

Fitting

The pushbutton should be plugged-in to the mounting hole and soldered onto the printed circuit board (PCB).

Construction

The large lens is available in two versions, convex or concave form. The small lens is available only in flat form. The large pushbutton has space for 3 SMD-LED's and the small one for 2 SMD-LED's.

Marking

The diffuser can be printed or engraved, or a film insert (use series 97 or 99 parts) can be fitted between the diffuser and the lens.

Mounting

Suitable for mounting on PCB's with thickness of 1.5 to 2.5 mm (use SMD-LED's for illumination).

The separated spring clip contact holds the switch in place during the assembly and soldering process.

The soldered joint makes the electrical contact and fixes the switch in the PCB.

Maximum soldering-temperature is 260 °C for 5 seconds.

There is a solder stop between the SMD-LED's and the contact mounting areas.

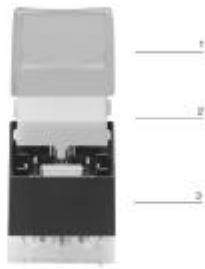
The PCB layout and mounting details are shown in the dimensional drawings.

The switch must be used with a lens.

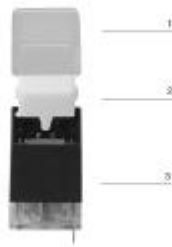
Switching system

Gold-plated momentary contact, 1 normally open, self-cleaning.

illuminated-/pushbutton



- 1 lens
- 2 Diffuser
- 3 switching element



- 1 lens
- 2 Diffuser
- 3 switching element

illuminated-/pushbutton



	contacts	switching action		b 19.05 x 19.05 mm part no.	b 12.70 x 12.70 mm part no.	technical drawing	mounting dimensions	component layout	e
illuminated-/pushbutton	1 NO	M	lens						
			neutral, flat		95-313.720	1	1	1	0,003
			neutral, concave	95-414.740		1	1	1	0,004
			neutral, convex	95-414.730		1	1	1	0,004

contacts: normally open = NO
switching action: momentary action = M
technical drawings from page 8, mounting dimensions from page 8, component layouts from page 8

at front

lens

	shape	colour	b 19.05 x 19.05 mm Typ-Nr.	b 12.70 x 12.70 mm Typ-Nr.	e
lens	flat		95-704.720	95-703.720	0,001
			95-704.750	95-703.750	0,001
	concave		95-704.740		0,001
			95-704.770		0,001
	convex		95-704.730		0,001
			95-704.760		0,001



diffuser

	colour	b 19.05 x 19.05 mm Typ-Nr.	b 12.70 x 12.70 mm Typ-Nr.	e
diffuser	blue	95-804.620	95-803.620	0,001
	yellow	95-804.420	95-803.420	0,001
	grey	95-804.820	95-803.820	0,001
	green	95-804.520	95-803.520	0,001
	without	95-804.020	95-803.020	0,001
	clear	95-804.720	95-803.720	0,001
	orange	95-804.320	95-803.320	0,001
	red	95-804.220	95-803.220	0,001
	white	95-804.920	95-803.920	0,001



at back

switching element

	contacts	b 19.05 x 19.05 mm Typ-Nr.	b 12.70 x 12.70 mm Typ-Nr.	e
switching element		95-414.000		0,003
no lens/diffuser			95-313.000	0,002



assembling

lens remover

for large and small switches

	part no.	e
lens remover	95-900.005	



mounting tool

for large and small switches

	part no.	e
mounting tool	95-900.009	



illuminated-/pushbutton

height of SMD-LED
max. 2.1 mm

material

plastic

PC / PEI self extinguishing as per UL 94 V0, Cd-free

material of contacts

CuSn, contact gold-plated, soldering terminal tinned

mechanical characteristics

actuating travel

4.5 mm

actuating force

3 N to end position

switching point

at 2.5 mm operation

life time

> 5 million operations as per IEC 512-5, test 9a

electrical characteristics

power rating

min. 1 mVDC/100 µA

max. 48 VDC/50 mA

electric strength

≤ 50 mΩ as per IEC 512-2, test 2b

electric strength

2.5 kVAC as per IEC 512-2-11

Environmental characteristics

degree of protection

front as per IP40

operating temperature

-25°C to + 70°C

storage temperature

-40°C to + 80°C

resistance to vibration

10 g, at 10 - 2000 Hz, 0.75 mm as per IEC 512-4-4

resistance to shock

50 g/11 ms as per IEC 512-4-3

illumination

SMD-LED type

P-LCC package or similar, radiation angle approx. 120°;

use of smaller SMD-LED is possible

SMD-LED configurations size

max. 2 SMD-LED's

(switch size 12.70 mm)

max. 3 SMD-LED's

(switch size 19.05 mm)

single colour or multi-colour

circuit layout

see dimension drawing

tolerance of SMD-LED on the printed circuit board ±0.2 mm

technical drawings

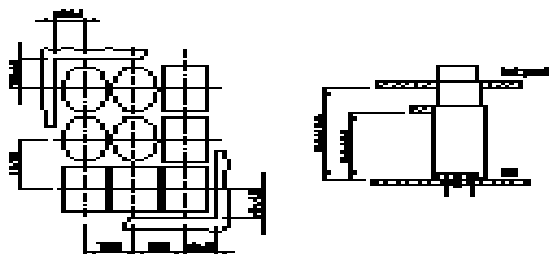
1 illuminated-/pushbutton, switching element

page 4,

mounting dimensions

1 illuminated-/pushbutton

page 4



component layouts

1 illuminated-/pushbutton

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