Series 04 22.5 mm 30.5 mm IP65 10 A 500 VAC















Choose one component from each of the coloured sections to assemble a complete switch.

Product Profile

The Series 04 is a high quality switch range that includes pushbuttons, indicators, selectors, mushroom headed switches, key switches, and Emergency-stops.

Options include self cleaning, slow-make and snap-action switching elements.

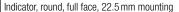
Technical data see page 25

- IP65 Protection
- Switch Rating:
 Maximum Voltage, 500 VAC

 Maximum Thermal Current, Ith = 10A
 230 VAC/6A, 24 VDC/10A
- Raised Mounting into 22.5 mm cut out
- Flush Mounting into 30.5 mm cut out
- Illumination using Ba9s Lamps or LED's
- All standard lenses are transparent with translucent diffuser
- Screw terminal or plug-in connections









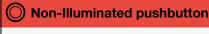
Indicator, flush mount, aluminium bezel, 30.5 mm mounting

Colour	Part No.	Colour	Part No.
Red	704.000.2	Red	704.006.218
O Yellow	704.000.4	O Yellow	704.006.418
Green	704.000.5	Green	704.006.518
Blue	704.000.6	Blue	704.006.618
O Clear	704.000.7	O Clear	704.006.718

For complete switch also order $\, \ddot{\mathbb{Q}} \,$

Indicator

Indicator, flush mount, silver plastic bezel, 30 x 30 mm mounting





Non-Illuminated raised pushbutton, grey plastic bezel, 22.5 mm mounting



Non-Illuminated raised pushbutton, aluminium bezel, 22.5 mm mounting

Colour	Part No.	Colour	Part No., Momentary	Part No., Maintained	Colour	Part No., Momentary	Part No., Maintained
Red	704.202.208	Red	704.010.2	704.040.2	Red	704.012.2	704.042.2
Yellow	704.202.408	Yellow	704.010.4	704.040.4	Yellow	704.012.4	704.042.4
Green	704.202.508	Green	704.010.5	704.040.5	Green	704.012.5	704.042.5
Blue	704.202.608	Blue	704.010.6	704.040.6	Blue	704.012.6	704.042.6
○ Clear	704.202.708	O Clear	704.010.7	704.040.7	O Clear	704.012.7	704.042.7
		Black	704.010.0	704.040.0	Black	704.012.0	704.042.0

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For other options or further information please contact your local sales office.









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Illuminated pushbutton



Illuminated raised pushbutton, aluminium bezel, 22.5 mm mounting



Illuminated flush mount pushbutton, aluminium bezel, 30.5 mm mounting



Illuminated flush mount pushbutton, silver plastic bezel, 30 x 30 mm mounting

Colour	Part No., Momentary	Part No., Maintained	Colour	Part No., Momentary	Part No., Maintained	Colour	Part No., Momentary	Part No., Maintained
Red	704.032.2	704.062.2	Red	704.032.218	704.062.218	Red	704.230.208	704.260.208
O Yellow	704.032.4	704.062.4	Yellow	704.032.418	704.062.418	O Yellow	704.230.408	704.260.408
Green	704.032.5	704.062.5	Green	704.032.518	704.062.518	Green	704.230.508	704.260.508
Blue	704.032.6	704.062.6	Blue	704.032.618	704.062.618	Blue	704.230.608	704.260.608
○ Clear	704.032.7	704.062.7	○ Clear	704.032.718	704.062.718	○ Clear	704.230.708	704.260.708

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Stop switch, twist release, mushroom head, 40 mm diameter, 22.5 mm mounting











Keylock switch 2 position, flush mount, 30.5 mm mounting



						Mon. 42	Mant. 30	1	•		MOIII. 42	Wallit. 30
Part.No	Front Ring	Markings	Graphic	Part No.	Function		Key out	Graphic	Part No.	Function		Key out
704.074.2	Gray plastic	Directional arrows	1	704.123.0	Momentary		Α	3	704.123.018	Momentary		Α
704.075.2	Anodized aluminium	Directional arrows	2	704.121.0	Maintained		С	4	704.121.018	Maintained		С
			2	704.122.0	Maintained		C + B	4	704.122.018	Maintained		C + B

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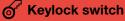
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For other options or further information please contact your local sales office.











Keylock switch 2 position, flush mount, $30 \, x \, 30 \, mm$ mounting







Keylock switch 3 position, raised, 22.5 mm mounting



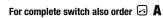
Keylock switch 3 position, flush mount,



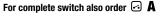


mounting			Mom. 42°	Maint. 90°				Mom./Maint. 42	° Maint. 90°	30.3111111	nounting		Mom./Maint. 42°	Maint. 90°
Graphic	Part No.	Function		Key out	Graphic	Part No.	Function		Key out	Graphic	Part No.	Function	Ke	ey out
5	704.343.008	Momentary		Α	7	704.115.0	Momentary		A	10	704.113.018	Maintained	C	+ A + B
6	704.341.008	Maintained		С	7	704.114.0	Maintained		A	9	704.115.018	Momentary	А	
6	704.342.008	Maintained		C + B	7	704.116.0	Maintained		C + B	9	704.114.018	Maintained	А	
					8	704.113.0	Maintained		C + A + B	9	704.116.018	Maintained	С	+ B

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Selector switch





Keylock switch



Keylock switch 3 position, flush mount, 30x30 mm mounting



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30 X 30 III	m mounting		Mom./Maint. 42°	Maint. 90°	22.511111111	nounting		Mom. 42°	Maint. 90°	30.5111111	nounting		Mom. 42°	Maint. 90°
Graphic	Part No.	Function	Ke	ey out	Graphic	Part No.	Function		Bezel	Graphic	Part No.	Function		Bezel
11	704.335.008	Momentary	Α		13	704.412.0	Momentary		Grey plastic	15	704.413.018	Momentary		Aluminium
11	704.334.008	Maintained	А		13	704.413.0	Momentary		Aluminium	16	704.411.018	Maintained		Aluminium
11	704.336.008	Maintained	С	+ B	14	704.410.0	Maintained		Grey plastic					
12	704.333.008	Maintained	С	+ A + B	14	704.411.0	Maintained		Aluminium					

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Selector switch



Selector switch short lever 2 position, flush mount, 30 x 30 mm mounting







Selector switch short lever 3 position, raised, 22.5 mm mounting

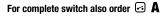


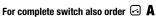
Selector switch short lever 3 position, flush mount, 30.5 mm mounting



•	WOIII. 4	z Iviaiii. 90		J		WOIII./Wallit. 42		J		MOIII./Maiiii. 42
Part No.	Function	Bezel	Graphic	Part No.	Function	Bezel	Graphic	Part No.	Function	Bezel
704.512.008	Momentary	Silver plastic	19	704.404.0	Momentary	Grey plastic	20	704.405.018	Momentary	Aluminium
704.510.008	Maintained	Silver plastic	19	704.405.0	Momentary	Aluminium	20	704.403.018	Maintained	Aluminium
			19	704.402.0	Maintained	Grey plastic				
			19	704.403.0	Maintained	Aluminium				
	704.512.008	Part No. Function	Part No. Function Bezel 704.512.008 Momentary Silver plastic	Part No. Function Bezel Graphic 704.512.008 Momentary Silver plastic 19 704.510.008 Maintained Silver plastic 19 19	Part No. Function Bezel Graphic Part No. 704.512.008 Momentary Silver plastic 19 704.404.0 704.510.008 Maintained Silver plastic 19 704.405.0 19 704.402.0	Part No. Function Bezel Graphic Part No. Function 704.512.008 Momentary Silver plastic 19 704.404.0 Momentary 704.510.008 Maintained Silver plastic 19 704.405.0 Momentary 19 704.402.0 Maintained	Part No. Function Bezel Graphic Part No. Function Bezel 704.512.008 Momentary Silver plastic 19 704.404.0 Momentary Grey plastic 704.510.008 Maintained Silver plastic 19 704.405.0 Momentary Aluminium 19 704.402.0 Maintained Grey plastic	Part No.FunctionBezelGraphicPart No.FunctionBezelGraphic704.512.008MomentarySilver plastic19704.404.0MomentaryGrey plastic20704.510.008MaintainedSilver plastic19704.405.0MomentaryAluminium2019704.402.0MaintainedGrey plastic	Part No.FunctionBezelGraphicPart No.FunctionBezelGraphicPart No.704.512.008MomentarySilver plastic19704.404.0MomentaryGrey plastic20704.405.018704.510.008MaintainedSilver plastic19704.405.0MomentaryAluminium20704.403.01819704.402.0MaintainedGrey plastic	Part No. Function Bezel Graphic Part No. Function Bezel Graphic Part No. Function 704.512.008 Momentary Silver plastic 19 704.404.0 Momentary Grey plastic 20 704.405.018 Momentary 704.510.008 Maintained Silver plastic 19 704.405.0 Momentary Aluminium 20 704.403.018 Maintained 19 704.402.0 Maintained Grey plastic 5

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Selector switch



Selector switch short lever 3 position, flush mount, 30 x 30 mm mounting





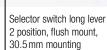


Selector switch long lever 2 position, raised, 22.5 mm mounting











	_		WOITI, Wallit. 42		_		WOIII. 42	main. 30		-		MOIII. 42	Widilit. 30
Graphic	Part No.	Function	Bezel	Graphic	Part No.	Function		Bezel	Graphic	Part No.	Function		Bezel
21	704.504.008	Momentary	Silver plastic	22	704.102.0	Momentary		Grey plastic	24	704.103.018	Momentary		Aluminium
21	704.502.008	Maintained	Silver plastic	22	704.103.0	Momentary		Aluminium	25	704.101.018	Maintained		Aluminium
				23	704.100.0	Maintained		Grey plastic					
				23	704.101.0	Maintained		Aluminium					

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Series 04 22.5 mm 30.5 mm IP65 10A 500VAC

Choose one component from each of the coloured sections to assemble a complete switch.

For other options or further information please contact your local sales office.











Selector switch long lever 2 position, flush mount, 30x30 mm mounting





Selector switch long lever 3 position, raised, 22.5 mm mounting



Selector switch long lever 3 position, flush mount, 30.5 mm mounting



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Mom.	/Main	t. 4

OOXOOIIII	ii iiioaiiaiig		Mom. 42°	Maint. 90°		nounting		Mom./Maint. 42°	00.0111111	mounting		Mom./Maint. 42°
Graphic	Part No.	Function		Bezel	Graphic	Part No.	Function	Bezel	Graphic	Part No.	Function	Bezel
26	704.302.008	Momentary		Silver plastic	28	704.094.0	Momentary	Grey plastic	29	704.095.018	Momentary	Aluminium
27	704.300.008	Maintained		Silver plastic	28	704.095.0	Momentary	Aluminium	29	704.093.018	Maintained	Aluminium
					28	704.092.0	Maintained	Grey plastic				
					28	704.093.0	Maintained	Aluminium				

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Buzzer



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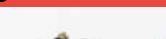


Selector switch



Selector switch long lever 3 position, flush mount, 30x30 mm mounting







Buzzer, raised, 22.5 mm mounting, IP65, 24 VDC, 95dB ± 8 at a distance of 0.1m



Buzzer, flush mount, 30.5 mm mounting, IP40, 24VDC, 95dB ± 8 at a distance of 0.1m

rmounting		Mom./Maint. 42°						
Part No.	Function	Bezel		Part No.	Front finish		Part No.	Front finish
704.294.008	Momentary	Black plastic		14-810.002	Black plastic		14-810.910	Black aluminium
704.292.008	Maintained	Black plastic		14-810.902	Nickel-plated brass		14-810.918	Natural aluminium
	Part No. 704.294.008	<u> </u>	Part No. Function Bezel 704.294.008 Momentary Black plastic	Part No. Function Bezel 704.294.008 Momentary Black plastic	Part No. Function Bezel Part No. 704.294.008 Momentary Black plastic 14-810.002	Part No. Function Bezel Part No. Front finish 704.294.008 Momentary Black plastic 14-810.002 Black plastic	Part No. Function Bezel Part No. Front finish 704.294.008 Momentary Black plastic 14-810.002 Black plastic	Part No. Function Bezel Part No. Front finish Part No. 704.294.008 Momentary Black plastic 14-810.002 Black plastic 14-810.910

Series 04 22.5 mm 30.5 mm IP65 10 A 500 VAC















Choose one component from each of the coloured sections to assemble a complete switch.

Switching element



Switching element, screw terminal, snap-action with silver self-cleaning contacts



Switching element, plug-in terminal, $6.3\,\mathrm{mm}$, snap-action with self-cleaning silver contacts



Switching element, screw terminal, snap-action with silver self-cleaning contacts

Part No.	Contact type	Part No.	Contact type	Part No.	Contact type
704.900.1	1NO	704.905.1	1NO	704.910.1	1NO
704.900.2	1NC	704.905.2	1NC	704.910.2	1NC
704.900.3	2N0	704.905.3	2N0	704.910.3	2NO
704.900.4	2NC	704.905.4	2NC	704.910.4	2NC
704.900.5	1NO/1NC	704.905.5	1NO/1NC	704.910.5	1NO/1NC
Other contact m	naterials and terminals available.	Other contact ma	terials and terminals available.	Other contact mat	erials and terminals available.
Please contact of	us.	Please contact us		Please contact us.	

Switching element



Switching element, plug-in terminal, 6.3 mm, slow-make with forced opening silver contacts

ED



LED, Ba9s, single chip, 6 Volt and 12 Volt



LED, Ba9s, single chip, 24 Volt and 28 Volt

Pa	art No.	Contact type	Colour	Part No.	Voltage	Colour	Part No.	Voltage
70	04.915.1	1NO	Red	10-2506.1082	6VDC, 10/17mA	Red	10-2512.1142	24VAC/DC, 15mA
70	04.915.2	1NC	O Yellow	10-2506.1084	6VDC, 10/17mA	O Yellow	10-2512.1144	24VAC/DC, 15mA
70	04.915.3	2N0	Green	10-2506.1085	6VDC, 10/17mA	Green	10-2512.1145	24VAC/DC, 15mA
70	04.915.4	2NC	Blue	10-2506.1086	6VDC, 10/17mA	Blue	10-2512.1146	24VAC/DC, 15mA
70	04.915.5	1NO/1NC	O White	10-2506.1089	6VDC, 10/17mA	O White	10-2512.1149	24VAC/DC, 15mA
			Red	10-2509.1142	12VAC/DC, 15mA	Red	10-2513.1142	28VAC/DC, 15mA
			O Yellow	10-2509.1144	12VAC/DC, 15mA	O Yellow	10-2513.1144	28VAC/DC, 15mA
			Green	10-2509.1145	12VAC/DC, 15mA	Green	10-2513.1145	28VAC/DC, 15mA
Ot	Other contact materials and terminals available.		Blue	10-2509.1146	12VAC/DC, 15mA	Blue	10-2513.1146	28VAC/DC, 15mA
Pl	ease contact us.		O White	10-2509.1149	12VAC/DC, 15mA	O White	10-2513.1149	28 VAC/DC, 15mA

For other options or further information please contact your local sales office.







A Accessories **LED** LED, Ba9s, single chip, 130 Volt and 230 Volt Lamp/LED block, screw terminal LED, Ba9s, single chip, 48 Volt Colour Voltage Colour Voltage Part No. 48 VAC/DC, 6mA Red 130 VAC / 5mA 704.950.0* Red 10-2519.1052 10-2H24.2052 ○ Yellow 10-2519.1054 48 VAC/DC, 6mA Yellow 10-2H24.2054 130 VAC / 5mA 10-2H24.2055 10-2519.1055 48 VAC/DC, 6mA 130 VAC / 5mA Green Green 130 VAC / 5mA Blue 10-2519.1056 48 VAC/DC, 6mA Blue 10-2H24.2056 O White 10-2519.1059 48 VAC/DC, 6mA O White 10-2H24.2059 130 VAC / 5mA Red 10-2H24.2042 230 VAC / 3mA Yellow 10-2H24.2044 230 VAC / 3mA

A Accessories



Lamp/LED block, plug-in terminal, 6.3 mm



230 VAC / 3mA

230 VAC / 3mA

230 VAC / 3mA

Lens cap, round, transparent, plastic for raised and flush indicators with bezel and pushbutton actuators

Green

Blue

O White

10-2H24.2045

10-2H24.2046

10-2H24.2049



* Other terminals available. Please contact us.

Lens cap raised, round, transparent, plastic for raised and flush mount pushbutton actuators

Part No.	Colour	Part No.	Colour	Part No.
704.950.1*	Red	704.602.2	Red	704.611.2
	O Yellow	704.602.4	Yellow	704.611.4
	Green	704.602.5	Green	704.611.5
	Blue	704.602.6	Blue	704.611.6
	○ Clear	704.602.7	○ Clear	704.611.7
		For complete lens also order diffuser		For complete lens also order diffuser
* Other terminals available. Please contact us.		704.609.9 (see page 24)		704.610.9 (see page 24)









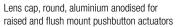






A Accessories







Protective cover, raised pushbutton



Protective front ring with silicon membrane for raised or flush mount pushbutton

Colour	Part No.	Comment	Part No.		Part No.	Size
		Comment				
Red	704.601.2		704.925.0	1	704.600.3	29 mm ∅ for raised pushbutton
O Yellow	704.601.4			2	704.955.3	35 mm Ø for flush mount pushbutton
Blue	704.601.6					
Silver	704.601.8					
Silver	704.601.81	Illuminated central dot				
Black	704.601.0					
Black	704.601.01	Illuminated central dot				
Silver	704.601.9	Stainless steel				

A Accessories



Emergency-stop protective shroud, yellow painted aluminium with 22.5 mm mounting hole



Emergency-stop switch label, 60 mm \varnothing



Emergency-stop switch enclosure 94 mm (w) x 94 mm (h) x 81 mm (d), anti twist hole. Cable gland M20, IP66

Part No.	Part No.	Markings		Part No.
704.927.4	704.963.5	NOT-AUS	1	704.945.0
	704.963.6	EMERGENCY-STOP	2	704.945.6
	704.963.7	ARRET D'URGENCE		
	704.963.8	NOT-HALT		

For other options or further information please contact your local sales office.







A Accessories



Emergency-stop switch enclosure with 22.5 mm \varnothing mounting hole, 65 mm (w) x 65 mm (h) x 81 mm (d), anti twist hole. Cable gland M20, IP66



Emergency-stop switch enclosure, with 22.5 mm \varnothing mounting hole, 94 mm (w) x 65 mm (h) x 81 mm (d), anti twist hole. Cable gland M20, IP66



Blanking plate

	,		,		
	Part No.		Part No.	Part No.	Mounting hole
1	704.945.7	1	704.945.8	704.960.7	22.5 mm Ø
2	704.945.6	2	704.945.6	704.964.8	30.5 mm Ø
				704.964.9	30 x 30 mm

Accessories



Flush mount bezel for $30.5 \varnothing$ mounting



Lens remover for round pushbuttons and indicators. LED and lamp remover for round and square pushbuttons and indicators



Lens remover for square pushbuttons and indicators

	Part No.	Product description	Part No.	
1	704.955.0	Aluminium, black anodised	700.006.0	98-968
2	704.955.1	Aluminium, natural anodised		
3	704.955.9	Stainless steel		
4	704.955.3	Alu, natural anodised with seal		











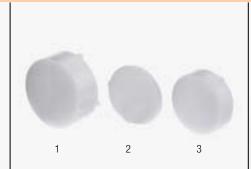




A Accessories







Diffuser for raised indicator, diffuser for flat lens indicator and pushbutton, diffuser for raised pushbutton



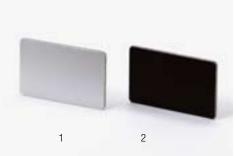
Marking plate selfadhesive, aluminium finish or black, for raised and flush mount push buttons

Part No.	Material	Image	Part No.	Product description	Image	Part No.	Size	Colour
704.960.5	Metal	1	704.608.9	Diffuser for raised indicator	1	704.968.2	$22.5\mathrm{mm}\varnothing$	Black
704.950.5	Plastic	2	704.609.9	Diffuser for flat lens	2	704.968.3	30.5 mm Ø	Black
		3	704.610.9	Diffuser for raised illum. pushbutton				

A Accessories



Engraving Label for Marking plate, selfadhesive, natural anodised or black aluminium



Engraving Label for flat square products, selfadhesive natural anodised or black aluminium

Image	Part No.	Size	Colour	Image	Part No.	Size	Colour
1	704.968.0	23.5 x 14.5 mm	Aluminium	1	704.968.4	35 x 18 mm	Aluminium
2	704.968.1	23.5 x 14.5 mm	Black	2	704.968.5	35 x 18 mm	Black

Technical Data Series 04

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 3 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

Polycarbonate (PC)

Mechanical characteristics

Terminals

Screw terminals

Plug-in terminals 6.3x0.8mm

max. wire cross-section 2x2.5 mm²

max. wire cross-section of stranded cable 2x1.5 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 dimensions)

Tightening torque

Screws at the mounting flange max. 25 Ncm Screws at switching element max. 50 Ncm

Actuating force

1 Normally closed 1.9N

1 Normally open 2 N

Actuating travel

5.8 mm ±0.2 mm

Rebound time

 $<3 \, \text{ms}$

Mechanical lifetime

(with 1 switching element)

1.5 million Pushbutton, maintained action Cycles of operation Pushbutton momentary action 3 million Cycles of operation Selector switch maintained action 1.25 million Cycles of operation Selector switch momentary action 2.5 million Cycles of operation 25 000 Keylock switch maintained action Cycles of operation Keylock switch momentary action 50 000 Cycles of operation

Electrical characteristics

Standards

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

Rated Insulation Voltage Ui

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

Contact resistance

New state ≤50 m Ω as per DIN IEC 60512-2-4

Conventional free air thermal current Ith

10 A, as per EN IEC 60947-5-1

the maximum current in continuous operation and at ambient temperature must not exceed the quoted maximum values.

Isolation resistance

≥10 MΩ between open contacts at 500 VDC, as per DIN IEC 60512-2-10

Switch rating

At switch rating AC for Gold/Silver, Silver/Palladium and Hard Silver contacts service category AC-15, as per EN IEC 60947-5-1 (cos 0.3)

230 VAC 400 VAC 500 VAC Voltage Current 6 A 4 A 25A

At switch rating DC for Gold-, Silver- and Hard Silver contacts service category DC-13, as per EN IEC 60947-5-1

Voltage 24 VDC 60 VDC 110 VDC Current 10A 3A 1 A

Recommended minimum operational data

Gold/Silver contacts:

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

Hard Silver contacts:

24 VDC 110VDC Voltage 50 mA 10mA Current

Protection class

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

Environmental conditions

Storage temperature

-40°C ... +85°C

Operating temperature

-25°C ... +55°C

Shock resistance

(single impacts, semi-sinusoidal)

300 m/s²puls 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

Approvals

Approbations

CB (IEC 60947)

CCC

CSA

Germanischer Lloyd

GOST

SEV

UL

Declaration of conformity

CF

NF F16-102

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 ratings.

Up to 3 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

Polycarbonate (PC)

Mechanical characteristics

Terminals

Screw terminals

Plug-in terminals 6.3 x 0.8 mm

max. wire cross-section 2x2.5 mm²

max. wire cross-section of stranded cable 2x1.5 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 dimensions)

Tightening torque

Screws at the mounting flange max. 25 Ncm Screws at switching element max. 50 Ncm

Actuating force

1 Normally closed 2N

1 Normally open 3.1 N

Actuating travel

5.8 mm ±0.2 mm

Rebound time

≤1 ms

Mechanical lifetime

(with 1 switching element)

Pushbutton, maintained action 1.5 million Cycles of operation Pushbutton momentary action 3 million Cycles of operation 1.25 million Cycles of operation Selector switch maintained action Selector switch momentary action 2.5 million Cycles of operation Emergency-stop switch 50 000 Cycles of operation Keylock switch maintained action 25 000 Cycles of operation Keylock switch momentary action 50 000 Cycles of operation

Electrical characteristics

Standards

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

Rated Insulation Voltage Ui

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

Contact resistance

New state \leq 50 m Ω as per DIN IEC 60512-2-4

Isolation resistance

 ${\ge}10\,M\Omega$ between open contacts at 500 VDC, as per DIN IEC 60512-2-10

Conventional free air thermal current Ith

10 A, as per EN IEC 60947-5-1

the maximum current in continuous operation and at ambient temperature must not exceed the quoted maximum values.

Switch rating

At switch rating AC for Gold/Silver, Silver/Palladium and Hard Silver contacts service category AC-15, as per EN IEC 60947-5-1 ($\cos\phi$ 0.3)

Voltage 230 VAC 400 VAC 500 VAC Current 7 A 5 A 4 A

At switch rating DC for Gold-, Silver- and Hard Silver contacts service category DC-13, as per EN IEC 60947-5-1

Voltage 24 VDC 60 VDC 110 VDC 250 VDC Current 10 A 5 A 2.5 A 0.6 A

Recommended minimum operational data

Gold/Silver contacts:

Voltage 24 VDC 110 VDC Current 10 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 protection class II

Environmental conditions

Storage temperature

−40°C ... +85°C

Operating temperature

-40°C ... +55°C

Shock resistance

(single impacts, semi-sinusoidal)

300 m/s² puls 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

Approvals

Approbations

CB (IEC 60947)

CCC

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GOST SEV

UL

Declaration of conformity

CE

NF F16-102

Technical Data Series 04

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 2.8x0.5mm

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 $\pm 10\%$ Operation Current $\leq 25 \,\text{mA}$

Environmental conditions

Storage temperature

-35°C ... +85°C

Operating temperature

−25 °C ... +55 °C

Protection degree

as per EN IEC 60529, frontside IP40, devices flush mounting IP65, devices raised mounting

Approvals

Declaration of conformity

CE

NF F16-102

Actuator

Material

Front ring

Polyamide, Aluminium or Stainless steel

Mounting flange

Polyethylene terephtalate

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

Pushbutton≤3 millionCycles of operationSelector switch≤2.5 millionCycles of operationStop pushbutton≤50 000Cycles of operationFool proofed E-stop≥6050Cycles of operationKeylock switch≤50 000Cycles 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

-40 °C ... +85 °C

Operating temperature

-25 °C ... +55 °C

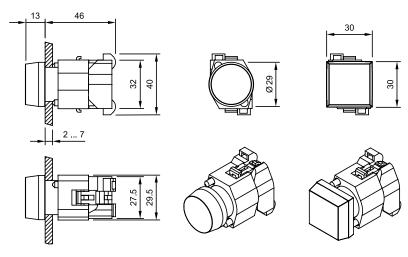
Protection degree

as per EN IEC 60529

Frontside IP65

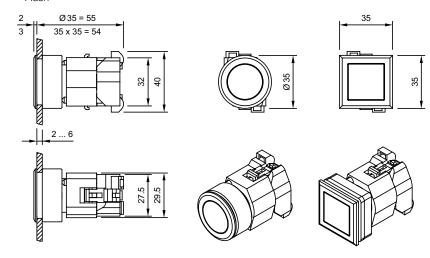
04 Indicator





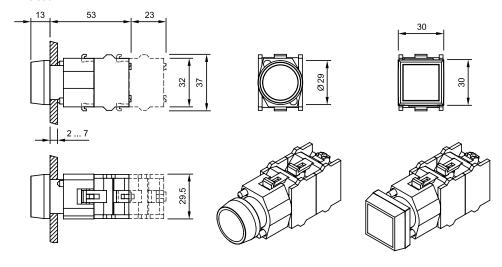
04 Indicator

Flush



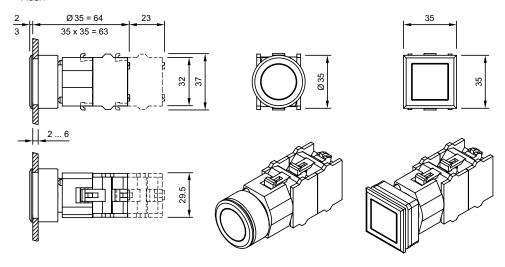
04 Non-Illuminated Pushbutton

Raised

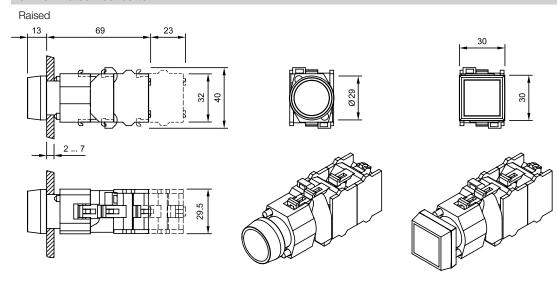


04 Non-Illuminated Pushbutton

Flush



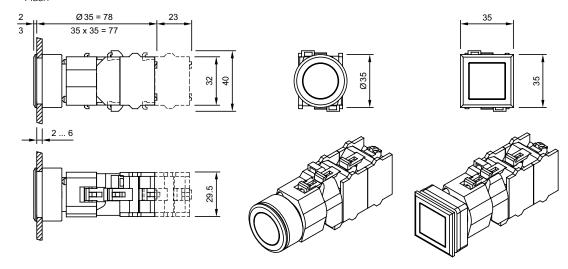
04 Illuminated Pushbutton



04 Illuminated Pushbutton

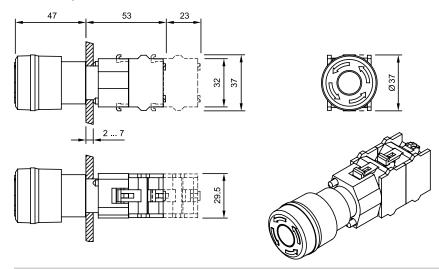
Flush

29



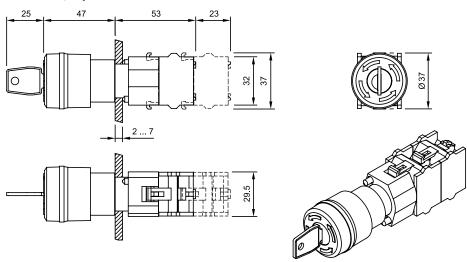
04 Emergency-stop switch

ISO 13850, Twist to release

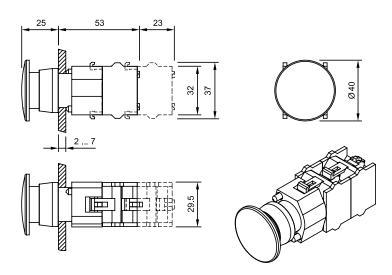


04 Emergency-stop switch

ISO 13850, Key to release

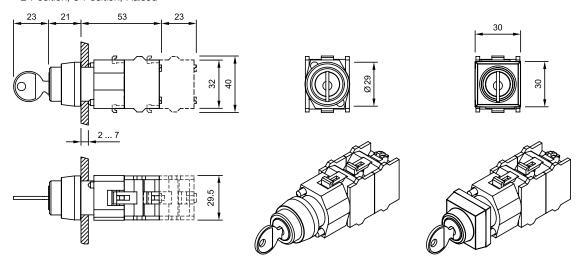


04 Head Pushbutton Mushroom



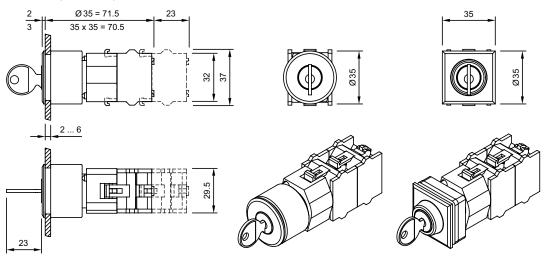
04 Keylock switch

2-Position, 3-Position, Raised



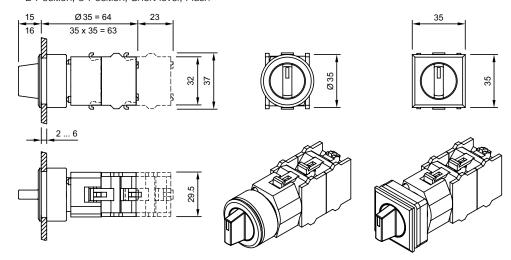
04 Keylock switch

2-Position, 3-Position, Flush



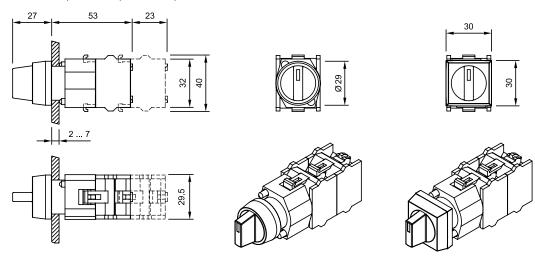
04 Selector switch

2-Position, 3-Position, Short lever, Flush



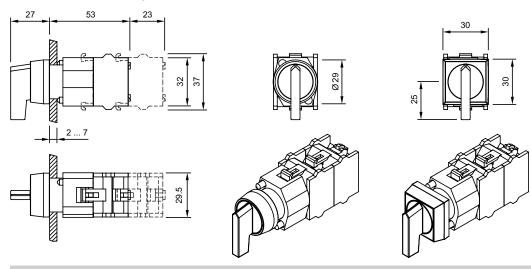
04 Selector switch

2-Position, 3-Position, Short lever, Raised



04 Selector switch

2-Position, 3-Position, Long lever, Raised

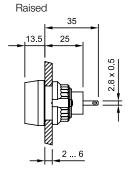


04 Selector switch

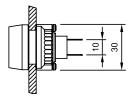
2-Position, 3-Position, Long lever, Flush

15
16
35 x 35 = 64
23
2 ... 6

04 Buzzer



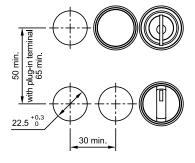






04 Cut-outs, Raised Mounting

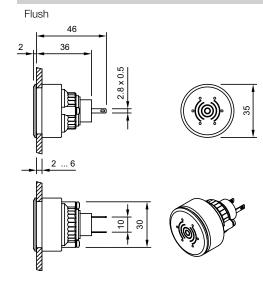
(All but long lever)





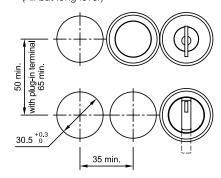


04 Buzzer



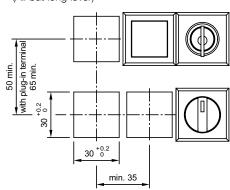
04 Cut-outs, Flush Mounting

(All but long lever)



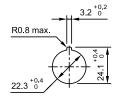
04 Cut-outs, Flush Mounting

(All but long lever)



04 Cut-outs, Emergency-Stop

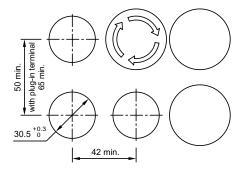
ISO 13850, Twist release, Key release



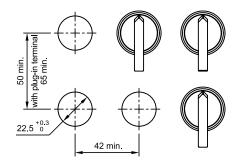




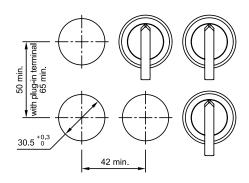
04 Cut-outs, Mushroom head



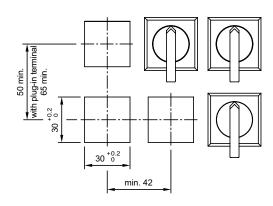
04 Cut-outs, Long Lever, Raised Mounting



04 Cut-outs, Long Lever, Flush Mounting



04 Cut-outs, Long Lever, Flush Mounting





OOO «ЛайфЭлектроникс" "LifeElectronics" LLC

ИНН 7805602321 КПП 780501001 P/C 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 3010181090000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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