stop protective shroud			
Plastic	yellow	45-549.1400	0.052 kg


Blind plug, IP66, IP67

Additional Information

- Use with plastic or metal holder



Dimensions [mm]

Mounting cut-out	Material	Colour	Part No.	Weight
 Blind plug				
Ø 22.5 mm	Plastic	black	45-506.1100	0.010 kg


45 Accessories

Mounting cut-out	Material	Colour	Part No.	Weight
 Blind plug				
	Ø 22.5 mm	Metal sandgrey	silver	45-506.3A00 0.008 kg
 Blind plug				
	Ø 22.5 mm	Metal shiny	silver	45-506.2A00 0.038 kg


Spare key

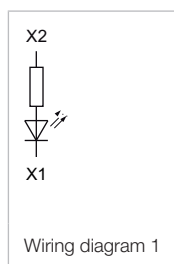
Additional Information

- For standard lock RONIS T254

Part No.	Weight
 Two spare key	
	45-522.0900 0.008 kg

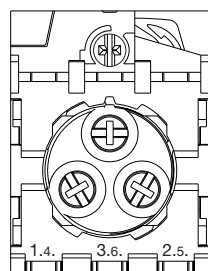
45 Accessories

LED colour	Operating voltage	Terminal	Part No.	Wiring diagram	Weight
 Illumination element					
red	24 VAC/DC	Spring-type terminal	45-320.1E46	1	0.009 kg
amber	24 VAC/DC	Spring-type terminal	45-320.1F46	1	0.009 kg
yellow	24 VAC/DC	Spring-type terminal	45-320.1G46	1	0.009 kg
green	24 VAC/DC	Spring-type terminal	45-320.1H46	1	0.009 kg
blue	24 VAC/DC	Spring-type terminal	45-320.1J46	1	0.009 kg
white	24 VAC/DC	Spring-type terminal	45-320.1N46	1	0.009 kg
red	230 VAC	Spring-type terminal	45-320.1E48	1	0.010 kg
amber	230 VAC	Spring-type terminal	45-320.1F48	1	0.010 kg
yellow	230 VAC	Spring-type terminal	45-320.1G48	1	0.010 kg
green	230 VAC	Spring-type terminal	45-320.1H48	1	0.010 kg
blue	230 VAC	Spring-type terminal	45-320.1J48	1	0.010 kg
white	230 VAC	Spring-type terminal	45-320.1N48	1	0.010 kg
red	24-240 VAC/DC	Spring-type terminal	45-320.1E42	1	0.010 kg
amber	24-240 VAC/DC	Spring-type terminal	45-320.1F42	1	0.010 kg
yellow	24-240 VAC/DC	Spring-type terminal	45-320.1G42	1	0.010 kg
green	24-240 VAC/DC	Spring-type terminal	45-320.1H42	1	0.010 kg
blue	24-240 VAC/DC	Spring-type terminal	45-320.1J42	1	0.010 kg
white	24-240 VAC/DC	Spring-type terminal	45-320.1N42	1	0.010 kg

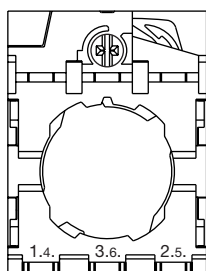


Extension plungers

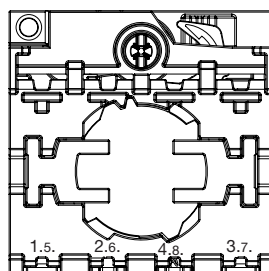
Product attribute	Material	Colour	Part No.	Weight
 Extension plungers				
for pushbutton with extended stroke	Plastic	black	45-50M.1900	0.009 kg



Component layout 1



Component layout 2



Component layout 3

Indicator actuator

Material

Actuator element

Plastic

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Vibration resistance

according to IEC 60068-2-6

2 ... 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

Pushbutton actuator

Material

Actuator element

Plastic

Front ring

Plastic or metal

Actuator housing

Plastic or metal

Mechanical characteristics

Operating frequency

Lens flat/level with front bezel:

- Momentary max. 3 600/h

- Maintain max. 1 800/h

Lens flat/raised above front ring:

- Momentary max. 3 600/h

- Maintain max. 1 800/h

Lens flat/lower than front ring:

- Momentary max. 3 600/h

Lens flat/lower than front ring, with castellation:

- Momentary max. 3 600/h

Mechanical lifetime

Lens flat/level with front bezel:

- Momentary 10 000 000 switching cycles

- Maintain 500 000 switching cycles

Lens flat/raised above front ring:

- Momentary 10 000 000 switching cycles

- Maintain 500 000 switching cycles

Lens flat/lower than front ring:

- Momentary 10 000 000 switching cycles

Lens flat/lower than front ring, with castellation:

- Momentary 10 000 000 switching cycles

Vibration resistance

according to IEC 60068-2-6

20 ... 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 Technical data

Storage temperature

-40 °C ... +80 °C

Protection degree

IP66, IP67, IP69K

Environmental category

during operation according to IEC 60721:
3K6, 3C3,3S2, 3M6

Slow-make switching element

Switching system

The double-break, slow-make switching element is equipped with normally open or normally closed contact. The normally closed contact has forced opening. Slow-make contacts with forced action are ideal for high switch ratings. Up to six switching elements can be snapped to each holder.

The NC contact opens automatically upon disconnection of the actuator. On delivery, the contact is open (= safe state). Activation (= NC contacts on the non-actuated commanding device are closed) takes place upon first-time actuation after the contact block is snapped onto the actuator.

Material

Material of contact

Silver alloy

Housing

Plastic

Mechanical characteristics

Terminals

Screw terminal

- Solid 2 x (1.0 ... 1.5 mm²)
- With end sleeves 2 x (0.5 ... 0.75 mm²)
- Finely stranded
- Without end sleeves 2 x (0.5 ... 0.75 mm²)
- With end sleeves 2 x (0.5 ... 1.5 mm²)
- For AWG cables for auxiliary contacts 2 x (18 ... 14)

Spring-type terminal (SP)

- Solid 2 x (0.25 ... 1.5 mm²)
- Finely stranded
- Without end sleeves 2 x (0.5 ... 1.5 mm²)
- With end sleeves 2 x (0.5 ... 0.75 mm²)
- For AWG cables for auxiliary contacts 2 x (24 ... 16)

Tightening torque

Screw terminal, spring-type terminal 0.8 ... 0.9 Nm

Operating frequency

max. 3 600/h

Mechanical lifetime

10 000 000 switching cycles

Vibration resistance

according to IEC 60068-2-6
2 ... 500 Hz: 5 g

Shock resistance

according to IEC 60068-2-27
Sinusoidal half-wave 50 g /11 ms

Electrical characteristics

Standards

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

Thermal current

10 A

Insulation voltage

Rated value 500 V

Pollution degree

3

Surge voltage resistance

Rated value 6 kV

Contact reliability

One contact failure per 100 million switching operations
(17 V, 5 mA)

One contact failure per 10 million switching operations (5 V, 1 mA)

Operating voltage

at AC

- Rated value 5 ... 500 V

at DC

- Rated value 5 ... 500 V

Operating current

at AC-12

Voltage	24 V	230 V	500 V
Current	10 A	10 A	10 A

at AC-15

Voltage	24V	230 V	400 V	500 V
Current	6 A	6 A	3 A	1.4 A

at DC-12

Voltage	24 V	48 V	110 V	230 V	400 V	500 V
Current	10 A	5 A	2.5 A	1 A	0.3 A	0.2 A