

Devices flush mounting


Pushbutton actuator, flush mounting

non-illuminative



	Front protection	Switching action	Front ring	Lens	Ø 35 x 35 mm Typ-Nr.	Ø 35 mm Typ-Nr.	Mounting dimensions	Technical drawing	Circuit drawing	
Pushbutton actuator, flush mounting	IP 65	MA	Plastic black	Plastic black	704.239.000		12	22	3	0.051
				Plastic blue	704.239.600		12	22	3	0.051
				Plastic colourless	704.239.700		12	22	3	0.051
				Plastic green	704.239.500		12	22	3	0.051
				Plastic red	704.239.200		12	22	3	0.051
				Plastic yellow	704.239.400		12	22	3	0.051
			Plastic silver	Plastic black	704.240.008		12	22	4	0.051
				Plastic blue	704.240.608		12	22	3	0.051
				Plastic colourless	704.240.708		12	22	3	0.051
				Plastic green	704.240.508		12	22	3	0.051
				Plastic red	704.240.208		12	22	3	0.051
				Plastic yellow	704.240.408		12	22	3	0.051
		M	Plastic black	Plastic black	704.209.000		12	22	4	0.051
				Plastic blue	704.209.600		12	22	4	0.051
				Plastic colourless	704.209.700		12	22	4	0.051
				Plastic green	704.209.500		12	22	4	0.051
				Plastic red	704.209.200		12	22	4	0.051
				Plastic yellow	704.209.400		12	22	4	0.051
			Plastic silver	Plastic black	704.210.008		12	22	4	0.051
				Plastic blue	704.210.608		12	22	4	0.051
				Plastic colourless	704.210.708		12	22	4	0.051
				Plastic green	704.210.508		12	22	4	0.051
				Plastic red	704.210.208		12	22	4	0.051
				Plastic yellow	704.210.408		12	22	4	0.051
	MA	Aluminium natural	Aluminium black		704.041.018	7	22	3	0.051	
			Aluminium blue		704.041.618	7	22	3	0.051	
			Aluminium green		704.041.518	7	22	3	0.051	
			Aluminium natural		704.041.818	7	22	3	0.051	
			Aluminium red		704.041.218	7	22	3	0.051	
			Aluminium yellow		704.041.418	7	22	3	0.051	
			Plastic black		704.042.018	7	22	3	0.051	
			Plastic blue		704.042.618	7	22	3	0.051	
			Plastic colourless		704.042.718	7	22	3	0.051	
			Plastic green		704.042.518	7	22	3	0.051	
			Plastic red		704.042.218	7	22	3	0.051	
			Plastic yellow		704.042.418	7	22	3	0.051	

Devices flush mounting

	Front protection	Switching action	Front ring	Lens	35 x 35 mm Typ-Nr.	Ø 35 mm Typ-Nr.	Mounting dimensions	Technical drawing	Circuit drawing	
Pushbutton actuator, flush mounting	IP 65	M	Aluminium natural	Aluminium black		704.011.018	7	22	4	0.051
				Aluminium blue		704.011.618	7	22	4	0.051
				Aluminium green		704.011.518	7	22	4	0.051
				Aluminium natural		704.011.818	7	22	4	0.051
				Aluminium red		704.011.218	7	22	4	0.051
				Aluminium yellow		704.011.418	7	22	4	0.051
				Plastic black		704.012.018	7	22	4	0.051
				Plastic blue		704.012.618	7	22	4	0.051
				Plastic colourless		704.012.718	7	22	4	0.051
				Plastic green		704.012.518	7	22	4	0.051
				Plastic red		704.012.218	7	22	4	0.051
				Plastic yellow		704.012.418	7	22	4	0.051

Switching action: MA = Maintained action, M = Momentary action

Mounting dimensions from page 86, Technical drawing from page 90, Circuit drawing from page 109

Technical Data

Buzzer

Buzzer system

System
Piezo disc

Material

Alarm buzzer case
Polyamide

Front cap
Plastic Polyamide
Metal Nickel-plated brass (sea-water proof)

Mechanical characteristics

Terminals
Plug-in terminal 2.8 x 0.5 mm

Electrical characteristics

Frequency (tone)
approx. 2.8 kHz continuous tone only

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

Operation Voltage/Current
Operation Voltage 24 VDC ±10 %
Operation Current ≤25 mA

Environmental conditions

Storage temperature
-35 °C ... +85 °C

Operating temperature
-25 °C ... +55 °C

Protection degree
as per EN IEC 60529, frontside
IP 40, devices flush mounting
IP 65, devices raised mounting

Approvals

Declaration of conformity
CE
RoHS

Actuator

Material

Front ring
Polyamide, Aluminium or Stainless steel

Mounting flange
Polyethylene terephthalate

Actuator housing
Polycarbonate, Polyamide

Mechanical characteristics

Actuating force
Mounting style square flush 6.2 N
other Mounting styles 8 N

Actuating travel
5.8 mm ± 0.2 mm

Mechanical lifetime
(with 1 switching element)

Pushbutton	≤3 million	Cycles of operation
Selector switch	≤2.5 million	Cycles of operation
Stop switch	≤50 000	Cycles of operation
Fool proofed E-stop	≥6050	Cycles of operation
Keylock switch	≤50 000	Cycles of operation
Key insert switches	≤250 000	Cycles of operation

Electrical characteristics

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

Environmental conditions

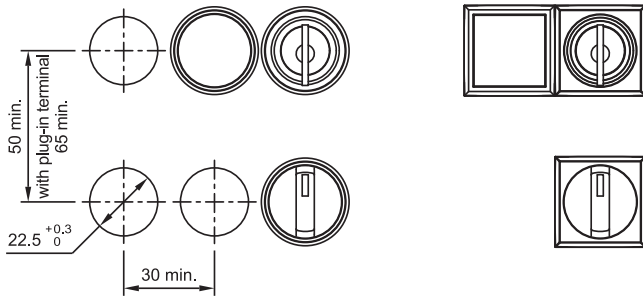
Storage temperature
-30 °C ... +85 °C

Operating temperature
-25 °C ... +55 °C (with LED)
-25 °C ... +40 °C (with filament lamp)
-40 °C ... +85 °C (Key insert switch)

Protection degree
as per EN IEC 60529
frontside IP 65 (IP 67 Key insert switch)

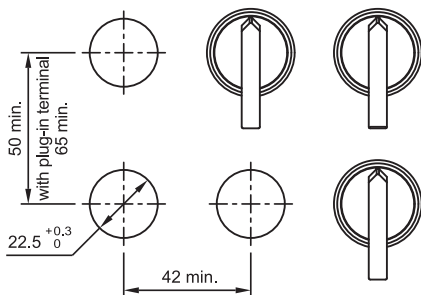
Drawings

5 Indicator full face illumination page 13 | Indicator front illumination page 14 | Flasher full face illumination page 15 | Flasher front illumination page 16 | Buzzer page 17 | Pushbutton actuator page 18 | Illuminated pushbutton actuator page 20 | Keylock switch actuator 2 positions page 25 | Keylock switch actuator 3 positions page 26 | Selector switch actuator 2 positions, short lever page 27 | Selector switch actuator 3 positions, short lever page 28

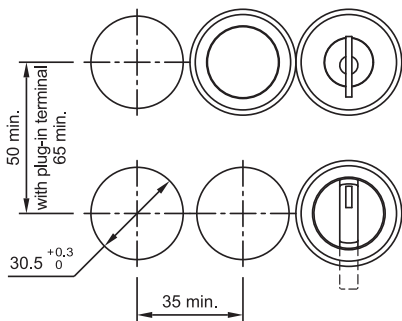


Hole spacing 31 mm min. by using blind plug 704.960.4

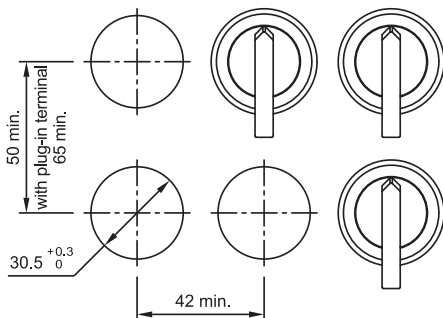
6 Selector switch actuator 2 positions, long lever page 27 | Selector switch actuator 3 positions, long lever long page 29



7 Indicator, flush mounting page 31 | Flasher, flush mounting page 32 | Buzzer, flush mounting page 32 | Pushbutton actuator, flush mounting page 33 | Illuminated pushbutton actuator, flush mounting page 35 | Keylock switch actuator 2 positions, flush mounting page 37 | Keylock switch actuator 3 positions, flush mounting page 38 | Selector switch actuator 2 positions, short lever, flush mounting page 39 | Selector switch actuator 2 positions, long lever, flush mounting page 40 | Selector switch actuator 3 positions, short lever, flush mounting page 41 | Keylock rotary switch actuator, flush mounting page 44 | Front bezel set for Indicator and Pushbutton, flush mounting page 66 | Front bezel set for Indicator and Pushbutton, flush mounting page 71

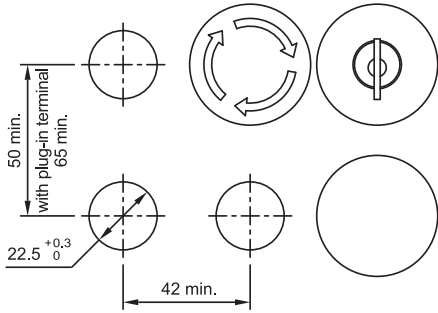


8 Selector switch actuator 3 positions, long lever, flush mounting page 42

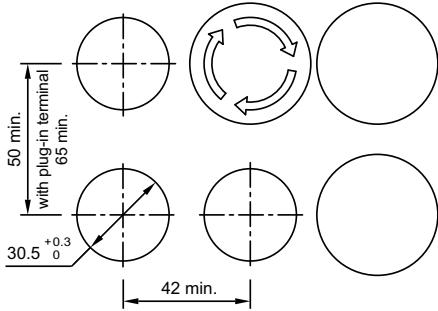


Drawings

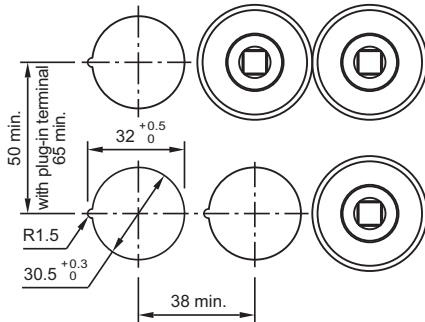
9 Stop pushbutton actuator page 22 | **Mushroom-head pushbutton actuator** page 23 | **Mushroom-head pushbutton actuator illuminated** page 24



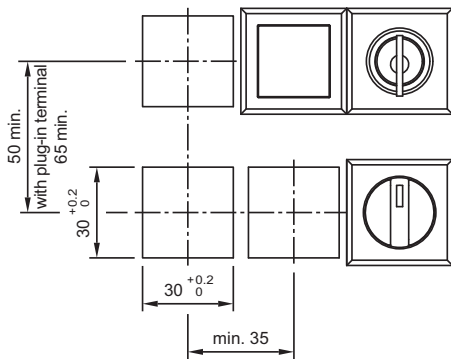
10 Stop pushbutton actuator, flush mounting page 36 | **Mushroom-head pushbutton actuator, flush mounting** page 36



11 Key insert switch actuator 2 positions, flush mounting page 44 | **Key insert switch actuator 3 positions, flush mounting** page 45

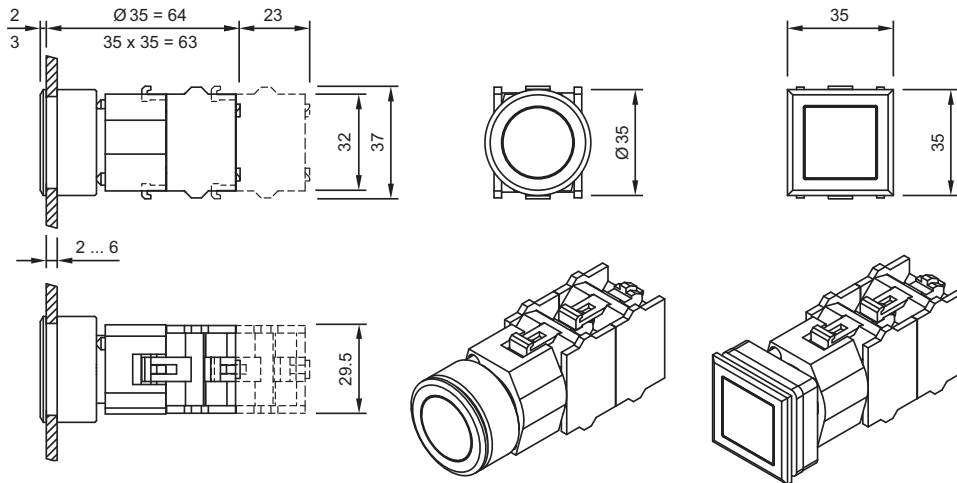


12 Indicator, flush mounting page 31 | **Flasher, flush mounting** page 32 | **Pushbutton actuator, flush mounting** page 33 | **Illuminated pushbutton actuator, flush mounting** page 35 | **Keylock switch actuator 2 positions, flush mounting** page 37 | **Keylock switch actuator 3 positions, flush mounting** page 38 | **Selector switch actuator 2 positions, short lever, flush mounting** page 39 | **Selector switch actuator 3 positions, short lever, flush mounting** page 41

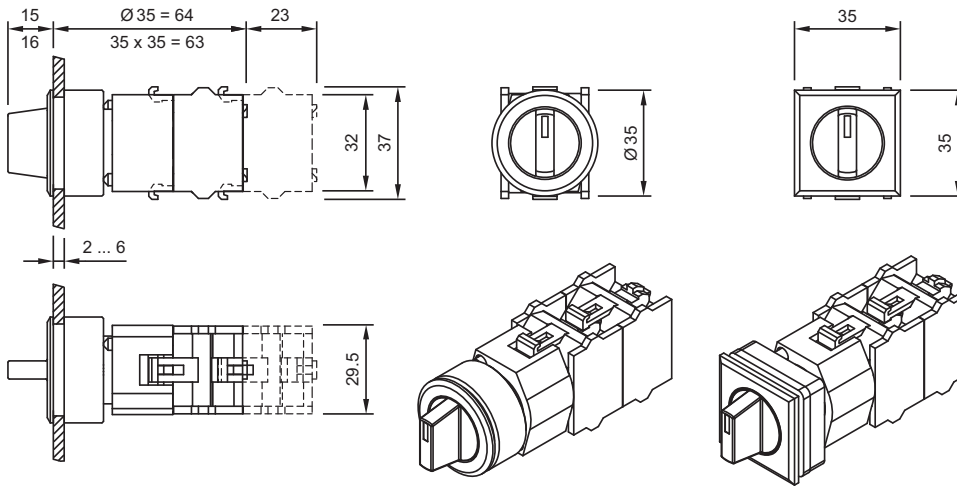


Drawings

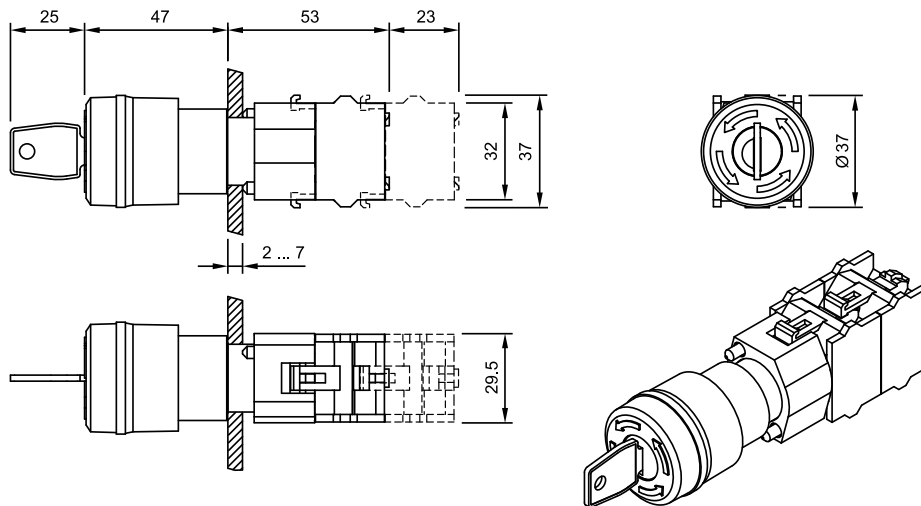
22 Pushbutton actuator, flush mounting page 33



23 Selector switch actuator 2 positions, short lever, flush mounting page 39 | Selector switch actuator 3 positions, short lever, flush mounting page 41 | Selector switch actuator 3 positions, long lever, flush mounting page 42

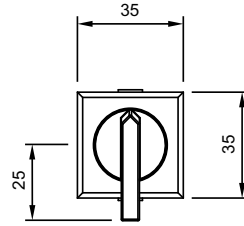
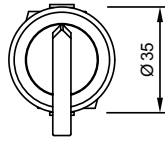
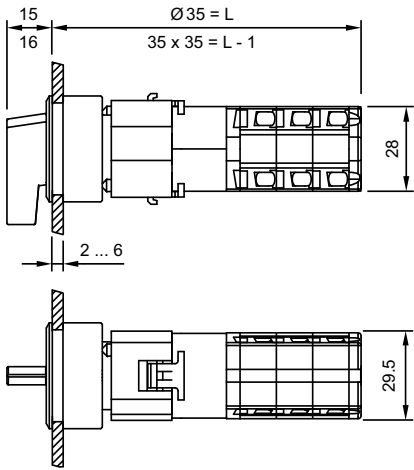


24 Emergency-stop pushbutton actuator, foolproof EN IEC 60947-5-5 page 21

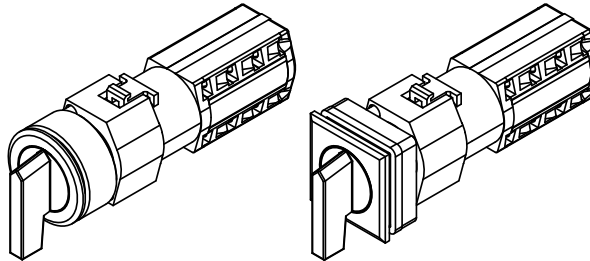


Drawings

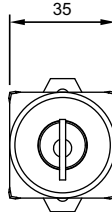
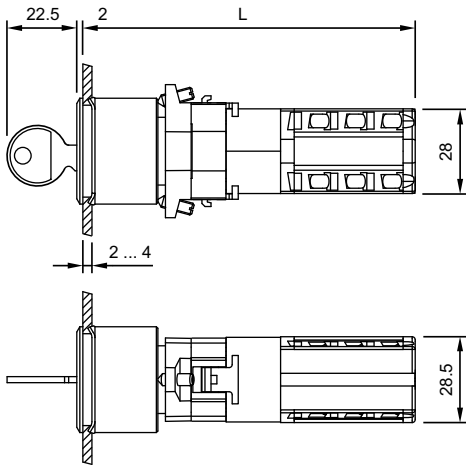
67 Rotary selector switch actuator, long lever, flush mounting page 43



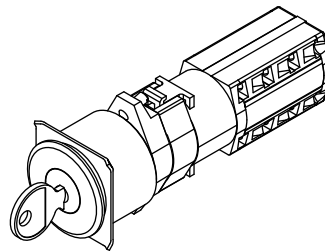
Stages	L
1	78.5
2	90.5
3	102.5
4	114.5
5	126.5
6	138.5
7	150.5
8	162.5



68 Keylock rotary switch actuator, flush mounting page 44

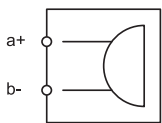


Stages	L
1	85.5
2	97.5
3	109.5
4	121.5
5	133.5
6	145.5
7	157.5
8	169.5

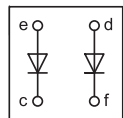


Circuit drawing

1 Buzzer page 17 | Buzzer, flush mounting page 32



2 Diode block page 56



3 Pushbutton actuator page 18 | Mushroom-head pushbutton actuator page 23 | Pushbutton actuator, flush mounting page 33 | Illuminated pushbutton actuator, flush mounting page 35 | Mushroom-head pushbutton actuator, flush mounting page 36



4 Pushbutton actuator page 18 | Mushroom-head pushbutton actuator page 23 | Pushbutton actuator, flush mounting page 33 | Illuminated pushbutton actuator, flush mounting page 35 | Mushroom-head pushbutton actuator, flush mounting page 36

