



Pushbuttons

	Page
General information	1 - 2
8 mm series	1 - 3
8 mm series, illuminated pushbutton, 42 V/250 mA	1 - 4
8 mm series, signal lamp	1 - 6
LUMOTAST FK	1 - 9
LUMOTAST FK illuminated pushbutton, 42 V/100 mA	1 - 12
LUMOTAST FK signal lamp	1 - 16
LUMOTAST 25	1 - 19
LUMOTAST 25 illuminated pushbutton	1 - 22
LUMOTAST 25 selector switch	1 - 26
LUMOTAST 25 keylock switch	1 - 28
LUMOTAST 25 emergency stop pushbutton	1 - 30
LUMOTAST 25 signal lamp	1 - 32
LUMOTAST 75 IP40	1 - 35
LUMOTAST 75 illuminated pushbutton IP40	1 - 36
LUMOTAST 75 keylock switch IP40	1 - 42
LUMOTAST 75 IP40 signal lamp with lamp socket T 4.5	1 - 46
LUMOTAST 75 IP40 signal lamp, square collar, flush lens	1 - 48
LUMOTAST 75 IP40 signal lamp, rectangular collar, flush lens	1 - 48
LUMOTAST 75 IP40 signal lamp, square collar, protruding lens	1 - 49
LUMOTAST 75 IP65	1 - 51
LUMOTAST 75 illuminated pushbutton IP65	1 - 52
LUMOTAST 75 signal lamp IP65	1 - 60
Other keylock switches	1 - 65
Keylock switch	1 - 66
Priority keylock switch	1 - 68
Other pushbuttons	1 - 71
Pushbutton opaque, mounting hole diameter 9.1 mm, non-illuminated, 24 V/100 mA	1 - 72
Illuminable pushbutton, mounting hole diameter 9.1 mm, 24 V/0.5 A	1 - 74
Pushbutton, opaque, mounting hole diameter 15.2 mm, 250 V/0.7 A	1 - 76
Pushbutton, opaque, mounting hole diameter 16.2 mm, 250 V/2 A	1 - 78
Pushbutton, opaque, mounting hole diameter 18.2 mm, 250 V/2 A	1 - 80
Illuminable pushbutton, with lamp socket BA9s (MBC/MCC), mounting hole diameter 20.3 mm, 250 V/2 A	1 - 82

Pushbuttons 1 - 1



General information

Concepts

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

CE-Conformity

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

Emergency-stop components with an operating voltage < 50 V

F. ex. LUMOTAST 25 emergencystop. For this pushbutton the Machine Directive 89/392/EWG applies.

All products with an operating voltage > 50 V

For these elements the Low-Voltage Directive 72/23/EWG applies.

All products with an operating voltage < 50 V

For these products no directive applies.

Single parts, accessories and illumination

For these products no directive applies.

EMC-Law

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

Declarations of Conformity

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

Marking

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

1 - 2 Pushbuttons



8 mm



General data

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

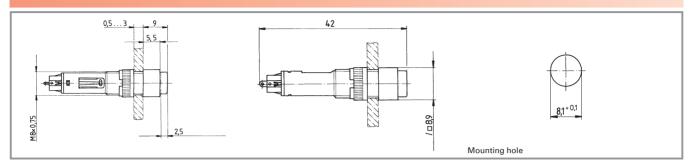
Content

8 mm series, illuminated pushbutton, 42 V/250 mA	1 - 4
8 mm series, illuminated pushbutton, round collar, 42 V/250 mA	1 - 5
8 mm series, illuminated pushbutton, square collar, 42 V/250 mA	1 - 5
8 mm series, signal lamp	1 - 6
8 mm series, signal lamp, round collar	1 - 7
8 mm series, signal lamp, square collar	1 - 7

Pushbuttons 1 - 3



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



Technical data

General information

Form of lens protruding lens see order block Colour of lens 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 Illuminability yes Bi-Pin T 1 Lamp socket

Mechanical characteristics

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

Electrical characteristics

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

Other specifications

Operating life (operations) Degree of protection

from front side Ambient temp. operating Ambient temp. operating max. without lamp /LED Ambient temp. operating max. with lamp /LED Storage temperature min. Storage temperature max. Resistance to constant environment Resistance at variable

Weight Soldering time max. Soldering temperature

environment

1000000 (momentary), 100000 (latching)

IP40

-25 °C

+70 °C

+55 °C

-40 °C +80 °C

according to

IEC 600 68-2-3 and 2-30

according to

IEC 60068-2-14 and 2-33

2 g 3 sec.

350 °C

Typical accessories 8 mm series, illuminated pushbutton, 42 V/250 mA

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

8 mm



Typical accessories 8 mm series, illuminated pushbutton, 42 V/250 mA

Description	Photo		Additional accesso- ries see page
Fixing spanner M 8		5.58.002.027/7705	5 - 21

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



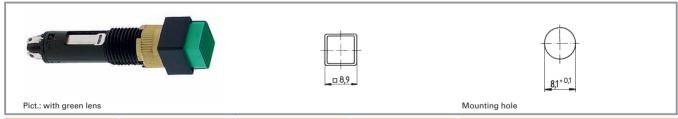
Contact arrangement	Contact function	Lamp socket	Order no. without lens	Note
1 NO	momentary	Bi-Pin T 1	· ·	Please include the desired lens in your order.
1 NO	latching	Bi-Pin T 1	· ·	Please include the desired lens in your order.

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, 42 V/250 mA



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

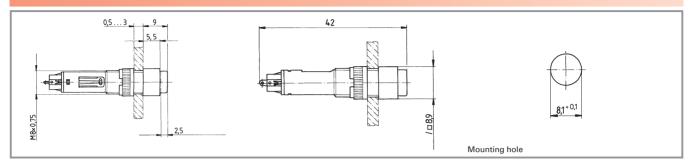
Technical data see page 1 - 4

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



8 mm

Technical data

General information

Form of lens Colour of lens Form of collar

Dimensions

Length of collar
Width of collar
Diameter of collar
Overall height
Mounting depth
Mounting hole
8.9 mm
8.9 mm
9 mm
9 mm
31 mm
8.1 mm

Mechanical design

Mounting Terminals Lamp socket Lamp

Electrical characteristics

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

Degree of protection
from front side
Weight
2
Ambient temp. operating
min.
-2
Ambient temp. operating
max.
+
Storage temperature min.
Storage temperature max.
Resistance to constant
environment

IE

Resistance at variable environment Soldering time max. Soldering temperature

max.

IP40
2 g

-25 °C

+55 °C

-40 °C
+80 °C
according to
IEC 600 68-2-3 and 2-30
according to
IEC 60068-2-14 and 2-33

3 sec.

Typical accessories 8 mm series, signal lamp

ring nut

Bi-Pin T 1

solder terminals

filament lamp / LED

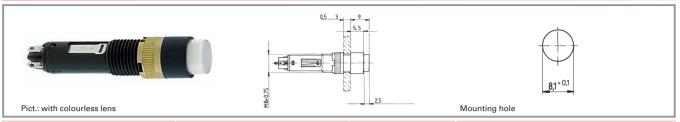
protruding lens

see order block

see order block

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



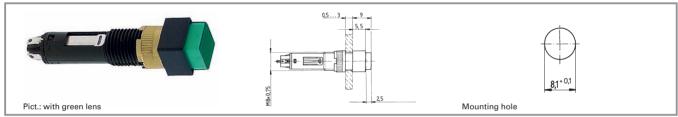
Voltage limit max.	Power limit max.	Lamp socket	Order no. without lens	Note
24 V	0.4 W	Bi-Pin T 1	· ·	Please include the desired lens in your order.

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



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:

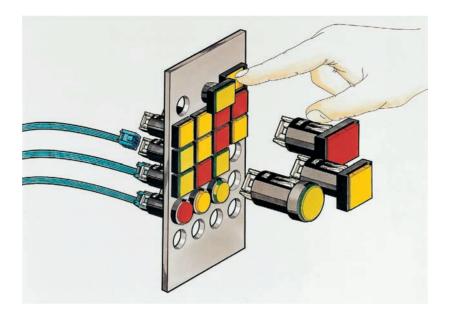
Lens, transparent colourless: 5.05.510.360/1002 Lens, transparent red: 5.05.510.360/1303 Lens, transparent yellow: 5.05.510.360/1402 Lens, transparent green: 5.05.510.360/1502

8 mm

聯輝電子 www.rafi.com.tw



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 / LED separately.
- Mounting hole diameter 16.2 mm
- 42 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, 42 V/100 mA	1 - 12
LUMOTAST FK illuminated pushbutton, square collar, 42 V/100 mA	1 - 13
LUMOTAST FK illuminated pushbutton, round collar, 42 V/100 mA	1 - 14
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

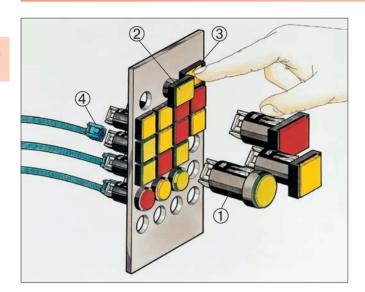
Series LUMOTAST FK

16.2 mm mounting hole diameter

•

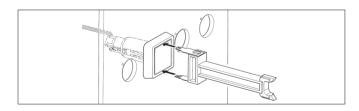
Design

LUMO FK

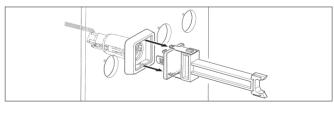


- ${ ext{ }}{ ext{ }}{$
- 2 Insert pushbutton into panel cut-out
- 3 Press once to fit
- 4 Attach connector with flat-ribbon cable

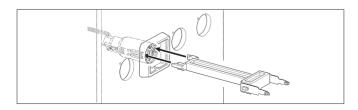
Disassembly



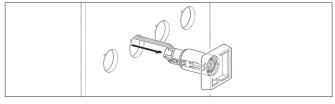
1. Grip body/lens



2. Pull out body/lens



3. Release click lever



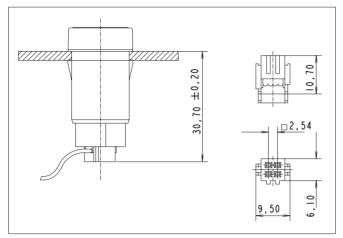
4. Pull out pushbutton/signal lamp with cable

1

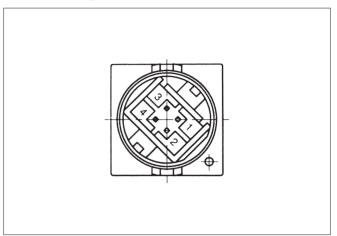
LUMO FK

Dimensional drawing

With quick connector and flat-ribbon cable

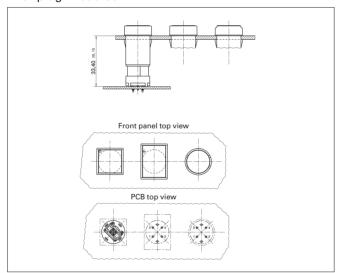


Connection diagram (PCB top view)

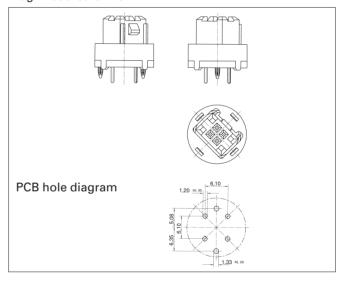


1 + 4 = pushbutton connection, 2 + 3 = lamp connection

With plug-in socket



Plug-in socket for PCB

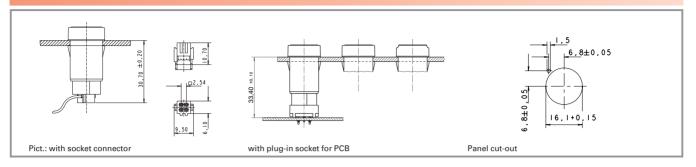


Pushbuttons 1 - 11

LUMOTAST 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 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 4-pol./ plug-in socket Contact system snap-action contact Contact function momentary

Contact arrangement **1 NO** Contact materials Au Illuminability ves

. Bi-Pin T 1/T 1º Lamp socket

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. 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. $300~\mathrm{m}\Omega$ to life max. Contact resistance when new max. $100 \text{ m}\Omega$ Bouncing time max.

Other specifications

Operating life Degree of protection from front side Ambient temp. operating Ambient temp. operating without lamp max. Ambient temp. operating with lamp max. Storage temperature min. Storage temperature max. Resistance to constant environment

Resistance at variable environment Weight

42 V

5 ms

1000000

IP65

-25 °C

+70 °C

+55 °C -40 °C

+80 °C

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

according to

IEC 60068-2-14 and 2-33

Additional accord

6 g

Typical accessories LUMOTAST FK illuminated pushbutton, 42 V/100 mA

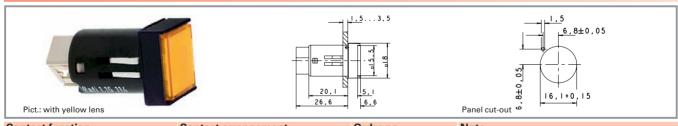
Description	Photo	Order no.	sories see page
Filament lamp, Bi-Pin T 11/4 base, 12 V		1.90.180.474/0000	5 - 5
Filament lamp, Bi-Pin T 11/4 base, 28 V		1.90.180.475/0000	5 - 5
LED Bi-Pin T 1 superbright, red, 24 V		1.90.690.351/0000	5 - 15
LED Bi-Pin T 1 superbright, green, 24 V		1.90.690.352/0000	5 - 15

LUM0 FK

Typical accessories LUMOTAST FK illuminated pushbutton, 42 V/100 mA

Description	Photo	Order no.	Additional accessories see page
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	二克拉	1.90.690.354/0000	5 - 15
LED Bi-Pin T 1 superbright, white, 24 V	二點	1.90.690.355/0000	5 - 15
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
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	0	5.37.700.124/0000	5 - 23
Socket connector, 4-pin		5.92.025.368/0000	5 - 22

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



Contact function	3	Order no. without lens	Note
momentary	1 NO	1.15.114.906/0000	Please include the desired lens in your order.

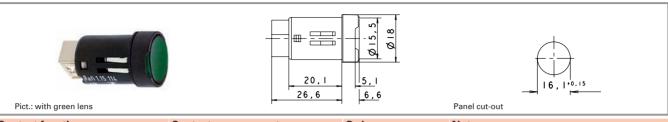
Technical data see page 1 - 12

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.

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



Contact function

Contact arrangement
Order no. without lens

Note

1 NO
1.15.114.936/0000
Please include the desired lens in your order.

LUMO FK

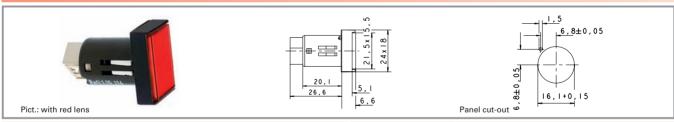
Technical data see page 1 - 12

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, rectangular 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, 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

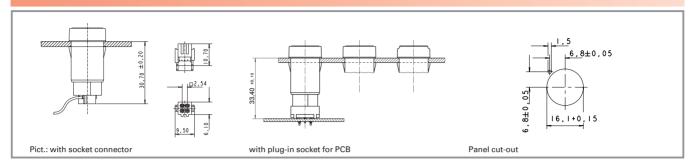
A notch on the lamp socket identifies the cathode side.

聯輝電子 www.rafi.com.tw

LUMOTAST FK



LUMOTAST FK signal lamp



LUMO FK

Technical data

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

Dimensions Length of collar Width of collar Mounting depth with

connector Mounting depth with plug-in socket

Mounting hole

Mechanical design

Mounting Terminals

Lamp socket Lamp

see order block

see order block see order block

30.7 mm

33.4 mm 16.2 mm

click quick connection pin connector 4-pol./ plug-in socket

Bi-Pin T 1/T 1¹/₄ filament lamp / LED **Electrical characteristics**

Voltage limit max. 24 V Power limit max. 0,7 W

Other specifications

Degree of protection IP65 from front side Weight 5 g Ambient temp, operating -25 °C min. Ambient temp. operating +55 °C max.

Storage temperature min. -40 °C +80 °C Storage temperature max. according to Resistance to constant IEC 600 68-2-3 and 2-30 environment

Resistance at variable according to environment

IEC 60068-2-14 and 2-33

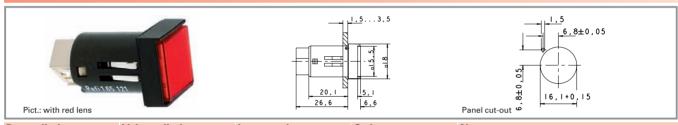
Typical accessories LUMOTAST FK signal lamp

Description	Photo	Order no.	Additional accessories see 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 - 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
LED Bi-Pin T 1, red, 3 V		1.90.691.026/0000	5 - 15

Typical accessories LUMOTAST FK signal lamp

Description	Photo	Order no.	Additional accessories see page
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
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	0	5.37.700.124/0000	5 - 23
Socket connector, 4-pin		5.92.025.368/0000	5 - 22

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 ¹ / ₄		Please include the desired lens in your order.

Technical data see page 1 - 16

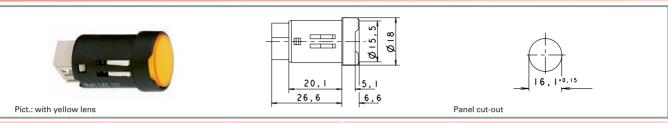
Lenses:

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 ¹ / ₄	1.65.121.936/0000	Please include the desired lens in your order.

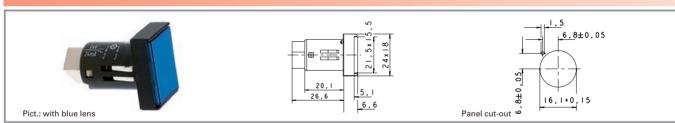
Technical data see page 1 - 16

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.		Order no. without lens	Note
0.7 W	24 V	Bi-Pin T 1/T 1 ¹ / ₄	·	Please include the desired lens in your order.

Technical data see page 1 - 16

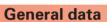
Lenses:

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.



LUMO 25



LUMOTAST 25 pushbutton range

- Illuminable pushbuttons and signal lamps. Please order lamps/LED separately.
- Mounting hole diameter: 16.2 mm
- 42 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" guick-assembly feature	1 - 25
LUMOTAST 25 illuminated pushbutton with protruding lens, ring nut fixing	1 - 25
LOWO 1751 25 marrimated pushbutton with producing lens, mig nat fixing	1 - 25
LUMOTAST 25 selector switch	1 - 26
LUMOTAST 25 selector switch, ring nut fixing	1 - 27
zomon, en zo ociosto, omicin, mig naturaling	
LUMOTAST 25 keylock switch	1 - 28
LUMOTAST 25 keylock switch	1 - 29
20 Key 100 K OWION	1 20
LUMOTAST 25 emergency stop pushbutton	1 - 30
LUMOTAST 25 emergency stop pushbutton, ring nut fixing	1 - 31
zome n e r zo omergene, etep paenzation, mig nat mang	
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
Lower Not 20 digital lamp, 27 t, mig hat hamg	1 57

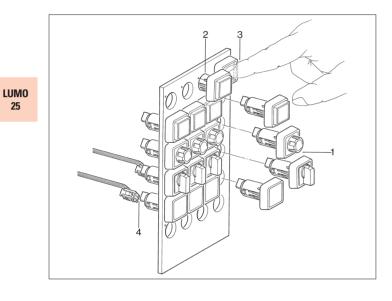
Pushbuttons 1 - 19

25

Series LUMOTAST25

16.2 mm mounting hole diameter

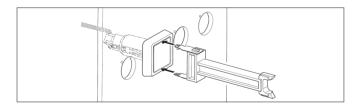
Design Click-Version



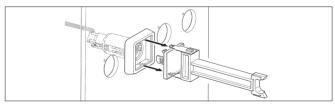
- 1. As delivered
- 2. Insert pushbutton in hole
- 3. Actuate once
- 4. Insert connector with flat-ribbon cable

Disassembly Click-Version

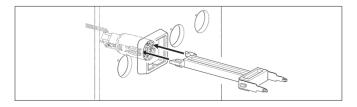
Click-Version from front (only for pushbuttons and signal lamps with special tool for dismounting)



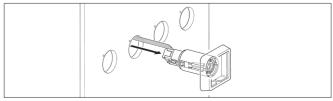
1. Grip body/lens



2. Pull out body/lens



3. Release click lever



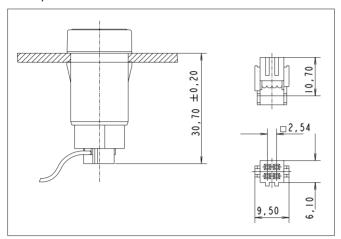
4. Pull out pushbutton/signal lamp with cable

1 - 20

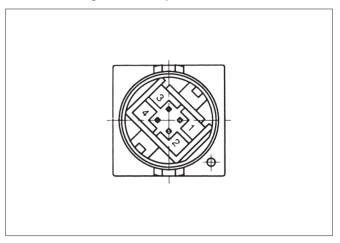
SOLUTIONS WITH PASSION

Dimensional drawing

With quick connector and flat-ribbon cable

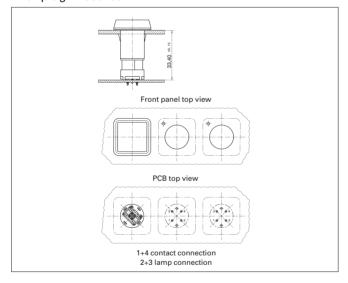


Connection diagram (PCB top view)

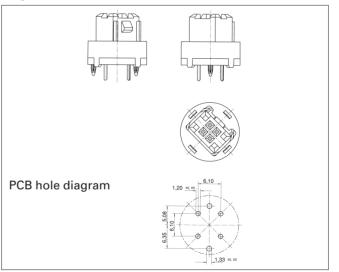


1 + 4 = pushbutton connection 2 + 3 = lamp connection

With plug-in socket



Plug-in socket for PCB



Pushbuttons 1 - 21

LUMO 25



LUMOTAST 25 illuminated pushbutton



Technical data

LUMO 25

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

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

Au Illuminability yes

Bi-Pin T 1/T 11/4 Lamp socket

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. 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 max. 100 m Ω Bouncing time max. 5 ms

Other specifications

Operating life (operations) 1000000 Degree of protection from front side IP65 Ambient temp. operating without lamp min. Ambient temp. operating +70 °C without lamp max. Ambient temp, operating -25 °C with lamp min. Ambient temp, operating with lamp max. Storage temperature min. +80 °C Storage temperature max. Resistance to climate

Resistance at variable environment Weight

-25 °C

+55 °C -40 °C

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

according to

IEC 60068-2-14 and 2-33

7 g

Typical accessories LUMOTAST 25 illuminated pushbutton

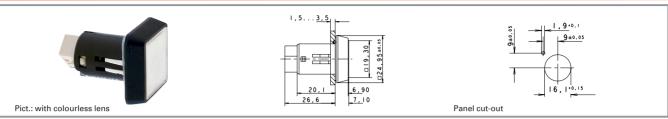
Description	Photo	Order no.	Additional accessories see page
Filament lamp, Bi-Pin T 11/4 base, 12 V		1.90.180.474/0000	5 - 5
Filament lamp, Bi-Pin T 11/4 base, 28 V		1.90.180.475/0000	5 - 5
LED Bi-Pin T 1 superbright, red, 24 V		1.90.690.351/0000	5 - 15
LED Bi-Pin T 1 superbright, green, 24 V		1.90.690.352/0000	5 - 15

LUMO 25

Typical accessories LUMOTAST 25 illuminated pushbutton					
Description	Photo	Order no.	Additional accessories see page		
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		
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		
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 - 60		
Blanking cap complete with sealing disc and ring nut, square		5.05.800.049/0100	2 - 64		
Label holder, flush, for square collar	8	5.07.620.004/0000	2 - 62		
Flat ribbon cable, 4-wire, 1 m long	0	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	EIN .	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



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

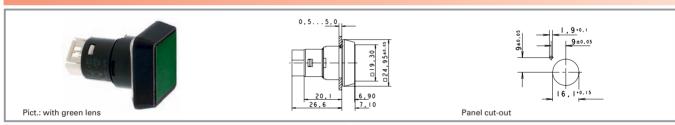
LUMO 25 Technical data see page 1 - 22

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 LED: A notch on the lamp socket identifies the cathode side.

LUMOTAST 25 illuminated pushbutton with flush lens, ring nut fixing



Contact function	3	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

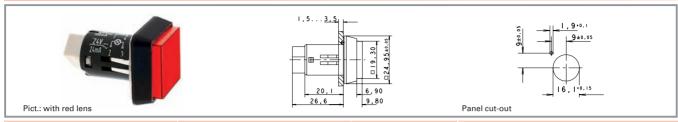
Lenses:

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 LED: 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		Please include the desired lens in your order.

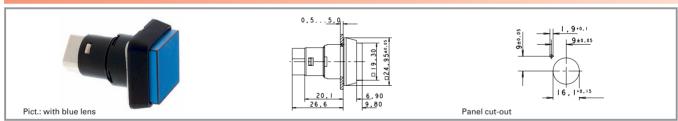
Technical data see page 1 - 22

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 LED: A notch on the lamp socket identifies the cathode side.

LUMOTAST 25 illuminated pushbutton with protruding lens, ring nut fixing



(Contact function	3.	Order no. without lens	Note
ľ	momentary	1 NO		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 LED: A notch on the lamp socket identifies the cathode side.

LUMO 25



LUMOTAST 25 selector switch



Technical data

LUMO 25

General information

Form of lens Colour of handle Form of collar square

Dimensions

Length of collar Width of collar 25 mm Overall height 17 mm Mounting depth with connector

Mounting depth with plug-in socket

Mounting hole

Mechanical design

Mounting Terminals

Contact system Contact function Contact arrangement Contact materials Illuminability

Mechanical characteristics

Operating force min. Rotating angle Robustness max.

handle black opaque

25 mm

30.7 mm

33.4 mm 16.2 mm

see order block pin connector 4-pol./ plug-in socket snap-action contact see order block 1 NO

Au no

0,03 Nm see order block 1.5 Nm

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 max. 100 m Ω Bouncing time max. 5 ms

Other specifications

Operating life (operations) 500000 Degree of protection from front side IP65 Ambient temp. operating -25 °C min Ambient temp. operating +70 °C max.

Storage temperature min. Storage temperature max. Resistance to constant environment

Resistance at variable

environment Weight

-40 °C +80 °C according to

IEC 600 68-2-3 and 2-30

according to

IEC 60068-2-14 and 2-33

8 g

Typical accessories LUMOTAST 25 selector switch

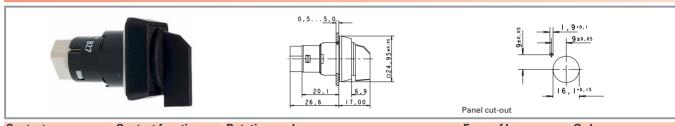
Description	Photo	Order no.	Additional accessories see page
Plug-in socket for PCB		5.00.645.036/0000	5 - 23
Cable (flat ribbon cable 10 cm with socket connector and male quick connector, AMP 4-pin)		5.03.771.306/0000	5 - 22
Blanking cap complete with sealing disc and ring nut, square	4	5.05.800.049/0100	2 - 64
Label holder, flush, for square collar	8	5.07.620.004/0000	2 - 62



Typical accessories LUMOTAST 25 selector switch

Description	Photo	Order no.	Additional accessories see page
Flat ribbon cable, 4-wire, 1 m long	0	5.37.700.124/0000	5 - 23
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 arrange- ment	Contact function	Rotating angle	Form of lens	Order no.
1 NO	latching	right, 1 x 90°	handle	1.15.153.106/0100

Technical data see page 1 - 26

LUM0 25



LUMOTAST 25 keylock switch



Technical data

LUMO 25

General information

Colour of lens black opaque **Mechanical characteristics** Form of collar Operating force max. square Rotating angle **Dimensions Electrical characteristics** Length of collar 25 mm Width of collar Rated voltage AC/DC max. 25 mm Rated voltage AC/DC min. Overall height 32.3 mm Mounting depth with Rated current AC/DC max. 30.7 mm Rated current AC/DC min. connector Mounting depth with Contact resistance max. plug-in socket 33.4 mm Bouncing time max. 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 Illuminability no Lamp socket no cylinder lock Lock Wafers 8 pins Lock type 5201

Number of locking positions 10000 Main key yes Symmetric key yes

Key removal position see order block

1,5 Nm 90°

42 V 0.02 V 100 mA 0.01 mA 100 m Ω 5 ms

Other specifications

Operating life 50000 (operations) Degree of protection from front side **IP65** Ambient temp. operating -25 °C min. Ambient temp. operating +70 °C -40 °C Storage temperature min. Storage temperature max. +80 °C Resistance to constant according to IEC 600 68-2-3 and 2-30 environment Resistance at variable according to environment

IEC 60068-2-14 and 2-33

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 - 64

Weight

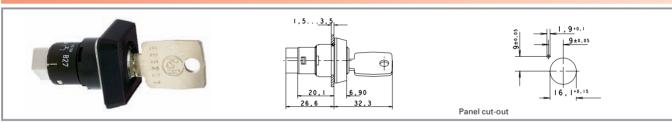


Typical accessories LUMOTAST 25 keylock switch

Description	Photo	Order no.	Additional accessories see page
Label holder, flush, for square collar	8	5.07.620.004/0000	2 - 62
Flat ribbon cable, 4-wire, 1 m long	0	5.37.700.124/0000	5 - 23
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21
Spare key		5.58.015.201/0000	
Legend label 23 x 16 for label holder, without legend	EIN	5.73.111.000/0000	
Socket connector, 4-pin		5.92.025.368/0000	5 - 22

LUM0 25

LUMOTAST 25 keylock switch



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

Technical data see page 1 - 28

Included: 2 keys.



LUMOTAST 25 emergency stop pushbutton



Technical data

LUMO 25

General information

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

25 mm

16.2 mm

no

Dimensions

Length of collar 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

Mechanical design

Mounting ring nut Terminals pin connector 4-pol./ plug-in socket Contact system snap-action contact Contact function latching 2 NC (forcibly actuated) Contact arrangement Au

Contact materials Illuminability

Mechanical characteristics

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

Electrical characteristics

Rated voltage AC/DC max. Rated voltage AC/DC min. Rated current AC/DC max.

Rated current AC/DC min. Contact resistance max. Bouncing time max.

Other specifications

Operating life

Approvals

Degree of protection from front side Ambient temp, operating min. Ambient temp. operating max. Storage temperature min. Storage temperature max. Resistance to constant environment Resistance at variable environment Weight

25 V 0.02 V

100 mA (1A short-circuit current)

0.01 mA $100 \text{ m}\Omega$ 10 ms

15000

IP65

-25 °C

+70 °C -40 °C +80 °C according to

IEC 600 68-2-3 and 2-30

according to

IEC 60068-2-14 and 2-33

TŰV/UL according to EN 60947-5-5 and -5-1/A2,

UL 508

Typical accessories LUMOTAST 25 emergency stop pushbutton

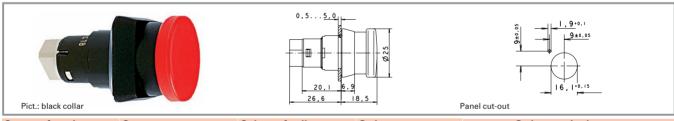
Description	Photo	Order no.	Additional accessories see page
Plug-in socket for PCB	1	5.00.645.036/0000	5 - 23
Cable (flat ribbon cable 10 cm with socket connector and male quick connector, AMP 4-pin)		5.03.771.306/0000	5 - 22
Blanking cap complete with sealing disc and ring nut, square	4	5.05.800.049/0100	2 - 64
Label holder, flush, for square collar	8	5.07.620.004/0000	2 - 62



Typical accessories LUMOTAST 25 emergency stop pushbutton

Description	Photo	Order no.	Additional accessories see page
Flat ribbon cable, 4-wire, 1 m long	0	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	£38	5.73.111.000/0000	
Emergency stop label, yellow, adhesive, round 60 mm, without legend		5.76.204.425/0400	
Emergency stop label, yellow, adhesive, round 60 mm, with legend "NOT-AUS"	a de la constante de la consta	5.76.204.426/0400	
Emergency stop label, yellow, adhesive, round 60 mm, with legend "ARRET-D'URGENCE"		5.76.204.427/0400	
Emergency stop label, yellow, adhesive, round 60 mm, with legend "EMERGENCY-STOP"		5.76.204.428/0400	
Emergency stop label, yellow, adhesive, round 60 mm, with legend "ARRESTO-D'EMERGENZA"		5.76.204.429/0400	
Socket connector, 4-pin	1E	5.92.025.368/0000	5 - 22

LUMOTAST 25 emergency stop pushbutton, ring nut fixing



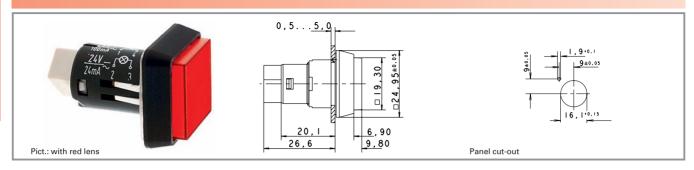
Contact function	Contact arrangement	Colour of collar	Order no.	Order no.	Order no. single parts	
				Housing	Lens	
latching	2 NC (forcibly actuated)	black	1.15.154.006/0301	-	-	
latching	2 NC (forcibly actuated)	yellow	1.15.154.016/0301	-	-	

Technical data see page 1 - 30

LUM0 25



LUMOTAST 25 signal lamp



LUM0 25

Technical data

General information		Lamp socket	Bi-Pin T 1/T 1 ¹ / ₄
Form of lens	square	Lamp	filament lamp / LED
Colour of lens	see order block	•	
		Electrical characteristics	
Dimensions		Voltage limit max.	24 V
Length of collar	25 mm	Power limit max.	0,7 W
Width of collar	25 mm		
Overall height	9.8 mm	Other specifications	
Mounting depth with		Degree of protection	
connector	30.7 mm	from front side	IP65
Mounting depth with		Weight	7 g
plug-in socket	33.4 mm	Ambient temp. operating	
Mounting hole	16.2 mm	min.	-25 °C
		Ambient temp. operating	
Mechanical design		max.	+70 °C
Mounting	see order block	Storage temperature min.	-40 °C
Terminals	pin connector 4-pol./ plug-in socket	Storage temperature max.	+80 °C

Typical accessories LUMOTAST 25 signal lamp

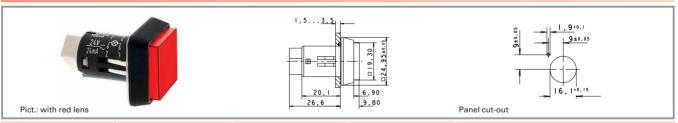
Description	Photo	Order no.	Additional accessories see page
Filament lamp, Bi-Pin T 11/4 base, 12 V		1.90.180.474/0000	5 - 5
Filament lamp, Bi-Pin T 11/4 base, 28 V		1.90.180.475/0000	5 - 5
LED Bi-Pin T 1 superbright, red, 24 V		1.90.690.351/0000	5 - 15
LED Bi-Pin T 1 superbright, green, 24 V		1.90.690.352/0000	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
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



Typical accessories LUMOTAST 25 signal lamp

Description	Photo	Order no.	Additional accessories see page
LED Bi-Pin T 1, yellow, 3 V		1.90.691.028/0000	5 - 15
Plug-in socket for PCB	1	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 - 60
Blanking cap complete with sealing disc and ring nut, square	4	5.05.800.049/0100	2 - 64
Label holder, flush, for square collar	8	5.07.620.004/0000	2 - 62
Flat ribbon cable, 4-wire, 1 m long	0	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	EIN	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



Voltage limit max.	Power limit max.		Order no. without lens	Note
24 V	0.7 W	Bi-Pin T 1/T 1 ¹ / ₄		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

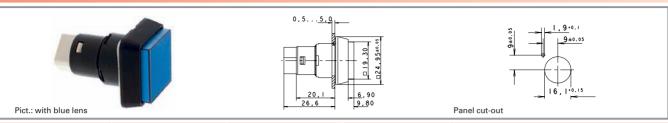
 $Do \ not \ press \ in \ lens \ in \ disassembled \ condition. \ Note \ when \ using \ a \ LED: A \ notch \ on \ the \ lamp \ identifies \ the \ cathode \ side.$

LUMO

25

1

LUMOTAST 25 signal lamp, 24 V, ring nut fixing



Voltage limit max.	Power limit max.		Order no. without lens	Note
24 V	0.7 W	Bi-Pin T 1/T 1 ¹ / ₄	1.65.122.956/0000	Please include the desired lens in your order.

LUM0 25 Technical data see page 1 - 32

Lenses:

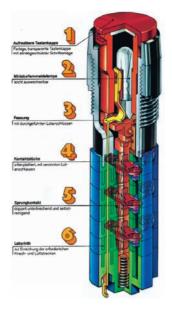
Lens, square, transparent colourless: 5.49.077.014/1002 Lens, square, transparent red: 5.49.077.014/1306

Lens, square, transparent 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.



LUMO 75 (40)



General data

LUMOTAST 75 IP40 pushbutton range

Illuminated pushbuttons, signal lamps and keylock switches

- Mounting hole diameter 16.2 mmDegree 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

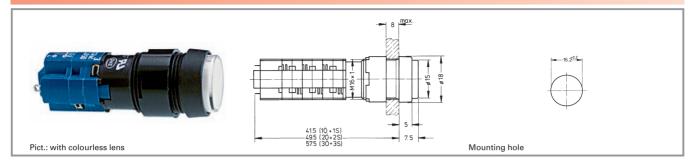
LUMOTAST 75 illuminated pushbutton IP40 LUMOTAST 75 illuminated pushbutton IP40, protruding lens, round collar LUMOTAST 75 illuminated pushbutton IP40, flush lens, square collar LUMOTAST 75 illuminated pushbutton IP40, flush lens, rectangular collar LUMOTAST 75 illuminated pushbutton IP40, protruding lens, square collar	1 - 36 1 - 38 1 - 39 1 - 40 1 - 41
LUMOTAST 75 keylock switch IP40 LUMOTAST 75 keylock switch IP40, round collar LUMOTAST 75 keylock switch IP40, rectangular collar	1 - 42 1 - 43 1 - 44
LUMOTAST 75 IP40 signal lamp with lamp socket T 4.5 LUMOTAST 75 IP40 signal lamp with lamp socket T 4.5, round collar, protruding lens LUMOTAST 75 IP40 signal lamp, square collar, flush lens LUMOTAST 75 IP40 signal lamp, rectangular collar, flush lens LUMOTAST 75 IP40 signal lamp, square collar, protruding lens	1 - 46 1 - 47 1 - 48 1 - 48 1 - 49

Pushbuttons 1 - 35 **LUMO**

75 (40)



LUMOTAST 75 illuminated pushbutton IP40



Technical data

General information

Form of lens Form of collar Colour of collar

see order block see order block 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 41.5/49.5/57.5 mm

Mounting depth

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 Aa Illuminability yes T 4.5 Lamp socket

Mechanical characteristics

Operating force max. 3 ... 6.5 N 2.7 mm Operating travel Switching travel NC 1.6 mm Switching travel NO $0.9 \, \text{mm}$ 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 0.2 A Rated current DC max. Rated current AC/DC min. 5 mA Contact resistance acc. to life max.

Protection class

Other specifications

Operating life, at 250 V/2 A (operations) Operating life, at 250 V/4 A (operations)

Degree of protection from front side Ambient temp. operating min

Ambient temp, operating without lamp max.

Ambient temp, operating with lamp max.

Storage temperature min. Storage temperature max. Resistance to constant environment

Resistance at variable environment Approvals

Flame class acc. to UL 94 Hot wire ignition acc. to IEC 60695-2-1

200 m Ω

200000 (momentary)

60000 (momentary), 10000 (latching)

IP40 -25 °C

+70 °C

+55 °C -40 °C +80 °C

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

according to

IEC 60068-2-14 and 2-33 ENEC 25 T 55 (70),

UL, CSA V 1

yes

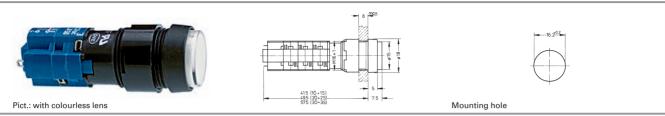
Typical accessories LUMOTAST 75 illuminated pushbutton IP40

Description	Photo		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

LUM0 75 (40)

Typical accessories LUMOTAST 75 illuminated pushbutton IP40					
Description	Photo	Order no.	Additional accessories see page		
LED T 4.5 superbright, green, 24 V		1.90.690.332/0000			
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 - 20		
Lamp extractor for lamp diameter 5-6 mm		1.90.900.004/0000	5 - 20		
Protective cap (for 18 x 24 collar)	্য	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		

LUMOTAST 75 illuminated pushbutton IP40, protruding lens, round collar



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

LUMO 75 (40)

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

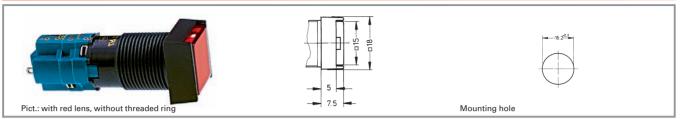
Accessories

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 illuminated pushbutton IP40, flush lens, square collar



Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	·	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, rectangular, transparent colourless, for filament lamp or LED: 5.49.275.036/1002

Lens, rectangular, transparent red, for LED: 5.49.275.036/1301

Lens, rectangular, transparent red, for filament lamp: 5.49.275.036/1303

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

Lens, rectangular, transparent green, for filament lamp: 5.49.275.036/1502

Lens, rectangular, transparent green, for LED: 5.49.275.036/1503

Lens, rectangular, transparent blue, for filament lamp: 5.49.275.036/1601

Accessories:

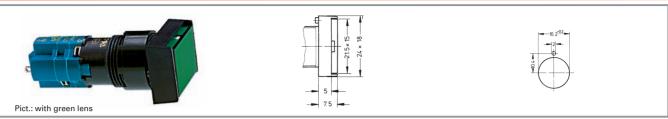
Sealing cap IP65 (for 18 x 18 collar): 5.05.200.009/0000 Protective cap (for 18 x 18 collar): 5.05.800.030/0000

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

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

LUMO 75 (40)

LUMOTAST 75 illuminated pushbutton IP40, flush lens, rectangular collar



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

LUMO 75 (40)

Technical data see page 1 - 36

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

Accessories:

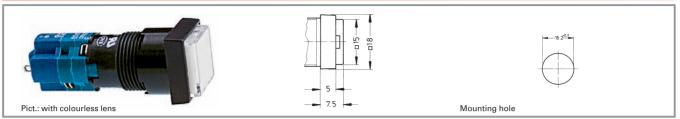
Sealing cap IP65 (for 18 x 24 collar): 5.05.200.008/0000 Protective cap (for 18 x 24 collar): 5.05.800.027/0000

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 illuminated pushbutton IP40, protruding lens, square collar



Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	·	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, rectangular, transparent colourless, for filament lamp or LED: 5.49.275.036/1002

Lens, rectangular, transparent red, for LED: 5.49.275.036/1301

Lens, rectangular, transparent red, for filament lamp: 5.49.275.036/1303

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

Lens, rectangular, transparent green, for filament lamp: 5.49.275.036/1502

Lens, rectangular, transparent green, for LED: 5.49.275.036/1503

Lens, rectangular, transparent blue, for filament lamp: 5.49.275.036/1601

Accessories:

Sealing cap IP 65 (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

LUMO 75 (40)



LUMOTAST 75 keylock switch IP40



Technical data

LU	MO
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 see order block Diameter of collar Width of collar see order block

Overall height (without kev)

Mounting depth Mounting hole

Mechanical design

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

no

7.5 mm

16.2 mm

see order block

Main key Symmetric key

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. Rated voltage AC/DC min.	220 V 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 m Ω
Bouncing time max.	10 ms
ESD-strength min.	14 kV

Other specifications

Operating life, at 250 V/2 A (operations) Operating life, at 250 V/4 A (operations) Degree of protection from front side **IP40** Ambient temp, operating min Ambient temp, operating max. Storage temperature min. Storage temperature max. Resistance to constant environment Resistance at variable environment

Flame class acc. to UL 94 Hot wire ignition acc. to IEC 60695-2-1

Weight max.

Approvals

50000 (momentary)

50000 (momentary)

-25 °C

+70 °C -40 °C +80 °C

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

according to

IEC 60068-2-14 and 2-33

ENEC 25 T 55 (70).

UL, CSA V 1

yes

Typical accessories LUMOTAST 75 keylock switch IP40

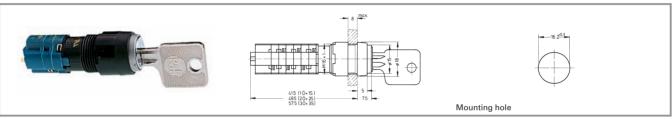
Description	Photo	Order no.	Additional accessories see page
Blanking cap, black, to cover spare holes, dimensions 18 x 24 mm		5.52.006.021/0100	5 - 26
Blanking cap, black, to cover spare holes, round 18 mm	P	5.52.006.022/0100	5 - 26
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21



Typical accessories LUMOTAST 75 keylock switch IP40

Description	Photo		Additional accessories see page
Key cap for LUMO 75		5.58.002.030/0000	
Spare key for LUMO 75 (1 key)		5.58.004.721/0000	

LUMOTAST 75 keylock switch IP40, round collar



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

Technical data see page 1 - 42

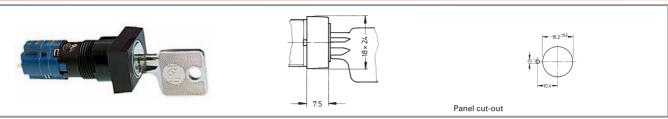
Included: 2 keys.

Other lock variants and contacts available on request.

LUMO 75 (40) 1

LUMO 75 (40)

LUMOTAST 75 keylock switch IP40, rectangular collar



Contact arrangement	Contact function	Rotating angle		Key removal position	Colour of collar	Order no.
1 NC + 1 NO	latching	90°	Ď,	0	black	1.15.108.571/0100
1 NC + 1 NO	latching	90°	Ů,	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°	Ů,	0	black	1.15.108.572/0100
2 NC + 2 NO	latching	90°	Ľ	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.

聯輝電子 www.rafi.com.tw

LUMO

75 (40)

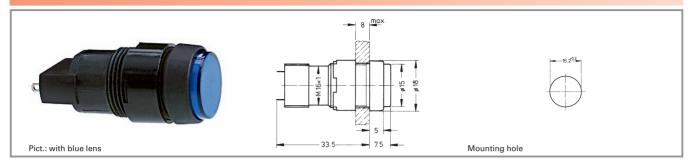


LUMOTAST 75 IP40 signal lamp with lamp socket T 4.5

see order block

see order block

see order block



Technical data

General information

Form of lens Form of collar Colour of collar

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. 42 V Power limit max. 1.2 W Other specifications

Degree of protection
from front side
Weight
Approvals
IP40
5 g
ENEC 25 T 55 (70),
UL, CSA

Ambient temp. operating min.

Ambient temp. operating max.

Storage temperature min. Storage temperature max. Resistance to constant environment

Resistance at variable environment

-25 °C

+55 °C -40 °C +80 °C according to

IEC 600 68-2-3 and 2-30

according to

IEC 60068-2-14 and 2-33

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
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



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, 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	I	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	P	5.52.006.022/0100	5 - 26
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

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
42 V	1.2 W	T 4.5	black	·	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: ${\bf 5.49.257.011/1303}$

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

Accessories:

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

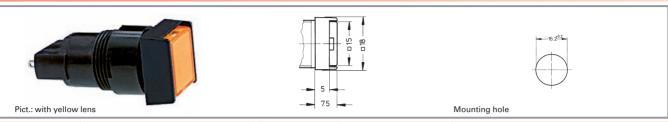
Diffuser, round, for LED, without legend: 5.72.050.000/0214

LUMO

75 (40)



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
42 V	1.2 W	T 4.5	black	· ·	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: 5.49.275.036/1002

Lens, rectangular, transparent red, for LED: 5.49.275.036/1301

Lens, rectangular, transparent red, for filament lamp: 5.49.275.036/1303

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

Lens, rectangular, transparent green, for filament lamp: 5.49.275.036/1502

Lens, rectangular, transparent green, for LED: 5.49.275.036/1503

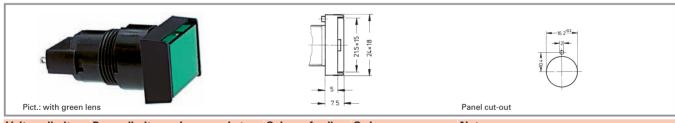
Lens, rectangular, transparent blue, for filament lamp: 5.49.275.036/1601

Accessories

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



Voltage limit max.	Power limit max.	Lamp socket	Colour of collar	Order no. without lens	Note
42 V	1.2 W	T 4.5	black	· ·	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

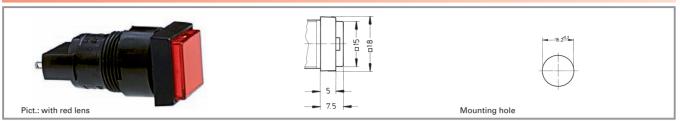
Accessories:

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 signal lamp, square collar, protruding lens



Voltage limit max.	Power limit max.	Lamp socket	Colour of collar	Order no. without lens	Note
42 V	1.2 W	T 4.5	black		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: 5.49.275.036/1002

Lens, rectangular, transparent red, for LED: 5.49.275.036/1301

Lens, rectangular, transparent red, for filament lamp: 5.49.275.036/1303

Lens, rectangular, transparent yellow, for filament lamp or LED: 5.49.275.036/1402 Lens, rectangular, transparent green, for filament lamp: 5.49.275.036/1502

Lens, rectangular, transparent green, for LED: 5.49.275.036/1503

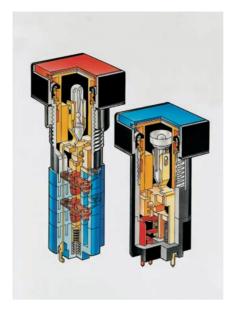
Lens, rectangular, transparent blue, for filament lamp: 5.49.275.036/1601

Diffuser, square, for filament lamp, without legend: 5.73.013.000/0202 Diffuser, square, for LED, without legend: 5.73.013.000/0214

LUMO 75 (40) 聯輝電子 www.rafi.com.tw



LUM0 75 (65)



General data

LUMOTAST 75 IP65 pushbutton range

Illuminated pushbuttons and signal lamps with lamp socket T 4.5

- Mounting hole diameter 16.2 mmDegree 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)

Content

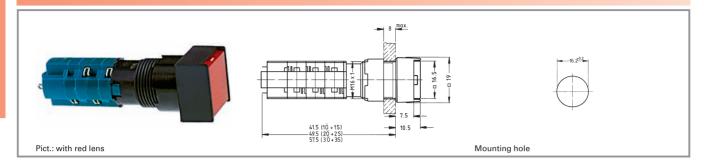
LUMOTAST 75 illuminated pushbutton IP65	1 - 52
LUMOTAST 75 illuminated pushbutton IP65, flush lens, square collar	1 - 54
LUMOTAST 75 illuminated pushbutton IP65, protruding lens, square collar	1 - 55
LUMOTAST 75 illuminated pushbutton IP65, flush lens, round collar	1 - 56
LUMOTAST 75 illuminated pushbutton IP65, protruding lens, round collar	1 - 57
LUMOTAST 75 illuminated pushbutton IP65, flush lens, rectangular collar	1 - 58
LUMOTAST 75 signal lamp IP65	1 - 60
LUMOTAST 75 signal lamp IP65, flush lens, square collar	1 - 61
LUMOTAST 75 signal lamp IP65, protruding lens, square collar	1 - 62
LUMOTAST 75 signal lamp IP65, flush lens, round collar	1 - 62
LUMOTAST 75 signal lamp IP65, protruding lens, round collar	1 - 63
LUMOTAST 75 signal lamn IP65, flush lens, rectangular collar	1 - 63

Pushbuttons 1 - 51 **LUMO**

75 (65)



LUMOTAST 75 illuminated pushbutton IP65



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 hlack

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 see order block Contact function Contact arrangement see order block Contact materials Aq Illuminability yes T 4.5 Lamp socket

Mechanical characteristics

Operating force 3 ... 6.5 N Operating travel 2.5 mm Switching travel NC 18 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. Protection class Ш ESD-strength min. 14 kV

Other specifications Operating life, at 250 V/2 A (operations)

Operating life, at 250 V/4 A (operations) Degree of protection from front side

Ambient temp. operating min

Ambient temp, operating without lamp max. Ambient temp, operating with lamp max.

Storage temperature min. Storage temperature max. Resistance to constant

environment Resistance at variable environment Weight

Approvals Flame class acc. to UL 94

Hot wire ignition acc. to IEC 60695-2-1

200 m Ω

200000 (momentary), 50000 (latching)

60000 (momentary)

IP65

-25 °C

+70 °C

+55 °C -40 °C +80 °C

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

according to

IEC 60068-2-14 and 2-33

ENEC 25 T 55 (70).

UL, CSA V₀

yes

Typical accessories LUMOTAST 75 illuminated pushbutton IP65

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

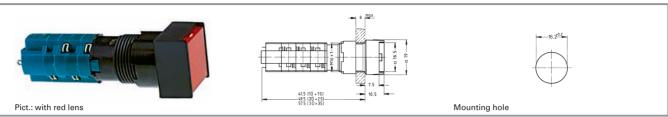
1 - 52



Typical accessories LUMOTAST 75 illuminated pushbutton IP65 **Description Photo** Order no. Additional accessories see page 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 - 20 Lamp extractor for lamp diameter 5-6 mm **1.90.900.004/0000** 5 - 20 Protective cap (for 18 x 24 collar) 5.05.800.027/0000 5 - 24 Blanking cap, black, to cover spare holes, **5.52.006.020/0103** 5 - 26 dimensions 18 x 18 mm Blanking cap, black, to cover spare holes, **5.52.006.021/0100** 5 - 26 dimensions 18 x 24 mm 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

LUMO 75 (65)

LUMOTAST 75 illuminated pushbutton IP65, 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	· ·	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

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

Legend insert, square, without legend: 5.70.629.000/2000



LUMOTAST 75 illuminated pushbutton IP65, protruding lens, square collar



Contact arrangement	Contact function		Order no. without lens	Note	
1 NC + 1 NO	momentary	black		Please include the desired lens in your order.	
1 NC + 1 NO	latching	black	· ·	Please include the desired lens in your order.	
2 NC + 2 NO	momentary	black	· ·	Please include the desired lens in your order.	
2 NC + 2 NO	latching	black		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

Legend insert, square, without legend: 5.70.629.000/2000

LUMO 75 (65)



LUMOTAST 75 illuminated pushbutton IP65, flush lens, round collar



-					
	Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
	1 NC + 1 NO	momentary	black		Please include the desired lens in your order.
	1 NC + 1 NO	latching	black	· ·	Please include the desired lens in your order.
	2 NC + 2 NO	momentary	black		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

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

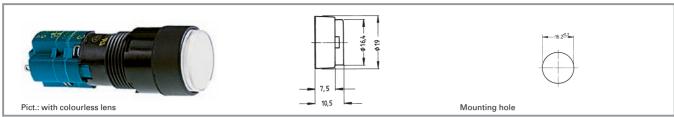
Lens, round, transparent green, for filament lamp: 5.49.259.013/1502
Lens, round, transparent green, for LED: 5.49.259.013/1502

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

Legend insert, round, without legend: 5.70.059.000/2000



LUMOTAST 75 illuminated pushbutton IP65, protruding lens, round collar



Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	·	Please include the desired lens in your order.
1 NC + 1 NO	latching	black		Please include the desired lens in your order.
2 NC + 2 NO	momentary	black		Please include the desired lens in your order.
2 NC + 2 NO	latching	black		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

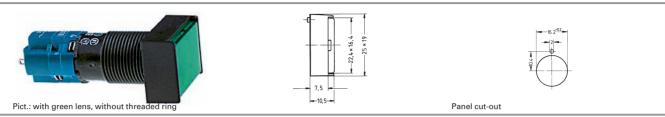
Lens, round, transparent blue, for filament lamp: 5.49.259.013/1601

Legend insert, round, without legend: 5.70.059.000/2000

LUMO 75 (65)



LUMOTAST 75 illuminated pushbutton IP65, flush lens, rectangular collar



Contact arrangement	Contact function	Colour of collar	Order no. without lens	Note
1 NC + 1 NO	momentary	black	·	Please include the desired lens in your order.
1 NC + 1 NO	latching	black		Please include the desired lens in your order.
2 NC + 2 NO	momentary	black		Please include the desired lens in your order.
2 NC + 2 NO	latching	black	·	Please include the desired lens in your order.

LUMO 75 (65) Technical data see page 1 - 52

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

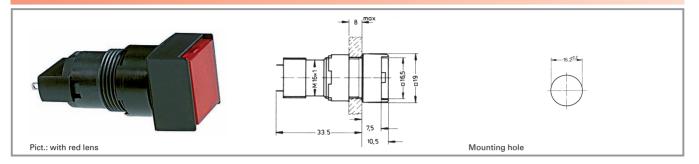
Lens, rectangular, transparent blue, for filament lamp: 5.49.277.058/1601

Legend insert, rectangular without legend: 5.70.630.000/2000

聯輝電子 www.rafi.com.tw



LUMOTAST 75 signal lamp IP65



Technical data

General information

Form of lens see order block Form of collar see order block Voltage limit max. 42 V Diameter of collar see order block Power limit max.

Dimensions LUMO

75 (65)

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 Storage temperature max.

Electrical characteristics

1.2 W

Other specifications

Degree of protection IP65 from front side Weight 5 g

ENEC 25 T 55 (70), Approvals UL, CSA

Ambient temp. operating min.

-25 °C Ambient temp. operating

max. +55 °C -40 °C Storage temperature min. +80 °C

Typical accessories LUMOTAST 75 signal lamp IP65

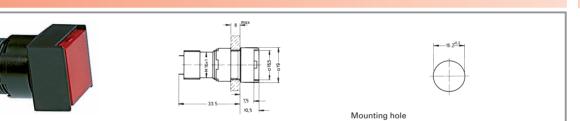
Description	Photo	Order no.	Additional accessories see page
Filament lamp, T 4.5 base, 12 V		1.90.100.022/0000	5 - 6
Filament lamp, T 4.5 base, 24 V		1.90.100.023/0000	5 - 6
LED T 4.5 superbright, red, 24 V		1.90.690.331/0000	5 - 16
LED T 4.5 superbright, green, 24 V		1.90.690.332/0000	5 - 16
LED T 4.5 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, yellow, 2-3 V (use external resistor)		1.90.692.003/0000	5 - 16



Typical accessories LUMOTAST 75 signal lamp IP65

Description	Photo	Order no.	Additional accessories see page
Lamp extractor for lamp diameter 4 mm		1.90.900.002/0000	5 - 20
Lamp extractor for lamp diameter 5-6 mm		1.90.900.004/0000	5 - 20
Blanking cap, black, to cover spare holes, dimensions 18 x 18 mm	I	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

LUMOTAST 75 signal lamp IP65, flush lens, square collar



Pict.: with red lens				10,5	Mounting hole
Voltage limit max.	Power limit max.	Lamp socket		Order no. without lens	Note
42 V	1.2 W	T 4.5	square	-	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

Legend insert, square, without legend: 5.70.629.000/2000

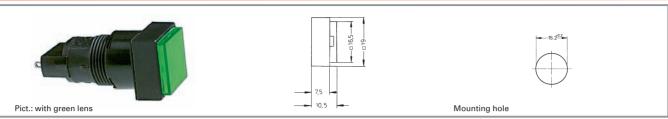
For assembly, press the lens as far as possible.

LUMO 75 (65) LUMO

75 (65)



LUMOTAST 75 signal lamp IP65, protruding lens, square collar



Voltage limit max.	Power limit max.	Lamp socket	Form of collar	Order no. without lens	Note
42 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

Accessories:

Legend insert, square, without legend: 5.70.629.000/2000

For assembly, press the lens as far as possible.

LUMOTAST 75 signal lamp IP65, flush lens, round collar



Voltage limit max.	Power limit max.	Lamp socket		Order no. without lens	Note
42 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

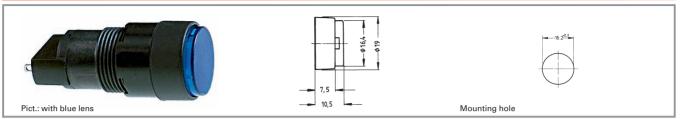
Accessories:

Legend insert, round, without legend: 5.70.059.000/2000

For assembly, press the lens as far as possible.



LUMOTAST 75 signal lamp IP65, protruding lens, round collar



Voltage limit max.	Power limit max.	Lamp socket		Order no. without lens	Note
42 V	1.2 W	T 4.5	round	•	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

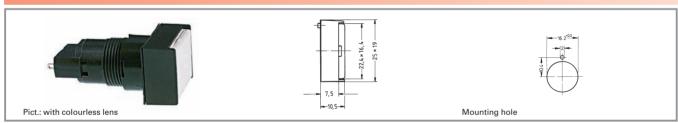
Lens, round, transparent blue, for filament lamp: 5.49.259.013/1601

Accessories

Legend insert, round, without legend: 5.70.059.000/2000

For assembly, press the lens as far as possible.

LUMOTAST 75 signal lamp IP65, flush lens, rectangular collar



Voltage limit max.	Power limit max.	Lamp socket		Order no. without lens	Note
42 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

Accessories:

Legend insert, rectangular without legend: 5.70.630.000/2000

For assembly, press the lens as far as possible.

LUMO 75 (65) 聯輝電子 www.rafi.com.tw



General data

Keylock switch for a mounting hole diameter of 16.2 mm $\,^{\bullet}$ 42 V max.

- 100 mA
- Design matches with LUMOTAST FK and 75 IP40.

Key switches

Content

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

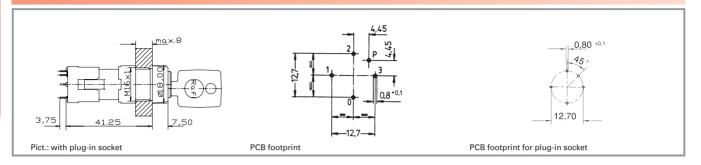
Pushbuttons 1 - 65 Kev

swit-

ches



Keylock switch



Technical data

General information	Gen	eral	info	rmation
---------------------	-----	------	------	---------

Form of collar see order block

Dimensions

see order block Length of collar 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

Mounting hole

Mechanical design

Mounting ring nut Terminals solder terminals Contact system sliding contact, self cleaning Contact function latching

1 NO at every switching Contact arrangement

16.2 mm

position Contact materials Au alloy Illuminability no

Mechanical design of lock

Lock cylinder lock with pin

tumblers Wafers 5 pins 5001 Lock type

Number of locking

10000 positions Main key on request Symmetric key on request Key removal position see order block Mechanical characteristics

Torque for actuating 0.035 Nm Torque against stop 1.8 Nm

Electrical characteristics

Rated voltage AC/DC max. see order block Rated voltage AC/DC min. Rated current AC/DC max. 100 mA Rated current AC/DC min. 5 mA ESD strength max. 12 kV Insulation resistance

min.

Contact resistance max.

Other specifications

Operating life Degree of protection from front side **IP65**

Ambient temp. operating

min.

Ambient temp. operating

Storage temperature min. Storage temperature max. Resistance to constant

environment

Soldering temperature

max. Resistance at variable

environment

Weight

Soldering time max.

Rotating angle

42 V

 $6 \times 10^{8} \Omega$ 200 m Ω

50000

-25 °C

+70 °C -40 °C

+80 °C

according to

IEC 600 68-2-3 and 2-30

350 °C

according to

IEC 60068-2-14 and 2-33

29 g 3 sec.

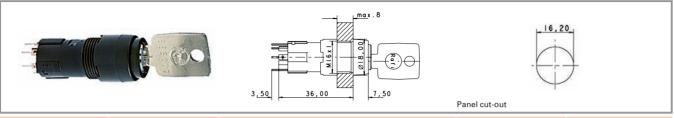
see order block

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
Spare key (1 key)		5.58.011.001/0000	



Keylock switch, round collar

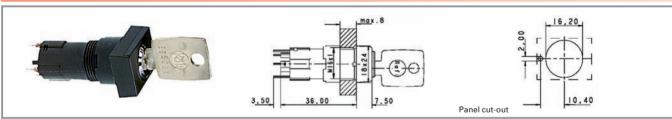


Contact arrange- ment	Contact function			Key removal position	Order no.	
1 NO at every switching position	latching	1 x 90°	1 + 3	0+1	1.10.118.612/0000	
1 NO at every switching position	latching	2 x 90°	+ + +	0	1.10.118.513/0000	
1 NO at every switching position	latching	2 x 90°	+ + +	0+1+2	1.10.118.713/0000	
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 arrange- ment	Contact function			Key removal position	Order no.
1 NO at every switching position	latching	1 x 90°	7 (1 + 3 +	0+1	1.10.118.212/0000
1 NO at every switching position	latching	2 x 90°	1 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 +	0+1+2	1.10.118.313/0000
1 NO at every switching position	latching	3 x 90°	1	0+1+2+3	1.10.118.414/0000

Technical data see page 1 - 66

Included: 2 keys.

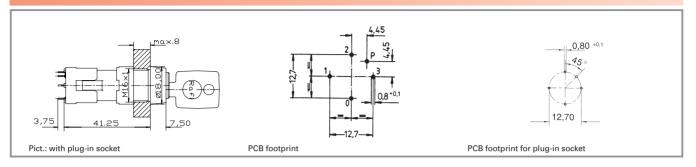
Key switches Kev

swit-

ches



Priority keylock switch



Technical data

General	linformation
Form of	collar

Dimensions see order block Length of collar Diameter of collar see order block

see order block Width of collar Overall height 7.5 mm

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

see order block

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 Illuminability no

Mechanical design of lock

Lock cylinder lock with pin

tumblers Wafers 5 pins 5001 Lock type Number of locking

10000 positions Main kev ves Symmetric key yes

Key removal position see order block Mechanical characteristics

Torque for actuating 0.035 Nm Torque against stop 1.8 Nm

Electrical characteristics

Rated voltage AC/DC max. 42 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 min.

 $6 \times 10^8 \Omega$ Contact resistance max. 200 m Ω

Other specifications

50000 Operating life Degree of protection

from front side **IP65**

Ambient temp. operating min.

Ambient temp. operating

Storage temperature min.

Storage temperature max. Resistance to constant

environment

Soldering temperature

max.

Resistance at variable

environment Weight

Soldering time max.

Rotating angle

-25 °C

+70 °C -40 °C

+80 °C

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

350 °C according to

IEC 60068-2-14 and 2-33

29 g 3 sec.

see order block

Typical accessories Priority keylock switch

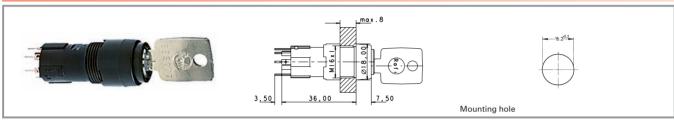
Description	Photo	Order no.	Additional accessories see page
Plug-in socket for PCB mounting		5.05.510.298/0000	5 - 23
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21
Set of spare keys (3 keys) for 3 x 90° type		5.58.099.010/0000	

Other keylock switches

Typical accessories Priority keylock switch

Description	Photo		Additional accessories see page
Set of spare keys (2 keys) for 2 x 90° type		5.58.099.011/0000	

Priority keylock switch, round collar



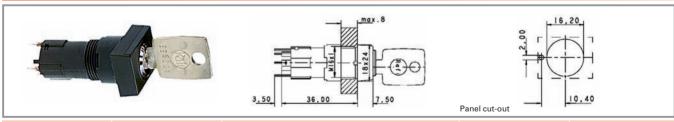
Contact arrange- ment	Contact function			Key removal position	Order no.
1 NO at every switching position	latching	2 x 90°	Schlussel	0	1.10.119.611/0000
1 NO at every switching position	latching	3 x 90°	Schlisser	0	1.10.119.617/0000
1 NO at every switching position	latching	3 x 90°	Settlesur	0+1+2+3	1.10.119.967/0000

Technical data see page 1 - 68

Included with 2 x 90 $^{\circ}$ type: 2 keys; with 3 x 90 $^{\circ}$ 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 arrange- ment	Contact function	Rotating angle		Key removal position	Order no.
1 NO at every switching position	latching	2 x 90°	Schlussel	0	1.10.119.111/0000
1 NO at every switching position	latching	3 x 90°	Schlosor	0	1.10.119.117/0000
1 NO at every switching position	latching	3 x 90°	Stitleson	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...

Key switches 聯輝電子 www.rafi.com.tw



General data

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

Content

1 - 72	Pushb.
1 - 73	
1 - 74	
1 - 75	

Other

1 - 72 1 - 73
1 - 74
1 - 75
1 - 76
1 - 77
1 - 78
1 - 79
1 - 80
1 - 8
1 - 82
1 - 83

Pushbuttons 1 - 71

Other Pushb.



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



Technical data

Operating travel

Robustness min.

Switching travel NO

2 mm

100 N

1.3 mm

General information Form of lens Colour of lens Form of collar	protruding lens see order block round	Electrical characteristics Rated voltage AC max. Rated voltage DC max. Rated current max.	24 V 24 V 0.1 A
		Contact resistance max.	200 mΩ
Dimensions			
Diameter of collar	11 mm	Other specifications	
Overall height	4.5 mm	Operating life	40000
Mounting depth	25.5 mm	Degree of protection	
Mounting hole	9.1 mm	from front side	IP40
· ·		Ambient temp. operating	
Mechanical design		min.	-25 °C
Mounting	ring nut	Ambient temp, operating	
Terminals	solder terminals	max.	+70 °C
Contact system	bridge contact	Storage temperature min.	-40 °C
Contact function	momentary	Storage temperature max.	+80 °C
Contact arrangement	1 NO	Resistance to constant	according to
Contact materials	Ag	environment	IEC 600 68-2-3 and 2-30
Illuminability	no	Resistance at variable	according to
Lamp socket	no	environment	IEC 60068-2-14 and 2-33
Lamp socket	110	Weight	
Mechanical characteristics		- C	2 g
	7 N	Soldering time max.	3 sec.
Operating force max.	7 N	Soldering temperature	

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

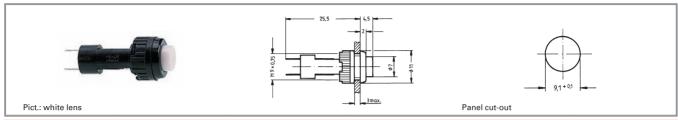
max.

Description	Photo		Additional accessories see page
Fixing spanner M 9, M 10		5.58.002.025/0105	5 - 21

350 °C



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



Contact arrangement	Contact function	Illuminability	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

Other Pushb.



Illuminable pushbutton, mounting hole diameter 9.1 mm, 24 V/0.5 A





Pict.: red Panel cut-out

round

11 mm

7 mm

25 mm

9.1 mm

ring nut

Au

nο

solder terminals

bridge contact

see order block

momentary

1 NC + 1 NO

Technical data

General information Form of lens

Colour of lens Form of collar

Dimensions

Diameter of collar Overall height Mounting depth Mounting hole

Mechanical design

Mounting Terminals Contact system Contact function Contact arrangement Contact materials Illuminability

Lamp socket

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. protruding lens Contact resistance when see order block new max

Contact resistance acc.

to life max.

Bouncing time max.

Lamp voltage

Other specifications

Operating life key switch Operating life filament

lamp

Degree of protection from front side

Ambient temp, operating

min.

Ambient temp. operating

max.

Storage temperature min. Storage temperature max. Resistance to constant

environment

Soldering temperature

max.

Resistance at variable environment

Weight

Soldering time max.

0.5 A

 $50 \text{ m}\Omega$

 $300 \text{ m}\Omega$

10 ms

see order block

200000

see order block

IP40

-25 °C

+70 (LED +55) °C

-40 °C

+80 °C

according to

IEC 600 68-2-3 and 2-30

350 °C

according to

IEC 60068-2-14 and 2-33

3 g

3 sec.

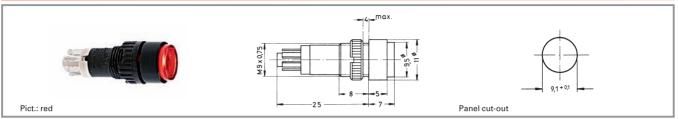
Typical accessories Illuminable pushbutton, mounting hole diameter 9.1 mm, 24 V/0.5 A

Description	Photo		Additional accessories see page	
Fixing spanner M 9, M 10		5.58.002.025/0105	5 - 21	

Other Pushh



Illuminable pushbutton, mounting hole diameter 9.1 mm, 24 V/0.5 A



Contact arrangement	Contact function	Illuminability	Lamp voltage	Colour of lens	Order no.
1 NC + 1 NO	momentary	filament lamp	24 V / 0.7 W	transparent colour- less	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
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

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

Operating life filamant Lamp: approx. 2000 h.

Other Pushb.



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





Pict.: Screw terminals, red

Technical data

General information

Form of lens Colour of lens Form of collar

round

Dimensions

Diameter of collar Overall height Mounting depth Mounting hole

19 mm 8.2 mm 21.5 mm 15.2 mm

protruding lens

see order block

Mechanical design

Mounting Terminals Contact system Contact function Contact arrangement Contact materials Illuminability

ring nut see order block bridge contact momentary see order block

Ag 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. Contact resistance when

new max Contact resistance acc.

to life max.

Other specifications

Operating life Degree of protection from front side

Ambient temp. operating

Ambient temp. operating max

Storage temperature min. Storage temperature max. Resistance to constant

environment

Resistance at variable

environment Weight Approvals

Flame class acc. to UL 94

Hot wire ignition acc. to IEC 60695-2-1

0.7 A

 $50 \text{ m}\Omega$

 $300~\mathrm{m}\Omega$

25000

IP40 (IP65 with sealing cap)

-25 °C

+85 °C -40 °C +90 °C

according to

IEC 600 68-2-3 and 2-30

according to IEC 60068-2-14 and 2-33

ENEC T 85/55

V 0

yes

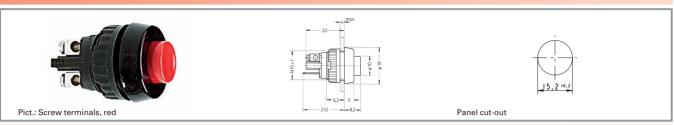
Typical accessories Pushbutton, opaque, mounting hole diameter 15.2 mm, 250 V/0.7 A

Description	Photo		Additional accessories see page
Sealing cap, transparent (IP65)	100	5.52.008.115/0000	
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

Other Pushb.



Pushbutton, opaque, mounting hole diameter 15.2 mm



Contact ar- rangement	Contact function	Illuminability	Terminals	Colour of lens	Order no.
1 NO	momentary	no	screw terminals	opaque black	1.10.001.001/0104
1 NO	momentary	no	screw terminals	opaque white	1.10.001.001/0205
1 NO	momentary	no	screw terminals	opaque red	1.10.001.001/0301
1 NO	momentary	no	screw terminals	opaque green	1.10.001.001/0507
1 NO	momentary	no	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm	opaque black	1.10.001.011/0104
1 NO	momentary	no	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm	opaque white	1.10.001.011/0205
1 NO	momentary	no	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm	opaque red	1.10.001.011/0301
1 NO	momentary	no	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm	opaque green	1.10.001.011/0507
1 NC	momentary	no	screw terminals	opaque black	1.10.001.151/0104
1 NC	momentary	no	screw terminals	opaque red	1.10.001.151/0301
1 NC	momentary	no	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm	opaque black	1.10.001.161/0104
1 NC	momentary	no	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 $6.3 \times 0.8 \text{ mm}$. The connector is splitted and also usable for two connectors $2.8 \times 0.8 \text{ mm}$.

Other Pushb.

Other

Pushb.



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





Pict.: green

Technical data

General information

Form of lens Colour of lens Form of collar

see order block

protruding lens

round

Dimensions

Diameter of collar Overall height Mounting depth Mounting hole

20 mm 9 mm 41 mm 16.2 mm

ring nut

no

Mechanical design

Mounting **Terminals** Contact system Contact function Contact arrangement Contact materials Illuminability

Lamp socket

bridge contact momentary see order block Aq no

screw terminals

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. Rated current max. Contact resistance when

new max.

Other specifications

Operating life Degree of protection from front side

Ambient temp. operating

Ambient temp. operating max.

Storage temperature min. Storage temperature max. Resistance to constant

environment

Resistance at variable

environment Weight

Approvals Flame class acc. to UL 94

Hot wire ignition acc. to IEC 60695-2-1

250 V 2 A

100 m Ω

150000

IP40 (IP65 with sealing cap)

-25 °C

+85 °C -40 °C

+90 °C according to

IEC 600 68-2-3 and 2-30

according to

IEC 60068-2-14 and 2-33

11 g

ENEC 25 T 85

V 0

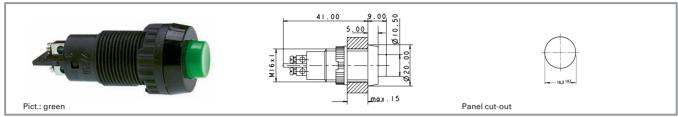
yes

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	Illuminability	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.

Other

Pushb.



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





Mounting hole Pict.: green

Technical data

General information

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

Dimensions

22 mm Diameter of collar 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 Aq Illuminability 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.

Other specifications

Operating life Degree of protection from front side

Ambient temp. operating

Ambient temp. operating

max.

Storage temperature min. Storage temperature max. Resistance to constant

environment

Resistance at variable

environment Weight

Flame class acc. to UL 94 Hot wire ignition acc. to IEC 60695-2-1

200 m Ω

50000

IP40 (IP65 with sealing cap)

-25 °C

+85 °C -40 °C +90 °C

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

according to

IEC 60068-2-14 and 2-33

14 g V 0

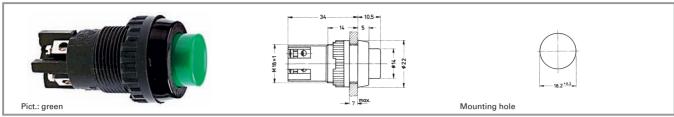
yes

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

Description	Photo		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	Illuminability	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. Other

Pushb.



Illuminable 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 Colour of lens Form of collar

see order block round

protruding lens

Dimensions

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

Mechanical design

Mounting ring nut **Terminals**

solder/quick connect terminals 2.8 x 0.8 mm bridge contact

Contact system Contact function momentary Contact arrangement see order block Contact materials Ag

Illuminability ves Lamp socket BA9s

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.

from front side

Other specifications Operating life Degree of protection

Ambient temp. operating

Ambient temp. operating

max.

Storage temperature min. Storage temperature max. Resistance to constant

environment

Resistance at variable

environment Weight Approvals

Flame class acc. to UL 94 Hot wire ignition acc.

to IEC 60695-2-1

200 mQ

100000

IP40 (IP65 with sealing cap)

-25 °C

+85 °C -40 °C +90 °C

IEC 600 68-2-3 and 2-30

according to according to

IEC 60068-2-14 and 2-33

18 g

ENEC 25 T 55 (85) V₀

yes

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

Description	Photo		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
LED BA 9s (MBC/MCC) superbright, green, 24 V		1.90.690.342/0000	5 - 17

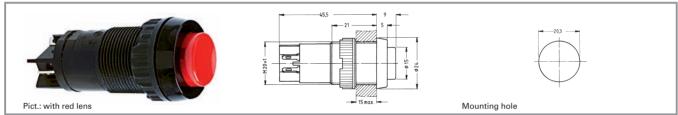
Other pushbuttons



Typical accessories Illuminable 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, 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)	100	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

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



Contact function	Contact arrangement	Order no. without lens	Note
momentary	1 NO	,	Please include the desired lens in your order.
momentary	1 NC + 1 NO	,	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 Other Pushb.