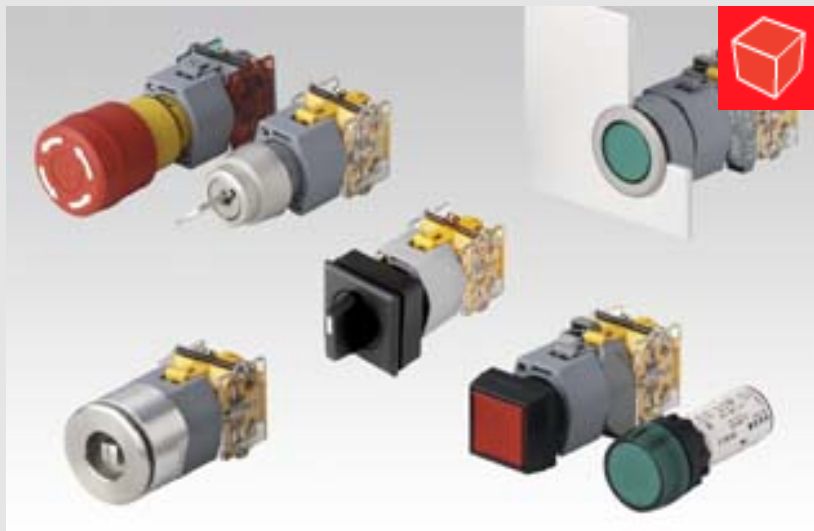


Series 04



Front size	29 mm dia. 30 x 30 mm 35 mm dia. 35 x 35 mm 37 mm dia. 38 mm dia. 40 mm dia.
Front protection	IP 40 IP 54 IP 65 IP 67
Mounting hole size	22.5 mm dia. 30 x 30 mm 30.5 mm dia. 33.5 mm dia.
Switching System	Slow-make switching element Snap-action switching element
Switch rating	10 A, VAC 500 VAC, 10 A
Illumination	Filament lamp LED


Devices raised mounting

Pushbutton actuator



Pushbutton actuator	Front protection	Switching action	Front ring	Lens	∅ 30 x 30 Typ-Nr.	∅ 29 mm Typ-Nr.	Mounting dimensions			Technical drawing	Circuit drawing	Ⓜ	
							5	4	3				
Pushbutton actuator	IP 65	MA	Plastic black	Plastic black	704.239.0	704.039.0	5	4	3	0.040			
				Plastic blue	704.239.6	704.039.6	5	4	3	0.040			
				Plastic colourless	704.239.7	704.039.7	5	4	3	0.040			
				Plastic green	704.239.5	704.039.5	5	4	3	0.040			
				Plastic red	704.239.2	704.039.2	5	4	3	0.040			
				Plastic yellow	704.239.4	704.039.4	5	4	3	0.040			
			Plastic light-grey	Plastic black	704.240.0	704.040.0	5	4	3	0.040			
				Plastic blue	704.240.6	704.040.6	5	4	3	0.040			
				Plastic colourless	704.240.7	704.040.7	5	4	3	0.040			
				Plastic green	704.240.5	704.040.5	5	4	3	0.040			
				Plastic red	704.240.2	704.040.2	5	4	3	0.040			
				Plastic yellow	704.240.4	704.040.4	5	4	3	0.040			
			M	Plastic black	Plastic black	704.209.0	704.009.0	5	4	4	0.040		
					Plastic blue	704.209.6	704.009.6	5	4	4	0.040		
					Plastic colourless	704.209.7	704.009.7	5	4	4	0.040		
					Plastic green	704.209.5	704.009.5	5	4	4	0.040		
					Plastic red	704.209.2	704.009.2	5	4	4	0.040		
					Plastic yellow	704.209.4	704.009.4	5	4	4	0.040		
		Plastic light-grey		Plastic black	704.210.0	704.010.0	5	4	4	0.040			
				Plastic blue	704.210.6	704.010.6	5	4	4	0.040			
				Plastic colourless	704.210.7	704.010.7	5	4	4	0.040			
				Plastic green	704.210.5	704.010.5	5	4	4	0.040			
				Plastic red	704.210.2	704.010.2	5	4	4	0.040			
				Plastic yellow	704.210.4	704.010.4	5	4	4	0.040			
		MA	Aluminium natural	Aluminium black		704.041.0	5	4	3	0.040			
				Aluminium blue		704.041.6	5	4	3	0.040			
				Aluminium green		704.041.5	5	4	3	0.040			
				Aluminium natural		704.041.8	5	4	3	0.040			
				Aluminium red		704.041.2	5	4	3	0.040			
				Aluminium yellow		704.041.4	5	4	3	0.040			
				Plastic black		704.042.0	5	4	3	0.040			
				Plastic blue		704.042.6	5	4	3	0.040			
				Plastic colourless		704.042.7	5	4	3	0.040			
				Plastic green		704.042.5	5	4	3	0.040			
				Plastic red		704.042.2	5	4	3	0.040			
				Plastic yellow		704.042.4	5	4	3	0.040			
			Aluminium natural with protective cover	Plastic black		704.043.0	5	4	3	0.040			
				Plastic blue		704.043.6	5	4	3	0.040			
				Plastic colourless		704.043.7	5	4	3	0.040			
				Plastic green		704.043.5	5	4	3	0.040			
				Plastic red		704.043.2	5	4	3	0.040			
				Plastic yellow		704.043.4	5	4	3	0.040			

Devices raised mounting

	Front protection	Switching action	Front ring	Lens	∅ 30 x 30 Typ-Nr.	∅ 29 mm Typ-Nr.	Mounting dimensions	Technical drawing	Circuit drawing	
Pushbutton actuator	IP 65	M	Aluminium natural	Aluminium black		704.011.0	5	4	4	0.040
				Aluminium blue		704.011.6	5	4	4	0.040
				Aluminium green		704.011.5	5	4	4	0.040
				Aluminium natural		704.011.8	5	4	4	0.040
				Aluminium red		704.011.2	5	4	4	0.040
				Aluminium yellow		704.011.4	5	4	4	0.040
				Plastic black		704.012.0	5	4	4	0.040
				Plastic blue		704.012.6	5	4	4	0.040
				Plastic colourless		704.012.7	5	4	4	0.040
				Plastic green		704.012.5	5	4	4	0.040
				Plastic red		704.012.2	5	4	4	0.040
				Plastic yellow		704.012.4	5	4	4	0.040
				Aluminium natural with protective cover	Plastic black		704.013.0	5	4	4
			Plastic blue			704.013.6	5	4	4	0.040
			Plastic colourless			704.013.7	5	4	4	0.040
			Plastic green			704.013.5	5	4	4	0.040
			Plastic red			704.013.2	5	4	4	0.040
			Plastic yellow			704.013.4	5	4	4	0.040

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

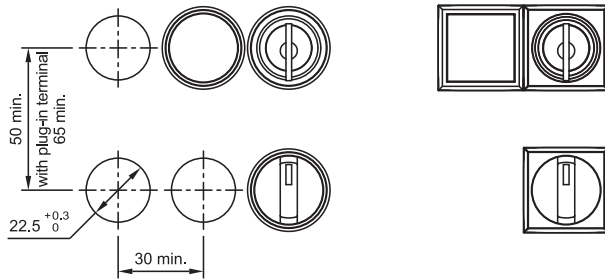
Storage temperature
-30 °C ... +85 °C

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)

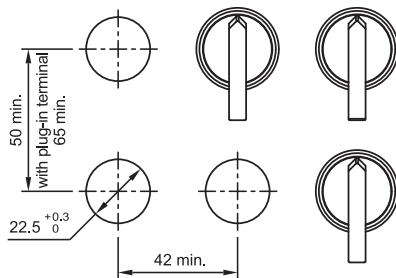
Drawings

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

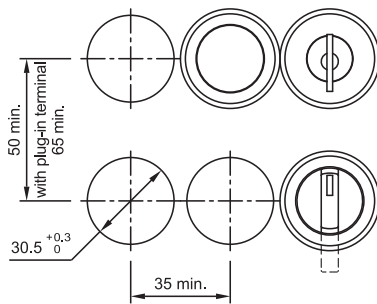


Hole spacing 31 mm min. by using blind plug 704.960.4

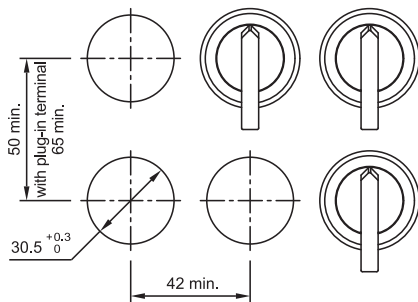
6 Selector switch actuator 2 positions, long lever page 27 | Selector switch actuator 3 positions, long lever long page 29



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

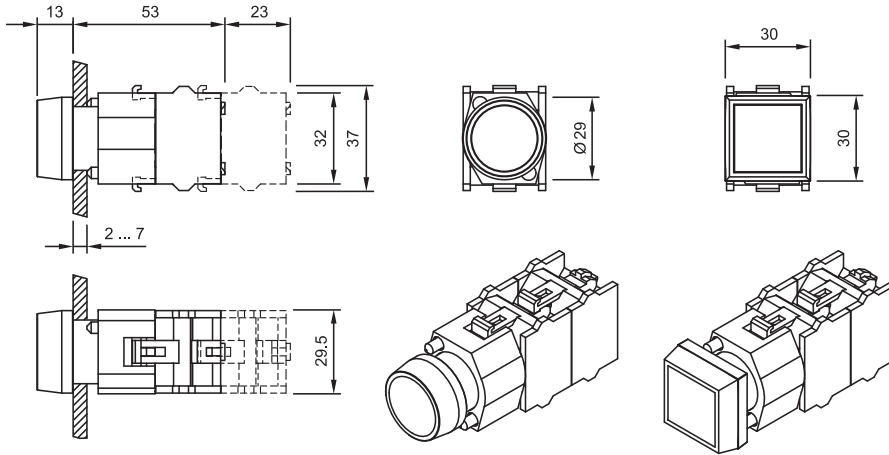


8 Selector switch actuator 3 positions, long lever, flush mounting page 42

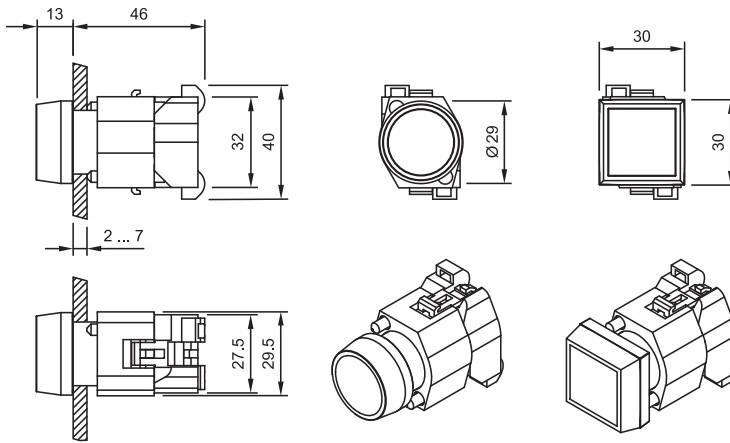


Drawings

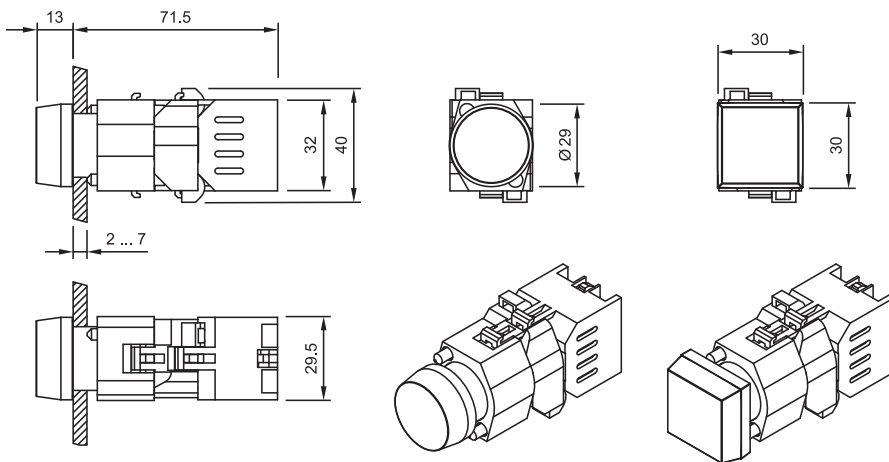
4 Pushbutton actuator page 18



5 Indicator front illumination page 14

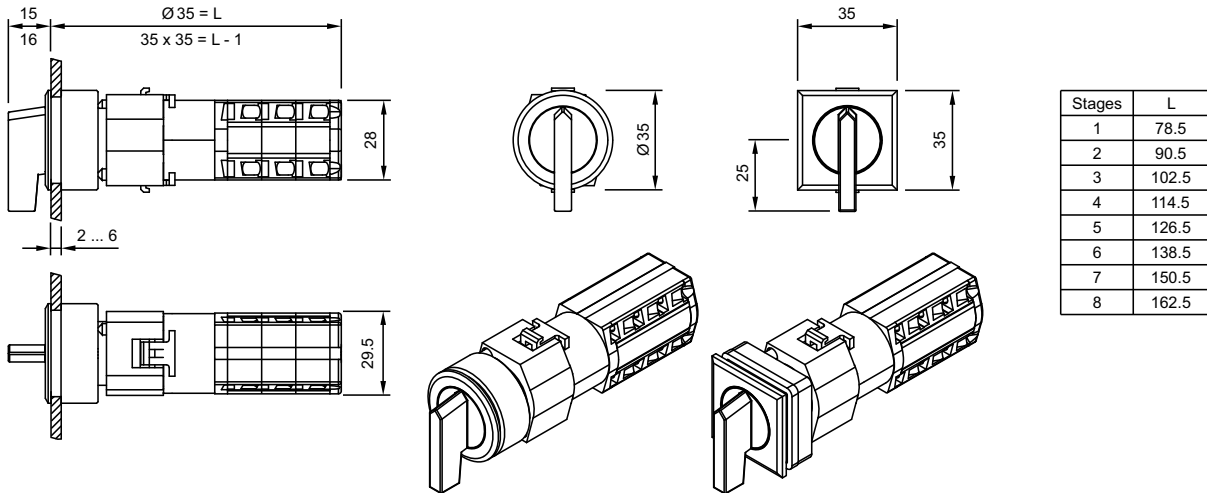


6 Flasher full face illumination page 15

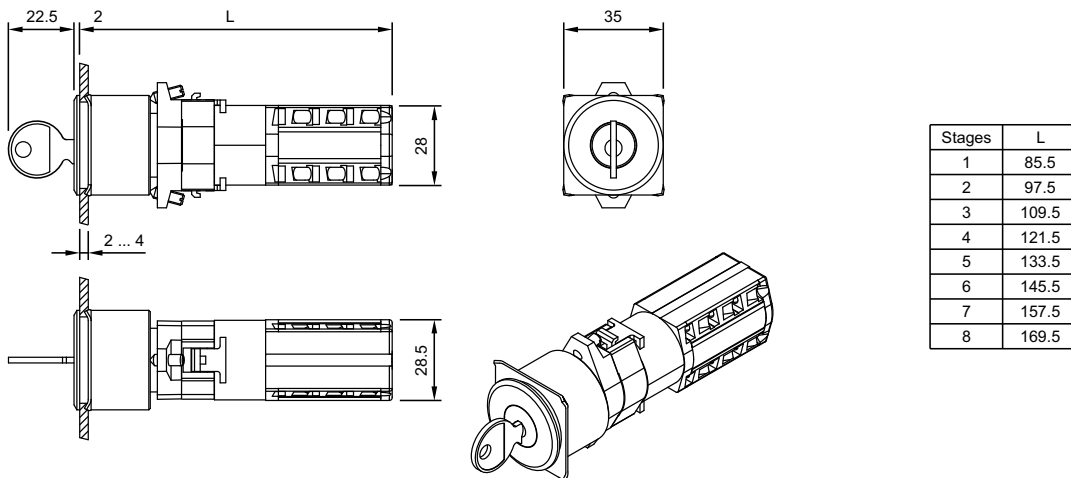


Drawings

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

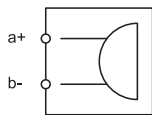


68 Keylock rotary switch actuator, flush mounting page 44

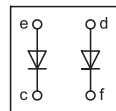


Circuit drawing

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

