

LUMO

FK

#### **General data**

#### **LUMOTAST FK illuminated pushbutton range**

- Illuminable pushbuttons and signal lamps with lamp socket T 1/T 11/4. Please order lamps / LEDs separately.
- Mounting hole diameter 16.2 mm
- 42 V/100 mA max.
- Water-jet proof IP65
- Low profile
- Keye'd 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, 42 V/100 mA	1 - 12
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LUMOTAST FK illuminated pushbutton, rectangular collar, 42 V/100 mA	1 - 14
LUMOTAST FK signal lamp	1 - 16
LUMOTAST FK signal lamp, square collar	1 - 17
LUMOTAST FK signal lamp, round collar	1 - 18
LUMOTAST FK signal lamp, rectangular collar	1 - 18

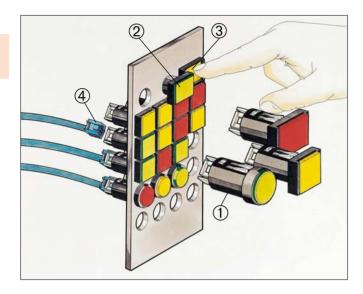
Pushbuttons 1 - 9

# **Series LUMOTAST FK**

16.2 mm mounting hole diameter

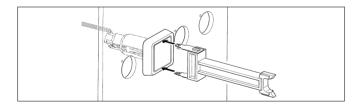
## Design

LUM0 FK

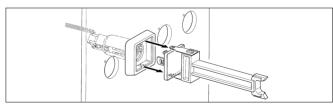


- ① Pushbutton as supplied② Insert pushbutton into panel cut-out
- 3 Press once to fit
- 4 Attach connector with flat-ribbon cable

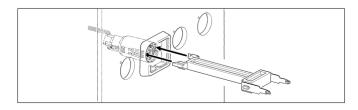
## **Disassembly**



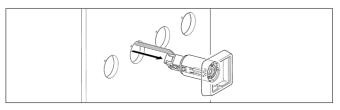
1. Grip body/lens



2. Pull out body/lens



3. Release click lever

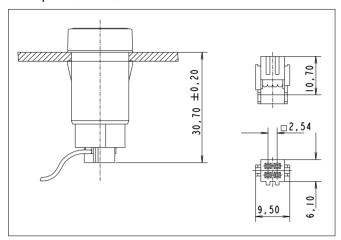


4. Pull out pushbutton/signal lamp with cable

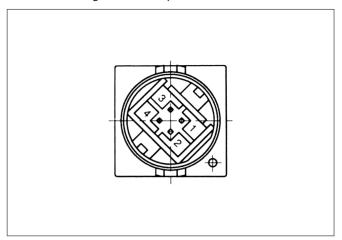
1 - 10

## **Dimensional drawing**

### With quick connector and flat-ribbon cable

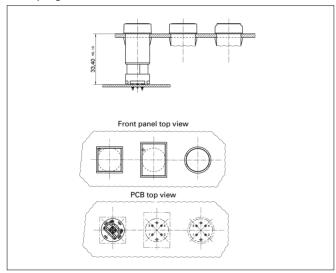


### Connection diagram (PCB top view)

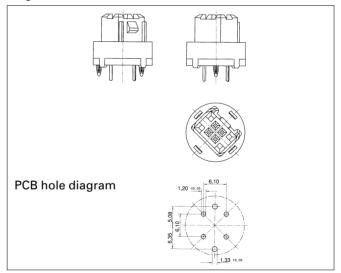


1 + 4 = pushbutton connection, 2 + 3 = lamp connection

### With plug-in socket



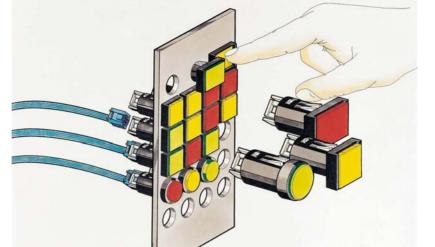
### Plug-in socket for PCB



Pushbuttons 1 - 11

1

LUMO FK



LUMO

FK

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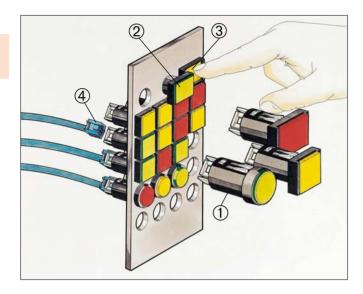
Pushbuttons 1 - 9

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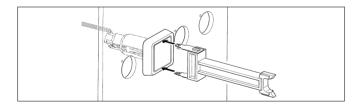
## Design

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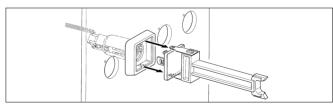


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- 3 Press once to fit
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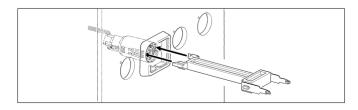
## **Disassembly**



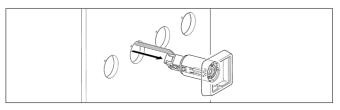
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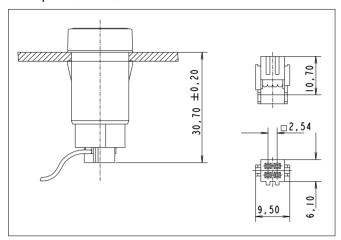


4. Pull out pushbutton/signal lamp with cable

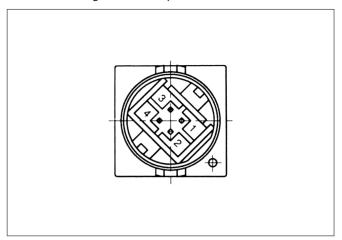
1 - 10

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### With quick connector and flat-ribbon cable

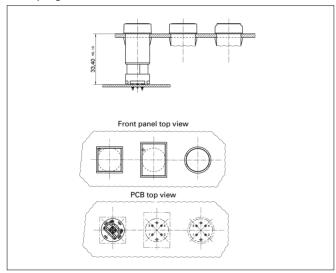


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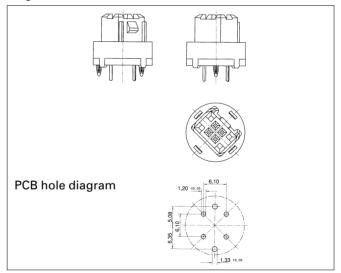


1 + 4 = pushbutton connection, 2 + 3 = lamp connection

### With plug-in socket



### Plug-in socket for PCB

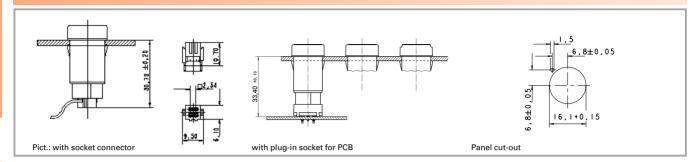


Pushbuttons 1 - 11

1

LUMO FK

## **LUMOTAST FK illuminated pushbutton, 42 V/100 mA**



**LUMO** FK

#### **Technical data**

General information	
Actuator	flat lens
Colour of mushroom	see order block
Form of collar	see order block
Dimensions	
Length of collar	see order block
\A/:d+b of collar	aga ardar black

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

Mechanical design

Mounting hole

Mounting click quick connection pin connector 4-pol./ Terminals plug-in socket Contact system snap-action contact Contact function momentary Contact arrangement 1 NO

16.2 mm

Contact materials Au Illuminability yes Lamp socket Bi-Pin T 1/T 1º

**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. 42 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 when 100 m $\Omega$ new max. Contact resistance acc.  $300 \text{ m}\Omega$ to life max. Bouncing time max. 5 ms

Other specifications

1,000,000 Operating life Degree of protection from front side **IP65** Ambient temp. operating -25 °C Ambient temp. operating +70 °C without lamp max. Ambient temp. operating +55 °C with lamp max. Storage temperature min. -40 °C Storage temperature max. +80 °C Resistance to constant environment

Resistance at variable environment

Weight

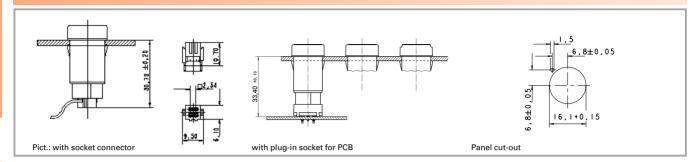
according to IEC 600 68-2-3 and 2-30

according to IEC 600 68-2-14 and 2-33 6 g

#### Accessories LUMOTAST FK illuminated pushbutton, 42 V/100 mA

ı	Description	Photo	Order no.	Page
ı	Filament lamp, Bi-Pin T 1½ base, 12 V		1.90.180.474/0000	5 - 5
	Filament lamp, Bi-Pin T 1½ 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 - 17

## **LUMOTAST FK illuminated pushbutton, 42 V/100 mA**



**LUMO** FK

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Colour of mushroom	see order block
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Resistance at variable environment

Weight

according to IEC 600 68-2-3 and 2-30

according to IEC 600 68-2-14 and 2-33 6 g

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	Filament lamp, Bi-Pin T 1½ 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 - 17

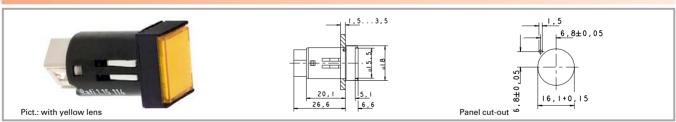
## 1

LUMO FK

## Accessories LUMOTAST FK illuminated pushbutton, 42 V/100 mA

Description	Photo	Order no.	Page
LED Bi-Pin T 1 superbright, green, 24 V		1.90.690.352/0000	5 - 17
LED Bi-Pin T 1 superbright, yellow, 24 V		1.90.690.353/0000	5 - 17
LED Bi-Pin T 1 superbright, blue, 24 V		1.90.690.354/0000	5 - 17
LED Bi-Pin T 1 superbright, white, 24 V		1.90.690.355/0000	5 - 17
LED Bi-Pin T 1, red, 3 V		1.90.691.026/0000	5 - 17
LED Bi-Pin T 1, green, 3 V		1.90.691.027/0000	5 - 17
LED Bi-Pin T 1, yellow, 3 V		1.90.691.028/0000	5 - 17
Plug-in socket for PCB	1	5.00.645.036/0000	5 - 25
Cable (flat ribbon cable 10 cm with socket connector and male quick connector, AMP 4-pin)		5.03.771.306/0000	5 - 24
Disassembly tool for LUMOTAST FK		5.05.800.041/0000	5 - 24
Flat ribbon cable, 4-wire, 1 m long	0	5.37.700.124/0000	5 - 25
Socket connector, 4-pin		5.92.025.368/0000	5 - 24

## LUMOTAST FK illuminated pushbutton, square collar, 42 V/100 mA



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

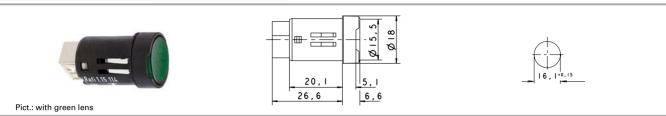
#### Lenses:

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.

LUMO FK

## LUMOTAST FK illuminated pushbutton, round collar, 42 V/100 mA



Contact function		Order no. without lens	Note
momentary	1 NO	-	Please include the desired lens in your order.

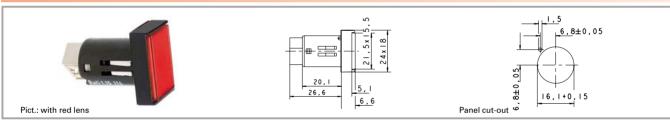
Technical data see page 1 - 12

#### Lenses

Lens, round, transparent colourless: 5.49.075.016/1002 Lens, round, transparent red: 5.49.075.016/1306 Lens, round, transparen 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, rectangular collar, 42 V/100 mA



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

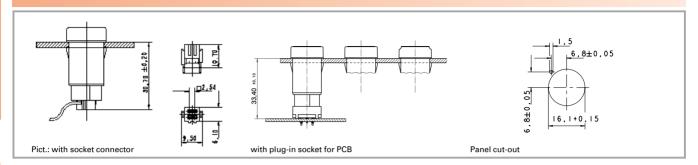
Technical data see page 1 - 12

#### Lenses

Lens, rectangular, transparen 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**



LUMO FK

### **Technical data**

General information		Electrical characteristics	
Form of lens	flat lens	Voltage limit max.	24 V
Colour of lens	see order block	Power limit max.	0,7 W
Form of collar	see order block		
		Other specifications	
Dimensions		Degree of protection	
Length of collar	see order block	from front side	IP65
Width of collar	see order block	Weight	5 g
Mounting depth with		Ambient temp. operating	
connector	30.7 mm	min.	-25 °C
Mounting depth with		Ambient temp. operating	
plug-in socket	33.4 mm	max.	+55 °C
Mounting hole	16.2 mm	Storage temperature min.	-40 °C
		Storage temperature max.	+80 °C
Mechanical design		Resistance to constant	
Mounting	click quick connection	environment	according to
Terminals	pin connector 4-pol./		IEC 600 68-2-3 and 2-30
	plug-in socket	Resistance at variable	
Lamp socket	Bi-Pin T 1/T 1 <sup>1</sup> / <sub>4</sub>	environment	according to
Lamp	filament lamp / LED		IEC 600 68-2-14 and 2-33

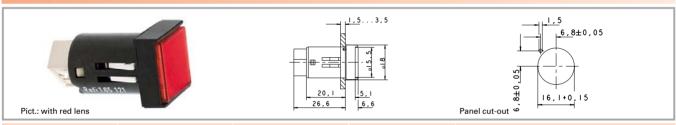
## **Accessories LUMOTAST FK signal lamp**

Description	Photo	Order no.	Page
Filament lamp, Bi-Pin T 11/4 base, 12 V		1.90.180.474/0000	5 - 5
Filament lamp, Bi-Pin T 11/4 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 - 17
LED Bi-Pin T 1 superbright, green, 24 V		1.90.690.352/0000	5 - 17
LED Bi-Pin T 1 superbright, yellow, 24 V		1.90.690.353/0000	5 - 17
LED Bi-Pin T 1 superbright, blue, 24 V		1.90.690.354/0000	5 - 17
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Disassembly tool for LUMOTAST FK		5.05.800.041/0000	5 - 24
Flat ribbon cable, 4-wire, 1 m long	0	5.37.700.124/0000	5 - 25
Socket connector, 4-pin		5.92.025.368/0000	5 - 24

## **LUMOTAST FK signal lamp, square collar**



Power limit max.	Voltage limit max.	Lamp socket	Order no. without lens	Note
0.7 W	24 V	Bi-Pin T 1/T 1 <sup>1</sup> / <sub>4</sub>	1.65.121.906/0000	Please include the desired lens in your order.

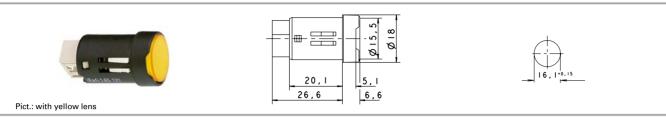
Technical data see page 1 - 16

#### 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. LUMO FK

## **LUMOTAST FK signal lamp, round collar**



Power limit max.	Voltage limit max.	Lamp socket	Order no. without lens	Note
0.7 W	24 V	Bi-Pin T 1/T 1 <sup>1</sup> / <sub>4</sub>	1.65.121.936/0000	Please include the desired lens in your order.

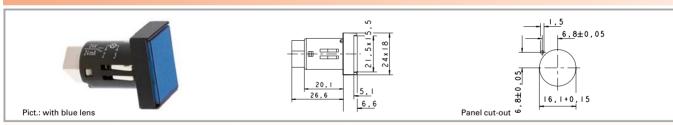
Technical data see page 1 - 16

#### 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**



Power limit max.	Voltage limit max.	Lamp socket	Order no. without lens	Note
0.7 W	24 V	Bi-Pin T 1/T 1 <sup>1</sup> / <sub>4</sub>	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.