



EAO Product Information

Series 84



Description 3

Product Assembly 4

Mounting instruction 6

Devices raised mounting 7

Devices flush mounting 9

Accessories..... 11

Technical Data..... 25

Drawings..... 28

Index..... 41

Product Information

General notes

The Series 84 consists of indicators, pushbuttons and emergency-stop switches. The indicators and pushbuttons are a modular system of lens, actuator, switching element and a variety of means of connection and mounting. Different front protection of IP 67, IP 65 or IP 40 ensure that the pushbuttons are suited for industrial use.

Anodized aluminium parts can have visible variations due production-technical reasons.

Mounting

The actuators of the Series 84 are inserted in a 22.5 mm diameter mounting hole and the switching units are clipped on to the rear of the actuators. The pushbutton system can be mounted as a complete unit (actuator and switching unit). Mounting from the front with the wiring already attached is also possible.

When mounted on printed circuit boards the actuators are inserted in the mounting hole 22.5 mm dia. and the switching elements are fixed on the board. The printed circuit board is connected to the preassembled actuator by means of the mounting flange. There is no need for subsequent adjustment or spacing studs.

Lenses

The lenses are available in various colours and made either from plastic or anodized aluminium.

Marking

The marking plates of the Series 84 can be marked by engraving or hot stamping.

Specific symbols and markings are available on request.

The lenses are without holder not engravable, since by mounting no accurate position of the engraving text is reached.

Specific symbols and markings are available on request.

Illumination

To ensure full illumination, the switching elements can be supplied with integrated Single- or Multi-LEDs in the colours red, orange, yellow, green, blue or white. The series resistor is integrated.

Luminosity and wave length scattering caused by the technology used in the LED manufacturing processes may lead to visual differences in our products.

Emergency-stop pushbutton, foolproof

The E-stop pushbutton can be mounted in front panels with a thickness between 1 and 4 mm. It has a low behind-panel depth of 13.5 mm (max.) and 18.5 mm with plug-in terminlas and can be safely and easily adapted to PCBs of different heights. The front protection degree is IP 65.

Importantly, the Series 84 emergency-stop requires no additional assembly because of its single-piece 'monoblock' design.

The switch's status is clearly indicated by a black or green colour ring on the shaft, and the foolproof actuator design conforms to DIN EN ISO 13850 and EN IEC 60947.

It can be supplied with LED illumination that is visible even from the side.

Specimen order

Indicator :

- Indicator actuator, IP 67 84-0100.0

Essential accessories :

- Lens plastic blue 84-7111.600
 - Indicator element 84-8001.6620
 Single-LED blue 24 VDC, plug-in terminal

or

Indicator with PCB terminal :

- Indicator actuator, IP 67 84-3100.1

Essential accessories :

- Lens plastic red 84-7111.200
 - Indicator element with PCB terminal 92-800.042
 - Single-LED red 2.2 VDC 10-2602.3172D
 - Mounting flange 92-960.0

*We reserve the right to modify technical data
 All dimensions in mm*

Indicator and pushbutton illuminative, 25 mm dia.



- 1 Lens
- 2 Marking plate
- 3 Lens holder
- 4 Actuator housing
- 5 Outer sealing
- 6 Inner sealing
- 7 Front panel
- 8 Fixing nut
- 9 Switching-/Illumination element with plug-in terminal (solderable)

Indicator and pushbutton illuminative, 40 mm dia.



- 1 Lens
- 2 Marking plate
- 3 Lens holder
- 4 Actuator housing
- 5 Sealing
- 6 Front panel
- 7 Fixing nut
- 8 Switching-/Illumination element with flat ribbon cable

Indicator and pushbutton illuminative, 25 mm dia., PCB version



- 1 Lens
- 2 Marking plate
- 3 Lens holder
- 4 Actuator housing
- 5 Sealing
- 6 Front panel
- 7 Fixing nut
- 8 Mounting flange
- 9 Switching-/Illumination element with PCB terminal
- 10 PCB
- 11 Fixing screws

Emergency-stop pushbutton



- 1 Emergency-stop pushbutton
- 2 Fixing nut
- 3 Position indication ring green or black

Arrangement mounting flange for Switching- and Illumination element, PCB version



The arrangement of the mounting flanges and their number is determined by the size of the front panel or PCB. To ensure uniform, tactile switching, we recommend a layout of the flanges as per adjacent sketch.

For large PCBs with several switching elements we recommend the following procedure :

1. Fit the actuator to the front panel.
2. Clip the mounting flange to the rear of the intended actuator.
3. Screw the PCB with the components soldered to it to the assembled mounting flange.

This arrangement applies to PCBs 1.6 mm thick.

Dismantling mounting flange

The tool 84-998 must be used for removing the mounting flange from the actuator. Before removing the flange, the PCB fixing screws must be loosened.

Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete

Application as per DIN EN ISO 13850 and EN 60204-1



	Front protection	Switching action	Mushroom had cap	Illumination	Terminals	Contacts	Ø 32 mm Typ-Nr.	Component layout	Mounting dimensions	Technical drawing	Circuit drawing	
Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete Position indication ring black Twist to unlock clockwise	IP 65	MA	Plastic red	without	FR	1 NC	84-5020.0040	2	2	15	8	0.036
						1 NC + 1 NO	84-5030.0040	2	2	15	9	0.036
						2 NC	84-5040.0040	2	2	15	10	0.036
					PT 2.8 s	1 NC	84-5020.0020	1	2	15	8	0.028
						1 NC + 1 NO	84-5030.0020	1	2	15	9	0.028
						2 NC	84-5040.0020	1	2	15	10	0.028
Position indication ring black Twist to unlock clockwise LED operating voltage: 5 ... 30 VDC Current consumption: 9.7 ... 12.4 mA	IP 65	MA	Plastic red	LED red	FR	1 NC	84-5021.2B40	2	2	15	11	0.036
						1 NC + 1 NO	84-5031.2B40	2	2	15	12	0.036
						2 NC	84-5041.2B40	2	2	15	13	0.036
					PT 2.8 s	1 NC	84-5021.2B20	1	2	15	11	0.028
						1 NC + 1 NO	84-5031.2B20	1	2	15	12	0.028
						2 NC	84-5041.2B20	1	2	15	13	0.028
Position indication ring green Twist to unlock clockwise	IP 65	MA	Plastic red	without	FR	1 NC	84-5120.0040	2	2	15	8	0.036
						1 NC + 1 NO	84-5130.0040	2	2	15	9	0.036
						2 NC	84-5140.0040	2	2	15	10	0.036
					PT 2.8 s	1 NC	84-5120.0020	1	2	15	8	0.028
						1 NC + 1 NO	84-5130.0020	1	2	15	9	0.028
						2 NC	84-5140.0020	1	2	15	10	0.028
Position indication ring green Twist to unlock clockwise LED operating voltage: 5 ... 30 VDC Current consumption: 9.7 ... 12.4 mA	IP 65	MA	Plastic red	LED red	FR	1 NC	84-5121.2B40	2	2	15	11	0.036
						1 NC + 1 NO	84-5131.2B40	2	2	15	12	0.036
						2 NC	84-5141.2B40	2	2	15	13	0.036
					PT 2.8 s	1 NC	84-5121.2B20	1	2	15	10	0.028
						1 NC + 1 NO	84-5131.2B20	1	2	15	12	0.028
						2 NC	84-5141.2B20	1	2	15	13	0.028

Standard version:

Flat ribbon-cable length 300 mm; Plug-in terminal 2.8 x 0.5 mm.

Other options on request:

Customisation of flat ribbon-cable and connectors.

Switching action: MA = Maintained action

Terminals: FR = Flat ribbon cable, PT 2.8 s = Plug-in terminal 2.8 mm (solderable)

Contacts: NC = Normally closed, NO = Normally open

Component layout from page 28, Mounting dimensions from page 29, Technical drawing from page 30, Circuit drawing from page 37

Stop pushbutton grey, complete



	Front protection	Switching action	Mushroom had cap	Illumination	Terminals	Contacts	Ø 32 mm Typ-Nr.	Component layout				MPE
								Mounting dimensions	Technical drawing	Circuit drawing		
Stop pushbutton grey, complete Position indication ring black Twist to unlock clockwise	IP 65	MA	Plastic grey	without	FR	1 NC	84-6020.0040	2	2	15	8	0.036
						1 NC + 1 NO	84-6030.0040	2	2	15	9	0.036
						2 NC	84-6040.0040	2	2	15	10	0.036
					PT 2.8 s	1 NC	84-6020.0020	1	2	15	8	0.028
						1 NC + 1 NO	84-6030.0020	1	2	15	9	0.028
						2 NC	84-6040.0020	1	2	15	10	0.028
Position indication ring black Twist to unlock clockwise LED operating voltage: 5 ... 30 VDC Current consumption: 9.7 ... 12.4 mA	IP 65	MA	Plastic grey	LED red	FR	1 NC	84-6021.2B40	2	2	15	11	0.036
						1 NC + 1 NO	84-6031.2B40	2	2	15	12	0.036
						2 NC	84-6041.2B40	2	2	15	13	0.036
					PT 2.8 s	1 NC	84-6021.2B20	1	2	15	11	0.028
						1 NC + 1 NO	84-6031.2B20	1	2	15	12	0.028
						2 NC	84-6041.2B20	1	2	15	13	0.028

Standard version:

Flat ribbon-cable length 300 mm; Plug-in terminal 2.8 x 0.5 mm.

Other options on request:

Customisation of flat ribbon-cable and connectors.

Switching action: MA = Maintained action

Terminals: FR = Flat ribbon cable, PT 2.8 s = Plug-in terminal 2.8 mm (solderable)




Contacts: NC = Normally closed, NO = Normally open


Component layout from page 28, Mounting dimensions from page 29, Technical drawing from page 30, Circuit drawing from page 37

Indicator actuator, flush mounting



Essential Accessories:

-  Illumination element page 15
-  Lens metal, Halo illumination page 12
-  Lens plastic page 11

	Front protection	Front ring	Ø 25 mm Typ-Nr.	Mounting dimensions	Technical drawing	
Indicator actuator, flush mounting	IP 40	Plastic black	84-3100.0	1 14	0.004	
	IP 67	Aluminium natural	84-0200.7	1 14	0.008	
		Plastic black	84-0100.0	1 14	0.003	
Halo illumination	IP 67	Plastic translucent	84-0090.7	1 14	0.006	

Accessories for Halo illumination:

Essential lenses Typ-Nr. 84-7202.x00A and 84-7205.x00A.




Recommended illumination elements Typ-Nr. 84-8001.xxx0 (only Single-LED blue, green and white).


Mounting dimensions from page 29, Technical drawing from page 30

Illuminated pushbutton actuator, flush mounting



Essential Accessories:

-  Lens metal, Halo illumination page 12
-  Lens plastic page 11
-  Switching element illuminated page 17

	Switching action	Front protection	Front ring	Ø 40 mm Typ-Nr.	Ø 25 mm Typ-Nr.	Mounting dimensions	Technical drawing	Circuit drawing	
Illuminated pushbutton actuator, flush mounting illuminative	M	IP 67	Aluminium natural	84-1221.7		3	21	4	0.022
Halo illumination illuminative	M	IP 67	Plastic translucent		84-1091.7	1	14	4	0.006
illuminative	M	IP 40	Plastic black		84-2101.0	1	14	4	0.004
			Aluminium black		84-1201.0	1	14	4	0.008
		IP 67	Aluminium black		84-1201.2	1	14	4	0.008
			Aluminium blue		84-1201.6	1	14	4	0.008
			Aluminium green		84-1201.5	1	14	4	0.008
			Aluminium natural		84-1201.7	1	14	4	0.008
			Aluminium yellow		84-1201.4	1	14	4	0.008
			Plastic black		84-1101.0	1	14	4	0.003

Accessories for Halo illumination:

Essential lenses Typ-Nr. 84-7202.x00A and 84-7205.x00A.

Recommended switching elements Typ-Nr. 84-8511.xxx0 (only Single-LED blue, green and white).

Switching action: M = Momentary action

Mounting dimensions from page 29, Technical drawing from page 30, Circuit drawing from page 37

Front


Lens plastic

	Lens	Ø 25 mm Typ-Nr.	
Lens plastic flush, illuminative	blue transparent	84-7111.600	0.001
	colourless transparent	84-7111.700	0.001
	green transparent	84-7111.500	0.001
	orange transparent	84-7111.300	0.001
	red transparent	84-7111.200	0.001
	yellow transparent	84-7111.400	0.001
flush, non-illuminative	black opaque	84-7121.000	0.001
	grey opaque	84-7121.800	0.001
raised, illuminative	blue transparent	84-7115.600	0.001
	colourless transparent	84-7115.700	0.001
	green transparent	84-7115.500	0.001
	orange transparent	84-7115.300	0.001
	red transparent	84-7115.200	0.001
	yellow transparent	84-7115.400	0.001
raised, non-illuminative	black opaque	84-7125.000	0.001
	grey opaque	84-7125.800	0.001




Marking plate for Lens plastic

can be hot stamped

	Marking plate	Typ-Nr.	
Marking plate for Lens plastic	Plastic colourless transparent	61-9707.7	0.001




Lens plastic, Halo illumination

	Lens	Ø 25 mm Typ-Nr.	
Lens plastic, Halo illumination flush	blue transparent	84-7111.601	0.002
	colourless transparent	84-7111.701	0.002
	green transparent	84-7111.501	0.002
	orange transparent	84-7111.301	0.002
	red transparent	84-7111.201	0.002
	yellow transparent	84-7111.401	0.002




The silvery coat is being applied on the lens (screen print) with an additional protective lacquer.

Lens metal

	Lens	Ø 25 mm Typ-Nr.	
Lens metal convex	Aluminium black	84-7202.000	0.003
	Aluminium blue	84-7202.600	0.003
	Aluminium green	84-7202.500	0.003
	Aluminium natural	84-7202.800	0.003
	Aluminium red	84-7202.200	0.003
	Aluminium yellow	84-7202.400	0.003
flush	Aluminium black	84-7201.000	0.003
	Aluminium blue	84-7201.600	0.003
	Aluminium green	84-7201.500	0.003
	Aluminium natural	84-7201.800	0.003
	Aluminium red	84-7201.200	0.003
	Aluminium yellow	84-7201.400	0.003
raised	Aluminium black	84-7205.000	0.003
	Aluminium blue	84-7205.600	0.003
	Aluminium green	84-7205.500	0.003
	Aluminium natural	84-7205.800	0.003
	Aluminium red	84-7205.200	0.003
	Aluminium yellow	84-7205.400	0.003



Lens metal, Halo illumination

	Lens	Ø 25 mm Typ-Nr.	
Lens metal, Halo illumination convex	Aluminium black	84-7202.000A	0.004
	Aluminium blue	84-7202.600A	0.004
	Aluminium green	84-7202.500B	0.004
	Aluminium natural	84-7202.800A	0.004
	Aluminium red	84-7202.200A	0.004
	Aluminium yellow	84-7202.400A	0.004
raised	Aluminium black	84-7205.000A	0.003
	Aluminium blue	84-7205.600A	0.003
	Aluminium green	84-7205.500A	0.003
	Aluminium natural	84-7205.800A	0.003
	Aluminium red	84-7205.200A	0.003
	Aluminium yellow	84-7205.400A	0.003




Lens metal with window

	Lens	Ø 25 mm Typ-Nr.	
Lens metal with window flush	Aluminium black	84-7211.000	0.002
	Aluminium blue	84-7211.600	0.002
	Aluminium green	84-7211.500	0.002
	Aluminium natural	84-7211.800	0.002
	Aluminium red	84-7211.200	0.002
	Aluminium yellow	84-7211.400	0.002
raised	Aluminium black	84-7215.000	0.002
	Aluminium blue	84-7215.600	0.002
	Aluminium green	84-7215.500	0.002
	Aluminium natural	84-7215.800	0.002
	Aluminium red	84-7215.200	0.002
	Aluminium yellow	84-7215.400	0.002




Mushroom-head cap

	Mushroom had cap	Ø 32 mm Typ-Nr.	
Mushroom-head cap	Plastic black opaque	84-7124.000A	0.004
	Plastic blue opaque	84-7124.600A	0.004
	Plastic green opaque	84-7124.500A	0.004
	Plastic red opaque	84-7124.200A	0.004
	Plastic yellow opaque	84-7124.400A	0.004



Front protective cap

for flush lenses only

	Front protective cap	Typ-Nr.	
Front protective cap	Silicone natural transparent	84-9103.7	0.001

ATTENTION

when using the front protection cover the external sealing in the actuator has to be removed !

Legend frame

for devices 25 mm dia.


	Legend frame	Typ-Nr.	Technical drawing	
Legend frame 30 x 50 mm, adhesive, Aluminium black		61-9980.0	7	0.001



Technical drawing from page 30


Legend plate insert

for Legend frame 61-9980.0

	Typ-Nr.	
Legend plate insert 14.5 x 23.5 mm, adhesive, Aluminium black	704.968.1	0.001
14.5 x 23.5 mm, adhesive, Aluminium natural	704.968.0	0.001



Blind plug


	Blind plug	Typ-Nr.	Technical drawing	
Blind plug Size 25 mm dia., for mounting hole 22.5 mm dia.	Plastic black	61-9453.0	8	0.006
Size 36 mm dia., for mounting hole 30.5 mm dia.	Plastic black	704.964.8	1	0.007



Technical drawing from page 30

Backside

Illumination element

	Illumination	Operating voltage/-current	Terminals	Typ-Nr.	Circuit drawing	
Illumination element LED and built-in resistor included	Multi-LED green	12 VDC, 40 mA	FR	84-8002.5340	5	0.010
			PT 2.8 s	84-8002.5320	5	0.005
		24 VDC, 20 mA	FR	84-8002.5640	5	0.010
			PT 2.8 s	84-8002.5620	5	0.005
	Multi-LED orange	12 VDC, 40 mA	FR	84-8002.3340	5	0.010
			PT 2.8 s	84-8002.3320	5	0.005
		24 VDC, 20 mA	FR	84-8002.3640	5	0.010
			PT 2.8 s	84-8002.3620	5	0.005
	Multi-LED red	12 VDC, 40 mA	FR	84-8002.2340	5	0.010
			PT 2.8 s	84-8002.2320	5	0.005
		24 VDC, 20 mA	FR	84-8002.2640	5	0.010
			PT 2.8 s	84-8002.2620	5	0.005
	Multi-LED yellow	12 VDC, 40 mA	FR	84-8002.4340	5	0.010
			PT 2.8 s	84-8002.4320	5	0.005
		24 VDC, 20 mA	FR	84-8002.4640	5	0.010
			PT 2.8 s	84-8002.4620	5	0.005
	Single-LED blue	24 VDC, 20 mA	FR	84-8001.6640	5	0.010
			PT 2.8 s	84-8001.6620	5	0.005
	Single-LED green	24 VDC, 20 mA	FR	84-8001.5640	5	0.010
			PT 2.8 s	84-8001.5620	5	0.005
	Single-LED orange	24 VDC, 20 mA	FR	84-8001.3640	5	0.010
			PT 2.8 s	84-8001.3620	5	0.005
	Single-LED red	24 VDC, 20 mA	FR	84-8001.2640	5	0.010
			PT 2.8 s	84-8001.2620	5	0.005
Single-LED white	12 VDC, 40 mA	FR	84-8001.9340	5	0.010	
		PT 2.8 s	84-8001.9320	5	0.005	
	24 VDC, 20 mA	FR	84-8001.9640	5	0.010	
		PT 2.8 s	84-8001.9620	5	0.005	
Single-LED yellow	24 VDC, 20 mA	FR	84-8001.4640	5	0.010	
		PT 2.8 s	84-8001.4620	5	0.005	



Standard version:

Cable length 300 mm with insulated ferrule; Plug-in terminal 2.8 x 0.8 mm.

Other options on request:

Customisation of cable and connectors.

Protection degree (rear side):

Plug-in terminal IP 40, upgrade to IP 67 with Plug Typ-Nr. 84-900 possible.

Terminals: FR = Flat ribbon cable, PT 2.8 s = Plug-in terminal 2.8 mm (solderable)

Circuit drawing from page 37

Illumination element with Bi-Color illumination

	Operating voltage/-current	Illumination	Terminals	Typ-Nr.	Circuit drawing	
Illumination element with Bi-Color illumination LED and built-in resistor included	24 VDC, 20 mA	Bi-Color LED red/green	FR	84-8005.8640	2	0.011
			PT 2.8 s	84-8005.8620	1	0.005
		Bi-Color LED yellow/green	FR	84-8005.7640	2	0.011
			PT 2.8 s	84-8005.7620	1	0.005



Standard version:

Cable length 300 mm with insulated ferrule; Plug-in terminal 2.8 x 0.8 mm.

Other options on request:

Customisation of cable and connectors.

The illumination element in the cable version cannot be dismantled from the actuator anymore!

Best illumination level will be reached with Alu lens with window, Typ-Nr. 84-7215.x00 and 84-7211.x00.

Protection degree (rear side) :


- Plug-in terminal IP 40, upgrade to IP 67 with Plug Typ-Nr. 84-900 possible.

- Cable connection IP 67, rear side fully sealed.

Terminals: FR = Flat ribbon cable, PT 2.8 s = Plug-in terminal 2.8 mm (solderable)

Circuit drawing from page 37

Switching element illuminated

	Contacts	Illumination	Operating voltage/-current	Terminals	Typ-Nr.	Circuit drawing	
Switching element illuminated LED and built-in resistor included	1 NO	Multi-LED blue	24 VDC, 20 mA	FR	84-8512.6640	7	0.015
				PT 2.8 s	84-8512.6620	7	0.006
		Multi-LED green	12 VDC, 40 mA	FR	84-8512.5340	7	0.015
				PT 2.8 s	84-8512.5320	7	0.006
			24 VDC, 20 mA	FR	84-8512.5640	7	0.015
				PT 2.8 s	84-8512.5620	7	0.006
		Multi-LED orange	12 VDC, 40 mA	FR	84-8512.3340	7	0.015
				PT 2.8 s	84-8512.3320	7	0.006
			24 VDC, 20 mA	FR	84-8512.3640	7	0.015
				PT 2.8 s	84-8512.3620	7	0.006
		Multi-LED red	12 VDC, 40 mA	FR	84-8512.2340	7	0.015
				PT 2.8 s	84-8512.2320	7	0.006
			24 VDC, 20 mA	FR	84-8512.2640	7	0.015
				PT 2.8 s	84-8512.2620	7	0.006
		Multi-LED yellow	12 VDC, 40 mA	FR	84-8512.4340	7	0.015
				PT 2.8 s	84-8512.4320	7	0.006
			24 VDC, 20 mA	FR	84-8512.4640	7	0.015
				PT 2.8 s	84-8512.4620	7	0.006
		Single-LED blue	24 VDC, 20 mA	FR	84-8511.6640	7	0.015
				PT 2.8 s	84-8511.6620	7	0.006
		Single-LED green	24 VDC, 20 mA	FR	84-8511.5640	7	0.015
				PT 2.8 s	84-8511.5620	7	0.006
		Single-LED orange	24 VDC, 20 mA	FR	84-8511.3640	7	0.015
				PT 2.8 s	84-8511.3620	7	0.006
		Single-LED red	24 VDC, 20 mA	FR	84-8511.2640	7	0.015
				PT 2.8 s	84-8511.2620	7	0.006
		Single-LED white	12 VDC, 40 mA	FR	84-8511.9340	7	0.015
				PT 2.8 s	84-8511.9320	7	0.006
24 VDC, 20 mA	FR		84-8511.9640	7	0.015		
	PT 2.8 s		84-8511.9620	7	0.006		
Single-LED yellow	24 VDC, 20 mA	FR	84-8511.4640	7	0.015		
		PT 2.8 s	84-8511.4620	7	0.006		



Standard version:

Cable length 300 mm with insulated ferrule; Plug-in terminal 2.8 x 0.8 mm.

Other options on request:

Customisation of cable and connectors.

Protection degree (rear side):

Plug-in terminal IP 40, upgrade to IP 67 with Plug Typ-Nr. 84-900 possible.

Contacts: NO = Normally open

Terminals: FR = Flat ribbon cable, PT 2.8 s = Plug-in terminal 2.8 mm (solderable)

Circuit drawing from page 37

Switching element with Bi-Color illumination

	Contacts	Illumination	Operating voltage/-current	Terminals	Typ-Nr.	Circuit drawing	
Switching element with Bi-Color illumination LED and built-in resistor included	1 NO	Bi-Color LED red/green	24 VDC, 20 mA	FR	84-8515.8640	3	0.015
		Bi-Color LED yellow/green	24 VDC, 20 mA	FR	84-8515.7640	3	0.015



Protection degree IP 67, back side fully sealed.

Non-removable switching element from actuator anymore.

Best illumination level will be reached with Alu lens with window, Typ-Nr. 84-7215.x00 and 84-7211.x00.

Standard version:

Cable length 300 mm with insulated ferrule.

Other options on request:

Customisation of cable and connectors.

Contacts: NO = Normally open

Terminals: FR = Flat ribbon cable

Circuit drawing from page 37

Switching element non-illuminated

	Contacts	Terminals	Typ-Nr.	Circuit drawing	
Switching element non-illuminated	1 NO	FR	84-8510.0040	6	0.010
		PT 2.8 s	84-8510.0020	6	0.005



Standard version:

Cable length 300 mm with insulated ferrule; Plug-in terminal 2.8 x 0.8 mm (solderable).

Other options on request:

Customisation of cable and connectors.

Protection degree (rear side):

Plug-in terminal IP 40, upgrade to IP 67 with Plug Typ-Nr. 84-900 possible.

Contacts: NO = Normally open

Terminals: FR = Flat ribbon cable, PT 2.8 s = Plug-in terminal 2.8 mm (solderable)

Circuit drawing from page 37

Switching element illuminative with PCB terminal

The customer has to decide what series resistor shall be used to the LED

	Contacts	Terminals	Typ-Nr.	Component layout	Technical drawing	Circuit drawing	
Switching element illuminative with PCB terminal	1 NO	P	92-851.342	4	13	14	0.001



Illumination and mounting flange to be ordered separately.

Contacts: NO = Normally open

Terminals: P = PCB terminal

Component layout from page 28, Technical drawing from page 30, Circuit drawing from page 37

Illumination element with PCB terminal

The customer has to decide what series resistor shall be used to the LED

	Terminals	Typ-Nr.	Component layout	Technical drawing	
Illumination element with PCB terminal	P	92-800.042	3	9	0.001



Illumination and mounting flange to be ordered separately.

Terminals: P = PCB terminal

Component layout from page 28, Technical drawing from page 30

Mounting flange

	Typ-Nr.	Technical drawing	
Mounting flange for Switching- and Illumination element with PCB terminal	92-960.0	10	0.001



Technical drawing from page 30

Flat receptacle

	Typ-Nr.	
Flat receptacle 2.8 x 0.8 mm	84-9420	0.001



Insulation sleeve

	Typ-Nr.	
Insulation sleeve for Flat receptacles 84-9420	31-929	0.001



Plug

	Typ-Nr.	
Plug	84-900	0.001




for back protection IP 67 of Switching elements and Illumination elements.
2 plugs are necessary per element.

Illumination

Single-LED


The customer has to decide what series resistor shall be used to the LED

Single-LED	Socket	Light colour	Operating voltage/-current	Typ-Nr.	
Single-LED	T1 Bi-Pin	blue	3.6 VDC, 20 mA	10-2603.3176D	0.001
		green	2.2 VDC, 20 mA	10-2602.3175D	0.001
		orange	2.2 VDC, 20 mA	10-2602.3173D	0.001
		red	2.2 VDC, 20 mA	10-2602.3172D	0.001
		white	3.6 VDC, 20 mA	10-2603.3179D	0.001
		yellow	2.2 VDC, 20 mA	10-2602.3174D	0.001



Multi-LED

The customer has to decide what series resistor shall be used to the LED


Multi-LED	Socket	Light colour	Operating voltage/-current	Typ-Nr.	
Multi-LED	T1 Bi-Pin	orange	12 VDC, 40 mA	10-5609.3173D	0.001
			6 VDC, 40 mA	10-5606.3243D	0.001
		red	12 VDC, 40 mA	10-5609.3172D	0.001
			6 VDC, 40 mA	10-5606.3242D	0.001
		yellow	12 VDC, 40 mA	10-5609.3174D	0.001
			6 VDC, 40 mA	10-5606.3244D	0.001



Emergency-stop and Stop pushbutton

Emergency-stop label

front panel thickness 3 mm max.

Emergency-stop label	Marking	Typ-Nr.	
60 mm dia., yellow, Mounting hole size 22.5 mm dia.	ARRET D'URGENCE	704.963.7	0.011
	EMERGENCY STOP	704.963.6	0.011
	NOT AUS	704.963.5	0.011
	NOT HALT	704.963.8	0.011
90 mm dia., yellow, Mounting hole size 22.5 mm dia.	ARRET D'URGENCE	704.963.2	0.011
	EMERGENCY STOP	704.963.1	0.011
	NOT AUS	704.963.0	0.011
	NOT HALT	704.963.3	0.011



Emergency-stop protective shroud

Front panel thickness 1 ... 3 mm

	Marking	Typ-Nr.	Technical drawing	
Emergency-stop protective shroud 45 mm dia., IP 40, mounting hole 22.5 mm dia., with anti-twist device	without	84-909	12	0.021
50 mm dia., IP 65, mounting hole 22.5 mm dia., with anti-twist device	EMERGENCY STOP	84-902B		0.006
	NOT - AUS	84-902A		0.006
	NOT - HALT	84-902D		0.006
	without	84-902		0.006



Please note: By using the protective shroud Typ-Nr. 84-909 the E-stop or Stop-Switch has to be mounted twisted by 180 °. Consult the dimensional drawing therefore.
Technical drawing from page 30

Fixing nut

	Fixing nut	Typ-Nr.	
Fixing nut 28 mm dia.	Plastic black	84-905	0.002
30 mm dia., standard delivery	Plastic black	84-908	0.002



Emergency-stop enclosures

Bottom grey similar RAL 7035; cover lead-sealable, yellow similar RAL 1004


	Dimension	Typ-Nr.	Technical drawing	
Emergency-stop enclosures with mounting hole 22.5 mm dia., with anti- twist device	L 65 mm, W 65 mm, H 57 mm	84-910	11	0.099



Openings for cable gland M16 or M20.
Protection class IP 66.
Technical drawing from page 30

Stop pushbutton enclosure


Grey similar RAL 7035; cover lead-sealable

	Dimension	Typ-Nr.	Technical drawing	
Stop pushbutton enclosure with mounting hole 1 x 22.5 mm dia., with anti-twist device	L 94 mm, W 94 mm, H 81 mm	704.945.1	2	0.211
with mounting hole 2 x 22.5 mm dia., with anti-twist device	L 130 mm, W 94 mm, H 81 mm	704.945.2	3	0.251
with mounting hole 3 x 22.5 mm dia., with anti-twist device	L 180 mm, W 94 mm, H 81 mm	704.945.3	4	0.313
with mounting hole 4 x 22.5 mm dia., with anti-twist device	L 180 mm, W 182 mm, H 110 mm	704.945.4	5	0.572
with mounting hole 6 x 22.5 mm dia., with anti-twist device	L 180 mm, W 182 mm, H 110 mm	704.945.5	6	0.568



Technical drawing from page 30


Cable gland

	Typ-Nr.	
Cable gland M16, Plastic grey	61-9481.6	0.007
M20, Plastic grey	704.945.6	0.011




with traction relief; protection degree IP 68.

Flat receptacle

	Typ-Nr.	
Flat receptacle 2.8 x 0.5 mm for Plug-in terminal	31-946	0.001



Insulation sleeve

	Typ-Nr.	
Insulation sleeve for Flat receptacles 31-946	31-929	0.001



Stop request pushbutton

Housing, pole mounting 35 mm dia.

	Housing	Colour	Typ-Nr.	Technical drawing	
Housing, pole mounting 35 mm dia.	Plastic blue	RAL 5017 traffic blue	84-9500.6A	16	0.035
	Plastic grey	RAL 7016	84-9500.8	16	0.035
	Plastic yellow	RAL 1023	84-9500.4	16	0.035



Screws are not contained in the scope of supply.
 Technical drawing from page 30

Housing, pole mounting 38 mm dia.

	Housing	Colour	Typ-Nr.	Technical drawing	
Housing, pole mounting 38 mm dia.	Plastic grey	RAL 7016	84-9600.8	17	0.030
	Plastic yellow	RAL 1023	84-9600.4	17	0.030



Screws are not contained in the scope of supply.
 Technical drawing from page 30


Adaptor, reducing to 30 mm dia.

	Housing	Colour	Typ-Nr.	Technical drawing	
Adaptor, reducing to 30 mm dia. for housing, pole mounting 35 mm dia.	Plastic grey	RAL 7016	84-9700.8	20	0.024
	Plastic yellow	RAL 1023	84-9700.4	20	0.024



Technical drawing from page 30


Adaptor, reducing to 25 mm dia.

	Housing	Colour	Typ-Nr.	Technical drawing	
Adaptor, reducing to 25 mm dia. for housing, pole mounting 35 mm dia.	Plastic grey	RAL 7016	84-9300.8	19	0.008
	Plastic yellow	RAL 1023	84-9300.4	19	0.008



Technical drawing from page 30

Housing, wall mounting

	Housing	Colour	Typ-Nr.	Technical drawing	
Housing, wall mounting	Plastic grey	RAL 7016	84-9800.8	18	0.024
	Plastic yellow	RAL 1023	84-9800.4	18	0.024



Screws are not contained in the scope of supply.
Technical drawing from page 30


Assembling

Lens remover

	Typ-Nr.	
Lens remover	61-9730.0	0.011




Mounting tool

	Typ-Nr.	
Mounting tool for tightening or loosening of Emergency-stop and Stop-Switch fixing nut	84-996	0.014
for tightening or loosening of Fixing nut, Indicator and Pushbutton	84-997	0.027



Dismantling tool

	Typ-Nr.	
Dismantling tool for actuator dismantling of switching- and illumination element and mounting flange	84-998	0.002



Emergency-stop

Switching system

The double-break switching system can be supplied for the following switching functions:

1 Normally closed, 2 Normally closed, 1 Normally closed + 1 Normally open.

The Normally closed contacts have forced opening according to EN IEC 60947-5-1

Material

Connection cable

Polyvinylchloride (PVC), operating temperature up to +65 °C

Mushroom-head cap

Polybutylenterephthalate (PBT), as per UL 94 V0 (red items)

Actuator housing

Polyamide (PA 66), as per UL 94 V0, Flat ribbon cable-cover
Polyamide (PA 6.6), as per UL 94 V0

Material of contact

Silver alloy gold plated

Mechanical characteristics

Front panel thickness

Standard 1 ... 4 mm
with E-stop protective shroud Typ-Nr. 84-902 1 ... 3 mm

Mounting hole

22.5 mm dia. as per EN IEC 60947-5-1 with anti-twist device

Terminals

Soldering terminals 2.8 x 0.5 mm (solderable), CuSn6 tin-plated
Flat ribbon cable 2-, 4-, or 6-poles 0.35 mm² (AWG 22)

Tightening torque

Fixing nut 80 Ncm

Actuating force

22 N ±4 N

Actuating travel

approx. 4 mm to release the internal operation part

Mechanical lifetime

≥50.000 cycles of operations

Electrical characteristics

Standards

The devices comply with : EN IEC 60947-5-1, EN IEC 60947-5-5 (Emergency-stop), DIN EN ISO 13850, EN IEC 60204

Illumination

LED red with pole reversal, constant current source

Operation Voltage 5 VDC ... 30 VDC
Current consumption 9.7 mA ... 12.4 mA

Rated Operational Voltage U_e

250 VAC, as per EN IEC 60947-1

Rated Insulation Voltage U_i

250 V, as per EN IEC 60947-1

Rated Impulse Withstand Voltage U_{imp}

2.5 kV, as per EN IEC 60947-1

Contact resistance

New state ≤ 50 mΩ, as per DIN IEC 60512-2-3

Isolation resistance

>10¹¹ Ω between the open contacts at 500 VDC, as per DIN IEC 60512-2-10

Electrical life

≥50 000 cycles of operations (inductive cosφ 0.4), as per EN IEC 60947-5-1

Voltage	120 VAC	240 VAC	125 VDC	250 VDC
Current	3 A	1.5 A	0.55 A	0.27 A

Reduced load ≥50'000 cycles of operations (resistive)

Voltage	1 VAC/DC	42 VAC/DC
Current	100 mA	200 mA

Conventional free air thermal current I_{th}

5 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

Switch rating AC with silver contact (gold plated), service category AC-15, as per EN IEC 60947-5-1

Voltage	120 VAC	240 VAC
Current	3 A	1.5 A

Switch rating DC for silver contact (gold plated), service category DC-13, as per EN IEC 60947-5-1 (inductive)

Voltage	12 VDC	24 VDC	48 VDC	60 VDC	125 VDC	250 VDC
Current _{Plug}	5 A	4 A	2.1 A	1.7 A	0.55 A	0.27 A
Current _{Cable}	3 A	3 A	2.1 A	1.7 A	0.55 A	0.27 A

Recommended minimum operational data

Silver contacts (gold plated)

Voltage	1 VAC/DC
Current	1 mA

Electric strength

500 VAC, 50 Hz, 1 min, as per DIN IEC 60512-2

Rated conditional short-circuit current

1000 A, type of short-circuit unit 6 A gG, as per EN IEC 60947-5-1

Protection class

Class II, as per EN IEC 60947-5

Overvoltage category

II, as per EN IEC 60947-1

Degree of pollution

3, as per EN IEC 60947-1

Environmental conditions

Storage temperature

-25 °C ... +80 °C

Operating temperature

-25 °C ... +65 °C

Front protection

IP 65, as per EN IEC 60529

Shock resistance

(semi-sinusoidal)
max. 150 m/s², pulse width 11 ms, 3-axis, as per EN IEC 60068-2-27

Vibration resistance

(sinusoidal)
max. 50 m/s² at 10 Hz ... 500 Hz, 10 cycles, 3-axis, as per EN IEC 60068-2-6

Climate resistance

Damp heat, cyclic
96 hours, +25 °C / 97 %, +55 °C / 93 % relative humidity, as per EN IEC 60068-2-30

Damp heat, steady

56 days, +40 °C / 93 % relative humidity, as per EN IEC 60068-2-78

Dry heat

96 hours, +70 °C, as per EN IEC 60068-2-2

Low temperature

96 hours, -40 °C, as per EN IEC 60068-2-1

Saline mist

96 Stunden, +35 °C in chemical solution NaCl, as per EN IEC 60068-2-11

Approvals

Approbations

SEV
UL

Declaration of conformity

CE
RoHS

Actuating travel

~0.5 mm

Rebound time

≤1 ms

Resistance to heat of soldering

260 °C, 5 s (PCB assembly)
350 °C, 10 s (when using a soldering iron)
as per EN IEC 60068-2-20

Mechanical lifetime

≥1 million cycles of operations

Electrical characteristics

Illumination

Single-Chip or Multi-Chip LED, green, orange, red, yellow, white and blue

Operation Voltage	12 VDC	24 VDC
Current consumption	40 mA	20 mA

Contact resistance

Starting value (initial) ≤100 mΩ, as per DIN IEC 60512-2

Isolation resistance

≥1 G Ω between all terminals at 100 VDC, as per DIN IEC 60512-2

Electrical life

as per EN IEC 60512-5

5 million	cycles of operation	24 VAC, 50 mA at 480 Ω
5 million	cycles of operation	24 VAC, 100 mA at 240 Ω
2 million	cycles of operation	42 VAC, 50 mA at 840 Ω
2 million	cycles of operation	42 VAC, 100 mA at 420 Ω
300 000	cycles of operation	42 VAC, 100 mA at cosφ 0,4
250 000	cycles of operation	42 VAC, 200 mA at cosφ 0,395
1 million	cycles of operation	12 VDC, 250 mA at 48 Ω
1 million	cycles of operation	24 VDC, 50 mA at 480 Ω
1 million	cycles of operation	24 VDC, 100 mA at 240 Ω
5 million	cycles of operation	42 VDC, 25 mA at 1680 Ω
1.5 million	cycles of operation	42 VDC, 50 mA at 840 Ω
100 000	cycles of operation	42 VDC, 100 mA at 420 Ω
500 000	cycles of operation	24 VDC, 200 mA at L/R=30 ms
300 000	cycles of operation	42 VDC, 100 mA at L/R=30 ms
100 000	cycles of operation	42 VDC, 200 mA at L/R=30 ms

Switch rating

Voltage	50 mVAC/DC ... 42 VAC/DC
Current	10 uA ... 100 mA
Power	max. 2 W

Electric strength

500 VAC, 50 Hz, 1 min, as per DIN IEC 60512-2

Environmental conditions

Storage temperature

-40 °C ... +85 °C

Operating temperature

-25 °C ... +70 °C

Protection degree

For IP 67 back protection, cable version only, use Plug Typ-Nr. 84-900

Switching element illuminated pushbutton

Switching system

Short-travel switching system with 2 independent contact points and tactile operation.

Guarantees reliable switching even of very light loads.

Fitted with 1 normally open contact.

Material

Connection cable

Polyvinylchloride (PVC), short-time heat-resistant up to 105 °C

Material of contact

Silver alloy gold plated

Switching element

Thermoplastic polyester (PET, PBT), as per UL 94 V0 and Polyacetale (POM), as per UL 94 HB

Mechanical characteristics

Terminals

Plug-in terminals 2.8 x 0.8 mm (solderable)

Flat ribbon cable 0.5 mm²

PCB terminal

Actuating force

4.0 N ±0.2 N (measured at the lens)

Shock resistance

(semi-sinusoidal)

max. 100 m/s², pulse width 11 ms, 3-axis, as per EN IEC 60068-2-27

Vibration resistance

(sinusoidal)

max. 50 m/s² at 10 Hz ... 500 Hz, 10 cycles, 3-axis, as per EN IEC 60068-2-6

Actuator

Material

Lens

Polycarbonate (PC), as per UL 94 V2 or Aluminium anodised

Actuator housing

Polyetherimid (PEI), as per UL 94 V0 or Aluminium anodised

Mechanical characteristics

Mounting hole

22.5 mm dia. and 30.5 mm dia.

Tightening torque

Fixing nut max. 80 Ncm

Actuating force

4.0 N ±0.2 N (measured at the lens)

Actuating travel

Total switching travel 1.2 mm

Mechanical lifetime

≥1 million cycles of operations

Electrical characteristics

Electrostatic breakdown value

Plastic case ≥15 kV

Aluminium case ≥5 kV

as per IEC 61000-4-2, mounted in plastic front panel

Environmental conditions

Storage temperature

-40 °C ... +85 °C

Operating temperature

-25 °C ... +70 °C

Front protection

IP 67, IP 65 and IP40, as per EN IEC 60529

Climate resistance

Damp heat, cyclic

96 hours, +25 °C / 97 %, +55 °C / 93 % relative humidity, as per EN IEC 60068-2-30

Damp heat, state

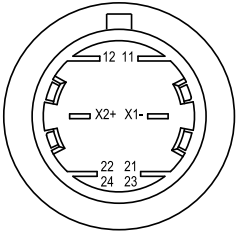
56 days, +40 °C / 93 % relative humidity, as per EN IEC 60068-2-78

Rapid change of temperature

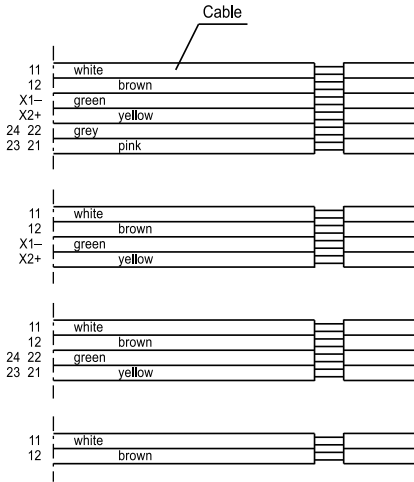
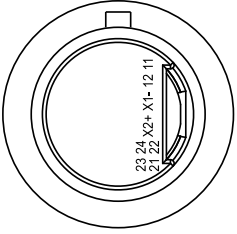
100 cycles, -40 °C ... +80 °C, as per EN IEC 60068-2-14

Component layout

1 Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete page 7 | Stop pushbutton grey, complete page 8



2 Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete page 7 | Stop pushbutton grey, complete page 8



	Terminals
1 NC + 1 NO	11 / 12 + 23 / 24
2 NC	11 / 12 + 21 / 22
Illumination	X1- / X2+

	Terminals
1 NC	11 / 12
Illumination	X1- / X2+

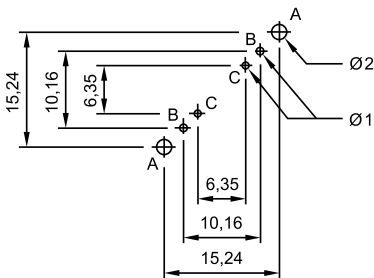
	Terminals
1 NC + 1 NO	11 / 12 + 23 / 24
2 NC	11 / 12 + 21 / 22

	Terminals
1 NC	11 / 12

3 Illumination element with PCB terminal page 19

Drilling plan (Elementside)

- A Fixing holes for mounting flange
- B Holes for LED
- C Holes for centering pins

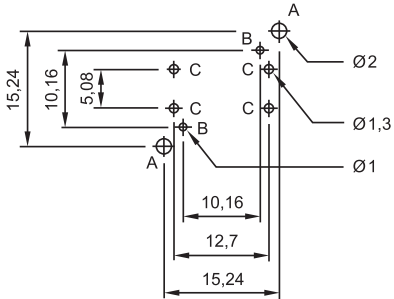


Libraries for the PCB layout-system p-cad 200X see : www.pcad.com/en/library Third-party Libraries

4 Switching element illuminative with PCB terminal page 18

Drilling plan (Elementside)

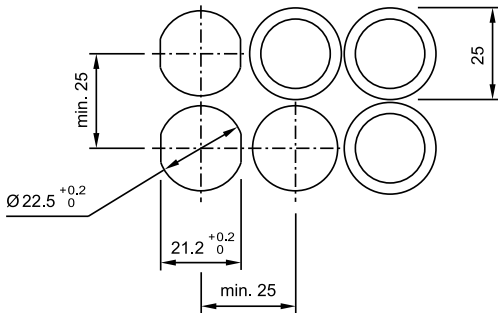
- A Fixing holes for mounting flange
- B Fixing holes for LED
- C Holes for contact pins
pad max. 2.5 mm dia.
through-connection recommended



Libraries for the PCB layout-system p-cad 200X see : www.pcad.com/en/library Third-party Libraries

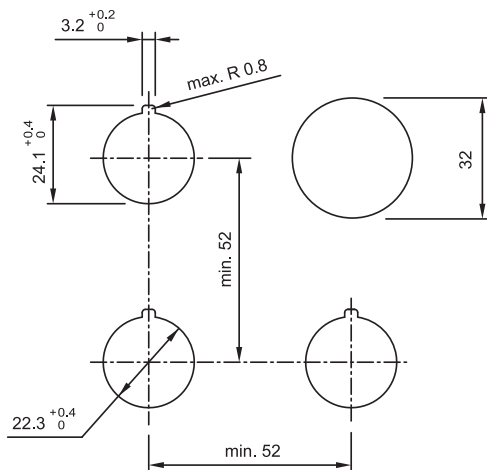
Mounting dimensions

1 Indicator actuator, flush mounting page 9 | Illuminated pushbutton actuator, flush mounting page 10

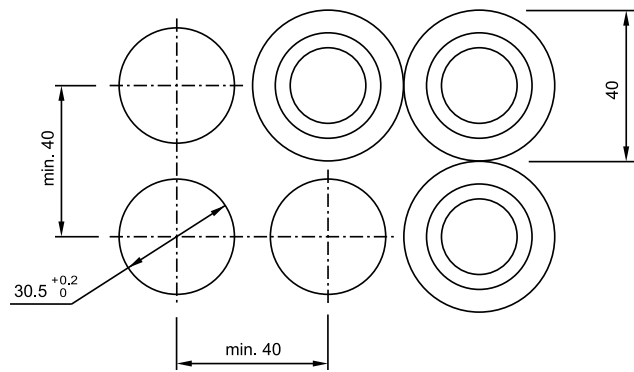


Hole spacing 31 mm min. by using blind plug 704.960.4

2 Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete page 7 | Stop pushbutton grey, complete page 8

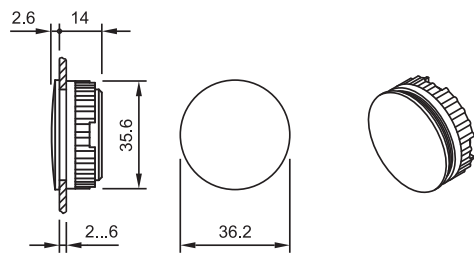


3 Illuminated pushbutton actuator, flush mounting page 10

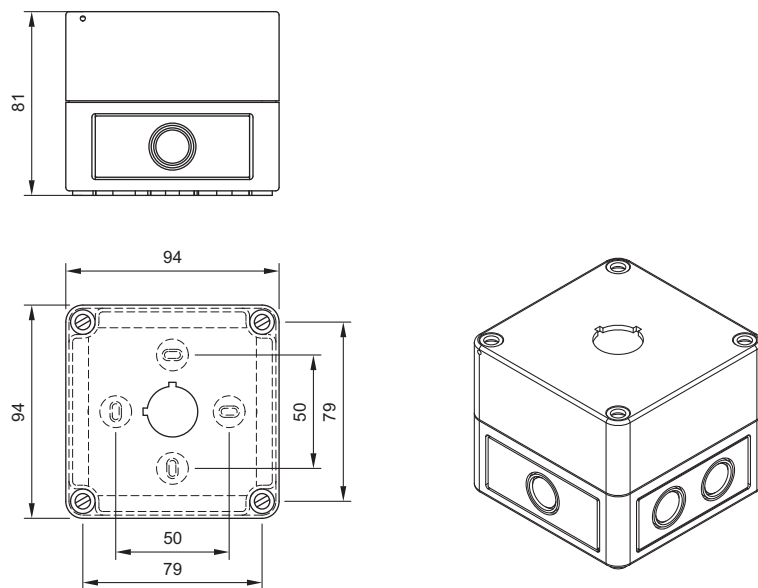


Technical drawing

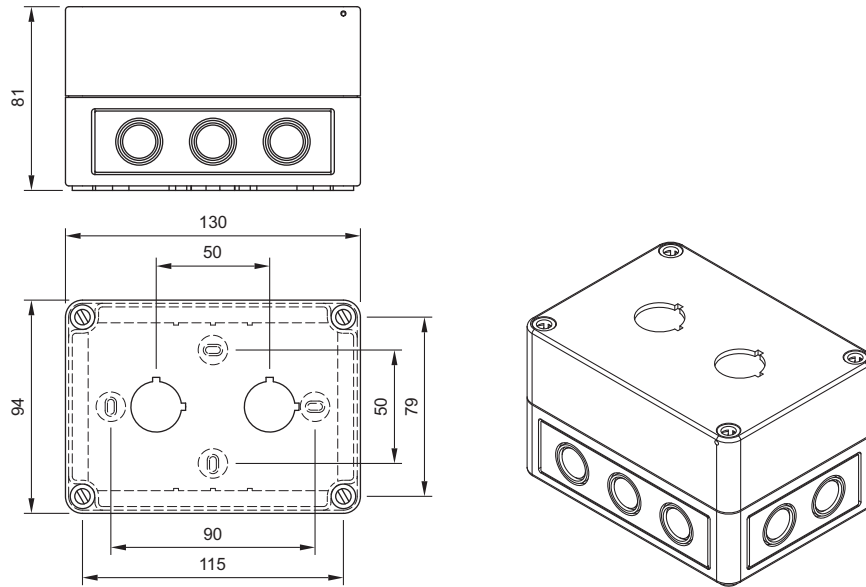
1 Blind plug page 14



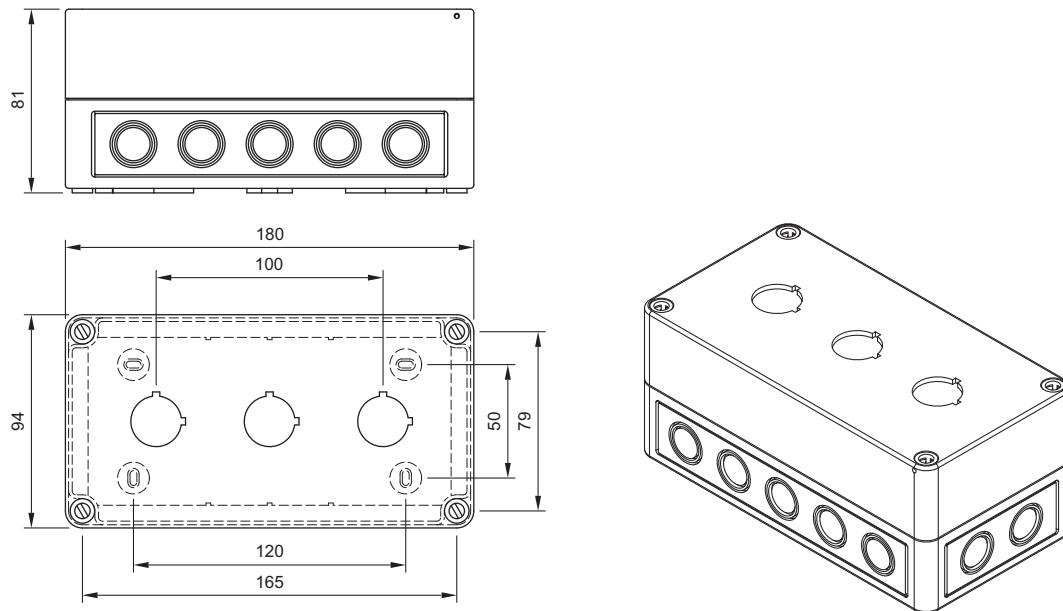
2 Stop pushbutton enclosure page 22



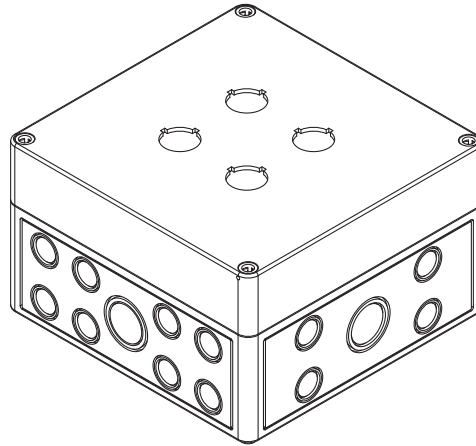
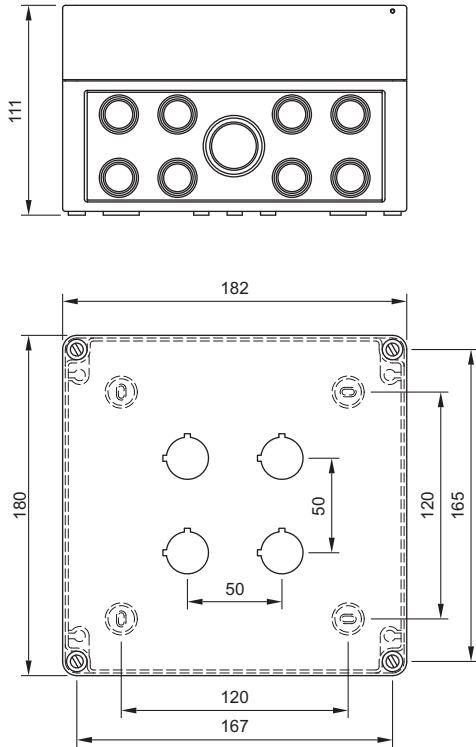
3 Stop pushbutton enclosure page 22



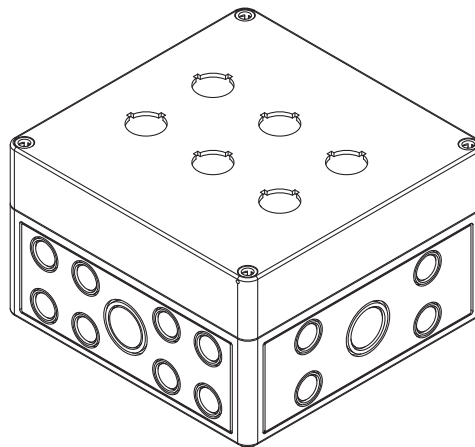
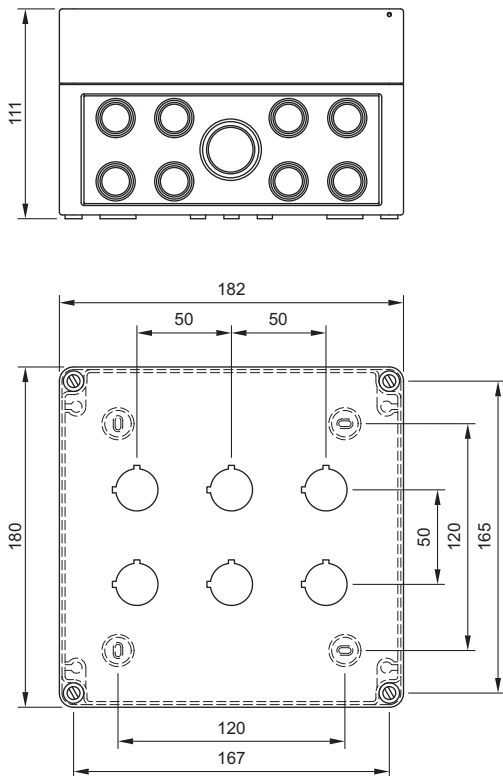
4 Stop pushbutton enclosure page 22



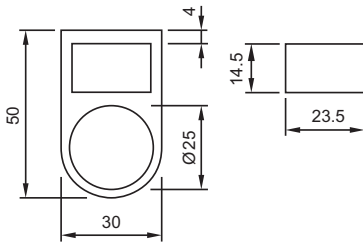
5 Stop pushbutton enclosure page 22



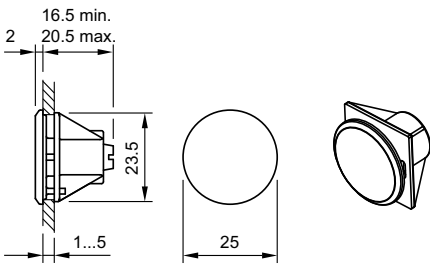
6 Stop pushbutton enclosure page 22



7 Legend frame page 13

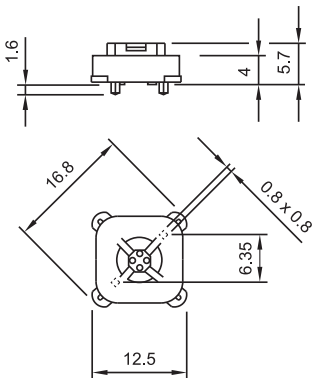


8 Blind plug page 14

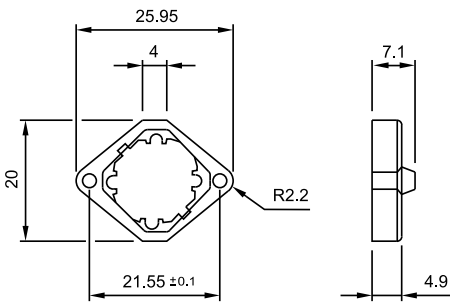


With this print version of the series 84, the panel thickness is reduced to 2.5 mm max.

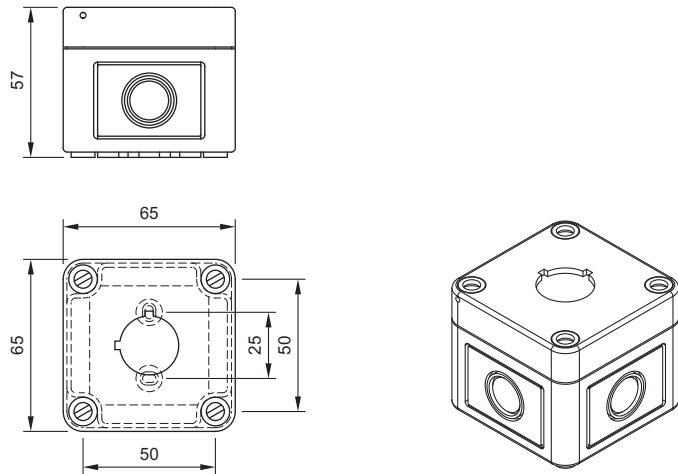
9 Illumination element with PCB terminal page 19



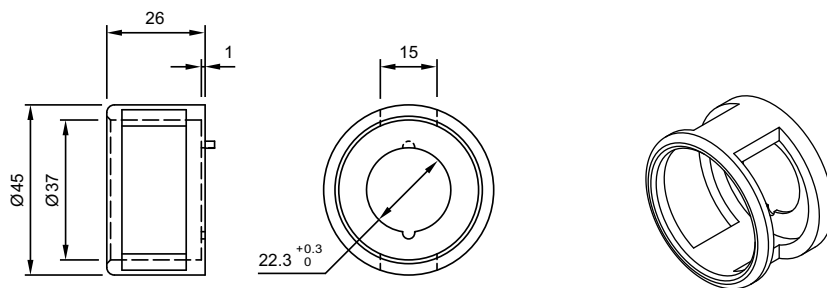
10 Mounting flange page 19



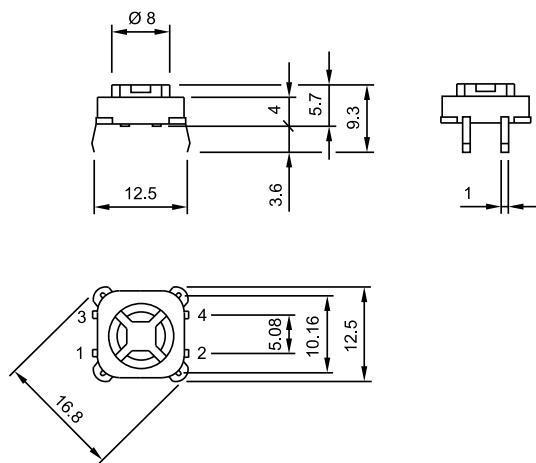
11 Emergency-stop enclosures page 21



12 Emergency-stop protective shroud page 21

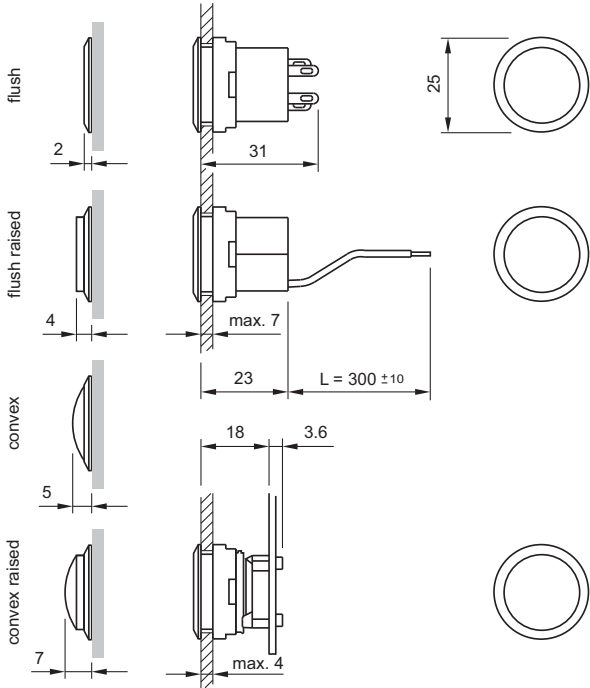


13 Switching element illuminative with PCB terminal page 18

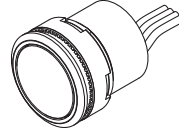
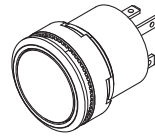


14 Indicator actuator, flush mounting page 9 | Illuminated pushbutton actuator, flush mounting page 10

Lenses

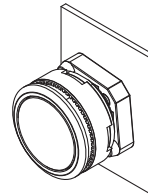


Plug-in terminal

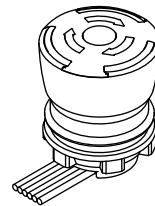
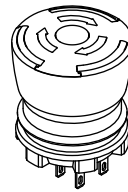
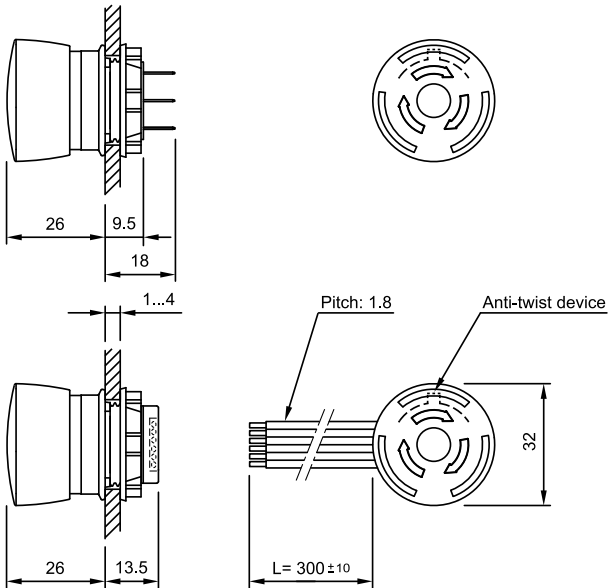


Flat ribbon cable

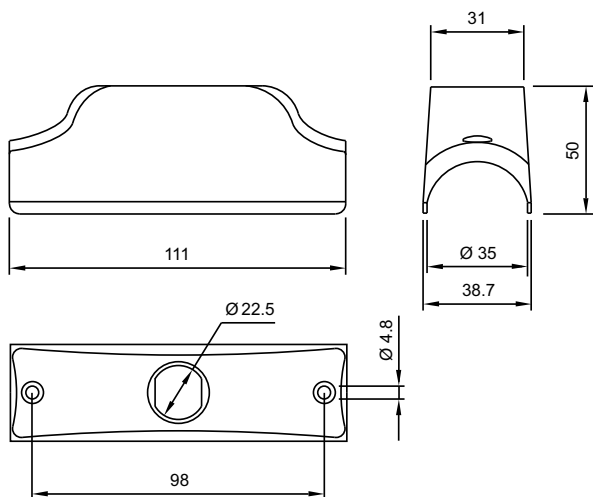
PCB terminal



15 Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete page 7 | Stop pushbutton grey, complete page 8

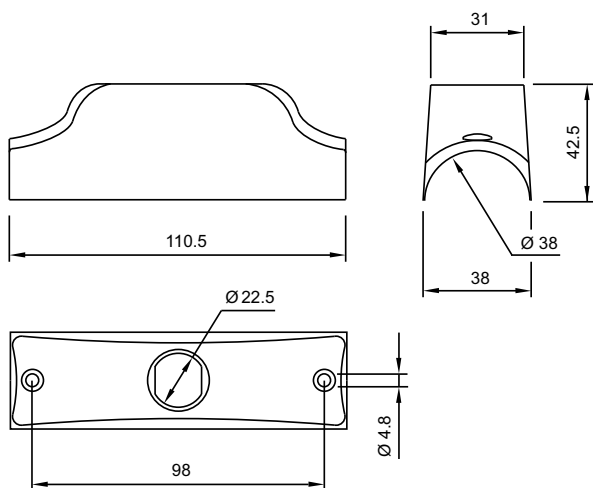


16 Housing, pole mounting 35 mm dia. page 23



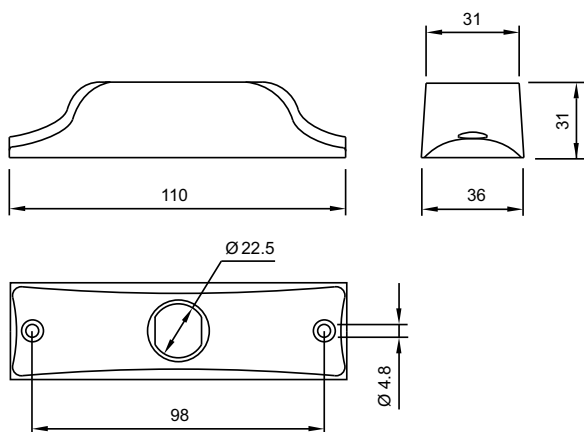
Please note: The cut-out of the pole must read min. 22 mm dia. and needs to be aligned with the switch!

17 Housing, pole mounting 38 mm dia. page 23



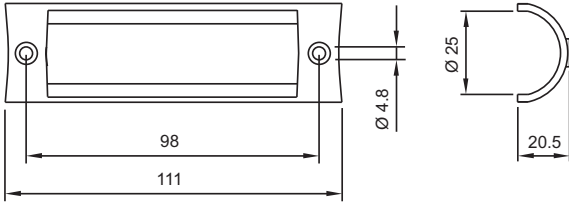
Please note: The cut-out of the pole must read min. 22 mm dia. and needs to be aligned with the switch!

18 Housing, wall mounting page 24

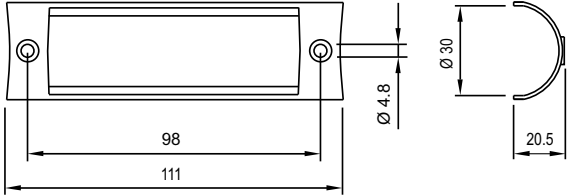


Please note: The cut-out of the wall must read min. 22 mm dia. and needs to be aligned with the switch!

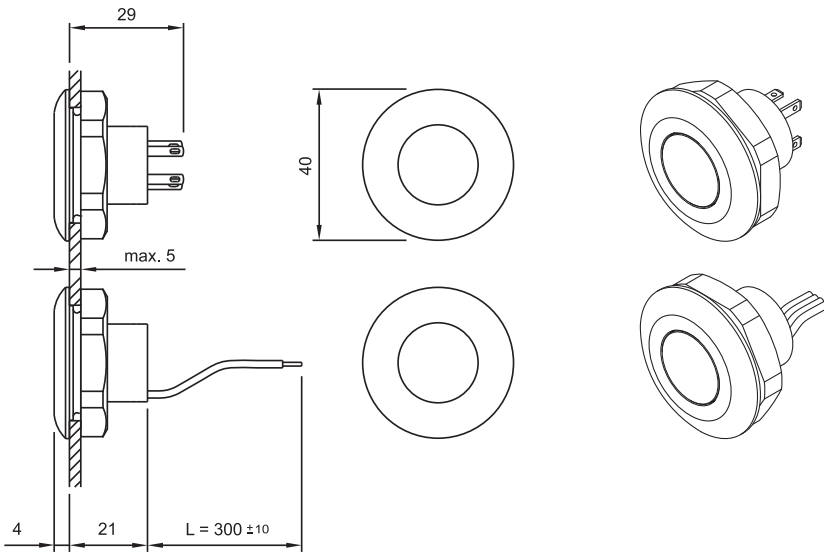
19 Adaptor, reducing to 25 mm dia. page 24



20 Adaptor, reducing to 30 mm dia. page 23

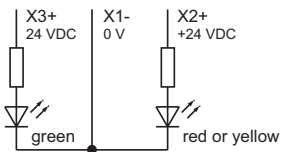


21 Illuminated pushbutton actuator, flush mounting page 10

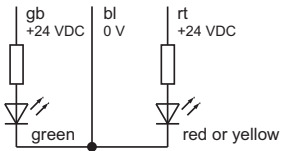


Circuit drawing

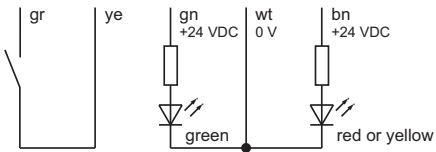
1 Illumination element with Bi-Color illumination page 16



2 Illumination element with Bi-Color illumination page 16



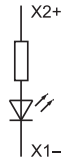
3 Switching element with Bi-Color illumination page 18



4 Illuminated pushbutton actuator, flush mounting page 10



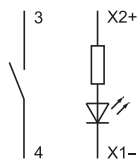
5 Illumination element page 15



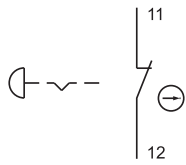
6 Switching element non-illuminated page 18



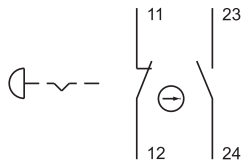
7 Switching element illuminated page 17



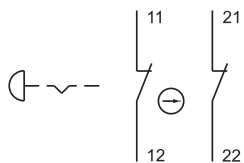
8 Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete page 7 | **Stop pushbutton grey, complete** page 8



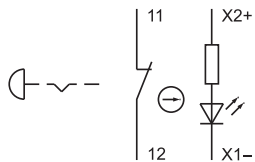
9 Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete page 7 | **Stop pushbutton grey, complete** page 8



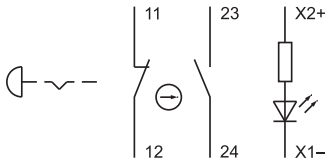
10 Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete page 7 | **Stop pushbutton grey, complete** page 8



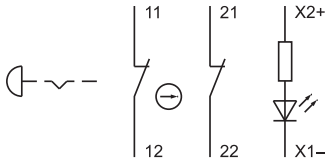
11 Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete page 7 | **Stop pushbutton grey, complete** page 8



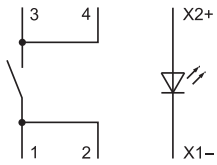
12 Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete page 7 | Stop pushbutton grey, complete page 8



13 Emergency-stop pushbutton, foolproof EN IEC 60947-5-5, complete page 7 | Stop pushbutton grey, complete page 8



14 Switching element illuminative with PCB terminal page 18



Index from Typ-Nr.

Typ-Nr.	Page	Typ-Nr.	Page	Typ-Nr.	Page
10-2602.3172D	20	84-5120.0020	7	84-7202.500	12
10-2602.3173D	20	84-5120.0040	7	84-7202.500B	12
10-2602.3174D	20	84-5121.2B20	7	84-7202.600	12
10-2602.3175D	20	84-5121.2B40	7	84-7202.600A	12
10-2603.3176D	20	84-5130.0020	7	84-7202.800	12
10-2603.3179D	20	84-5130.0040	7	84-7202.800A	12
10-5606.3242D	20	84-5131.2B20	7	84-7205.000	12
10-5606.3243D	20	84-5131.2B40	7	84-7205.000A	12
10-5606.3244D	20	84-5140.0020	7	84-7205.200	12
10-5609.3172D	20	84-5140.0040	7	84-7205.200A	12
10-5609.3173D	20	84-5141.2B20	7	84-7205.400	12
10-5609.3174D	20	84-5141.2B40	7	84-7205.400A	12
31-929	19	84-6020.0020	8	84-7205.500	12
31-929	22	84-6020.0040	8	84-7205.500A	12
31-946	22	84-6021.2B20	8	84-7205.600	12
61-9453.0	14	84-6021.2B40	8	84-7205.600A	12
61-9481.6	22	84-6030.0020	8	84-7205.800	12
61-9707.7	11	84-6030.0040	8	84-7205.800A	12
61-9730.0	24	84-6031.2B20	8	84-7211.000	13
61-9980.0	13	84-6031.2B40	8	84-7211.200	13
704.945.1	22	84-6040.0020	8	84-7211.400	13
704.945.2	22	84-6040.0040	8	84-7211.500	13
704.945.3	22	84-6041.2B20	8	84-7211.600	13
704.945.4	22	84-6041.2B40	8	84-7211.800	13
704.945.5	22	84-7111.200	11	84-7215.000	13
704.945.6	22	84-7111.201	11	84-7215.200	13
704.963.0	20	84-7111.300	11	84-7215.400	13
704.963.1	20	84-7111.301	11	84-7215.500	13
704.963.2	20	84-7111.400	11	84-7215.600	13
704.963.3	20	84-7111.401	11	84-7215.800	13
704.963.5	20	84-7111.500	11	84-8001.2620	15
704.963.6	20	84-7111.501	11	84-8001.2640	15
704.963.7	20	84-7111.600	11	84-8001.3620	15
704.963.8	20	84-7111.601	11	84-8001.3640	15
704.964.8	14	84-7111.700	11	84-8001.4620	15
704.968.0	14	84-7111.701	11	84-8001.4640	15
704.968.1	14	84-7115.200	11	84-8001.5620	15
84-0090.7	9	84-7115.300	11	84-8001.5640	15
84-0100.0	9	84-7115.400	11	84-8001.6620	15
84-0200.7	9	84-7115.500	11	84-8001.6640	15
84-1091.7	10	84-7115.600	11	84-8001.9320	15
84-1101.0	10	84-7115.700	11	84-8001.9340	15
84-1201.0	10	84-7121.000	11	84-8001.9620	15
84-1201.2	10	84-7121.800	11	84-8001.9640	15
84-1201.4	10	84-7124.000A	13	84-8002.2320	15
84-1201.5	10	84-7124.200A	13	84-8002.2340	15
84-1201.6	10	84-7124.400A	13	84-8002.2620	15
84-1201.7	10	84-7124.500A	13	84-8002.2640	15
84-1221.7	10	84-7124.600A	13	84-8002.3320	15
84-2101.0	10	84-7125.000	11	84-8002.3340	15
84-3100.0	9	84-7125.800	11	84-8002.3620	15
84-5020.0020	7	84-7201.000	12	84-8002.3640	15
84-5020.0040	7	84-7201.200	12	84-8002.4320	15
84-5021.2B20	7	84-7201.400	12	84-8002.4340	15
84-5021.2B40	7	84-7201.500	12	84-8002.4620	15
84-5030.0020	7	84-7201.600	12	84-8002.4640	15
84-5030.0040	7	84-7201.800	12	84-8002.5320	15
84-5031.2B20	7	84-7202.000	12	84-8002.5340	15
84-5031.2B40	7	84-7202.000A	12	84-8002.5620	15
84-5040.0020	7	84-7202.200	12	84-8002.5640	15
84-5040.0040	7	84-7202.200A	12	84-8005.7620	16
84-5041.2B20	7	84-7202.400	12	84-8005.7640	16
84-5041.2B40	7	84-7202.400A	12	84-8005.8620	16

Index from Typ-Nr.

Typ-Nr.	Page	Typ-Nr.	Page	Typ-Nr.	Page
84-8005.8640	16	92-851.342	18		
84-8510.0020	18	92-960.0	19		
84-8510.0040	18				
84-8511.2620	17				
84-8511.2640	17				
84-8511.3620	17				
84-8511.3640	17				
84-8511.4620	17				
84-8511.4640	17				
84-8511.5620	17				
84-8511.5640	17				
84-8511.6620	17				
84-8511.6640	17				
84-8511.9320	17				
84-8511.9340	17				
84-8511.9620	17				
84-8511.9640	17				
84-8512.2320	17				
84-8512.2340	17				
84-8512.2620	17				
84-8512.2640	17				
84-8512.3320	17				
84-8512.3340	17				
84-8512.3620	17				
84-8512.3640	17				
84-8512.4320	17				
84-8512.4340	17				
84-8512.4620	17				
84-8512.4640	17				
84-8512.5320	17				
84-8512.5340	17				
84-8512.5620	17				
84-8512.5640	17				
84-8512.6620	17				
84-8512.6640	17				
84-8515.7640	18				
84-8515.8640	18				
84-900	19				
84-902	21				
84-902A	21				
84-902B	21				
84-902D	21				
84-905	21				
84-908	21				
84-909	21				
84-910	21				
84-9103.7	13				
84-9300.4	24				
84-9300.8	24				
84-9420	19				
84-9500.4	23				
84-9500.6A	23				
84-9500.8	23				
84-9600.4	23				
84-9600.8	23				
84-9700.4	23				
84-9700.8	23				
84-9800.4	24				
84-9800.8	24				
84-996	24				
84-997	24				
84-998	24				
92-800.042	19				

	EAO AG
	Tannwaldstrasse 88 4601 Olten, Switzerland
E-mail	info@eao.com
Website	www.eao.com
	Austria
Phone	+49 201 85 87 0
Fax	+49 201 85 87 210
E-mail	sales.ede@eao.com
	Belgium
Phone	+32 3 777 82 36
Fax	+32 3 777 84 19
E-mail	sales.ebl@eao.com
	China
Phone	+852 27 86 91 41
Fax	+852 27 86 95 61
E-mail	sales.ehk@eao.com
	France
Phone	+33 1 64 43 37 37
Fax	+33 1 64 43 37 49
E-mail	sales.esa@eao.com
	Germany
Phone	+49 201 85 87 0
Fax	+49 201 85 87 210
E-mail	sales.ede@eao.com
	Italy
Phone	+39 035 481 0189
Fax	+39 035 481 3786
E-mail	sales.eit@eao.com
	Japan
Phone	+81 3 5401 0953
Fax	+81 3 5444 0345
E-mail	sales.esj@eao.com
	Netherlands
Phone	+31 78 653 17 00
Fax	+31 78 653 17 99
E-mail	sales.enl@eao.com
	Sweden
Phone	+46 8 683 86 60
Fax	+46 8 724 29 12
E-mail	sales.esw@eao.com
	Switzerland
Phone	+41 62 388 95 00
Fax	+41 62 388 95 55
E-mail	sales.ech@eao.com
	United Kingdom
Phone	+44 1444 236 000
Fax	+44 1444 236 641
E-mail	sales.euk@eao.com
	USA
Phone	+1 203 877 4577
Fax	+1 203 877 3694
E-mail	sales.eus@eao.com
	Other Countries
Phone	+41 62 286 92 10
Fax	+41 62 296 21 62
E-mail	info@eao.com