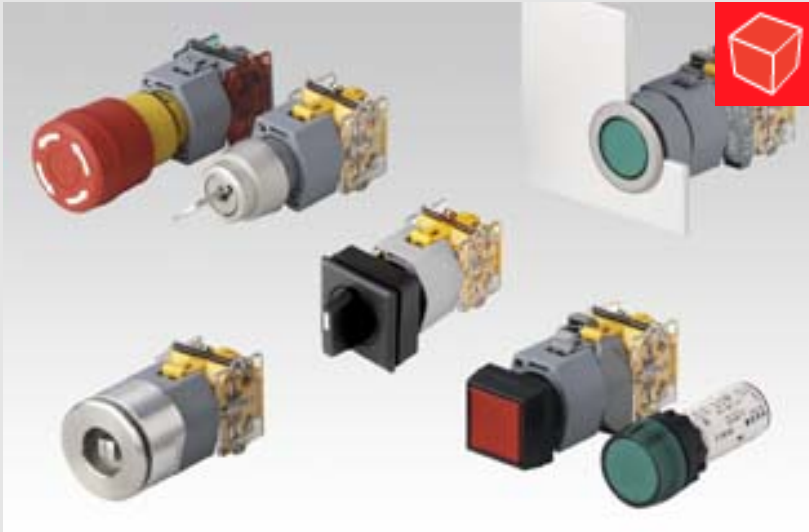


## Series 04



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	eao	
							5	4	3				
Pushbutton actuator	IP 65	MA	Plastic black	Plastic black	<b>704.239.0</b>	<b>704.039.0</b>	5	4	3	0.040			
				Plastic blue	<b>704.239.6</b>	<b>704.039.6</b>	5	4	3	0.040			
				Plastic colourless	<b>704.239.7</b>	<b>704.039.7</b>	5	4	3	0.040			
				Plastic green	<b>704.239.5</b>	<b>704.039.5</b>	5	4	3	0.040			
				Plastic red	<b>704.239.2</b>	<b>704.039.2</b>	5	4	3	0.040			
				Plastic yellow	<b>704.239.4</b>	<b>704.039.4</b>	5	4	3	0.040			
			Plastic light-grey	Plastic black	<b>704.240.0</b>	<b>704.040.0</b>	5	4	3	0.040			
				Plastic blue	<b>704.240.6</b>	<b>704.040.6</b>	5	4	3	0.040			
				Plastic colourless	<b>704.240.7</b>	<b>704.040.7</b>	5	4	3	0.040			
				Plastic green	<b>704.240.5</b>	<b>704.040.5</b>	5	4	3	0.040			
				Plastic red	<b>704.240.2</b>	<b>704.040.2</b>	5	4	3	0.040			
				Plastic yellow	<b>704.240.4</b>	<b>704.040.4</b>	5	4	3	0.040			
			M	Plastic black	Plastic black	<b>704.209.0</b>	<b>704.009.0</b>	5	4	4	0.040		
					Plastic blue	<b>704.209.6</b>	<b>704.009.6</b>	5	4	4	0.040		
					Plastic colourless	<b>704.209.7</b>	<b>704.009.7</b>	5	4	4	0.040		
					Plastic green	<b>704.209.5</b>	<b>704.009.5</b>	5	4	4	0.040		
					Plastic red	<b>704.209.2</b>	<b>704.009.2</b>	5	4	4	0.040		
					Plastic yellow	<b>704.209.4</b>	<b>704.009.4</b>	5	4	4	0.040		
		Plastic light-grey		Plastic black	<b>704.210.0</b>	<b>704.010.0</b>	5	4	4	0.040			
				Plastic blue	<b>704.210.6</b>	<b>704.010.6</b>	5	4	4	0.040			
				Plastic colourless	<b>704.210.7</b>	<b>704.010.7</b>	5	4	4	0.040			
				Plastic green	<b>704.210.5</b>	<b>704.010.5</b>	5	4	4	0.040			
				Plastic red	<b>704.210.2</b>	<b>704.010.2</b>	5	4	4	0.040			
				Plastic yellow	<b>704.210.4</b>	<b>704.010.4</b>	5	4	4	0.040			
		MA	Aluminium natural	Aluminium black		<b>704.041.0</b>	5	4	3	0.040			
				Aluminium blue		<b>704.041.6</b>	5	4	3	0.040			
				Aluminium green		<b>704.041.5</b>	5	4	3	0.040			
				Aluminium natural		<b>704.041.8</b>	5	4	3	0.040			
				Aluminium red		<b>704.041.2</b>	5	4	3	0.040			
				Aluminium yellow		<b>704.041.4</b>	5	4	3	0.040			
				Plastic black		<b>704.042.0</b>	5	4	3	0.040			
				Plastic blue		<b>704.042.6</b>	5	4	3	0.040			
				Plastic colourless		<b>704.042.7</b>	5	4	3	0.040			
				Plastic green		<b>704.042.5</b>	5	4	3	0.040			
				Plastic red		<b>704.042.2</b>	5	4	3	0.040			
				Plastic yellow		<b>704.042.4</b>	5	4	3	0.040			
			Aluminium natural with protective cover	Plastic black		<b>704.043.0</b>	5	4	3	0.040			
				Plastic blue		<b>704.043.6</b>	5	4	3	0.040			
				Plastic colourless		<b>704.043.7</b>	5	4	3	0.040			
				Plastic green		<b>704.043.5</b>	5	4	3	0.040			
				Plastic red		<b>704.043.2</b>	5	4	3	0.040			
				Plastic yellow		<b>704.043.4</b>	5	4	3	0.040			

# Devices raised mounting

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

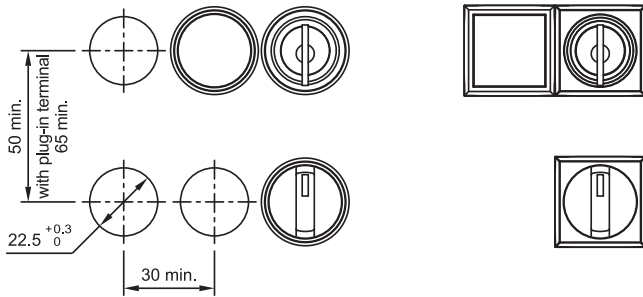
**Storage temperature**  
-30 °C ... +85 °C

**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)

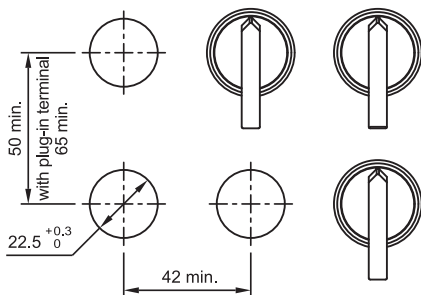
# Drawings

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

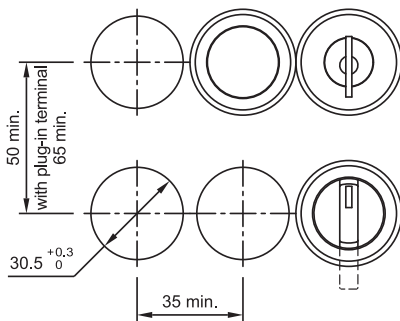


Hole spacing 31 mm min. by using blind plug 704.960.4

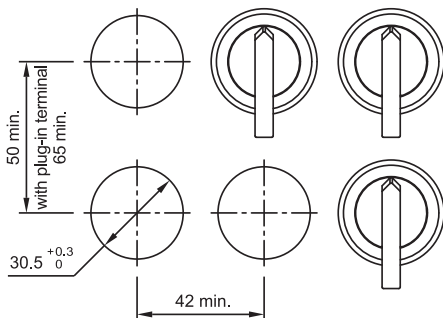
6 Selector switch actuator 2 positions, long lever page 27 | Selector switch actuator 3 positions, long lever long page 29



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

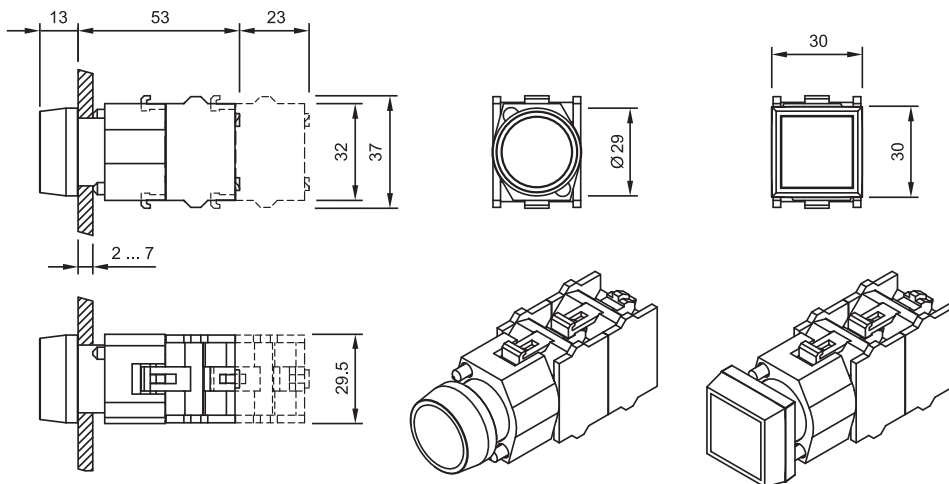


8 Selector switch actuator 3 positions, long lever, flush mounting page 42

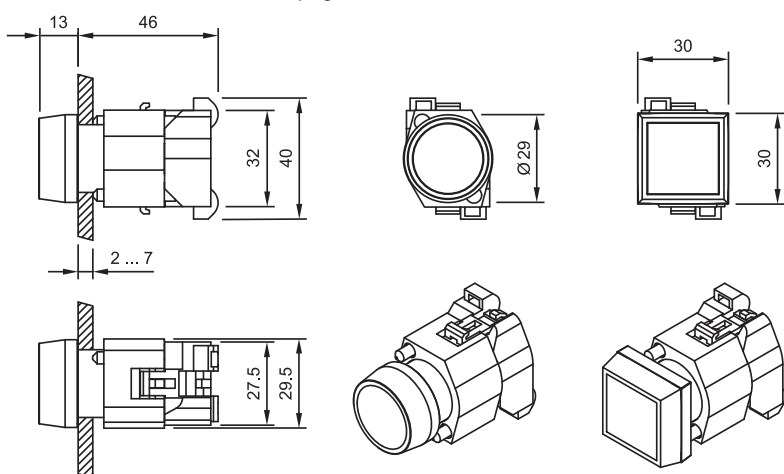


# Drawings

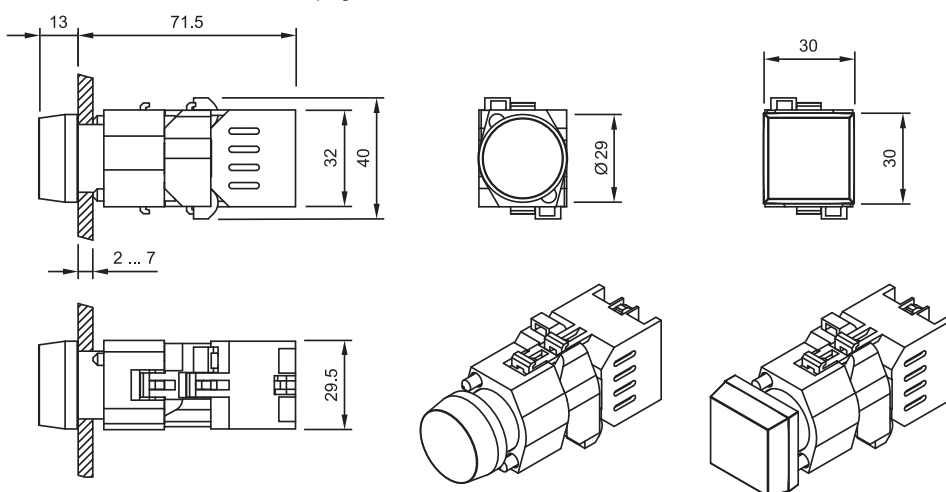
## 4 Pushbutton actuator page 18



## 5 Indicator front illumination page 14

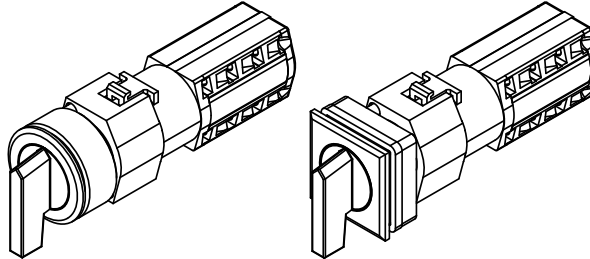
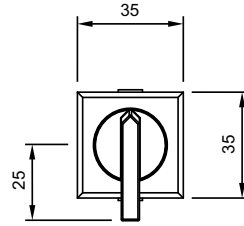
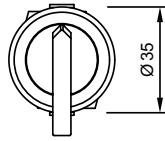
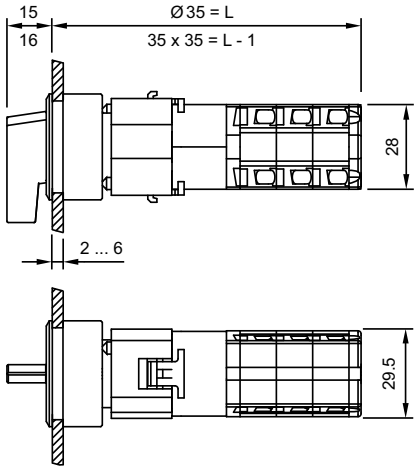


## 6 Flasher full face illumination page 15



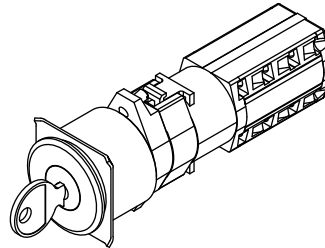
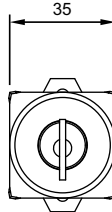
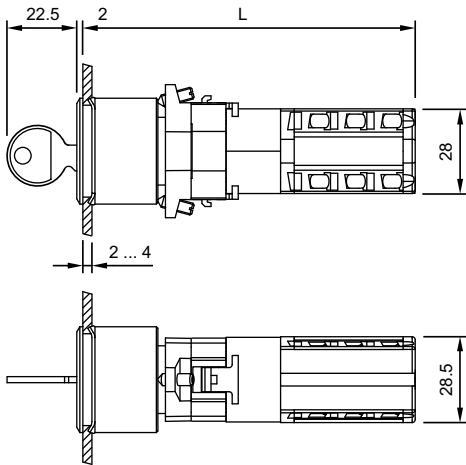
# Drawings

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



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

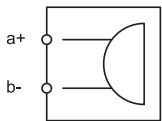
## 68 Keylock rotary switch actuator, flush mounting page 44



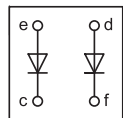
Stages	L
1	85.5
2	97.5
3	109.5
4	121.5
5	133.5
6	145.5
7	157.5
8	169.5

## 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

