



Pushbuttons

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General information

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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 accommodating a filament, neon lamp or LED.
 4. **Legending** can be effected using kabel holders, 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/EEG – 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/EEG applies.

All products with an operating voltage > 50 V

For these elements the Low-Voltage Directive 72/23/EEG 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 Electromagnetic Conformity (= EMC-Law) "basic components as, f. ex., switches, signal lamps or like" and, therefore, do not fall within the scope of the EMC-Law.

Marking

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



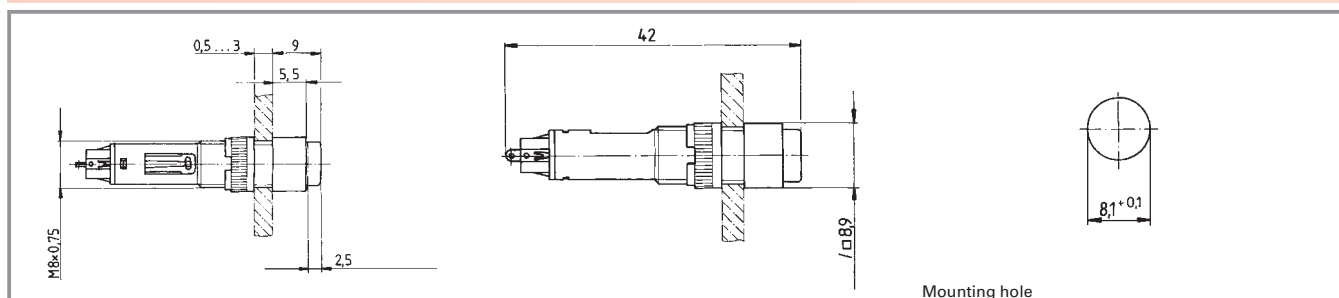
General Data

Illuminable pushbuttons and signal lamps with lamp socket for a mounting hole diameter of 8.1 mm; 35 V, 250 mA max.

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8 mm Series - Illuminated pushbutton, round collar	1 - 5
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8 mm Series - Signal lamp, square collar	1 - 7

8 mm Series - Illuminated pushbutton



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
Contact system	2 plate springs
Contact function	see order block
Contact arrangement	1 NO
Contact materials	Au
Illumination	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.	35 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)	1,000,000 (momentary), 100,000 (latching)
Degree of protection from front side	IP40
Operation temperature 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
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Weight	2 g
Soldering time max.	3 s
Soldering temperature max.	350 °C

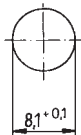
Typical accessories 8 mm Series - Illuminated pushbutton

Description	Photo	Order no.	Additional accessories see 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 - 15
LED Bi-Pin T 1, green, 3 V		1.90.691.027/0000	5 - 15
LED Bi-Pin T 1, yellow, 3 V		1.90.691.028/0000	5 - 15

Typical accessories 8 mm Series - Illuminated pushbutton

Description	Photo	Order no.	Additional accessories see page
Fixing spanner M 8		5.58.002.027/7705	5 - 21

8 mm Series - Illuminated pushbutton, round collar

				
Pict.: with colourless lens		Mounting hole		
Contact arrangement	Contact function	Lamp socket	Order no. without lens	Note
1 NO	momentary	Bi-PinT 1	1.15.116.001/0000	Please include the desired lens in your order.
1 NO	latching	Bi-PinT 1	1.15.116.011/0000	Please include the desired lens in your order.

Technical data see page 1 - 4

Lenses:

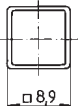
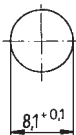
Lens, transparent colourless: 5.05.510.470/1002

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

					
Pict.: with green lens				Mounting hole	
Contact arrangement	Contact function	Lamp socket	Order no. without lens	Note	
1 NO	momentary	Bi-PinT 1	1.15.116.021/0000	Please include the desired lens in your order.	
1 NO	latching	Bi-PinT 1	1.15.116.031/0000	Please include the desired lens in your order.	

Technical data see page 1 - 4

Lenses:

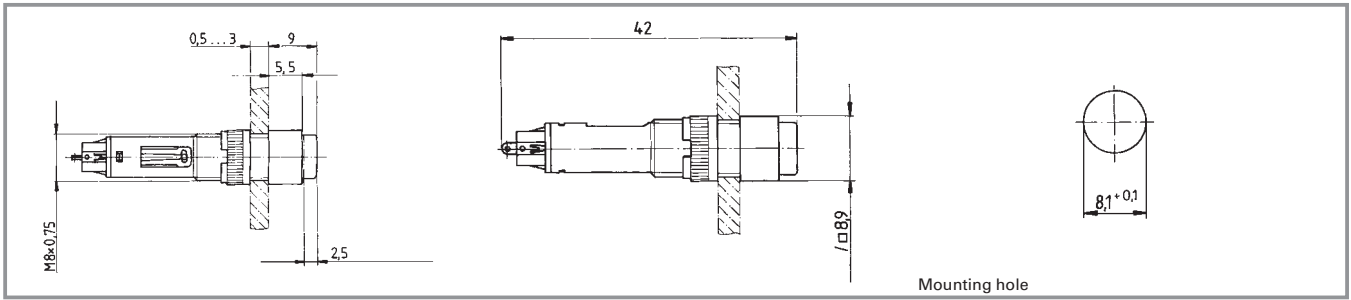
Lens, transparent colourless: 5.05.510.471/1002

Lens, transparent red: 5.05.510.471/1303

Lens, transparent yellow: 5.05.510.471/1402

Lens, transparent green: 5.05.510.471/1502

8 mm Series - Signal lamp



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	8.9 mm
Width of collar	8.9 mm
Diameter 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
Lamp socket	Bi-Pin T 1
Lamp	filament lamp / LED

Electrical characteristics

Voltage limit max.	24 V
Power limit max.	0.4 W

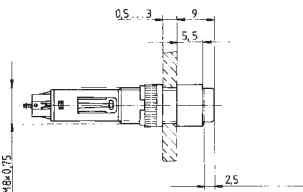
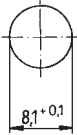
Other specifications

Degree of protection from front side	IP40
Weight	2 g
Operation temperature min.	-25 °C
Ambient temp. operating max.	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Soldering time max.	3 s
Soldering temperature max.	350 °C

Typical accessories 8 mm Series - Signal lamp

Description	Photo	Order no.	Additional accessories see 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 - 15
LED Bi-Pin T 1, green, 3 V		1.90.691.027/0000	5 - 15
LED Bi-Pin T 1, yellow, 3 V		1.90.691.028/0000	5 - 15
Fixing spanner M 8		5.58.002.027/7705	5 - 21

8 mm Series - Signal lamp, round collar

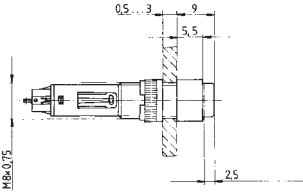
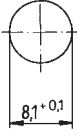
  				
Pict.: with colourless lens Mounting hole				
Voltage limit max.	Power limit max.	Lamp socket	Order no. without lens	Note
24 V	0.4 W	Bi-Pin T 1	1.65.120.001/0000	Please include the desired lens in your order.

Technical data see page 1 - 6

Lenses:

Lens, transparent colourless: 5.05.510.359/1002
 Lens, transparent red: 5.05.510.359/1303
 Lens, transparent yellow: 5.05.510.359/1402
 Lens, transparent green: 5.05.510.359/1502

8 mm Series - Signal lamp, square collar

  				
Pict.: with green lens Mounting hole				
Voltage limit max.	Power limit max.	Lamp socket	Order no. without lens	Note
24 V	0.4 W	Bi-Pin T 1	1.65.120.011/0000	Please include the desired lens in your order.

Technical data see page 1 - 6

Lenses:

Lens, transparent colourless: 5.05.510.360/1002
 Lens, transparent red: 5.05.510.360/1303
 Lens, transparent yellow: 5.05.510.360/1402
 Lens, transparent green: 5.05.510.360/1502



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General Data

LUMOTAST FK - Illuminated pushbutton range

- Illuminable pushbuttons and signal lamps with lamp socket T 1/T 1¼.
- Mounting hole diameter 16.2 mm
- 35 V/100 mA max.
- Water-jet proof IP65
- Low profile
- Keyed socket connector and flat ribbon cable in insulation displacement (IDC) technology or PCB plug-in socket
- Time-saving click fixing method: Insert pushbutton into front panel and press pushbutton once to fix it.

Content

LUMOTAST FK - Illuminated pushbutton

- LUMOTAST FK - Illuminated pushbutton, square collar
- LUMOTAST FK - Illuminated pushbutton

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LUMOTAST FK - Signal lamp

- LUMOTAST FK - Signal lamp, square collar
- LUMOTAST FK - Signal lamp, round collar
- LUMOTAST FK - Signal lamp, rectangular collar

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1 - 18

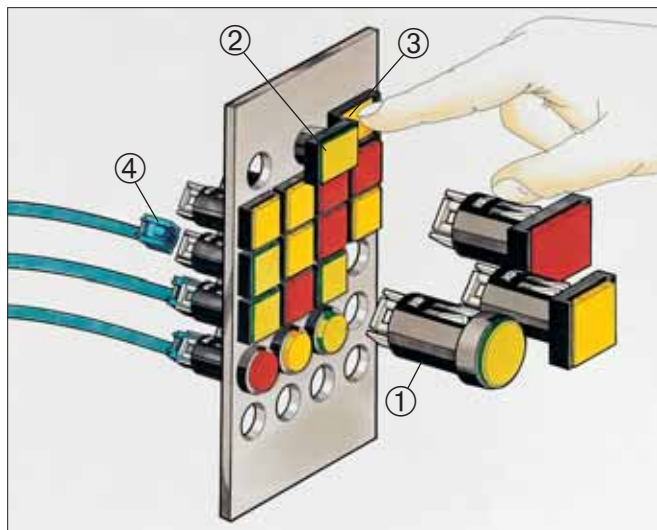
1 - 18

Series LUMOTAST FK

16.2 mm mounting hole diameter

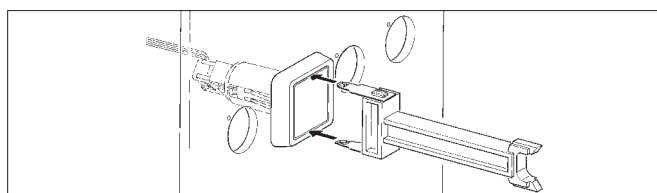
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Mounting

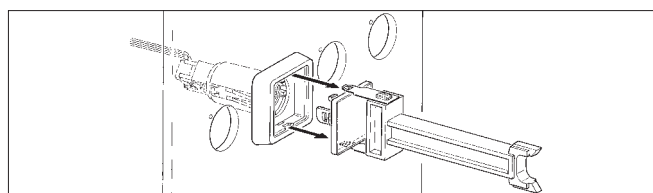
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- ① Pushbutton as supplied
- ② Insert pushbutton into panel cut-out
- ③ Press once to fit
- ④ Attach connector with flat-ribbon cable

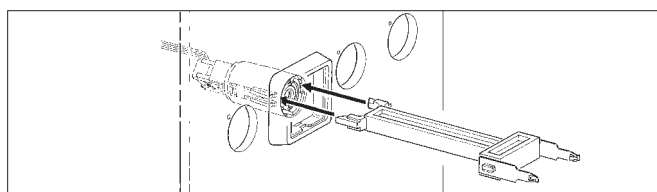
Disassembly from front side



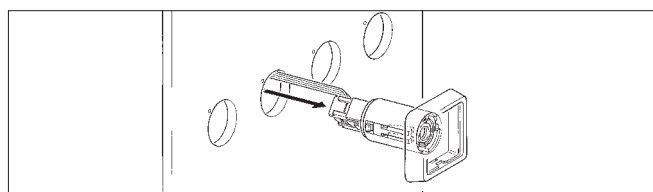
1. Grip body/lens



2. Pull out body/lens



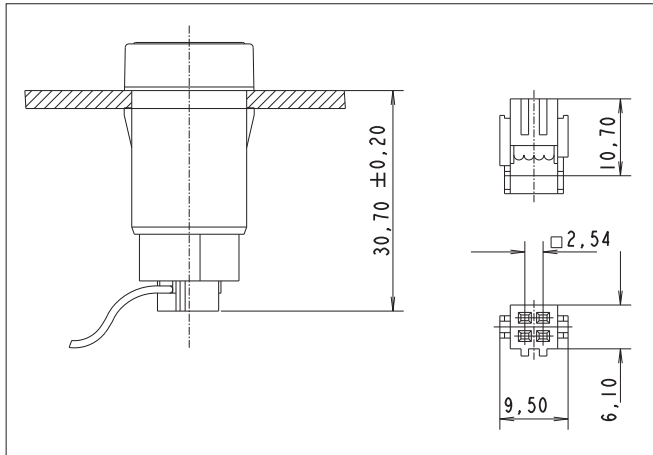
3. Release click lever



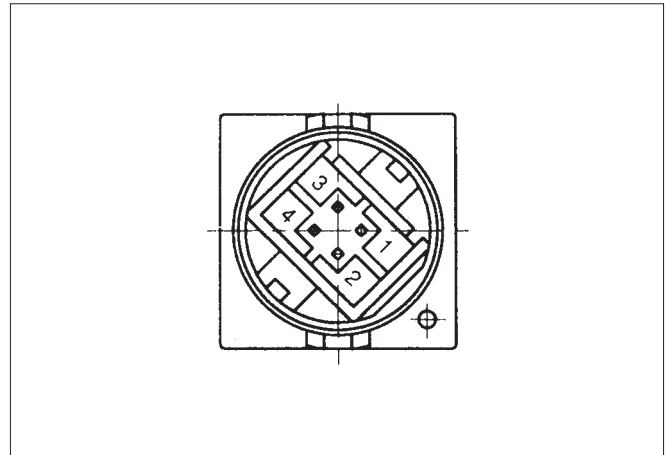
4. Pull out pushbutton/signal lamp with cable

Dimensional drawing

With quick connector and flat-ribbon cable

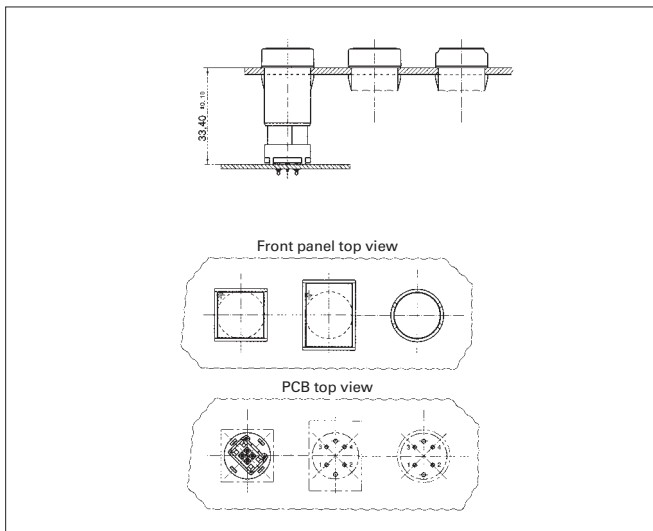


Connection diagram (PCB top view)

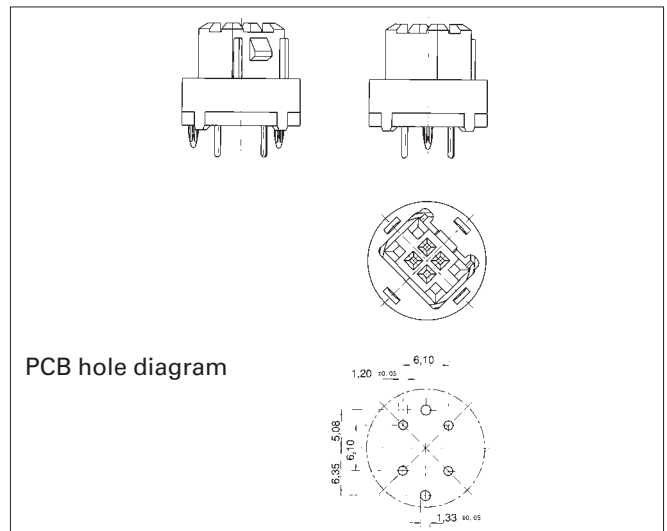


1 + 4 = pushbutton connection, 2 + 3 = lamp connection

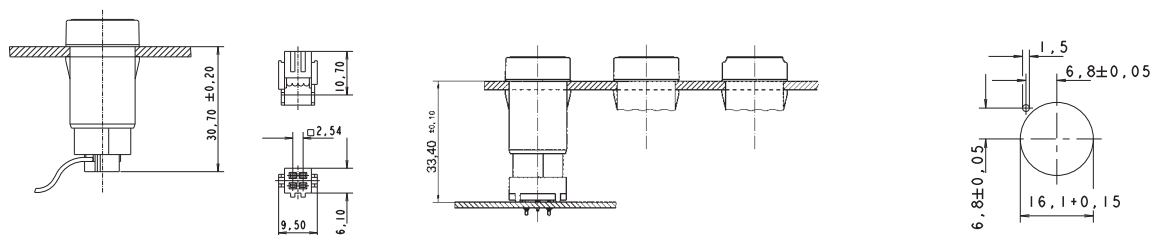
With plug-in socket



Plug-in socket for PCB



LUMOTAST FK - Illuminated pushbutton



Pict.: with socket connector

with plug-in socket for PCB

Panel cut-out

Technical Data

General information

Actuator	flat lens
Colour of lens	see order block
Form of collar	see order block

Dimensions

Length of collar	see order block
Width of collar	see order block
Diameter of collar	see order block
Overall height	6.6 mm
Mounting depth with connector	30.7 mm
Mounting depth with plug-in socket	33.4 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	click quick connection
Terminals	pin connector
Contact system	4-pol./ plug-in socket
Contact function	snap-action contact
Contact arrangement	momentary
Contact materials	1 NO
Illumination	Au
Lamp socket	yes
	Bi-Pin T1 / T1¼

Mechanical characteristics

Operating force max.	6 N
Operating travel	3 mm
Switching travel	1.9 mm
Robustness min.	100 N

Electrical characteristics

Rated voltage AC/DC max.	35 V
Rated voltage AC/DC min.	0.02 V
Rated current AC/DC max.	100 mA
Rated current AC/DC min.	0.01 mA
Contact resistance acc. to life max.	300 mΩ
Contact resistance when new max.	100 mΩ
Bouncing time max.	5 mΩ

Other specifications

Operating life (operations)	1,000,000
Degree of protection from front side	IP65
Operation temperature 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
Environmental resistance	acc. to IEC 60068-2
	-14, -30, -33 and -78
Weight	6 g

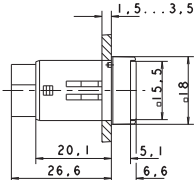
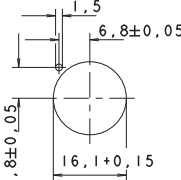
Typical accessories LUMOTAST FK - Illuminated pushbutton

Description	Photo	Order no.	Additional accessories see page
Filament lamp, Bi-Pin T 1¼ base, 12 V		1.90.180.474/0000	5 - 5
Filament lamp, Bi-Pin T 1¼ base, 28 V		1.90.180.475/0000	5 - 5
LED Bi-Pin T 1 superbright, red, 24 V		1.90.690.351/0000	5 - 15

Typical accessories LUMOTAST FK - Illuminated pushbutton

Description	Photo	Order no.	Additional accessories see page
LED Bi-PinT 1 superbright, green, 24 V		1.90.690.352/0000	5 - 15
LED Bi-PinT 1 superbright, yellow, 24 V		1.90.690.353/0000	5 - 15
LED Bi-PinT 1 superbright, blue, 24 V		1.90.690.354/0000	5 - 15
LED Bi-PinT 1 superbright, white, 24 V		1.90.690.355/0000	5 - 15
LED Bi-PinT 1, red, 3 V		1.90.691.026/0000	5 - 15
LED Bi-PinT 1, green, 3 V		1.90.691.027/0000	5 - 15
LED Bi-PinT 1, yellow, 3 V		1.90.691.028/0000	5 - 15
Plug-in socket for PCB		5.00.645.036/0000	5 - 23
Cable (flat ribbon cable 10 cm with socket connector and male quick connector, AMP 4-pin)		5.03.771.306/0000	5 - 22
Disassembly tool for LUMOTAST FK		5.05.800.041/0000	5 - 22
Flat ribbon cable, 4-wire, 1 m long		5.37.700.124/0000	5 - 23
Socket connector, 4-pin		5.92.025.368/0000	5 - 22

LUMOTAST FK - Illuminated pushbutton, square collar

 Pict.: with yellow lens   Panel cut-out			
Contact function	Contact arrangement	Order no. without lens	Note
momentary	1 NO	1.15.114.906/0000	Please include the desired lens in your order.

Technical data see page 1 - 12

Lenses:

 Lens, square, transparent colourless: **5.49.075.015/1002**

 Lens, square, transparent red: **5.49.075.015/1306**

 Lens, square, transparent yellow: **5.49.075.015/1403**

 Lens, square, transparent green: **5.49.075.015/1505**

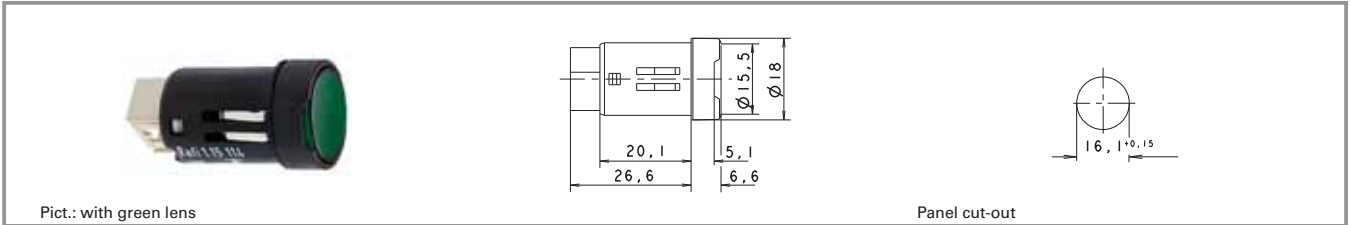
 Lens, square, transparent blue: **5.49.075.015/1607**

A notch on the lamp socket identifies the cathode side.

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LUMOTAST FK - Illuminated pushbutton



Contact function	Contact arrangement	Order no. without lens	Note
momentary	1 NO	1.15.114.936/0000	Please include the desired lens in your order.

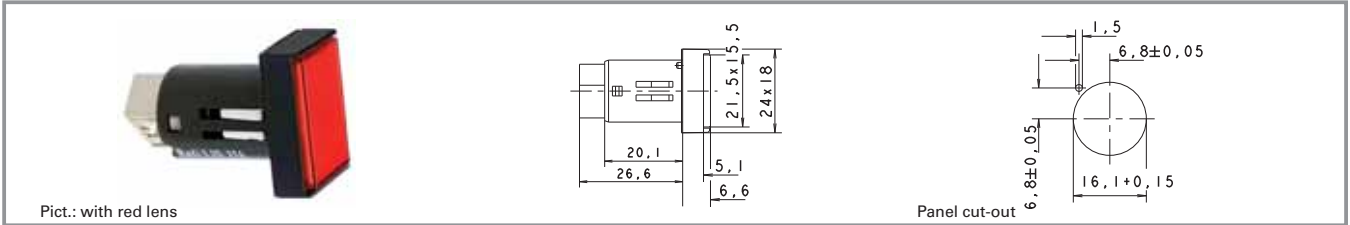
Technical data see page 1 - 12

Lenses:

- Lens, round, transparent colourless: **5.49.075.016/1002**
- Lens, round, transparent red: **5.49.075.016/1306**
- Lens, round, transparent yellow: **5.49.075.016/1403**
- Lens, round, transparent green: **5.49.075.016/1505**
- Lens, round, transparent blue: **5.49.075.016/1607**

A notch on the lamp socket identifies the cathode side.

LUMOTAST FK - Illuminated pushbutton



Contact function	Contact arrangement	Order no. without lens	Note
momentary	1 NO	1.15.114.966/0000	Please include the desired lens in your order.

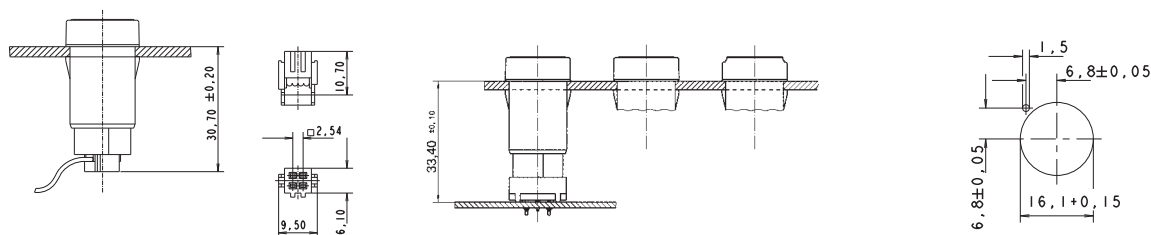
Technical data see page 1 - 12

Lenses:

- Lens, rectangular, transparent colourless: **5.49.075.017/1002**
- Lens, rectangular, transparent red: **5.49.075.017/1306**
- Lens, rectangular, transparent yellow: **5.49.075.017/1403**
- Lens, rectangular, transparent green: **5.49.075.017/1505**
- Lens, rectangular, transparent blue: **5.49.075.017/1607**

A notch on the lamp socket identifies the cathode side.

LUMOTAST FK - Signal lamp



Pict.: with socket connector

with plug-in socket for PCB

Panel cut-out

LUMO
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Technical Data

General information

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

Dimensions

Length of collar	see order block
Width of collar	see order block
Overall height	see order block
Mounting depth with connector	30.7 mm
Mounting depth with plug-in socket	33.4 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	click quick connection
Terminals	pin connector
	4-pol./ plug-in socket
Lamp socket	Bi-Pin T 1/T 1¼
Lamp	filament lamp / LED

Electrical characteristics

Voltage limit max.	24 V
Power limit max.	0.7 W

Other specifications

Degree of protection from front side	IP65
Weight	5 g
Operation temperature min.	-25 °C
Ambient temp. operating max.	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78

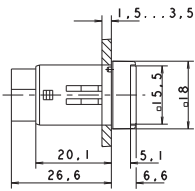
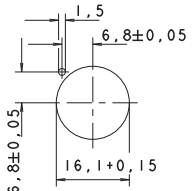
Typical accessories LUMOTAST FK - Signal lamp

Description	Photo	Order no.	Additional accessories see page
Filament lamp, Bi-Pin T 1¼ base, 12 V		1.90.180.474/0000	5 - 5
Filament lamp, Bi-Pin T 1¼ base, 28 V		1.90.180.475/0000	5 - 5
LED Bi-Pin T 1 superbright, red, 24 V		1.90.690.351/0000	5 - 15
LED Bi-Pin T 1 superbright, green, 24 V		1.90.690.352/0000	5 - 15
LED Bi-Pin T 1 superbright, yellow, 24 V		1.90.690.353/0000	5 - 15
LED Bi-Pin T 1 superbright, blue, 24 V		1.90.690.354/0000	5 - 15
LED Bi-Pin T 1 superbright, white, 24 V		1.90.690.355/0000	5 - 15

Typical accessories LUMOTAST FK - Signal lamp

Description	Photo	Order no.	Additional accessories see page
LED Bi-PinT 1, red, 3V		1.90.691.026/0000	5 - 15
LED Bi-PinT 1, green, 3V		1.90.691.027/0000	5 - 15
LED Bi-PinT 1, yellow, 3V		1.90.691.028/0000	5 - 15
Plug-in socket for PCB		5.00.645.036/0000	5 - 23
Cable (flat ribbon cable 10 cm with socket connector and male quick connector, AMP 4-pin)		5.03.771.306/0000	5 - 22
Disassembly tool for LUMOTAST FK		5.05.800.041/0000	5 - 22
Flat ribbon cable, 4-wire, 1 m long		5.37.700.124/0000	5 - 23
Socket connector, 4-pin		5.92.025.368/0000	5 - 22

LUMOTAST FK - Signal lamp, square collar

   Pict.: with red lens Panel cut-out				
Power limit max.	Voltage limit max.	Lamp socket	Order no. without lens	Note
0.7 W	24 V	Bi-PinT 1/T 1¼	1.65.121.906/0000	Please include the desired lens in your order.

Technical data see page 1 - 16

Lenses:

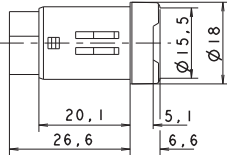
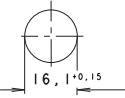
Lens, square, transparent colourless: **5.49.075.015/1002**
 Lens, square, transparent red: **5.49.075.015/1306**
 Lens, square, transparent yellow: **5.49.075.015/1403**
 Lens, square, transparent green: **5.49.075.015/1505**
 Lens, square, transparent blue: **5.49.075.015/1607**

Do not press in lens in disassembled condition.
 A notch on the lamp socket identifies the cathode side.

1

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FK

LUMOTAST FK - Signal lamp, round collar

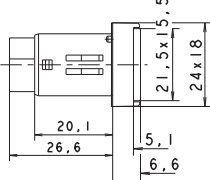
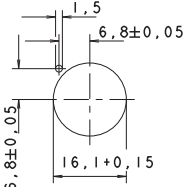
				
Pict.: with yellow lens				Panel cut-out
Power limit max.	Voltage limit max.	Lamp socket	Order no. without lens	Note
0.7 W	24 V	Bi-Pin T 1/T 1¼	1.65.121.936/0000	Please include the desired lens in your order.

Technical data see page 1 - 16

Lenses:
Lens, round, transparent colourless: **5.49.075.016/1002**
Lens, round, transparent red: **5.49.075.016/1306**
Lens, round, transparent yellow: **5.49.075.016/1403**
Lens, round, transparent green: **5.49.075.016/1505**
Lens, round, transparent blue: **5.49.075.016/1607**

Do not press in lens in disassembled condition.
A notch on the lamp socket identifies the cathode side.

LUMOTAST FK - Signal lamp, rectangular collar

				
Pict.: with blue lens				Panel cut-out
Power limit max.	Voltage limit max.	Lamp socket	Order no. without lens	Note
0.7 W	24 V	Bi-Pin T 1/T 1¼	1.65.121.966/0000	Please include the desired lens in your order.

Technical data see page 1 - 16

Lenses:
Lens, rectangular, transparent colourless: **5.49.075.017/1002**
Lens, rectangular, transparent red: **5.49.075.017/1306**
Lens, rectangular, transparent yellow: **5.49.075.017/1403**
Lens, rectangular, transparent green: **5.49.075.017/1505**
Lens, rectangular, transparent blue: **5.49.075.017/1607**

Do not press in lens in disassembled condition.
A notch on the lamp socket identifies the cathode side.



General Data

LUMOTAST 25 - Pushbutton range

- Illuminable pushbuttons and signal lamps.
- Mounting hole diameter: 16.2 mm
- 35 V/100 mA max.
- Water-jet proof IP65
- Low profile
- Lamp socket Bi-Pin T 1 for LEDs and filament lamps
- Keyed socket connector and flat ribbon cable or PCB plug-in socket
- Ring nut or click fixing method.

Content

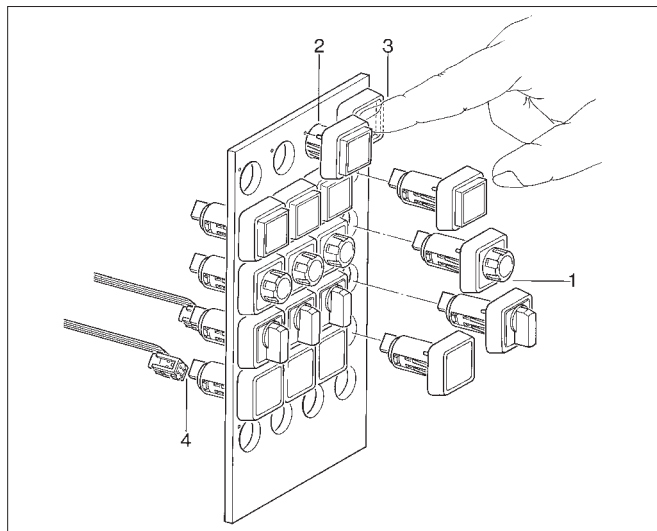
LUMOTAST 25 - Illuminated pushbutton	1 - 22
LUMOTAST 25 - Illuminated pushbutton with flush lens, „Click“ quick-assembly feature	1 - 24
LUMOTAST 25 - Illuminated pushbutton with flush lens, ring nut fixing	1 - 24
LUMOTAST 25 - Illuminated pushbutton with protruding lens, „Click“ quick-assembly feature	1 - 25
LUMOTAST 25 - Illuminated pushbutton with protruding lens, ring nut fixing	1 - 25
LUMOTAST 25 - Selector switch	1 - 26
LUMOTAST 25 - Selector switch, ring nut fixing	1 - 27
LUMOTAST 25 - Keylock switch	1 - 28
LUMOTAST 25 - Keylock switch	1 - 29
LUMOTAST 25 - Emergency stop pushbutton	1 - 30
LUMOTAST 25 - Emergency stop pushbutton, ring nut fixing	1 - 31
LUMOTAST 25 - Signal lamp	1 - 32
LUMOTAST 25 - Signal lamp, 24 V, „Click“ quick-assembly feature	1 - 33
LUMOTAST 25 - Signal lamp, 24 V, ring nut fixing	1 - 34

Series LUMOTAST 25

16.2 mm mounting hole diameter

1

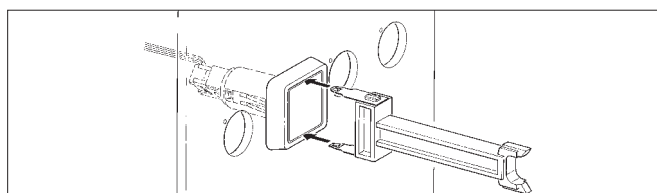
Mounting of Click-Version



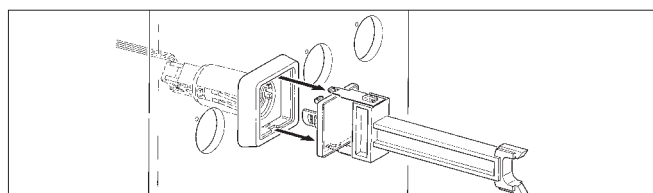
1. As delivered
2. Insert pushbutton in hole
3. Actuate once
4. Insert connector with flat-ribbon cable

Disassembly Click-Version from Front Side

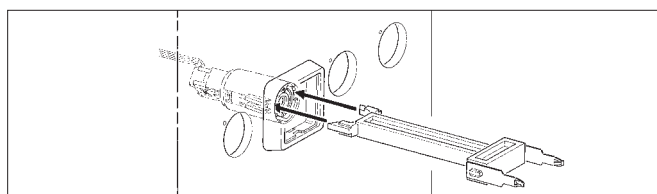
Click-Version from front (only for pushbuttons and signal lamps with special tool for dismounting)



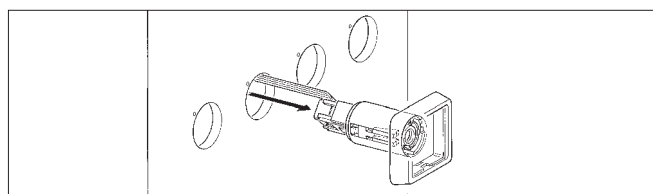
1. Grip body/lens



2. Pull out body/lens



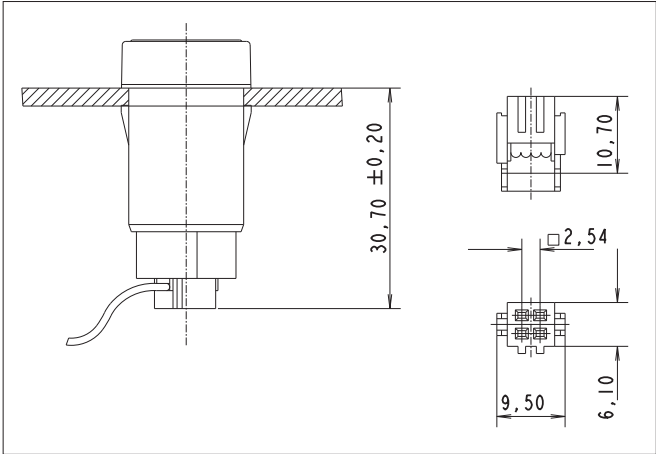
3. Release click lever



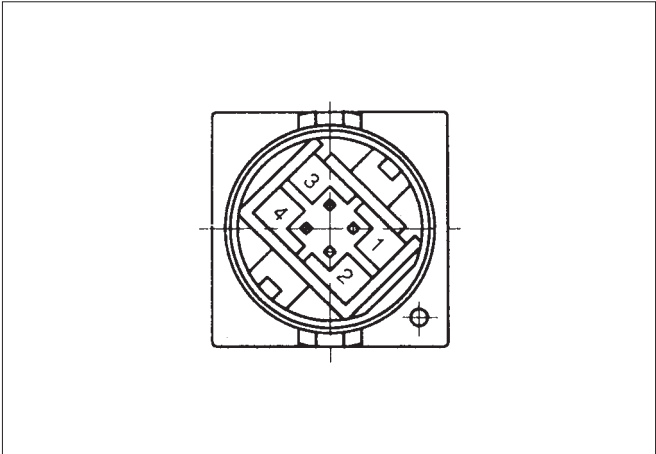
4. Pull out pushbutton/signal lamp with cable

Dimensional drawing

With quick connector and flat-ribbon cable

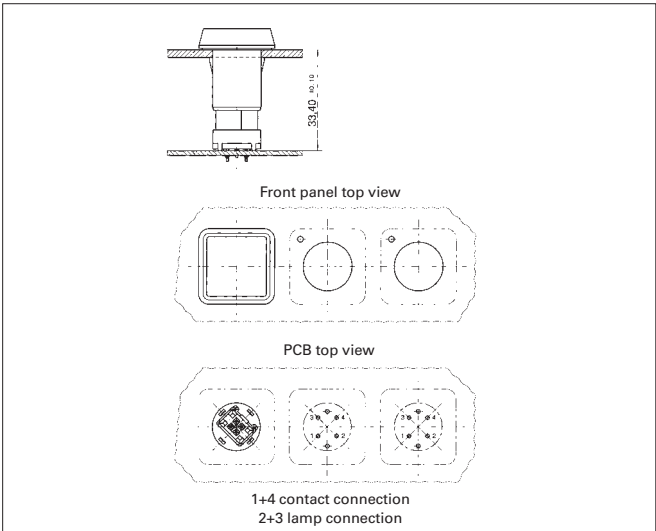


Connection diagram (PCB top view)

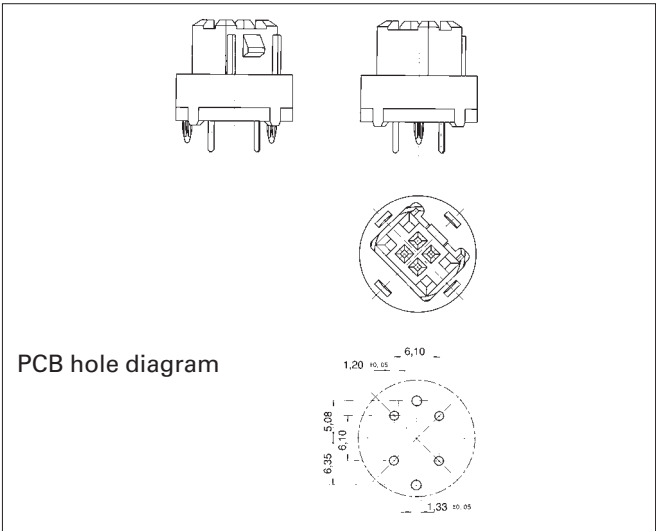


1 + 4 = pushbutton connection 2 + 3 = lamp connection

With plug-in socket



Plug-in socket for PCB



LUMOTAST 25 - Illuminated pushbutton



Technical Data

General information

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

Dimensions

Length of collar	25 mm
Width of collar	25 mm
Overall height	7.1 mm
Mounting depth with connector	30.7 mm
Mounting depth with plug-in socket	33.4 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	see order block
Terminals	pin connector 4-pol./ plug-in socket
Contact system	snap-action contact
Contact function	momentary
Contact arrangement	1 NO
Contact materials	Au
Illumination	yes
Lamp socket	Bi-Pin T1 / T1¼

Mechanical characteristics

Operating force max.	6 N
Operating travel	3 mm
Switching travel	2 mm
Robustness min.	100 N

Electrical characteristics

Rated voltage AC/DC max.	35 V
Rated voltage AC/DC min.	0.02 V
Rated current AC/DC max.	100 mA
Rated current AC/DC min.	0.01 mA
Contact resistance max.	100 mΩ
Bouncing time max.	5 ms

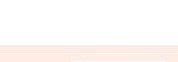
Other specifications

Operating life (operations)	1,000,000
Degree of protection from front side	IP65
Ambient temp. operating max. without lamp /LED	-25 °C
Ambient temp. operating max. without lamp /LED	+70 °C
Ambient temp. operating min. with lamp /LED	-25 °C
Ambient temp. operating max. with lamp /LED	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Weight	7 g

Typical accessories LUMOTAST 25 - Illuminated pushbutton

Description	Photo	Order no.	Additional accessories see page
Filament lamp, Bi-Pin T 1¼ base, 12 V		1.90.180.474/0000	5 - 5
Filament lamp, Bi-Pin T 1¼ base, 28 V		1.90.180.475/0000	5 - 5
LED Bi-Pin T 1 superbright, red, 24 V		1.90.690.351/0000	5 - 15
LED Bi-Pin T 1 superbright, green, 24 V		1.90.690.352/0000	5 - 15

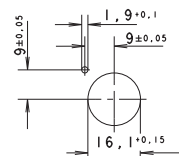
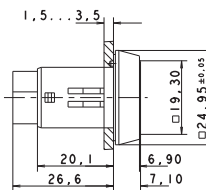
Typical accessories LUMOTAST 25 - Illuminated pushbutton

Description	Photo	Order no.	Additional accessories see page
LED Bi-PinT 1 superbright, yellow, 24 V		1.90.690.353/0000	5 - 15
LED Bi-PinT 1 superbright, blue, 24 V		1.90.690.354/0000	5 - 15
LED Bi-PinT 1 superbright, white, 24 V		1.90.690.355/0000	5 - 15
LED Bi-PinT 1, red, 3 V		1.90.691.026/0000	5 - 15
LED Bi-PinT 1, green, 3 V		1.90.691.027/0000	5 - 15
LED Bi-PinT 1, yellow, 3 V		1.90.691.028/0000	5 - 15
Plug-in socket for PCB		5.00.645.036/0000	5 - 23
Cable (flat ribbon cable 10 cm with socket connector and male quick connector, AMP 4-pin)		5.03.771.306/0000	5 - 22
Disassembly tool for LUMOTAST 25, RAFIX 16		5.05.800.042/0000	2 - 94
Blanking cap complete with sealing disc and ring nut, square		5.05.800.049/0100	2 - 100, 5 - 26
Label holder, flush, for square collar		5.07.620.004/0000	2 - 96
Flat ribbon cable, 4-wire, 1 m long		5.37.700.124/0000	5 - 23
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21
Legend insert, blank, use only for transparent lenses		5.70.635.000/2000	
Legend label 23 x 16 for label holder, without legend		5.73.111.000/0000	
Socket connector, 4-pin		5.92.025.368/0000	5 - 22

LUMOTAST 25 - Illuminated pushbutton with flush lens, „Click“ quick-assembly feature



Pict.: with colourless lens



Panel cut-out

Contact function	Contact arrangement	Order no. without lens	Note
momentary	1 NO	1.15.150.506/0000	Please include the desired lens in your order.

Technical data see page 1 - 22

Lenses:

Lens, square, transparent colourless: 5.49.077.011/1002

Lens, square, transparent red: 5.49.077.011/1306

Lens, square, transparent yellow: 5.49.077.011/1403

Lens, square, transparent green: 5.49.077.011/1505

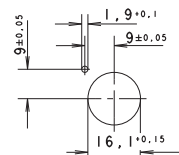
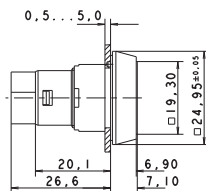
Lens, square, transparent blue: 5.49.077.011/1607

Note when using LEDs: A notch on the lamp socket identifies the cathode side.

LUMOTAST 25 - Illuminated pushbutton with flush lens, ring nut fixing



Pict.: with green lens



Panel cut-out

Contact function	Contact arrangement	Order no. without lens	Note
momentary	1 NO	1.15.150.556/0000	Please include the desired lens in your order.

Technical data see page 1 - 22

Lenses:

Lens, square, transparent colourless: 5.49.077.011/1002

Lens, square, transparent red: 5.49.077.011/1306

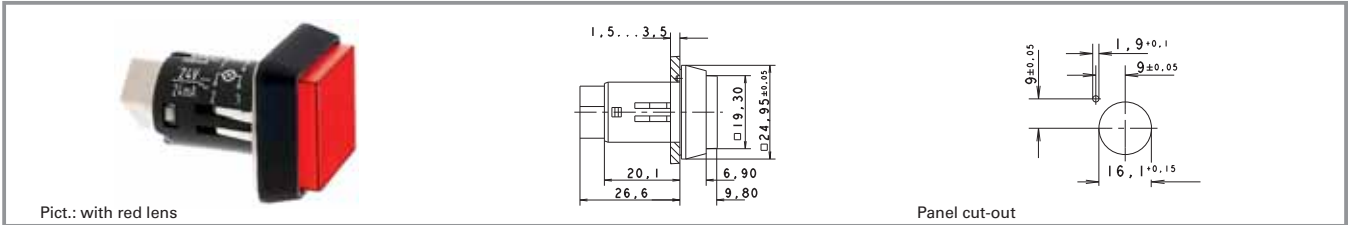
Lens, square, transparent yellow: 5.49.077.011/1403

Lens, square, transparent green: 5.49.077.011/1505

Lens, square, transparent blue: 5.49.077.011/1607

Note when using LEDs: A notch on the lamp socket identifies the cathode side.

LUMOTAST 25 - Illuminated pushbutton with protruding lens, „Click“ quick-assembly feature



Contact function	Contact arrangement	Order no. without lens	Note
momentary	1 NO	1.15.150.606/0000	Please include the desired lens in your order.

Technical data see page 1 - 22

Lenses:

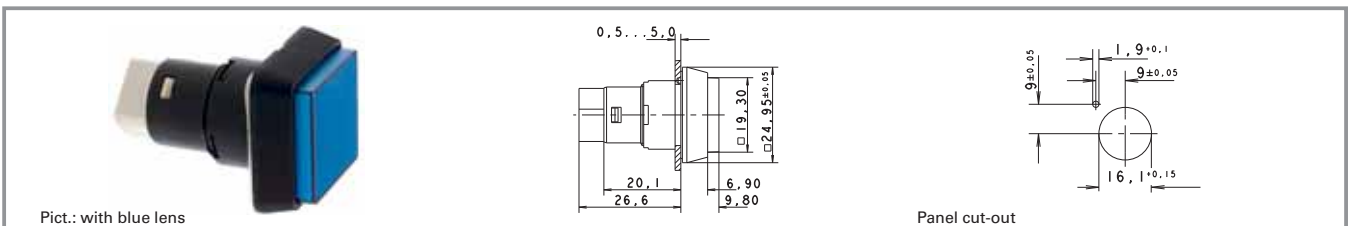
- Lens, square, transparent colourless: 5.49.077.012/1002
- Lens, square, transparent red: 5.49.077.012/1306
- Lens, square, transparent yellow: 5.49.077.012/1403
- Lens, square, transparent green: 5.49.077.012/1505
- Lens, square, transparent blue: 5.49.077.012/1607

Note when using LEDs: A notch on the lamp socket identifies the cathode side.

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LUMOTAST 25 - Illuminated pushbutton with protruding lens, ring nut fixing



Contact function	Contact arrangement	Order no. without lens	Note
momentary	1 NO	1.15.150.656/0000	Please include the desired lens in your order.

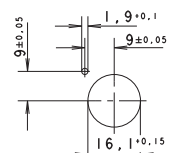
Technical data see page 1 - 22

Lenses:

- Lens, square, transparent colourless: 5.49.077.012/1002
- Lens, square, transparent red: 5.49.077.012/1306
- Lens, square, transparent yellow: 5.49.077.012/1403
- Lens, square, transparent green: 5.49.077.012/1505
- Lens, square, transparent blue: 5.49.077.012/1607

Note when using LEDs: A notch on the lamp socket identifies the cathode side.

LUMOTAST 25 - Selector switch



Panel cut-out

Technical Data

General information

Actuator	handle
Colour of handle	black opaque
Form of collar	square

Dimensions

Length of collar	25 mm
Width of collar	25 mm
Overall height	17 mm
Mounting depth with connector	30.7 mm
Mounting depth with plug-in socket	33.4 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	see order block
Terminals	pin connector 4-pol./ plug-in socket
Contact system	snap-action contact
Contact function	see order block
Contact arrangement	1 NO
Contact materials	Au
Illumination	no

Mechanical characteristics

Operating force min.	0.03 Nm
Rotating angle	see order block
Robustness max.	1.5 N

Electrical characteristics

Rated voltage AC/DC max.	35 V
Rated voltage AC/DC min.	0.02 V
Rated current AC/DC max.	100 mA
Rated current AC/DC min.	0.01 mA
Contact resistance max.	100 mΩ
Bouncing time max.	5 ms

Other specifications

Operating life (operations)	500,000
Degree of protection from front side	IP65
Operation temperature min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Weight	8 g

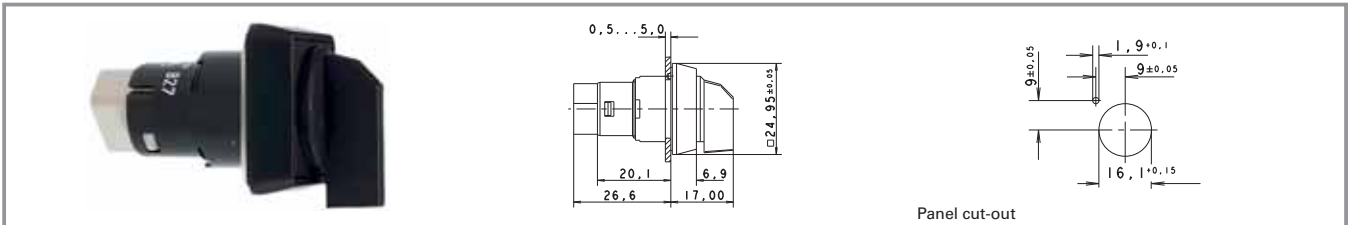
Typical accessories LUMOTAST 25 - Selector switch

Description	Photo	Order no.	Additional accessories see page
Plug-in socket for PCB		5.00.645.036/0000	5 - 23
Cable (flat ribbon cable 10 cm with socket connector and male quick connector, AMP 4-pin)		5.03.771.306/0000	5 - 22
Blanking cap complete with sealing disc and ring nut, square		5.05.800.049/0100	2 - 100, 5 - 26
Label holder, flush, for square collar		5.07.620.004/0000	2 - 96
Flat ribbon cable, 4-wire, 1 m long		5.37.700.124/0000	5 - 23

Typical accessories LUMOTAST 25 - Selector switch

Description	Photo	Order no.	Additional accessories see page
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21
Socket connector, 4-pin		5.92.025.368/0000	5 - 22

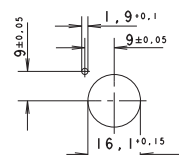
LUMOTAST 25 - Selector switch, ring nut fixing



Contact arrangement	Contact function	Rotating angle	Actuator	Order no.
1 NO	latching	right, 1 x 90°	handle	1.15.153.106/0100

Technical data see page 1 - 26

LUMOTAST 25 - Keylock switch



Panel cut-out

Technical Data

General information

Colour of lens	black opaque
Form of collar	square

Dimensions

Length of collar	25 mm
Width of collar	25 mm
Overall height	32.3 mm
Mounting depth with connector	30.7 mm
Mounting depth with plug-in socket	33.4 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Terminals	pin connector
	4-pol./ plug-in socket
Contact system	snap-action contact
Contact function	latching
Contact arrangement	1 NO
Contact materials	Au
Illumination	no
Lamp socket	no
Lock	cylinder lock
Wafers	8 pins
Lock type	5201
Number of locking positions	10,000
Main key	yes
Symmetric key	yes
Key removal position	see order block

Mechanical characteristics

Operating force max.	1.5 N
Rotating angle	90°

Electrical characteristics

Rated voltage AC/DC max.	35 V
Rated voltage AC/DC min.	0.02 V
Rated current AC/DC max.	100 mA
Rated current AC/DC min.	0.01 mA
Contact resistance max.	100 mΩ
Bouncing time max.	5 ms

Other specifications

Operating life (operations)	50,000
Degree of protection from front side	IP65
Operation temperature min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Weight	20 g

Typical accessories LUMOTAST 25 - Keylock switch

Description	Photo	Order no.	Additional accessories see page
Plug-in socket for PCB		5.00.645.036/0000	5 - 23
Cable (flat ribbon cable 10 cm with socket connector and male quick connector, AMP 4-pin)		5.03.771.306/0000	5 - 22
Blanking cap complete with sealing disc and ring nut, square		5.05.800.049/0100	2 - 100, 5 - 26

Typical accessories LUMOTAST 25 - Keylock switch

Description	Photo	Order no.	Additional accessories see page
Label holder, flush, for square collar		5.07.620.004/0000	2 - 96
Flat ribbon cable, 4-wire, 1 m long		5.37.700.124/0000	5 - 23
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21
Spare key set (2 keys)		5.58.015.201/0000	
Legend label 23 x 16 for label holder, without legend		5.73.111.000/0000	
Socket connector, 4-pin		5.92.025.368/0000	5 - 22

LUMOTAST 25 - Keylock switch

Contact arrangement	Contact function	Rotating angle	Key removal position	Colour of lens	Order no.
1 NO	latching	90°	0	black opaque	1.15.156.001/0000
1 NO	latching	90°	0 + 1	black opaque	1.15.156.011/0000

Technical data see page 1 - 28

Included: 2 keys.

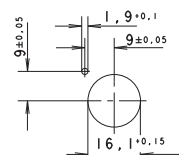
LUMOTAST 25 - Emergency stop pushbutton



Pict.: yellow collar



black collar



Panel cut-out

Technical Data

General information

Colour of lens	opaque red
Form of collar	square
Colour of collar	see order block

Dimensions

Length of collar	25 mm
Width of collar	25 mm
Overall height	18.5 mm
Mounting depth with connector	30.7 mm
Mounting depth with plug-in socket	33.4 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Terminals	pin connector
Contact system	4-pol./ plug-in socket
Contact function	snap-action contact
Contact arrangement	latching
	2 NC (forcibly actuated)
Contact materials	Au
Illumination	no
Reset	by pulling

Mechanical characteristics

Operating force max.	10 N
Operating travel	2.6 mm
Switching travel	2 mm
Robustness min.	100 N

Electrical characteristics

Rated voltage AC/DC max.	25 V
Rated voltage AC/DC min.	0.02 V
Rated current AC/DC max.	100 mA (1A short-circuit current)
Rated current AC/DC min.	0.01 mA
Contact resistance max.	100 mΩ
Bouncing time max.	10 ms

Other specifications

Operating life (operations)	15,000
Degree of protection from front side	IP65
Operation temperature min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2
	-14, -30, -33 and -78
Weight	9 g

Approvals

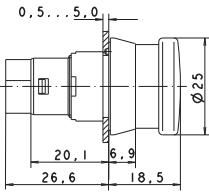
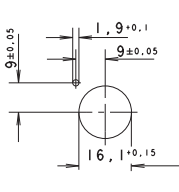

 IEC 60947-5-x,
 60904, 60073


UL 508

Typical accessories LUMOTAST 25 - Emergency stop pushbutton

Description	Photo	Order no.	Additional accessories see page
Plug-in socket for PCB		5.00.645.036/0000	5 - 23
Cable (flat ribbon cable 10 cm with socket connector and male quick connector, AMP 4-pin)		5.03.771.306/0000	5 - 22
Blanking cap complete with sealing disc and ring nut, square		5.05.800.049/0100	2 - 100, 5 - 26
Label holder, flush, for square collar		5.07.620.004/0000	2 - 96
Flat ribbon cable, 4-wire, 1 m long		5.37.700.124/0000	5 - 23
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21
Legend label 23 x 16 for label holder, without legend		5.73.111.000/0000	
Adhesive label yellow, round 16.1 / 60 mm, without legend		5.76.204.425/0400	
Adhesive label yellow, round 16.1 / 60 mm, with legend „Not-Aus“		5.76.204.426/0400	
Adhesive label yellow, round 16.1 / 60 mm, with legend „ARRET-D'URGENCE“		5.76.204.427/0400	
Adhesive label yellow, round 16.1 / 60 mm, with legend „EMERGENCY-STOP“		5.76.204.428/0400	
Adhesive label yellow, round 16.1 / 60 mm, with legend „ARRESTO-D'EMERGENZA“		5.76.204.429/0400	
Socket connector, 4-pin		5.92.025.368/0000	5 - 22

LUMOTAST 25 - Emergency stop pushbutton, ring nut fixing

					
				Panel cut-out	
Contact function	Contact arrangement	Colour of collar	Order no. complete	Order no. single parts	
				Housing	Lens
latching	2 NC (forcibly actuated)	black	1.15.154.006/0301	-	-
latching	2 NC (forcibly actuated)	yellow	1.15.154.016/0301	-	-

Technical data see page 1 - 30

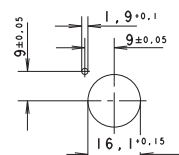
LUMOTAST 25 - Signal lamp



Pict.: with red lens



with blue lens



Panel cut-out

Technical Data

General information

Form of lens	square
Colour of lens	see order block

Dimensions

Length of collar	25 mm
Width of collar	25 mm
Overall height	9.8 mm
Mounting depth with connector	30.7 mm
Mounting depth with plug-in socket	33.4 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	see order block
Terminals	pin connector 4-pol./ plug-in socket
Lamp socket	see order block
Lamp	filament lamp / LED

Electrical characteristics

Voltage limit max.	24 V
Power limit max.	0.7 W

Other specifications

Degree of protection from front side	IP65
Weight	7 g
Operation temperature min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C

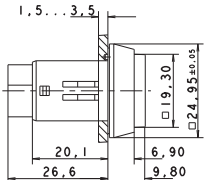
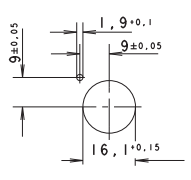
Typical accessories LUMOTAST 25 - Signal lamp

Description	Photo	Order no.	Additional accessories see page
Filament lamp, Bi-PinT 1¼ base, 12 V		1.90.180.474/0000	5 - 5
Filament lamp, Bi-PinT 1¼ base, 28 V		1.90.180.475/0000	5 - 5
LED Bi-PinT 1 superbright, red, 24 V		1.90.690.351/0000	5 - 15
LED Bi-PinT 1 superbright, green, 24 V		1.90.690.352/0000	5 - 15
LED Bi-PinT 1 superbright, yellow, 24 V		1.90.690.353/0000	5 - 15
LED Bi-PinT 1 superbright, blue, 24 V		1.90.690.354/0000	5 - 15
LED Bi-PinT 1 superbright, white, 24 V		1.90.690.355/0000	5 - 15
LED Bi-PinT 1, red, 3 V		1.90.691.026/0000	5 - 15

Typical accessories LUMOTAST 25 - Signal lamp

Description	Photo	Order no.	Additional accessories see page
LED Bi-PinT 1, green, 3V		1.90.691.027/0000	5 - 15
LED Bi-PinT 1, yellow, 3V		1.90.691.028/0000	5 - 15
Plug-in socket for PCB		5.00.645.036/0000	5 - 23
Cable (flat ribbon cable 10 cm with socket connector and male quick connector, AMP 4-pin)		5.03.771.306/0000	5 - 22
Disassembly tool for LUMOTAST 25, RAFIX 16		5.05.800.042/0000	2 - 94
Blanking cap complete with sealing disc and ring nut, square		5.05.800.049/0100	2 - 100, 5 - 26
Label holder, flush, for square collar		5.07.620.004/0000	2 - 96
Flat ribbon cable, 4-wire, 1 m long		5.37.700.124/0000	5 - 23
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21
Legend insert, blank, use only for transparent lenses		5.70.635.000/2000	
Legend label 23 x 16 for label holder, without legend		5.73.111.000/0000	
Socket connector, 4-pin		5.92.025.368/0000	5 - 22

LUMOTAST 25 - Signal lamp, 24 V, „Click“ quick-assembly feature

   Pict.: with red lens Panel cut-out				
Voltage limit max.	Power limit max.	Lamp socket	Order no. without lens	Note
24 V	0.7 W	Bi-PinT 1/T 1¼	1.65.122.906/0000	Please include the desired lens in your order.

Technical data see page 1 - 32

Lenses:

Lens, square, transparent colourless: 5.49.077.014/1002

Lens, square, transparent red: 5.49.077.014/1306

Lens, square, transparent yellow: 5.49.077.014/1403

Lens, square, transparent green: 5.49.077.014/1505

Lens, square, transparent blue: 5.49.077.014/1607

Do not press in lens in disassembled condition.

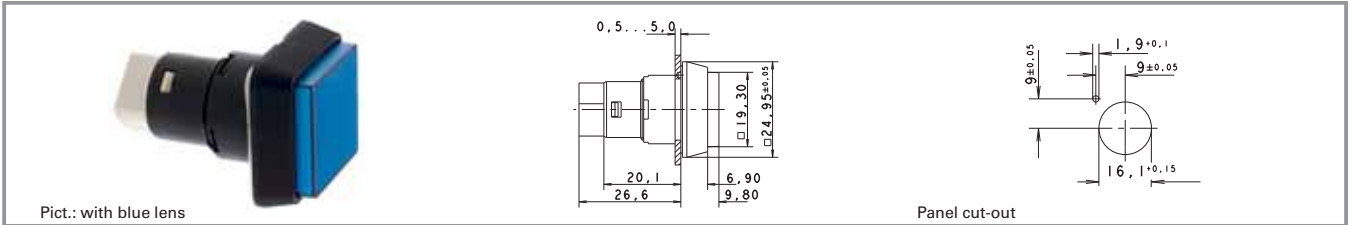
Note when using a LED: A notch on the lamp identifies the cathode side.

Pushbuttons

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

1

LUMOTAST 25 - Signal lamp, 24 V, ring nut fixing



Voltage limit max.	Power limit max.	Lamp socket	Order no. without lens	Note
24 V	0.7 W	Bi-Pin T 1/T 1¼	1.65.122.956/0000	Please include the desired lens in your order.

LUMO
25

Technical data see page 1 - 32

- Lenses:**
Lens, square, transparent colourless: 5.49.077.014/1002
Lens, square, transparent red: 5.49.077.014/1306
Lens, square, transparent yellow: 5.49.077.014/1403
Lens, square, transparent green: 5.49.077.014/1505
Lens, square, transparent blue: 5.49.077.014/1607

Do not press in lens in disassembled condition.
Note when using LED: A notch on the lamp socket identifies the cathode side.



General Data

LUMOTAST 75 IP40 - Pushbutton range

Illuminated pushbuttons, signal lamps and keylock switches

- Mounting hole diameter 16.2 mm
- Degree of protection IP40
- Solder terminals for the following wire cross-sections:
 - Installed 0.5 mm² max.
 - Factory terminated 0.35 mm² max.
- 250 V/4 A max.
- 2 NC + 2 NO max. (3 NC + 3 NO on request)
- Lamp socket T 4.5

Content

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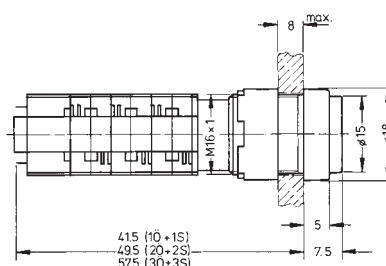
LUMOTAST 75 IP40 - Keylock switch

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LUMOTAST 75 IP40 - Signal lamp with lamp socket T 4.5

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LUMOTAST 75 IP40 - Signal lamp, square collar, protruding lens	1 - 49

LUMOTAST 75 IP40 - Illuminated pushbutton



Mounting hole



Technical Data

General information

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

Dimensions

Length of collar	see order block
Width of collar	see order block
Diameter of collar	see order block
Overall height	7.5 mm
Mounting depth	41.5/49.5/57.5 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Terminals	solder terminals
Contact system	snap-action bridge contact
Contact function	see order block
Contact arrangement	see order block
Contact materials	Ag
Illumination	yes
Lamp socket	T 4.5

Mechanical characteristics

Operating force max.	3 ... 6.5 N
Operating travel	2.7 mm
Switching travel NC	1.6 mm
Switching travel NO	0.9 mm
Robustness min.	100 N

Electrical characteristics

Rated voltage AC max.	250 V
Rated voltage DC max.	220 V
Rated voltage AC/DC min.	12 V
Rated current AC max.	4 A
Rated current DC max.	0.2 A
Rated current AC/DC min.	5 mA
Contact resistance acc. to life max.	200 mΩ
Protection class	II

Other specifications

Operating life, at 250 V/2 A (operations)	200,000 (momentary)
Operating life, at 250 V/4 A (operations)	60,000 (momentary), 10,000 (latching)
Degree of protection from front side	IP40
Operation temperature 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
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Flame class acc. to UL 94	V 1
Hot wire ignition acc. to IEC 60695-2-1	yes

Approvals



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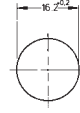
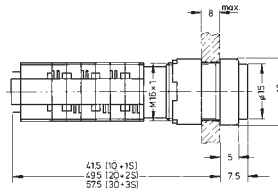
Typical accessories LUMOTAST 75 IP40 - Illuminated pushbutton

Description	Photo	Order no.	Additional accessories see page
Filament lamp, T 4.5 base, 12 V		1.90.100.022/0000	5 - 6
Filament lamp, T 4.5 base, 24 V		1.90.100.023/0000	5 - 6
LED T 4.5 superbright, red, 24 V		1.90.690.331/0000	5 - 16
LED T 4.5 superbright, green, 24 V		1.90.690.332/0000	5 - 16
LED T 4.5 superbright, yellow, 24 V		1.90.690.333/0000	5 - 16
LED T 4.5 superbright, blue, 24 V		1.90.690.334/0000	5 - 16
LED T 4.5 superbright, white, 24 V		1.90.690.335/0000	5 - 16
LED T 4.5, red, 2-3 V (use external resistor)		1.90.692.001/0000	5 - 16
LED T 4.5, green, 2-3 V (use external resistor)		1.90.692.002/0000	5 - 16
LED T 4.5, yellow, 2-3 V (use external resistor)		1.90.692.003/0000	5 - 16
Lamp extractor for lamp diameter 4 mm		1.90.900.002/0000	5 - 5, 5 - 6, 5 - 20
Lamp extractor for lamp diameter 5-6 mm		1.90.900.004/0000	5 - 16, 5 - 20
Protective cap (for 18 x 24 collar)		5.05.800.027/0000	5 - 24
Blanking cap, black, to cover spare holes, dimensions 18 x 18 mm		5.52.006.020/0103	5 - 26
Blanking cap, black, to cover spare holes, dimensions 18 x 24 mm		5.52.006.021/0100	5 - 26
Blanking cap, black, to cover spare holes, round 18 mm		5.52.006.022/0100	5 - 26
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

1

LUMO
75 (40)

LUMOTAST 75 IP40 - Illuminated pushbutton, protruding lens, round collar



Mounting hole

Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	1.15.108.451/0000	Please include the desired lens and diffuser in your order.
1 NC + 1 NO	latching	black	1.15.108.551/0000	Please include the desired lens and diffuser in your order.
2 NC + 2 NO	momentary	black	1.15.108.452/0000	Please include the desired lens and diffuser in your order.
2 NC + 2 NO	latching	black	1.15.108.552/0000	Please include the desired lens and diffuser in your order.

Technical data see page 1 - 36

Lenses:

Lens, round, transparent colourless, for filament lamp or LED: **5.49.257.011/1002**

Lens, round, transparent red, for LED: **5.49.257.011/1301**

Lens, round, transparent red, for filament lamp: **5.49.257.011/1303**

Lens, round, transparent yellow, for filament lamp or LED: **5.49.257.011/1402**

Lens, round, transparent green, for filament lamp: **5.49.257.011/1502**

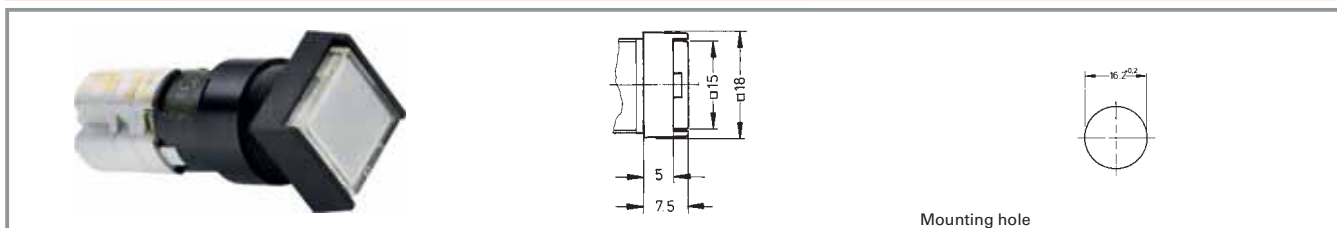
Lens, round, transparent green, for LED: **5.49.257.011/1503**

Lens, round, transparent blue, for filament lamp: **5.49.257.011/1601**

Accessoires:

Diffuser, round, for filament lamp, without legend: **5.72.050.000/0202**

Diffuser, round, for LED, without legend: **5.72.050.000/0214**

LUMOTAST 75 IP40 - Illuminated pushbutton, flush lens, square collar


Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	1.15.108.251/0000	Please include the desired lens and diffuser in your order.
1 NC + 1 NO	latching	black	1.15.108.351/0000	Please include the desired lens and diffuser in your order.
2 NC + 2 NO	momentary	black	1.15.108.252/0000	Please include the desired lens and diffuser in your order.
2 NC + 2 NO	latching	black	1.15.108.352/0000	Please include the desired lens and diffuser in your order.

Technical data see page 1 - 36

Lenses:

Lens, square, transparent colourless, for filament lamp or LED: **5.49.275.036/1002**

Lens, square, transparent red, for LED: **5.49.275.036/1301**

Lens, square, transparent red, for filament lamp: **5.49.275.036/1303**

Lens, square, transparent yellow, for filament lamp or LED: **5.49.275.036/1402**

Lens, square, transparent green, for filament lamp: **5.49.275.036/1502**

Lens, square, transparent green, for LED: **5.49.275.036/1503**

Lens, square, transparent blue, for filament lamp: **5.49.275.036/1601**

Accessoires:

Sealing cap IP65 (for 18 x 18 collar): 5.05.200.009/0000

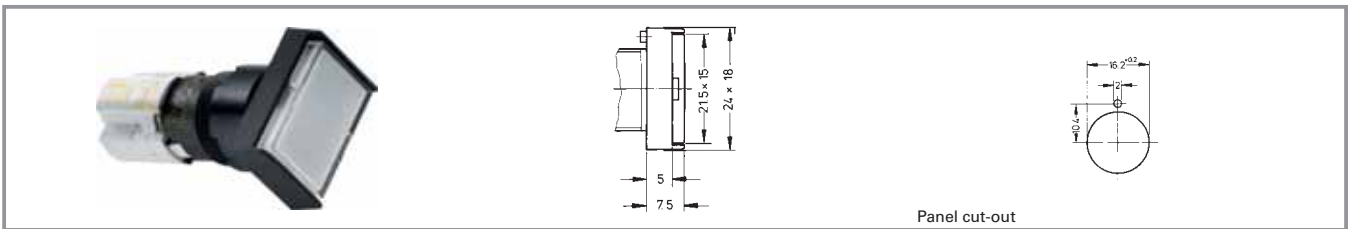
Protective cap (for 18 x 18 collar): 5.05.800.030/0000

Diffuser, square, for filament lamp, without legend: **5.73.013.000/0202**

Diffuser, square, for LED, without legend: **5.73.013.000/0214**

1

LUMOTAST 75 IP40 - Illuminated pushbutton, flush lens, rectangular collar



Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	1.15.108.051/0000	Please include the desired lens and diffuser in your order.
1 NC + 1 NO	latching	black	1.15.108.151/0000	Please include the desired lens and diffuser in your order.
2 NC + 2 NO	momentary	black	1.15.108.052/0000	Please include the desired lens and diffuser in your order.
2 NC + 2 NO	latching	black	1.15.108.152/0000	Please include the desired lens and diffuser in your order.

Technical data see page 1 - 36

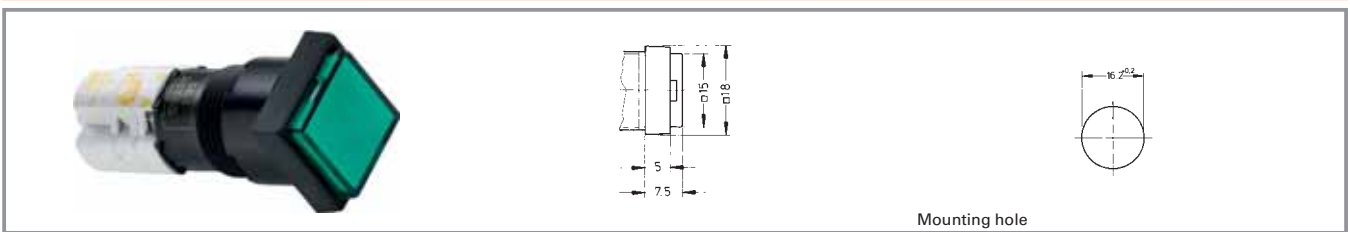
Lenses:

- Lens, rectangular, transparent colourless, for filament lamp or LED: **5.49.275.032/1002**
- Lens, rectangular, transparent red, for LED: **5.49.275.032/1301**
- Lens, rectangular, transparent red, for filament lamp: **5.49.275.032/1303**
- Lens, rectangular, transparent yellow, for filament lamp or LED: **5.49.275.032/1402**
- Lens, rectangular, transparent green, for filament lamp: **5.49.275.032/1502**
- Lens, rectangular, transparent green, for LED: **5.49.275.032/1503**
- Lens, rectangular, transparent blue, for filament lamp: **5.49.275.032/1601**

Accessoires:

- Sealing cap IP65 (for 18 x 24 collar): 5.05.200.008/0000
- Protective cap (for 18 x 24 collar): 5.05.800.027/0000
- Diffuser, rectangular, for filament lamp, without legend: **5.73.012.000/0202**
- Diffuser, rectangular, for LED, without legend: **5.73.012.000/0214**

LUMOTAST 75 IP40 - Illuminated pushbutton, protruding lens, square collar



Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	1.15.108.256/0000	Please include the desired lens and diffuser in your order.
1 NC + 1 NO	latching	black	1.15.108.356/0000	Please include the desired lens and diffuser in your order.
2 NC + 2 NO	momentary	black	1.15.108.257/0000	Please include the desired lens and diffuser in your order.
2 NC + 2 NO	latching	black	1.15.108.357/0000	Please include the desired lens and diffuser in your order.

Technical data see page 1 - 36

Lenses:

- Lens, square, transparent colourless, for filament lamp or LED: **5.49.275.036/1002**
- Lens, square, transparent red, for LED: **5.49.275.036/1301**
- Lens, square, transparent red, for filament lamp: **5.49.275.036/1303**
- Lens, square, transparent yellow, for filament lamp or LED: **5.49.275.036/1402**
- Lens, square, transparent green, for filament lamp: **5.49.275.036/1502**
- Lens, square, transparent green, for LED: **5.49.275.036/1503**
- Lens, square, transparent blue, for filament lamp: **5.49.275.036/1601**

Accessoires:

- Sealing cap IP65 (for 18 x 18 collar): 5.05.200.009/0000
- Protective cap (for 18 x 18 collar): 5.05.800.030/0000
- Diffuser, square, for filament lamp, without legend: **5.73.013.000/0202**
- Diffuser, square, for LED, without legend: **5.73.013.000/0214**

LUMOTAST 75 IP40 - Keylock switch



Mounting hole

Technical Data

LUMO
75 (40)

General information

Form of lens	see order block
Colour of collar	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 (without key)	7.5 mm
Mounting depth	see order block
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Terminals	solder terminals
Contact system	snap-action bridge contact
Contact function	see order block
Contact arrangement	see order block
Contact materials	Ag
Illumination	no
Lock	cylinder lock
Wafers	4 pins
Lock type	1D 21
Number of locking positions	45
Main key	no
Symmetric key	no
Key removal position	see order block

Mechanical characteristics

Rotating angle	see order block
----------------	-----------------

Electrical characteristics

Rated voltage AC max.	250 V
Rated voltage DC max.	220 V
Rated voltage AC/DC min.	12 V
Rated current AC max.	4 A
Rated current DC max.	0.02 A
Rated current AC/DC min.	5 mA
Contact resistance acc. to life max.	200 mΩ
Bouncing time max.	10 ms
ESD-strength min.	14 kV

Other specifications

Operating life, at 250 V/2 A (operations)	50,000 (momentary)
Operating life, at 250 V/4 A (operations)	50,000 (momentary)
Degree of protection from front side	IP40
Operation temperature min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Weight	35 g
Flame class acc. to UL 94	V 1
Hot wire ignition acc. to IEC 60695-2-1	yes

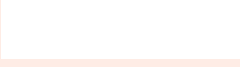
Approvals



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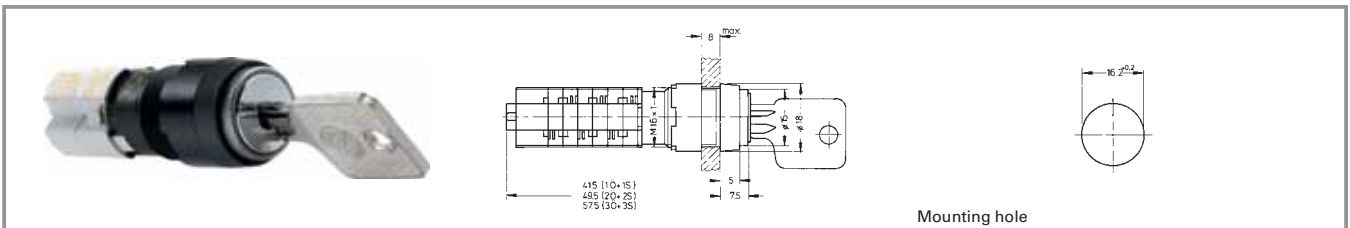
C22.2 No. 14-M91

Typical accessories LUMOTAST 75 IP40 - Keylock switch

Description	Photo	Order no.	Additional accessories see page
Blanking cap, black, to cover spare holes, dimensions 18 x 24 mm		5.52.006.021/0100	5 - 26
Blanking cap, black, to cover spare holes, round 18 mm		5.52.006.022/0100	5 - 26
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21
Keylock switch cap		5.58.002.030/0000	
LUMOTAST 75 - Spare key (1 piece)		5.58.004.721/0000	

LUMOTAST 75 IP40 - Keylock switch, round collar

LUMO
75 (40)



Contact arrangement	Contact function	Rotating angle	Key removal position		Colour of collar	Order no.
1 NC + 1 NO	latching	90°	0		black	1.15.108.851/0000
1 NC + 1 NO	latching	90°	0+1		black	1.15.108.911/0000
1 NC + 1 NO	momentary	45°	0		black	1.15.108.941/0000
2 NC + 2 NO	latching	90°	0		black	1.15.108.852/0000
2 NC + 2 NO	latching	90°	0+1		black	1.15.108.912/0000

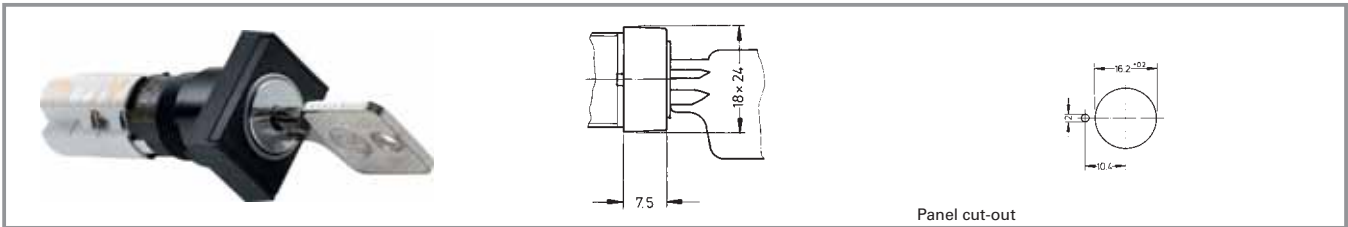
Technical data see page 1 - 42

Included: 2 keys.

Other lock variants and contacts available on request.

1

LUMOTAST 75 IP40 - Keylock switch, rectangular collar



Contact arrange- ment	Contact function	Rotating angle	Key removal position		Colour of collar	Order no.
1 NC + 1 NO	latching	90°	0		black	1.15.108.571/0100
1 NC + 1 NO	latching	90°	0+1		black	1.15.108.631/0100
1 NC + 1 NO	momentary	45°	0		black	1.15.108.661/0100
2 NC + 2 NO	latching	90°	0		black	1.15.108.572/0100
2 NC + 2 NO	latching	90°	0+1		black	1.15.108.632/0100

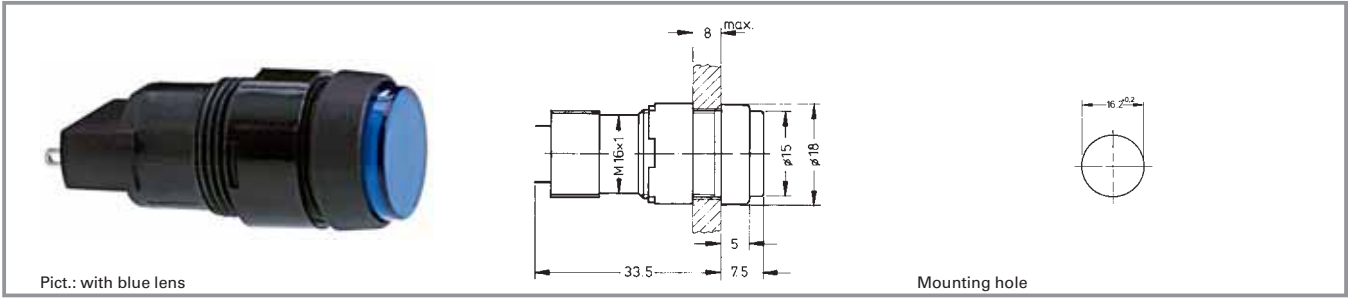
Technical data see page 1 - 42

Included: 2 keys.
Other lock variants and contacts available on request.

LUMO
75 (40)

1

LUMOTAST 75 IP40 - Signal lamp with lamp socket T 4.5



Technical Data

LUMO
75 (40)

General information

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

Dimensions

Length of collar	see order block
Width of collar	see order block
Diameter of collar	see order block
Overall height	7.5 mm
Mounting depth	33.5 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Terminals	solder terminals
Lamp socket	T 4.5
Lamp	filament lamp / LED

Electrical characteristics

Voltage limit max.	35 V
Power limit max.	1.2 W

Other specifications

Degree of protection from front side	IP40
Weight	5 g
Operation temperature min.	-25 °C
Ambient temp. operating max.	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78

Approvals



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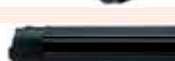
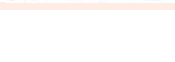


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Typical accessories LUMOTAST 75 IP40 - Signal lamp with lamp socket T 4.5

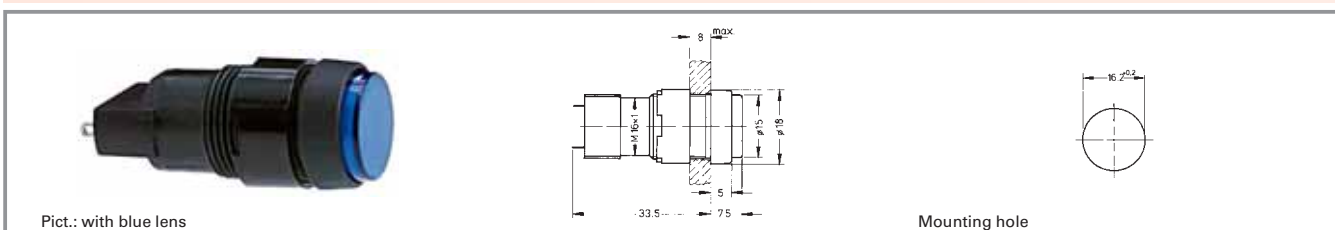
Description	Photo	Order no.	Additional accessories see page
Filament lamp, T 4.5 base, 12 V		1.90.100.022/0000	5 - 6
Filament lamp, T 4.5 base, 24 V		1.90.100.023/0000	5 - 6
LED T 4.5 superbright, red, 24 V		1.90.690.331/0000	5 - 16

Typical accessories LUMOTAST 75 IP40 - Signal lamp with lamp socket T 4.5

Description	Photo	Order no.	Additional accessories see page
LED T 4.5 superbright, green, 24 V		1.90.690.332/0000	5 - 16
LED T 4.5 superbright, yellow, 24 V		1.90.690.333/0000	5 - 16
LED T 4.5 superbright, blue, 24 V		1.90.690.334/0000	5 - 16
LED T 4.5 superbright, white, 24 V		1.90.690.335/0000	5 - 16
LED T 4.5, red, 2-3 V (use external resistor)		1.90.692.001/0000	5 - 16
LED T 4.5, green, 2-3 V (use external resistor)		1.90.692.002/0000	5 - 16
LED T 4.5, yellow, 2-3 V (use external resistor)		1.90.692.003/0000	5 - 16
Blanking cap, black, to cover spare holes, dimensions 18 x 18 mm		5.52.006.020/0103	5 - 26
Blanking cap, black, to cover spare holes, dimensions 18 x 24 mm		5.52.006.021/0100	5 - 26
Blanking cap, black, to cover spare holes, round 18 mm		5.52.006.022/0100	5 - 26
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

1

LUMO
75 (40)

LUMOTAST 75 IP40 - Signal lamp with lamp socket T 4.5, round collar, protruding lens


Voltage limit max.	Power limit max.	Lamp socket	Colour of collar	Order no. without lens	Note
35 V	1.2 W	T 4.5	black	1.65.111.071/0000	Please include the desired lens and diffuser in your order.

Technical data see page 1 - 46

Lenses:

 Lens, round, transparent colourless, for filament lamp or LED: **5.49.257.011/1002**

 Lens, round, transparent red, for LED: **5.49.257.011/1301**

 Lens, round, transparent red, for filament lamp: **5.49.257.011/1303**

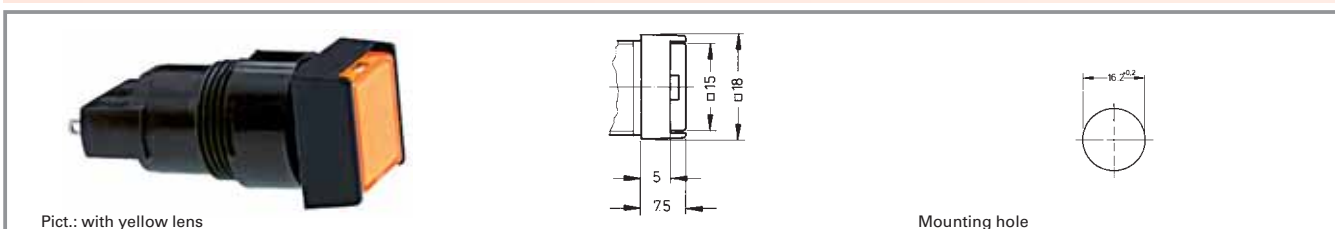
 Lens, round, transparent yellow, for filament lamp or LED: **5.49.257.011/1402**

 Lens, round, transparent green, for filament lamp: **5.49.257.011/1502**

 Lens, round, transparent green, for LED: **5.49.257.011/1503**

 Lens, round, transparent blue, for filament lamp: **5.49.257.011/1601**
Accessoires:

 Diffuser, round, for filament lamp, without legend: **5.72.050.000/0202**

 Diffuser, round, for LED, without legend: **5.72.050.000/0214**
LUMOTAST 75 IP40 - Signal lamp, square collar, flush lens


Voltage limit max.	Power limit max.	Lamp socket	Colour of collar	Order no. without lens	Note
35 V	1.2 W	T 4.5	black	1.65.111.061/0000	Please include the desired lens and diffuser in your order.

Technical data see page 1 - 46

Lenses:

 Lens, square, transparent colourless, for filament lamp or LED: **5.49.275.036/1002**

 Lens, square, transparent red, for LED: **5.49.275.036/1301**

 Lens, square, transparent red, for filament lamp: **5.49.275.036/1303**

 Lens, square, transparent yellow, for filament lamp or LED: **5.49.275.036/1402**

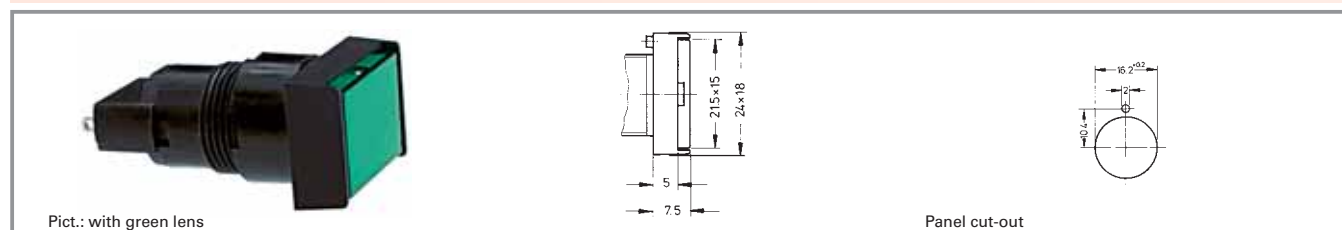
 Lens, square, transparent green, for filament lamp: **5.49.275.036/1502**

 Lens, square, transparent green, for LED: **5.49.275.036/1503**

 Lens, square, transparent blue, for filament lamp: **5.49.275.036/1601**
Accessoires:

 Diffuser, square, for filament lamp, without legend: **5.73.013.000/0202**

 Diffuser, square, for LED, without legend: **5.73.013.000/0214**

LUMOTAST 75 IP40 - Signal lamp, rectangular collar, flush lens


Pict.: with green lens

Panel cut-out

Voltage limit max.	Power limit max.	Lamp socket	Colour of collar	Order no. without lens	Note
35 V	1.2 W	T 4.5	black	1.65.111.051/0000	Please include the desired lens and diffuser in your order.

Technical data see page 1 - 46

Lenses:

 Lens, rectangular, transparent colourless, for filament lamp or LED: **5.49.275.032/1002**

 Lens, rectangular, transparent red, for LED: **5.49.275.032/1301**

 Lens, rectangular, transparent red, for filament lamp: **5.49.275.032/1303**

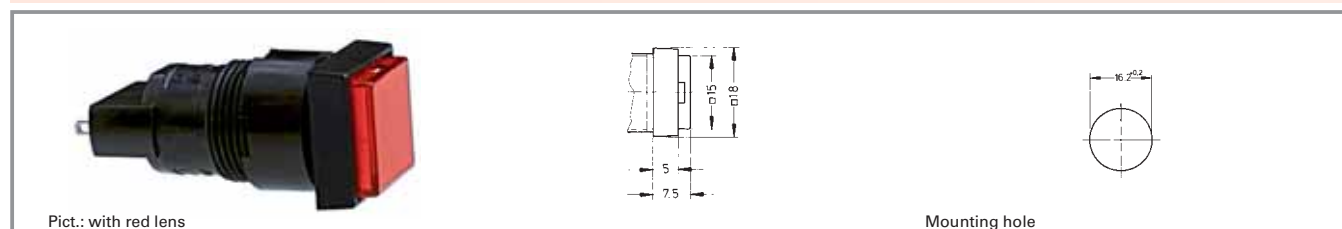
 Lens, rectangular, transparent yellow, for filament lamp or LED: **5.49.275.032/1402**

 Lens, rectangular, transparent green, for filament lamp: **5.49.275.032/1502**

 Lens, rectangular, transparent green, for LED: **5.49.275.032/1503**

 Lens, rectangular, transparent blue, for filament lamp: **5.49.275.032/1601**
Accessoires:

 Diffuser, rectangular, for filament lamp, without legend: **5.73.012.000/0202**

 Diffuser, rectangular, for LED, without legend: **5.73.012.000/0214**
**LUMO
75 (40)**
LUMOTAST 75 IP40 - Signal lamp, square collar, protruding lens


Pict.: with red lens

Mounting hole

Voltage limit max.	Power limit max.	Lamp socket	Colour of collar	Order no. without lens	Note
35 V	1.2 W	T 4.5	black	1.65.111.081/0000	Please include the desired lens and diffuser in your order.

Technical data see page 1 - 46

Lenses:

 Lens, square, transparent colourless, for filament lamp or LED: **5.49.275.036/1002**

 Lens, square, transparent red, for LED: **5.49.275.036/1301**

 Lens, square, transparent red, for filament lamp: **5.49.275.036/1303**

 Lens, square, transparent yellow, for filament lamp or LED: **5.49.275.036/1402**

 Lens, square, transparent green, for filament lamp: **5.49.275.036/1502**

 Lens, square, transparent green, for LED: **5.49.275.036/1503**

 Lens, square, transparent blue, for filament lamp: **5.49.275.036/1601**
Accessoires:

 Diffuser, square, for filament lamp, without legend: **5.73.013.000/0202**

 Diffuser, square, for LED, without legend: **5.73.013.000/0214**



General Data

LUMOTAST 75 IP65 - Pushbutton range

Illuminated pushbuttons and signal lamps with lamp socket T 4.5

- Mounting hole diameter 16.2 mm
- Degree of protection IP65
- Solder terminals for the following wire cross-sections:
 - Installed 0.5 mm² max.
 - Factory terminated 0.35 mm² max.
- 250 V/4 A max.
- 2 NC + 2 NO max. (3 NC + 3 NO on request)

LUMO
75 (65)

Content

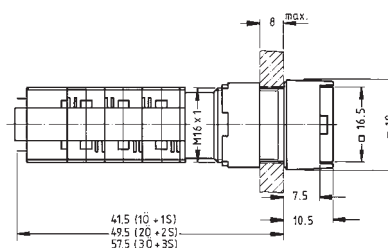
LUMOTAST 75 IP65 - Illuminated pushbutton

LUMOTAST 75 IP65 - Illuminated pushbutton, flush lens, square collar	1 - 52
LUMOTAST 75 IP65 - Illuminated pushbutton, protruding lens, square collar	1 - 54
LUMOTAST 75 IP65 - Illuminated pushbutton, flush lens, round collar	1 - 55
LUMOTAST 75 IP65 - Illuminated pushbutton, protruding lens, round collar	1 - 56
LUMOTAST 75 IP65 - Illuminated pushbutton, flush lens, rectangular collar	1 - 57
LUMOTAST 75 IP65 - Illuminated pushbutton, protruding lens, rectangular collar	1 - 58

LUMOTAST 75 IP65 - Signal lamp

LUMOTAST 75 IP65 - Signal lamp, flush lens, square collar	1 - 60
LUMOTAST 75 IP65 - Signal lamp, protruding lens, square collar	1 - 62
LUMOTAST 75 IP65 - Signal lamp, flush lens, round collar	1 - 62
LUMOTAST 75 IP65 - Signal lamp, protruding lens, round collar	1 - 63
LUMOTAST 75 IP65 - Signal lamp, flush lens, rectangular collar	1 - 63
LUMOTAST 75 IP65 - Signal lamp, protruding lens, rectangular collar	1 - 64

LUMOTAST 75 IP65 - Illuminated pushbutton



Mounting hole



Technical Data

General information

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

Dimensions

Length of collar	see order block
Diameter of collar	see order block
Width of collar	see order block
Overall height	10.5 mm
Mounting depth	see order block
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Terminals	solder terminals
Contact system	snap-action bridge contact
Contact function	see order block
Contact arrangement	see order block
Contact materials	Ag
Illumination	yes
Lamp socket	T 4.5

Mechanical characteristics

Operating force	3 ... 6.5 N
Operating travel	2.5 mm
Switching travel NC	1.8 mm
Switching travel NO	0.9 mm
Robustness min.	100 N

Electrical characteristics

Rated voltage AC max.	250 V
Rated voltage DC max.	220 V
Rated voltage AC/DC min.	12 V
Rated current AC max.	4 A
Rated current DC max.	0.2 A
Rated current AC/DC min.	5 mA
Contact resistance acc. to life max.	200 mΩ
Protection class	II
ESD-strength min.	14 kV

Other specifications

Operating life, at 250 V/2 A (operations)	200,000 (momentary), 50,000 (latching)
Operating life, at 250 V/4 A (operations)	60,000 (momentary)
Degree of protection from front side	IP65
Operation temperature 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
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Weight	15 g
Flame class acc. to UL 94	V 0
Hot wire ignition acc. to IEC 60695-2-1	yes

Approvals



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Typical accessories LUMOTAST 75 IP65 - Illuminated pushbutton

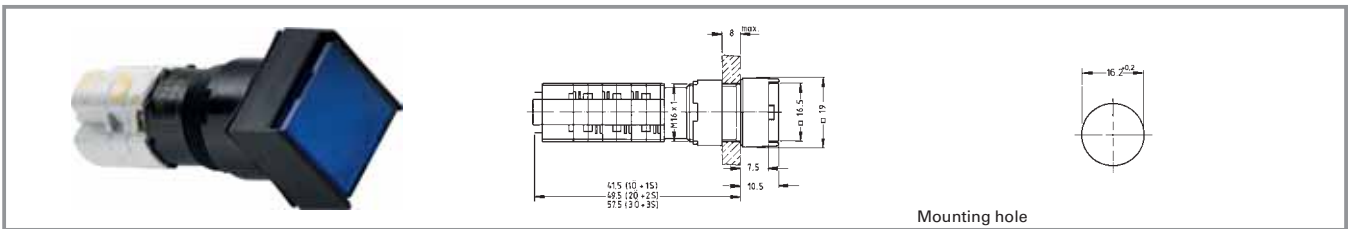
Description	Photo	Order no.	Additional accessories see page
Filament lamp, T 4.5 base, 12 V		1.90.100.022/0000	5 - 6
Filament lamp, T 4.5 base, 24 V		1.90.100.023/0000	5 - 6
LED T 4.5 superbright, red, 24 V		1.90.690.331/0000	5 - 16
LED T 4.5 superbright, green, 24 V		1.90.690.332/0000	5 - 16
LED T 4.5 superbright, yellow, 24 V		1.90.690.333/0000	5 - 16
LED T 4.5 superbright, blue, 24 V		1.90.690.334/0000	5 - 16
LED T 4.5 superbright, white, 24 V		1.90.690.335/0000	5 - 16
LED T 4.5, red, 2-3 V (use external resistor)		1.90.692.001/0000	5 - 16
LED T 4.5, green, 2-3 V (use external resistor)		1.90.692.002/0000	5 - 16
LED T 4.5, yellow, 2-3 V (use external resistor)		1.90.692.003/0000	5 - 16
Lamp extractor for lamp diameter 4 mm		1.90.900.002/0000	5 - 5, 5 - 6, 5 - 20
Lamp extractor for lamp diameter 5-6 mm		1.90.900.004/0000	5 - 16, 5 - 20
Protective cap (for 18 x 24 collar)		5.05.800.027/0000	5 - 24
Blanking cap, black, to cover spare holes, dimensions 18 x 18 mm		5.52.006.020/0103	5 - 26
Blanking cap, black, to cover spare holes, dimensions 18 x 24 mm		5.52.006.021/0100	5 - 26
Blanking cap, black, to cover spare holes, round 18 mm		5.52.006.022/0100	5 - 26
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

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LUMO
75 (65)

1

LUMOTAST 75 IP65 - Illuminated pushbutton, flush lens, square collar



Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	1.15.108.276/0000	Please include the desired lens in your order.
1 NC + 1 NO	latching	black	1.15.108.376/0000	Please include the desired lens in your order.
2 NC + 2 NO	momentary	black	1.15.108.277/0000	Please include the desired lens in your order.
2 NC + 2 NO	latching	black	1.15.108.377/0000	Please include the desired lens in your order.

LUMO
75 (65)

Technical data see page 1 - 52

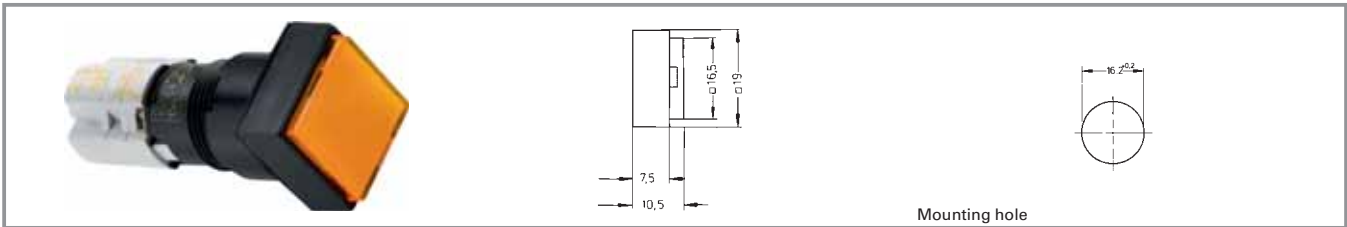
Lenses:

- Lens, square, transparent colourless, for filament lamp or LED: **5.49.277.052/1002**
- Lens, square, transparent red, for LED: **5.49.277.052/1301**
- Lens, square, transparent red, for filament lamp: **5.49.277.052/1303**
- Lens, square, transparent yellow, for filament lamp or LED: **5.49.277.052/1402**
- Lens, square, transparent green, for filament lamp: **5.49.277.052/1502**
- Lens, square, transparent green, for LED: **5.49.277.052/1503**
- Lens, square, transparent blue, for filament lamp: **5.49.277.052/1601**

Accessoires:

- Legend insert, square, without legend: **5.70.629.000/2000**

LUMOTAST 75 IP65 - Illuminated pushbutton, protruding lens, square collar



Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	1.15.108.281/0000	Please include the desired lens in your order.
1 NC + 1 NO	latching	black	1.15.108.381/0000	Please include the desired lens in your order.
2 NC + 2 NO	momentary	black	1.15.108.282/0000	Please include the desired lens in your order.
2 NC + 2 NO	latching	black	1.15.108.382/0000	Please include the desired lens in your order.

Technical data see page 1 - 52

Lenses:

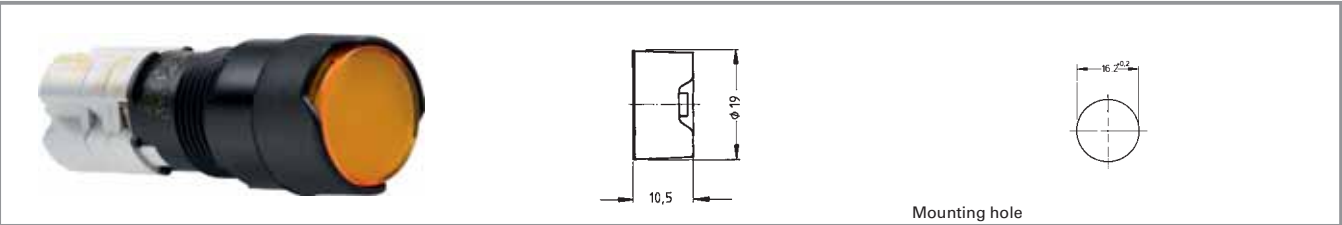
- Lens, square, transparent colourless, for filament lamp or LED: **5.49.277.052/1002**
- Lens, square, transparent red, for LED: **5.49.277.052/1301**
- Lens, square, transparent red, for filament lamp: **5.49.277.052/1303**
- Lens, square, transparent yellow, for filament lamp or LED: **5.49.277.052/1402**
- Lens, square, transparent green, for filament lamp: **5.49.277.052/1502**
- Lens, square, transparent green, for LED: **5.49.277.052/1503**
- Lens, square, transparent blue, for filament lamp: **5.49.277.052/1601**

Accessoires:

- Legend insert, square, without legend: **5.70.629.000/2000**

1

LUMOTAST 75 IP65 - Illuminated pushbutton, flush lens, round collar



Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	1.15.108.481/0000	Please include the desired lens in your order.
1 NC + 1 NO	latching	black	1.15.108.981/0000	Please include the desired lens in your order.
2 NC + 2 NO	momentary	black	1.15.108.482/0000	Please include the desired lens in your order.
2 NC + 2 NO	latching	black	1.15.108.982/0000	Please include the desired lens in your order.

LUMO
75 (65)

Technical data see page 1 - 52

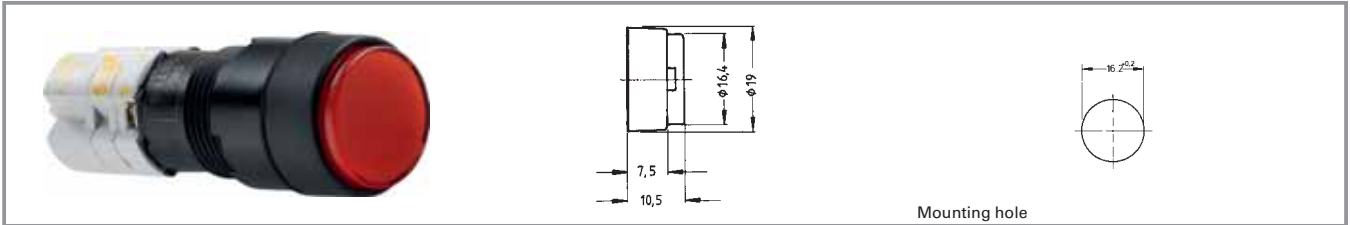
Lenses:

- Lens, round, transparent colourless, for filament lamp or LED: **5.49.259.013/1002**
- Lens, round, transparent red, for LED: **5.49.259.013/1301**
- Lens, round, transparent red, for filament lamp: **5.49.259.013/1303**
- Lens, round, transparent yellow, for filament lamp or LED: **5.49.259.013/1402**
- Lens, round, transparent green, for filament lamp: **5.49.259.013/1502**
- Lens, round, transparent green, for LED: **5.49.259.013/1503**
- Lens, round, transparent blue, for filament lamp: **5.49.259.013/1601**

Accessoires:

- Legend insert, round, without legend: **5.70.059.000/2000**

LUMOTAST 75 IP65 - Illuminated pushbutton, protruding lens, round collar



Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	1.15.108.476/0000	Please include the desired lens in your order.
1 NC + 1 NO	latching	black	1.15.108.976/0000	Please include the desired lens in your order.
2 NC + 2 NO	momentary	black	1.15.108.477/0000	Please include the desired lens in your order.
2 NC + 2 NO	latching	black	1.15.108.977/0000	Please include the desired lens in your order.

Technical data see page 1 - 52

Lenses:

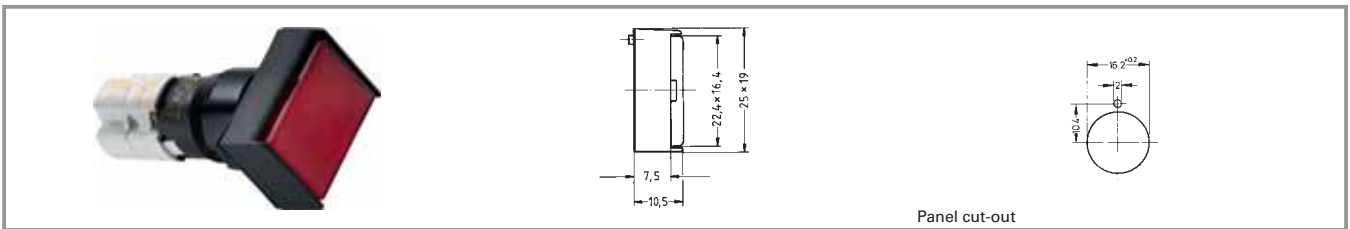
- Lens, round, transparent colourless, for filament lamp or LED: **5.49.259.013/1002**
- Lens, round, transparent red, for LED: **5.49.259.013/1301**
- Lens, round, transparent red, for filament lamp: **5.49.259.013/1303**
- Lens, round, transparent yellow, for filament lamp or LED: **5.49.259.013/1402**
- Lens, round, transparent green, for filament lamp: **5.49.259.013/1502**
- Lens, round, transparent green, for LED: **5.49.259.013/1503**
- Lens, round, transparent blue, for filament lamp: **5.49.259.013/1601**

Accessoires:

- Legend insert, round, without legend: **5.70.059.000/2000**

1

LUMOTAST 75 IP65 - Illuminated pushbutton, flush lens, rectangular collar



Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	1.15.108.076/0000	Please include the desired lens in your order.
1 NC + 1 NO	latching	black	1.15.108.176/0000	Please include the desired lens in your order.
2 NC + 2 NO	momentary	black	1.15.108.077/0000	Please include the desired lens in your order.
2 NC + 2 NO	latching	black	1.15.108.177/0000	Please include the desired lens in your order.

LUMO
75 (65)

Technical data see page 1 - 52

Lenses:

- Lens, rectangular, transparent colourless, for filament lamp or LED: 5.49.277.058/1002
- Lens, rectangular, transparent red, for LED: 5.49.277.058/1301
- Lens, rectangular, transparent red, for filament lamp: 5.49.277.058/1303
- Lens, rectangular, transparent yellow, for filament lamp or LED: 5.49.277.058/1402
- Lens, rectangular, transparent green, for filament lamp: 5.49.277.058/1502
- Lens, rectangular, transparent green, for LED: 5.49.277.058/1503
- Lens, rectangular, transparent blue, for filament lamp: 5.49.277.058/1601

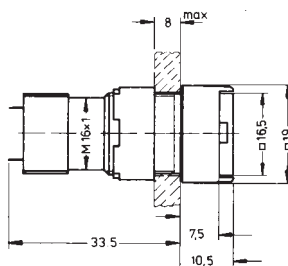
Accessoires:

- Legend insert, rectangular without legend: 5.70.630.000/2000

LUMOTAST 75 IP65 - Signal lamp



Pict.: with red lens



Mounting hole

Technical Data

General information

Form of lens	see order block
Form of collar	see order block
Diameter of collar	see order block

Electrical characteristics

Voltage limit max.	35 V
Power limit max.	1.2 W

Other specifications

Degree of protection from front side	IP65
Weight	5 g
Operation temperature min.	-25 °C
Ambient temp. operating max.	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C

Dimensions

Length of collar	see order block
Width of collar	see order block
Overall height	10.5 mm
Mounting depth	33.5 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Terminals	solder terminals
Lamp socket	T 4.5
Lamp	filament lamp / LED

Approvals



UL 508



C22.2 No. 14-M91

Typical accessories LUMOTAST 75 IP65 - Signal lamp

Description	Photo	Order no.	Additional accessories see page
Filament lamp, T 4.5 base, 12 V		1.90.100.022/0000	5 - 6
Filament lamp, T 4.5 base, 24 V		1.90.100.023/0000	5 - 6
LED T 4.5 superbright, red, 24 V		1.90.690.331/0000	5 - 16
LED T 4.5 superbright, green, 24 V		1.90.690.332/0000	5 - 16

Typical accessories LUMOTAST 75 IP65 - Signal lamp

Description	Photo	Order no.	Additional accessories see page
LEDT 4.5 superbright, yellow, 24 V		1.90.690.333/0000	5 - 16
LEDT 4.5 superbright, blue, 24 V		1.90.690.334/0000	5 - 16
LEDT 4.5 superbright, white, 24 V		1.90.690.335/0000	5 - 16
LEDT 4.5, red, 2-3 V (use external resistor)		1.90.692.001/0000	5 - 16
LEDT 4.5, yellow, 2-3 V (use external resistor)		1.90.692.003/0000	5 - 16
Lamp extractor for lamp diameter 4 mm		1.90.900.002/0000	5 - 5, 5 - 6, 5 - 20
Lamp extractor for lamp diameter 5-6 mm		1.90.900.004/0000	5 - 16, 5 - 20
Blanking cap, black, to cover spare holes, dimensions 18 x 18 mm		5.52.006.020/0103	5 - 26
Blanking cap, black, to cover spare holes, dimensions 18 x 24 mm		5.52.006.021/0100	5 - 26
Blanking cap, black, to cover spare holes, round 18 mm		5.52.006.022/0100	5 - 26
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

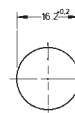
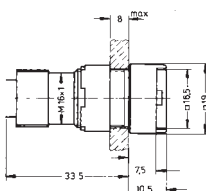
1

LUMO
75 (65)

LUMOTAST 75 IP65 - Signal lamp, flush lens, square collar



Pict.: with red lens



Mounting hole

Voltage limit max.	Power limit max.	Lamp socket	Form of collar	Order no. without lens	Note
35 V	1.2 W	T 4.5	square	1.65.111.066/0000	Please include the desired lens in your order.

Technical data see page 1 - 60

Lenses:

Lens, square, transparent colourless, for filament lamp or LED: **5.49.277.052/1002**

Lens, square, transparent red, for LED: **5.49.277.052/1301**

Lens, square, transparent red, for filament lamp: **5.49.277.052/1303**

Lens, square, transparent yellow, for filament lamp or LED: **5.49.277.052/1402**

Lens, square, transparent green, for filament lamp: **5.49.277.052/1502**

Lens, square, transparent green, for LED: **5.49.277.052/1503**

Lens, square, transparent blue, for filament lamp: **5.49.277.052/1601**

Accessoires:

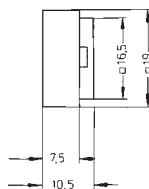
Legend insert, square, without legend: **5.70.629.000/2000**

For assembly, press the lens as far as possible.

LUMOTAST 75 IP65 - Signal lamp, protruding lens, square collar



Pict.: with green lens



Mounting hole

Voltage limit max.	Power limit max.	Lamp socket	Form of collar	Order no. without lens	Note
35 V	1.2 W	T 4.5	square	1.65.111.086/0000	Please include the desired lens in your order.

Technical data see page 1 - 60

Lenses:

Lens, square, transparent colourless, for filament lamp or LED: **5.49.277.052/1002**

Lens, square, transparent red, for LED: **5.49.277.052/1301**

Lens, square, transparent red, for filament lamp: **5.49.277.052/1303**

Lens, square, transparent yellow, for filament lamp or LED: **5.49.277.052/1402**

Lens, square, transparent green, for filament lamp: **5.49.277.052/1502**

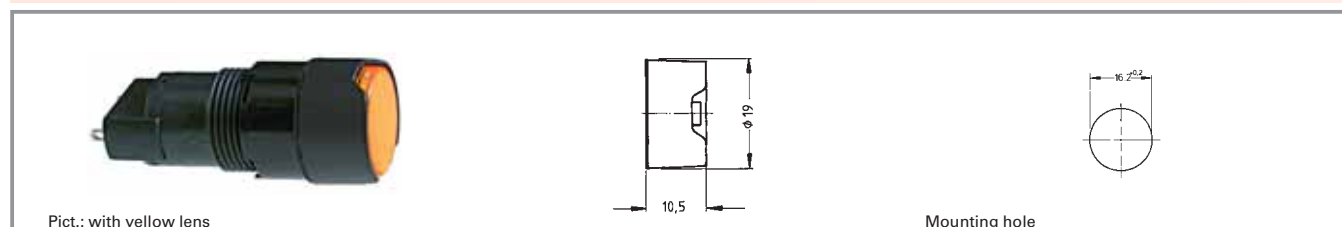
Lens, square, transparent green, for LED: **5.49.277.052/1503**

Lens, square, transparent blue, for filament lamp: **5.49.277.052/1601**

Accessoires:

Legend insert, square, without legend: **5.70.629.000/2000**

For assembly, press the lens as far as possible.

LUMOTAST 75 IP65 - Signal lamp, flush lens, round collar


Voltage limit max.	Power limit max.	Lamp socket	Form of collar	Order no. without lens	Note
35 V	1.2 W	T 4.5	round	1.65.111.096/0000	Please include the desired lens in your order.

Technical data see page 1 - 60

Lenses:

Lens, round, transparent colourless, for filament lamp or LED: **5.49.259.013/1002**

Lens, round, transparent red, for LED: **5.49.259.013/1301**

Lens, round, transparent red, for filament lamp: **5.49.259.013/1303**

Lens, round, transparent yellow, for filament lamp or LED: **5.49.259.013/1402**

Lens, round, transparent green, for filament lamp: **5.49.259.013/1502**

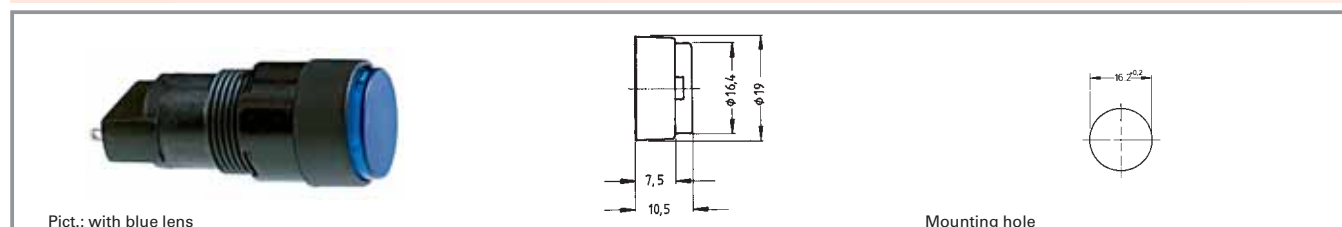
Lens, round, transparent green, for LED: **5.49.259.013/1503**

Lens, round, transparent blue, for filament lamp: **5.49.259.013/1601**

Accessoires:

Legend insert, round, without legend: **5.70.059.000/2000**

For assembly, press the lens as far as possible.

1
**LUMO
75 (65)**
LUMOTAST 75 IP65 - Signal lamp, protruding lens, round collar


Voltage limit max.	Power limit max.	Lamp socket	Form of collar	Order no. without lens	Note
35 V	1.2 W	T 4.5	round	1.65.111.076/0000	Please include the desired lens in your order.

Technical data see page 1 - 60

Lenses:

Lens, round, transparent colourless, for filament lamp or LED: **5.49.259.013/1002**

Lens, round, transparent red, for LED: **5.49.259.013/1301**

Lens, round, transparent red, for filament lamp: **5.49.259.013/1303**

Lens, round, transparent yellow, for filament lamp or LED: **5.49.259.013/1402**

Lens, round, transparent green, for filament lamp: **5.49.259.013/1502**

Lens, round, transparent green, for LED: **5.49.259.013/1503**

Lens, round, transparent blue, for filament lamp: **5.49.259.013/1601**

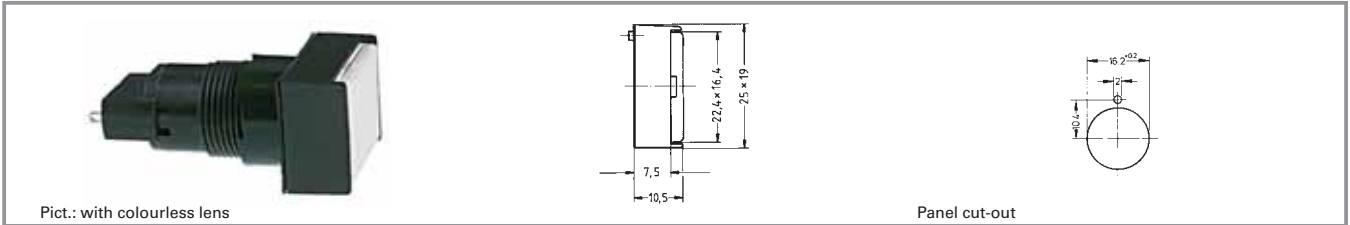
Accessoires:

Legend insert, round, without legend: **5.70.059.000/2000**

For assembly, press the lens as far as possible.

1

LUMOTAST 75 IP65 - Signal lamp, flush lens, rectangular collar



Voltage limit max.	Power limit max.	Lamp socket	Form of collar	Order no. without lens	Note
35 V	1.2 W	T 4.5	rectangular	1.65.111.056/0000	Please include the desired lens in your order.

Technical data see page 1 - 60

- Lenses:**
Lens, rectangular, transparent colourless, for filament lamp or LED: 5.49.277.058/1002
Lens, rectangular, transparent red, for LED: 5.49.277.058/1301
Lens, rectangular, transparent red, for filament lamp: 5.49.277.058/1303
Lens, rectangular, transparent yellow, for filament lamp or LED: 5.49.277.058/1402
Lens, rectangular, transparent green, for filament lamp: 5.49.277.058/1502
Lens, rectangular, transparent green, for LED: 5.49.277.058/1503
Lens, rectangular, transparent blue, for filament lamp: 5.49.277.058/1601

- Accessoires:**
Legend insert, rectangular without legend: 5.70.630.000/2000

For assembly, press the lens as far as possible.

LUMO
75 (65)



General Data

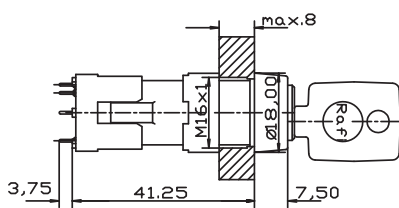
- Keylock switch for a mounting hole diameter of 16.2 mm
- 35 V max.
 - 100 mA
 - Design matches with LUMOTAST FK and LUMOTAST 75 IP40.

Key
Swit-
ches

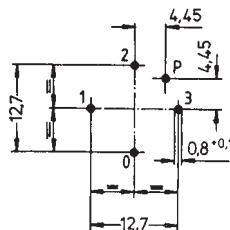
Content

Keylock switch	1 - 66
Keylock switch - round collar	1 - 67
Keylock switch - rectangular collar	1 - 67
Priority keylock switch	1 - 68
Priority keylock switch - round collar	1 - 69
Priority keylock switch - rectangular collar	1 - 69

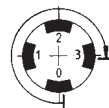
Keylock switch



Pict.: with plug-in socket



PCB footprint



Technical Data

General information

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 7.5 mm
Mounting depth 39.5 mm; with plug-in socket 41.25 mm
Mounting hole 16.2 mm

Mechanical design

Mounting ring nut
Terminals solder terminals
Contact system sliding contact, self cleaning
Contact function latching
Contact arrangement 1 NO at every switching position
Contact materials Au alloy
Illumination no

Mechanical design of lock

Lock cylinder lock with pin tumblers
Wafers 5 pins
Lock type 5001
Number of locking positions 10,000
Main key on request
Symmetric key on request
Key removal position see order block

Mechanical characteristics

Torque against stop max. 0.035 Nm
Torque against stop max. 1.8 Nm

Electrical characteristics

Rated voltage AC/DC max. 35 V
Rated voltage AC/DC min. 5 V
Rated current AC/DC max. 100 mA
Rated current AC/DC min. 5 mA
ESD strength max. 12 kV
Insulation resistance $6 \times 10^8 \Omega$
Contact resistance max. 200 m Ω

Other specifications

Operating life (operations) 50,000
Degree of protection from front side IP65
Operation temperature min. -25 °C
Ambient temp. operating max. +70 °C
Storage temperature min. -40 °C
Storage temperature max. +80 °C
Environmental resistance acc. to IEC 60068-2 -14, -30, -33 and -78
Soldering temperature max. 350 °C
Weight 29 g
Soldering time max. 3 s
Rotating angle see order block

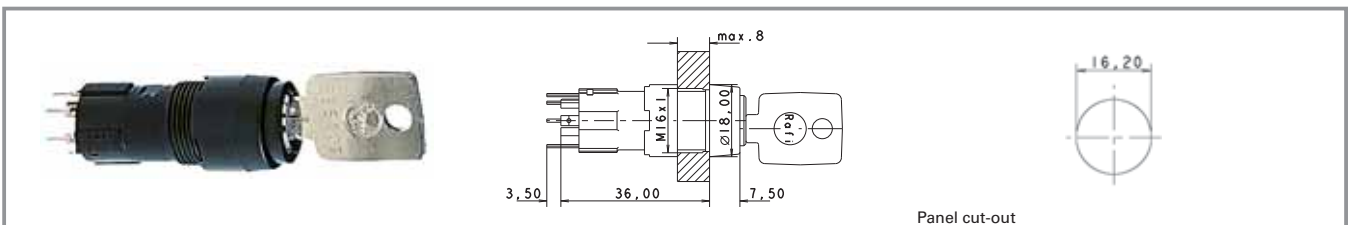
Typical accessories Keylock switch

Description	Photo	Order no.	Additional accessories see page
Plug-in socket for PCB mounting		5.05.510.298/0000	5 - 23
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

Typical accessories Keylock switch

Description	Photo	Order no.	Additional accessories see page
Spare key (1 piece)		5.58.011.001/0000	

Keylock switch - round collar

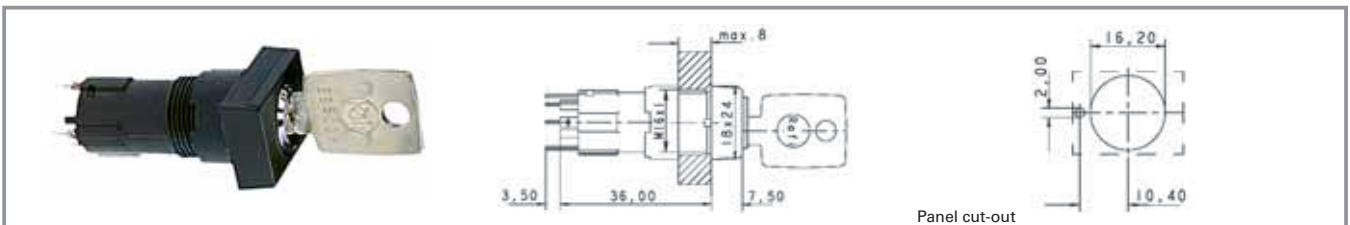


Contact arrangement	Contact function	Rotating angle	Key removal position	Order no.
1 NO at every switching position	latching	1 x 90°	 0+1	1.10.118.612/0000
1 NO at every switching position	latching	2 x 90°	 0	1.10.118.513/0000
1 NO at every switching position	latching	2 x 90°	 0+1+2	1.10.118.713/0000
1 NO at every switching position	latching	3 x 90°	 0+1+2+3	1.10.118.814/0000

Technical data see page 1 - 66

Included: 2 keys.

Keylock switch - rectangular collar

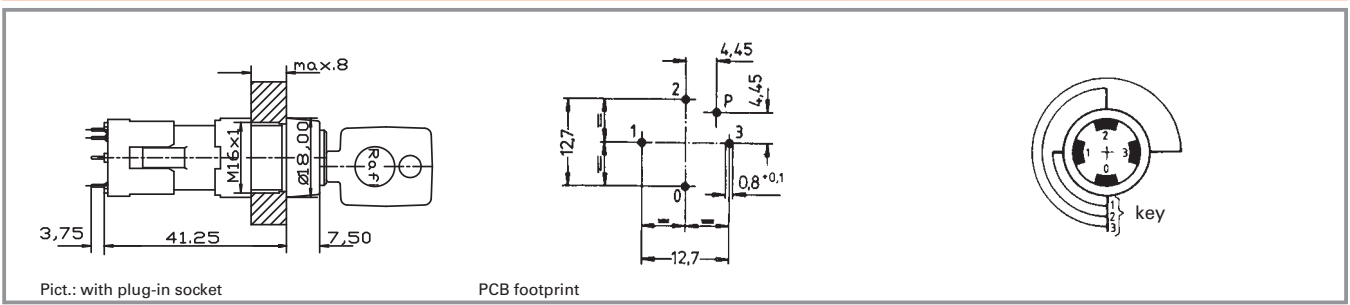


Contact arrangement	Contact function	Rotating angle	Key removal position	Order no.
1 NO at every switching position	latching	1 x 90°	 0+1	1.10.118.212/0000
1 NO at every switching position	latching	2 x 90°	 0+1+2	1.10.118.313/0000
1 NO at every switching position	latching	3 x 90°	 0+1+2+3	1.10.118.414/0000

Technical data see page 1 - 66

Included: 2 keys.

Priority keylock switch



Pict.: with plug-in socket

PCB footprint

Technical Data

General information		Mechanical characteristics	
Form of collar	see order block	Torque against stop max.	0.035 Nm
		Torque against stop max.	1.8 Nm
Dimensions		Electrical characteristics	
Length of collar	see order block	Rated voltage AC/DC max.	35 V
Diameter of collar	see order block	Rated voltage AC/DC min.	5 V
Width of collar	see order block	Rated current AC/DC max.	100 mA
Overall height	7.5 mm	Rated current AC/DC min.	5 mA
Mounting depth	39.5 mm; with plug-in socket 41.25 mm	ESD strength max.	12 kV
Mounting hole	16.2 mm	Insulation resistance	6 x 10 ⁸ Ω
		Contact resistance max.	200 mΩ
Mechanical design		Other specifications	
Mounting	ring nut	Operating life (operations)	50,000
Terminals	solder terminals	Degree of protection from front side	IP65
Contact system	sliding contact, self cleaning	Operation temperature min.	-25 °C
Contact function	latching	Ambient temp. operating max.	+70 °C
Contact arrangement	1 NO at every switching position	Storage temperature min.	-40 °C
Contact materials	Au alloy	Storage temperature max.	+80 °C
Illumination	no	Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Mechanical design of lock		Soldering temperature max.	350 °C
Lock	cylinder lock with pin tumblers	Weight	29 g
Wafers	5 pins	Soldering time max.	3 s
Lock type	5001	Rotating angle	see order block
Number of locking positions	10,000		
Main key	yes		
Symmetric key	yes		
Key removal position	see order block		

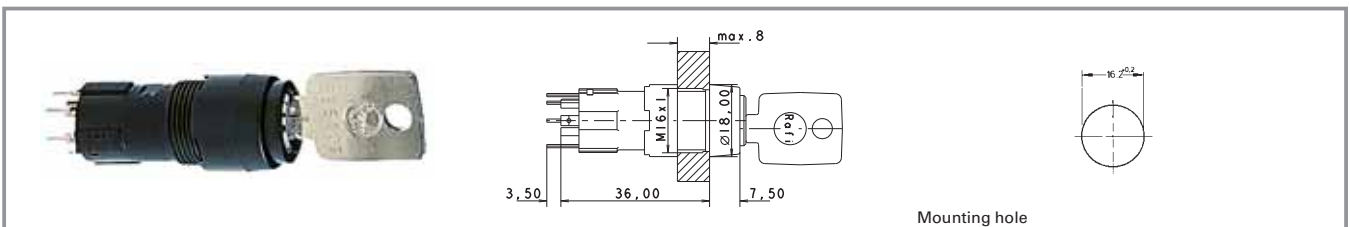
Typical accessories Priority keylock switch

Description	Photo	Order no.	Additional accessories see page
Plug-in socket for PCB mounting		5.05.510.298/0000	5 - 23
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

Typical accessories Priority keylock switch

Description	Photo	Order no.	Additional accessories see page
Set of spare keys (3 keys) for 3 x 90° type		5.58.099.010/0000	
Set of spare keys (2 keys) for 2 x 90° type		5.58.099.011/0000	

Priority keylock switch - round collar

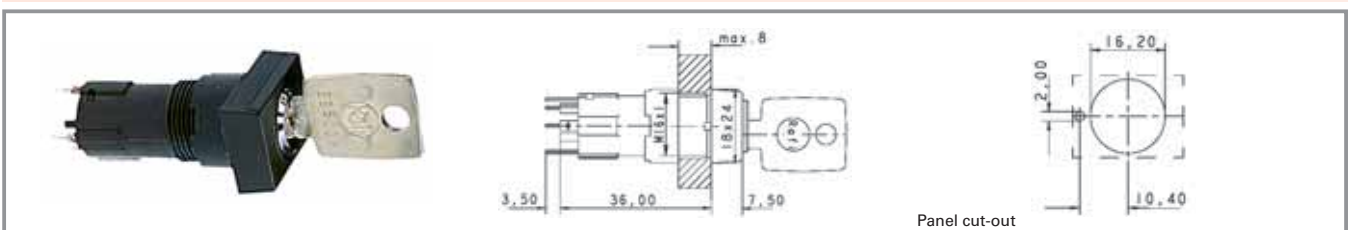


Contact arrangement	Contact function	Rotating angle	Key removal position	Order no.
1 NO at every switching position	latching	2 x 90°	0	1.10.119.611/0000
1 NO at every switching position	latching	3 x 90°	0	1.10.119.617/0000
1 NO at every switching position	latching	3 x 90°	0+1+2+3	1.10.119.967/0000

Technical data see page 1 - 68

Included with 2 x 90° type: 2 keys; with 3 x 90° type: 3 keys.
Key 1 switches to lock position 1, key 2 switches to lock positions 1 and 2, etc...

Priority keylock switch - rectangular collar



Contact arrangement	Contact function	Rotating angle	Key removal position	Order no.
1 NO at every switching position	latching	2 x 90°	0	1.10.119.111/0000
1 NO at every switching position	latching	3 x 90°	0	1.10.119.117/0000
1 NO at every switching position	latching	3 x 90°	0+1+2+3	1.10.119.467/0000

Technical data see page 1 - 68

Included with 2 x 90° type: 2 keys; with 3 x 90° type: 3 keys.
Key 1 switches to lock position 1, key 2 switches to lock positions 1 and 2, etc...



General Data

Various pushbuttons for mounting hole diameters from 9.1 mm to 20.3 mm.

Content

Pushbutton opaque - mounting hole diameter 9.1 mm, 24 V/100 mA	1 - 72
Pushbutton opaque - mounting hole diameter 9.1 mm, 24 V/0.1 A	1 - 73
Pushbutton (illuminated) - mounting hole diameter 9.1 mm, 24 V/0.5 A	1 - 74
Pushbutton (illuminated) - mounting hole diameter 9.1 mm, 24 V/0.5 A	1 - 75
Pushbutton opaque - mounting hole diameter 15.2 mm, 250 V/0.7 A	1 - 76
Pushbutton opaque - mounting hole diameter 15.2 mm	1 - 77
Pushbutton opaque - mounting hole diameter 16.2 mm, 250 V/2 A	1 - 78
Pushbutton opaque - mounting hole diameter 16.2 mm, 250 V/2 A	1 - 79
Pushbutton opaque - mounting hole diameter 18.2 mm, 250 V/2 A	1 - 80
Pushbutton opaque - mounting hole diameter 18.2 mm, 250 V/2 A	1 - 81
Pushbutton with lamp socket BA9s - (MBC/MCC), mounting hole diameter 20.3 mm, 250 V/2 A	1 - 82
Pushbutton with lamp socket BA9s - (MBC/MCC), mounting hole diameter 20.3 mm, 250 V/2 A	1 - 83

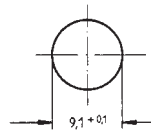
Other
Pushb.

1

Pushbutton opaque - mounting hole diameter 9.1 mm, 24 V/100 mA



Pict.: white lens



Panel cut-out

Technical Data

General information

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

Dimensions

Diameter of collar	11 mm
Overall height	4.5 mm
Mounting depth	25.5 mm
Mounting hole	9.1 mm

Mechanical design

Mounting	ring nut
Terminals	solder terminals
Contact system	bridge contact
Contact function	momentary
Contact arrangement	1 NO
Contact materials	Ag
Illumination	no
Lamp socket	no

Mechanical characteristics

Operating force max.	7 N
Operating travel	2 mm
Switching travel NO	1.3 mm
Robustness min.	100 N

Electrical characteristics

Rated voltage AC max.	24 V
Rated voltage DC max.	24 V
Rated current max.	0.1 A
Contact resistance max.	200 mΩ

Other specifications

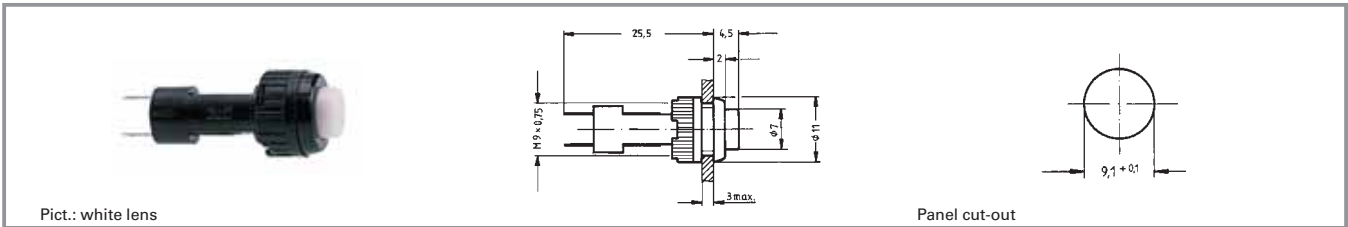
Operating life (operations)	40,000
Degree of protection from front side	IP40
Operation temperature min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2
	-14, -30, -33 and -78
Weight	2 g
Soldering time max.	3 s
Soldering temperature max.	350 °C

Other Pushb.

Typical accessories Pushbutton opaque - mounting hole diameter 9.1 mm, 24 V/100 mA

Description	Photo	Order no.	Additional accessories see page
Fixing spanner M 9, M 10		5.58.002.025/0105	5 - 21

Pushbutton opaque - mounting hole diameter 9.1 mm, 24 V/0.1 A



Contact arrangement	Contact function	Illumination	Rated voltage DC max.	Colour of lens	Order no.
1 NO	momentary	no	24 V	opaque black	1.10.107.011/0104
1 NO	momentary	no	24 V	opaque white	1.10.107.011/0205
1 NO	momentary	no	24 V	opaque red	1.10.107.011/0301
1 NO	momentary	no	24 V	opaque yellow	1.10.107.011/0404
1 NO	momentary	no	24 V	opaque green	1.10.107.011/0507

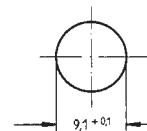
Technical data see page 1 - 72

1

Other
Pushb.

Pushbutton (illuminated) - mounting hole diameter 9.1 mm, 24 V/0.5 A


Pict.: red



Panel cut-out

Technical Data
General information

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

Dimensions

Diameter of collar	11 mm
Overall height	7 mm
Mounting depth	25 mm
Mounting hole	9.1 mm

Mechanical design

Mounting	ring nut
Terminals	solder terminals
Contact system	bridge contact
Contact function	momentary
Contact arrangement	1 NC + 1 NO
Contact materials	Au
Illumination	see order block
Lamp socket	no

Mechanical characteristics

Operating force max.	5 N
Operating travel	1.5 mm
Switching travel NC	0.5 mm
Switching travel NO	1 mm
Robustness min.	100 N

Electrical characteristics

Rated voltage AC/DC max.	24 V
Rated voltage DC max.	24 V
Rated current max.	0.5 A

Contact resistance when new max.	50 mΩ
Contact resistance acc. to life max.	300 mΩ
Bouncing time max.	10 ms
Lamp voltage	see order block

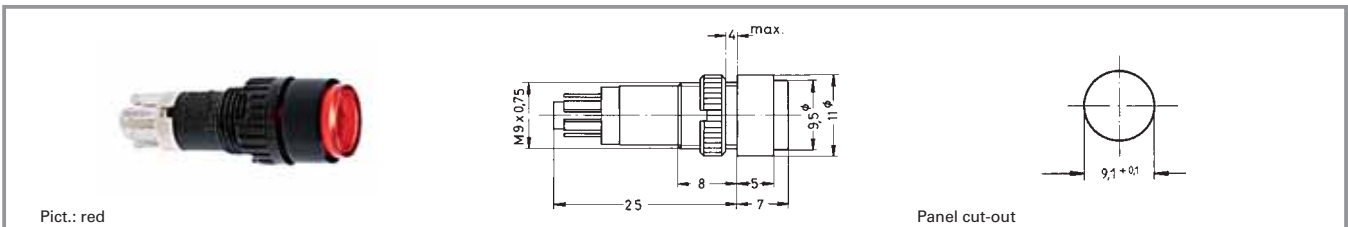
Other specifications

Operating life key switch	200,000
Operating life filament lamp	see order block
Degree of protection from front side	IP40
Operation temperature min.	-25 °C
Ambient temp. operating max.	+70 (LED +55) °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2
	-14, -30, -33 and -78
Soldering temperature max.	350 °C
Weight	3 g
Soldering time max.	3 s
LED operating voltage	see order block
LED forward current	see order block
LED forward voltage	see order block
LED reverse voltage	see order block
LED reverse current	see order block
LED power dissipation	see order block
LED series resistor 5-7 V	see order block
LED series resistor 12-14 V	see order block
LED series resistor 24-28 V	see order block

Typical accessories Pushbutton (illuminated) - mounting hole diameter 9.1 mm, 24 V/0.5 A

Description	Photo	Order no.	Additional accessories see page
Fixing spanner M 9, M 10		5.58.002.025/0105	5 - 21

Pushbutton (illuminated) - mounting hole diameter 9.1 mm, 24 V/0.5 A



Contact arrangement	Contact function	Illumination	Lamp voltage	Colour of lens	Order no.
1 NC + 1 NO	momentary	LED super bright white	2 V/10 mA external series resistor	transparent white	1.15.106.505/1000
1 NC + 1 NO	momentary	LED super bright red	2 V/10 mA external series resistor	transparent red	1.15.106.501/1300
1 NC + 1 NO	momentary	LED super bright yellow	2 V/10 mA external series resistor	transparent yellow	1.15.106.503/1400
1 NC + 1 NO	momentary	LED super bright green	2 V/10 mA external series resistor	transparent green	1.15.106.502/1500
1 NC + 1 NO	momentary	LED super bright blue	2 V/10 mA external series resistor	transparent blue	1.15.106.504/1600
1 NC + 1 NO	momentary	filament lamp	24 V / 0.7 W	transparent colourless	1.15.106.021/1002
1 NC + 1 NO	momentary	filament lamp	24 V / 0.7 W	transparent red	1.15.106.021/1307
1 NC + 1 NO	momentary	filament lamp	24 V / 0.7 W	transparent yellow	1.15.106.021/1403
1 NC + 1 NO	momentary	filament lamp	24 V / 0.7 W	transparent green	1.15.106.021/1510
1 NC + 1 NO	momentary	no	-	opaque black	1.15.106.301/0104
1 NC + 1 NO	momentary	no	-	opaque white	1.15.106.301/0214
1 NC + 1 NO	momentary	no	-	opaque red	1.15.106.301/0313
1 NC + 1 NO	momentary	no	-	opaque yellow	1.15.106.301/0410
1 NC + 1 NO	momentary	no	-	opaque green	1.15.106.301/0518

Technical data see page 1 - 74

Recommended values for external series resistor for LED

- 5 - 7 V = 270 Ω, 0.25 W
- 12 - 14 V = 680 Ω, 0.5 W
- 24 - 28 V = 1500 Ω, 1 W

LED forward current: max. 10 mA at T = 25° C

LED forward voltage: 2V at 10 mA

LED reverse voltage: 5 V

LED reverse current: 0,1 mA

LED power dissipation: max. 120 mW at T = 50° C

Please note: connect plus with the LED anode, which is marked with a colour point.

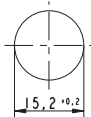
Operating life filament lamp: approx. 2,000 h.

1

Pushbutton opaque - mounting hole diameter 15.2 mm, 250 V/0.7 A



Pict.: Screw terminals, red



Panel cut-out

Technical Data

General information

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

Dimensions

Diameter of collar	19 mm
Overall height	8.2 mm
Mounting depth	21.5 mm
Mounting hole	15.2 mm

Mechanical design

Mounting	ring nut
Terminals	see order block
Contact system	bridge contact
Contact function	momentary
Contact arrangement	see order block
Contact materials	Ag
Illumination	no
Lamp socket	no

Mechanical characteristics

Operating force max.	7.5 N
Operating travel	3 mm
Switching travel NC	1.2 mm
Switching travel NO	2.0 mm
Robustness min.	100 N

Electrical characteristics

Rated voltage AC max.	250 V
Rated current max.	0.7 A
Contact resistance when new max.	50 mΩ
Contact resistance acc. to life max.	300 mΩ

Other specifications

Operating life (operations)	25,000
Degree of protection from front side	IP40 (IP65 with sealing cap)
Operation temperature min.	-25 °C
Ambient temp. operating max.	+85 °C
Storage temperature min.	-40 °C
Storage temperature max.	+90 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Weight	7 g
Flame class acc. to UL 94	V 0
Hot wire ignition acc. to IEC 60695-2-1	yes

Other
Pushb.

Approvals

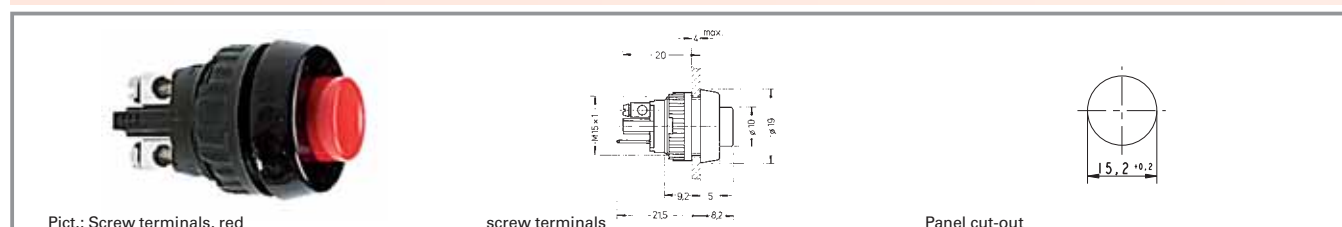


ENEC 25T85

Typical accessories Pushbutton opaque - mounting hole diameter 15.2 mm, 250 V/0.7 A

Description	Photo	Order no.	Additional accessories see page
Sealing cap, transparent (IP65)		5.52.008.115/0000	
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

Pushbutton opaque - mounting hole diameter 15.2 mm



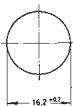
Contact arrangement	Contact function	Terminals	Colour of lens	Order no.
1 NO	momentary	screw terminals	opaque black	1.10.001.001/0104
1 NO	momentary	screw terminals	opaque white	1.10.001.001/0205
1 NO	momentary	screw terminals	opaque red	1.10.001.001/0301
1 NO	momentary	screw terminals	opaque green	1.10.001.001/0507
1 NO	momentary	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm	opaque black	1.10.001.011/0104
1 NO	momentary	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm	opaque white	1.10.001.011/0205
1 NO	momentary	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm	opaque red	1.10.001.011/0301
1 NO	momentary	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm	opaque green	1.10.001.011/0507
1 NC	momentary	screw terminals	opaque black	1.10.001.151/0104
1 NC	momentary	screw terminals	opaque red	1.10.001.151/0301
1 NC	momentary	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm	opaque black	1.10.001.161/0104
1 NC	momentary	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm	opaque red	1.10.001.161/0301

Technical data see page 1 - 76

Quick-connector 6.3 x 0.8 mm. The connector is splitted and also usable for two connectors 2.8 x 0.8 mm.

1

Pushbutton opaque - mounting hole diameter 16.2 mm, 250 V/2 A



Pict.: green

Panel cut-out

Technical Data

General information

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

Dimensions

Diameter of collar	20 mm
Overall height	9 mm
Mounting depth	41 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Terminals	screw terminals
Contact system	bridge contact
Contact function	momentary
Contact arrangement	see order block
Contact materials	Ag
Illumination	no
Lamp socket	no

Mechanical characteristics

Operating force max.	7.5 N
Operating travel	4.3 mm
Switching travel NC	1.3 mm
Switching travel NO	2.2 mm
Robustness min.	100 N

Electrical characteristics

Rated voltage AC max.	250 V
Rated current max.	2 A
Contact resistance when new max.	100 mΩ

Other specifications

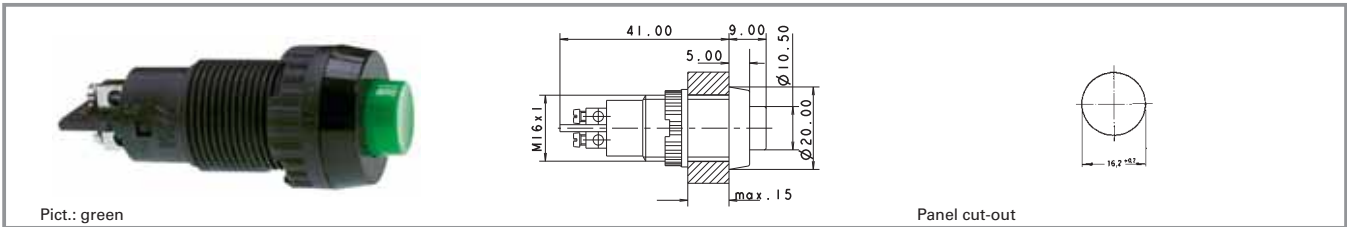
Operating life (operations)	150,000
Degree of protection from front side	IP40 (IP65 with sealing cap)
Operation temperature min.	-25 °C
Ambient temp. operating max.	+85 °C
Storage temperature min.	-40 °C
Storage temperature max.	+90 °C
Environmental resistance	acc. to IEC 60068-2
	-14, -30, -33 and -78
Weight	11 g
Flame class acc. to UL 94	V 0
Hot wire ignition acc. to IEC 60695-2-1	yes

Other Pushb.

Typical accessories Pushbutton opaque - mounting hole diameter 16.2 mm, 250 V/2 A

Description	Photo	Order no.	Additional accessories see page
Sealing cap, black (IP65)		5.52.008.101/0100	
Sealing cap, red (IP65)		5.52.008.101/0300	
Protective sleeve for terminals		5.52.011.026/0100	
Protection against contact to VBG 4		5.55.101.715/0200	5 - 25
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

Pushbutton opaque - mounting hole diameter 16.2 mm, 250 V/2 A



Contact arrangement	Contact function	Illumination	Rated voltage AC max.	Colour of lens	Order no.
1 NO	momentary	no	250 V	opaque black	1.10.102.001/0104
1 NO	momentary	no	250 V	opaque white	1.10.102.001/0205
1 NO	momentary	no	250 V	opaque red	1.10.102.001/0301
1 NO	momentary	no	250 V	opaque green	1.10.102.001/0507
1 NC	momentary	no	250 V	opaque black	1.10.102.011/0104
1 NC	momentary	no	250 V	opaque red	1.10.102.011/0301

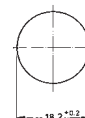
Technical data see page 1 - 78

Other
Pushb.

Pushbutton opaque - mounting hole diameter 18.2 mm, 250 V/2 A



Pict.: green



Mounting hole

Technical Data

General information

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

Dimensions

Diameter of collar	22 mm
Overall height	10.5 mm
Mounting depth	34 mm
Mounting hole	18.2 mm

Mechanical design

Mounting	ring nut
Terminals	see order block
Contact system	sliding bridge contact
Contact function	momentary
Contact arrangement	see order block
Contact materials	Ag
Illumination	no
Lamp socket	no

Mechanical characteristics

Operating force max.	9.5 N
Operating travel	5 mm
Switching travel NC	2.1 mm
Switching travel NO	3.7 mm
Robustness min.	100 N

Electrical characteristics

Rated voltage AC max.	250 V
Rated current max.	2 A
Contact resistance acc. to life max.	200 mΩ

Other specifications

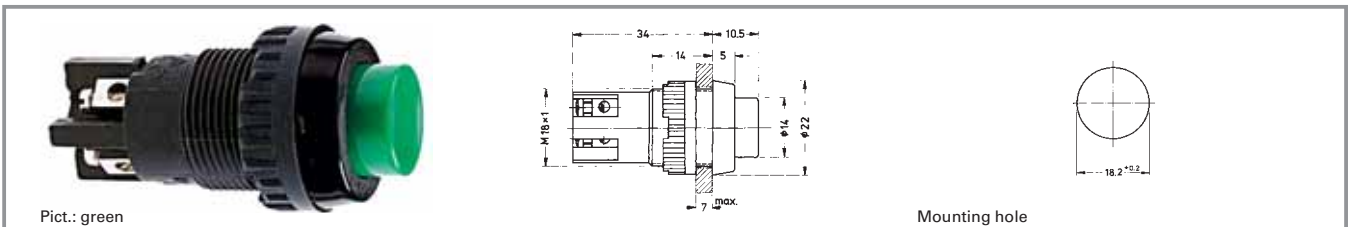
Operating life (operations)	50,000
Degree of protection from front side	IP40 (IP65 with sealing cap)
Operation temperature min.	-25 °C
Ambient temp. operating max.	+85 °C
Storage temperature min.	-40 °C
Storage temperature max.	+90 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Weight	14 g
Flame class acc. to UL 94	V 0
Hot wire ignition acc. to IEC 60695-2-1	yes

Other
Pushb.

Typical accessories Pushbutton opaque - mounting hole diameter 18.2 mm, 250 V/2 A

Description	Photo	Order no.	Additional accessories see page
Neoprene sealing cap, black		5.52.008.061/0100	
Silicone sealing cap (IP65)		5.52.008.065/0000	
Protective sleeve for terminals		5.52.011.028/0100	
Fixing spanner M 18, M 19		5.58.002.017/0105	5 - 21

Pushbutton opaque - mounting hole diameter 18.2 mm, 250 V/2 A



Contact arrangement	Contact function	Illumination	Terminals	Colour of lens	Order no.
2 NO	momentary	no	screw terminals	opaque black	1.01.102.001/0104
2 NO	momentary	no	screw terminals	opaque red	1.01.102.001/0301
2 NO	momentary	no	screw terminals	opaque green	1.01.102.001/0507
1 NC + 1 NO	momentary	no	screw terminals	opaque black	1.01.102.011/0104
1 NC + 1 NO	momentary	no	screw terminals	opaque white	1.01.102.011/0205
1 NC + 1 NO	momentary	no	screw terminals	opaque red	1.01.102.011/0301
1 NC + 1 NO	momentary	no	screw terminals	opaque green	1.01.102.011/0507

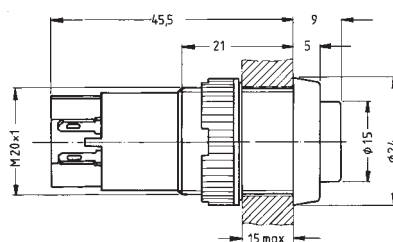
Technical data see page 1 - 80

Other
Pushb.

Pushbutton with lamp socket BA9s - (MBC/MCC), mounting hole diameter 20.3 mm, 250 V/2 A



Pict.: with red lens



Mounting hole



Technical Data

General information

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

Dimensions

Diameter of collar	24 mm
Overall height	9 mm
Mounting depth	45.5 mm
Mounting hole	20.3 mm

Mechanical design

Mounting	ring nut
Terminals	solder/quick connect terminals
	2.8 x 0.8 mm
Contact system	bridge contact
Contact function	momentary
Contact arrangement	see order block
Contact materials	Ag
Illumination	yes
Lamp socket	BA 9 s

Mechanical characteristics

Operating force max.	10 N
Operating travel	3.6 mm
Switching travel NC	0.8 mm
Switching travel NO	2.9 mm
Robustness min.	100 N

Electrical characteristics

Rated voltage AC max.	250 V
Rated current max.	2 A
Contact resistance acc. to life max.	200 mΩ

Other specifications

Operating life (operations)	100,000
Degree of protection from front side	IP40 (IP65 with sealing cap)
Operation temperature min.	-25 °C
Ambient temp. operating max.	+85 °C
Storage temperature min.	-40 °C
Storage temperature max.	+90 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Weight	18 g
Flame class acc. to UL 94	V 0
Hot wire ignition acc. to IEC 60695-2-1	yes

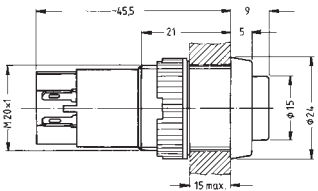
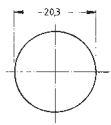
Typical accessories Pushbutton with lamp socket BA9s - (MBC/MCC), mounting hole diameter 20.3 mm, 250 V/2 A

Description	Photo	Order no.	Additional accessories see page
Filament lamp, BA 9s base (MBC/MCC), 12 - 15 V		1.90.060.003/0000	5 - 7
Filament lamp, BA 9s base (MBC/MCC), 24 - 30 V		1.90.060.014/0000	5 - 7
LED BA 9s (MBC/MCC) superbright, red, 24 V		1.90.690.341/0000	5 - 17

Typical accessories Pushbutton with lamp socket BA9s - (MBC/MCC), mounting hole diameter 20.3 mm, 250 V/2 A

Description	Photo	Order no.	Additional accessories see page
LED BA 9s (MBC/MCC) superbright, green, 24 V		1.90.690.342/0000	5 - 17
LED BA 9s (MBC/MCC) superbright, yellow, 24 V		1.90.690.343/0000	5 - 17
LED BA 9s (MBC/MCC) superbright, blue, 24 V		1.90.690.344/0000	5 - 17
LED BA 9s (MBC/MCC) superbright, white, 24 V		1.90.690.345/0000	5 - 17
Silicone sealing cap (IP65)		5.52.008.065/0000	
Protective sleeve for terminals		5.52.011.030/0100	
Fixing spanner M 20, M 22, for ring nut		5.58.002.018/0105	5 - 21

Pushbutton with lamp socket BA9s - (MBC/MCC), mounting hole diameter 20.3 mm, 250 V/2 A

   Pict.: with red lens Mounting hole			
Contact function	Contact arrangement	Order no. without lens	Note
momentary	1 NO	1.15.112.101/0000	Please include the desired lens in your order.
momentary	1 NC + 1 NO	1.15.112.121/0000	Please include the desired lens in your order.

Technical data see page 1 - 82

Lenses:

Lens, transparent colourless: 5.49.205.008/1002
 Lens, transparent red: 5.49.205.008/1303
 Lens, transparent yellow: 5.49.205.008/1402
 Lens, transparent green: 5.49.205.008/1502