Series 04

Versatile. Robust and reliable.

https://eao.com/04





04 Information about the Series

Key advantages

- Versatile and reliable range of products
- Ideal for driver's cabs
- Modern and robust designSafe and ergonomically friendly in use
- Pronounced tactile feedback
- Customised and standardised markings

Typical application areas

- Driver's desks
- Control panels
- Control cabinets
- Special vehicles
- Machinery

Functions

- Pushbutton
- Illuminated pushbutton
- Mushroom-head pushbutton
- Selector switch
- Keylock switch
- Key insert switch
- Lever switch
- Indicator
- Potentiometer
- Stop switch
- Emergency stop switch

Design

- Flush
- Raised

IP front protection

- IP40
- IP54
- IP65
- IP67

Raitings

• 500 VAC (10 A)

Mounting cut-outs

- Ø 22.3 mm
- Ø 30.5 mm
- 30 mm x 30 mm

Terminal

- Plug-in terminal
- Double plug-in terminal
- Screw terminal
- Push-in terminal (PIT)

Lens Material

- Aluminium
- Stainless steel
- Plastic

Markings

- Engraving
- Hot stamping
- Pad printing
- Screen print
- Under eloxal printing

Approvals

- CB (IEC 60947)
- CCC
- CSA
- DNV GL (previously Germanischer Lloyd)
- GOST
- NFF 16-102
- UL

Conformities

- CE
- EN 45545
- ECE R 118
- 2006/42/EU (MD)
- 2011/65/EU (RoHS)
- REACH



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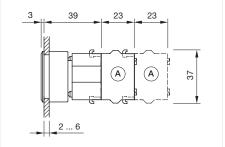
Pushbutton square, IP65



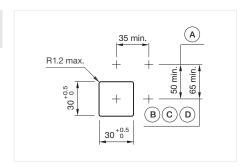
Product can differ from the current configuration.

General information

• Max. 3 switching elements can be clipped on



Dimensions [mm] A = Screw terminal



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm

Equipment consisting of (schematic overview) Lens Lens holder







Bayonet flange



Switching element

Page 213

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.



Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Black	Plastic	Black	Plastic	Black	Plastic	704.209.000	72
	Black	Plastic	Red	Plastic	Black	Plastic	704.209.200	72
	Black	Plastic	Yellow	Plastic	Black	Plastic	704.209.400	72
	Black	Plastic	Green	Plastic	Black	Plastic	704.209.500	72
	Black	Plastic	Blue	Plastic	Black	Plastic	704.209.600	72
	Black	Plastic	Colourless	Plastic	Black	Plastic	704.209.700	72
	Silver	Plastic	Black	Plastic	Black	Plastic	704.210.008	72
	Silver	Plastic	Red	Plastic	Black	Plastic	704.210.208	72
	Silver	Plastic	Yellow	Plastic	Black	Plastic	704.210.408	72
	Silver	Plastic	Green	Plastic	Black	Plastic	704.210.508	72
	Silver	Plastic	Blue	Plastic	Black	Plastic	704.210.608	72
	Silver	Plastic	Colourless	Plastic	Black	Plastic	704.210.708	72
Maintained	Black	Plastic	Red	Plastic	Black	Plastic	704.239.200	73
	Black	Plastic	Yellow	Plastic	Black	Plastic	704.239.400	73
	Black	Plastic	Blue	Plastic	Black	Plastic	704.239.600	73
	Black	Plastic	Colourless	Plastic	Black	Plastic	704.239.700	73
	Silver	Plastic	Red	Plastic	Black	Plastic	704.240.208	73
	Silver	Plastic	Yellow	Plastic	Black	Plastic	704.240.408	73
	Silver	Plastic	Green	Plastic	Black	Plastic	704.240.508	73
	Silver	Plastic	Colourless	Plastic	Black	Plastic	704.240.708	73

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Wiring diagrams

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Wiring diagram 72	Wiring diagram 73

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Pushbutton round, IP65



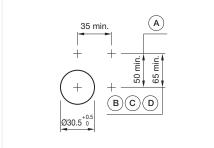
Product can differ from the current configuration.

23 (A)

Dimensions [mm] A = Screw terminal



- The colour of anodised aluminium parts can vary due to technical production reasons

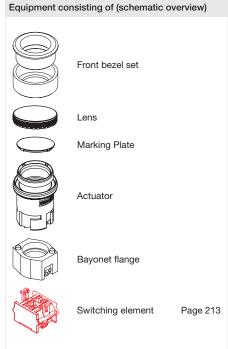


Mounting cut-outs [mm] A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



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

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



Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Front bezel surface	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Nature	Aluminium	anodised	Black	Aluminium	Grey	Plastic	704.011.018	72
	Nature	Aluminium	anodised	Red	Aluminium	Grey	Plastic	704.011.218	72
	Nature	Aluminium	anodised	Gold	Aluminium	Grey	Plastic	704.011.418	72
	Nature	Aluminium	anodised	Olive green	Aluminium	Grey	Plastic	704.011.518	72
	Nature	Aluminium	anodised	Blue	Aluminium	Grey	Plastic	704.011.618	72
	Nature	Aluminium	anodised	Nature	Aluminium	Grey	Plastic	704.011.818	72
	Nature	Aluminium	anodised	Black	Plastic	Grey	Plastic	704.012.018	72
_	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.012.218	72
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.012.418	72
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	704.012.518	72
	Nature	Aluminium	anodised	Blue	Plastic	Grey	Plastic	704.012.618	72
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	704.012.718	72
Maintained	Nature	Aluminium	anodised	Black	Plastic	Grey	Plastic	704.042.018	73
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.042.218	73
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.042.418	73
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	704.042.518	73
	Nature	Aluminium	anodised	Blue	Plastic	Grey	Plastic	704.042.618	73
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	704.042.718	73

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Wiring diagrams

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Wiring diagram 72	Wiring diagram 73

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Pushbutton square, IP65

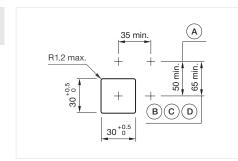


Product can differ from the current configuration.

• Max. 3 switching elements can be clipped on

General information

Dimensions [mm] A = Screw terminal



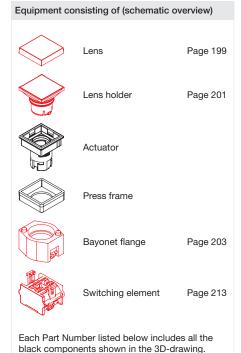
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



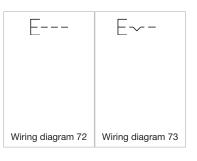
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Black	Plastic	Black	Plastic	704.741.0	72
	Silver	Plastic	Black	Plastic	704.741.8	72
Maintained	Black	Plastic	Black	Plastic	704.742.0	73
	Silver	Plastic	Black	Plastic	704.742.8	73

Wiring diagrams



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Pushbutton round, IP65

Equipment consisting of (schematic overview)



Page 202 Front bezel set



Lens Page 199

Marking Plate

Page 201



Actuator



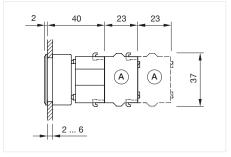
Bayonet flange Page 203



Switching element Page 213

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] A = Screw terminal



Product can differ from the current configuration.

35 min. (B)(C)(D) Ø30.5^{+0.5}

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

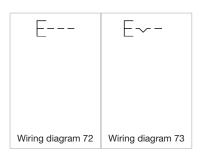
- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Actuator, Front dimension Ø 35 mm

Switching action	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Grey	Plastic	704.631.1	72
Maintained	Grey	Plastic	704.632.1	73

Wiring diagrams



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Illuminated pushbutton square, IP65



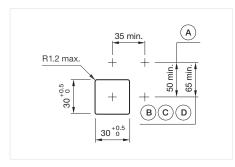
Product can differ from the current configuration.

39 15.5 23 23 (A) (A) $2 \dots 6$

Dimensions [mm] A = Screw terminal

General information

- Max. 3 switching elements can be clipped on
- The lamp block will be delivered with screw



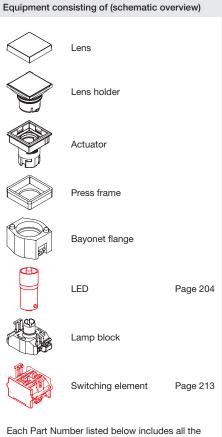
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



black components shown in the 3D-drawing.

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

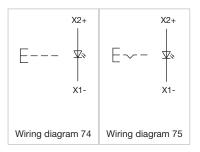
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Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Black	Plastic	Red	Plastic	Black	Plastic	704.229.200	74
	Black	Plastic	Yellow	Plastic	Black	Plastic	704.229.400	74
	Black	Plastic	Green	Plastic	Black	Plastic	704.229.500	74
	Black	Plastic	Blue	Plastic	Black	Plastic	704.229.600	74
	Black	Plastic	Colourless	Plastic	Black	Plastic	704.229.700	74
	Silver	Plastic	Red	Plastic	Black	Plastic	704.230.208	74
	Silver	Plastic	Yellow	Plastic	Black	Plastic	704.230.408	74
	Silver	Plastic	Green	Plastic	Black	Plastic	704.230.508	74
	Silver	Plastic	Blue	Plastic	Black	Plastic	704.230.608	74
	Silver	Plastic	Colourless	Plastic	Black	Plastic	704.230.708	74
Maintained	Black	Plastic	Red	Plastic	Black	Plastic	704.259.200	75
	Black	Plastic	Yellow	Plastic	Black	Plastic	704.259.400	75
	Black	Plastic	Green	Plastic	Black	Plastic	704.259.500	75
	Black	Plastic	Blue	Plastic	Black	Plastic	704.259.600	75
	Black	Plastic	Colourless	Plastic	Black	Plastic	704.259.700	75
	Silver	Plastic	Red	Plastic	Black	Plastic	704.260.208	75
	Silver	Plastic	Yellow	Plastic	Black	Plastic	704.260.408	75
	Silver	Plastic	Green	Plastic	Black	Plastic	704.260.508	75
	Silver	Plastic	Blue	Plastic	Black	Plastic	704.260.608	75
	Silver	Plastic	Colourless	Plastic	Black	Plastic	704.260.708	75

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Wiring diagrams





On our website you can download technical data, assembly instructions, catalogs, brochures and much more.



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Illuminated pushbutton round, IP65



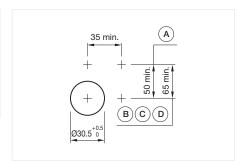
Product can differ from the current configuration.

2 40 15.5 23 23 (A) (A) (A) (A) (9)

Dimensions [mm] A = Screw terminal

General information

- Max. 3 switching elements can be clipped on
- The lamp block will be delivered with screw terminal
- The colour of anodised aluminium parts can vary due to technical production reasons



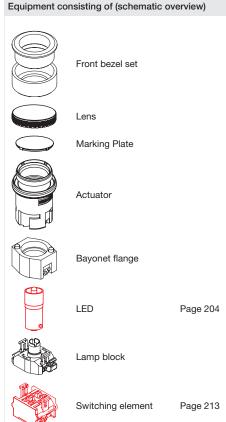
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



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

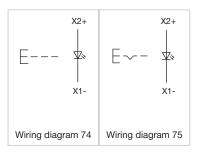
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Front bezel surface	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.032.218	74
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.032.418	74
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	704.032.518	74
	Nature	Aluminium	anodised	Blue	Plastic	Grey	Plastic	704.032.618	74
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	704.032.718	74
Maintained	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.062.218	75
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.062.418	75
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	704.062.518	75
	Nature	Aluminium	anodised	Blue	Plastic	Grey	Plastic	704.062.618	75
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	704.062.718	75

Wiring diagrams





Modern. Tactile and long-lasting.

Series 04 illuminated selector switches.

Intuitive and reliable operation for enhanced safety in public transportation.

- Bright, single or bi-colour LED illumination
- Modern, ergonomic design
- Rounded edges (in accordance with DIN 5566-1)
- Excellent tactile feedback
- · Long service life and robust construction
- · Wide range of possible combinations and options





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Illuminated pushbutton square, IP65

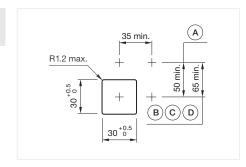


Product can differ from the current configuration.

39 15.5 23 23 (A)

Dimensions [mm] A = Screw terminal



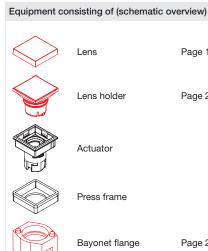


Mounting cut-outs [mm] A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



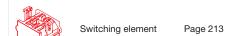
100 mg		
	LED	Page 204
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Lamp block

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

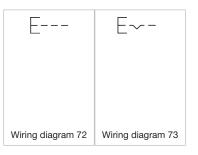
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Black	Plastic	Black	Plastic	704.741.0	72
	Silver	Plastic	Black	Plastic	704.741.8	72
Maintained	Black	Plastic	Black	Plastic	704.742.0	73
	Silver	Plastic	Black	Plastic	704.742.8	73

Wiring diagrams



Illuminated pushbutton round, IP65

Equipment consisting of (schematic overview)



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Lens Page 199

Marking Plate Page 201



Actuator



Bayonet flange Page 203



LED Page 204



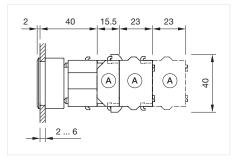
Page 210 Lamp block



Switching element Page 213

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] A = Screw terminal



Product can differ from the current configuration.

35 min. (B)(C)(D) Ø30.5^{+0.5}

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Actuator, Front dimension Ø 35 mm

Switching action	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Grey	Plastic	704.631.1	72
Maintained	Grey	Plastic	704.632.1	73

Wiring diagrams

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Wiring diagram 72	Wiring diagram 73

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Mushroom-head pushbutton, IP65

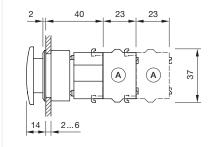


Product can differ from the current configuration.

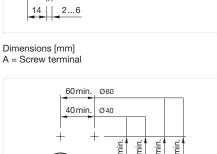
Max. 3 switching elements can be clipped on

• The colour of anodised aluminium parts can vary due to technical production reasons

General information



Dimensions [mm]



(B)(C)(D)

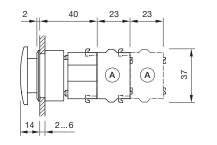
Mounting cut-outs [mm] A = Screw terminal

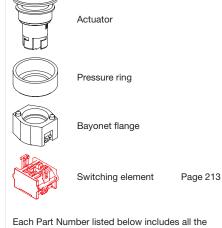
Ø30.5^{+0.3}

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm





Equipment consisting of (schematic overview)

black components shown in the 3D-drawing.

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

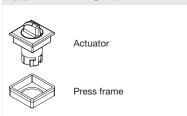
Actuator, Front dimension Ø 40 mm

Switching action	Front bezel colour	Front bezel material	Front bezel surface	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Black	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.071.210	72
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.071.218	72
	Black	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.071.410	72
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.071.418	72

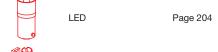


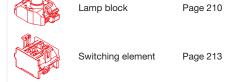
Selector switch illuminated, 2 positions, short lever, square, IP65

Equipment consisting of (schematic overview)



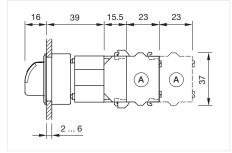






Each Part Number listed below includes all the black components shown in the 3D-drawing.

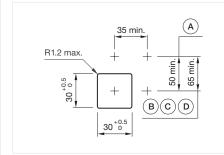
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

Max. 3 switching elements can be clipped on

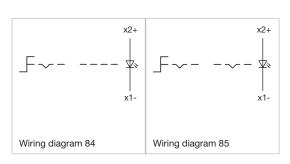




Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Black	Plastic	90° right	704.510.0001	85
	Silver	Plastic	90° right	704.510.0081	85
Rest - Momentary	Black	Plastic	42° right	704.512.0001	84
	Silver	Plastic	42° right	704.512.0081	84

Wiring diagrams



04

Selector switch illuminated 2 positions short lever, round, IP65



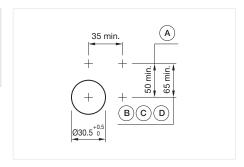
Product can differ from the current configuration.

15 40 15.5 23 23 A A A

Dimensions [mm] X = Screw terminal

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm x 0.8 mm

Equipment consisting of (schematic overview)



Actuator



Pressure ring



Bayonet flange



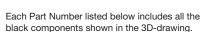
LED Page 204



Lamp block Page 210



Switching element Page 213



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

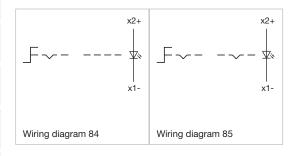




Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Black	Aluminium	90° right	anodised	704.411.0101	85
	Nature	Aluminium	90° right	anodised	704.411.018I	85
Rest - Momentary	Black	Aluminium	42° right	anodised	704.413.0101	84
	Nature	Aluminium	42° right	anodised	704.413.018I	84

Wiring diagrams



84

92

Selector switch 2 positions short lever, square, IP65

Equipment consisting of (schematic overview)





Press frame



Bayonet flange

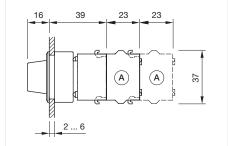


Switching element

Page 213

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

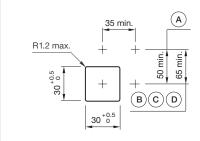
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



General information

• Max. 3 switching elements can be clipped on

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm



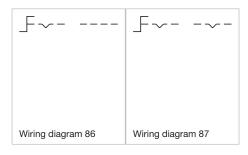




Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Black	Plastic	90° right	704.510.000	87
	Silver	Plastic	90° right	704.510.008	87
Rest - Momentary	Black	Plastic	42° right	704.512.000	86
	Silver	Plastic	42° right	704.512.008	86

Wiring diagrams



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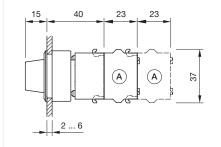
84

30

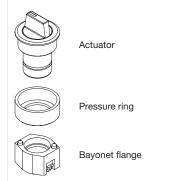
Selector switch 2 positions, short lever, round, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal



Equipment consisting of (schematic overview)



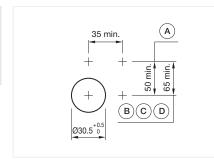
Switching element Page 213

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.

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

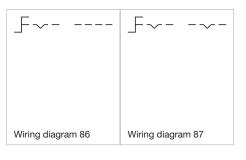
D = Double plug-in terminal 6.3 mm \times 0.8 mm





Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Black	Aluminium	90° right	anodised	704.411.010	87
	Nature	Aluminium	90° right	anodised	704.411.018	87
Rest - Momentary	Black	Aluminium	42° right	anodised	704.413.010	86
	Nature	Aluminium	42° right	anodised	704.413.018	86



Selector switch 2 positions, short lever, square, IP65

Equipment consisting of (schematic overview)



Actuator



Press frame



Bayonet flange

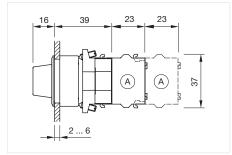


Switching element Pa

Page 213

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] A = Screw terminal



Product can differ from the current configuration.

• Max 3 switching 6

Max. 3 switching elements can be clipped on

Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm x 0.8 mm

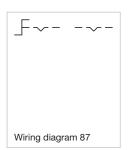




Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Black	Plastic	90° right	704.510.000.12	87
	Silver	Plastic	90° right	704.510.008.12	87

Wiring diagrams



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Selector switch 2 positions, short lever, round, IP65

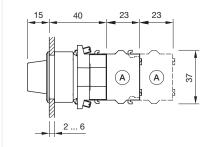


Product can differ from the current configuration.

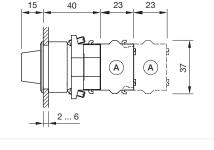
Max. 3 switching elements can be clipped on

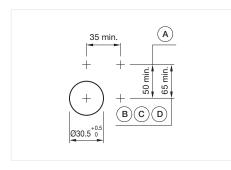
• The colour of anodised aluminium parts can vary due to technical production reasons

General information



Dimensions [mm] X = Screw terminal



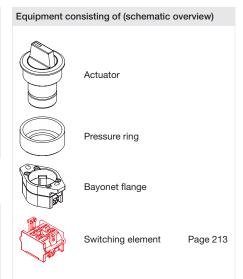


Mounting cut-outs [mm] A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



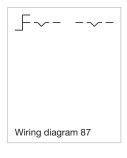
Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

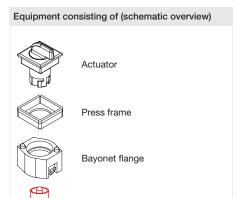


Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Black	Aluminium	90° right	anodised	704.411.010.12	87
	Nature	Aluminium	90° right	anodised	704.411.018.12	87



Selector switch illuminated, 2 positions, long lever, square, IP65

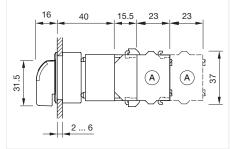






Each Part Number listed below includes all the black components shown in the 3D-drawing.

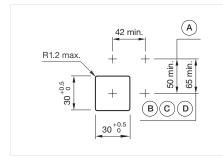
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal

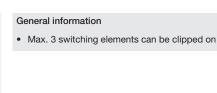


Product can differ from the current configuration.



Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3v x 0.8 mm



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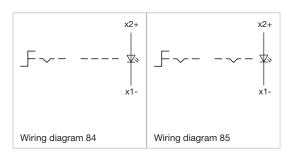
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Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Black	Plastic	90° right	704.300.0001	85
	Silver	Plastic	90° right	704.300.0081	85
Rest - Momentary	Black	Plastic	42° right	704.302.0001	84
	Silver	Plastic	42° right	704.302.0081	84



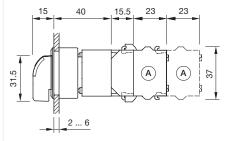
Selector switch illuminated, 2 positions, long lever, round, IP65



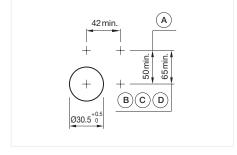
Product can differ from the current configuration.

Max. 3 switching elements can be clipped on

• The colour of anodised aluminium parts can vary due to technical production reasons



Dimensions [mm] A = Screw terminal General information



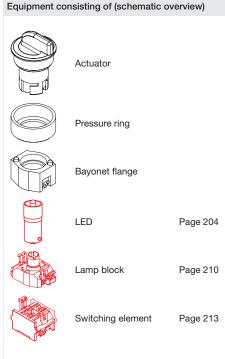
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



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

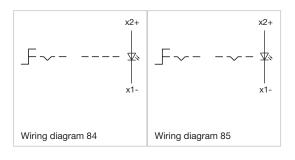
To obtain a complete unit, please select the red components from the pages shown.





Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Black	Aluminium	90° right	anodised	704.101.0101	85
	Nature	Aluminium	90° right	anodised	704.101.018I	85
Rest - Momentary	Nature	Aluminium	42° right	anodised	704.103.018I	84



Selector switch 2 positions, long lever, square, IP65

Equipment consisting of (schematic overview)



Actuator



Press frame



Bayonet flange

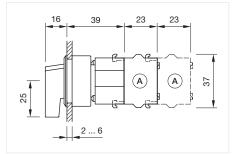


Switching element

Page 213

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] A = Screw terminal



Product can differ from the current configuration.

(A) 42 min. R1.2 max. (B)(C)(D) 30 +0.5

General information

Max. 3 switching elements can be clipped on

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3v x 0.8 mm

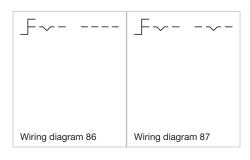




Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Black	Plastic	90° right	704.300.000	87
	Silver	Plastic	90° right	704.300.008	87
Rest - Momentary	Black	Plastic	42° right	704.302.000	86
	Silver	Plastic	42° right	704.302.008	86

Wiring diagrams



Selector switch 2 positions, long lever, round, IP65

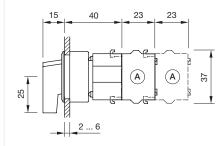


Product can differ from the current configuration.

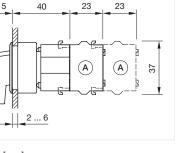
Max. 3 switching elements can be clipped on

• The colour of anodised aluminium parts can vary due to technical production reasons

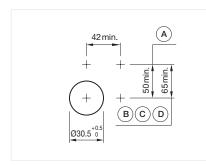
General information



Dimensions [mm]



A = Screw terminal



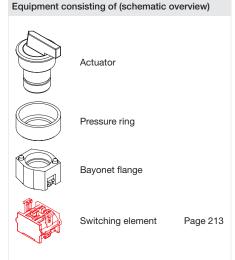
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



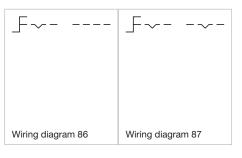
Each Part Number listed below includes all the black components shown in the 3D-drawing.

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



Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Black	Aluminium	90° right	anodised	704.101.010	87
	Nature	Aluminium	90° right	anodised	704.101.018	87
Rest - Momentary	Nature	Aluminium	42° right	anodised	704.103.018	86



Selector switch 2 positions, 12 o'clock, long lever, square, IP65

Equipment consisting of (schematic overview)



Actuator



Press frame



Bayonet flange

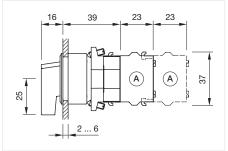


Switching element Page 213

witching element Page 213

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] A = Screw terminal



Product can differ from the current configuration.

42 min. A 42 min. 42 min. 42 min. 42 min. 43 min. 44 min. 4 mi

General information

• Max. 3 switching elements can be clipped on

Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3v x 0.8 mm

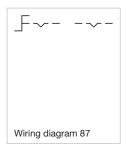




Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Black	Plastic	90° right	704.300.000.12	87
	Silver	Plastic	90° right	704.300.008.12	87

Wiring diagrams



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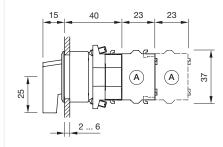
/ 1

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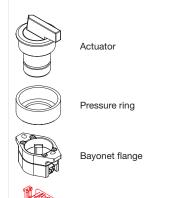
Selector switch 2 positions, long lever, round, IP65



Product can differ from the current configuration.



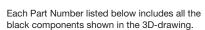
Dimensions [mm] A = Screw terminal



Equipment consisting of (schematic overview)

Switching element

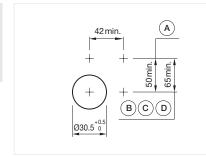
Page 213



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

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

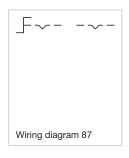
D = Double plug-in terminal 6.3 mm \times 0.8 mm





Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Black	Aluminium	90° right	anodised	704.101.010.12	87
	Nature	Aluminium	90° right	anodised	704.101.018.12	87





Selector switch illuminated, 3 positions, short lever, square, IP65

Equipment consisting of (schematic overview)



Press frame



Bayonet flange



LED Page 204



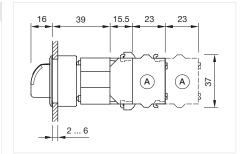
Lamp block Page 210



Switching element Page 213

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] A = Screw terminal



Product can differ from the current configuration.

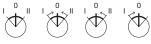
(A) 35 min. R1.2 max 50 min. min. 65 (B)(C)(D) 30 +0.5

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

Max. 3 switching elements can be clipped on

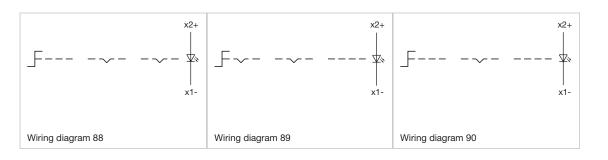




Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained - Rest - Maintained	Black	Plastic	42° left / 42° right	704.502.0001	91
	Silver	Plastic	42° left / 42° right	704.502.0081	91
Momentary - Rest - Momentary	Black	Plastic	42° left / 42° right	704.504.0001	90
	Silver	Plastic	42° left / 42° right	704.504.0081	90
Maintained - Rest - Momentary	Black	Plastic	42° left / 42° right	704.506.0001	89
	Silver	Plastic	42° left / 42° right	704.506.0081	89
Momentary - Rest - Maintained	Black	Plastic	42° left / 42° right	704.508.0001	88
	Silver	Plastic	42° left / 42° right	704.508.0081	88

Wiring diagrams

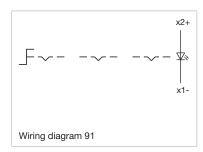


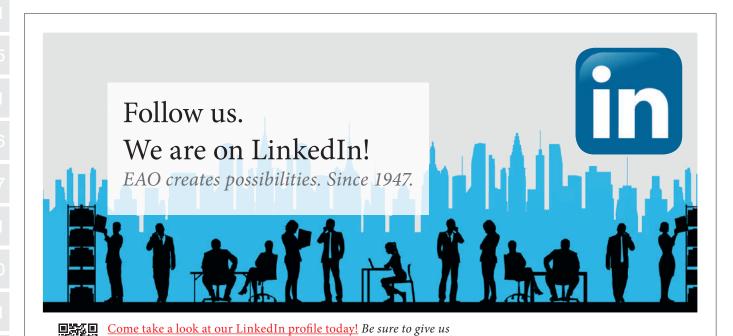
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Wiring diagrams





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Selector switch illuminated, 3 positions, short lever, round, IP65

Equipment consisting of (schematic overview)



Actuator



Pressure ring



Bayonet flange



LED Page 204



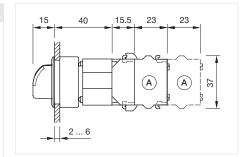
Lamp block Page 210



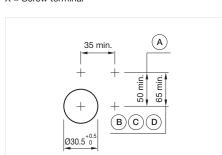
Switching element Page 213

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] X = Screw terminal



Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm



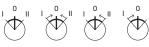
Product can differ from the current configuration.

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons





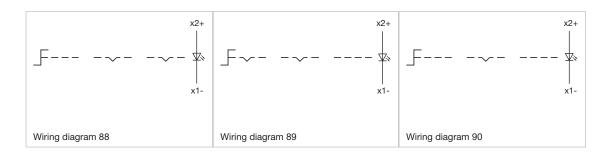




Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Maintained - Rest - Maintained	Black	Aluminium	42° left / 42° right	anodised	704.403.0101	91
	Nature	Aluminium	42° left / 42° right	anodised	704.403.018I	91
Momentary - Rest - Momentary	Black	Aluminium	42° left / 42° right	anodised	704.405.0101	90
	Nature	Aluminium	42° left / 42° right	anodised	704.405.018I	90
Maintained - Rest - Momentary	Black	Aluminium	42° left / 42° right	anodised	704.407.0101	89
	Nature	Aluminium	42° left / 42° right	anodised	704.407.018I	89
Momentary - Rest - Maintained	Black	Aluminium	42° left / 42° right	anodised	704.409.0101	88
	Nature	Aluminium	42° left / 42° right	anodised	704.409.018I	88

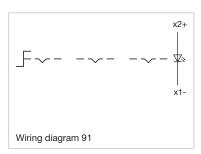
Wiring diagrams



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Wiring diagrams



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Selector switch 3 positions, short lever, square, IP65

Equipment consisting of (schematic overview)



Actuator



Press frame



Bayonet flange

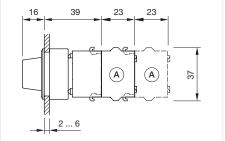


Switching element

Page 213

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] A = Screw terminal



Product can differ from the current configuration.

35 min. R1.2 max. (B)(C)(D)30 +0.5

General information

Max. 3 switching elements can be clipped on

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

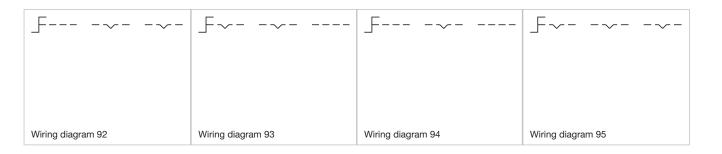




Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained - Rest - Maintained	Black	Plastic	42° left / 42° right	704.502.000	95
	Silver	Plastic	42° left / 42° right	704.502.008	95
Momentary - Rest - Momentary	Black	Plastic	42° left / 42° right	704.504.000	94
	Silver	Plastic	42° left / 42° right	704.504.008	94
Maintained - Rest - Momentary	Black	Plastic	42° left / 42° right	704.506.000	93
	Silver	Plastic	42° left / 42° right	704.506.008	93
Momentary - Rest - Maintained	Black	Plastic	42° left / 42° right	704.508.000	92
	Silver	Plastic	42° left / 42° right	704.508.008	92

Wiring diagrams



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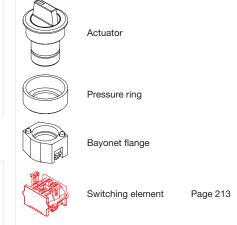
Selector switch 3 positions, short lever, round, IP65



Product can differ from the current configuration.

15 40 23 23 A A A

Dimensions [mm] A = Screw terminal



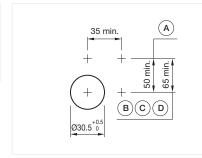
Equipment consisting of (schematic overview)

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.

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm





Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Maintained - Rest - Maintained	Black	Aluminium	42° left / 42° right	anodised	704.403.010	95
	Nature	Aluminium	42° left / 42° right	anodised	704.403.018	95
Momentary - Rest - Momentary	Black	Aluminium	42° left / 42° right	anodised	704.405.010	94
	Nature	Aluminium	42° left / 42° right	anodised	704.405.018	94
Maintained - Rest - Momentary	Black	Aluminium	42° left / 42° right	anodised	704.407.010	93
	Nature	Aluminium	42° left / 42° right	anodised	704.407.018	93
Momentary - Rest - Maintained	Black	Aluminium	42° left / 42° right	anodised	704.409.010	92
	Nature	Aluminium	42° left / 42° right	anodised	704.409.018	92

Wiring diagrams

F~-	F~~-	J	F~~-
Wiring diagram 92	Wiring diagram 93	Wiring diagram 94	Wiring diagram 95

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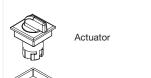
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Selector switch illuminated, 3 positions, long lever, square, IP65

Equipment consisting of (schematic overview)



Press frame



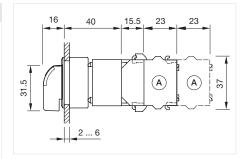
LED Page 204



Switching element Page 213

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

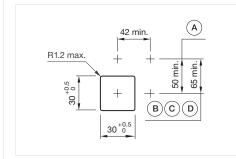
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



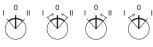
Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3v x 0.8 mm



General information

Max. 3 switching elements can be clipped on

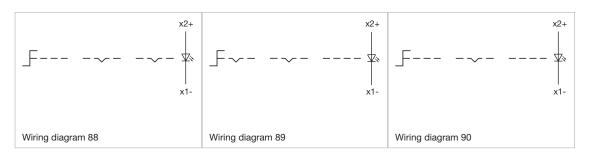




Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained - Rest - Maintained	Black	Plastic	42° left / 42° right	704.292.0001	91
	Silver	Plastic	42° left / 42° right	704.292.0081	91
Momentary - Rest - Momentary	Black	Plastic	42° left / 42° right	704.294.0001	90
	Silver	Plastic	42° left / 42° right	704.294.0081	90
Maintained - Rest - Momentary	Black	Plastic	42° left / 42° right	704.296.0001	89
	Silver	Plastic	42° left / 42° right	704.296.0081	89
Momentary - Rest - Maintained	Black	Plastic	42° left / 42° right	704.298.0001	88
	Silver	Plastic	42° left / 42° right	704.298.0081	88

Wiring diagrams



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Intuitive and reliable operation for enhanced safety in public transportation.

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Selector switch illuminated, 3 positions long lever, round, IP65

Equipment consisting of (schematic overview)





Pressure ring



Bayonet flange



LED Page 204



Lamp block Page 210



Switching element Page 213

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.

15.5 23 23 A A A E

Dimensions [mm] A = Screw terminal



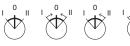
Product can differ from the current configuration.

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons

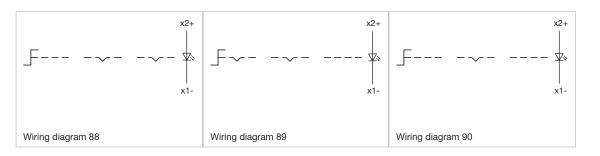




Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Maintained - Rest - Maintained	Black	Aluminium	42° left / 42° right	anodised	704.093.0101	91
	Nature	Aluminium	42° left / 42° right	anodised	704.093.018I	91
Momentary - Rest - Momentary	Black	Aluminium	42° left / 42° right	anodised	704.095.0101	90
	Nature	Aluminium	42° left / 42° right	anodised	704.095.018I	90
Maintained - Rest - Momentary	Black	Aluminium	42° left / 42° right	anodised	704.097.0101	89
	Nature	Aluminium	42° left / 42° right	anodised	704.097.018I	89
Momentary - Rest - Maintained	Black	Aluminium	42° left / 42° right	anodised	704.099.0101	88
	Nature	Aluminium	42° left / 42° right	anodised	704.099.018I	88

Wiring diagrams



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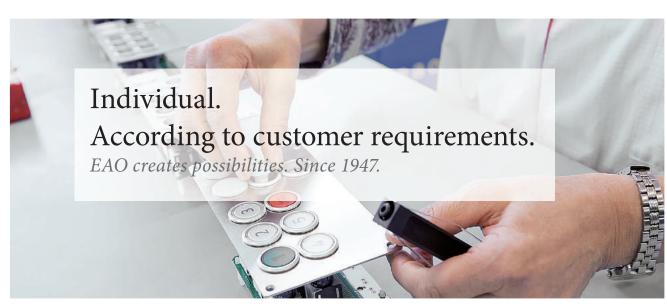
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With our value-added services, we individually modify our standard <u>components</u> in accordance with our customers' needs – quickly and cost-effectively.

- · Customer-specific marking
- Individual illumination
- Customized software
- · Customized cables and connectors
- Mechanical and electronic adaptations
- · Manufacturing of mounting sets







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Selector switch 3 positions, long lever, quare, IP65

Equipment consisting of (schematic overview)





Press frame



Bayonet flange

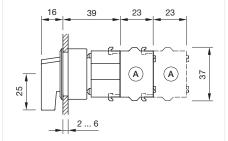


Switching element

Page 213

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] A = Screw terminal



Product can differ from the current configuration.

A 42 min. R1.2 max. 50 min. min. 9 (B)(C)(D) 30 +0.5

General information

Max. 3 switching elements can be clipped on

Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3v x 0.8 mm





Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained - Rest - Maintained	Black	Plastic	42° left / 42° right	704.292.000	95
	Silver	Plastic	42° left / 42° right	704.292.008	95
Momentary - Rest - Momentary	Black	Plastic	42° left / 42° right	704.294.000	94
	Silver	Plastic	42° left / 42° right	704.294.008	94
Maintained - Rest - Momentary	Black	Plastic	42° left / 42° right	704.296.000	93
	Silver	Plastic	42° left / 42° right	704.296.008	93
Momentary - Rest - Maintained	Black	Plastic	42° left / 42° right	704.298.000	92
	Silver	Plastic	42° left / 42° right	704.298.008	92

Wiring diagrams

F~-	F~~-	J	F~~-
Wiring diagram 92	Wiring diagram 93	Wiring diagram 94	Wiring diagram 95

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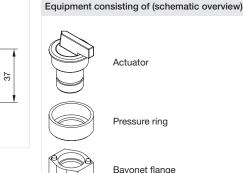
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Selector switch 3 positions, long lever, round, IP65



Product can differ from the current configuration.

Dimensions [mm] A = Screw terminal



Pressure ring

Actuator



Bayonet flange



Switching element

Page 213

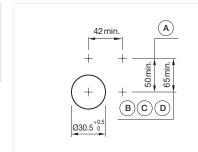


black components shown in the 3D-drawing.

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

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm

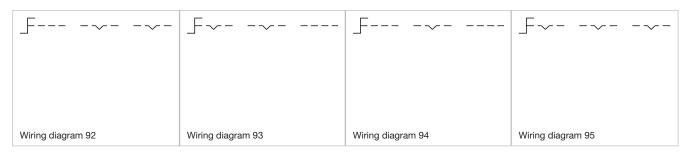




Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Maintained - Rest - Maintained	Black	Aluminium	42° left / 42° right	anodised	704.093.010	95
	Nature	Aluminium	42° left / 42° right	anodised	704.093.018	95
Momentary - Rest - Momentary	Black	Aluminium	42° left / 42° right	anodised	704.095.010	94
	Nature	Aluminium	42° left / 42° right	anodised	704.095.018	94
Maintained - Rest - Momentary	Black	Aluminium	42° left / 42° right	anodised	704.097.010	93
	Nature	Aluminium	42° left / 42° right	anodised	704.097.018	93
Momentary - Rest - Maintained	Black	Aluminium	42° left / 42° right	anodised	704.099.010	92
	Nature	Aluminium	42° left / 42° right	anodised	704.099.018	92

Wiring diagrams



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Selector rotary switch, short lever rounded, round, IP65

Equipment consisting of (schematic overview)





Pressure ring



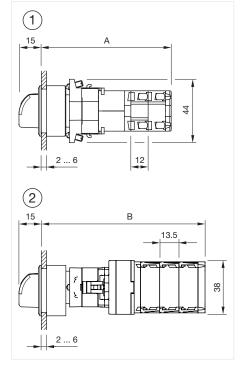
Bayonet flange



Switching element Page 227

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.



General information

The colour of anodised aluminium parts can vary due to technical production reasons



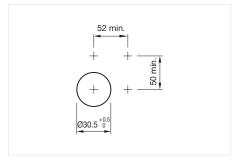
Product can differ from the current configuration.

Dimensions [mm]

1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm

2 = Santon switching element

B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]

Actuator, Front dimension Ø 35 mm

Front bezel colour	Front bezel material	Switching positions	Front bezel surface	Part No.
Black	Aluminium	Rest = 12 o'clock	anodised	704.411.010KNI
Nature	Aluminium	Rest = 12 o'clock	anodised	704.411.018KNI
	Aluminium	Rest = 9 o'clock	anodised	704.411.118KNI

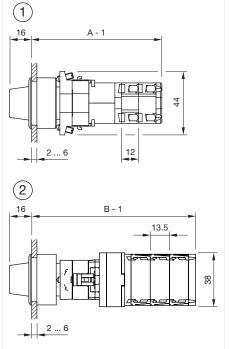
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Selector rotary switch, short lever, square, IP65



Product can differ from the current configuration.

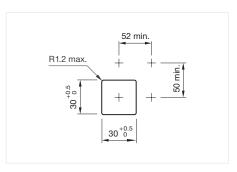


Dimensions [mm]

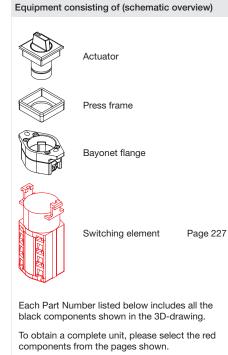
1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm

2 = Santon switching element

B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]





Actuator, Front dimension 35 mm x 35 mm

Front bezel colour	Front bezel material	Switching positions	Part No.
Black	Plastic	Rest = 9 o'clock	704.510.100KN
Silver	Plastic	Rest = 9 o'clock	704.510.108KN

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Selector rotary switch short lever, round, IP65

Equipment consisting of (schematic overview)





Pressure ring



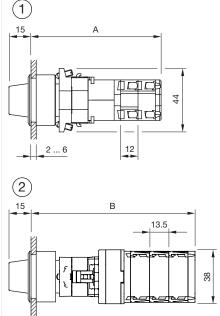
Bayonet flange



Page 227 Switching element

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.



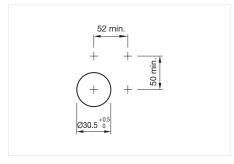
Dimensions [mm]

1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm

2 = Santon switching element

2 ... 6

B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]





Product can differ from the current configuration.

The colour of anodised aluminium parts can vary due to technical production reasons



Actuator, Front dimension Ø 35 mm

Front bezel colour	Front bezel material	Switching positions	Front bezel surface	Part No.
Black	Aluminium	Rest = 12 o'clock	anodised	704.411.010KN
Nature	Aluminium	Rest = 12 o'clock	anodised	704.411.018KN
Black	Aluminium	Rest = 9 o'clock	anodised	704.411.110KN
Nature	Aluminium	Rest = 9 o'clock	anodised	704.411.118KN

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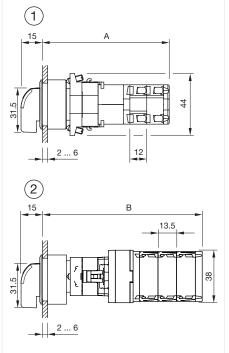
Selector rotary switch, long lever rounded, round, IP65



Product can differ from the current configuration.

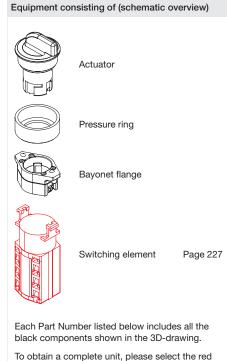
General information

The colour of anodised aluminium parts can vary due to technical production reasons

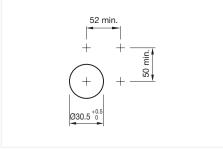


Dimensions [mm]

- 1 = Kraus & Naimer switching element
- $A = (Number of stages \times 12) + 66.5 mm$
- 2 = Santon switching element
- B = (Number of stages x 13,5) + 65.5 mm



components from the pages shown.



Mounting cut-outs [mm]

Actuator, Front dimension Ø 35 mm

Front bezel colour	Front bezel material	Switching positions	Front bezel surface	Part No.
Nature	Aluminium	Rest = 12 o'clock	anodised	704.101.018KNI
Black	Aluminium	Rest = 9 oʻclock	anodised	704.101.110KNI
Nature	Aluminium	Rest = 9 o'clock	anodised	704.101.118KNI

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Selector rotary switch long lever, square, IP65

Equipment consisting of (schematic overview)





Press frame



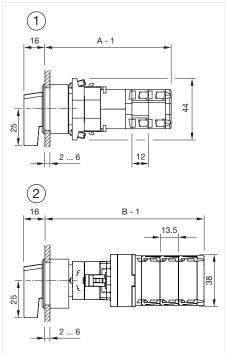
Bayonet flange



Switching element Page 227

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.



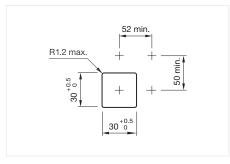
Product can differ from the current configuration.

Dimensions [mm]

1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm

2 = Santon switching element

B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]

Actuator, Front dimension 35 mm x 35 mm

Front bezel colour	Front bezel material	Switching positions	Part No.
Black	Plastic	Rest = 9 o'clock	704.300.100KN
Silver	Plastic	Rest = 9 o'clock	704.300.108KN

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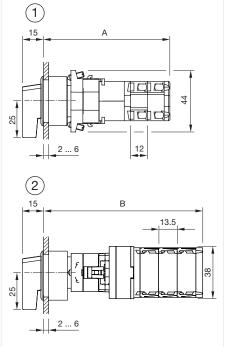
Selector rotary switch long lever, round, IP65



Product can differ from the current configuration.

General information

• The colour of anodised aluminium parts can vary due to technical production reasons

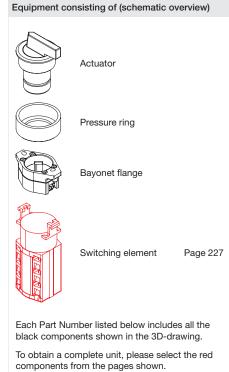


Dimensions [mm]

1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm

2 = Santon switching element

B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]

52 min 50 min. Ø30.5 ^{+0.}

Actuator, Front dimension Ø 35 mm

Front bezel colour	Front bezel material	Switching positions	Front bezel surface	Part No.
Nature	Aluminium	Rest = 12 o'clock	anodised	704.101.018KN
Black	Aluminium	Rest = 9 o'clock	anodised	704.101.110KN
Nature	Aluminium	Rest = 9 o'clock	anodised	704.101.118KN

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Keylock switch 2 positions, square, IP65

Equipment consisting of (schematic overview)



Press frame



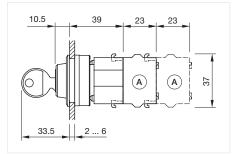
Bayonet flange



Switching element Page 213

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] A = Screw terminal



Product can differ from the current configuration.

35 min. A A B1.2 max. + B C B C D B C D

General information

- Max. 3 switching elements can be clipped on
- The standard lock Ronis 251

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm



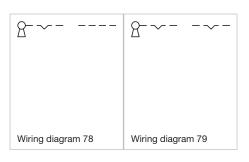


Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained (a)	Black	Plastic	90° right	704.340.000	79
	Silver	Plastic	90° right	704.340.008	79
Rest (a) - Maintained	Black	Plastic	90° right	704.341.000	79
	Silver	Plastic	90° right	704.341.008	79
Rest (a) - Maintained (a)	Black	Plastic	90° right	704.342.000	79
	Silver	Plastic	90° right	704.342.008	79
Rest (a) - Momentary	Black	Plastic	42° right	704.343.000	78
	Silver	Plastic	42° right	704.343.008	78

a = Key remove

Wiring diagrams



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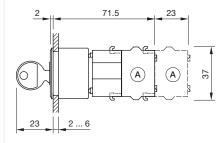
90

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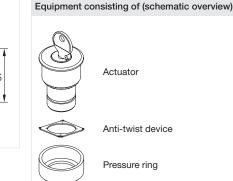
Keylock switch 2 positions, round, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal



Anti-twist device



Pressure ring

Actuator

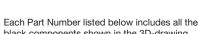


Bayonet flange



Switching element

Page 213



black components shown in the 3D-drawing. To obtain a complete unit, please select the red

components from the pages shown.

- Max. 3 switching elements can be clipped on
- The standard lock Ronis 251

General information

The colour of anodised aluminium parts can vary due to technical production reasons

> Mounting cut-outs [mm] A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm

35 min.

(B)(C)(D)



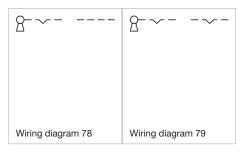


Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained (a)	Nature	Aluminium	90° right	704.120.018	79
Rest (a) - Maintained	Nature	Aluminium	90° right	704.121.018	79
Rest (a) - Maintained (a)	Nature	Aluminium	90° right	704.122.018	79
Rest (a) - Momentary	Nature	Aluminium	42° right	704.123.018	78

a = Key remove

Wiring diagrams



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Keylock switch 3 positions, square, IP65

Equipment consisting of (schematic overview)





Press frame



Bayonet flange

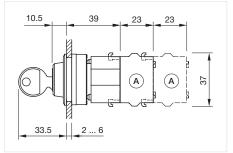


Switching element Page 213

Each Part Number listed below includes all the

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

black components shown in the 3D-drawing.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.

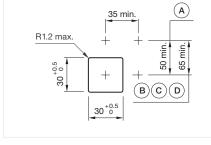
(A) 35 min. R1.2 max 50 min. min. 65 +(B)(C)(D) 30 +0.5

General information

- Max. 3 switching elements can be clipped on
- The standard lock Ronis 251

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm







Actuator, Front dimension 35 mm x 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained (a) - Rest (a) - Maintained (a)	Black	Plastic	90° left / 90° right	704.333.000	83
	Silver	Plastic	90° left / 90° right	704.333.008	83
Maintained - Rest (a) - Maintained	Black	Plastic	42° left / 42° right	704.334.000	83
	Silver	Plastic	42° left / 42° right	704.334.008	83
Momentary - Rest (a) - Momentary	Black	Plastic	42° left / 42° right	704.335.000	82
	Silver	Plastic	42° left / 42° right	704.335.008	82
Maintained (a) - Rest - Maintained (a)	Black	Plastic	42° left / 42° right	704.336.000	83
	Silver	Plastic	42° left / 42° right	704.336.008	83
Maintained (a) - Rest - Momentary	Black	Plastic	42° left / 42° right	704.337.000	81
	Silver	Plastic	42° left / 42° right	704.337.008	81
Momentary - Rest (a) - Maintained	Black	Plastic	42° left / 42° right	704.338.000	80
	Silver	Plastic	42° left / 42° right	704.338.008	80
Maintained (a) - Rest (a) - Momentary	Black	Plastic	42° left / 42° right	704.344.000	81
	Silver	Plastic	42° left / 42° right	704.344.008	81

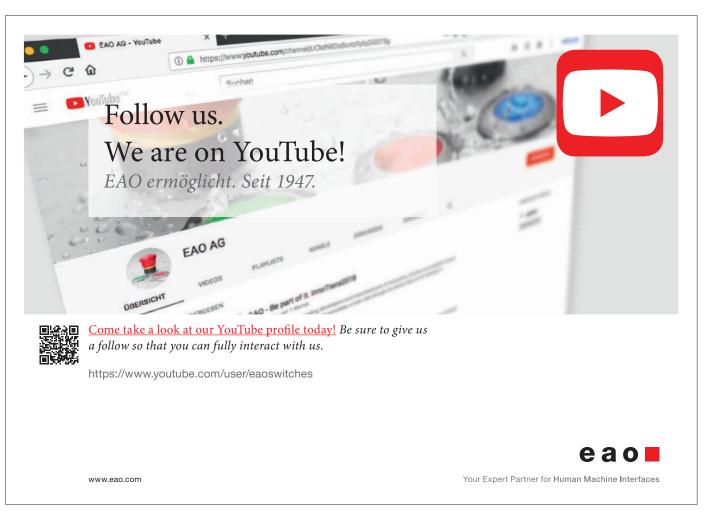
a = Key remove

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Wiring diagrams

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Wiring diagram 80	Wiring diagram 81	Wiring diagram 82	Wiring diagram 83



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Keylock switch 3 positions, round, IP65

Equipment consisting of (schematic overview)





Anti-twist device



Pressure ring



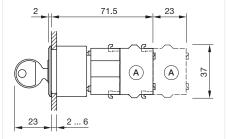
Bayonet flange



Switching element Page 213

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] A = Screw terminal



Product can differ from the current configuration.

35 min. (B)(C)(D) Ø30.5^{+0.5}

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

- Max. 3 switching elements can be clipped on
- The standard lock Ronis 251
- The colour of anodised aluminium parts can vary due to technical production reasons



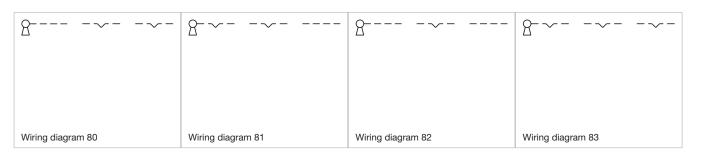


Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained (a) - Rest (a) - Maintained (a)	Nature	Aluminium	90° left / 90° right	704.113.018	83
Maintained - Rest (a) - Maintained	Nature	Aluminium	42° left / 42° right	704.114.018	83
Momentary - Rest (a) - Momentary	Nature	Aluminium	42° left / 42° right	704.115.018	82
Maintained (a) - Rest - Maintained (a)	Nature	Aluminium	42° left / 42° right	704.116.018	83
Maintained (a) - Rest - Momentary	Nature	Aluminium	42° left / 42° right	704.117.018	81
Momentary - Rest (a) - Maintained	Nature	Aluminium	42° left / 42° right	704.118.018	80
Maintained (a) - Rest (a) - Momentary	Nature	Aluminium	42° left / 42° right	704.124.018	81

a = Key remove

Wiring diagrams



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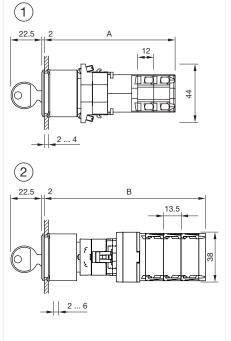
Keylock rotary switch, IP65



Product can differ from the current configuration.

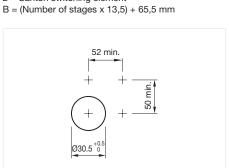
General information

- The standard lock Ronis 251
- The colour of anodised aluminium parts can vary due to technical production reasons



Dimensions [mm]

- 1 = Kraus & Naimer switching element
- $A = (Number of stages \times 12) + 66,5 mm$
- 2 = Santon switching element



Mounting cut-outs [mm]

Equipment consisting of (schematic overview)



Actuator



Anti-twist device



Pressure ring



Bayonet flange



Switching element

Page 227

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.



Actuator, Front dimension Ø 35 mm

Switching action	Front bezel colour	Front bezel material	Switching positions	Part No.
Maintained - Rest (a)	Nature	Aluminium	Rest = 12 o'clock	704.123.018KN
	Nature	Aluminium	Rest = 9 oʻclock	704.123.118KN

a = Key remove

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Key-insert switch 2 positions, IP67

Equipment consisting of (schematic overview)





Fixing nut



Bayonet flange

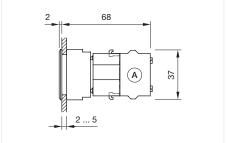


Switching element

Page 213

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] A = Screw terminal



Product can differ from the current configuration.

(A)38 min. R1.5 50 min. min. 65 (B)(C)(D) 32 +0.5

General information

- Max. 3 switching elements can be clipped on
- In the Part-No. "x" stands for not defined actua-

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

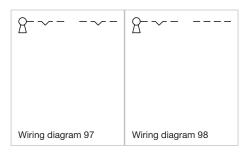




Actuator, Front dimension Ø 38 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Nature	Stainless steel	90° right	704.101.0x28	97
Rest - Momentary	Nature	Stainless steel	45° left	704.103.0x28	98

Wiring diagrams



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Key-insert switch 3 positions, IP67



Product can differ from the current configuration.

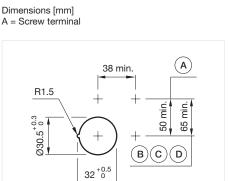
• Max. 3 switching elements can be clipped on

• In the Part-No. "x" stands for not defined actua-

General information

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Dimensions [mm]

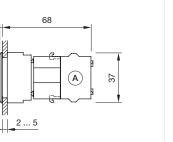


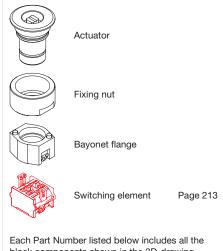
Mounting cut-outs [mm] A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm





Equipment consisting of (schematic overview)

black components shown in the 3D-drawing.

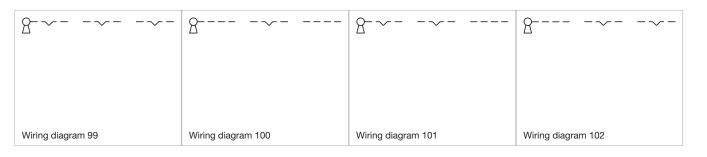
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension Ø 38 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained - Rest - Maintained	Nature	Stainless steel	45° left / 45° right	704.093.0x28	99
Momentary - Rest - Momentary	Nature	Stainless steel	45° left / 45° right	704.095.0x28	100
Maintained - Rest - Momentary	Nature	Stainless steel	45° left / 45° right	704.097.0x28	101
Momentary - Rest - Maintained	Nature	Stainless steel	45° left / 45° right	704.099.0x28	102

Wiring diagrams



Key-insert switch 3 positions, conductor switch, IP67

Equipment consisting of (schematic overview)



Actuator

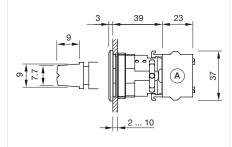


Switching element

Page 213

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] A = Screw terminal



Product can differ from the current configuration.

38 min. 50 min. R1.2 max. 30 +0.5

General information

Max. 1 switching element can be clipped on

Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm x 0.8 mm

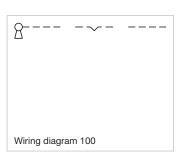




Actuator, Front dimension Ø 38 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Momentary - Rest - Momentary	Nature	Stainless steel	42° left / 42° right	704.095.0T28N	100

Wiring diagrams



Lever switch, IP54



Product can differ from the current configuration.

General information

- For all units are the levers 02 (black), 03, 04, 05, 06 (yellow) 13, 14, 15 and 16 available (levers 6 + 16 according UIC 612). Special levers on request
- Front bezel can also be delivered in black version
- Functions and properties, including lever style and switching positions of the lever switch are being produced according to customer specifications. Please contact your local EAO Sales Office
- Micro-switch contacts: The micro-switch is available with a silver contact or a gold plated silver contact. Contact without positive opening operation is used in the lever switches S41, S42 and S43
- Each lever switch includes a maximum of five micro-switches. Contact with positive opening operation is used in the lever switches S44 and S45. Each lever switch includes a maximum of four micro-switches



Actuator, Front dimension Ø 40 mm

Product attributes	Front bezel colour	Front bezel material	Front bezel surface	Switching system	Contacts	Part No.
S41: Cage clamp 1.0 mm 1.5 mm², 1 contact element	Nature	Aluminium	anodised	Snap-action switching element	1 NC / 1 NO	704.151.XXX
S42: JST connector max. 0.2 mm² (counter plug is supplied), 1 contact element	Nature	Aluminium	anodised	Snap-action switching element	1 NC / 1 NO	704.152.XXX
S43: Plug-in terminal 6.3 mm x 0.8 mm, 1 contact element	Nature	Aluminium	anodised	Snap-action switching element	1 NC / 1 NO	704.153.XXX
S44: Cage clamp 1.0 mm 1.5 mm², 1 contact element positive opend	Nature	Aluminium	anodised	Snap-action switching element	1 NC / 1 NO	704.154.XXX
S45: Screw terminal or plug-in terminal 6.3 mm x 0.8 mm, 1 contact element positive opend	Nature	Aluminium	anodised	Snap-action switching element	1 NC / 1 NO	704.155.XXX

Contacts: NC = Normally closed, NO = Normally open

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Indicator square, IP65

Equipment consisting of (schematic overview)



Lens



Lens holder



Actuator



Press frame



Bayonet flange



LED

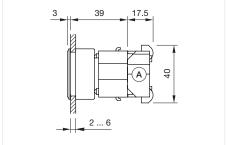
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Lamp block

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

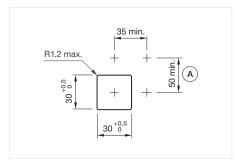
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



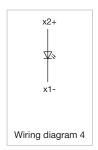
Mounting cut-outs [mm] A = Screw terminal

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Actuator, Front dimension 35 mm x 35 mm

Housing colour	Housing ma- terial	Lens colour	Front bezel colour	Front bezel material	Marking plate colour	Marking plate optics	Part No.	Wiring diagram
Black	Plastic	Red	Silver	Plastic	White	translucent	704.202.208	4
	Plastic	Yellow	Silver	Plastic	White	translucent	704.202.408	4
	Plastic	Green	Silver	Plastic	White	translucent	704.202.508	4
	Plastic	Blue	Silver	Plastic	White	translucent	704.202.608	4
	Plastic	Colourless	Silver	Plastic	White	translucent	704.202.708	4
	Plastic	Red	Black	Plastic	White	translucent	704.206.200	4
	Plastic	Yellow	Black	Plastic	White	translucent	704.206.400	4
	Plastic	Green	Black	Plastic	White	translucent	704.206.500	4
	Plastic	Blue	Black	Plastic	White	translucent	704.206.600	4
	Plastic	Colourless	Black	Plastic	White	translucent	704.206.700	4

Wiring diagrams



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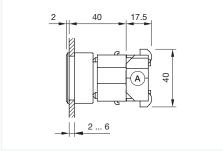
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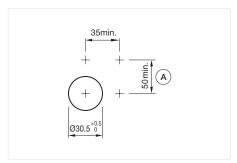
Indicator round, IP65



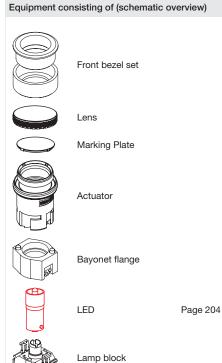
Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal



Mounting cut-outs [mm] A = Screw terminal



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

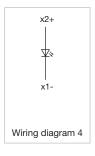
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension Ø 35 mm

Housing colour	Housing material	Lens colour	Front bezel colour	Front bezel material	Front bezel surface	Part No.	Wiring diagram
Grey	Plastic	Red	Nature	Aluminium	anodised	704.006.218	4
	Plastic	Yellow	Nature	Aluminium	anodised	704.006.418	4
	Plastic	Green	Nature	Aluminium	anodised	704.006.518	4
	Plastic	Blue	Nature	Aluminium	anodised	704.006.618	4
	Plastic	Colourless	Nature	Aluminium	anodised	704.006.718	4

Wiring diagrams



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Indicator square, IP65

Equipment consisting of (schematic overview)







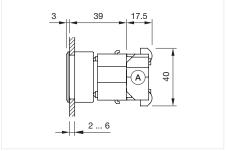


LED Page 204



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

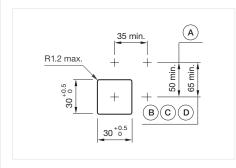
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



Mounting cut-outs [mm]

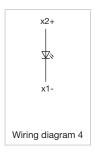
- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm



Actuator, Front dimension 35 mm x 35 mm

Housing colour	Housing material	Front bezel colour	Front bezel material	Part No.	Wiring diagram
Black	Plastic	Black	Plastic	704.743.0	4
	Plastic	Silver	Plastic	704.743.8	4

Wiring diagrams



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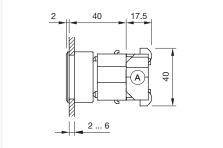
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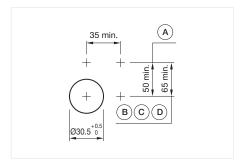
Indicator round, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal



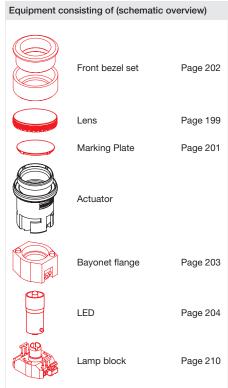
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



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

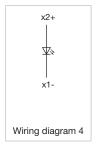
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension Ø 35 mm

Housing colour	Housing material	Part No.	Wiring diagram
Grey	Plastic	704.633.1	4

Wiring diagrams



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Flasher without LED square, IP65

Equipment consisting of (schematic overview)

Lens



Marking foil



Lens holder



Actuator



Press frame



Bayonet flange



LED

Page 204



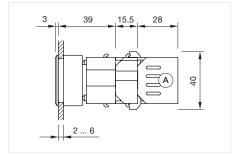
Lamp block



Flasher element Page 235

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

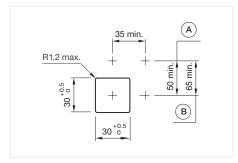
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



Mounting cut-outs [mm]
A = Screw terminal
B = Push-in terminal (PIT)



Actuator, Front dimension 35 mm x 35 mm

Housing colour	Housing ma- terial	Lens colour	Front bezel colour	Front bezel material	Marking plate colour	Marking plate optics	Part No.	Wiring diagram
Black	Plastic	Red	Silver	Plastic	White	translucent	704.202.208	4
	Plastic	Yellow	Silver	Plastic	White	translucent	704.202.408	4
	Plastic	Green	Silver	Plastic	White	translucent	704.202.508	4
	Plastic	Blue	Silver	Plastic	White	translucent	704.202.608	4
	Plastic	Colourless	Silver	Plastic	White	translucent	704.202.708	4
	Plastic	Red	Black	Plastic	White	translucent	704.206.200	4
	Plastic	Yellow	Black	Plastic	White	translucent	704.206.400	4
	Plastic	Green	Black	Plastic	White	translucent	704.206.500	4
	Plastic	Blue	Black	Plastic	White	translucent	704.206.600	4
	Plastic	Colourless	Black	Plastic	White	translucent	704.206.700	4

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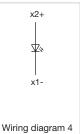
82

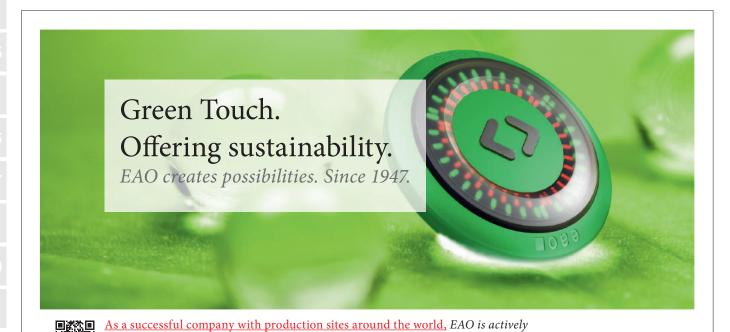
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Wiring diagrams





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committed to the effective implementation of a sustainable environmental policy.

and that we adhere to EC guidelines on hazardous materials (RoHS).







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Flasher without LED round, IP65

Equipment consisting of (schematic overview)

Front bezel set



Lens



Marking Plate



Actuator



Bayonet flange



LED



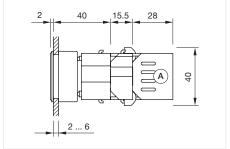
Lamp block



Flasher element Page 235

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.

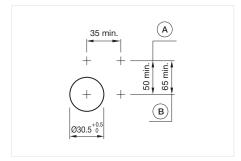


Dimensions [mm] A = Screw terminal



04

Product can differ from the current configuration.



Mounting cut-outs [mm]
A = Screw terminal
B = Push-in terminal (PIT)

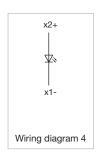


Actuator, Front dimension Ø 35 mm

Page 204

Housing colour	Housing material	Lens colour	Front bezel colour	Front bezel material	Front bezel surface	Part No.	Wiring diagram
Grey	Plastic	Red	Nature	Aluminium	anodised	704.006.218	4
	Plastic	Yellow	Nature	Aluminium	anodised	704.006.418	4
	Plastic	Green	Nature	Aluminium	anodised	704.006.518	4
	Plastic	Blue	Nature	Aluminium	anodised	704.006.618	4
	Plastic	Colourless	Nature	Aluminium	anodised	704.006.718	4

Wiring diagrams



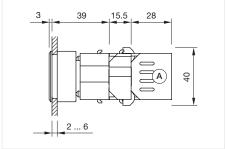
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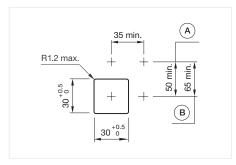
Flasher square, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal



Mounting cut-outs [mm]
A = Screw terminal
B = Push-in terminal (PIT)

Lens Page 199 Lens holder Page 201 Actuator









Flasher element

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

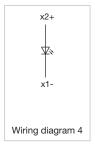
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension 35 mm x 35 mm

Housing colour	Housing material	Front bezel colour	Front bezel material	Part No.	Wiring diagram
Black	Plastic	Black	Plastic	704.743.0	4
	Plastic	Silver	Plastic	704.743.8	4

Wiring diagrams



Flasher round, IP65

Equipment consisting of (schematic overview)

Front bezel set Page 202

Lens Page 199

Marking Plate Page 201

Actuator

Bayonet flange Page 203

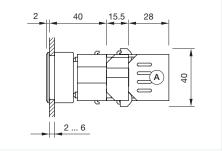
LED Page 204

Lamp block Page 210

Flasher element Page 235

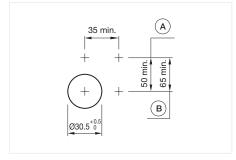
Each Part Number listed below includes all the black components shown in the 3D-drawing.

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



Dimensions [mm] A = Screw terminal





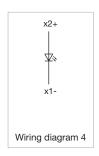
Mounting cut-outs [mm]
A = Screw terminal
B = Push-in terminal (PIT)



Actuator, Front dimension Ø 35 mm

Housing colour	Housing material	Part No.	Wiring diagram
Grey	Plastic	704.633.1	4

Wiring diagrams



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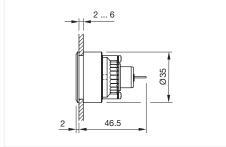
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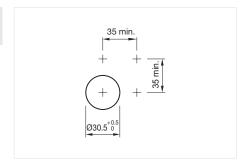
Buzzer, IP40



Product can differ from the current configuration.



Dimensions [mm]



Mounting cut-outs [mm]

Actuator Pressure ring Fixing nut

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

General information

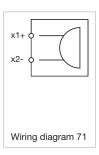
• Further information see Technical data



Actuator, Front dimension Ø 35 mm

Terminal	Operating voltage	Front cap colour	Front cap material	Front cap surface	Part No.	Wiring diagram
Plug-in terminal	24 V DC	Black	Aluminium	anodised	14-810.910	71
	24 V DC	Nature	Aluminium	anodised	14-810.918	71

Wiring diagrams



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Potentiometer, IP65

Equipment consisting of (schematic overview)



Lever



Actuator



Page 202 Front bezel set



Fixing nut



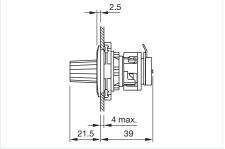
Mounting



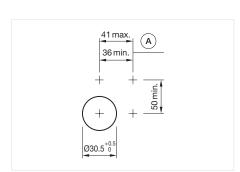
Potentiometer

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] A = Action range of aligning pins



Product can differ from the current configuration.

General information

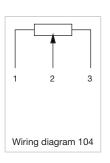
• For front dimensions 36 mm x 36 mm, Ø 36 mm



Actuator, Front dimension Ø 36 mm

Housing material	Front bezel colour	Front bezel material	Front bezel surface	Resistance	Part No.	Wiring diagram
Plastic		Metal	matt chrome	10 kOhm	44-745.20-10K1	104
	Matt grey	Plastic		10 kOhm	44-745.60-10K1	104

Wiring diagrams



Stop switch, IP65

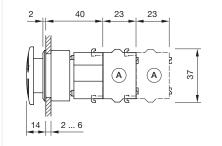


Product can differ from the current configuration.

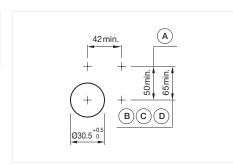
• Max. 3 switching elements can be clipped on

General information

• Twist to unlock clockwise



Dimensions [mm] A = Screw terminal



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm x 0.8 mm

Equipment consisting of (schematic overview)



Actuator



Anti-twist device



Pressure ring



Bayonet flange



Switching element

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

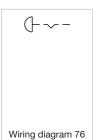
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension Ø 40 mm

Switching action	Lens colour	Front bezel colour	Front bezel material	Front bezel surface	Marking	Part No.	Wiring diagram
Maintained	Red	Black	Aluminium	anodised	Arrows	704.074.210	76
	Red	Nature	Aluminium	anodised	Arrows	704.075.218	76
	Red	Black	Aluminium	anodised	Stop	704.075.310	76
	Red	Nature	Aluminium	anodised	Stop	704.075.318	76

Wiring diagrams



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Raised design 04

Pushbutton square, IP67

Equipment consisting of (schematic overview)

Front bezel



Lens



Lens holder



Actuator



Bayonet flange

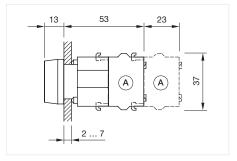


Switching element

Page 213

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

components from the pages shown.



Dimensions [mm] A = Screw terminal

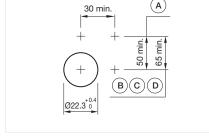


Product can differ from the current configuration.

• Max. 3 switching elements can be clipped on

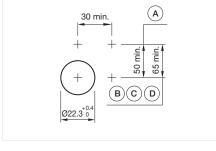
General information

To obtain a complete unit, please select the red



Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm



Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Black	Plastic	Black	Plastic	Black	Plastic	704.209.0	72
	Black	Plastic	Red	Plastic	Black	Plastic	704.209.2	72
	Black	Plastic	Yellow	Plastic	Black	Plastic	704.209.4	72
	Black	Plastic	Green	Plastic	Black	Plastic	704.209.5	72
	Black	Plastic	Blue	Plastic	Black	Plastic	704.209.6	72
	Black	Plastic	Colourless	Plastic	Black	Plastic	704.209.7	72
	Grey	Plastic	Black	Plastic	Black	Plastic	704.210.0	72
	Grey	Plastic	Red	Plastic	Black	Plastic	704.210.2	72
	Grey	Plastic	Yellow	Plastic	Black	Plastic	704.210.4	72
	Grey	Plastic	Green	Plastic	Black	Plastic	704.210.5	72
	Grey	Plastic	Blue	Plastic	Black	Plastic	704.210.6	72
	Grey	Plastic	Colourless	Plastic	Black	Plastic	704.210.7	72
Maintained	Black	Plastic	Black	Plastic	Black	Plastic	704.239.0	73
	Black	Plastic	Red	Plastic	Black	Plastic	704.239.2	73
	Black	Plastic	Green	Plastic	Black	Plastic	704.239.5	73
	Black	Plastic	Colourless	Plastic	Black	Plastic	704.239.7	73
	Grey	Plastic	Black	Plastic	Black	Plastic	704.240.0	73
	Grey	Plastic	Red	Plastic	Black	Plastic	704.240.2	73
	Grey	Plastic	Yellow	Plastic	Black	Plastic	704.240.4	73
	Grey	Plastic	Green	Plastic	Black	Plastic	704.240.5	73
	Grey	Plastic	Colourless	Plastic	Black	Plastic	704.240.7	73

04

04 Raised design

Wiring diagrams

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Wiring diagram 72	Wiring diagram 73



Modern. Tactile and long-lasting.

Series 04 illuminated selector switches.

Intuitive and reliable operation for enhanced safety in public transportation.

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Pushbutton round

Equipment consisting of (schematic overview)

Front bezel



Lens



Marking Plate



Actuator



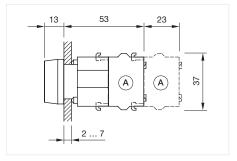
Bayonet flange



Switching element Page 213

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] A = Screw terminal



Product can differ from the current configuration.

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

• Max. 3 switching elements can be clipped on



Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Front bezel surface	Lens colour	Lens material	Housing colour	Housing material	IP front protection	Part No.	Wiring diagram
Momentary	Black	Plastic		Black	Plastic	Grey	Plastic	IP65	704.009.0	72
	Black	Plastic		Red	Plastic	Grey	Plastic	IP65	704.009.2	72
	Black	Plastic		Yellow	Plastic	Grey	Plastic	IP65	704.009.4	72
	Black	Plastic		Green	Plastic	Grey	Plastic	IP65	704.009.5	72
	Black	Plastic		Blue	Plastic	Grey	Plastic	IP65	704.009.6	72
	Grey	Plastic		Colour- less	Plastic	Grey	Plastic	IP65	704.009.7	72
	Grey	Plastic		Black	Plastic	Grey	Plastic	IP65	704.010.0	72
	Grey	Plastic		Red	Plastic	Grey	Plastic	IP65	704.010.2	72
	Grey	Plastic		Yellow	Plastic	Grey	Plastic	IP65	704.010.4	72
	Grey	Plastic		Green	Plastic	Grey	Plastic	IP65	704.010.5	72
	Grey	Plastic		Blue	Plastic	Grey	Plastic	IP65	704.010.6	72
	Grey	Plastic		Colour- less	Plastic	Grey	Plastic	IP65	704.010.7	72
	Nature	Aluminium	anodised	Black	Alumi- nium	Grey	Plastic	IP65	704.011.0	72

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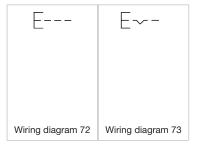
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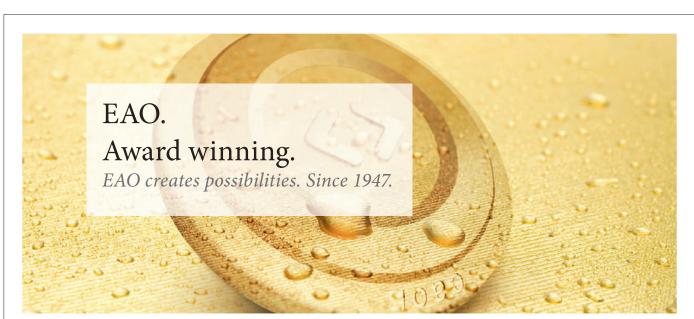
32

Switching action	Front bezel colour	Front bezel material	Front bezel surface	Lens colour	Lens material	Housing colour	Housing material	IP front protection	Part No.	Wiring diagrai
Momentary	Nature	Aluminium	anodised	Red	Alumi- nium	Grey	Plastic	IP65	704.011.2	72
	Nature	Aluminium	anodised	Gold	Alumi- nium	Grey	Plastic	IP65	704.011.4	72
	Nature	Aluminium	anodised	Olive green	Alumi- nium	Grey	Plastic	IP65	704.011.5	72
	Nature	Aluminium	anodised	Blue	Alumi- nium	Grey	Plastic	IP65	704.011.6	72
	Nature	Aluminium	anodised	Nature	Alumi- nium	Grey	Plastic	IP65	704.011.8	72
	Nature	Aluminium	anodised	Black	Plastic	Grey	Plastic	IP65	704.012.0	72
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	IP65	704.012.2	72
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	IP65	704.012.4	72
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	IP65	704.012.5	72
	Nature	Aluminium	anodised	Blue	Plastic	Grey	Plastic	IP65	704.012.6	72
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	IP65	704.012.7	72
Maintained	Black	Plastic		Black	Plastic	Grey	Plastic	IP65	704.039.0	73
	Black	Plastic		Red	Plastic	Grey	Plastic	IP65	704.039.2	73
	Black	Plastic		Yellow	Plastic	Grey	Plastic	IP65	704.039.4	73
	Black	Plastic		Green	Plastic	Grey	Plastic	IP65	704.039.5	73
	Black	Plastic		Blue	Plastic	Grey	Plastic	IP65	704.039.6	73
	Black	Plastic		Colour- less	Plastic	Grey	Plastic	IP65	704.039.7	73
	Grey	Plastic		Black	Plastic	Grey	Plastic	IP65	704.040.0	73
	Grey	Plastic		Red	Plastic	Grey	Plastic	IP65	704.040.2	73
	Grey	Plastic		Yellow	Plastic	Grey	Plastic	IP65	704.040.4	73
	Grey	Plastic		Green	Plastic	Grey	Plastic	IP65	704.040.5	73
	Grey	Plastic		Blue	Plastic	Grey	Plastic	IP65	704.040.6	73
	Grey	Plastic		Colour- less	Plastic	Grey	Plastic	IP65	704.040.7	73
	Nature	Aluminium	anodised	Black	Alumi- nium	Grey	Plastic	IP65	704.041.0	73
	Nature	Aluminium	anodised	Red	Alumi- nium	Grey	Plastic	IP65	704.041.2	73
	Nature	Aluminium	anodised	Olive green	Alumi- nium	Grey	Plastic	IP65	704.041.5	73
	Nature	Aluminium	anodised		Alumi- nium	Grey	Plastic	IP65	704.041.6	73
	Nature	Aluminium	anodised	Nature	Alumi- nium	Grey	Plastic	IP65	704.041.8	73
	Nature	Aluminium	anodised	Black	Plastic	Grey	Plastic	IP65	704.042.0	73
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	IP65	704.042.2	73
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	IP65	704.042.4	73
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	IP65	704.042.5	73
	Nature	Aluminium	anodised	Blue	Plastic	Grey	Plastic	IP65	704.042.6	73
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	IP65	704.042.7	73
Momentary	Nature	Aluminium	anodised	Black	Plastic	Grey	Plastic	IP67	704.013.0	72
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	IP67	704.013.2	72
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	IP67	704.013.4	72
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	IP67	704.013.5	72
	Nature	Aluminium	anodised	Blue	Plastic	Grey	Plastic	IP67	704.013.6	72
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	IP67	704.013.7	72
Maintained	Nature	Aluminium	anodised	Black	Plastic	Grey	Plastic	IP67	704.043.0	73
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	IP67	704.043.2	73
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	IP67	704.043.7	73

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Wiring diagrams





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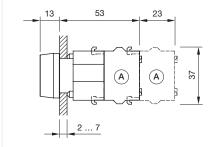
Pushbutton square, IP65



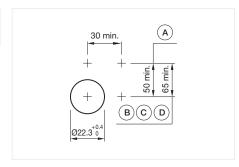
Product can differ from the current configuration.

General information

• Max. 3 switching elements can be clipped on



Dimensions [mm] A = Screw terminal



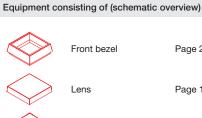
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm





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Actuator



Bayonet flange Page 203



Switching element Page 213

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.



Actuator, Front dimension 30 mm x 30 mm

Switching action	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Black	Plastic	704.731.0	72
	Grey	Plastic	704.731.1	72
Maintained	Black	Plastic	704.732.0	73
	Grey	Plastic	704.732.1	73

Wiring diagrams

E	E~-
Wiring diagram 72	Wiring diagram 73

Pushbutton round, IP65

Equipment consisting of (schematic overview)

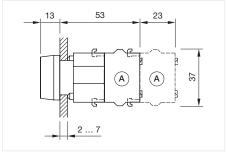




Each Part Number listed below includes all the black components shown in the 3D-drawing.

Switching element

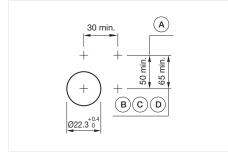
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

- Frontring with protective cover to be mounted with a torque of 0.4 Nm onto actuator
- Max. 3 switching elements can be clipped on

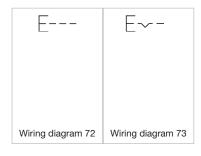


Actuator, Front dimension Ø 29 mm

Page 213

Switching action	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Grey	Plastic	704.631.1	72
Maintained	Grey	Plastic	704.632.1	73

Wiring diagrams



51

04

70

71

82

90

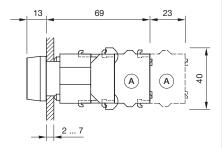
Illuminated pushbutton square, IP65



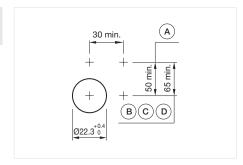
Product can differ from the current configuration.

General information

Max. 3 switching elements can be clipped on



Dimensions [mm] A = Screw terminal



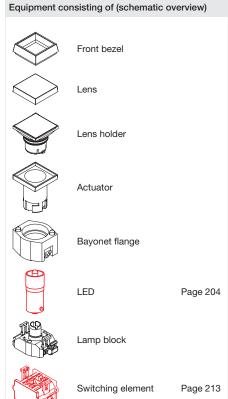
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



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

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

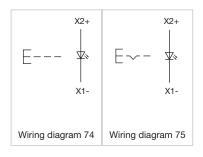


Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Black	Plastic	Red	Plastic	Black	Plastic	704.229.2	74
	Black	Plastic	Yellow	Plastic	Black	Plastic	704.229.4	74
	Black	Plastic	Green	Plastic	Black	Plastic	704.229.5	74
	Black	Plastic	Blue	Plastic	Black	Plastic	704.229.6	74
	Black	Plastic	Colourless	Plastic	Black	Plastic	704.229.7	74
	Grey	Plastic	Red	Plastic	Black	Plastic	704.230.2	74
	Grey	Plastic	Yellow	Plastic	Black	Plastic	704.230.4	74
	Grey	Plastic	Green	Plastic	Black	Plastic	704.230.5	74
	Grey	Plastic	Blue	Plastic	Black	Plastic	704.230.6	74
	Grey	Plastic	Colourless	Plastic	Black	Plastic	704.230.7	74
Maintained	Black	Plastic	Red	Plastic	Black	Plastic	704.259.2	75
	Black	Plastic	Yellow	Plastic	Black	Plastic	704.259.4	75
	Black	Plastic	Green	Plastic	Black	Plastic	704.259.5	75
	Black	Plastic	Blue	Plastic	Black	Plastic	704.259.6	75
	Black	Plastic	Colourless	Plastic	Black	Plastic	704.259.7	75
	Grey	Plastic	Red	Plastic	Black	Plastic	704.260.2	75
	Grey	Plastic	Yellow	Plastic	Black	Plastic	704.260.4	75
	Grey	Plastic	Green	Plastic	Black	Plastic	704.260.5	75
	Grey	Plastic	Blue	Plastic	Black	Plastic	704.260.6	75
	Grey	Plastic	Colourless	Plastic	Black	Plastic	704.260.7	75

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Wiring diagrams



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Illuminated pushbutton round

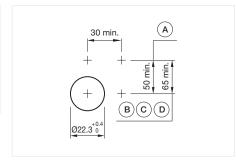


Product can differ from the current configuration.

Dimensions [mm] A = Screw terminal

General information Frontring with protective cover to be mounted

- with a torque of 0.4 Nm onto actuator
- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



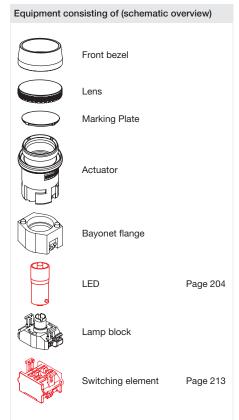
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



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

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



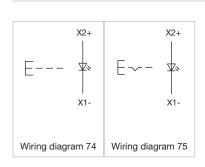
Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Front bezel surface	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Black	Plastic		Red	Plastic	Grey	Plastic	704.029.2	74
	Black	Plastic		Yellow	Plastic	Grey	Plastic	704.029.4	74
	Black	Plastic		Green	Plastic	Grey	Plastic	704.029.5	74
	Black	Plastic		Blue	Plastic	Grey	Plastic	704.029.6	74
	Black	Plastic		Colour- less	Plastic	Grey	Plastic	704.029.7	74
	Grey	Plastic		Red	Plastic	Grey	Plastic	704.030.2	74
	Grey	Plastic		Yellow	Plastic	Grey	Plastic	704.030.4	74
	Grey	Plastic		Green	Plastic	Grey	Plastic	704.030.5	74
	Grey	Plastic		Blue	Plastic	Grey	Plastic	704.030.6	74
	Grey	Plastic		Colour- less	Plastic	Grey	Plastic	704.030.7	74
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.032.2	74
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.032.4	74
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	704.032.5	74
	Nature	Aluminium	anodised	Blue	Plastic	Grey	Plastic	704.032.6	74
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	704.032.7	74
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.033.2	74

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Switching action	Front bezel colour	Front bezel material	Front bezel surface	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.033.4	74
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	704.033.5	74
	Nature	Aluminium	anodised	Blue	Plastic	Grey	Plastic	704.033.6	74
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	704.033.7	74
Maintained	Black	Plastic		Red	Plastic	Grey	Plastic	704.059.2	75
	Black	Plastic		Yellow	Plastic	Grey	Plastic	704.059.4	75
	Black	Plastic		Green	Plastic	Grey	Plastic	704.059.5	75
	Black	Plastic		Colour- less	Plastic	Grey	Plastic	704.059.7	75
	Grey	Plastic		Red	Plastic	Grey	Plastic	704.060.2	75
	Grey	Plastic		Yellow	Plastic	Grey	Plastic	704.060.4	75
	Grey	Plastic		Green	Plastic	Grey	Plastic	704.060.5	75
	Grey	Plastic		Blue	Plastic	Grey	Plastic	704.060.6	75
	Grey	Plastic		Colour- less	Plastic	Grey	Plastic	704.060.7	75
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.062.2	75
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.062.4	75
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	704.062.5	75
	Nature	Aluminium	anodised	Blue	Plastic	Grey	Plastic	704.062.6	75
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	704.062.7	75
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.063.2	75
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.063.4	75
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	704.063.5	75
	Nature	Aluminium	anodised	Blue	Plastic	Grey	Plastic	704.063.6	75
	Nature	Aluminium	anodised	Colour- less	Plastic	Grey	Plastic	704.063.7	75

Wiring diagrams



Illuminated pushbutton square, IP65



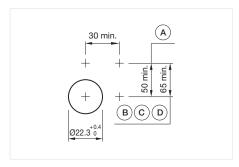
Product can differ from the current configuration.

13 69 23 A A A 9

Dimensions [mm] A = Screw terminal

General information

- Frontring with protective cover to be mounted with a torque of 0.4 Nm onto actuator
- Max. 3 switching elements can be clipped on



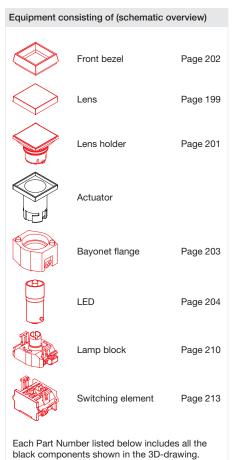
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



To obtain a complete unit, please select the red

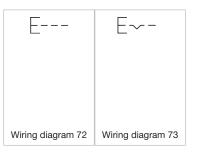
components from the pages shown.



Actuator, Front dimension 30 mm x 30 mm

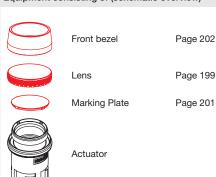
Switching action	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Black	Plastic	704.731.0	72
	Grey	Plastic	704.731.1	72
Maintained	Black	Plastic	704.732.0	73
	Grey	Plastic	704.732.1	73

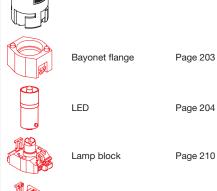
Wiring diagrams



Illuminated pushbutton round, IP65

Equipment consisting of (schematic overview)

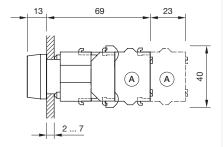




Each Part Number listed below includes all the black components shown in the 3D-drawing.

Switching element

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



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

- Frontring with protective cover to be mounted with a torque of 0.4 Nm onto actuator
- Max. 3 switching elements can be clipped on

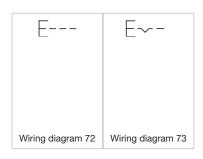


Actuator, Front dimension Ø 29 mm

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Switching action	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Grey	Plastic	704.631.1	72
Maintained	Grey	Plastic	704.632.1	73

Wiring diagrams



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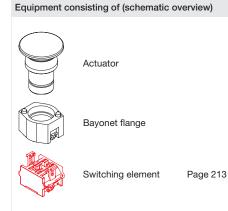
84

Mushroom-head pushbutton, IP65



Product can differ from the current configuration.

Dimensions [mm] A = Screw terminal

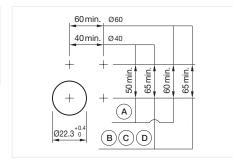


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



Actuator, Front dimension Ø 40 mm

Switching action	Front bezel colour	Front bezel material	Front bezel surface	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Grey	Plastic		Black	Plastic	Grey	Plastic	704.070.0	72
	Grey	Plastic		Red	Plastic	Grey	Plastic	704.070.2	72
	Grey	Plastic		Yellow	Plastic	Grey	Plastic	704.070.4	72
	Grey	Plastic		Green	Plastic	Grey	Plastic	704.070.5	72
	Nature	Aluminium	anodised	Black	Plastic	Grey	Plastic	704.071.0	72
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.071.2	72
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.071.4	72
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	704.071.5	72
	Nature	Aluminium	anodised	Red	Aluminium	Grey	Plastic	704.079.2	72
Maintained	Grey	Plastic		Black	Plastic	Grey	Plastic	704.072.0	73
	Grey	Plastic		Red	Plastic	Grey	Plastic	704.072.2	73
	Nature	Aluminium	anodised	Black	Plastic	Grey	Plastic	704.073.0	73
	Nature	Aluminium	anodised	Red	Plastic	Grey	Plastic	704.073.2	73
	Nature	Aluminium	anodised	Yellow	Plastic	Grey	Plastic	704.073.4	73
	Nature	Aluminium	anodised	Green	Plastic	Grey	Plastic	704.073.5	73
	Nature	Aluminium	anodised	Red	Aluminium	Grey	Plastic	704.075.21	73

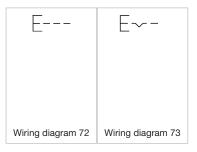
92

92

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Wiring diagrams





Modern. Tactile and long-lasting.

Series 04 illuminated selector switches.

Intuitive and reliable operation for enhanced safety in public transportation.

- Bright, single or bi-colour LED illumination
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- Rounded edges (in accordance with DIN 5566-1)
- Excellent tactile feedback
- · Long service life and robust construction
- · Wide range of possible combinations and options

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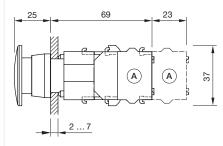
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Mushroom-head pushbutton illuminated, IP65



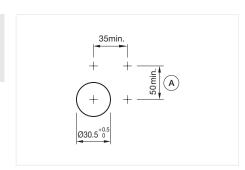
Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal

General information

- Max. 3 switching elements can be clipped on
- The lamp block will be delivered with screw terminal



Mounting cut-outs [mm] A = Screw terminal

Actuator Bayonet flange LED Page 204 Lamp block Switching element Page 213

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

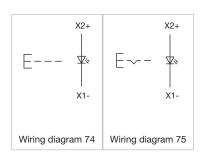
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension Ø 40 mm

Switching action	Front bezel colour	Front bezel material	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Momentary	Grey	Plastic	Red	Plastic	Grey	Plastic	704.084.2	74
	Grey	Plastic	Yellow	Plastic	Grey	Plastic	704.084.4	74
	Grey	Plastic	Green	Plastic	Grey	Plastic	704.084.5	74
	Grey	Plastic	Blue	Plastic	Grey	Plastic	704.084.6	74
	Grey	Plastic	Colourless	Plastic	Grey	Plastic	704.084.7	74
Maintained	Grey	Plastic	Red	Plastic	Grey	Plastic	704.086.2	75
	Grey	Plastic	Yellow	Plastic	Grey	Plastic	704.086.4	75
	Grey	Plastic	Green	Plastic	Grey	Plastic	704.086.5	75

Wiring diagrams



03

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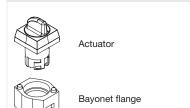
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84

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Selector switch illuminated, 2 positions, short lever, square, IP65

Equipment consisting of (schematic overview)





LED

Page 204



Lamp block

Page 210

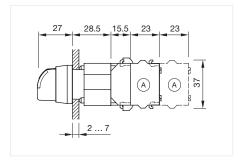


Switching element

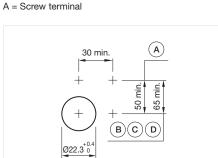
t Page 213

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]
A = Screw terminal



Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm



Product can differ from the current configuration.

General information

Max. 3 switching elements can be clipped on

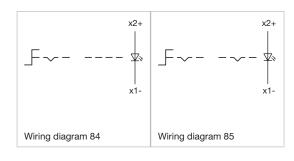




Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right	704.510.0i	85
Rest - Momentary	Grey	Plastic	42° right	704.512.0i	84

Wiring diagrams



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Selector switch illuminated, 2 positions, short lever, round, IP65



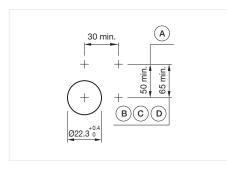
Product can differ from the current configuration.

27 28.5 15.5 23 23 A A A E

Dimensions [mm] A = Screw terminal

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



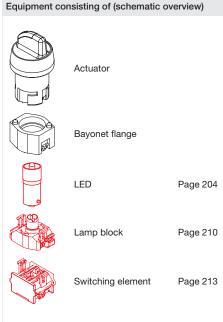
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



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

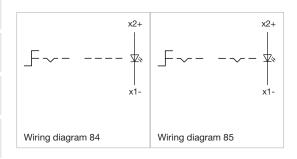
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right		704.410.0i	85
	Grey	Plastic	90° right (-45° +45°)		704.410.1i	85
	Nature	Aluminium	90° right	anodised	704.411.0i	85
Rest - Momentary	Grey	Plastic	42° right		704.412.0i	84
	Nature	Aluminium	42° right	anodised	704.413.0i	84

Wiring diagrams



03

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84

92

Selector switch 2 positions, short lever, square, IP65

Equipment consisting of (schematic overview)





Bayonet flange

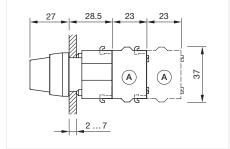


Switching element

Page 213

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.



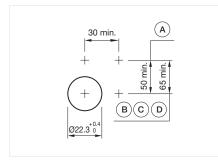
Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.

General information

• Max. 3 switching elements can be clipped on



Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

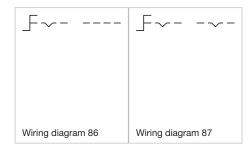




Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right	704.510.0	87
Rest - Momentary	Grey	Plastic	42° right	704.512.0	86

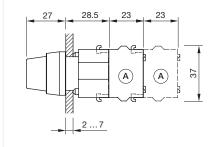
Wiring diagrams



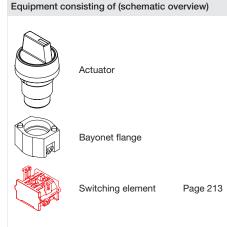
Selector switch 2 positions, short lever, round, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal

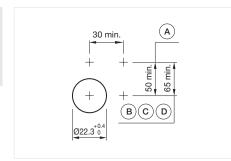


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm

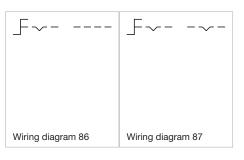




Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right		704.410.0	87
	Nature	Aluminium	90° right	anodised	704.411.0	87
Rest - Momentary	Grey	Plastic	42° right		704.412.0	86
	Nature	Aluminium	42° right	anodised	704.413.0	86

Wiring diagrams





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02

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Selector switch 2 positions, short lever, square, IP65

Equipment consisting of (schematic overview)





Bayonet flange

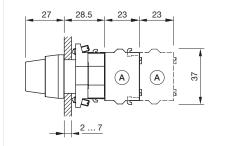


Switching element

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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] A = Screw terminal



Product can differ from the current configuration.

30 min. (B)(C)(D)Ø22.3^{+0.4}0

General information

Max. 3 switching elements can be clipped on

Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm x 0.8 mm





Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right	704.510.0.12	87

Wiring diagrams



04

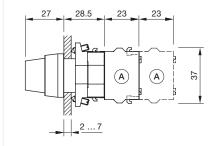
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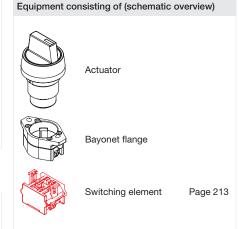
Selector switch 2 positions, short lever, round, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal

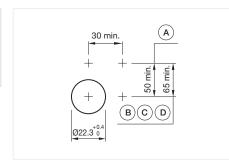


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm

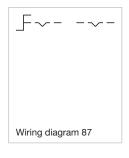




Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right		704.410.0.12	87
	Nature	Aluminium	90° right	anodised	704.411.0.12	87
	Nature	Aluminium	90° right	anodised	704.411.0B.12	87

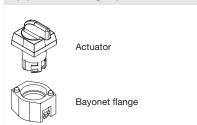
Wiring diagrams



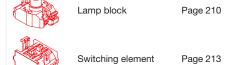


Selector switch illuminated, 2 positions, long lever, square, IP65

Equipment consisting of (schematic overview)

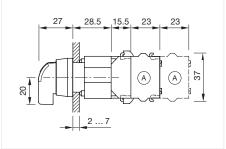






Each Part Number listed below includes all the black components shown in the 3D-drawing.

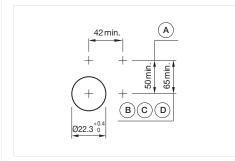
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

Max. 3 switching elements can be clipped on

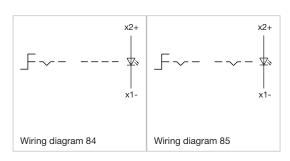




Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right	704.300.0i	85
Rest - Momentary	Grey	Plastic	42° right	704.302.0i	84

Wiring diagrams



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Selector switch illuminated, 2 positions, long lever, round, IP65

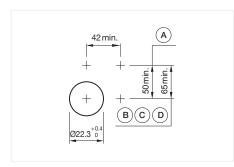


Product can differ from the current configuration.

Dimensions [mm] A = Screw terminal

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



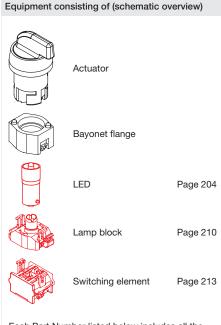
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



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

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

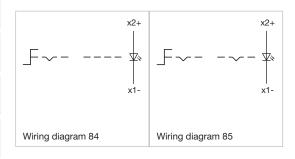




Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right		704.100.0i	85
	Nature	Aluminium	90° right	anodised	704.101.0i	85
Rest - Momentary	Grey	Plastic	42° right		704.102.0i	84
	Nature	Aluminium	42° right	anodised	704.103.0i	84

Wiring diagrams



Selector switch 2 positions, long lever, square, IP65

Equipment consisting of (schematic overview)



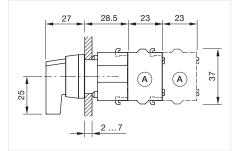


Switching element

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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.



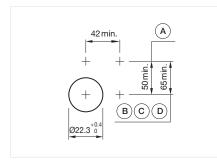
Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.

General information

Max. 3 switching elements can be clipped on



Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

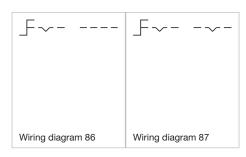




Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right	704.300.0	87
Rest - Momentary	Grey	Plastic	42° right	704.302.0	86

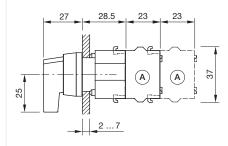
Wiring diagrams



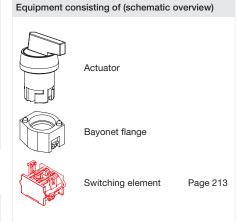
Selector switch 2 positions, long lever, round, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal

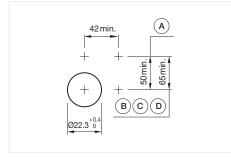


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm

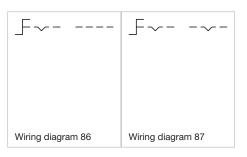




Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right		704.100.0	87
	Nature	Aluminium	90° right	anodised	704.101.0	87
Rest - Momentary	Grey	Plastic	42° right		704.102.0	86
	Nature	Aluminium	42° right	anodised	704.103.0	86

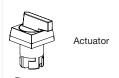
Wiring diagrams



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Selector switch 2 positions, long lever, square, IP65

Equipment consisting of (schematic overview)





Bayonet flange



Switching element

Dimensions [mm] A = Screw terminal

(A) (A) 25

Product can differ from the current configuration.

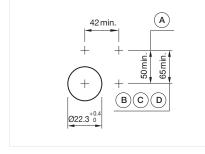
Page 213

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.

General information

Max. 3 switching elements can be clipped on



Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm





Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right	704.300.0.12	87

Wiring diagrams



Selector switch 2 positions, long lever, round, IP65



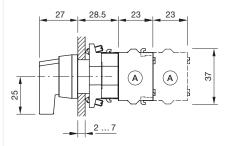
Product can differ from the current configuration.

Max. 3 switching elements can be clipped on

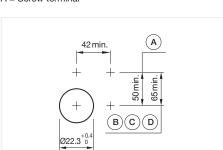
due to technical production reasons

• The colour of anodised aluminium parts can vary

General information



Dimensions [mm] A = Screw terminal

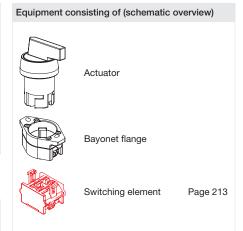


Mounting cut-outs [mm] A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



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

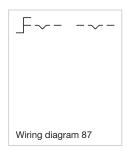
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Rest - Maintained	Grey	Plastic	90° right		704.100.0.12	87
	Nature	Aluminium	90° right	anodised	704.101.0.12	87

Wiring diagrams





Selector switch illuminated, 3 positions, short lever, square, IP65

Equipment consisting of (schematic overview)





Bayonet flange



LED

Page 204



Lamp block

Page 210

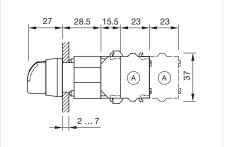


Switching element

Page 213

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] A = Screw terminal



Product can differ from the current configuration.

30 min. (B)(C)(D)

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

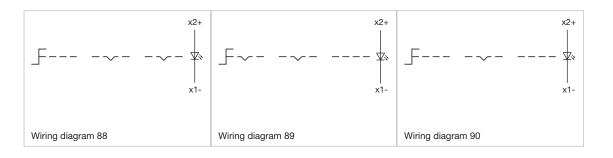
Max. 3 switching elements can be clipped on



Actuator, Front dimension 30 mm x 30 mm

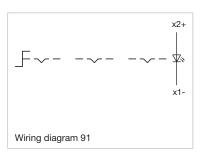
Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained - Rest - Maintained	Grey	Plastic	42° left / 42° right	704.502.0i	91
Momentary - Rest - Momentary	Grey	Plastic	42° left / 42° right	704.504.0i	90
Maintained - Rest - Momentary	Grey	Plastic	42° left / 42° right	704.506.0i	89
Momentary - Rest - Maintained	Grey	Plastic	42° left / 42° right	704.508.0i	88

Wiring diagrams



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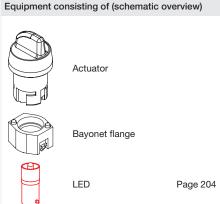




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Selector switch illuminated, 3 positions, short lever, round, IP65

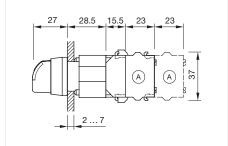


Switching element Page 213

Lamp block

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] A = Screw terminal



Product can differ from the current configuration.

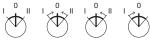
30 min. (B)(C)(D)

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



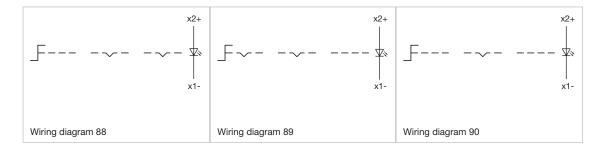


Actuator, Front dimension Ø 29 mm

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Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Maintained - Rest - Maintained	Grey	Plastic	42° left / 42° right		704.402.0i	91
	Nature	Aluminium	42° left / 42° right	anodised	704.403.0i	91
Momentary - Rest - Momentary	Grey	Plastic	42° left / 42° right		704.404.0i	90
	Nature	Aluminium	42° left / 42° right	anodised	704.405.0i	90
Maintained - Rest - Momentary	Grey	Plastic	42° left / 42° right		704.406.0i	89
	Nature	Aluminium	42° left / 42° right	anodised	704.407.0i	89
Momentary - Rest - Maintained	Grey	Plastic	42° left / 42° right		704.408.0i	88
	Nature	Aluminium	42° left / 42° right	anodised	704.409.0i	88

Wiring diagrams



04

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Modern. Tactile and long-lasting.

Series 04 illuminated selector switches.

Intuitive and reliable operation for enhanced safety in public transportation.

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Selector switch 3 positions, short lever, square, IP65

Equipment consisting of (schematic overview)





Bayonet flange

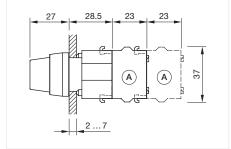


Switching element

Page 213

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

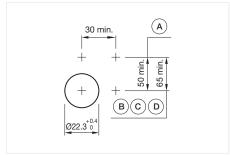
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



General information

• Max. 3 switching elements can be clipped on

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

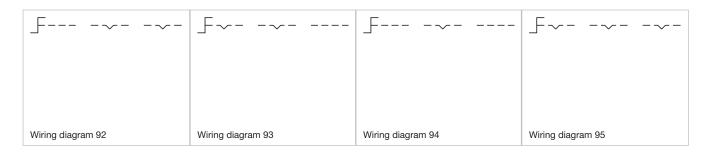




Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained - Rest - Maintained	Grey	Plastic	42° left / 42° right	704.502.0	95
Momentary - Rest - Momentary	Grey	Plastic	42° left / 42° right	704.504.0	94
Maintained - Rest - Momentary	Grey	Plastic	42° left / 42° right	704.506.0	93
Momentary - Rest - Maintained	Grey	Plastic	42° left / 42° right	704.508.0	92

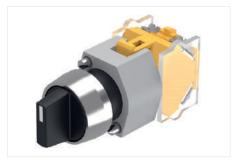
Wiring diagrams



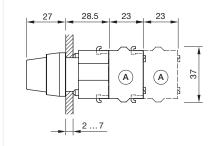
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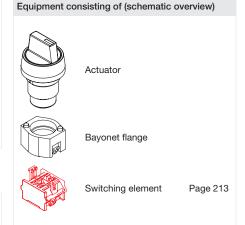
Selector switch 3 positions, short lever, round, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal

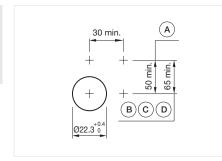


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm





Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Maintained - Rest - Maintained	Grey	Plastic	42° left / 42° right		704.402.0	95
	Nature	Aluminium	42° left / 42° right	anodised	704.403.0	95
Momentary - Rest - Momentary	Grey	Plastic	42° left / 42° right		704.404.0	94
	Nature	Aluminium	42° left / 42° right	anodised	704.405.0	94
Maintained - Rest - Momentary	Grey	Plastic	42° left / 42° right		704.406.0	93
	Nature	Aluminium	42° left / 42° right	anodised	704.407.0	93
Momentary - Rest - Maintained	Grey	Plastic	42° left / 42° right		704.408.0	92
	Nature	Aluminium	42° left / 42° right	anodised	704.409.0	92

Wiring diagrams

F~-	F~~-	F~-	F~~-
Wiring diagram 92	Wiring diagram 93	Wiring diagram 94	Wiring diagram 95



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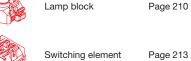
Selector switch illuminated, 3 positions, long lever, square, IP65

Equipment consisting of (schematic overview)



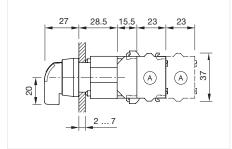






Each Part Number listed below includes all the black components shown in the 3D-drawing.

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



Dimensions [mm] A = Screw terminal



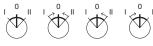
Product can differ from the current configuration.

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

Max. 3 switching elements can be clipped on

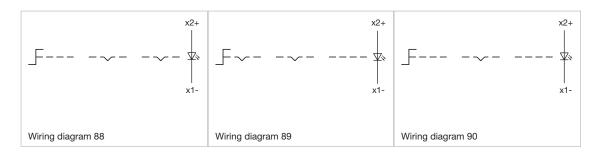




Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained - Rest - Maintained	Grey	Plastic	42° left / 42° right	704.292.0i	91
Momentary - Rest - Momentary	Grey	Plastic	42° left / 42° right	704.294.0i	90
Maintained - Rest - Momentary	Grey	Plastic	42° left / 42° right	704.296.0i	89
Momentary - Rest - Maintained	Grey	Plastic	42° left / 42° right	704.298.0i	88

Wiring diagrams



01

02

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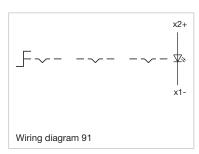
/ 1

92

96

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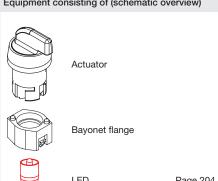
Wiring diagrams



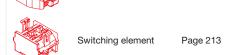
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Selector switch illuminated, 3 positions, long lever, round, IP65

Equipment consisting of (schematic overview)



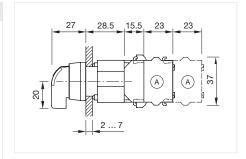
Page 204 LED



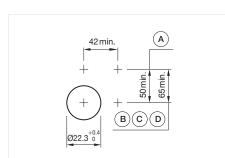
Lamp block

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] A = Screw terminal



Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm



Product can differ from the current configuration.

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



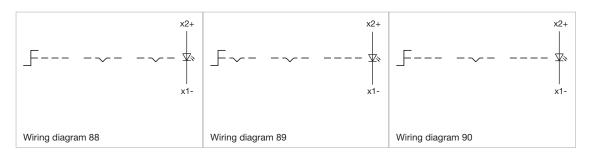


Actuator, Front dimension Ø 29 mm

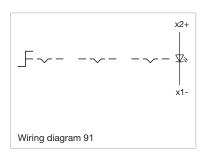
Page 210

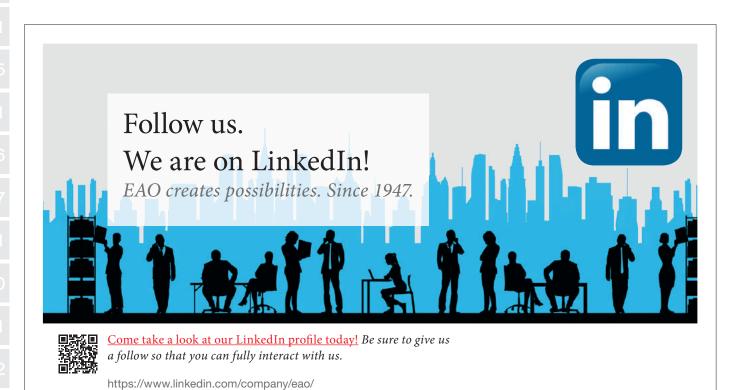
Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Maintained - Rest - Maintained	Grey	Plastic	42° left / 42° right		704.092.0i	91
	Nature	Aluminium	42° left / 42° right	anodised	704.093.0i	91
Momentary - Rest - Momentary	Grey	Plastic	42° left / 42° right		704.094.0i	90
	Nature	Aluminium	42° left / 42° right	anodised	704.095.0i	90
Maintained - Rest - Momentary	Grey	Plastic	42° left / 42° right		704.096.0i	89
	Nature	Aluminium	42° left / 42° right	anodised	704.097.0i	89
Momentary - Rest - Maintained	Grey	Plastic	42° left / 42° right		704.098.0i	88
	Nature	Aluminium	42° left / 42° right	anodised	704.099.0i	88

Wiring diagrams



Wiring diagrams





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Your Expert Partner for Human Machine Interfaces

Selector switch 3 positions, long lever, square, IP65

Equipment consisting of (schematic overview)





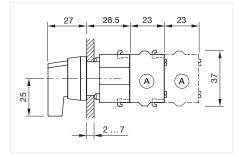
Bayonet flange



Switching element Page 213

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] A = Screw terminal



Product can differ from the current configuration.

Mounting cut-outs [mm]
A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm

General information

• Max. 3 switching elements can be clipped on

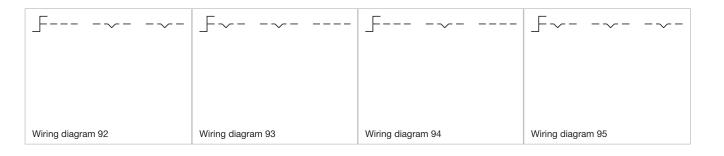




Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained - Rest - Maintained	Grey	Plastic	42° left / 42° right	704.292.0	95
Momentary - Rest - Momentary	Grey	Plastic	42° left / 42° right	704.294.0	94
Maintained - Rest - Momentary	Grey	Plastic	42° left / 42° right	704.296.0	93
Momentary - Rest - Maintained	Grey	Plastic	42° left / 42° right	704.298.0	92

Wiring diagrams



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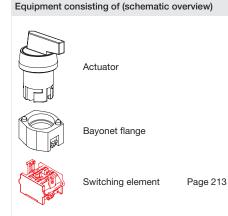
96

Selector switch 3 positions, long lever, round, IP65



Product can differ from the current configuration.

Dimensions [mm] A = Screw terminal

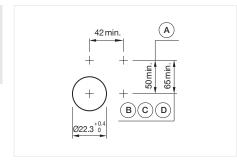


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

General information

- Max. 3 switching elements can be clipped on
- The colour of anodised aluminium parts can vary due to technical production reasons



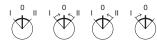
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm x 0.8 mm





Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Front bezel surface	Part No.	Wiring diagram
Maintained - Rest - Maintained	Grey	Plastic	42° left / 42° right		704.092.0	95
	Nature	Aluminium	42° left / 42° right	anodised	704.093.0	95
Momentary - Rest - Momentary	Grey	Plastic	42° left / 42° right		704.094.0	94
	Nature	Aluminium	42° left / 42° right	anodised	704.095.0	94
Maintained - Rest - Momentary	Grey	Plastic	42° left / 42° right		704.096.0	93
	Nature	Aluminium	42° left / 42° right	anodised	704.097.0	93
Momentary - Rest - Maintained	Grey	Plastic	42° left / 42° right		704.098.0	92
	Nature	Aluminium	42° left / 42° right	anodised	704.099.0	92

Wiring diagrams

F~-	F~~-	F~-	F
Wiring diagram 92	Wiring diagram 93	Wiring diagram 94	Wiring diagram 95

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Selector rotary switch, short lever, rounded, square, IP65

Equipment consisting of (schematic overview)





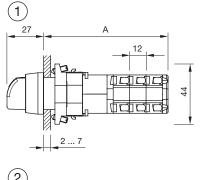
Bayonet flange

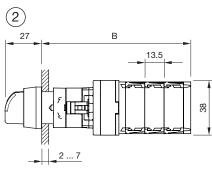


Switching element Page 227

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.





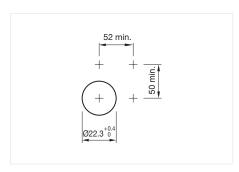
Product can differ from the current configuration.

Dimensions [mm]

1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm

2 = Santon switching element

B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]



Actuator, Front dimension 30 mm x 30 mm

Front bezel colour	Front bezel material	Switching positions	Part No.
Grey	Plastic	Rest = 9 o'clock	704.510.1KNI

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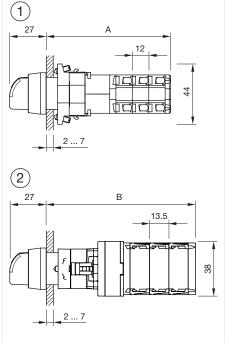
Selector rotary switch, short lever rounded, round, IP65

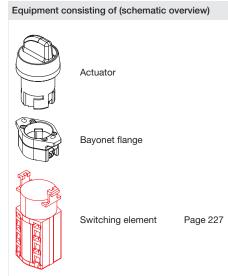


Product can differ from the current configuration.

General information

The colour of anodised aluminium parts can vary due to technical production reasons



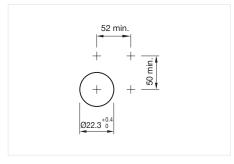


Each Part Number listed below includes all the black components shown in the 3D-drawing.

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

Dimensions [mm]

- 1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm
- 2 = Santon switching element
- B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]



Actuator, Front dimension Ø 29 mm

Front bezel colour	Front bezel material	Switching positions	Front bezel surface	Part No.
Nature	Aluminium	Rest = 9 o'clock	anodised	704.411.1KNI

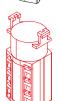
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Selector rotary switch, short lever, square, IP65

Equipment consisting of (schematic overview)



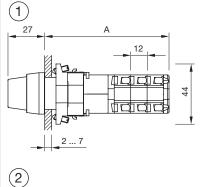
Bayonet flange

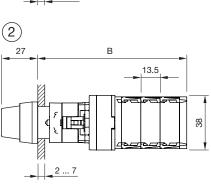


Switching element Page 227

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.





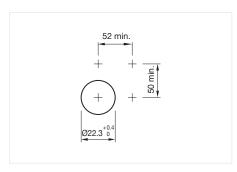
Product can differ from the current configuration.

Dimensions [mm]

1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm

2 = Santon switching element

B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]



Actuator, Front dimension 30 mm x 30 mm

Front bezel colour	Front bezel material	Switching positions	Part No.
Grey	Plastic	Rest = 9 o'clock	704.510.1KN

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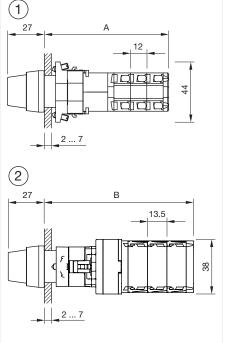
Selector rotary switch, short lever, round, IP65

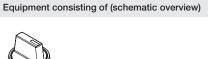


Product can differ from the current configuration.

General information

The colour of anodised aluminium parts can vary due to technical production reasons











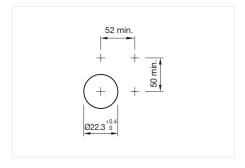
Page 227 Switching element

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]

- 1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm
- 2 = Santon switching element
- B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]

Actuator, Front dimension Ø 29 mm

Front bezel colour	Front bezel material	Switching positions	Front bezel surface	Part No.
Nature	Aluminium	Rest = 9 o'clock	anodised	704.411.1KN

Selector rotary switch, long lever rounded, square, IP65

Equipment consisting of (schematic overview)





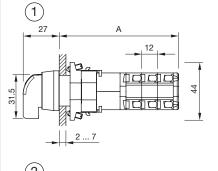
Bayonet flange

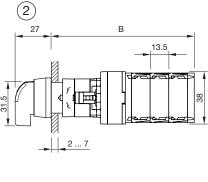


Switching element Page 227

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.





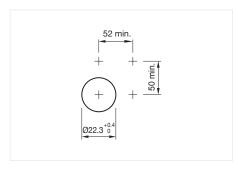
Product can differ from the current configuration.

Dimensions [mm]

1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm

2 = Santon switching element

B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]



Actuator, Front dimension 30 mm x 30 mm

Grev Plastic Rest = 9 o'clock 704,300,1KNI	Fre	ont bezel colour	Front bezel material	Switching positions	Part No.
	Gr	rey	Plastic	Rest = 9 o'clock	704.300.1KNI

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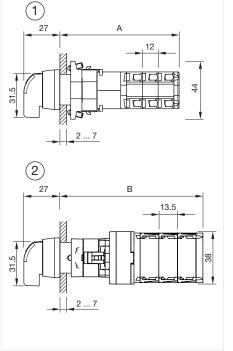
Selector rotary switch, long lever rounded, round, IP65



Product can differ from the current configuration.

General information

The colour of anodised aluminium parts can vary due to technical production reasons



Equipment consisting of (schematic overview)





Bayonet flange



Page 227 Switching element

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

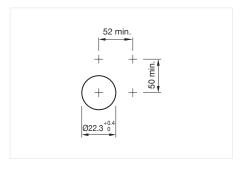
To obtain a complete unit, please select the red components from the pages shown.

Dimensions [mm]

1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm

2 = Santon switching element

B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]

Actuator, Front dimension Ø 29 mm

Front bezel colour	Front bezel material	Switching positions	Front bezel surface	Part No.
Nature	Aluminium	Rest = 9 o'clock	anodised	704.101.1KNI

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Selector rotary switch, long lever, square, IP65

Equipment consisting of (schematic overview)



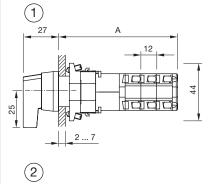


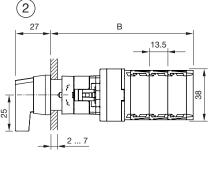


Page 227

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.





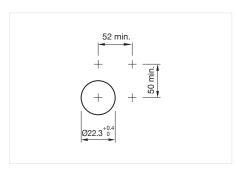
Product can differ from the current configuration.

Dimensions [mm]

1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm

2 = Santon switching element

B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]



Actuator, Front dimension 30 mm x 30 mm

Front bezel colour	Front bezel material	Switching positions	Part No.
Grey	Plastic	Rest = 9 o'clock	704.300.1KN

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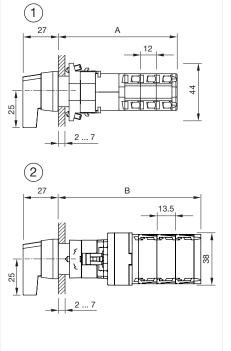
Selector rotary switch, long lever, round, IP65

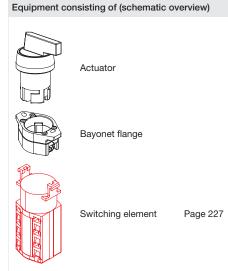


Product can differ from the current configuration.

General information

The colour of anodised aluminium parts can vary due to technical production reasons





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

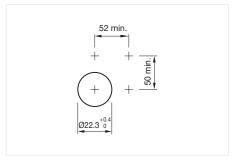
To obtain a complete unit, please select the red components from the pages shown.

Dimensions [mm]

1 = Kraus & Naimer switching element A = (Number of stages x 12) + 66.5 mm

2 = Santon switching element

B = (Number of stages x 13,5) + 65.5 mm



Mounting cut-outs [mm]

Actuator, Front dimension Ø 29 mm

Front bezel colour	Front bezel material	Switching positions	Front bezel surface	Part No.
Nature	Aluminium	Rest = 12 o'clock	anodised	704.101.0KN
	Aluminium	Rest = 9 o'clock	anodised	704.101.1KN

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Keylock switch 2 positions, square, IP65

Equipment consisting of (schematic overview)





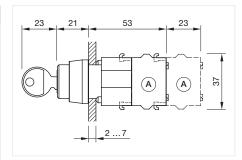
Bayonet flange



Switching element Page 213

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] A = Screw terminal



Product can differ from the current configuration.

30 min. (B)(C)(D)

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

- Max. 3 switching elements can be clipped on
- The standard lock Ronis 251

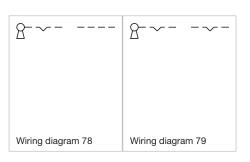


Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained (a)	Grey	Plastic	90° right	704.340.0	79
Rest (a) - Maintained	Grey	Plastic	90° right	704.341.0	79
Rest (a) - Maintained (a)	Grey	Plastic	90° right	704.342.0	79
Rest (a) - Momentary	Grey	Plastic	42° right	704.343.0	78

a = Key remove

Wiring diagrams



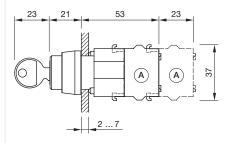
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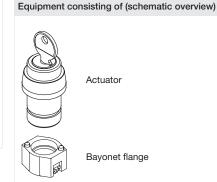
Keylock switch 2 positions, round, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal





Switching element

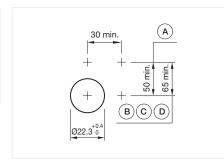
Page 213

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.

General information

- Max. 3 switching elements can be clipped on
- The standard lock Ronis 251
- The colour of anodised aluminium parts can vary due to technical production reasons



Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



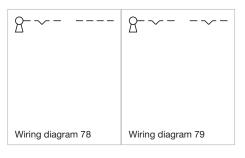


Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Rest - Maintained (a)	Nature	Aluminium	90° right	704.120.0	79
Rest (a) - Maintained	Nature	Aluminium	90° right	704.121.0	79
Rest (a) - Maintained (a)	Nature	Aluminium	90° right	704.122.0	79
Rest (a) - Momentary	Nature	Aluminium	42° right	704.123.0	78

a = Key remove

Wiring diagrams



Keylock switch 3 positions, square, IP65

Equipment consisting of (schematic overview)



Actuator



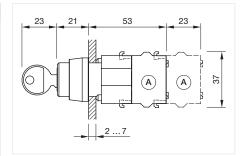
Bayonet flange



Switching element Page 213

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] A = Screw terminal



Product can differ from the current configuration.

(B)(C)(D)

Mounting cut-outs [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

General information

- Max. 3 switching elements can be clipped on
- The standard lock Ronis 251

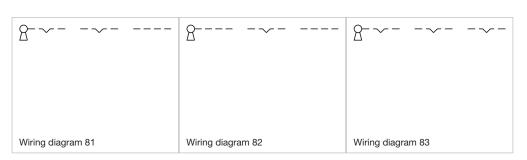


Actuator, Front dimension 30 mm x 30 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained (a) - Rest (a) - Maintained (a)	Grey	Plastic	90° left / 90° right	704.333.0	83
Maintained - Rest (a) - Maintained	Grey	Plastic	42° left / 42° right	704.334.0	83
Momentary - Rest (a) - Momentary	Grey	Plastic	42° left / 42° right	704.335.0	82
Maintained (a) - Rest - Momentary	Grey	Plastic	42° left / 42° right	704.337.0	81
Maintained (a) - Rest (a) - Momentary	Grey	Plastic	42° left / 42° right	704.344.0	81

a = Key remove

Wiring diagrams



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Keylock switch 3 positions, round, IP65

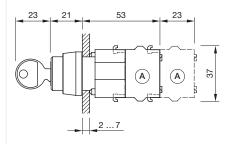


Product can differ from the current configuration.

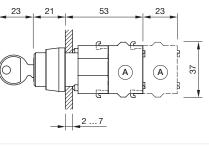
Max. 3 switching elements can be clipped on

General information

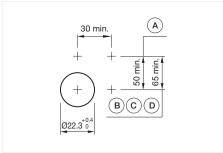
• The standard lock Ronis 251



Dimensions [mm]



A = Screw terminal



components from the pages shown.

The colour of anodised aluminium parts can vary due to technical production reasons

Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



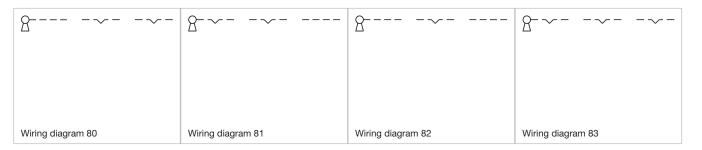


Actuator, Front dimension Ø 29 mm

Switching action	Front bezel colour	Front bezel material	Switching angle	Part No.	Wiring diagram
Maintained (a) - Rest (a) - Maintained (a)	Nature	Aluminium	90° left / 90° right	704.113.0	83
Maintained - Rest (a) - Maintained	Nature	Aluminium	42° left / 42° right	704.114.0	83
Momentary - Rest (a) - Momentary	Nature	Aluminium	42° left / 42° right	704.115.0	82
Maintained (a) - Rest - Maintained (a)	Nature	Aluminium	42° left / 42° right	704.116.0	83
Maintained (a) - Rest - Momentary	Nature	Aluminium	42° left / 42° right	704.117.0	81
Momentary - Rest (a) - Maintained	Nature	Aluminium	42° left / 42° right	704.118.0	80
Maintained (a) - Rest (a) - Momentary	Nature	Aluminium	42° left / 42° right	704.124.0	81

a = Key remove

Wiring diagrams



Actuator Bayonet flange Switching element Page 213

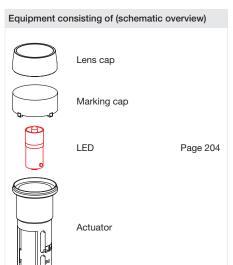
Equipment consisting of (schematic overview)

black components shown in the 3D-drawing. To obtain a complete unit, please select the red

Each Part Number listed below includes all the

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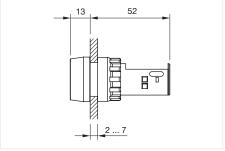
Indicator full-face illumination compact, round, IP65



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

Fixing nut

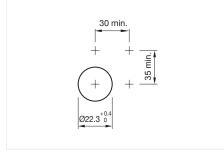
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]



Product can differ from the current configuration.



Mounting cut-outs [mm]



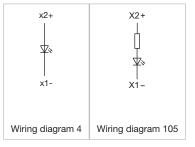
Actuator, Front dimension Ø 29 mm

Product attributes	Housing colour	Housing material	Lens cap colour	Marking cap colour	Part No.	Wiring diagram
Filament lamp max. 2.6 W or LED	Grey	Plastic	Red	White	704.020.2	4
	Grey	Plastic	Yellow	White	704.020.4	4
	Grey	Plastic	Green	White	704.020.5	4
	Grey	Plastic	Blue	White	704.020.6	4
	Grey	Plastic	Colourless	White	704.020.7	4
	Grey	Plastic	Red	Colourless	704.021.2	4
	Grey	Plastic	Yellow	Colourless	704.021.4	4
	Grey	Plastic	Green	Colourless	704.021.5	4
	Grey	Plastic	Blue	Colourless	704.021.6	4
	Grey	Plastic	Colourless	Colourless	704.021.7	4
Filament lamp 130 V, max. 2.6 W with integrated	Grey	Plastic	Red	White	704.022.2	105
series resistor 230/130 V	Grey	Plastic	Yellow	White	704.022.4	105
	Grey	Plastic	Green	White	704.022.5	105
	Grey	Plastic	Blue	White	704.022.6	105
	Grey	Plastic	Colourless	White	704.022.7	105

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Wiring diagrams





On our website you can download technical data, assembly instructions, catalogs, brochures and much more.



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Indicator full-face illumination compact, round, IP65

Equipment consisting of (schematic overview)

Lens cap Page 200

Marking cap Page 201

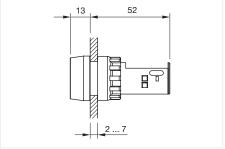
LED Page 204

Actuator

Fixing nut

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

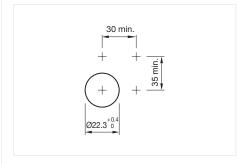
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]



Product can differ from the current configuration.



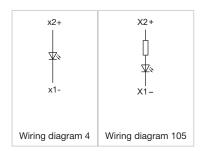
Mounting cut-outs [mm]



Actuator, Front dimension Ø 29 mm

Product attributes	Housing colour	Housing material	Part No.	Wiring diagram
Without built-in series resistor	Grey	Plastic	704.642.0	4
With series resistor for 220/240 V and filament lamp 130 V, 20 mA	Grey	Plastic	704.642.1	105
With series resistor for 110/125 V and filament lamp 60 V, 33 mA	Grey	Plastic	704.642.2	105

Wiring diagrams



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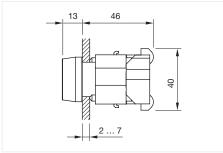
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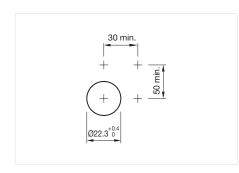
Indicator full-face illumination, square, IP65



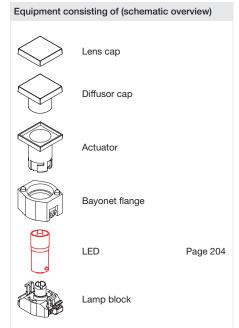
Product can differ from the current configuration.



Dimensions [mm]



Mounting cut-outs [mm]



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

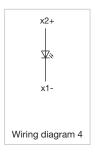
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension 30 mm x 30 mm

Housing colour	Housing material	Front bezel colour	Lens cap colour	Marking cap colour	Diffusor cap colour	Part No.	Wiring diagram
Grey	Plastic	Black	Red	White	White	704.199.2	4
	Plastic	Black	Yellow	White	White	704.199.4	4
	Plastic	Black	Green	White	White	704.199.5	4
	Plastic	Black	Colourless	White	White	704.199.7	4
	Plastic	Grey	Red	White	White	704.200.2	4
	Plastic	Grey	Yellow	White	White	704.200.4	4
	Plastic	Grey	Green	White	White	704.200.5	4
	Plastic	Grey	Blue	White	White	704.200.6	4
	Plastic	Grey	Colourless	White	White	704.200.7	4

Wiring diagrams



Indicator full-face illumination, round, IP65

Equipment consisting of (schematic overview)

Lens cap

Marking cap

Actuator



Bayonet flange



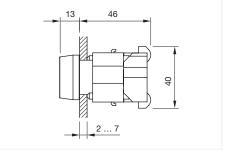
LED Page 204



Lamp block

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

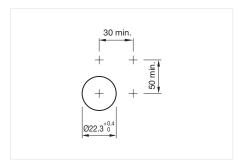
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]



Product can differ from the current configuration.



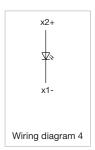
Mounting cut-outs [mm]



Actuator, Front dimension Ø 29 mm

Housing colour	Housing material	Lens cap colour	Marking cap colour	Diffusor cap colour	Part No.	Wiring diagram
Grey	Plastic	Red	White	White	704.000.2	4
	Plastic	Yellow	White	White	704.000.4	4
	Plastic	Green	White	White	704.000.5	4
	Plastic	Blue	White	White	704.000.6	4
	Plastic	Colourless	White	White	704.000.7	4
	Plastic	Red	Colourless	White	704.001.2	4
	Plastic	Yellow	Colourless	White	704.001.4	4
	Plastic	Green	Colourless	White	704.001.5	4
	Plastic	Blue	Colourless	White	704.001.6	4
	Plastic	Colourless	Colourless	White	704.001.7	4

Wiring diagrams



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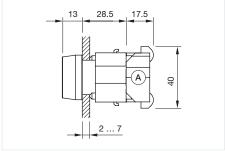
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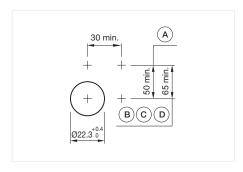
Indicator full-face illumination, square, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal



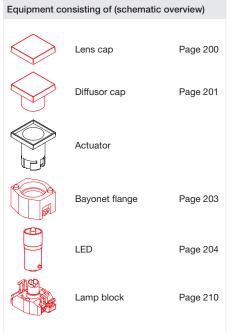
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm x 0.8 mm



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

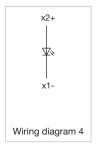
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension 30 mm x 30 mm

Housing colour	Housing material	Part No.	Wiring diagram
Black	Plastic	704.730.0	4
Grey	Plastic	704.730.1	4

Wiring diagrams

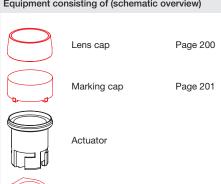


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Indicator full-face illumination, round, IP65

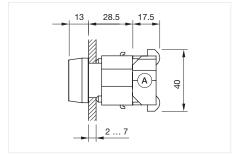
Equipment consisting of (schematic overview)





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

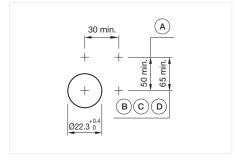
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



Mounting cut-outs [mm]

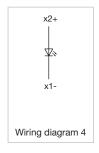
- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm



Actuator, Front dimension Ø 29 mm

Housing colour	Housing material	Part No.	Wiring diagram
Grey	Plastic	704.630.1	4

Wiring diagrams



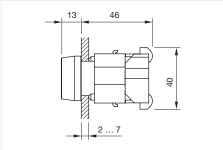
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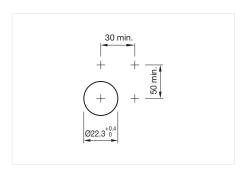
Indicator front illumination, square, IP65



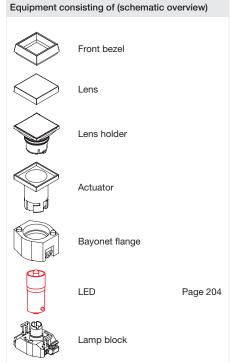
Product can differ from the current configuration.



Dimensions [mm]



Mounting cut-outs [mm]



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

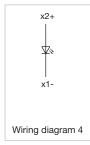
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension 30 mm x 30 mm

Housing colour	Housing material	Front bezel colour	Lens colour	Marking plate colour	Marking plate optics	Part No.	Wiring diagram
Black	Plastic	Grey	Red	White	translucent	704.202.2	4
	Plastic	Grey	Yellow	White	translucent	704.202.4	4
	Plastic	Grey	Green	White	translucent	704.202.5	4
	Plastic	Grey	Blue	White	translucent	704.202.6	4
	Plastic	Grey	Colourless	White	translucent	704.202.7	4
	Plastic	Grey	Red	Colourless	transparent	704.203.2	4
	Plastic	Grey	Yellow	Colourless	transparent	704.203.4	4
	Plastic	Grey	Green	Colourless	transparent	704.203.5	4
	Plastic	Grey	Blue	Colourless	transparent	704.203.6	4
	Plastic	Grey	Colourless	Colourless	transparent	704.203.7	4
	Plastic	Black	Red	White	translucent	704.206.2	4
	Plastic	Black	Yellow	White	translucent	704.206.4	4
	Plastic	Black	Green	White	translucent	704.206.5	4
	Plastic	Black	Blue	White	translucent	704.206.6	4
	Plastic	Black	Colourless	White	translucent	704.206.7	4
	Plastic	Black	Green	Colourless	transparent	704.207.5	4
	Plastic	Black	Blue	Colourless	transparent	704.207.6	4

Wiring diagrams





Modern. Tactile and long-lasting.

Series 04 illuminated selector switches.

Intuitive and reliable operation for enhanced safety in public transportation.

- Bright, single or bi-colour LED illumination
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- Long service life and robust construction
- · Wide range of possible combinations and options

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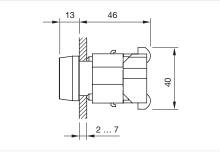
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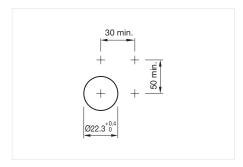
Indicator front illumination, round, IP65



Product can differ from the current configuration.



Dimensions [mm]



Mounting cut-outs [mm]

Equipment consisting of (schematic overview) Front bezel Lens Marking Plate Actuator Bayonet flange LED Page 204

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.



Actuator, Front dimension Ø 29 mm

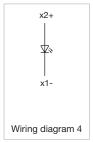
Product attributes	Housing colour	Housing ma- terial	Front bezel colour	Lens colour	Marking plate colour	Marking plate optics	Part No.	Wiring diagram
Filament lamp or	Grey	Plastic	Grey	Red	White	translucent	704.002.2	4
LED	Grey	Plastic	Grey	Yellow	White	translucent	704.002.4	4
	Grey	Plastic	Grey	Green	White	translucent	704.002.5	4
	Grey	Plastic	Grey	Blue	White	translucent	704.002.6	4
	Grey	Plastic	Grey	Colourless	White	translucent	704.002.7	4
	Grey	Plastic	Grey	Red	Colourless	transparent	704.003.2	4
	Grey	Plastic	Grey	Yellow	Colourless	transparent	704.003.4	4
	Grey	Plastic	Grey	Green	Colourless	transparent	704.003.5	4
	Grey	Plastic	Grey	Blue	Colourless	transparent	704.003.6	4
	Grey	Plastic	Grey	Colourless	Colourless	transparent	704.003.7	4
Filament lamp or	Grey	Plastic	Black	Red	White	translucent	704.006.2	4
LED	Grey	Plastic	Black	Yellow	White	translucent	704.006.4	4
	Grey	Plastic	Black	Green	White	translucent	704.006.5	4
	Grey	Plastic	Black	Blue	White	translucent	704.006.6	4
	Grey	Plastic	Black	Colourless	White	translucent	704.006.7	4

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Wiring diagrams





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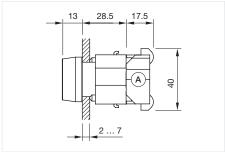
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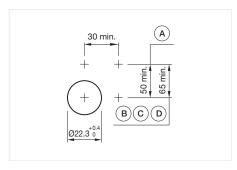
Indicator front illumination, square, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal



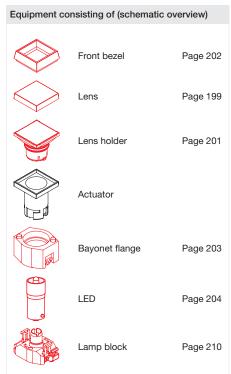
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



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

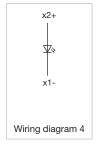
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension 30 mm x 30 mm

Housing colour	Housing material	Part No.	Wiring diagram
Black	Plastic	704.733.0	4
Grey	Plastic	704.733.1	4

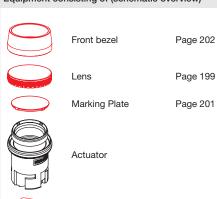
Wiring diagrams



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Indicator front illumination, round, IP65

Equipment consisting of (schematic overview)



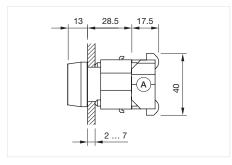
Bayonet flange Page 203

LED Page 204

Lamp block Page 210

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

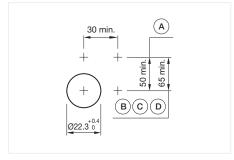
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



Mounting cut-outs [mm]

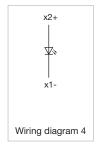
- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm



Actuator, Front dimension Ø 29 mm

Housing colour	Housing material	Part No.	Wiring diagram
Grey	Plastic	704.633.1	4

Wiring diagrams



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Flasher full-face illumination, square, IP65

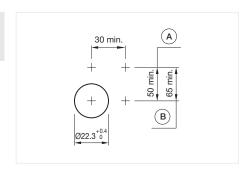


Product can differ from the current configuration.

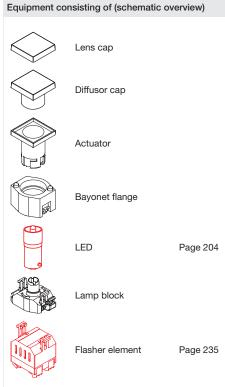
13 43.5 28 A Q

Dimensions [mm] A = Screw terminal





Mounting cut-outs [mm]
A = Screw terminal
B = Push-in terminal (PIT)



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

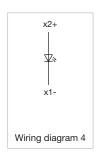
To obtain a complete unit, please select the red components from the pages shown.

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Actuator, Front dimension 30 mm x 30 mm

Housing colour	Housing ma- terial	Front bezel colour	Front bezel material	Diffusor cap colour	Lens cap colour	Marking cap colour	Part No.	Wiring diagram
Grey	Plastic	Black	Plastic	White	Red	White	704.199.2	4
	Plastic	Black	Plastic	White	Yellow	White	704.199.4	4
	Plastic	Black	Plastic	White	Green	White	704.199.5	4
	Plastic	Black	Plastic	White	Colourless	White	704.199.7	4
	Plastic	Grey	Plastic	White	Red	White	704.200.2	4
	Plastic	Grey	Plastic	White	Yellow	White	704.200.4	4
_	Plastic	Grey	Plastic	White	Green	White	704.200.5	4
	Plastic	Grey	Plastic	White	Blue	White	704.200.6	4
	Plastic	Grey	Plastic	White	Colourless	White	704.200.7	4

Wiring diagrams



Flasher full-face illumination, round, IP65

Equipment consisting of (schematic overview)

Lens cap



Marking cap



Actuator



Bayonet flange



LED

Page 204



Lamp block

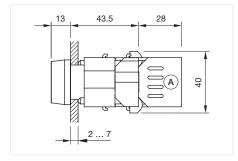


Flasher element

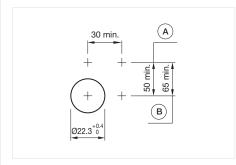
Page 235

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] A = Screw terminal



Mounting cut-outs [mm] A = Screw terminal B = Push-in terminal (PIT)



Product can differ from the current configuration.

General information

The lamp block will be delivered with screw terminal



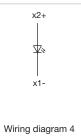
Actuator, Front dimension Ø 29 mm

Housing colour	Housing ma- terial	Diffusor cap colour	Diffusor cap surface	Lens cap colour	Marking cap colour	Marking cap surface	Part No.	Wiring diagram
Grey Plastic Plastic	Plastic	White		Red	White		704.000.2	4
	Plastic	White		Yellow	White		704.000.4	4
	Plastic	White		Green	White		704.000.5	4
	Plastic	White		Blue	White		704.000.6	4
	Plastic	White		Colourless	White		704.000.7	4
	Plastic	White		Red	Colourless	ribbed	704.001.2	4
	Plastic	White	ribbed	Yellow	Colourless	ribbed	704.001.4	4
	Plastic	White	ribbed	Green	Colourless	ribbed	704.001.5	4
	Plastic	White	ribbed	Blue	Colourless	ribbed	704.001.6	4
	Plastic	White	ribbed	Colourless	Colourless	ribbed	704.001.7	4

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Wiring diagrams



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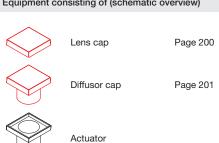
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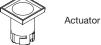
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Flasher full-face illumination, square, IP65

Equipment consisting of (schematic overview)

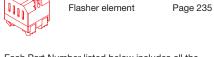




Bayonet flange Page 203



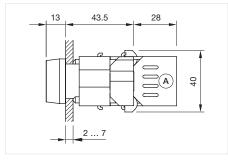




Flasher element

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

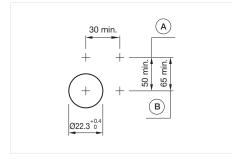
components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



Mounting cut-outs [mm] A = Screw terminal B = Push-in terminal (PIT)

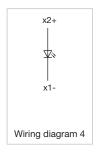
To obtain a complete unit, please select the red



Actuator, Front dimension 30 mm x 30 mm

Housing colour	Housing material	Part No.	Wiring diagram
Black	Plastic	704.730.0	4
Grey	Plastic	704.730.1	4

Wiring diagrams



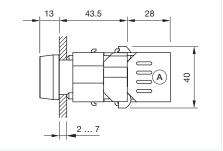
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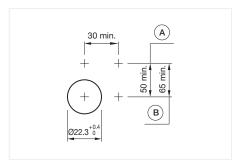
Flasher full-face illumination, round, IP65



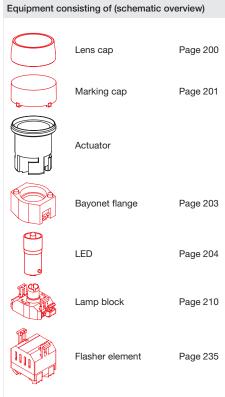
Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal



Mounting cut-outs [mm]
A = Screw terminal
B = Push-in terminal (PIT)



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

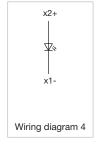
To obtain a complete unit, please select the red components from the pages shown.



Actuator, Front dimension Ø 29 mm

Housing colour	Housing material	Part No.	Wiring diagram
Grey	Plastic	704.630.1	4

Wiring diagrams



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Flasher front illumination, square, IP65

Equipment consisting of (schematic overview)

Front bezel



Lens



Lens holder



Actuator



Bayonet flange



LED

Page 204



Lamp block

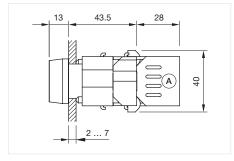


Flasher element

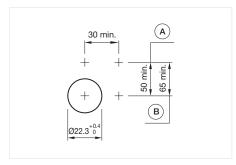
Page 235

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] A = Screw terminal



Mounting cut-outs [mm] A = Screw terminal B = Push-in terminal (PIT)



Product can differ from the current configuration.

General information

The lamp block will be delivered with screw terminal



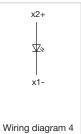
Actuator, Front dimension 30 mm x 30 mm

Housing colour	Housing ma- terial	Lens colour	Front bezel colour	Front bezel material	Marking plate colour	Marking plate optics	Part No.	Wiring diagram
Black Plastic Plastic	Plastic	Red	Grey	Plastic	White	translucent	704.202.2	4
	Plastic	Yellow	Grey	Plastic	White	translucent	704.202.4	4
	Plastic	Green	Grey	Plastic	White	translucent	704.202.5	4
	Plastic	Blue	Grey	Plastic	White	translucent	704.202.6	4
	Plastic	Colourless	Grey	Plastic	White	translucent	704.202.7	4
	Plastic	Red	Grey	Plastic	Colourless	transparent	704.203.2	4
	Plastic	Yellow	Grey	Plastic	Colourless	transparent	704.203.4	4
	Plastic	Green	Grey	Plastic	Colourless	transparent	704.203.5	4
	Plastic Blue Plastic Colourless Plastic Red	Blue	Grey	Plastic	Colourless	transparent	704.203.6	4
		Colourless	Grey	Plastic	Colourless	transparent	704.203.7	4
		Red	Black	Plastic	White	translucent	704.206.2	4
	Plastic	Yellow	Black	Plastic	White	translucent	704.206.4	4
	Plastic	Green	Black	Plastic	White	translucent	704.206.5	4
	Plastic	Blue	Black	Plastic	White	translucent	704.206.6	4
	Plastic	Colourless	Black	Plastic	White	translucent	704.206.7	4
	Plastic	Green	Black	Plastic	Colourless	transparent	704.207.5	4
	Plastic	Blue	Black	Plastic	Colourless	transparent	704.207.6	4

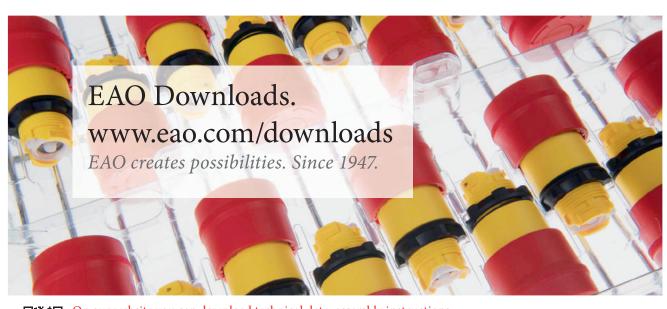
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Wiring diagrams



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Flasher front illumination, round, IP65

Equipment consisting of (schematic overview)

F

Front bezel



Lens



Marking Plate



Actuator



Bayonet flange



LED



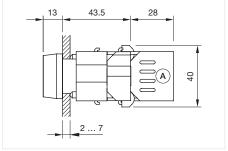
Lamp block



Flasher element Page 235

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] A = Screw terminal



Product can differ from the current configuration.

Mounting cut-outs [mm]
A = Screw terminal
B = Push-in terminal (PIT)

General information

The lamp block will be delivered with screw terminal

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Actuator, Front dimension Ø 29 mm

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Housing colour	Housing ma- terial	Lens colour	Front bezel colour	Front bezel material	Marking plate colour	Marking plate optics	Part No.	Wiring diagram
-	Plastic	Red	Grey	Plastic	White	translucent	704.002.2	4
	Plastic	Yellow	Grey	Plastic	White	translucent	704.002.4	4
	Plastic	Green	Grey	Plastic	White	translucent	704.002.5	4
	Plastic	Blue	Grey	Plastic	White	translucent	704.002.6	4
	Plastic	Colourless	Grey	Plastic	White	translucent	704.002.7	4
	Plastic	Red	Grey	Plastic	Colourless	transparent	704.003.2	4
	Plastic	Yellow	Grey	Plastic	Colourless	transparent	704.003.4	4
	Plastic	Green	Grey	Plastic	Colourless	transparent	704.003.5	4
	Plastic	Blue	Grey	Plastic	Colourless	transparent	704.003.6	4
	Plastic	Colourless	Grey	Plastic	Colourless	transparent	704.003.7	4
	Plastic	Red	Black	Plastic	White	translucent	704.006.2	4
	Plastic	Yellow	Black	Plastic	White	translucent	704.006.4	4
	Plastic	Green	Black	Plastic	White	translucent	704.006.5	4
	Plastic	Blue	Black	Plastic	White	translucent	704.006.6	4
	Plastic	Colourless	Black	Plastic	White	translucent	704.006.7	4

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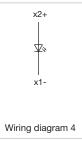
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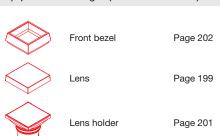
Wiring diagrams



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Flasher front illumination, square, IP65

Equipment consisting of (schematic overview)





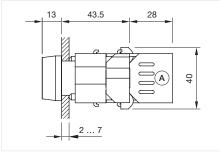






Each Part Number listed below includes all the black components shown in the 3D-drawing.

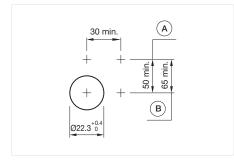
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



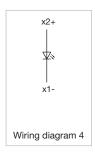
Mounting cut-outs [mm]
A = Screw terminal
B = Push-in terminal (PIT)



Actuator, Front dimension 30 mm x 30 mm

Housing colour	Housing material	Part No.	Wiring diagram
Black	Plastic	704.733.0	4
Grey	Plastic	704.733.1	4

Wiring diagrams



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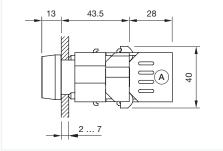
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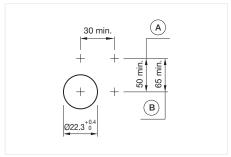
Flasher front illumination, round, IP65



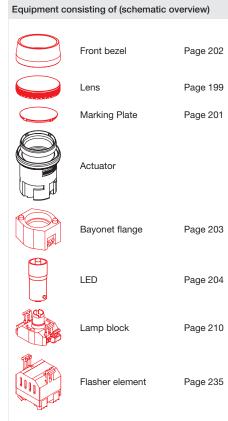
Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal



Mounting cut-outs [mm]
A = Screw terminal
B = Push-in terminal (PIT)



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.

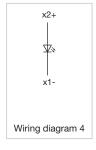
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Actuator, Front dimension Ø 29 mm

Housing colour	Housing material	Part No.	Wiring diagram
Grey	Plastic	704.633.1	4

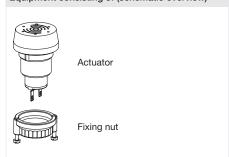
Wiring diagrams



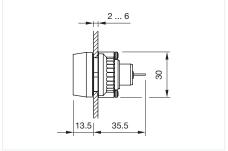
92

Buzzer, IP65

Equipment consisting of (schematic overview)



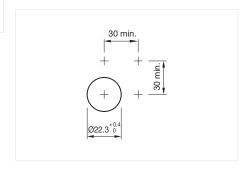
Each Part Number listed below includes all the black components shown in the 3D-drawing.



Dimensions [mm]



Product can differ from the current configuration.



Mounting cut-outs [mm]

General information

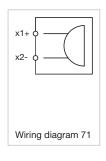
- Further information see Technical data
- The colour of anodised aluminium parts can vary due to technical production reasons



Actuator, Front dimension Ø 29 mm

Terminal	Operating voltage	Front cap colour	Front cap material	Front cap surface	Part No.	Wiring diagram
Plug-in terminal	24 V DC	Black	Plastic		14-810.002	71
	24 V DC	Nature	Aluminium	anodised	14-810.902	71

Wiring diagrams



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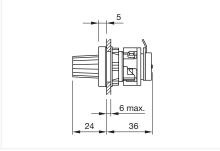
82

Potentiometer, IP65

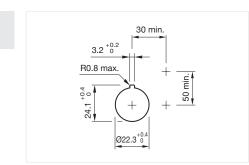


Product can differ from the current configuration.

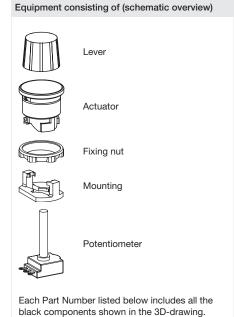
• Resistor 10 kOhm / linear, series E3



Dimensions [mm]



Mounting cut-outs [mm]

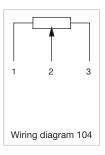


General information

Actuator, Front dimension Ø 28 mm

Housing material	Front bezel colour	Front bezel material	Front bezel surface	Resistance	Part No.	Wiring diagram
Plastic		Metal	matt chrome	10 kOhm	44-745.20-10K1	104
	Matt grey	Plastic		10 kOhm	44-745.60-10K1	104

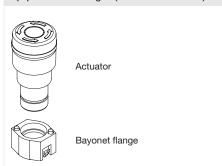
Wiring diagrams



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Stop switch Ø 37 mm, IP65

Equipment consisting of (schematic overview)

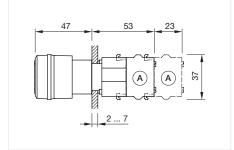


Switching element Page 213

black components shown in the 3D-drawing.

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

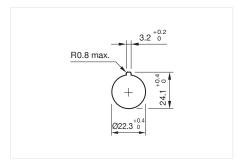
Each Part Number listed below includes all the



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



Mounting cut-outs [mm]

General information

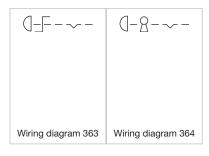
Max. 2 switching elements can be clipped on



Actuator, Front dimension Ø 37 mm

Switching action	Housing colour	Housing material	Lens colour	Marking	Product attributes	Part No.	Wiring diagram
Maintained	Yellow	Plastic	Red	Arrows	Twist to unlock clockwise	704.064.2	363
	Yellow	Plastic	Red	Arrows	Key to unlock clockwise	704.066.2	364

Wiring diagrams



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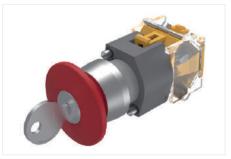
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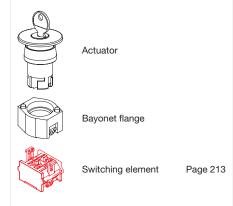
Stop switch Ø 40 mm, IP65



Product can differ from the current configuration.

23 25 53 23 A A A E

Dimensions [mm] A = Screw terminal



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.

General information

- The standard lock Ronis 251
- The colour of anodised aluminium parts can vary due to technical production reasons

Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

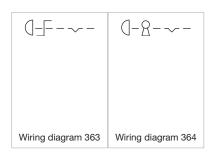
D = Double plug-in terminal 6.3 mm \times 0.8 mm



Actuator, Front dimension Ø 40 mm

Switching action	Housing colour	Housing material	Lens colour	Marking	Product attributes	Front bezel colour	Front bezel material	Front bezel surface	Part No.	Wiring diagram
Maintained	Grey	Plastic	Red	Arrows	Twist to unlock clockwise	Grey	Plastic		704.074.2	363
	Grey	Plastic	Red	Stop	Twist to unlock clockwise	Grey	Plastic		704.074.3	363
	Grey	Plastic	Red	Arrows	Twist to unlock clockwise	Nature	Aluminium	anodised	704.075.2	363
	Grey	Plastic	Red	Stop	Twist to unlock clockwise	Nature	Aluminium	anodised	704.075.3	363
	Grey	Plastic	Red		Key to unlock clockwise	Grey	Plastic		704.076.0	364
	Grey	Plastic	Red		Key to unlock clockwise	Nature	Aluminium	anodised	704.078.0	364

Wiring diagrams



Emergency stop switch, foolproof EN IEC 60974-5-5, IP65

Equipment consisting of (schematic overview)

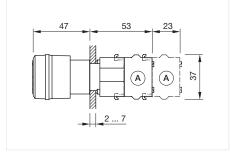


Switching element

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

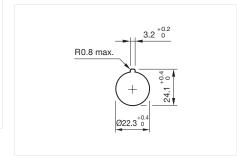
To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm] A = Screw terminal



Product can differ from the current configuration.



Mounting cut-outs [mm]

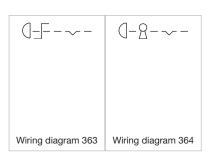
General information

- Max. 2 switching elements can be clipped on
- Shaft yellow

Actuator, Front dimension Ø 37 mm

Switching action	Housing colour	Housing material	Lens colour	Marking	Product attributes	Part No.	Wiring diagram
Maintained	Yellow	Plastic	Red	Arrows	Twist to unlock clockwise	704.064.2A	363
	Yellow	Plastic	Red	Arrows	Twist to unlock clockwise	704.066.2A	364

Wiring diagrams



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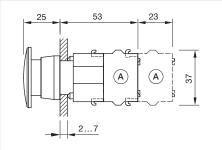
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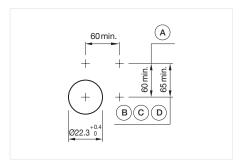
Emergency call switch, IP65



Product can differ from the current configuration.



Dimensions [mm] A = Screw terminal



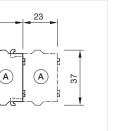
Mounting cut-outs [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm



Equipment consisting of (schematic overview)



Mushroom-head cap



Actuator



Bayonet flange



Switching element

Page 213

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.



Actuator, Front dimension Ø 60 mm

Switching action	Lens colour	Lens material	Housing colour	Housing material	Part No.	Wiring diagram
Maintained	Red	Plastic	Grey	Plastic	704.077.2D	364

Wiring diagrams



Wiring diagram 364



Lens plastic raised

Lens material	Lens colour	Lens optics	Lens shape	Lens illumination	Dimensions	Part No.
Plastic	Red	transparent	flush	illuminative	Ø 23,7 mm	704.611.2
	Yellow	transparent	flush	illuminative	Ø 23,7 mm	704.611.4
	Green	transparent	flush	illuminative	Ø 23,7 mm	704.611.5
	Blue	transparent	flush	illuminative	Ø 23,7 mm	704.611.6
	Colourless	transparent	flush	illuminative	Ø 23,7 mm	704.611.7

Additional information

• To obtain IP67, use marking plate Part Nr. 704.610.X



Lens plastic square

Lens material	Lens colour	Lens optics	Lens shape	Lens illumination	Dimensions	Part No.
Plastic	Black	opaque	flush	non illuminative	24,4 mm x 24,4 mm	704.702.0
	White	opaque	flush	non illuminative	24,4 mm x 24,4 mm	704.702.9
	Red	transparent	flush	illuminative	24,4 mm x 24,4 mm	704.702.2
	Yellow	transparent	flush	illuminative	24,4 mm x 24,4 mm	704.702.4
	Green	transparent	flush	illuminative	24,4 mm x 24,4 mm	704.702.5
	Blue	transparent	flush	illuminative	24,4 mm x 24,4 mm	704.702.6
	Colourless	transparent	flush	illuminative	24,4 mm x 24,4 mm	704.702.7



Lens metal round spot round

Lens material	Lens colour	Lens optics	Lens shape	Lens illumination	Dimensions	Part No.
Aluminium	Black	opaque	flush	illuminative	Ø 23,7 mm	704.601.01
	Red	opaque	flush	illuminative	Ø 23,7 mm	704.601.21
	Gold	opaque	flush	illuminative	Ø 23,7 mm	704.601.41
	Olive green	opaque	flush	illuminative	Ø 23,7 mm	704.601.51
	Blue	opaque	flush	illuminative	Ø 23,7 mm	704.601.61
	Nature	opaque	flush	illuminative	Ø 23,7 mm	704.601.81
Stainless steel	Nature	opaque	flush	illuminative	Ø 23,7 mm	704.601.91
	Nature	opaque	flush	illuminative	Ø 23,7 mm	704.601.101

Additional information

- The colour of anodised aluminium parts can vary due to technical production reasons
- To obtain IP65, it is necessary to use marking plate Part No.. 704.609.X

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Lens metal round

Lens material	Lens colour	Lens optics	Lens shape	Lens illumination	Dimensions	Part No.
Aluminium	Black	opaque	flush	non illuminative	Ø 23,7 mm	704.601.0
	Red	opaque	flush	non illuminative	Ø 23,7 mm	704.601.2
	Gold	opaque	flush	non illuminative	Ø 23,7 mm	704.601.4
	Olive green	opaque	flush	non illuminative	Ø 23,7 mm	704.601.5
	Blue	opaque	flush	non illuminative	Ø 23,7 mm	704.601.6
	Nature	opaque	flush	non illuminative	Ø 23,7 mm	704.601.8
Stainless steel	Nature	opaque	flush	non illuminative	Ø 23,7 mm	704.601.9
	Nature	opaque	flush	non illuminative	Ø 23,7 mm	704.601.10

Additional information

- The colour of anodised aluminium parts can vary due to technical production reasons
- To obtain IP65, it is necessary to use marking plate Part No.. 704.609.X



Lens plastic round

Lens material	Lens colour	Lens optics	Lens shape	Lens illumination	Symbol	Dimensions	Part No.
Plastic	Black	opaque	flush	non illuminative		Ø 23.7 mm	704.602.0
	Red	transparent	flush	illuminative		Ø 23,7 mm	704.602.2
	Yellow	transparent	flush	illuminative		Ø 23,7 mm	704.602.4
	Green	transparent	flush	illuminative		Ø 23,7 mm	704.602.5
	Blue	transparent	flush	illuminative		Ø 23,7 mm	704.602.6
	Colourless	transparent	flush	illuminative		Ø 23,7 mm	704.602.7
	Silver	transparent	flush	illuminative	Ring	Ø 23,7 mm	704.602.7A01

Additional information

- To obtain IP67, use marking plate Part No. 704.609.9
- To obtain IP67 use marking plate Part No. 704.609.9A01 (ring illumination)



Lens cap round for full face indicator

Lens cap material	Lens cap colour	Lens cap optical effect	Diameter	Part No.
Plastic	Red	transparent	29 mm	704.603.2
	Yellow	transparent	29 mm	704.603.4
	Green	transparent	29 mm	704.603.5
	Blue	transparent	29 mm	704.603.6
	Colourless	transparent	29 mm	704.603.7

Additional information

• To obtain IP67, use marking plate Part Nr. 704.608.X

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Lens holder

Marking plate material	Marking plate colour	Marking plate illumination	Part No.
Plastic	Colourless	illuminative	704.709.7
	White	illuminative	704.709.9

Additional information

• For square lens



Marking cap for lens cap round

Marking cap material	Marking cap colour	Marking cap optics	Dimensions	Marking cap surface	Part No.
Plastic	Colourless	transparent	Ø 29 mm	ribbed	704.608.7
	White	translucent	Ø 29 mm		704.608.9



Marking cap round raised profile

Marking cap material	Marking cap colour	Marking cap optics	Dimensions	Marking cap surface	Part No.
Plastic	Colourless	transparent	Ø 29 mm	ribbed	704.610.7
	White	translucent	Ø 29 mm		704.610.9



Marking cap round flat

Marking plate material	Marking plate colour	Marking plate optics	Marking plate illumination	Part No.
Plastic	Black	opaque	non illuminative	704.609.0
	Colourless	transparent	illuminative	704.609.7
	White	translucent	illuminative	704.609.9
	White	translucent	ring illumination	704.609.9A01



Diffusor cap

Product attributes	Diffusor cap colour	Diffusor cap optics	Diffusor cap illumination	Part No.
	Colourless	transparent	illuminative	704.708.7
Can be marked	White	translucent	illuminative	704.708.9

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Front bezel round, raised design

Front bezel material	Front bezel colour	Front bezel surface	Dimensions	Part No.
Plastic	Black		Ø 29 mm	704.600.0
	Grey		Ø 29 mm	704.600.6
	Grey		Ø 29 mm x 16 mm	704.600.7
Aluminium	Nature	anodised	Ø 29 mm	704.600.1
	Black	anodised	Ø 29 mm	704.600.1A
Stainless steel	Nature		Ø 29 mm	704.600.9

Additional information

• The colour of anodised aluminium parts can vary due to technical production reasons



Front bezel square, raised design

Front bezel material	Front bezel colour	Front bezel surface	Dimensions	Part No.
Plastic	Black		30 mm x 30 mm	704.701.0
	Chrome coloured	chrome plated	30 mm x 30 mm	704.701.4
	Grey		30 mm x 30 mm	704.701.6



Front bezel set flush design

Front bezel material	Front bezel colour	Front bezel surface	Dimensions	Part No.
Aluminium	Black	anodised	Ø 35 mm	704.955.0
	Nature	anodised	Ø 35 mm	704.955.1
Stainless steel 304	Nature		Ø 35 mm	704.955.9
Stainless steel 316	Nature		Ø 35 mm	704.955.10

Additional information

• The colour of anodised aluminium parts can vary due to technical production reasons



Front bezel set protective membrane

Product attributes	Front bezel material	Front bezel colour	Front bezel surface	Dimensions	Part No.
With transparent silicone membrane	Aluminium	Nature	anodised	Ø 35 mm	704.955.3
	Aluminium	Black	anodised	Ø 35 mm	704.955.4
With transparent silicone membrane, resistant to sea water	Stainless steel	Nature		Ø 35 mm	704.955.9E

Additional information

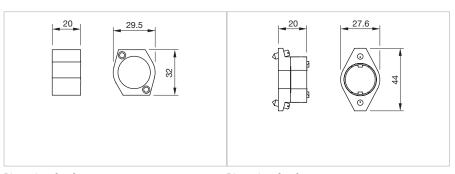
• The colour of anodised aluminium parts can vary due to technical production reasons

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Bayonet flange

Material	Part No.
plastic	704.950.5
metal	704.960.5



Dimensions [mm] for Part No. 704.950.5 Dimensions [mm] for Part No. 704.960.5





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We act responsibly. In our environmental focus, we set benchmarks for ourselves, our products and our customers. Throughout our entire value chain, we think and work in a way that is resource-efficient and environmentally-friendly. When selecting our components and raw materials, we ensure that we have partnerships in place with certified manufacturers and that we adhere to EC guidelines on hazardous materials (RoHS).

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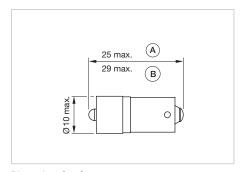


Single-LED, BA9s

Illumination colour	Operating voltage	Operation current	Lumi. Intensity	Dom. Wavelength	Part No.	Wiring diagram
Red	6 V AC/DC +10%	17 mA ±15 %	400 mcd	630 nm	10-2506.1082	70
	12 V AC/DC +10%	16 mA ±15 %	390 mcd	630 nm	10-2509.1142	70
	24 V AC/DC +10%	15 mA ±15 %	350 mcd	630 nm	10-2512.1142	70
	28 V AC/DC +10%	13 mA ±15 %	300 mcd	630 nm	10-2513.1142	70
	48 V AC/DC +10%	8 mA ±15 %	200 mcd	630 nm	10-2519.1052	70
	130 V AC/DC +10%	3 mA ±15 %	120 mcd	630 nm	10-2524.3042	70
	130 V AC/DC +10%	5 mA ±15 %	180 mcd	630 nm	10-2H24.2052	70
	230 V AC/DC +10%	3 mA ±15 %	120 mcd	630 nm	10-2H25.2042	70
Yellow	6 V AC/DC +10%	17 mA ±15 %	340 mcd	587 nm	10-2506.1084	70
	12 V AC/DC +10%	16 mA ±15 %	340 mcd	587 nm	10-2509.1144	70
	24 V AC/DC +10%	15 mA ±15 %	300 mcd	587 nm	10-2512.1144	70
	28 V AC/DC +10%	13 mA ±15 %	270 mcd	587 nm	10-2513.1144	70
	48 V AC/DC +10%	8 mA ±15 %	180 mcd	587 nm	10-2519.1054	70
	130 V AC/DC +10%	3 mA ±15 %	110 mcd	587 nm	10-2524.3044	70
	130 V AC/DC +10%	5 mA ±15 %	160 mcd	587 nm	10-2H24.2054	70
	230 V AC/DC +10%	3 mA ±15 %	110 mcd	587 nm	10-2H25.2044	70
Green	6 V AC/DC +10%	7 mA ±15 %	1050 mcd	525 nm	10-2506.1085	70
	12 V AC/DC +10%	7 mA ±15 %	1050 mcd	525 nm	10-2509.1145	70
	24 V AC/DC +10%	7 mA ±15 %	1050 mcd	525 nm	10-2512.1145	70
	28 V AC/DC +10%	7 mA ±15 %	1050 mcd	525 nm	10-2513.1145	70
	48 V AC/DC +10%	4 mA ±15 %	600 mcd	525 nm	10-2519.1055	70
	130 V AC/DC +10%	2 mA ±15 %	300 mcd	525 nm	10-2524.3045	70
	130 V AC/DC +10%	3 mA ±15 %	450 mcd	525 nm	10-2H24.2055	70
	230 V AC/DC +10%	2 mA ±15 %	300 mcd	525 nm	10-2H25.2045	70
Blue	6 V AC/DC +10%	17 mA ±15 %	780 mcd	470 nm	10-2506.1086	70
	12 V AC/DC +10%	16 mA ±15 %	720 mcd	470 nm	10-2509.1146	70
	24 V AC/DC +10%	15 mA ±15 %	680 mcd	470 nm	10-2512.1146	70
	28 V AC/DC +10%	13 mA ±15 %	590 mcd	470 nm	10-2513.1146	70
	48 V AC/DC +10%	8 mA ±15 %	400 mcd	470 nm	10-2519.1056	70
	130 V AC/DC +10%	3 mA ±15 %	200 mcd	470 nm	10-2524.3046	70
	130 V AC/DC +10%	5 mA ±15 %	230 mcd	470 nm	10-2H24.2056	70
	230 V AC/DC +10%	3 mA ±15 %	200 mcd	470 nm	10-2H25.2046	70
White	6 V AC/DC +10%	5 mA ±15 %	750 mcd	x: 0.31 / y: 0.32 nm	10-2506.1089	70
	12 V AC/DC +10%	8 mA ±15 %	1200 mcd	x: 0.31 / y: 0.32 nm	10-2509.1149	70
	24 V AC/DC +10%	7 mA ±15 %	1050 mcd	x: 0.31 / y: 0.32 nm	10-2512.1149	70
	28 V AC/DC +10%	5 mA ±15 %	750 mcd	x: 0.31 / y: 0.32 nm	10-2513.1149	70
	48 V AC/DC +10%	5 mA ±15 %	750 mcd	x: 0.31 / y: 0.32 nm	10-2519.1059	70
	130 V AC/DC +10%	1,5 mA ±15 %	225 mcd	x: 0.31 / y: 0.32 nm	10-2524.3049	70
	130 V AC/DC +10%	2 mA ±15 %	300 mcd	x: 0.31 / y: 0.32 nm	10-2H24.2059	70
	230 V AC/DC +10%	1,5 mA ±15 %	225 mcd	x: 0.31 / y: 0.32 nm	10-2H25.2049	70

Additional information

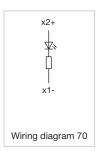
- The specified 6 V DC, 24 V DC Bi-colour; 130 V AC, 130 V DC and 230 V AC versions are built with a protection diode
- The specified 12, 24, 28, 48 VAC/DC versions are built with a bridge rectifier
- The specified 130 VAC types are developed to run on a supply voltage of 130 VAC only
- An operation at a higher supply voltage using commercial lampholders with integrated resistors, is not approved
- If the 24VDC Bi-colour lamp is driven with normal polarity (plus on middle contact of the lamp) the first mentioned colour will light up, with inverted polarity the second colour will light up
- The luminous intensity stated is for when used with DC
- Electrical and optical data are measured at 25 °C
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination. The customer has to decide what resistor shall be used to the LED



Dimensions [mm]

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Wiring diagrams



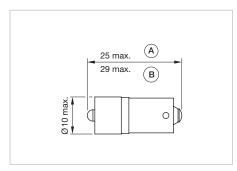


Single-LED super bright

Illumination colour	Operating voltage	Operation current	Lumi. Intensity	Dom. Wavelength	Part No.	Wiring diagram
Red	28 V AC/DC +10%	14 mA ±15 %	7700 mcd	630 nm	10-2413.1132R	70
Green	28 V AC/DC +10%	13 mA ±15 %	12400 mcd	525 nm	10-2413.1125R	70
Yellow	28 V AC/DC +10%	14 mA ±15 %	4200 mcd	589 nm	10-2413.1134R	70

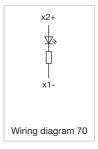
Additional information

- The specified 12, 24, 28, 48 VAC/DC versions are built with a bridge rectifier
- Electrical and optical data are measured at 25 °C
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination. The customer has to decide what resistor shall be used to the LED



Dimensions [mm] A = (standard)
B = (super bright)

Wiring diagrams



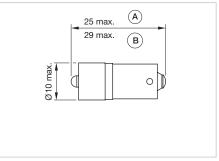


Single-LED with integrated Zener diode, BA9s

Illumination colour	Operating voltage	Operation current	Lumi. Intensity	Dom. Wavelength	Part No.	Wiring diagram
Red	24 - 30 V AC/DC +10%	13 - 19 mA ±15 %	300 - 440 mcd	630 nm	10-2H13.3162Q	367
Green	24 - 30 V AC/DC +10%	12 - 18 mA ±15 %	1800 - 2700 mcd	525 nm	10-2H13.3165Q	367
Yellow	24 - 30 V AC/DC +10%	13 - 19 mA ±15 %	270 - 380 mcd	589 nm	10-2H13.3164Q	367
Blue	24 - 30 V AC/DC +10%	12 - 18 mA ±15 %	560 - 800 mcd	589 nm	10-2H13.3166Q	367
White	24 - 30 V AC/DC +10%	7 - 11 mA ±15 %	600 - 900 mcd	589 nm	10-2H13.3169Q	367

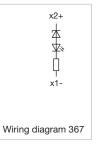
Additional information

- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination. The customer has to decide what resistor shall be used to the LED
- Electrical and optical data are measured at 25 °C
- The specified 12, 24, 28, 48 VAC/DC versions are built with a bridge rectifier



Dimensions [mm] A = (standard) B = (super bright)

Wiring diagrams



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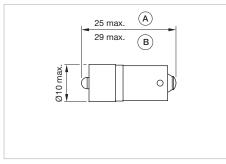


Bi-colour LED, BA9s

Illumination colour	Operating voltage	Operation current	Lumi. Intensity	Dom. Wavelength	Product attributes	Part No.	Wiring diagram
Red / Green	24 V AC/DC +10%	15 mA ±15 %	1200/900 mcd	625 / 525 nm	X2: + = Red / X1: + = Green	10-2H12.314A	171
Red / Yellow	24 V AC/DC +10%	15 mA ±15 %	1200/550 mcd	625 / 589 nm	X2: + = Red / X1: + = Yellow	10-2H12.314B	171
Green / Yellow	24 V AC/DC +10%	15 mA ±15 %	900/550 mcd	525 / 589 nm	X2: + = Yellow / X1: + = Green	10-2H12.314C	171

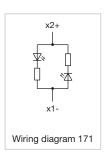
Additional information

- The max. overall length of the lamp may not exeed 25mm
- Electrical and optical data are measured at 25 °C
- The specified 6 V DC, 24 V DC Bi-colour; 130 V AC, 130 V DC and 230 V AC versions are built with a protection diode
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination. The customer has to decide what resistor shall be used to the LED



Dimensions [mm]
A = (standard)
B = (super bright)

Wiring diagrams



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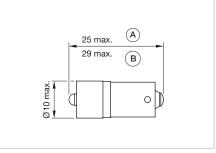


Single-LED, BA9s, EN 50155, Fail Safe

Illumination colour	Operating voltage	Operation current	Lumi. Intensity	Dom. Wavelength	Part No.	Wiring diagram
Red	72 V AC/DC	2,2 mA -30%/+25%	4 x 128 mcd	625 nm	10-4H21.1032P	368
	110 V AC/DC	2 mA -30%/+25%	4 x 128 mcd	625 nm	10-4H22.1032P	368
Yellow	72 V AC/DC	2,2 mA -30%/+25%	4 x 112 mcd	589 nm	10-4H21.1034P	368
	110 V AC/DC	2 mA -30%/+25%	4 x 128 mcd	589 nm	10-4H22.1034P	368
Green	72 V AC/DC	2,2 mA -30%/+25%	4 x 478 mcd	525 nm	10-4H21.1035P	368
	110 V AC/DC	2 mA -30%/+25%	4 x 510 mcd	525 nm	10-4H22.1035P	368
Blue	72 V AC/DC	2,2 mA -30%/+25%	4 x 90 mcd	465 nm	10-4H21.1036P	368
	110 V AC/DC	2 mA -30%/+25%	4 x 86 mcd	465 nm	10-4H22.1036P	368
White	72 V AC/DC	2,2 mA -30%/+25%	4 x 382 mcd		10-4H21.1039P	368
	110 V AC/DC	2 mA -30%/+25%	4 x 446 mcd		10-4H22.1039P	368

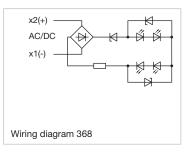
Additional information

- A suitable LED remover Part No. 700.006.0
- The luminous intensity stated is for when used with DC
- Electrical and optical data are measured at 25 °C
- The specified 72 and 110 VAC/VDC versions are built with a bridge rectifier
- The specified 72 and 110 VAC/VDC versions are built with a protection diode
- In case one LED fails, the other pair of still functioning LEDs is working. The light output then is half in order to indicate the malfunction and shows this way the need for replacement
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination. The customer has to decide what resistor shall be used to the LED



Dimensions [mm]
A = (standard)
B = (super bright)

Wiring diagrams



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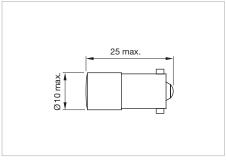


LED BA9s, EN 50155

Illumination colour	Operating voltage	Operation current	Lumi. Intensity	Part No.	Wiring diagram
White	24 V AC/DC	-30%/+25%	700 mcd	10-2412.1089P	369

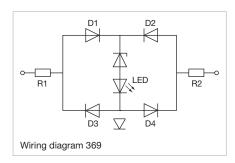
Additional information

- A suitable LED remover Part No. 700.006.0
- The luminous intensity stated is for when used with DC
- Electrical and optical data are measured at 25 °C
- The specified 24 VAC/VDC versions are built with a protection diode
- Specified 24 VAC/VDC versions are built with a bridge rectifier
- The new, white BA9s LED operates within a range of 16VDC to 34VDC. It conforms to the norms EN 50155 and IEEE 1476
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination. The customer has to decide what resistor shall be used to the LED



Dimensions [mm]

Wiring diagrams





Filament lamp

Operating voltage	Operation current	Part No.	Wiring diagram
24 V AC/DC	50 mA ±10 %	10-1412.1279	432
36 V AC/DC	56 mA ±10 %	10-1416.1289	432
60 V AC/DC	33 mA ±10 %	10-1420.1219	432
110 V AC/DC	22 mA ±10 %	10-1422.1179	432
130 V AC/DC	20 mA ±10 %	10-1424.1179	432

Additional information

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

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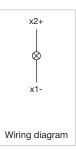
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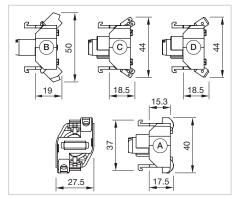
Wiring diagrams





Lamp block for selector switch and illuminated pushbutton, 2 positions

Product attributes	Terminal kind of	Part No.	Wiring diagram
	Screw terminal	704.950.0	4
	Plug-in terminal	704.950.1	4
Terminals nickel plated and blank Cu/Sn	Double plug-in terminal	704.950.1/D	4
	Push-in Terminal	704.950.3	4
Terminals nickel plated Cu/Sn	Double plug-in terminal	704.950.2/D	4
For ring cable shoe	Screw terminal	704.950.0B	4



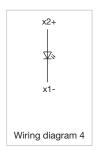
Dimensions [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams

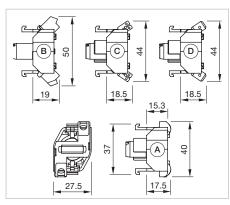


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Lamp block for selector switch 3 positions

Product attributes	Terminal kind of	Part No.	Wiring diagram
	Screw terminal	704.951.0	4
	Plug-in terminal	704.951.1	4
Terminals nickel plated and blank Cu/Sn	Double plug-in terminal	704.951.1/D	4
	Push-in Terminal	704.951.3	4

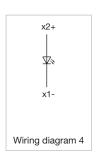


Dimensions [mm] A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm
D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams

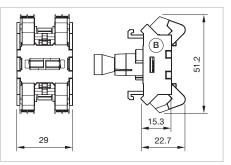




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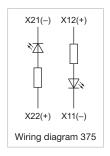
Dual lamp block

Operating voltage	Terminal kind of	Part No.	Wiring diagram	Com- ponent Layout
24 V AC/DC	Push-in Terminal	704.952.129.3	375	104
110 V AC/DC	Push-in Terminal	704.952.159.3	375	104

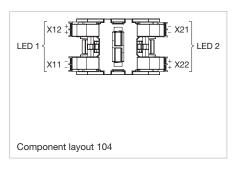


Dimensions [mm] B = Push-in terminal (PIT)

Wiring diagrams



Component layouts





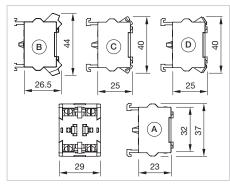
Snap-action switching element with push-in terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
250 V	6 A	1 NO	Gold-plated silver	704.907.1	376
	6 A	1 NC	Gold-plated silver	704.907.2	377
	6 A	2 NO	Gold-plated silver	704.907.3	378
	6 A	2 NC	Gold-plated silver	704.907.4	379
	6 A	1 NC / 1 NO	Gold-plated silver	704.907.5	380
	6 A	1 NO	Silver	704.908.1	376
	6 A	1 NC	Silver	704.908.2	377
	6 A	2 NO	Silver	704.908.3	378
	6 A	2 NC	Silver	704.908.4	379
	6 A	1 NC / 1 NO	Silver	704.908.5	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

• For the third switching element the terminal marking insert is to be ordered separately



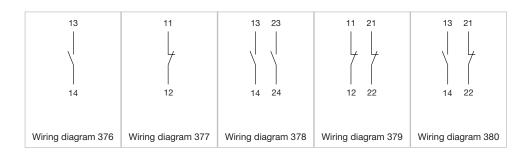
Dimensions [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm
D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams



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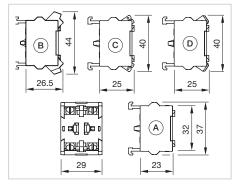
Slow-make switching element with push-in terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
250 V	6 A	1 NO	Gold-plated silver	704.917.1	376
	6 A	1 NC	Gold-plated silver	704.917.2	377
	6 A	2 NO	Gold-plated silver	704.917.3	378
	6 A	2 NC	Gold-plated silver	704.917.4	379
	6 A	1 NC / 1 NO	Gold-plated silver	704.917.5	380
	6 A	1 NO	Silver	704.918.1	376
	6 A	1 NC	Silver	704.918.2	377
_	6 A	2 NO	Silver	704.918.3	378
	6 A	2 NC	Silver	704.918.4	379
	6 A	1 NC / 1 NO	Silver	704.918.5	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

• For the third switching element the terminal marking insert is to be ordered separately



Dimensions [mm]

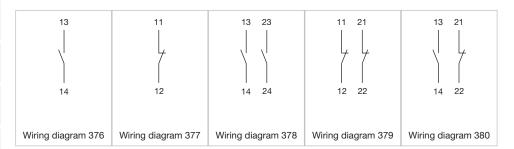
A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams



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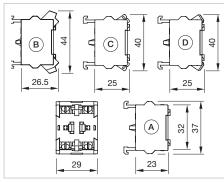
Snap-action switching element with plug-in terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
	6 A	1 NO	Silver	704.905.1	376
	6 A	1 NC	Silver	704.905.2	377
	6 A	2 NO	Silver	704.905.3	378
	6 A	2 NC	Silver	704.905.4	379
	6 A	1 NC / 1 NO	Silver	704.905.5	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

• For the third switching element the terminal marking insert is to be ordered separately



Dimensions [mm]

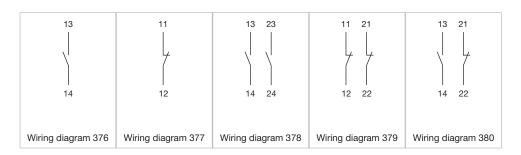
A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm \times 0.8 mm

Wiring diagrams



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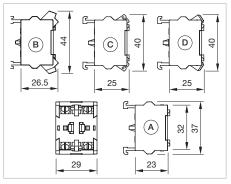
Slow-make switching element with plug-in terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
500 V	6 A	1 NO	Silver	704.915.1	376
	6 A	1 NC	Silver	704.915.2	377
	6 A	2 NO	Silver	704.915.3	378
	6 A	2 NC	Silver	704.915.4	379
	6 A	1 NC / 1 NO	Silver	704.915.5	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

For the third switching element the terminal marking insert is to be ordered separately



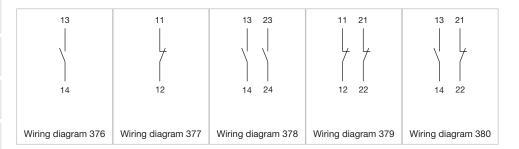
Dimensions [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams



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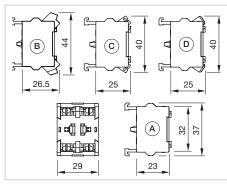
Snap-action switching element with double plug-in terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
500 V	6 A	1 NO	Gold-plated silver	704.901.1/D	376
	6 A	1 NC	Gold-plated silver	704.901.2/D	377
	6 A	2 NO	Gold-plated silver	704.901.3/D	378
	6 A	2 NC	Gold-plated silver	704.901.4/D	379
	6 A	1 NC / 1 NO	Gold-plated silver	704.901.5/D	380
	6 A	1 NO	Silver	704.905.1/D	376
	6 A	1 NC	Silver	704.905.2/D	377
500 V	6 A	2 NC	Silver	704.905.4/D	379
	6 A	1 NC / 1 NO	Silver	704.905.5/D	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

• For the third switching element the terminal marking insert is to be ordered separately

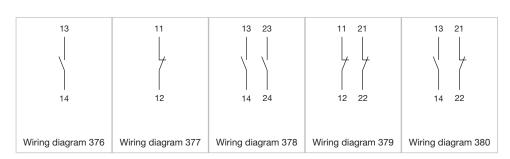


Dimensions [mm]

A = Screw terminal

A = Sciew terminal
B = Push-in terminal (PIT)
C = Plug-in terminal 6.3 mm x 0.8 mm
D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams





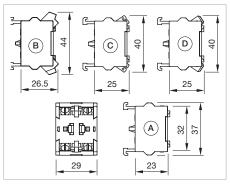
Slow-make switching element with double plug-in terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
500 V	6 A	1 NO	Silver	704.915.1/D	376
	6 A	1 NC	Silver	704.915.2/D	377
	6 A	2 NO	Silver	704.915.3/D	378
	6 A	2 NC	Silver	704.915.4/D	379
	6 A	1 NC / 1 NO	Silver	704.915.5/D	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

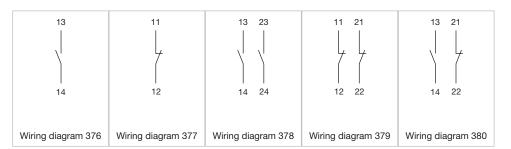
• For the third switching element the terminal marking insert is to be ordered separately



Dimensions [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams



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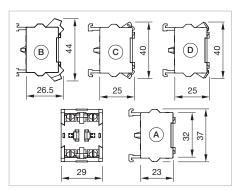
Snap-action switching element with screw terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
500 V	10 A	1 NO	Silver	704.900.1	376
	10 A	1 NC	Silver	704.900.2	377
	10 A	2 NO	Silver	704.900.3	378
	10 A	2 NC	Silver	704.900.4	379
	10 A	1 NC / 1 NO	Silver	704.900.5	380
	10 A	1 NO	Gold-plated silver	704.901.1	376
	10 A	1 NC	Gold-plated silver	704.901.2	377
	10 A	2 NO	Gold-plated silver	704.901.3	378
	10 A	2 NC	Gold-plated silver	704.901.4	379
	10 A	1 NC / 1 NO	Gold-plated silver	704.901.5	380
	10 A	1 NO	Palladium	704.902.1	376
	10 A	1 NC	Palladium	704.902.2	377
	10 A	2 NO	Palladium	704.902.3	378
	10 A	2 NC	Palladium	704.902.4	379
	10 A	1 NC / 1 NO	Palladium	704.902.5	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

• For the third switching element the terminal marking insert is to be ordered separately



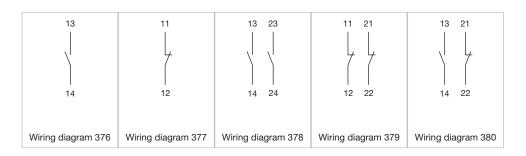
Dimensions [mm]

A = Screw terminal

B = Push-in terminal (PIT) C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams





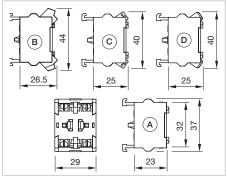
Slow-make switching element with screw terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
500 V	10 A	1 NO	Silver	704.910.1	376
	10 A	1 NC	Silver	704.910.2	377
	10 A	2 NO	Silver	704.910.3	378
	10 A	2 NC	Silver	704.910.4	379
	10 A	1 NC / 1 NO	Silver	704.910.5	380
	10 A	1 NO	Gold-plated silver	704.911.1	376
	10 A	1 NC	Gold-plated silver	704.911.2	377
	10 A	2 NO	Gold-plated silver	704.911.3	378
	10 A	2 NC	Gold-plated silver	704.911.4	379
	10 A	1 NC / 1 NO	Gold-plated silver	704.911.5	380
	10 A	1 NO	Palladium	704.912.1	376
	10 A	2 NO	Palladium	704.912.3	378
	10 A	2 NC	Palladium	704.912.4	379
	10 A	1 NC / 1 NO	Palladium	704.912.5	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

• For the third switching element the terminal marking insert is to be ordered separately

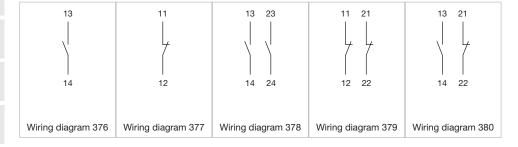


Dimensions [mm]

- A = Screw terminal

- A = Solew Enimal
 B = Push-in terminal (PIT)
 C = Plug-in terminal 6.3 mm x 0.8 mm
 D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams

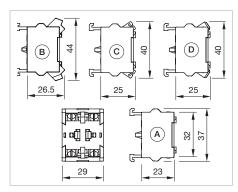




Snap-action switching element for ring cable shoe with screw terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
500 V	10 A	1 NO	Silver	704.900.1B	376
	10 A	1 NC	Silver	704.900.2B	377
	10 A	2 NO	Silver	704.900.3B	378
	10 A	2 NC	Silver	704.900.4B	379
	10 A	1 NC / 1 NO	Silver	704.900.5B	380

Contacts: NC = Normally closed, NO = Normally open



Dimensions [mm]

- A = Screw terminal

- A = Sciew terminal (PIT)
 B = Push-in terminal (PIT)
 C = Plug-in terminal 6.3 mm x 0.8 mm
 D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams

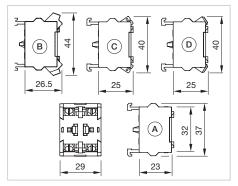
13	11	13 23	11 21	13 21
	<u></u>			
14	12	14 24	12 22	14 22
Wiring diagram 376	Wiring diagram 377	Wiring diagram 378	Wiring diagram 379	Wiring diagram 380



Slow-make switching element for ring cable shoe with screw terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
500 V	10 A	1 NO	Silver	704.910.1B	376
	10 A	1 NC	Silver	704.910.2B	377
	10 A	2 NO	Silver	704.910.3B	378
	10 A	2 NC	Silver	704.910.4B	379
	10 A	2 NO	Gold-plated silver	704.911.3B	378
	10 A	2 NC	Gold-plated silver	704.911.4B	379
	10 A	1 NC / 1 NO	Gold-plated silver	704.911.5B	380

Contacts: NC = Normally closed, NO = Normally open



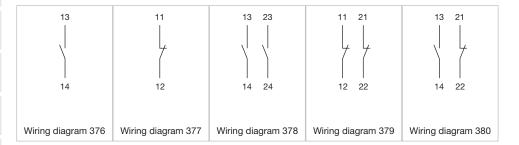
Dimensions [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm
D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams



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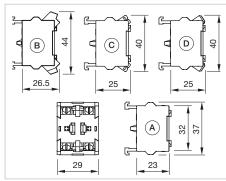
Slow-make switching element for emergency stop switch with push-in terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
250 V	6 A	1 NO	Gold-plated silver	704.917.1	376
	6 A	1 NC	Gold-plated silver	704.917.2	377
	6 A	2 NO	Gold-plated silver	704.917.3	378
	6 A	2 NC	Gold-plated silver	704.917.4	379
	6 A	1 NC / 1 NO	Gold-plated silver	704.917.5	380
	6 A	1 NO	Silver	704.918.1	376
	6 A	1 NC	Silver	704.918.2	377
	6 A	2 NO	Silver	704.918.3	378
	6 A	2 NC	Silver	704.918.4	379
	6 A	1 NC / 1 NO	Silver	704.918.5	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

• For the third switching element the terminal marking insert is to be ordered separately



Dimensions [mm]

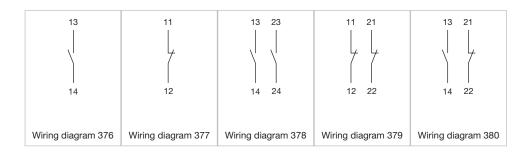
A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm

D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams



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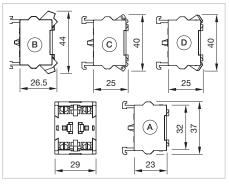
Slow-make switching element for emergency stop switch with plug-in terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
500 V	6 A	1 NO	Silver	704.915.1	376
	6 A	1 NC	Silver	704.915.2	377
	6 A	2 NO	Silver	704.915.3	378
	6 A	2 NC	Silver	704.915.4	379
	6 A	1 NC / 1 NO	Silver	704.915.5	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

For the third switching element the terminal marking insert is to be ordered separately



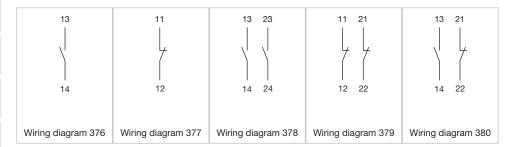
Dimensions [mm]

A = Screw terminal

B = Push-in terminal (PIT)

C = Plug-in terminal 6.3 mm x 0.8 mm D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams



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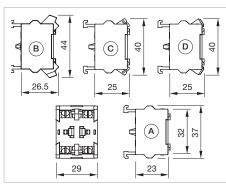
Slow-make switching element for emergency stop switch with double plug-in terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
500 V	6 A	1 NO	Silver	704.915.1/D	376
	6 A	1 NC	Silver	704.915.2/D	377
	6 A	2 NO	Silver	704.915.3/D	378
	6 A	2 NC	Silver	704.915.4/D	379
	6 A	1 NC / 1 NO	Silver	704.915.5/D	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

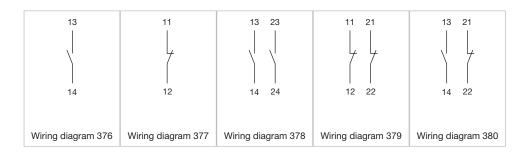
• For the third switching element the terminal marking insert is to be ordered separately



Dimensions [mm]

- A = Screw terminal
- B = Push-in terminal (PIT)
- C = Plug-in terminal 6.3 mm x 0.8 mm
- D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams



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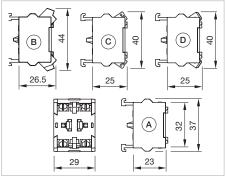
Slow-make switching element for emergency stop switch with screw terminal

Switching voltage	Switching current	Contacts	Contact material	Part No.	Wiring diagram
500 V	10 A	1 NO	Silver	704.910.1	376
	10 A	1 NC	Silver	704.910.2	377
	10 A	2 NO	Silver	704.910.3	378
	10 A	2 NC	Silver	704.910.4	379
	10 A	1 NC / 1 NO	Silver	704.910.5	380
	10 A	1 NO	Gold-plated silver	704.911.1	376
	10 A	1 NC	Gold-plated silver	704.911.2	377
	10 A	2 NO	Gold-plated silver	704.911.3	378
	10 A	2 NC	Gold-plated silver	704.911.4	379
	10 A	1 NC / 1 NO	Gold-plated silver	704.911.5	380
	10 A	1 NO	Palladium	704.912.1	376
	10 A	2 NO	Palladium	704.912.3	378
	10 A	2 NC	Palladium	704.912.4	379
	10 A	1 NC / 1 NO	Palladium	704.912.5	380

Contacts: NC = Normally closed, NO = Normally open

Additional information

• For the third switching element the terminal marking insert is to be ordered separately

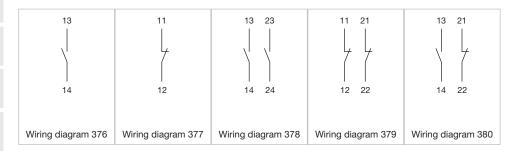


Dimensions [mm]

- A = Screw terminal

- A = Solew Enimal
 B = Push-in terminal (PIT)
 C = Plug-in terminal 6.3 mm x 0.8 mm
 D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams

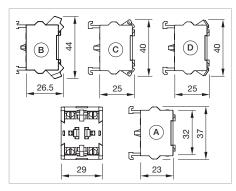




Slow-make switching element failsafe

Contacts	Contact material	Terminal	Product attributes	Part No.	Wiring diagram
1 NC / 1 FS	Silver	Screw terminal		704.910.4FS	381
	Gold-plated silver	Screw terminal		704.911.4FS	381
	Silver	Screw terminal	For ring cable shoe	704.910.4BFS	381
	Gold-plated silver	Screw terminal	For ring cable shoe	704.911.4BFS	381
	Silver	Plug-in terminal		704.915.4FS	381
	Gold-plated silver	Double plug-in terminal		704.911.4/DFS	381
	Silver	Double plug-in terminal		704.915.4/DFS	381
	Gold-plated silver	Push-in Terminal		704.917.4FS	381
	Silver	Push-in Terminal		704.918.4FS	381

Contacts: NC = Normally closed, NO = Normally open

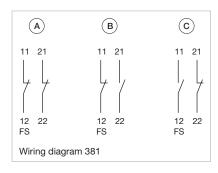


Dimensions [mm]

A = Screw terminal

B = Push-in terminal (PIT)
C = Plug-in terminal 6.3 mm x 0.8 mm
D = Double plug-in terminal 6.3 mm x 0.8 mm

Wiring diagrams





Kraus Naimer rotary switching element 30°

Switching positions	Rotary positions	Multi-step switch	Stages	Terminal	Part No.	Wiring diagram
A = Rest, I = End	9	1-pole	5	Screw terminal	704.8A236	382
A = Rest, K = End	10	1-pole	5	Screw terminal	704.8A237	383
A = Rest, L = End	11	1-pole	6	Screw terminal	704.8A238	384
A = Rest, M = End	12	1-pole	6	Screw terminal	704.8A239	385
A = Rest (without stop)	12	1-pole	6	Screw terminal	704.8A639	385

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Wiring diagrams

9 13 17	9 13 17	9 13 17	9 13 17
5 0 15	5 0 19	5 21	5 21
1 0 2 3	1 0 0 3	1 2 3	1 3 3
2 ° 7	1 0 7	1 2 7	23 7
11	15 11	19 15 11	19 15 11
Wiring diagram 382	Wiring diagram 383	Wiring diagram 384	Wiring diagram 385



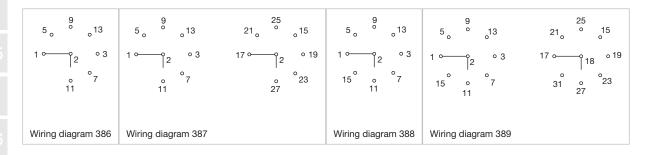
Kraus Naimer rotary switching element 45°

Switching positions	Rotary positions	Multi-step switch	Stages	Terminal	Part No.	Wiring diagram
A = Rest, G = End	7	1-pole	4	Screw terminal	704.8A234	386
	7	2-pole	7	Screw terminal	704.8A254	387
A = Rest, H = End	8	1-pole	4	Screw terminal	704.8A235	388
	8	2-pole	8	Screw terminal	704.8A255	389

Additional information

• Switching positions and functions of the rotary switching element are being produced according to customer specifications. Please contact your local EAO Sales Office

Wiring diagrams



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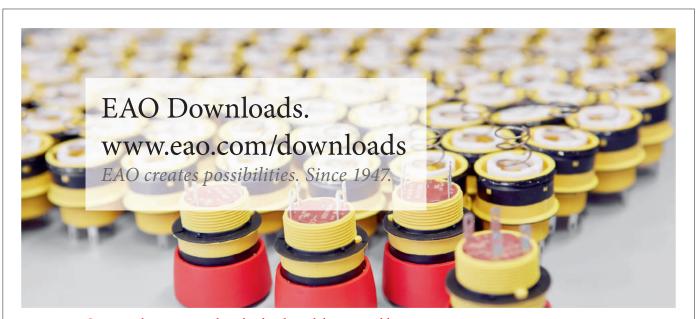


Kraus Naimer rotary switching element 60°

Switching positions	Rotary positions	Multi-step switch	Stages	Terminal	Part No.	Wiring diagram
A = Rest, C = End	3	1-pole	2	Screw terminal	704.8A230	390
	3	1-pole, galvanically isolated	2	Screw terminal	704.8A730	391
	3	2-pole	3	Screw terminal	704.8A250	392
	3	3-pole	5	Screw terminal	704.8A270	393
A = Rest, D = End	4	1-pole	2	Screw terminal	704.8A231	394
	4	1-pole, galvanically isolated	2	Screw terminal	704.8A731	395
	4	2-pole	4	Screw terminal	704.8A251	396
	4	3-pole	6	Screw terminal	704.8A271	397
A = Rest, E = End	5	1-pole	3	Screw terminal	704.8A232	398
	5	2-pole	5	Screw terminal	704.8A252	399
	5	3-pole	8	Screw terminal	704.8A272	400
A = Rest, F = End	6	1-pole	3	Screw terminal	704.8A233	401
	6	2-pole	6	Screw terminal	704.8A253	402

Additional information

Switching positions and functions of the rotary switching element are being produced according to customer specifications. Please contact your local EAO Sales Office





On our website you can download technical data, assembly instructions, catalogs, brochures and much more.

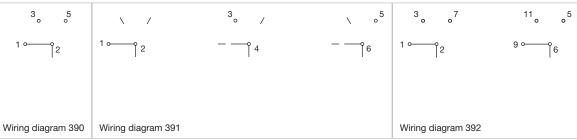


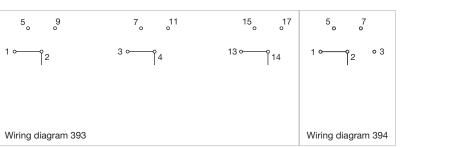
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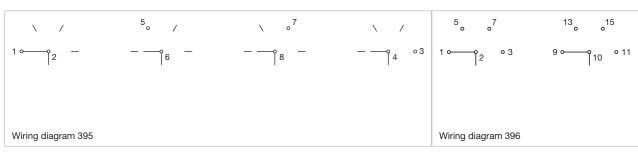
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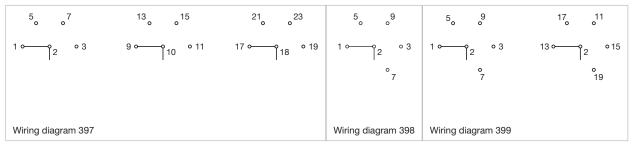
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Wiring diagrams

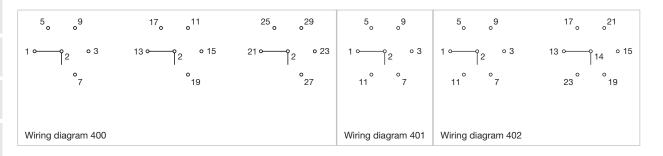








Wiring diagrams



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Santon rotary switching element 30°

Switching positions	Rotary positions	Multi-step switch	Stages	Terminal	Part No.	Wiring diagram
A = Rest, I = End	9	1-pole	5	Screw terminal	704.F100001	443
A = Rest, K = End	10	1-pole	5	Screw terminal	704.F100002	444
A = Rest, L = End	11	1-pole	6	Screw terminal	704.F100003	445
A = Rest, M = End	12	1-pole	6	Screw terminal	704.F100004	442
A = Rest, M = End	12	1-pole	6	Screw terminal	704.F100015	442
A = Rest, I = End	9	1-pole	5	Plug-in terminal	704.F1A00001	443
A = Rest, K = End	10	1-pole	5	Plug-in terminal	704.F1A00002	444
A = Rest, L = End	11	1-pole	6	Plug-in terminal	704.F1A00003	445
A = Rest, M = End	12	1-pole	6	Plug-in terminal	704.F1A00004	442
A = Rest, M = End	12	1-pole	6	Plug-in terminal	704.F1A00015	442

Additional information

Switching positions and functions of the rotary switching element are being produced according to customer specifications. Please contact your local EAO Sales Office

Wiring diagrams

9 13 17 5 21	9 13 17 5 016	9 13 17 5 0 20	9 13 17 5 21	4 5
1 ° ° 2 ° 4 24 ° ° 8 20 ° 16 12	1 ° ° 8 ° 8 ° 12	1 ° ° 4 ° 8 ° 8 ° 16 ° 12	1 ° 2 ° 4 ° 8 20° 16 12	1 0
Wiring diagram 442	Wiring diagram 443	Wiring diagram 444	Wiring diagram 445	Wiring diagram 446



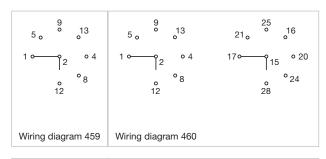
Santon rotary switching element 45°

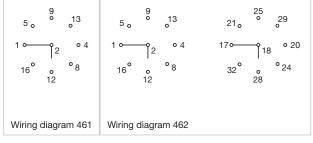
Switching positions	Rotary positions	Multi-step switch	Stages	Terminal	Part No.	Wiring diagram
A = Rest, G = End	7	1-pole	4	Screw terminal	704.F100019	459
A = Rest, G = End	7	2-pole	7	Screw terminal	704.F100020	460
A = Rest, H = End	8	1-pole	4	Screw terminal	704.F100021	461
A = Rest, H = End	8	2-pole	8	Screw terminal	704.F100022	462
A = Rest, G = End	7	1-pole	4	Plug-in terminal	704.F1A00019	459
A = Rest, G = End	7	2-pole	7	Plug-in terminal	704.F1A00020	460
A = Rest, H = End	8	1-pole	4	Plug-in terminal	704.F1A00021	461
A = Rest, H = End	8	2-pole	8	Plug-in terminal	704.F1A00022	462

Additional information

• Switching positions and functions of the rotary switching element are being produced according to customer specifications. Please contact your local EAO Sales Office

Wiring diagrams







Santon rotary switching element 60°

Switching positions	Rotary positions	Multi-step switch	Stages	Terminal	Part No.	Wiring diagram
A = Rest, D = End	4	4-pole	2	Screw terminal	704.F100005	451
A = Rest, C = End	3	1-pole	2	Screw terminal	704.F100006	446
A = Rest, C = End	3	2-pole	3	Screw terminal	704.F100007	448
A = Rest, C = End	3	3-pole	5	Screw terminal	704.F100008	449
A = Rest, D = End	4	1-pole	2	Screw terminal	704.F100009	450
A = Rest, D = End	4	2-pole	4	Screw terminal	704.F100010	452
A = Rest, D = End	4	3-pole	6	Screw terminal	704.F100011	453
A = Rest, E = End	5	1-pole	3	Screw terminal	704.F100012	454
A = Rest, E = End	5	2-pole	5	Screw terminal	704.F100013	455
A = Rest, E = End	5	3-pole	8	Screw terminal	704.F100014	456
A = Rest, F = End	6	1-pole	3	Screw terminal	704.F100016	457
A = Rest, F = End	6	2-pole	6	Screw terminal	704.F100017	458
A = Rest, C = End	3	3-pole	2	Screw terminal	704.F100018	447
A = Rest, D = End	4	4-pole	2	Plug-in terminal	704.F1A00005	451
A = Rest, C = End	3	1-pole	2	Plug-in terminal	704.F1A00006	446
A = Rest, C = End	3	2-pole	3	Plug-in terminal	704.F1A00007	448
A = Rest, C = End	3	3-pole	5	Plug-in terminal	704.F1A00008	449
A = Rest, D = End	4	1-pole	2	Plug-in terminal	704.F1A00009	450
A = Rest, D = End	4	2-pole	4	Plug-in terminal	704.F1A00010	452
A = Rest, D = End	4	3-pole	6	Plug-in terminal	704.F1A00011	453
A = Rest, E = End	5	1-pole	3	Plug-in terminal	704.F1A00012	454
A = Rest, E = End	5	2-pole	5	Plug-in terminal	704.F1A00013	455
A = Rest, E = End	5	3-pole	8	Plug-in terminal	704.F1A00014	456
A = Rest, F = End	6	1-pole	3	Plug-in terminal	704.F1A00016	457
A = Rest, F = End	6	2-pole	6	Plug-in terminal	704.F1A00017	458
A = Rest, C = End	3	3-pole	2	Plug-in terminal	704.F1A00018	447

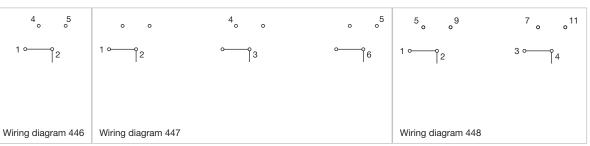
Additional information

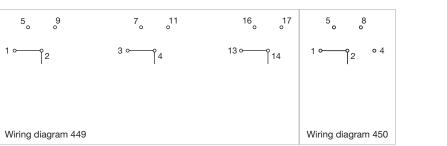
Switching positions and functions of the rotary switching element are being produced according to customer specifications. Please contact your local EAO Sales Office

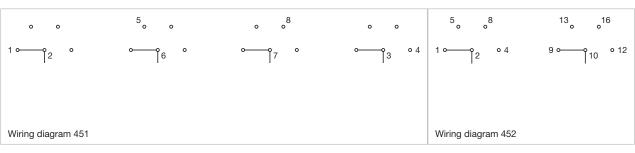
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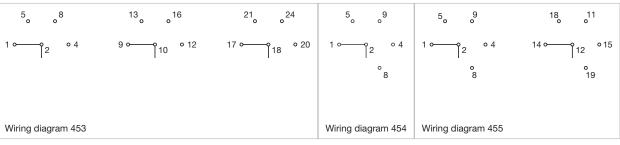
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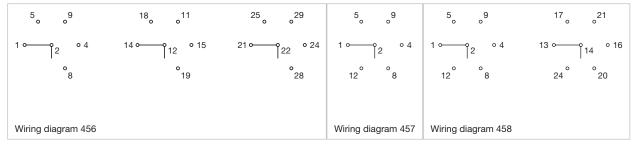
Wiring diagrams







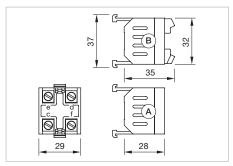






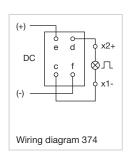
Flasher element

Product attributes	Terminal	Part No.	Wiring diagram
Lamp voltage/-current 130 V, 20 mA	Screw terminal	704.943.0	374
Lamp voltage/- current 60 V, 33 mA	Screw terminal	704.943.1	374
Lamp voltage/-current 130 V, 3 mA	Push-in Terminal	704.943.2P	374
	Screw terminal	704.943.2	374
Lamp voltage/-current 24 V, 10 85 mA	Screw terminal	704.943.5	374



Dimensions [mm] A = Screw terminal Push-in terminal (PIT)

Wiring diagrams



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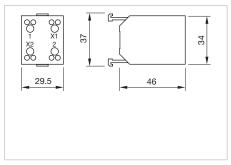


Lamp transformer

Part No.	Wiring diagram
704.970.3	371
704.970.4	371
704.970.5	371
704.970.6	371

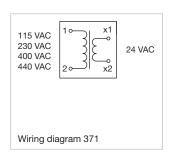
Additional information

• Lamp voltage/-current 24 VAC, 50 mA, 50/60 Hz



Dimensions [mm]

Wiring diagrams



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Front side

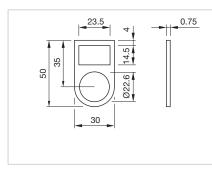


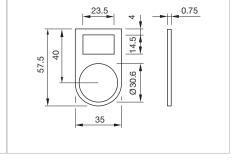
Legend frame

Product attributes	Dimensions	Material	Colour	Surface	Mounting type	Part No.
For raised design	30 mm x 0.75 mm x 50 mm	aluminium	Black	anodised	adhesive	704.968.2
For flush design	35 mm x 0.75 mm x 57.5 mm	aluminium	Black	anodised	adhesive	704.968.3

Additional information

The colour of anodised aluminium parts can vary due to technical production reasons





Dimensions [mm] for Part No. 704.968.2

Dimensions [mm] for Part No. 704.968.3



Legend plate

Dimensions	Material	Colour	Surface	Mounting type	Part No.
14.5 mm x 23.5 mm	aluminium	Nature	anodised	adhesive	704.968.0
	aluminium	Black	anodised	adhesive	704.968.1

Additional information

- For legend frame Part No.704.968.2 and 704.968.3
- The colour of anodised aluminium parts can vary due to technical production reasons



Legend plate flush design

Dimensions	Material	Colour	Surface	Mounting type	Part No.
18 mm x 35 mm	aluminium	Nature	anodised	adhesive	704.968.4
	aluminium	Black	anodised	adhesive	704.968.5

Additional information

- For devices square with flush design
- The colour of anodised aluminium parts can vary due to technical production reasons

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04 Accessories



Emergency stop legend

Dimensions	Material	Colour	Mounting cut-out	Marking	Part No.
Ø 60 mm	plastic	Yellow	Ø 22.3 mm	NOT AUS	704.963.5
	plastic	Yellow	Ø 22.3 mm	EMERGENCY STOP	704.963.6
	plastic	Yellow	Ø 22.3 mm	ARRET D'URGENCE	704.963.7
	plastic	Yellow	Ø 22.3 mm	NOT HALT	704.963.8
	plastic	Yellow	Ø 22.3 mm	EN ISO 13850 symbol	704.963.9
Ø 90 mm	plastic	Yellow	Ø 22.3 mm	NOT AUS	704.963.0
	plastic	Yellow	Ø 22.3 mm	EMERGENCY STOP	704.963.1
	plastic	Yellow	Ø 22.3 mm	ARRET D'URGENCE	704.963.2
	plastic	Yellow	Ø 22.3 mm	NOT HALT	704.963.3
	plastic	Yellow	Ø 22.3 mm	EN ISO 13850 symbol	704.963.4

Additional information

• Front panel thickness 3 mm max.



Legend plate rotary switch

Product attributes	Dimensions	Material	Colour	Surface	Mounting type	Part No.
For raised design Ø 29 mm	48 mm x 48 mm	aluminium	Black	anodised	adhesive	704.968.10
For flush design Ø 35 mm	48 mm x 48 mm	aluminium	Black	anodised	adhesive	704.968.11
For raised design Ø 29 mm	48 mm x 60 mm	aluminium	Black	anodised	adhesive	704.968.12

Additional information

• The colour of anodised aluminium parts can vary due to technical production reasons

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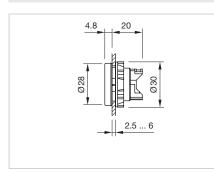


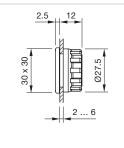
Blind plug

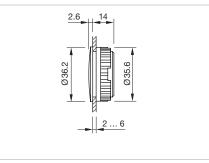
Dimensions	Material	Colour	Mounting cut-out	Part No.
Ø 28 mm	plastic	Black	Ø 22.3 mm	704.960.4
Ø 22.5 mm	plastic	Black	Ø 22.3 mm	704.964.7
Ø 36 mm	plastic	Black	Ø 30.5 mm	704.964.8
35 mm x 35 mm	plastic	Black	30 mm x 30 mm	704.964.9

Additional information

• Please note that bigger minimum distances are necessary



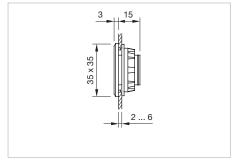




Dimensions [mm] for Part No. 704.960.4

Dimensions [mm] for Part No. 704.964.7

Dimensions [mm] for Part No. 704.964.8



Dimensions [mm] for Part No. 704.964.9



Spare key

Product attributes	Material	Part No.
The standard lock Ronis 251	metal	704.989.251



Protective cap

Product attributes	Material	Colour	Optics	Part No.
Only together with lenses Part No. 704.602.X, 704.601.X and front rings Part No. 704.600.X	silicone	Colourless	transparent	704.953.0

Additional information

For Indicator and Illuminated pushbutton for IP68 protection

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04 Accessories



Protective ring

Product attributes	Material	Colour	Surface	Part No.
With transparent silicone membrane (resistant to sea water), temperature resistance -40 °C +85 °C	brass		chrome	704.600.2
	aluminium	Nature	anodised	704.600.3
With transparent Pebax membrane, temperature resistance -40 °C +85 °C	aluminium	Nature	anodised	704.600.5/A

Additional information

- For Illuminated pushbutton for front protection IP 67
- The colour of anodised aluminium parts can vary due to technical production reasons

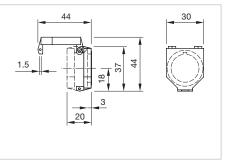


Protective cover raised design

Product attributes	Material	Optics	Part No.
For pushbutton	plastic	transparent	704.925.0
With spring fitted, for pushbutton	plastic	transparent	704.925.3
For selector switch	plastic	transparent	704.925.2

Additional information

• Hinged, with means for sealing



Dimensions [mm]

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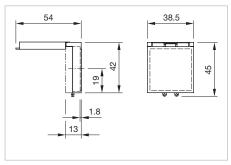


Protective cover square flush design

Product attributes	Dimensions	Material	Optics	Mounting cut-out	Part No.
For pushbutton	38.5 mm x 45 mm	plastic	transparent	30 mm x 30 mm	704.925.8
For selector switch	38.5 mm x 45 mm	plastic	transparent	30 mm x 30 mm	704.925.9

Additional information

- Hinged, with means for sealing
- Front panel thickness reduces by 2 mm
- · Please note that bigger minimum distances are necessary



Dimensions [mm]

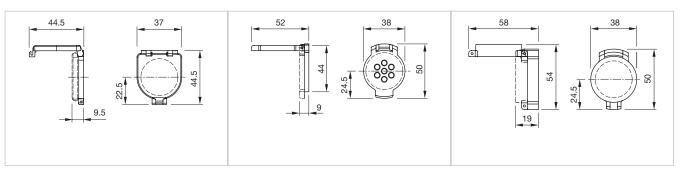


Protective cover round flush design

Product attributes	Dimensions	Material	Colour	Surface	Part No.
With means for sealing, for pushbutton with mounting cut-outs $\ensuremath{\mathcal{O}}$ 30.5 mm	37 mm x 44.5 mm	plastic	Colourless		704.925.7
Without cover locking hole, with spring fitted, with window, for pushbuttonwith mounting cut-outs \varnothing 30.5 mm	38 mm x 50 mm	aluminium	Nature	anodised	704.928.18
Without cover locking hole, for pushbutton and selector switch short lever with mounting cut-outs Ø 30.5 mm	38 mm x 50 mm	aluminium	Nature	anodised	704.928.28
With means for sealing, for pushbutton and selector switch short lever with mounting cut-outs Ø 30.5 mm	38 mm x 50 mm	aluminium	Nature	anodised	704.928.38

Additional information

- Hinged
- Front panel thickness reduces by 2 mm
- Please note that bigger minimum distances are necessary
- The colour of anodised aluminium parts can vary due to technical production reasons



Dimensions [mm] for Part No. 704.925.7

Dimensions [mm] for Part No. 704.928.18

Dimensions [mm] for Part No. 704.928.28, 704.928.38

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04 Accessories

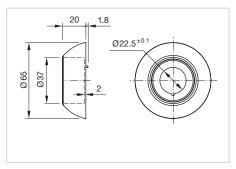


E stop protective shroud

Dimensions	Material	Colour	Marking	IK Protection	Part No.
Ø 65 mm	plastic	Yellow		IK 07	704.927.6
	plastic	Yellow	NOT-AUS	IK 07	704.927.6A
	plastic	Yellow	EMERGENCY-STOP	IK 07	704.927.6B
	plastic	Yellow	EMERGENCY-STOP / NOT-AUS	IK 07	704.927.6C

Additional information

- Front panel thickness 1 ... 2.5 mm other actuators
- Front panel thickness 1 ... 2.5 mm with emergency stop switch
- With anti-twist device
- When using a protective shroud the e-stop or stop-switch has to be turned by 180° to be mounted. See dimensional drawing
- Do not use solvents when cleaning



Dimensions [mm]

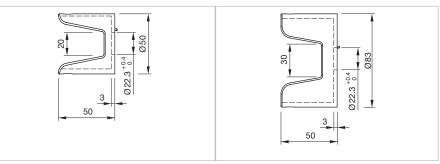


Protective shroud

Product attributes	Dimensions	Material	Colour	Part No.
Use only for Part No. 704.064.2 und 704.066.2	Ø 50 mm	plastic	Yellow	704.927.8
	Ø 83 mm	plastic	Yellow	704.927.9

Additional information

- The protection shroud Part is not suitable for a proper use of emergency-stop. It can obstruct a spontaneous operation of the emergency-stop switch
- Use only for Part No. 704.064.2 und 704.066.2



Dimensions [mm]

Dimensions [mm]

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Marking foil square

Product attributes	Material	Colour	Optics	Part No.
For lens square, front illumination	plastic	Colourless	transparent	704.707.7
For lens square, full-face illumination	plastic	Colourless	transparent	704.706.7

Additional information

Can be hot stamped





On our website you can download technical data, assembly instructions, catalogs, brochures and much more.





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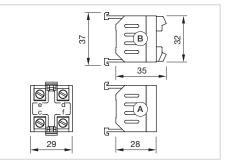
04 Accessories

Rear side



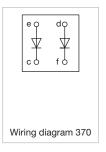
Diode block

Terminal	Part No.	Wiring diagram
Push-in Terminal	704.942.5P	370
Screw terminal	704.942.5	370



Dimensions [mm] A = Screw terminal Push-in terminal (PIT)

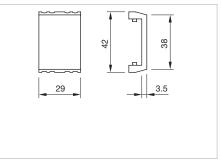
Wiring diagrams





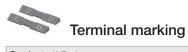
Terminal cover

Product attributes	Material	Part No.
For covering of screw terminal	plastic	704.964.5



Dimensions [mm]

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Product attributes	Marking	Part No.
2 NO for 1st or 2nd switching element	13/23 33/43	704.965.1
	24/14 44/34	704.965.2
2 NO for 3rd switching element	53/63 73/83	704.965.3
	64/54 84/74	704.965.4
2 NC for 1st or 2nd switching element	11/21 31/41	704.965.5
	22/12 42/32	704.965.6
2 NC for 3rd switching element	51/61 71/81	704.965.7
	62/52 82/72	704.965.8
1 NC + 1 NO for 1st or 2nd switching element	13/21 33/41	704.965.9
	22/14 42/34	704.966.0
1 NC + 1 NO for 3rd switching element	53/61 73/81	704.966.1
	62/54 82/74	704.966.2



Side terminal plate empty

Product attributes	Dimensions	Part No.
5 spaces	62.5 mm x 15 mm x 60 mm	02-912.1
10 spaces	125 mm x 15 mm x 60 mm	02-912.2
15 spaces	187.6 mm x 15 mm x 60 mm	02-912.3
20 spaces	250 mm x 15 mm x 60 mm	02-912.4



Contact bridge

Material	Part No.
metal	704.990.1

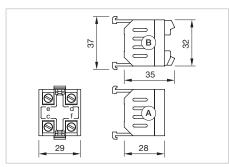
Additional information

- For switching element with screw terminals
- Do not insert by Emergency-stopp switches and by stop switches
- Available in unit of 10 pieces



Resistor block

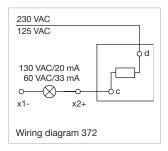
Product attributes	Material	Operating voltage	Terminal	Part No.	Wiring diagram
Lamp voltage/-current 130 V, 20 mA	plastic	130 - 230 V AC	Screw terminal	704.941.0	372
Lamp voltage/- current 60 V, 33 mA	plastic	33 - 60 V AC	Push-in Terminal	704.941.5P	372
	plastic	33 - 60 V AC	Screw terminal	704.941.5	372



Dimensions [mm] A = Screw terminal Push-in terminal (PIT)

04 Accessories

Wiring diagrams

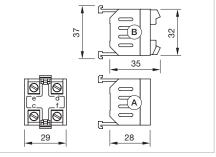




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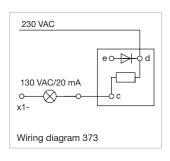
Side resistor diode block

Product attributes	Material	Operating voltage	Terminal	Part No.	Wiring diagram
Lamp voltage/-current 130 V, 20 mA	plastic	130 - 230 V AC	Screw terminal	704.941.9	373



Dimensions [mm] A = Screw terminal Push-in terminal (PIT)

Wiring diagrams



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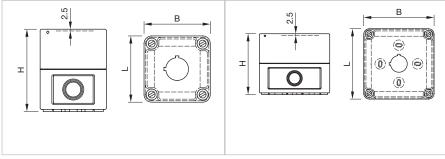
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Mounting



Enclosure

Product attributes	Dimensions	Material	Colour	IP Protection	Part No.
, 5,,	94 mm x 81 mm x 94 mm	plastic	Grey	IP66	704.945.0
yellow similar RAL 1004	65 mm x 81 mm x 65 mm	plastic	Grey	IP66	704.945.7
	94 mm x 81 mm x 65 mm	plastic	Grey	IP66	704.945.8
With mounting cut-out 1 x Ø 22.5 mm, with anti-twist device	94 mm x 81 mm x 94 mm	plastic	Grey	IP66	704.945.1
with mounting cut-out 2 x Ø 22.3 mm, with anti-twist device	130 mm x 81 mm x 94 mm	plastic	Grey	IP66	704.945.2
with mounting cut-out 3 x Ø 22.3 mm, with anti-twist device	180 mm x 81 mm x 94 mm	plastic	Grey	IP66	704.945.3
with mounting cut-out 4 x Ø 22.3 mm, with anti-twist device	180 mm x 110 mm x 182 mm	plastic	Grey	IP66	704.945.4
with mounting cut-out 6 x Ø 22.3 mm, with anti-twist device	180 mm x 110 mm x 182 mm	plastic	Grey	IP66	704.945.5



Dimensions [mm]

Dimensions [mm]



Lens plug

Product attributes	Material	Part No.
For mounting and dismantling of the round lens,	plastic	700.006.0
flush design		



Lens remover

		- · · ·
Product attributes	Material	Part No.
For dismantling of the square lens, flush design	metal	98-968



Cable gland

Product attributes	Material	Colour	IP Protection	Thread	Part No.
With traction relief	plastic	Grey	IP68	M16 x 1.5 mm	61-9481.6
	plastic	Grey	IP68	M20 x 1.5 mm	704.945.6

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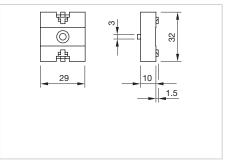
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04 Accessories



Mounting plate

Product attributes	Material	Colour	Part No.
For separate mounting of lamp transformer, resistor block or capacitor block	plastic	Grey	704.940.8



Dimensions [mm]



Mounting tool indicator

Product attributes	Material	Part No.
For Indicators full-face illumination, compact	metal	700.005.0



Mounting tool key insert switch and conductor switch

Product attributes	Material	Part No.
For key insert switch	metal	704.990.0

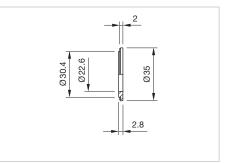


Reducing ring

Product attributes	Material	Colour	Surface	Part No.
	aluminium	Black	anodised	704.960.0
	aluminium	Nature	anodised	704.960.8
With slot for anti-twist device	aluminium	Nature	anodised	704.960.8A

Additional information

- Devices Ø 22.3 mm in mounting cut-out Ø 30.5 mm
- The colour of anodised aluminium parts can vary due to technical production reasons



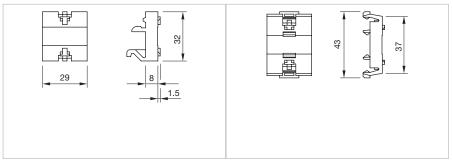
Dimensions [mm]

Accessories 04



On base

Product attributes	Material	Colour	Optics	Part No.
To snap-on, for seperate mounting of lamp trans-	plastic	Black		704.940.9
former, resistor block or capacitor block	plastic	Colourless	transparent	704.941.1



Dimensions [mm]

Dimensions [mm]



Reinforcement ring

Dimensions	Material	Surface	Part No.
44 mm x 3 mm x 29 mm	steel_plate	galvanized	704.960.9

Additional information

• For thin front panels and plastic case

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Slow-make switching element

Switching system

The double-break, slow-make switching element is equipped with one or two independent contact systems, acting as normally open or normally closed contact. The normally closed contact has forced opening.

Slow-make contacts with forced action are ideal for high switch

Up to three switching elements can be snapped to each actuator.

For the emergency-stop pushbutton use the slow-make switching element (max. 2).

Material

Material of contact

Hard silver, gold-silver, silver-palladium (for aggressive atmospheres)

Switch housing

Plastic

Mechanical characteristics

Terminals Screw terminals

Plug-in terminals 6.3 mm x 0.8 mm

Max. wire cross-section 2 x 2.5 mm²

Max. wire cross-section of stranded cable 2 x 1.5 mm²

For switches with plug-in terminals it is necessary to provide insulation sleeves and to maintain a spacing of 65 mm between rows (mounting cut-outs)

Tightening torque

Screws at the plastic mounting flange max. 0.4-0.5 Nm Screws at the metal mounting flange max. 0.25-0.3 Nm

Screws at switching element max. 0.50 Nm

Actuating force

1 Normally closed 2 N

1 Normally open 3.1 N

Actuating travel

Approx. $5.8 \,\text{mm} \pm 0.2 \,\text{mm}$

Mechanical lifetime

(with 1 switching element)

Pushbutton maintained action Pushbutton momentary action Selector switch maintained action 1.25 million cycles of operation

Selector switch momentary action

Emergency-stop switch

Keylock switch maintained action Keylock switch momentary action 1.5 million cycles of operation 3 million cycles of operation

2.5 million cycles of operation

50 000 cycles of operation 25 000 cycles of operation 50000 cycles of operation

Electrical characteristics

Standards

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

Rated Insulation Voltage Ui

500 VAC/600 VDC, as per DIN EN 60947-5-1

Electrical life

50 000 cycles of operations

Thermal current Ith

10A

Switching voltage and switching current

as per EN IEC 60947-5-1

AC-15: 230 V, 7 A AC-15: 400 V, 5 A AC-15: 500 V, 4 A DC-13: 24 V, 10 A DC-13: 60 V, 5 A DC-13: 110 V, 2.5 A

Recommended minimum operational data

Gold-silver contacts:

Voltage 24 VDC 110 VDC Current 5 mA

Hard silver contacts:

Voltage 24VDC 110VDC Current 50 mA 10_mA

Protection class

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

Ambient conditions

Storage temperature

-40°C...+85°C

Operating temperature

-40°C...+55°C

(other temperatures on request)

Protection degree

IP00

Shock resistance

(single impacts, semi-sinusoidal)

300 m/s² pulse width 11 ms, as per EN IEC 60068-2-27

Vibration resistance

(sinusoidal)

100 m/s² at 10 Hz... 500 Hz, amplitude 0.75 mm, as per

EN IEC 60068-2-6

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Approvals

Approbations

CB (IEC 60947-5-1, IEC60947-5-5))

CCC

CSA

DNV GL (previously Germanischer Lloyd)

EAC

NFF 16-102

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SEV (EN/IEC 60947-5-1, EN/IEC 60947-5-5)

Conformities

CF

2014/35/EU (LVD) 2011/65/EC (RoHS)

Snap-action switching element

Switching system

The double-break, snap-action switching element is equipped with one or two independent contact systems, acting as normally open or normally closed contact. The snap-action switching element is fitted with self-cleaning contacts.

Up to three switching elements can be snapped to each actuator.

Snap-action switching elements are not permissible for emergencystop pushbuttons!

Material

Material of contact

Hard silver, gold-silver, silver-palladium (for aggressive atmospheres)

Switch housing

Plastic

Mechanical characteristics

Terminals

Screw terminals

Plug-in terminals 6.3 x 0.8 mm

Max. wire cross-section 2 x 2.5 mm²

Max. wire cross-section of stranded cable 2 x 1.5 mm² For switches with plug-in terminals it is necessary to provide insulation sleeves and to maintain a spacing of 65 mm between rows (mounting cut-outs)

Tightening torque

Screws at the plastic mounting flange max. 0.4-0.5 Nm Screws at the metal mounting flange max. 0.25-0.3 Nm Screws at switching element max. 0.50 Nm

Actuating force

1 Normally closed 1.9 N

1 Normally open 2 N

Actuating travel

Approx. $5.8 \, \text{mm} \pm 0.2 \, \text{mm}$

Mechanical lifetime

(with 1 switching element)

Pushbutton maintained action Pushbutton momentary action Selector switch maintained action 1.25 million cycles of operation Selector switch momentary action Keylock switch maintained action Keylock switch momentary action

1.5 million cycles of operation 3 million cycles of operation

2.5 million cycles of operation 25 000 cycles of operation 50 000 cycles of operation

Electrical characteristics

Standards

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

Rated Insulation Voltage U

500 VAC/600 VDC, as per DIN EN 60947-5-1

Electrical life

50 000 cycles of operations

Thermal current $I_{\rm th}$

10 A

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Switching voltage and switching current

as per EN IEC 60947-5-1 (cosφ 0.3)

AC-15: 230 V, 6 A AC-15: 400 V, 4 A AC-15: 500 V, 2,5 A DC-13: 24 V, 10 A DC-13: 60 V, 3 A DC-13: 110 V, 1 A

Recommended minimum operational data

Gold-silver contacts:

Voltage 5 VDC 24 VDC 110 VDC Current 15 mA 5 mA 2 mA

Hard silver contacts:

Voltage 24 VDC 110 VDC Current 50 mA 10 mA

Protection class

Indicators and switches, fit for mounting into devices with protec-

tion class II

Ambient conditions

Storage temperature

-40 °C ... +85 °C

Operating temperature

-40°C...+55°C

(other temperatures on request)

Protection degree

IP00

Shock resistance

(single impacts, semi-sinusoidal)

300 m/s² pulse width 11 ms, as per DIN EN 60068-2-27

Vibration resistance

(sinusoidal)

 $100\,\text{m}3/\text{s}^2$ at $10\,\text{Hz}\dots500\,\text{Hz}$, amplitude $0.75\,\text{mm}$, as per

DIN EN 60068-2-6

Approvals

Approbations

CB (IEC 60947-5-1)

CCC

CSA

DNV GL (previously Germanischer Lloyd)

EAC

NFF 16-102

UL

SEV (EN/IEC 60947-5-1

Conformities

CE

2014/35/EU (LVD)

2011/65/EC (RoHS)

Slow-make switching element PIT

Switching system

The double-break, slow-make switching element is equipped with one or two independent contact systems, acting as 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 three switching elements can be snapped to each actuator.

For the emergency-stop pushbutton use the slow-make switching element (max. 2).

Material

Material of contact

Hard silver and gold-silver

Switch housing

Plastic

Mechanical characteristics

Terminals

PIT push-in terminal

Skinning 8 mm

Wire cross-section:

Wire 0.2 to 1.0 mm²

Stranded wire 0.2 to 1.0 mm² without core and sleeve Stranded wire 0.2 to 0.75 mm² with core and sleeve

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Tightening torque

Screws at the mounting flange max. 0.4-0.5 Nm

Actuating force

1 Normally closed 2 N

1 Normally open 3.1 N

Actuating travel

approx. $5.8 \, \text{mm} \pm 0.2 \, \text{mm}$

Mechanical lifetime

(with 1 switching element)

Pushbutton maintained action Pushbutton momentary action Selector switch maintained action 1.25 million cycles of operation

Selector switch momentary action

Emergency-stop switch

Keylock switch maintained action Keylock switch momentary action

1.5 million cycles of operation 3 million cycles of operation 2.5 million cycles of operation

> 50 000 cycles of operation 25 000 cycles of operation

50000 cycles of operation

Electrical characteristics

Standards

The switches comply with DIN EN 60947-1/EN IEC 60947-5-1

Rated Insulation Voltage Ui

500 VAC/600 VDC, as per DIN EN 60947-5-1

Electrical life

50000 cycles of operations

Thermal current I_{th}

6A

Switching voltage and switching current

as per DIN EN 60947-5-1

AC-15: 230 V, 6A DC-13: 24 V, 10 A DC-13: 60 V, 3 A DC-13: 110 V, 1 A Recommended minimum operational data

Gold-silver contacts: Voltage 24 VDC Current 5 mA

Hard silver contacts: Voltage 24 VDC Current 50 mA

Protection class

Indicators and switches, fit for mounting into devices with

protection class II

Ambient conditions

Storage temperature

-40°C...+85°C

Operating temperature

 $-40\,^{\circ}\text{C} \dots +55\,^{\circ}\text{C}$

(other temperatures on request)

Protection degree

IP20

Shock resistance

(single impacts, semi-sinusoidal)

300 m/s² pulse width 11 ms, as per DIN EN 60068-2-27

Approvals

Approbations

CB (IEC 60947-5-1, IEC 60947-5-5)

CCC **CSA**

DNV GL (previously Germanischer Lloyd)

EAC NFF 16-102

SEV (EN 60947-5-1, EN 60947-5-5)

Conformities

CE

2014/35/EU (LVD) 2011/65/EC (RoHS)

Snap-action switching element PIT

Switching system

The double-break, snap-action switching element is equipped with one or two independent contact systems, acting as normally open or normally closed contact. The snap-action switching element is fitted with self-cleaning contacts.

Up to three switching elements can be snapped to each actuator.

Snap-action switching elements are not permissible for emergency stop pushbuttons!

Material

Material of contact

Hard silver and gold-silver

Switch housing

Plastic

Mechanical characteristics

PIT push-in terminal Skinning 8 mm Wire cross-section:

Wire 0.2 to 1.0 mm²

Stranded wire 0.2 to 1.0 mm² without core and sleeve Stranded wire 0.2 to 0.75 mm² with core and sleeve

Tightening torque

Screws at the mounting flange max. 0.4-0.5 Nm

Actuating force

1 Normally closed 1.9 N 1 Normally open 2 N

Actuating travel

Approx. $5.8 \, \text{mm} \pm 0.2 \, \text{mm}$

Mechanical lifetime

(with 1 switching element) Pushbutton maintained action

Pushbutton momentary action Selector switch maintained action 1.25 million cycles of operation Selector switch momentary action Keylock switch maintained action Keylock switch momentary action

1.5 million cycles of operation 3 million cycles of operation

2.5 million cycles of operation 25000 cycles of operation

Electrical characteristics

The switches comply with DIN EN 60947-1/DIN EN 60947-5-1

Rated Insulation Voltage Ui

500 VAC/600 VDC, as per DIN EN 60947-5-1

Flectrical life

50000 cycles of operations

Thermal current Ith

6A

Switching voltage and switching current

as per DIN EN 60947-5-1 AC-15: 230 V, 6 A DC-13: 24 V, 6 A

DC-13: 60 V. 3 A DC-13: 110 V, 1 A

Recommended minimum operational data

Gold-silver contacts: Voltage 24 VDC Current 5 mA

Hard silver contacts: Voltage 24 VDC Current 50 mA

Protection class

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

Ambient conditions

Storage temperature

-40°C...+85°C

Operating temperature

-40°C...+55°C

(other temperatures on request)

Protection degree

IP20

Shock resistance

(single impacts, semi-sinusoidal)

50 000 cycles of operation 300 m/s² pulse width 11 ms, as per DIN EN 60068-2-27

Vibration resistance

(sinusoidal)

100 m/s² at 10 Hz... 500 Hz, as per DIN EN 60068-2-6 and

EN 61373 Increased broad band noise, class 1B

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Approvals

Approbations

CB (IEC 60947-5-1)

CSA

DNV GL (previously Germanischer Lloyd)

EAC

NFF 16-102

UL

SEV (EN/IEC 60947-5-1)

Conformities

CE

2014/35/EU (LVD) 2011/65/EC (RoHS)

Lamp block

Material

Housing

Plastic

Mechanical characteristics

Terminals

Screw terminals

Plug-in terminals 6.3 x 0.8 mm

Max. wire cross-section 2 x 2.5 mm²

Max. wire cross-section of stranded cable 2 x $1.5\,\text{mm}^2$

For switches with plug-in terminals it is necessary to provide insulation sleeves and to maintain a spacing of 65 mm between rows (mounting cut-outs)

Tightening torque

Screws at lamp block max. 0.5 Nm

Electrical characteristics

Standards

The switches comply with DIN EN 60947-1/DIN EN 60947-5-1

Illumination

Voltage 250 V max.

Power 2.6W max.

BA9s standard adaptable.

Ambient conditions

Storage temperature

-40°C...+85°C

Operating temperature

-40°C...+55°C

(other temperatures on request)

Protection degree

IP00

Shock resistance

(single impacts, semi-sinusoidal)

 $300\,\text{m/s}^2$ pulse width 11 ms, as per DIN EN 60068-2-27

Vibration resistance

(sinusoidal)

 $100\,m/s^2$ at $10\,Hz\dots500\,Hz,$ as per DIN EN 60068-2-6 and EN 61373 Increased broad band noise, class 1B

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Operating voltages

24 VDC (-30 % / +25 %) 110 VDC (-30 % / +25 %)

Lamp block PIT Material **Ambient conditions** Housing Storage temperature Plastic -40°C...+85°C Operating temperature Mechanical characteristics -40°C...+55°C (other temperatures on request) Terminals PIT push-in terminal Protection degree Skinning 8 mm IP20 Wire cross-section: Wire 0.2 to 1.0 mm² Shock resistance Stranded wire 0.2 to 1.0 mm² without core and sleeve (single impacts, semi-sinusoidal) Stranded wire 0.2 to 0.75 mm² with core and sleeve 300 m/s² pulse width 11 ms, as per DIN EN 60068-2-27 Vibration resistance **Electrical characteristics** (sinusoidal) 100 m/s² at 10 Hz... 500 Hz, as per DIN EN 60068-2-6 and EN 61373 Increased broad band noise, class 1B Standards The switches comply with EN IEC 60947-1/EN IEC 60947-5-1 Illumination Voltage 250 V max. Power 2.6W max. BA9s standard adaptable. Dual lamp block Material Operating current Typ. 8 mA Housing Plastic Ambient conditions Mechanical characteristics Storage temperature -40 °C ... +85 °C **Terminals** PIT push-in-terminal Operating temperature Strip length L = 8 mm -40 °C ... +60 °C (other temperatures on request) Wire cross section Max. wire cross section 0.2 to 1.0 mm² Degree of protection Max. wire cross section of stranded cable 0.2 bto 0.75 mm² with IP20 bootlace ferrules Resistance to shock 500 m/s², pulse duration 11 ms, according to EN IEC 60068-2-27 **Electrical characteristics** (semi-sinusoidal) Lighting Broadband noise Illuminant = 2 SMD-LEDs white 5.72 m/s² per axis, 5 h (duration), class 1B according to

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DIN EN 61373

Approvals

Approbations

UL-94 V0 EN 45545

Buzzer

Buzzer

System

Piezo disc

Material

Buzzer case

Plastic

Front cap

Flush design

Aluminium black anodised Aluminium natural anodised

Raised design

Plastic

Metal = nickel-plated brass (sea-water proof)

Mechanical characteristics

Terminals

Plug-in terminal 2.8 x 0.5 mm

Tightening torque

For fixing nut max. 0.25 Nm

Acoustic characteristics

Frequency (tone)

Approx. 2.8 kHz continuous tone only

Sound pressure

95 db (A) ± 8 dB at a distance of 0.1 m

Electrical characteristics

Operation Voltage/Current

 $\begin{array}{ll} \mbox{Operation Voltage} & 24\,\mbox{VDC}\,\pm 10\,\% \\ \mbox{Operation Current} & \leq 25\,\mbox{mA} \end{array}$

Ambient conditions

Storage temperature

-40°C...+85°C

Operating temperature

-40°C...+55°C

(other temperatures on request)

Protection degree

As per DIN EN 60529, frontside IP40, devices flush design IP65, devices raised design

Approvals

Conformities

CE

2014/35/EU (LVD) 2011/65/EC (RoHS) 01

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1 to 16 max. normally open contacts

(contact positioning according circuit drawing)

	U4 lechnical data	
	Actuator	
	Material	Keylock switch
	Front ring Polyamide, Aluminium or Stainless steel	The standard lock number is 251, the last digit of the device Part No. = 0 (example: 704.335.0). Additional lock numbers are available: 252 last digit = 1; 253 last digit = 2; 254 last digit = 3
04	Mounting flange Plastic, metal	255 last digit = 1, 255 last digit = 2, 254 last digit = 3 255 last digit = 4, 256 last digit = 5; 257 last digit = 6 258 last digit = 7; 259 last digit = 8; 260 last digit = 9
	Actuator housing Plastic	Electrical characteristics
	Mechanical characteristics	Standards The switches comply with the "Rules for low-voltage switching devices" EN IEC 60947-5-1
	Actuating force Mounting style square flush 6.2 N Other mounting styles 8 N	Ambient conditions
	Actuating travel Approx. 5.8 mm ±0.2 mm	Storage temperature $-40^{\circ}\text{C}\ldots + 85^{\circ}\text{C}$
	Mechanical lifetime (with 1 switching element) Pushbutton ≤ 3 million cycles of operation	Operating temperature -40 °C +55 °C (other temperatures on request)
	Selector switch ≤ 2.5 million cycles of operationStop switch ≤ 50000 cycles of operationFool proofed E-stop ≥ 50000 cycles of operation	Protection degree As per EN IEC 60529
	Keylock switch ≤ 50 000 cycles of operation Key insert switches ≤ 250 000 cycles of operation	IP65 front side (IP65 and IP67 Key insert switch)
	Kraus Naimer rotary selector switching element	
	Mechanical characteristics	Switching angle Basic position of switching position "A" is 9 o'clock
	Terminals Screw terminals Terminal lead material copper wires only	Maintained action Switching angle 12 max. 30°
	Max. permissible wire gage: Single-core or stranded wire 2 x 1.5 mm² (2 x AWG 14) Flexible wire 2 x 1.5 mm² (2 x AWG 16)	8 max. 45° 6 max. 60° 4 max. 90°
	Tightening torque	Momentary action with release 24°
	For fixing nut max. 0.25 Nm	(provide at the beginning or at the end)
	Number of stages 1 to 8 positions max.	Standard type of Kraus & Naimer CG4 Hard Silver contacts with 1 µm Gold layer CG4-1 Hard Silver contacts with 35 µm Gold layer
	Number of contacts	

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Electrical characteristics AC-Direct-on-line starting, reversing, plugging and inching 3 phase, 3 pole 220 V-240 V 0.37 kW Minimum Voltage 20 V 380V-440V 0.55kW 1 phase, 2 pole 110V-120V 0.15kW Rated Impulse Withstand Voltage Uimp 220V-240V 0.25kW 4kV 380V-440V 0.50kW AC-23A Frequent switching of motors or other high inductive loads **Short Circuit Protection** Max. fuse size (gL-characteristic) 10 A Rated short-time withstand current (1s-current) 90 A 220V-240V 1.80kW 3 phase, 3 pole 380V-440V 3.00kW 1 phase, 2 pole 110V-120V 0.37kW Electrical characteristics for AC 220V-240V 0.75kW 380V-440V 1.10kW Standards The devices comply with: DIN EN 60947-3, VDE 0660 part 107 Overvoltage category III, valid for lines with grounded common neutral termination Rated Operational Voltage U_e 440 V Degree of pollution 3, valid for lines with grounded common neutral termination Rated Insulation Voltage Ui 440 V Electrical characteristics for AC (UL/Canada) Rated Thermal Current Iu/ Ith 10 A Rated operational voltage 300 V Rated Operational Current I, AC-15 Switching of control devices, contactors, valves etc. Rated Insulation Voltage Ui 300 V 110V-120V 2.5A 220V-240V 2.5A **Bated Thermal Current** 380V-440V 1.5A 10 A No load operation Ampere Rating 10 A Resisitve or low inductive loads, for switching of power > 1 kW, 10 A AC-21A Switching of resistive loads, including moderate overloads For switching of power > 1 kW Standard motor load, DOL Rating (similar AC-3) 10A 3 phase, 3 pole 110V-120V 0.75HP AC-22A Switching of combined resistive or low inductive loads 220V-240V 1.00HP including moderate overloads 110V-120V 0.33HP 1 phase, 2 pole 220V-240V 10A 220V-240V 0.75HP 277V-277V 0.75HP Rated Utilization Category AC-2 Slip ring motor starting, reversing and plugging, star-delta Pilot Duty, Heavy 300 VAC starting 3 phase, 3 pole

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220V-240V 2.5kW 380V-440V 4.5kW

3 phase, 3 pole

1 phase, 2 pole

AC-3 Direct-on-line starting, star-delta starting

220V-240V 2.50kW

380 V-440 V 2.20 kW

110V-120V 0.30kW 220V-240V 0.55kW 380V-440V 0.75kW

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Standard type of Santon

F1V Hard Silver contacts Gold plated

• lecillical data		
Electrical characteristics for DC		Number of series contact(s) Switch
		1 2 3 4 5 6 8 capacity
Switching voltage and switching current DC		24V 48V 70V 95V 120V 145V 190V 6.0A
Resistive loads $T \le 1 \text{ ms}$		30V 60V 90V 120V 150V 180V 240V 3.0A
		48V 95V 140V 190V 240V 290V 350V 1.0A
Number of series contact(s)	Switch	60V 120V 180V 240V 300V 360V 450V 0.7A
1 2 3 4 5 6 8	capacity	110V 220V 330V 440V 550V 660V 0.3A
24V 48V 70V 95V 120V 145V 190V	10.0A	
48V 95V 140V 190V 240V 290V 350V	6.0 A	
60V 120V 180V 240V 300V 360V 450V	2.5 A	Ambient conditions
110V 220V 330V 440V 550V 660V	0.7 A	
220V 440V 660V	0.3 A	Operating temperature
440V 660V	0.2 A	Ambient Temperatures of Stages
110 0 000 0	0.271	open at 100 % I _{II} / I _{th} 55 °C during 24h with peaks up to 60 °C
Inductive loads T = 50 ms		enclosed at 100 % I _{the} 35 °C during 24h with peaks up to 40 °C
maddive loads 1 = come		Thorosod at 100 % 1the CC C during 2-11 With poaks up to 40 C
Santon rotary selector switching element		
Mechanical characteristics		Electrical Characteristics
Terminals		Minimum Voltage
Screw terminals		20V
Terminal lead material copper wires only		Rated Impulse Withstand Voltage U
Max. wire gauge:		4KV
Single or multi-wire 2 x 1.5 mm ² (2 x AWG 12)		
Fine wire 2 x 1.5 mm ² (2 x AWG 12)		Short Circuit Protection
Min. wire gauge:		Max. fuse size (gL-characteristics)
Single or multi-wire 2 x 0.5 mm ² (2 x AWG 20)		25 KA = > 16A
Fine wire 2 x 0.5 mm ² (2 x AWG 20)		10 KA = > 20A
\(\text{\text{\$\tint{\$\text{\$\tin\\$\$\$}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}		Rated short-time withstand current (1s-current) 250 A
Tightening torque		Traced offert affice Walletand Carrolle (10 Carrolle) 20071
For fixing nuts max. 0.5 Nm		
To many hate max. o.e min		Electrical Characteristics for AC
Number of stages		
1 to 8 stages max.		Standards The devices assembly with JEO COOM, JEO COOM DIN EN CLOSE
		The devices comply with: IEC 60947, IEC 60204, DIN EN 61058,
Number of contacts		UL508, C22.2 No.14
1 to 16 closing contacts		
(contacts positioning according to wiring diagram)		Rated Operational Voltage U _e 480 V
Switching angle		
Basic position of switching position "A" is 9 o'clock		Rated Insulation Voltage \mathbf{U}_{i} 480 \vee
Maintained action switching angle		
12 max. 30°		Rated Operational Current I _e
8 max. 45°		AC-15 switching of control devices, contractors, valves, etc.
6 max. 60°		220V – 230V 8 A
4 max. 90°		380 V – 440 V 6 A
Momentary action with release 30°		AC-20A no load operation 20A
		

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AC-21A Switching of resistive loads, including moderate overloads for switching of power $> 1\,\mathrm{kW}$

20 A

AC-23 Switching of motors or other high-inductive loads

3-phase, 3-pole	220 V – 230 V	5,00 kW
	380 V - 440 V	7,50 kW
1-phase, 2-pole	220 V - 230 V	2,50 kW
	380 V - 440 V	3,70 kW

Related Utilization Category

AC-3 Direct starting of squirrel-cage induction motors, switching off during the starting, star-delta starting

	•	_
3-phasig, 3-polig	220 V - 240 V	3,00 kW
	380 V - 440 V	5,00 kW
1-phasig, 2-polig	220 V - 230 V	2,20 kW
	380 V - 440 V	3.00 kW

Degree of pollution

3, valid for lines with grounded common neutral termination

Electrical characteristics for AC (UL/Canada)

Rated operational voltage

 $300\,\mathrm{V}$

Rated Insulation Voltage U,

300 V

Rated Thermal Current

15A

Ampere Rating

Resistive or low inductive loads, for switching of power

> 1 kW, 15 A

Ratings

Standard motor load, DOL Rating (similar to AC-3)

3-phase, 3-pole 220 V - 240 V 3.00 HP

Electrical characteristics for DC

Switching voltage and switching current DC

Resistive loads T ≤1 ms DC 21

Number of series contact(s)

1	2	5	8	Switch capacity
24 V	110 V	220 V	440 V	20.0 A
48 V				20.0 A
60 V				20.0 A
110 V				4.0 A
220 V				0.7 A
440 V				0.25 A

Inductive Loads T = 50 ms DC13

Number of series contact(s)

1	2	3	6	8	Switch capacity
24 V	48 V	60 V	110 V	220 V	20.0 A
48 V					16.0 A
60 V					12.0 A
110 V					1.0 A
220 V					0.4 A
440 V					0.15 A

Ambient conditions

Operating Temperature

Ambient Temperature of Stages

-25 °C ... +55 °C

Shock resistance

(single impact, semi-sinusoidal)

300 m/s² pulse width 11 ms, as per DIN EN 600068-2-27

Fire Protection norms

EN 45545

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Flasher

Material

Housing

Plastic, in accordance with UL 94 V0

Med Med

Mechanical characteristics

Electrical characteristics

Terminals

Screw terminal

Flasher frequency

1.5 Hz

Relative duty factor

Approx. 50 %

Ambient conditions

Operating temperature

0° ... +50 °C

Protection degree

Rear side IP30

Emergency call switch

Material

Lens Aluminium red

Front bezel

Aluminium natural

Mechanical characteristics

Terminals

Screw terminal

Max. wire cross-section 2 x 2.5 mm²

Max. wire cross-section of stranded cable 2 x 1.5 mm²

Mechanical lifetime

As per IEC 337-1/2

50 000 cycles of operation with 1 switching element

Switching element

Sap-action switching element

Ambient conditions

Storage temperature

-40°C ... +85°C

Operating temperature

-40 °C ... +55 °C

Protection degree

IP65 front side

Approvals

Approbations

SEV CSA

UL

ENEC

DNV GL (previously Germanischer Lloyd)

CB

Conformities

CE

EAO reserves the right to alter specifications without further notice.

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General notes

1. Engraving

In addition to the most commonly used world languages, in DIN1451-3 close spacing, other typefaces are available as Scandinavian, Slavic, Greek, Russian and Polish. Red, blue and black lenses are filled with white colour. Other colour lenses are filled in black. Standard height of letters is 3 mm. If the height is not specified, we will supply 3 mm engraved letters.

2. Hot stamping

For larger series it is worth considering markings by means of hot stamping. We will pleased to advise you. For letters and figures, typefaces with 2.5 mm, 3 mm and 4 mm are available.

3. Film inserts

Instead of using engraving the square lenses can be fitted with film inserts, as an alternative. Film thickness is 0.25 mm. Max. film size: for Indicator 24.5 x 24.5 mm, for illuminated pushbutton 21.5×21.5 mm.

Engraving marking cap for Indicator round, full face illumination

All dimensions in mm

Height of text cap	Height of letters h	Number of lines	Number of capital letters per line (guide value)	Number of lowercase letters per line (guide value)	Picture
Text cap (Ø 23)	3	3	8-9	9-10	B1
	4	3	5-7	6-8	B1
	8	3	_	_	B1
	3	2	8	9	B2
	4	2	5	6	B2
	8	2	2	2	B2
	3	1	9	10	В3
	4	1	7	8	В3
	8	1	3	3-4	В3

B1	B2	B3
23		
		=

The gap between two words results in each case a letter less.

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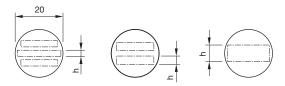
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Engraving marking plate for Indicator and illuminated Pushbutton round, front illumination

All dimensions in mm

Height of marking plate	Height of letters h	Number of lines	Number of capital letters per line (guide value)	Number of lowercase letters per line (guide value)	Picture
Marking plate (Ø 20)	3	3	6-8	7+9	B1
	4	3	5-6	6-7	B1
	8	3	_	_	B1
	3	2	6	7	B2
	4	2	5	6	B2
	8	2	1	2	B2
	3	1	8	9	В3
	4	1	6	7	В3
	8	1	3	3	B3

B1 B2 B3

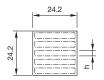


The gap between two words results in each case a letter less.

Engraving diffusor cap for Indicator square, full face illumination

All dimensions in mm

Height of letters h	Number of lines	Number of capital letters per line (guide value)	Number of lowercase letters per line (guide value)
2.5	6	12	13
3.0	5	10	11
4.0	4	7	8
5.0	3	6	7
6.0	3	5	5-6
8.0	2	4	4-5



The gap between two words results in each case a letter less.

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Engraving lens holder for Indicator and Illuminate Pushbutton square, front illumination

All dimensions in mm

Height of letters h	Number of lines	Number of capital letters per line (guide value)	Number of lowercase letters per line (guide value)
2.5	5	10	11
3.0	5	9	9-10
4.0	4	6	7
5.0	3	5	6
6.0	1	4	4-5
8.0	2	2-3	3



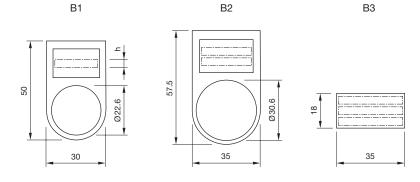
The gap between two words results in each case a letter less.

Important: Consider lens holder mounting orientation before specifying engraving charachters!

Engraving legend plates

All dimensions in mm

Dimension	Devices mounting style	Height of letters h	Number of lines	Number of capital letters per line (guide value)	Number of lowercase letters per line (guide value)	Picture
30 x 50	round, raised	3	2	10	11	B1
		4	1	7	8	B1
		8	1	3	4	B1
35 x 57.5	round, flush	3	2	10	11	B2
		4	1	7	8	B2
			8	1	3	4
18 x 35	square, flush	3	3	15	16	В3
		4	2	10	12	В3



The gap between two words results in each case a letter less.

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

Height of letters 6 mm

Part No. 704.609.912001	Part No. 704.609.912002	Part No. 704.609.912003	O Part No. 704.609.912004
EIN Part No. 704.609.912005	AUS Part No. 704.609.912006	AUF Part No. 704.609.912007	AB Part No. 704.609.912008
START Part No. 704.609.912009	STOP Part No. 704.609.912010	HAND Part No. 704.609.912011	AUTO Part No. 704.609.912012
ZU Part No. 704.609.912013	ON Part No. 704.609.912014	OFF Part No. 704.609.912015	ARRET Part No. 704.609.912016
MARCHE Part No. 704.609.912017	RESET Part No. 704.609.912018		

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

All marking plates with the printed article-numbers are available for flat lenses, marking cap only on request.

Part No. 704.609.910001 Direction of linear rectilinear motion (also for → ↓↑)	Part No. 704.609.910002 Linear motion in 2 directions (also for 1)	Part No. 704.609.910004 Limited linear motion (also for ← 1 1)	Part No. 704.609.910007 Direction of continuous rotation (right)
Part No. 704.609.9100071 Direction of continuous rotation (left)	Part No. 704.609.910008 Rotation in 2 directions	Part No. 704.609.910009 Direction of interrupted rotation (right)	Part No. 704.609.910010 Limited rotation (right)
Part No. 704.609.9100101 Limited rotation (left)	Part No. 704.609.910013 Direction of spindle rotation	Part No. 704.609.910026 Rapid traverse	Part No. 704.609.910028 Increase of value (speed, for instance)
Part No. 704.609.910029 Decrease of value (speed, for instance)	Part No. 704.609.910041 Electric motor	Part No. 704.609.910048 Pump (general symbol)	Part No. 704.609.9100631 Lock or tighten
Part No. 704.609.9100632 Lock or tighten	Part No. 704.609.9100641 Unlock, unclamp	Part No. 704.609.9100642 Unlock, unclamp	Part No. 704.609.910065 Brake on
Part No. 704.609.910066 Brake off	Part No. 704.609.910067 Automatic (or semi-automatic) cycle	Part No. 704.609.910068 Hand control	Part No. 704.609.910069 Start, on
Part No. 704.609.910070 Stop, off	Part No. 704.609.910071 Start and stop with same button	Part No. 704.609.910072 In action as long as button is operated	Part No. 704.609.910074 Engaging (mechanical start)
Part No. 704.609.910075 Disengaging (mechanical stop)	Part No. 704.609.910092 Danger (high voltage)!	Part No. 704.609.910093 Caution!	Part No. 704.609.910101 Coolant fluid
Part No. 704.609.910102 Machine lighting	Part No. 704.609.910108 Blast		

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Terminal Markings

We supply the switch elements with terminal marking labels inserted, the figures always being visible for the first element (immediately following the actuator). Therefore, when two switch elements are used, these inserts have to be turned for the second element. Then the numbers appear as described under III.

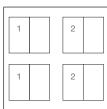
If more than two switch elements are used, this should be noted on your order, in order that we may insert and deliver the marking labels accordingly.

I. Consecutive numbering of switch systems

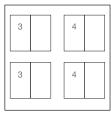
(2 per switch element)

First switch element

04

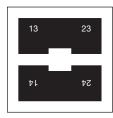




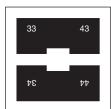


III. Example of the correct insertion of the labels for 2 switch elements with normally open contacts

First switch element



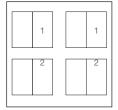
Second switch element

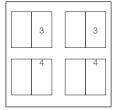


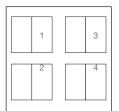
When more than 2 switch elements are used, the numbering is sequenced accordingly (5, 6 etc.).

II. Marking of normally closed contact, normally open contact and their combinations

Normally closed (1-2) Normally open (3-4) Normally closed/ open







Labels for normally closed and normally closed/normally open contacts should be inserted accordingly.

Application guidelines 04

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.

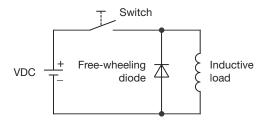
Fig. 1 shows an inductive load with a free-wheeling diode connected in parallel. This free-wheeling diode provides a path for the inductor current to flow when the current is interrupted by the switch. Without this free-wheeling diode, the voltage across the coil will be limited only by dielectric breakdown voltages of the circuit or parasitic elements of the coil. This voltage can be kilo-

volts in amplitude even when nominal circuit voltages are low (e.g. 12 VDC) see Fig. 2.

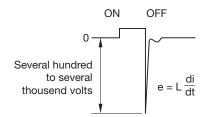
The free-wheeling diode should be chosen so that the reverse breakdown voltage is greater than the voltage driving the inductive load. The DC blocking voltage (VR) of the free-wheeling diode can be found in the datasheet of a diode. The forward current should be equal or greater than the maximum current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



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