General information

1

Concepts

1. **Momentary pushbuttons** are switching elements which are used for making or breaking contact while they are being pressed.
2. **Latching pushbutton** are used for making or breaking contact until they are returned to their initial position by being pressed again.
3. **Illuminated pushbuttons** have the same functions as described for (1) and (2) and feature an additional lamp socket for accomodating a filament, neon lamp or LED.
4. **Pushbuttons** with degree of protection IP 65 are provided with a special sealing, which guarantees reliable and long-lasting protection.
5. **Legending** can ce effected using legend inserts, by engraving or hot stamping. Grooved transparent lenses are not suitable for legending.

CE-Conformity

The products of the Chapter Pushbuttons" can – relating to the CE-conformity according to the Low-Voltage Directive 73/23/EWG – be divided into the following groups:

Emergency-stop components with an operating voltage < 50 V
F. ex. LUMOTAST 25 emergency-stop. For this pushbutton the Machine Directive 89/392/EWG applies.

All products with an operating voltage > 50 V
For these elements the Low-Voltage Directive 72/23/EWG applies.

All products with an operating voltage < 50 V
For these products no directive applies.

Single parts, accessories and illumination
For these products no directive applies.

EMC-Law
The components of this catalogue are within the meaning of the law concerning the Eletromagnetic Conformy (= EMC-Law) "basic components as, f. ex., switches, signal lamps or like" and, therefore, do not fall within the scope of the EMC-Law.

Declarations of Conformity
Declarations of conformity for all concerned products are available and can be delivered upon request. Please always state the exact order reference of the respective product.

Marking
The marking will be corresponding to the Low-Voltage Directive 73/23/EWG resp. the Directive "CE-Marking 93/68/EWG" either on the packing or on the product itself.

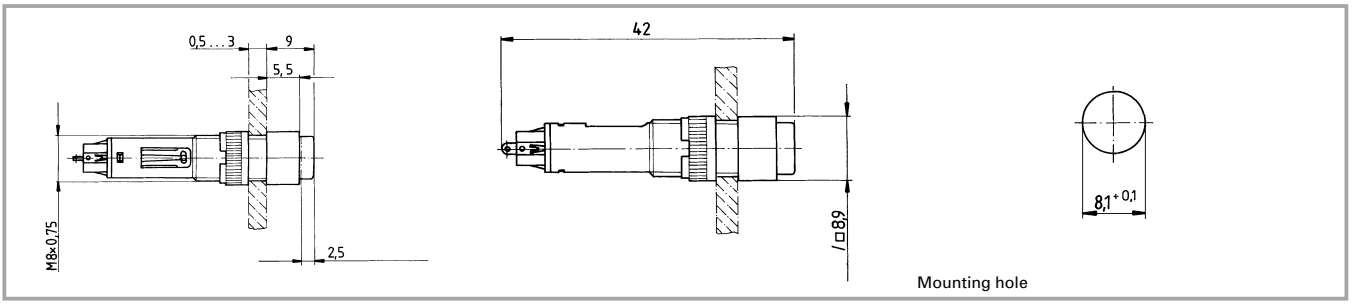
General data

Illuminable pushbuttons and signal lamps with lamp socket for a mounting hole diameter of 8.1 mm; 42 V, 250 mA max.
Please order lamps/LEDs separately.

Content

Stock items are marked
by **bold printed** order numbers.

8 mm Series, illuminated pushbutton, 42 V/250 mA



Technical data

General information

Form of lens	protruding lens
Colour of lens	see order block
Form of collar	see order block

Dimensions

Length of collar	see order block
Diameter of collar	see order block
Width of collar	see order block
Overall height	9 mm
Mounting depth	31 mm
Mounting hole	8.1 mm

Mechanical design

Mounting	ring nut
Terminals	solder terminals, tin-plated
Contact system	2 plate springs
Contact function	see order block
Contact arrangement	1 NO
Contact materials	Au
Illuminability	yes
Lamp socket	Bi-Pin T 1

Mechanical characteristics

Operating force max.	2.6 N
Operating travel	2.7 mm
Switching travel NO	1 mm
Robustness	100 N

Electrical characteristics

Rated voltage AC/DC max.	42 V
Rated voltage AC/DC min.	0.02 V
Rated current AC/DC max.	250 mA
Rated current AC/DC min.	0.01 mA
Contact resistance max.	100 mΩ
Bouncing time max.	10 ms

Other specifications

Operating life (operations)	1000000 (momentary), 100000 (latching)
Degree of protection from front side	IP40
Ambient temp. operating min.	-25 °C
Ambient temp. operating max. without lamp /LED	+70 °C
Ambient temp. operating max. with lamp /LED	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Resistance to constant environment	according to IEC 600 68-2-3 and 2-30
Resistance at variable environment	according to IEC 600 68-2-14 and 2-33
Weight	2 g
Soldering time max.	3 sec.
Soldering temperature max.	350 °C

Accessories 8 mm Series, illuminated pushbutton, 42 V/250 mA

Description	Photo	Order no.	Page
Filament lamp, Bi-Pin T 1 base, 24 - 28 V		**1.90.180.473/0000**	5 - 5
LED Bi-Pin T 1, red, 3 V		**1.90.691.026/0000**	5 - 17
LED Bi-Pin T 1, green, 3 V		**1.90.691.027/0000**	5 - 17

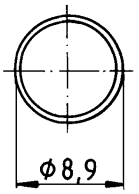
Stock items are marked by **bold printed** order numbers.

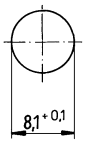
Accessories 8 mm Series, illuminated pushbutton, 42 V/250 mA

Description	Photo	Order no.	Page
LED Bi-Pin T 1, yellow, 3 V		**1.90.691.028/0000**	5 - 17
Fixing spanner M 8		**5.58.002.027/7705**	5 - 25

8 mm Series, illuminated pushbutton, round collar, 42 V/250 mA

Pict.: with colourless lens





Mounting hole

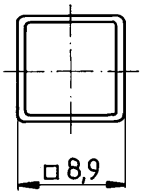
Contact arrangement	Contact function	Lamp socket	Order no. without lens	Note
1 NO	momentary	Bi-Pin T 1	**1.15.116.001/0000**	Please include the desired lens in your order.
1 NO	latching	Bi-Pin T 1	**1.15.116.011/0000**	Please include the desired lens in your order.

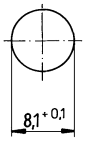
Technical data see page 1 - 4

Lens, transparent colourless: **5.05.510.470/1002**
Lens, transparent red: **5.05.510.470/1303**
Lens, transparent yellow: **5.05.510.470/1402**
Lens, transparent green: **5.05.510.470/1502**

8 mm Series, illuminated pushbutton, square collar, 42 V/250 mA

Pict.: with green lens





Mounting hole

Contact arrangement	Contact function	Lamp socket	Order no. without lens	Note
1 NO	momentary	Bi-Pin T 1	1.15.116.021/0000	Please include the desired lens in your order.
1 NO	latching	Bi-Pin T 1	1.15.116.031/0000	Please include the desired lens in your order.

Technical data see page 1 - 4

Lens, transparent colourless: 5.05.510.471/1002
Lens, transparent red: 5.05.510.471/1303
Lens, transparent yellow: 5.05.510.471/1402
Lens, transparent green: 5.05.510.471/1502

Stock items are marked by **bold printed** order numbers.