Signal lamps

	Page
Signal lamps with integrated LED	**3 - 3**
Signal lamps with integrated LED - 5 mm	3 - 4
Signal lamps with integrated LED - 7.0 mm	3 - 8
Signal lamps with integrated LED - 9.1 mm	3 - 10
Signal lamps with integrated LED - 10 mm	3 - 12
RF 15 - Signal indicator	3 - 16
RF 19 - Signal indicator	3 - 18
RG 85 III - Signal indicator, without lens	3 - 22
Signal lamps with integrated lamp	**3 - 25**
Signal lamps with integrated filament lamp - 5 mm	3 - 26
Signal lamps with integrated filament/neon lamp - 7 mm	3 - 28
Signal lamps with integrated filament/neon lamp - 10 mm	3 - 30
Signal lamps with integrated filament/neon lamp - 14 mm	3 - 36
Signal lamps with lamp socket	**3 - 39**
8 mm Series - Signal lamp	3 - 42
Signal lamps with lamp socket - W 2 x 4.6d, 9.1 mm	3 - 44
Signal lamps with lamp socket - T 4.6, 9.1 mm	3 - 46
Signal lamps with lamp socket - W 2x4.6d, 11.1 mm	3 - 48
Signal lamps with lamp socket - BA 9s (MBC/MCC), 16.2 mm	3 - 50
Signal lamps with lamp socket - E 10 (MES), 16.2 mm	3 - 52
LUMOTAST FK - Signal lamp	3 - 56
LUMOTAST 25 - Signal lamp	3 - 60
LUMOTAST 75 IP40 - Signal lamp with lamp socket T 4.5	3 - 64
LUMOTAST 75 IP65 - Signal lamp	3 - 68
RAFIX 16 - Signal indicator	3 - 74
RAFIX 16 F - Signal indicator	3 - 80
Signal lamps with lamp socket - BA 9s (MBC/MCC), 18.2 mm	3 - 84
Signal lamps with lamp socket - E 14, 22.3 mm	3 - 86
RAFIX 22 QR - Signal indicator	3 - 88
RAFIX 22 FS - Signal indicator	3 - 92
Signal lamps with lamp socket - E 14, 30.5 mm	3 - 96
Signal lamps with lamp socket - BA 15d, 30.5 mm	3 - 98
Panel mounting sockets	**3 - 101**
Panel mounting sockets - W 2 x 4.6d	3 - 102
Panel mounting sockets - Tubular lamp holders	3 - 104
Panel mounting sockets - BA 15d	3 - 106

General information

Signal Lamps with integral lamps/LED
The soldered lamps/LED without base cannot be replaced.

Signal Lamps with lamp socket
An integral lamp socket allows replacement of lamps/LED of the appropriate type.

Filament operating life
Operating life specifications refer to AC voltage operation. If operated with DC voltage, these values are reduced by 40%.

Color and lenses
transparent = clear, grooved on inner surface for better light diffusion
opaque = translucent but not clear

Standard mounting dimensions
We recommend use of mounting hole diameters 16, 22 and 30 mm, as these comply with international standard recommendations and DIN standards.

Limit values
The voltage specified as the limit value is the standard insulating voltage for the signal lamps.
The permitted ambient temperatures are always specified in conjunction with the maximum power of the lamps used, and the signal lamp should be located outside of the space subject to increased temperature.

Neon lamps
Neon lamps may glow on a short time after having been switched off, for example in combination with long wires.

To avoid this, a parallel resistor with 1,2 MΩ $^1/_4$ W, can be used.

3

Engraving and Hot Stamping

Custom-made legend inserts, photographic film inserts or customer-specific inserts. Standard font DIN 30 640, thin type setting A or narrow-spaced semi-bold type E, however, with rounded ends of characters.

Type size* in mm	Line thickness in mm	Standard colour combinations	
		Lens colour	Legend
3	0,35	**transparent:**	
4	0,5	colourless and red yellow, green, blue	white white
5	0,6		
6	0,7	**opaque:**	
8	0,8	black and dark grey white, red, yellow, green blue and light grey	white black black
10	1		
12,5	1,2		

*The selected type size depends on text length and lens size.

General Data

Signal lamps with integral LED, mounting hole diameter from 5 to 10 mm.
The mm specification in the product name indicates the appropriate mounting hole diameter of the signal lamps.

Content

Signal lamps with integrated LED - 5 mm **3 - 4**
Signal lamps with integrated LED - 5 mm, protruding LED 3 - 5
Signal lamps with integrated LED - 5 mm, round protruding lens 3 - 5
Signal lamps with integrated LED - 5 mm, round flush lens 3 - 6
Signal lamps with integrated LED - 5 mm, triangular flush lens 3 - 7

Signal lamps with integrated LED - 7.0 mm **3 - 8**
Signal lamps with integrated LED - 7.0 mm, round protruding lens 3 - 8

Signal lamps with integrated LED - 9.1 mm **3 - 10**
Signal lamps with integrated LED - 9.1 mm, round lens 3 - 11
Signal lamps with integrated LED - 9.1 mm, round protruding lens 3 - 11

Signal lamps with integrated LED - 10 mm **3 - 12**
Signal lamps with integrated LED - 10 mm, protruding LED 3 - 13
Signal lamps with integrated LED - 10 mm, round lens 3 - 14

RF 15 - Signal indicator **3 - 16**
RF 15 - Signal indicator, fully illuminated, 1 LED 3 - 17

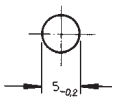
RF 19 - Signal indicator **3 - 18**
RF 19 - Signal indicator, ½ x 1-module 3 - 19
RF 19 - Signal indicator, ½ x 2-module 3 - 19
RF 19 - Signal indicator, 1 x 1-module 3 - 20
RF 19 - Signal indicator, 1 x 2-module 3 - 20

RG 85 III - Signal indicator, without lens **3 - 22**
RG 85 III - Signal indicator, without lens 3 - 23

Signal lamps with integrated LED - 5 mm

Pict.: red

red



Mounting hole

Technical Data

General information

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

Dimensions

Length of collar	see order block
Overall height	see order block
Mounting depth	see order block
Mounting hole	5 mm

Mechanical design

Mounting	pressing into hole
Terminals	solder terminals
Lamp socket	no
Lamp	see order block

Electrical characteristics

Operating voltage U_B	see order block
Integrated currency resistor	see order block
Forward voltage U_F at 25 °C	at 10 mA forward current 2.2 V
Reverse voltage U_R at 25 °C	3 V
Forward current, I_F at 25 °C	see order block
Reverse current I_R at 25 °C	100 µA
Power dissipation P_{tot} at 25 °C	max. 120 mW

Other specifications

Degree of protection from front side	IP40
Weight	0.35 g

Operating voltage U_B: DC voltage from 5 to 28 V

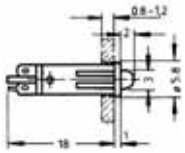
A suitable series resistor is installed in the unit; versions without series resistor must be fitted with an external one.

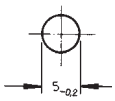
External resistor: $R_V = (U_B - U_F):I_F$

Recommended ratings of external resistors:
- for 5 - 7 V = 330 Ω 0.25 W
- for 12 - 16 V = 1.1 kΩ 0.25 W
- for 24 - 28 V = 2.4 kΩ 0.5 W

Signal lamps with integrated LED - 5 mm, protruding LED

Pict.: red





Mounting hole

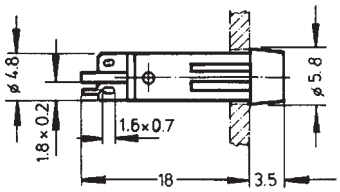
Integrated currency resistor	Operating voltage U_B	Forward current, I_F at 25 °C	Lamp	Colour of lens	Order no.
yes	24 - 28 V	8 - 12 mA	LED red	transparent red	1.69.508.804/0000
yes	24 - 28 V	8 - 12 mA	LED green	transparent green	1.69.508.810/0000
yes	24 - 28 V	8 - 12 mA	LED yellow	transparent yellow	1.69.508.816/0000

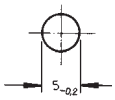
Technical data see page 3 - 4

Long terminal is anode.

Signal lamps with integrated LED - 5 mm, round protruding lens

Pict.: yellow





Mounting hole

Integrated currency resistor	Operating voltage U_B	Forward current, I_F at 25 °C	Lamp	Colour of lens	Order no.
no	according to series resistor 5 - 28 V	max. 20 mA	LED green	transparent green	1.69.508.837/1503
no	according to series resistor 5 - 28 V	max. 20 mA	LED yellow	transparent yellow	1.69.508.843/1402
yes	24 - 28 V	8 - 12 mA	LED red	transparent red	1.69.508.834/1301
yes	24 - 28 V	8 - 12 mA	LED green	transparent green	1.69.508.840/1503
yes	24 - 28 V	8 - 12 mA	LED yellow	transparent yellow	1.69.508.846/1402
yes	24 - 28 V	8 - 12 mA	LED super bright red	transparent red	1.69.508.835/1300
yes	24 - 28 V	8 - 12 mA	LED super bright yellow	transparent yellow	1.69.508.847/1400

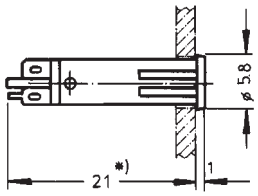
Technical data see page 3 - 4

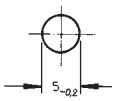
Long terminal is anode.

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

Signal lamps with integrated LED - 5 mm, round flush lens

Pict.: green





Mounting hole

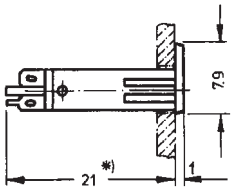
Integrated currency resistor	Operating voltage U_B	Forward current, I_F at 25 °C	Lamp	Colour of lens	Order no.
no	according to series resistor 5 - 28 V	max. 20 mA	LED red	transparent red	1.69.508.861/1301
no	according to series resistor 5 - 28 V	max. 20 mA	LED green	transparent green	1.69.508.867/1503
no	according to series resistor 5 - 28 V	max. 20 mA	LED yellow	transparent yellow	1.69.508.873/1402
yes	24 - 28 V	8 - 12 mA	LED red	transparent red	1.69.508.864/1301
yes	24 - 28 V	8 - 12 mA	LED green	transparent green	1.69.508.870/1503
yes	24 - 28 V	8 - 12 mA	LED yellow	transparent yellow	1.69.508.876/1402
yes	24 - 28 V	8 - 12 mA	LED super bright red	transparent red	1.69.508.865/1300
yes	24 - 28 V	8 - 12 mA	LED super bright yellow	transparent yellow	1.69.508.877/1400

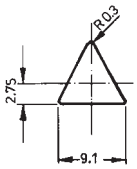
Technical data see page 3 - 4

Long terminal is anode.
* Without series resistor, mounting depth = 18 mm

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

Signal lamps with integrated LED - 5 mm, triangular flush lens





Pict.: red

Integrated currency resistor	Operating voltage U_B	Forward current, I_F at 25 °C	Lamp	Colour of lens	Order no.
yes	24 - 28 V	8 - 12 mA	LED red	transparent red	1.69.508.934/1301
yes	24 - 28 V	8 - 12 mA	LED green	transparent green	1.69.508.940/1503
yes	24 - 28 V	8 - 12 mA	LED yellow	transparent yellow	1.69.508.946/1402
yes	24 - 28 V	8 - 12 mA	LED super bright red	transparent red	1.69.508.935/1300
yes	24 - 28 V	8 - 12 mA	LED super bright yellow	transparent yellow	1.69.508.947/1400

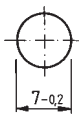
Technical data see page 3 - 4

Long terminal is anode.
* Without series resistor, mounting depth = 18 mm

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

Signal lamps with integrated LED - 7.0 mm

Pict.: yellow



Mounting hole

Technical Data

General information

Form of lens	round protruding
Colour of lens	see order block
Diameter of collar	8.5 mm

Dimensions

Overall height	5 mm
Mounting depth	27.5 mm
Mounting hole	7.0 mm

Mechanical design

Mounting	pressing into hole
Terminals	solder terminals
Lamp socket	no
Lamp	see order block

Electrical characteristics

Operating voltage U_B	24 - 28 V
Forward voltage U_F at 25 °C	at 20 mA forward current 2.4 V
Reverse current I_R at 25 °C	3 V
Forward current, I_F	max. 20 mA
Reverse current I_R at 25 °C	100 µA
Power dissipation P_{tot} at 25 °C	max. 120 mW
Light intensity	see order block

Other specifications

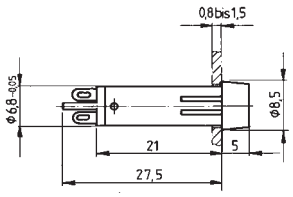
Degree of protection from front side	IP40

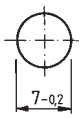
3

integr. LED

Signal lamps with integrated LED - 7.0 mm, round protruding lens

Pict.: yellow





Mounting hole

Operating voltage U_B	Forward current, I_F	Lamp	Colour of lens	Light intensity	Order no.
24 - 28 V	max. 20 mA	LED white	transparent colourless	400 mcd	1.69.511.101/1000
24 - 28 V	max. 20 mA	LED red	transparent red	200 mcd	1.69.511.102/1300
24 - 28 V	max. 20 mA	LED yellow	transparent yellow	200 mcd	1.69.511.103/1400
24 - 28 V	max. 20 mA	LED green	transparent green	1000 mcd	1.69.511.104/1500
24 - 28 V	max. 20 mA	LED blue	transparent blue	300 mcd	1.69.511.105/1600

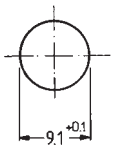
Technical data see page 3 - 8

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

Signal lamps with integrated LED - 9.1 mm

Pict.: red

transparent colourless



Mounting hole

Technical Data

General information

Form of lens	round protruding
Colour of lens	see order block
Diameter of collar	11 mm

Dimensions

Overall height	see order block
Mounting depth	30.5 mm
Mounting hole	9.1 mm

Mechanical design

Mounting	ring nut
Terminals	solder terminals
Lamp socket	no
Lamp	see order block

Electrical characteristics

Operating voltage U_B	24 - 28 V
Forward voltage U_F at 25 °C	at 20 mA forward current 2.4 V
Reverse voltage U_R at 25 °C	3 V
Reverse current I_R at 25 °C	100 µA
Power dissipation P_{tot} at 25 °C	max. 120 mW
Light intensity at 20 mA	see order block

Other specifications

Degree of protection from front side	IP40
Weight	1 g

3

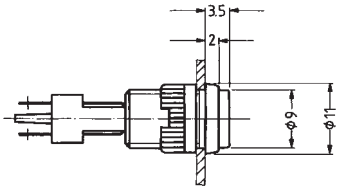
integr. LED

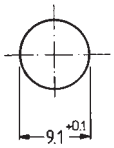
Typical accessories Signal lamps with integrated LED - 9.1 mm

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

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

Signal lamps with integrated LED - 9.1 mm, round lens





Pict.: red

Mounting hole

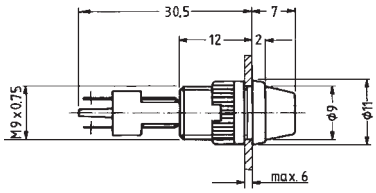
Operating voltage U_B	Light intensity at 20 mA	Lamp	Colour of lens	Order no.
24 - 28 V	200 mcd	LED super bright red	transparent red	1.02.157.105/1300
24 - 28 V	1000 mcd	LED super bright green	transparent green	1.02.157.110/1500
24 - 28 V	200 mcd	LED super bright yellow	transparent yellow	1.02.157.115/1400
24 - 28 V	300 mcd	LED super bright blue	transparent blue	1.02.157.120/1600
24 - 28 V	400 mcd	LED super bright white	transparent colourless	1.02.157.125/1000

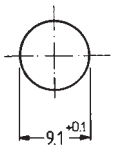
Technical data see page 3 - 10

Accessoires:
Fixing spanner M 9, M 10: **5.58.002.025/0105**

With integrated series resistor. Other voltages on request.

Signal lamps with integrated LED - 9.1 mm, round protruding lens





Pict.: transparent colourless

Mounting hole

Operating voltage U_B	Light intensity at 20 mA	Lamp	Colour of lens	Order no.
24 - 28 V	200 mcd	LED super bright red	transparent red	1.02.157.505/1300
24 - 28 V	1000 mcd	LED super bright green	transparent green	1.02.157.510/1500
24 - 28 V	200 mcd	LED super bright yellow	transparent yellow	1.02.157.515/1400
24 - 28 V	300 mcd	LED super bright blue	transparent blue	1.02.157.520/1600
24 - 28 V	400 mcd	LED super bright white	transparent colourless	1.02.157.525/1000

Technical data see page 3 - 10

Accessoires:
Fixing spanner M 9, M 10: **5.58.002.025/0105**

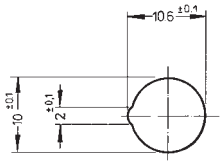
With integrated series resistor. Other voltages on request.

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

Signal lamps with integrated LED - 10 mm

Pict.: red

green



Panel cut-out

Technical Data

General information	
Form of lens	see order block
Colour of lens	see order block
Diameter of collar	12.5 mm
Dimensions	
Overall height	see order block
Mounting depth	30.5 mm
Mounting hole	10 mm
Mechanical design	
Mounting	pressing into hole
Terminals	quick connector 2.8 x 0.8 mm
Lamp socket	no
Lamp	see order block

Electrical characteristics	
Operating voltage U_B	see order block
Integrated currency resistor	see order block
Forward voltage U_F at 25 °C	at 20 mA forward current 2.4 V
Reverse voltage U_R at 25 °C	3 V
Forward current, I_F	see order block
Reverse current I_R at 25 °C	100 µA
Power dissipation P_{tot} at 25 °C	max. 120 mW
Light intensity	see order block
Protecting diode	see order block
Other specifications	
Degree of protection from front side	IP40
Weight	2.44 g

Operating voltage U_B DC voltage from 6 - 28 V

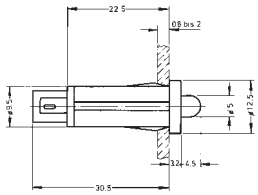
A suitable series resistor is installed in the unit; the version without resistor must be fitted with an external one.
A version with an additional protective diode is available to protect the LED against any voltage peaks.

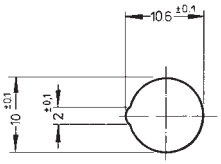
External resistor: $R_V = (U_B - U_F) : I_F$

Recommended ratings of external resistors:
- for 6 - 7 V = 330 Ω 0.25 W
- for 12 - 16 V = 680 Ω 0.5 W
- for 24 - 28 V = 1500 Ω 1 W

Signal lamps with integrated LED - 10 mm, protruding LED

Pict.: red





Panel cut-out

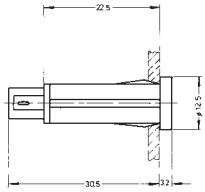
Integrated currency resistor	Protecting diode	Operating voltage U_B	Forward current, I_F	Colour of lens	Light intensity	Order no.
no	yes	according to series resistor 6 - 28 V	max. 20 mA	red	1000 mcd	1.69.525.051/0000
no	yes	according to series resistor 6 - 28 V	max. 20 mA	green	1000 mcd	1.69.525.056/0000
no	yes	according to series resistor 6 - 28 V	max. 20 mA	yellow	200 mcd	1.69.525.061/0000
no	no	according to series resistor 6 - 28 V	max. 20 mA	red	200 mcd	1.69.525.001/0000
no	no	according to series resistor 6 - 28 V	max. 20 mA	green	1000 mcd	1.69.525.006/0000
no	no	according to series resistor 6 - 28 V	max. 20 mA	yellow	200 mcd	1.69.525.011/0000
yes	yes	24 - 28 V	15 - 20 mA	red	200 mcd	1.69.525.054/0000
yes	yes	24 - 28 V	13 - 18.5 mA	green	1000 mcd	1.69.525.059/0000
yes	yes	24 - 28 V	13 - 18.5 mA	yellow	200 mcd	1.69.525.064/0000
yes	no	24 - 28 V	15 - 20 mA	red	200 mcd	1.69.525.004/0000
yes	no	24 - 28 V	13 - 18.5 mA	green	1000 mcd	1.69.525.009/0000
yes	no	24 - 28 V	13 - 18.5 mA	yellow	200 mcd	1.69.525.014/0000

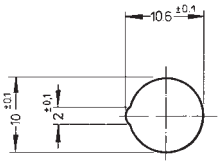
Technical data see page 3 - 12

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

Signal lamps with integrated LED - 10 mm, round lens

Pict.: green





Panel cut-out

Integrated currency resistor	Protecting diode	Operating voltage U_B	Forward current, I_F	Colour of lens	Light intensity	Order no.
yes	yes	24 - 28 V	15 - 20 mA	red	200 mcd	1.69.525.255/1300
yes	yes	24 - 28 V	13 - 18.5 mA	green	1000 mcd	1.69.525.260/1500
yes	yes	24 - 28 V	13 - 18.5 mA	yellow	200 mcd	1.69.525.265/1400
yes	yes	24 - 28 V	-	blue	300 mcd	1.69.525.266/1600
yes	yes	24 - 28 V	-	white	400 mcd	1.69.525.271/1000
yes	no	24 - 28 V	15 - 20 mA	red	200 mcd	1.69.525.205/1300
yes	no	24 - 28 V	13 - 18.5 mA	green	1000 mcd	1.69.525.210/1500
yes	no	24 - 28 V	13 - 18.5 mA	yellow	200 mcd	1.69.525.215/1400
yes	no	24 - 28 V	-	blue	300 mcd	1.69.525.216/1600
yes	no	24 - 28 V	-	white	400 mcd	1.69.525.221/1000

Technical data see page 3 - 12

Other voltages on request.

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

RF 15 - Signal indicator

Pict.: green

Technical Data

General information

Colour of lens	see order block
Recommended key grid	19.05 mm

Dimensions

Length	15 mm
Width	15 mm
Overall height	9.7 mm

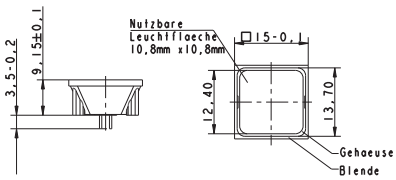
Mechanical design

Mounting	THT soldering in PCB
Illumination	fully illuminated 1 LED
LED colour	see order block
LED type	2 mm

Other specifications

Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Environmental restistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Solderability / solder heat resistance	according to E DIN IEC 600 28-2-20
Wave soldering	260 °C max.
Manual soldering	350 °C / 5 sec. max.

RF 15 - Signal indicator, fully illuminated, 1 LED



Pict.: green

Overall height	Illumination	Colour of lens	LED colour	LED type	Order no.
9.7 mm	fully illuminated 1 LED	red	red	2 mm	**3.14.200.051/0000**
9.7 mm	fully illuminated 1 LED	green	green	2 mm	**3.14.200.052/0000**
9.7 mm	fully illuminated 1 LED	yellow	yellow	2 mm	**3.14.200.053/0000**
9.7 mm	fully illuminated 1 LED	orange	yellow	2 mm	3.14.200.054/0000
9.7 mm	fully illuminated 1 LED	blue	blue	2 mm	3.14.200.055/0000

Technical data see page 3 - 16

Technical data of LED see separate page at the beginning of chapter 4 PCB Keyswitches.

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

RF 19 - Signal indicator

Pict.: 0.5 x 1-module

0,5 x 2-module

1 x 1-module

1 x 2-module

Technical Data

General information

Colour of lens	see order block
Recommended key grid	23/x mm

Dimensions

Length	see order block
Width	see order block
Overall height	9.15 mm

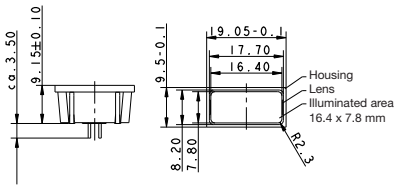
Mechanical design

Mounting	THT soldering in PCB
Illumination	see order block
LED colour	see order block
LED type	see order block

Other specifications

Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Environmental restistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Solderability / solder heat resistance	according to E DIN IEC 600 28-2-20
Wave soldering	260 °C max.
Manual soldering	350 °C / 5 sec. max.

RF 19 - Signal indicator, ½ x 1-module



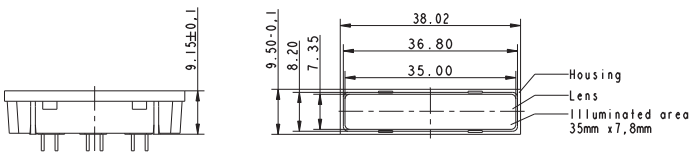
Pict.: 0.5 x 1-module

Illumination	Colour of lens	LED colour	LED type	Order no.
fully illuminated 1 LED	red	red	2 mm	**3.14.002.061/0000**
fully illuminated 1 LED	green	green	2 mm	3.14.002.062/0000
fully illuminated 1 LED	yellow	yellow	2 mm	3.14.002.063/0000
fully illuminated 1 LED	orange	yellow	2 mm	3.14.002.064/0000

Technical data see page 3 - 18

Technical data of LED see separate page at the beginning of chapter 4 PCB Keyswitches.

RF 19 - Signal indicator, ½ x 2-module



Pict.: 0,5 x 2-module

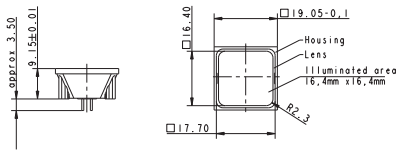
Illumination	Colour of lens	LED colour	LED type	Order no.
fully illuminated 3 LED	red	red	2 mm	3.14.002.908/0000
fully illuminated 3 LED	green	green	2 mm	3.14.002.909/0000
fully illuminated 3 LED	yellow	yellow	2 mm	3.14.002.910/0000
fully illuminated 3 LED	orange	yellow	2 mm	3.14.002.911/0000

Technical data see page 3 - 18

Technical data of LED see separate page at the beginning of chapter 4 PCB Keyswitches.

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

RF 19 - Signal indicator, 1 x 1-module



Pict.: 1 x 1-module

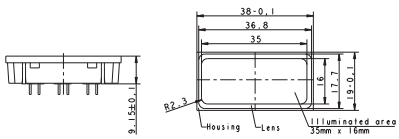
Illumination	Colour of lens	LED colour	LED type	Order no.
fully illuminated 2 LED	red	red	2 mm	**3.14.002.051/0000**
fully illuminated 2 LED	green	green	2 mm	**3.14.002.052/0000**
fully illuminated 2 LED	yellow	yellow	2 mm	**3.14.002.053/0000**
fully illuminated 2 LED	orange	yellow	2 mm	3.14.002.054/0000
fully illuminated 2 LED	blue	blue	2 mm	3.14.001.659/0000

Technical data see page 3 - 18

For technical data of the LED see separate page at the beginning of chapter „RF short-travel keyswitches“

Suitable for RK 90 system design, illuminated for 2-module keycap.

RF 19 - Signal indicator, 1 x 2-module



Pict.: 1 x 2-module

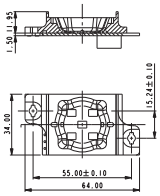
Illumination	Colour of lens	LED colour	LED type	Order no.
fully illuminated 5 LED	red	red	2 mm	3.14.002.071/0000
fully illuminated 5 LED	green	green	2 mm	3.14.002.072/0000
fully illuminated 5 LED	yellow	yellow	2 mm	3.14.002.073/0000
fully illuminated 5 LED	orange	yellow	2 mm	3.14.002.074/0000

Technical data see page 3 - 18

For technical data of the LED see separate page at the beginning of chapter „RF short-travel keyswitches“

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

RG 85 III - Signal indicator, without lens



Technical Data

Dimensions

Mounting grid min.	55 x 35 mm
Length	64 mm
Width	34 mm

Mechanical design

Version	according to lens
Mounting	on U-rails or single mounting
Terminals	8-pin Micro-Match® female connector
Illumination	see order block

Electrical characteristics

Operating voltage for LED	24±20% V
Input current LED	depending on LED colour 20 - 30 mA

Other specifications

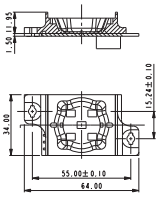
Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental restistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Degree of protection rail mounting	IP40
Degree of protection single mounting	IP65
Flammability of materials	according to UL 94 HB

Typical accessories RG 85 III - Signal indicator, without lens

Description	Photo	Order no.	Additional accessories see page
Cable, 8 wires, with socket connectors on both ends, length 2 m		5.03.772.262/0000	4 - 122
RG 85 III - Lens, square, for signal indicators		5.04.903.009/0000	4 - 122
RG 85 III - Lens, round, for signal indicators		5.04.903.010/0000	4 - 121
RG 85 III - Lens, triangular, for signal indicators		**5.04.903.011/0000**	4 - 122

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

RG 85 III - Signal indicator, without lens



Illumination	Order no.
5 LED white	3.99.400.100/2000
5 LED red	3.99.400.100/3000
5 LED yellow	3.99.400.100/4000
5 LED green	3.99.400.100/5000
5 LED blue	3.99.400.100/6000
5 LED white, 5 LED blue	3.99.400.100/7000
5 LED green, 5 LED red	3.99.400.100/8000

Technical data see page 3 - 22

Please order round, square or triangular lenses separately.

General Data

Signal lamps with integral filament lamp, neon lamp or neon glow lamp.
For mounting hole diameters from 5 to 14 mm.The mm specification in the product name indicates the appropriate mounting hole diameter of the signal lamps.

Content

Signal lamps with integrated filament lamp - 5 mm **3 - 26**
Signal lamps with integrated filament lamp - 5 mm, round lens 3 - 27

Signal lamps with integrated filament/neon lamp - 7 mm **3 - 28**
Signal lamps with integrated filament/neon lamp - 7 mm, solder terminals 3 - 29

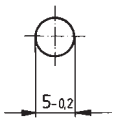
Signal lamps with integrated filament/neon lamp - 10 mm **3 - 30**
Signal lamps with integrated filament/neon lamp - 10 mm, round lens 3 - 31

Signal lamps with integrated filament/neon lamp - 10 mm **3 - 32**
Signal lamps with integrated filament/neon lamp - 10 mm, round lens 3 - 33
Signal lamps with integrated filament/neon lamp - 10 mm, square lens 3 - 34
Signal lamps with integrated filament/neon lamp - 10 mm, lens in arrow shape 3 - 35

Signal lamps with integrated filament/neon lamp - 14 mm **3 - 36**
Signal lamps with integrated neon lamp - 14 mm, round lens, 230 V 3 - 37
Signal lamps with integrated filament lamp - 14 mm, round lens, 28 V 3 - 37

Signal lamps with integrated filament lamp - 5 mm

Pict.: green



Mounting hole

Technical Data

General information

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

Dimensions

Length of collar	see order block
Width of collar	see order block
Overall height	1 mm
Mounting depth	18 mm
Mounting hole	5 mm

Mechanical design

Mounting	pressing into hole
Terminals	solder terminals
Lamp socket	no
Lamp	filament lamp

Electrical characteristics

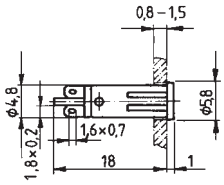
Voltage limit max.	24 V
Power limit max.	0.45 W

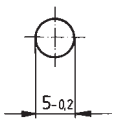
Other specifications

Operating life	10,000 h
Degree of protection from front side	IP40
Weight	0.3 g

Signal lamps with integrated filament lamp - 5 mm, round lens

Pict.: green





Mounting hole

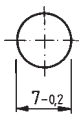
Voltage limit max.	Power limit max.	Lamp	Operating life	Colour of lens	Order no.
24 V	0.45 W	filament lamp	10000 h	transparent colourless	1.69.508.113/1002
24 V	0.45 W	filament lamp	10000 h	transparent red	1.69.508.113/1301
24 V	0.45 W	filament lamp	10000 h	transparent yellow	1.69.508.113/1402
24 V	0.45 W	filament lamp	10000 h	transparent green	1.69.508.113/1502
24 V	0.45 W	filament lamp	10000 h	transparent blue	1.69.508.113/1601

Technical data see page 3 - 26

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

Signal lamps with integrated filament/neon lamp - 7 mm

Pict.: yellow



Mounting hole

Technical Data

General information

Form of lens	round
Colour of lens	see order block
Diameter of collar	8.5

Dimensions

Overall height	5 mm
Mounting depth	see order block
Mounting hole	7 mm

Mechanical design

Mounting	pressing into hole
Terminals	see order block
Lamp socket	no
Lamp	see order block

Electrical characteristics

Voltage limit max.	see order block
Power limit max.	see order block

Other specifications

Operating life	see order block
Degree of protection from front side	IP40
Weight	0.87 g

3

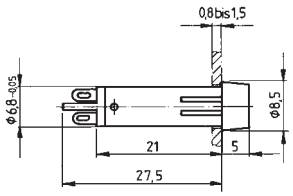
integr. Lamp

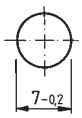
Approvals

VDE T85° (only version with neon lamp)

Signal lamps with integrated filament/neon lamp - 7 mm, solder terminals

Pict.: yellow





Mounting hole

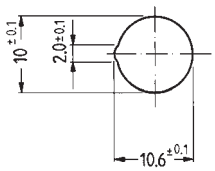
Voltage limit max.	Power limit max.	Terminals	Lamp	Operating life	Colour of lens	Order no.
24 V	0.84 W	solder terminals	filament lamp	25,000 h	transparent colourless	1.69.511.054/1002
24 V	0.84 W	solder terminals	filament lamp	25,000 h	transparent red	1.69.511.054/1301
24 V	0.84 W	solder terminals	filament lamp	25,000 h	transparent yellow	1.69.511.054/1402
24 V	0.84 W	solder terminals	filament lamp	25,000 h	transparent green	1.69.511.054/1502
230 V	-	solder terminals	neon lamp	-	transparent colourless	1.69.511.059/1002
230 V	-	solder terminals	neon lamp	-	transparent red	1.69.511.059/1301
230 V	-	solder terminals	neon lamp	-	transparent yellow	1.69.511.059/1402

Technical data see page 3 - 28

Other voltages on request.

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

Signal lamps with integrated filament/neon lamp - 10 mm



Panel cut-out

Technical Data

General information

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

Dimensions

Length of collar	see order block
Width of collar	see order block
Overall height	1.2 mm
Mounting depth	32 mm
Mounting hole	10 mm

Mechanical design

Mounting	pressing into hole
Terminals	quick connector 2.8 x 0.8 mm
Lamp socket	no
Lamp	see order block

Electrical characteristics

Voltage limit max.	see order block
Power limit max.	see order block

Other specifications

Operating life	see order block
Degree of protection from front side	IP40
Weight	2.5 g

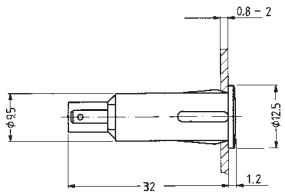
3

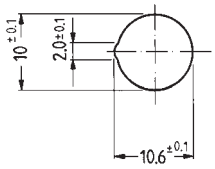
integr. Lamp

Approvals

VDE T85° (only version with neon lamp)

Signal lamps with integrated filament/neon lamp - 10 mm, round lens





Panel cut-out

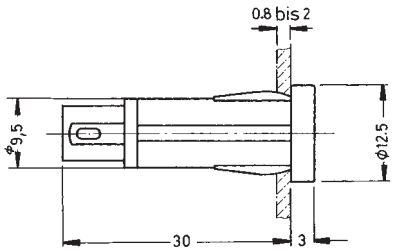
Voltage limit max.	Power limit max.	Lamp	Operating life	Colour of lens	Order no.
28 V	1.2 W	filament lamp	10,000 h	transparent colourless	1.69.527.003/1002
28 V	1.2 W	filament lamp	10,000 h	transparent red	1.69.527.003/1301
28 V	1.2 W	filament lamp	10,000 h	transparent yellow	1.69.527.003/1402
28 V	1.2 W	filament lamp	10,000 h	transparent green	1.69.527.003/1502
230 V	-	neon lamp	-	transparent colourless	1.69.527.104/1002
230 V	-	neon lamp	-	transparent red	1.69.527.104/1301
230 V	- W	neon lamp	-	transparent yellow	1.69.527.104/1402

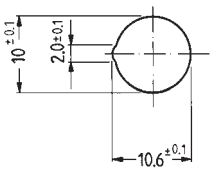
Technical data see page 3 - 30

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

Signal lamps with integrated filament/neon lamp - 10 mm

Pict.: transparent colourless





Panel cut-out

Technical Data

General information

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

Dimensions

Length of collar	see order block
Width of collar	see order block
Overall height	3 mm
Mounting depth	30 mm
Mounting hole	10 mm

Mechanical design

Mounting	pressing into hole
Terminals	see order block
Lamp socket	no
Lamp	see order block

Electrical characteristics

Voltage limit max.	see order block
Power limit max.	see order block

Other specifications

Operating life	see order block
Degree of protection from front side	IP40
Weight	2.5 g

3

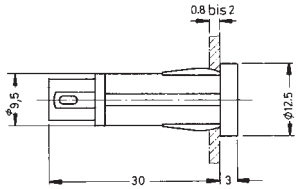
integr. Lamp

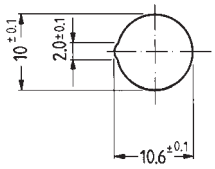
Approvals

VDE 0710
(T85° for filament
andT120° for neon
lamp versions)

Signal lamps with integrated filament/neon lamp - 10 mm, round lens

Pict.: transparent colourless





Panel cut-out

Voltage limit max.	Power limit max.	Lamp	Terminals	Operating life	Colour of lens	Order no.
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	opaque white	1.69.507.105/0214
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent colourless	1.69.507.105/1002
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent red	1.69.507.105/1301
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent yellow	1.69.507.105/1402
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent green	1.69.507.105/1502
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent blue	1.69.507.105/1601
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent colourless	1.69.507.117/1002
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent red	1.69.507.117/1301
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent yellow	1.69.507.117/1402
230 V	-	neon glow lamp	quick connector 2.8 x 0.8	-	transparent green	1.69.507.118/1502

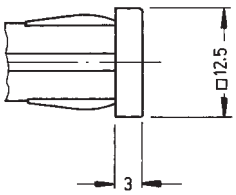
Technical data see page 3 - 32

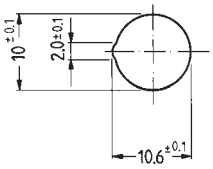
Other voltages and versions with connection cable on request.

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

Signal lamps with integrated filament/neon lamp - 10 mm, square lens

Pict.: red





Panel cut-out

Voltage limit max.	Power limit max.	Lamp	Terminals	Operating life	Colour of lens	Order no.
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	opaque white	1.69.507.125/0214
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent colourless	1.69.507.125/1002
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent red	1.69.507.125/1301
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent yellow	1.69.507.125/1402
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent green	1.69.507.125/1502
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent blue	1.69.507.125/1601
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent colourless	1.69.507.137/1002
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent red	1.69.507.137/1301
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent yellow	1.69.507.137/1402
230 V	-	neon glow lamp	quick connector 2.8 x 0.8	-	transparent green	1.69.507.138/1502

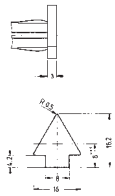
Technical data see page 3 - 32

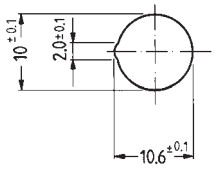
Other voltages and versions with connection cable on request.

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

Signal lamps with integrated filament/neon lamp - 10 mm, lens in arrow shape

Pict.: green





Panel cut-out

Voltage limit max.	Power limit max.	Lamp	Terminals	Operating life	Colour of lens	Order no.
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	opaque white	1.69.507.145/0214
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent colourless	1.69.507.145/1002
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent red	1.69.507.145/1301
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent yellow	1.69.507.145/1402
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent green	1.69.507.145/1502
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent blue	1.69.507.145/1601
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent colourless	1.69.507.157/1002
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent red	1.69.507.157/1301
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent yellow	1.69.507.157/1402
230 V	-	neon glow lamp	quick connector 2.8 x 0.8	-	transparent green	1.69.507.158/1502

Technical data see page 3 - 32

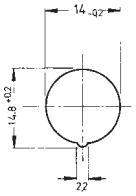
Other voltages and versions with connection cable on request.

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

Signal lamps with integrated filament/neon lamp - 14 mm

Pict.: transparent red

transparent colourless



Panel cut-out

Technical Data

General information

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

Dimensions

Dimensions of collar	see order block
Overall height	4 mm
Mounting depth	see order block
Mounting hole	14 mm

Mechanical design

Mounting	pressing into hole
Terminals	see order block
Lamp socket	no
Lamp	see order block

Electrical characteristics

Voltage limit max.	see order block
Power limit max.	1.2 W

Other specifications

Operating life	see order block
Degree of protection from front side	IP40
Weight	5 g

3

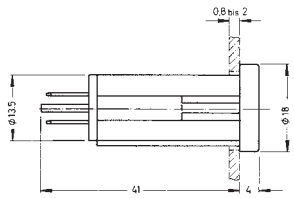
integr. Lamp

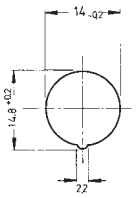
Approvals

VDE T85° (only version with neon lamp)

Signal lamps with integrated neon lamp - 14 mm, round lens, 230 V

Pict.: transparent colourless





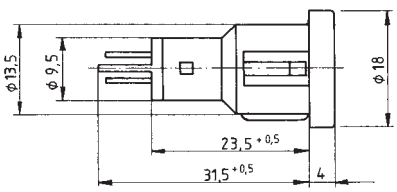
Panel cut-out

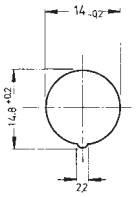
Voltage limit max.	Power limit max.	Lamp	Terminals	Operating life	Colour of lens	Order no.
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent colourless	1.02.614.502/1002
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent red	1.02.614.502/1301
230 V	-	neon lamp	quick connector 2.8 x 0.8	-	transparent yellow	1.02.614.502/1402
230 V	-	neon glow lamp	quick connector 2.8 x 0.8	-	transparent green	1.02.614.503/1502

Technical data see page 3 - 36

Signal lamps with integrated filament lamp - 14 mm, round lens, 28 V

Pict.: transparent red





Panel cut-out

Voltage limit max.	Power limit max.	Lamp	Terminals	Operating life	Colour of lens	Order no.
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent colourless	1.69.523.003/1002
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent red	1.69.523.003/1301
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent yellow	1.69.523.003/1402
28 V	1.2 W	filament lamp	quick connector 2.8 x 0.8	10,000 h	transparent green	1.69.523.003/1502

Technical data see page 3 - 36

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

Signal lamps with lamp socket

General Data

Signal lamps with lamp socket.The standard illumination is by a filament lamp; illumination with LED is available on request. The mm specification in the product name indicates the appropriate mounting hole diameter of the signal lamps.

Content

8 mm Series - Signal lamp **3 - 42**
8 mm Series - Signal lamp, round collar 3 - 43
8 mm Series - Signal lamp, square collar 3 - 43

Signal lamps with lamp socket - W 2 x 4.6d, 9.1 mm **3 - 44**
Signal lamps with lamp socket - W 2 x 4.6d, 9.1 mm, round lens 3 - 45

Signal lamps with lamp socket - T 4.6, 9.1 mm **3 - 46**
Signal lamps with lamp socket - T 4.6, 9.1 mm, round lens 3 - 47

Signal lamps with lamp socket - W 2x4.6d, 11.1 mm **3 - 48**
Signal lamps with lamp socket - W 2x4.6d, 11 mm, round lens 3 - 49

Signal lamps with lamp socket - BA 9s (MBC/MCC), 16.2 mm **3 - 50**
Signal lamps with lamp socket - BA 9s (MBC/MCC), 16.2 mm, round lens 3 - 51

Signal lamps with lamp socket - E 10 (MES), 16.2 mm **3 - 52**
Signal lamps with lamp socket - E 10 (MES), 16.2 mm, round lens 3 - 53
Signal lamps with lamp socket - E 10 (MES), 16.2 mm, round lens 3 - 54

LUMOTAST FK - Signal lamp **3 - 56**
LUMOTAST FK - Signal lamp, square collar 3 - 57
LUMOTAST FK - Signal lamp, round collar 3 - 58
LUMOTAST FK - Signal lamp, rectangular collar 3 - 58

LUMOTAST 25 - Signal lamp **3 - 60**
LUMOTAST 25 - Signal lamp, 24 V, „Click“ quick-assembly feature 3 - 61
LUMOTAST 25 - Signal lamp, 24 V, ring nut fixing 3 - 62

LUMOTAST 75 IP40 - Signal lamp with lamp socket T 4.5 **3 - 64**
LUMOTAST 75 IP40 - Signal lamp with lamp socket T 4.5, round collar, protruding lens 3 - 66
LUMOTAST 75 IP40 - Signal lamp, square collar, flush lens 3 - 66
LUMOTAST 75 IP40 - Signal lamp, rectangular collar, flush lens 3 - 67
LUMOTAST 75 IP40 - Signal lamp, square collar, protruding lens 3 - 67

LUMOTAST 75 IP65 - Signal lamp **3 - 68**
LUMOTAST 75 IP65 - Signal lamp, flush lens, square collar 3 - 70
LUMOTAST 75 IP65 - Signal lamp, protruding lens, square collar 3 - 70
LUMOTAST 75 IP65 - Signal lamp, flush lens, round collar 3 - 71
LUMOTAST 75 IP65 - Signal lamp, protruding lens, round collar 3 - 71
LUMOTAST 75 IP65 - Signal lamp, flush lens, rectangular collar 3 - 72

RAFIX 16 - Signal indicator **3 - 74**
RAFIX 16 - Signal indicator, square lens 3 - 75
RAFIX 16 - Signal indicator, square collar, flush lens 3 - 76
RAFIX 16 - Signal indicator, square collar, protruding lens 3 - 76
RAFIX 16 - Signal indicator, round lens 3 - 77
RAFIX 16 - Signal indicator, round collar, flush lens 3 - 77
RAFIX 16 - Signal indicator, round collar, protruding lens 3 - 78
RAFIX 16 - Signal indicator, square collar, alignable without gaps, flush lens 3 - 78
RAFIX 16 - Signal indicator, square collar, alignable without gaps, protruding lens 3 - 79

RAFIX 16 F - Signal indicator **3 - 80**
RAFIX 16 F - Signal indicator, flush lens, square black collar 3 - 81
RAFIX 16 F - Signal indicator, flush lens, round black collar 3 - 82
RAFIX 16 F - Signal indicator, flush lens, round metallized collar NEW 3 - 82

Signal lamps with lamp socket - BA 9s (MBC/MCC), 18.2 mm **3 - 84**
Signal lamps with lamp socket - BA 9s (MBC/MCC), 18.2 mm, round lens 3 - 85

Signal lamps with lamp socket - E 14, 22.3 mm **3 - 86**
Signal lamps with lamp socket - E 14, IP40, 22.3 mm 3 - 87
Signal lamps with lamp socket - E 14, 22.3 mm, screw-on lens, IP40 3 - 87

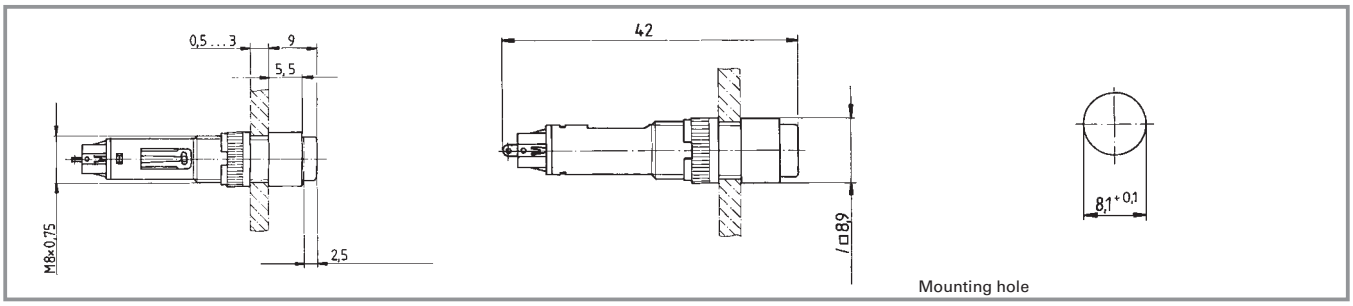
RAFIX 22 QR - Signal indicator **3 - 88**
RAFIX 22 QR - Signal indicator, flat, round collar, for legend inserts 3 - 89
RAFIX 22 QR - Signal indicator, high, round collar NEW 3 - 90
RAFIX 22 QR - Signal indicator, flat, square collar, for legend inserts 3 - 90
RAFIX 22 QR - Signal indicator, high, square collar NEW 3 - 91

RAFIX 22 FS - Signal indicator **3 - 92**
RAFIX 22 FS - Signal indicator, round collar, flat 3 - 93
RAFIX 22 FS - Signal indicator, round collar, high NEW 3 - 93
RAFIX 22 FS - Signal indicator, square collar, flat 3 - 94
RAFIX 22 FS - Signal indicator, round collar, high NEW 3 - 94

Signal lamps with lamp socket - E 14, 30.5 mm 3 - 96
Signal lamps with lamp socket - E 14, IP40, 30.5 mm 3 - 97

Signal lamps with lamp socket - BA 15d, 30.5 mm **3 - 98**
Signal lamps with lamp socket - BA 15d, IP40, 30.5 mm 3 - 99

8 mm Series - Signal lamp



Technical Data

General information

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

Dimensions

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

Mechanical design

Mounting	ring nut
Terminals	solder terminals
Lamp socket	Bi-Pin T 1
Lamp	filament lamp / LED

Electrical characteristics

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

Other specifications

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

3

With Socket

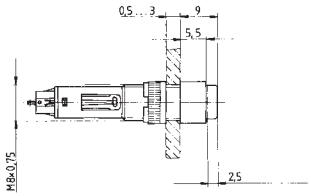
Typical accessories 8 mm Series - Signal lamp

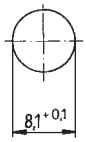
Description	Photo	Order no.	Additional accessories see page
Filament lamp, Bi-Pin T 1 base, 24 - 28 V		**1.90.180.473/0000**	5 - 5
LED Bi-Pin T 1, red, 3 V		**1.90.691.026/0000**	5 - 15
LED Bi-Pin T 1, green, 3 V		**1.90.691.027/0000**	5 - 15
LED Bi-Pin T 1, yellow, 3 V		**1.90.691.028/0000**	5 - 15
Fixing spanner M 8		**5.58.002.027/7705**	5 - 21

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

8 mm Series - Signal lamp, round collar

Pict.: with colourless lens





Mounting hole

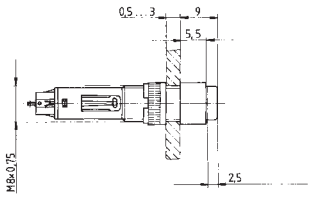
Voltage limit max.	Power limit max.	Lamp socket	Order no. without lens	Note
24 V	0.4 W	Bi-Pin T 1	1.65.120.001/0000	Please include the desired lens in your order.

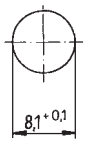
Technical data see page 3 - 42

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

8 mm Series - Signal lamp, square collar

Pict.: with green lens





Mounting hole

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

Technical data see page 3 - 42

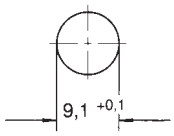
Lenses:
Lens, transparent colourless: 5.05.510.360/1002
Lens, transparent red: 5.05.510.360/1303
Lens, transparent yellow: 5.05.510.360/1402
Lens, transparent green: 5.05.510.360/1502

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

RAFI
SOLUTIONS WITH PASSION

Signal lamps with lamp socket - W 2 x 4.6d, 9.1 mm

Pict.: red



Mounting hole

Technical Data

General information

Form of lens	round
Colour of lens	see order block
Diameter of collar	11 mm

Dimensions

Overall height	7 mm
Mounting depth	25.5 mm
Mounting hole	9.10 mm

Mechanical design

Mounting	ring nut
Terminals	solder/quick connect terminals 2.8 x 0.8 mm
Lamp socket	W 2 x 4.6d
Lamp	filament lamp

Electrical characteristics

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

Other specifications

Degree of protection from front side	IP40
Weight	1 g

3

Typical accessories Signal lamps with lamp socket - W 2 x 4.6d, 9.1 mm

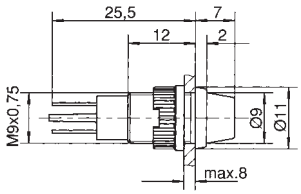
With Socket

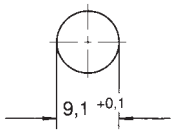
Description	Photo	Order no.	Additional accessories see page
Filament lamp, W 2 x 4.6d base, 24 - 30 V		**1.90.120.005/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 60 V		**1.90.120.009/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 48 V		**1.90.120.010/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 24 V		**1.90.120.011/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 12 V		**1.90.120.012/0000**	5 - 4
Fixing spanner M 9, M 10		**5.58.002.025/0105**	5 - 21

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

Signal lamps with lamp socket - W 2 x 4.6d, 9.1 mm, round lens

Pict.: red





Mounting hole

Voltage limit max.	Power limit max.	Lamp	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
35 V	1.2 W	filament lamp	transparent colourless	**1.66.001.011/1002**	1.66.001.026/0000	5.49.255.002/1002
35 V	1.2 W	filament lamp	transparent red	**1.66.001.011/1301**	1.66.001.026/0000	5.49.255.002/1301
35 V	1.2 W	filament lamp	transparent yellow	**1.66.001.011/1402**	1.66.001.026/0000	5.49.255.002/1402
35 V	1.2 W	filament lamp	transparent green	**1.66.001.011/1502**	1.66.001.026/0000	5.49.255.002/1502
35 V	1.2 W	filament lamp	transparent blue	**1.66.001.011/1601**	1.66.001.026/0000	5.49.255.002/1601

Technical data see page 3 - 44

Please order luminous elements separately.

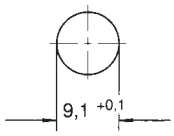
Stock items are marked by **bold printed order numbers.**

RAFI
SOLUTIONS WITH PASSION

Signal lamps with lamp socket - T 4.6, 9.1 mm

Pict.: red

transparent colourless



Mounting hole

Technical Data

General information

Form of lens	see order block
Colour of lens	see order block
Diameter of collar	11 mm

Dimensions

Overall height	see order block
Mounting depth	30.5 mm
Mounting hole	9.1 mm

Mechanical design

Mounting	ring nut
Terminals	solder terminals
Lamp socket	T 4.6
Lamp	filament lamp

Electrical characteristics

Voltage limit max.	35 V
Power limit max.	1 W

Other specifications

Degree of protection from front side	IP40
Weight	1 g

3

Typical accessories Signal lamps with lamp socket - T 4.6, 9.1 mm

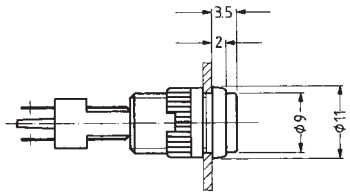
With Socket

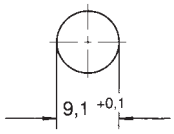
Description	Photo	Order no.	Additional accessories see page
Filament lamp, T 4.6 base, 12 V		**1.90.100.012/0000**	5 - 6
Filament lamp, T 4.6 base, 24 V		**1.90.100.013/0000**	5 - 6
Fixing spanner M 9, M 10		**5.58.002.025/0105**	5 - 21

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

Signal lamps with lamp socket - T 4.6, 9.1 mm, round lens

Pict.: red





Mounting hole

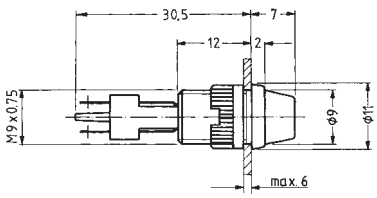
Voltage limit max.	Lamp socket	Lamp	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
35 V	T 4.6	filament lamp	transparent colourless	**1.02.157.001/1002**	1.02.157.021/0000	5.49.255.001/1002
35 V	T 4.6	filament lamp	transparent red	**1.02.157.001/1307**	1.02.157.021/0000	5.49.255.001/1307
35 V	T 4.6	filament lamp	transparent yellow	**1.02.157.001/1403**	1.02.157.021/0000	5.49.255.001/1403
35 V	T 4.6	filament lamp	transparent green	**1.02.157.001/1510**	1.02.157.021/0000	5.49.255.001/1510

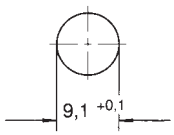
Technical data see page 3 - 46

Please order luminous elements separately.

Signal lamps with lamp socket - T 4.6, 9.1 mm, round lens

Pict.: transparent colourless





Mounting hole

Voltage limit max.	Lamp socket	Lamp	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
35 V	T 4.6	filament lamp	transparent colourless	**1.02.157.011/1002**	1.02.157.021/0000	5.49.255.002/1002
35 V	T 4.6	filament lamp	transparent red	**1.02.157.011/1301**	1.02.157.021/0000	5.49.255.002/1301
35 V	T 4.6	filament lamp	transparent yellow	**1.02.157.011/1402**	1.02.157.021/0000	5.49.255.002/1402
35 V	T 4.6	filament lamp	transparent green	**1.02.157.011/1502**	1.02.157.021/0000	5.49.255.002/1502

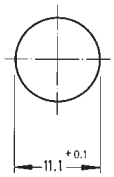
Technical data see page 3 - 46

Please order luminous elements separately.

RAFI
SOLUTIONS WITH PASSION

Signal lamps with lamp socket - W 2x4.6d, 11.1 mm

Pict.: with red lens



Mounting hole

Technical Data

General information

Form of lens	round
Colour of lens	see order block
Diameter of collar	11

Dimensions

Overall height	8.5 mm
Mounting depth	28.5 mm
Mounting hole	11.10 mm

Mechanical design

Mounting	ring nut
Terminals	quick connector A 2.8 x 0.5
Lamp socket	W 2 x 4.6 d
Lamp	filament lamp

Electrical characteristics

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

Other specifications

Degree of protection from front side	IP40
Weight	1.4 g

3

Typical accessories Signal lamps with lamp socket - W 2x4.6d, 11.1 mm

With Socket

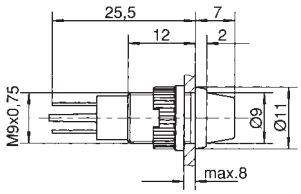
Description	Photo	Order no.	Additional accessories see page
Filament lamp, W 2 x 4.6d base, 24 - 30 V		**1.90.120.005/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 60 V		**1.90.120.009/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 48 V		**1.90.120.010/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 24 V		**1.90.120.011/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 12 V		**1.90.120.012/0000**	5 - 4
Protective sleeve made of Buna N (NBR), 8 x 30		**5.52.011.023/0100**	
Fixing spanner M 11, M 13		**5.58.002.026/0105**	5 - 21

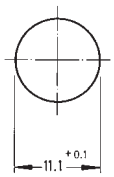
Please include the desired lens in your order.

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

Signal lamps with lamp socket - W 2x4.6d, 11 mm, round lens

Pict.: with red lens





Mounting hole

Voltage limit max.	Power limit max.	Lamp socket	Colour of lens	Order no. without lens	Note
35 V	1.2 W	W 2 x 4.6 d	-	1.66.003.091/0000	Please include the desired lens in your order.

Technical data see page 3 - 48

Lenses:
Lens transparent colourless: 5.49.255.003/1002
Lens transparent red: 5.49.255.003/1301
Lens transparent yellow: 5.49.255.003/1402
Lens transparent green: 5.49.255.003/1502

Please order luminous elements separately.

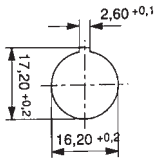
Stock items are marked by **bold printed order numbers.**

RAFI
SOLUTIONS WITH PASSION

Signal lamps with lamp socket - BA 9s (MBC/MCC), 16.2 mm

Pict.: transparent colourless

yellow



Panel cut-out

Technical Data

General information

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

Dimensions

Overall height	see order block
Mounting depth	45.8 mm
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Terminals	solder/quick connector 6.3x0.8 / 2x2.8x0.8mm
Lamp socket	BA 9 s
Lamp	filament lamp

Electrical characteristics

Voltage limit max.	250 V
Power limit max.	2 W

Other specifications

Degree of protection from front side	see order block
Weight	10 g

3

With Socket

Approvals

VDE 0710

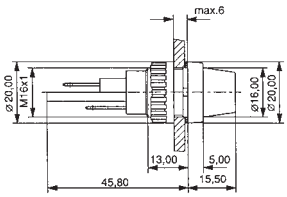
Typical accessories Signal lamps with lamp socket - BA 9s (MBC/MCC), 16.2 mm

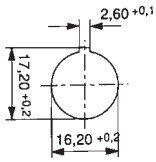
Description	Photo	Order no.	Additional accessories see page
Protective sleeve for terminals made of Buna N (NBR)		**5.52.011.027/0100**	
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

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

Signal lamps with lamp socket - BA 9s (MBC/MCC), 16.2 mm, round lens

Pict.: transparent colourless





Panel cut-out

Voltage limit max.	Power limit max.	Degree of protection from front side	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
250 V	2 W	IP40	transparent colourless	**1.63.004.001/1002**	1.63.004.091/0000	5.49.205.013/1002
250 V	2 W	IP40	transparent red	**1.63.004.001/1301**	1.63.004.091/0000	5.49.205.013/1301
250 V	2 W	IP40	transparent yellow	**1.63.004.001/1402**	1.63.004.091/0000	5.49.205.013/1402
250 V	2 W	IP40	transparent green	**1.63.004.001/1502**	1.63.004.091/0000	5.49.205.013/1502

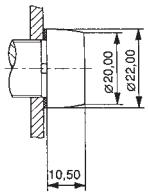
Technical data see page 3 - 50

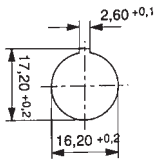
Accessoires:
Filament lamp, BA 9s base (MBC/MCC), 12 - 15 V: **1.90.060.132/0000**
Filament lamp, BA 9s base (MBC/MCC), 24 - 30 V: **1.90.060.133/0000**
Filament lamp, BA 9s base (MBC/MCC), 110 - 130 V: **1.90.060.137/0000**
Neon lamp BA 9s (MBC/MCC), 220 V AC: **1.90.560.102/0000**

Technical data lamps see chapter 5

Signal lamps with lamp socket - BA 9s (MBC/MCC), 16.2 mm, round lens

Pict.: yellow





Panel cut-out

Voltage limit max.	Power limit max.	Degree of protection from front side	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
250 V	2 W	IP65	transparent colourless	**1.63.004.010/1002**	1.63.004.100/0000	5.49.227.007/1002
250 V	2 W	IP65	transparent red	**1.63.004.010/1301**	1.63.004.100/0000	5.49.227.007/1301
250 V	2 W	IP65	transparent yellow	**1.63.004.010/1402**	1.63.004.100/0000	5.49.227.007/1402
250 V	2 W	IP65	transparent green	**1.63.004.010/1502**	1.63.004.100/0000	5.49.227.007/1502

Technical data see page 3 - 50

Accessoires:
Filament lamp, BA 9s base (MBC/MCC), 12 - 15 V: **1.90.060.003/0000**
Filament lamp, BA 9s base (MBC/MCC), 24 - 30 V: **1.90.060.014/0000**
Neon lamp BA 9s (MBC/MCC), 220 V AC: **1.90.560.002/0000**

Technical data lamps see chapter 5

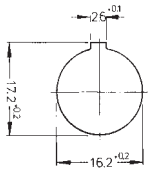
Stock items are marked by **bold printed order numbers.**

RAFI
SOLUTIONS WITH PASSION

Signal lamps with lamp socket - E 10 (MES), 16.2 mm

Pict.: red

Screw terminals, yellow



Panel cut-out

Technical Data

General information

Form of lens	round
Colour of lens	see order block
Diameter of collar	20 mm

Dimensions

Overall height	see order block
Mounting depth	see order block
Mounting hole	16.2 mm

Mechanical design

Mounting	ring nut
Terminals	see order block
Lamp socket	E 10
Lamp	filament lamp

Electrical characteristics

Voltage limit max.	250 V
Power limit max.	2 W

Other specifications

Degree of protection from front side	IP40
Weight	11 g

Approvals

VDE 0710

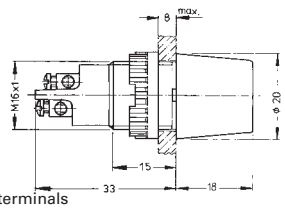
Typical accessories Signal lamps with lamp socket - E 10 (MES), 16.2 mm

Description	Photo	Order no.	Additional accessories see page
Filament lamp, E 10 (MES) base, 24 - 30 V		**1.90.010.033/0000**	5 - 10
Filament lamp, E 10 (MES) base, 110 - 130 V		**1.90.010.037/0000**	5 - 10
Protective sleeve for terminals		**5.52.011.026/0100**	
Fixing spanner M 15, M 16		5.58.002.019/0105	5 - 21

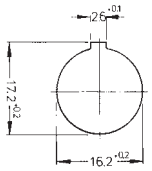
Stock items are marked by **bold printed order numbers.**

Signal lamps with lamp socket - E 10 (MES), 16.2 mm, round lens

Pict.: Screw terminals, yellow



screw terminals



Panel cut-out

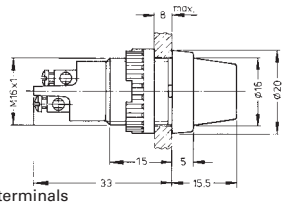
Voltage limit max.	Power limit max.	Terminals	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
250 V	2 W	screw terminals nickel-plated	transparent colourless	**1.60.502.001/1002**	1.60.502.099/0000	5.49.227.004/1002
250 V	2 W	screw terminals nickel-plated	transparent red	**1.60.502.001/1301**	1.60.502.099/0000	5.49.227.004/1301
250 V	2 W	screw terminals nickel-plated	transparent yellow	**1.60.502.001/1402**	1.60.502.099/0000	5.49.227.004/1402
250 V	2 W	screw terminals nickel-plated	transparent green	**1.60.502.001/1502**	1.60.502.099/0000	5.49.227.004/1502
250 V	2 W	screw terminals nickel-plated	transparent blue	**1.60.502.001/1601**	1.60.502.099/0000	5.49.227.004/1601

Technical data see page 3 - 52

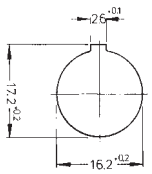
3

Signal lamps with lamp socket - E 10 (MES), 16.2 mm, round lens

Pict.: red



screw terminals



Panel cut-out

Voltage limit max.	Power limit max.	Terminals	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
250 V	2 W	screw terminals nickel-plated	transparent colourless	**1.60.502.102/1002**	1.60.502.091/0000	5.49.205.013/1002
250 V	2 W	screw terminals nickel-plated	transparent red	**1.60.502.102/1301**	1.60.502.091/0000	5.49.205.013/1301
250 V	2 W	screw terminals nickel-plated	transparent yellow	**1.60.502.102/1402**	1.60.502.091/0000	5.49.205.013/1402
250 V	2 W	screw terminals nickel-plated	transparent green	**1.60.502.102/1502**	1.60.502.091/0000	5.49.205.013/1502
250 V	2 W	screw terminals nickel-plated	transparent blue	**1.60.502.102/1601**	1.60.502.091/0000	5.49.205.013/1601

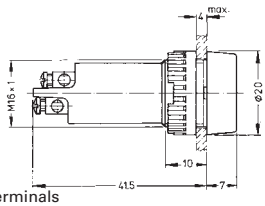
Technical data see page 3 - 52

Versions with 2.8 x 0.8 quick-connect terminals available on request.

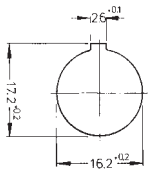
Stock items are marked by **bold printed order numbers.**

Signal lamps with lamp socket - E 10 (MES), 16.2 mm, round lens

Pict.: Screw terminals, yellow



screw terminals



Panel cut-out

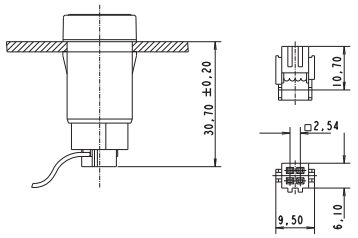
Voltage limit max.	Power limit max.	Terminals	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
250 V	2 W	screw terminals nickel-plated	transparent colourless	**1.60.502.002/1002**	1.60.502.098/0000	5.49.227.005/1002
250 V	2 W	screw terminals nickel-plated	transparent red	**1.60.502.002/1301**	1.60.502.098/0000	5.49.227.005/1301
250 V	2 W	screw terminals nickel-plated	transparent yellow	**1.60.502.002/1402**	1.60.502.098/0000	5.49.227.005/1402
250 V	2 W	screw terminals nickel-plated	transparent green	**1.60.502.002/1502**	1.60.502.098/0000	5.49.227.005/1502
250 V	2 W	screw terminals nickel-plated	transparent blue	**1.60.502.002/1601**	1.60.502.098/0000	5.49.227.005/1601

Technical data see page 3 - 52

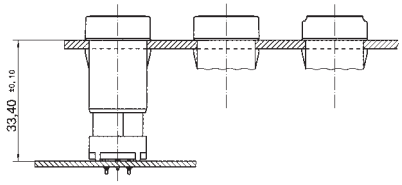
Stock items are marked by **bold printed order numbers.**

RAFI
SOLUTIONS WITH PASSION

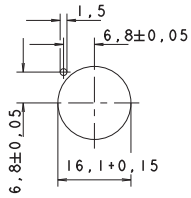
LUMOTAST FK - Signal lamp



Pict.: with socket connector



with plug-in socket for PCB



Panel cut-out

Technical Data

General information

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

Dimensions

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

Mechanical design

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

Electrical characteristics

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

Other specifications

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

3

With Socket

Typical accessories LUMOTAST FK - Signal lamp

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

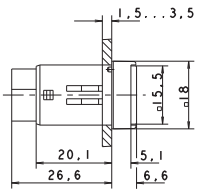
Stock items are marked by **bold printed order numbers.**

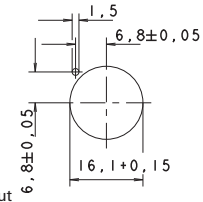
Typical accessories LUMOTAST FK - Signal lamp

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

LUMOTAST FK - Signal lamp, square collar

Pict.: with red lens





Panel cut-out

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

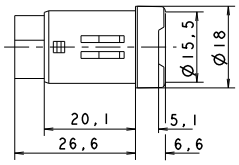
Technical data see page 3 - 56

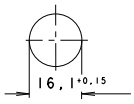
Lenses:
Lens, square, transparent colourless: **5.49.075.015/1002**
Lens, square, transparent red: **5.49.075.015/1306**
Lens, square, transparent yellow: **5.49.075.015/1403**
Lens, square, transparent green: **5.49.075.015/1505**
Lens, square, transparent blue: **5.49.075.015/1607**

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

LUMOTAST FK - Signal lamp, round collar

Pict.: with yellow lens





Panel cut-out

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

Technical data see page 3 - 56

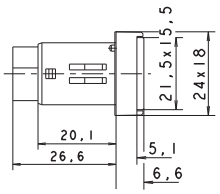
Lenses:
Lens, round, transparent colourless: **5.49.075.016/1002**
Lens, round, transparent red: **5.49.075.016/1306**
Lens, round, transparent yellow: **5.49.075.016/1403**
Lens, round, transparent green: **5.49.075.016/1505**
Lens, round, transparent blue: **5.49.075.016/1607**

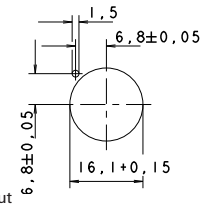
Do not press in lens in disassembled condition.
A notch on the lamp socket identifies the cathode side.

3

LUMOTAST FK - Signal lamp, rectangular collar

Pict.: with blue lens





Panel cut-out

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

Technical data see page 3 - 56

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.

With Socket

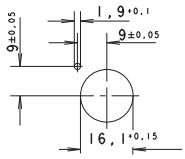
Stock items are marked by **bold printed order numbers.**

RAFI
SOLUTIONS WITH PASSION

LUMOTAST 25 - Signal lamp

Pict.: with red lens

with blue lens



Panel cut-out

Technical Data

General information

Form of lens	square
Colour of lens	see order block

Dimensions

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

Mechanical design

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

Electrical characteristics

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

Other specifications

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

3

With Socket

Typical accessories LUMOTAST 25 - Signal lamp

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

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

Typical accessories LUMOTAST 25 - Signal lamp

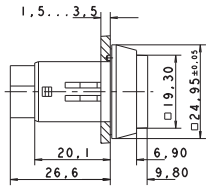
Description	Photo	Order no.	Additional accessories see page
LED Bi-PinT 1, green, 3 V		**1.90.691.027/0000**	5 - 15
LED Bi-PinT 1, yellow, 3 V		**1.90.691.028/0000**	5 - 15
Plug-in socket for PCB		**5.00.645.036/0000**	5 - 23
Cable (flat ribbon cable 10 cm with socket connector and male quick connector,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

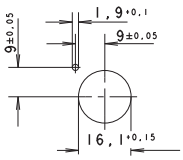
3

With Socket

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

Pict.: with red lens





Panel cut-out

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

Technical data see page 3 - 60

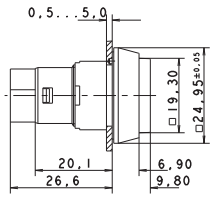
Lenses:
Lens, square, transparent colourless: 5.49.077.014/1002
Lens, square, transparent red: 5.49.077.014/1306
Lens, square, transparent yellow: 5.49.077.014/1403
Lens, square, transparent green: 5.49.077.014/1505
Lens, square, transparent blue: 5.49.077.014/1607

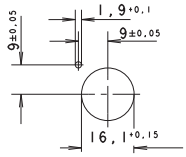
Do not press in lens in disassembled condition. Note when using a LED: A notch on the lamp identifies the cathode side.

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

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

Pict.: with blue lens





Panel cut-out

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

Technical data see page 3 - 60

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

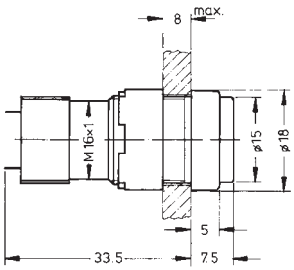
Do not press in lens in disassembled condition. Note when using LED: A notch on the lamp socket identifies the cathode side.

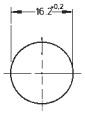
Stock items are marked by **bold printed order numbers.**

RAFI
SOLUTIONS WITH PASSION

LUMOTAST 75 IP40 - Signal lamp with lamp socket T 4.5

Pict.: with blue lens





Mounting hole

Technical Data

General information

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

Dimensions

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

Mechanical design

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

Electrical characteristics

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

Other specifications

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

3

With Socket

Approvals

IEC 61058 UL 508 C22.2 No. 14-M91

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

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

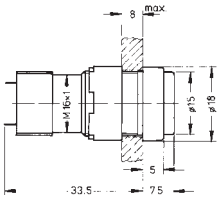
Typical accessories LUMOTAST 75 IP40 - Signal lamp with lamp socket T 4.5

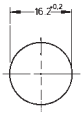
Description	Photo	Order no.	Additional accessories see page
LED T 4.5 superbright, green, 24 V		**1.90.690.332/0000**	5 - 16
LED T 4.5 superbright, yellow, 24 V		**1.90.690.333/0000**	5 - 16
LED T 4.5 superbright, blue, 24 V		**1.90.690.334/0000**	5 - 16
LED T 4.5 superbright, white, 24 V		**1.90.690.335/0000**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

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

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

Pict.: with blue lens





Mounting hole

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

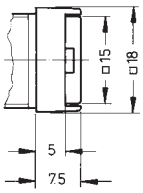
Technical data see page 3 - 64

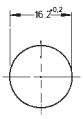
Lenses:
Lens, round, transparent colourless, for filament lamp or LED: **5.49.257.011/1002**
Lens, round, transparent red, for LED: **5.49.257.011/1301**
Lens, round, transparent red, for filament lamp: **5.49.257.011/1303**
Lens, round, transparent yellow, for filament lamp or LED: **5.49.257.011/1402**
Lens, round, transparent green, for filament lamp: **5.49.257.011/1502**
Lens, round, transparent green, for LED: **5.49.257.011/1503**
Lens, round, transparent blue, for filament lamp: **5.49.257.011/1601**

Accessoires:
Diffuser, round, for filament lamp, without legend: **5.72.050.000/0202**
Diffuser, round, for LED, without legend: **5.72.050.000/0214**

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

Pict.: with yellow lens





Mounting hole

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

Technical data see page 3 - 64

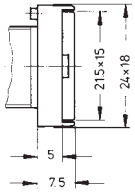
Lenses:
Lens, rectangular, transparent colourless, for filament lamp or LED: **5.49.275.036/1002**
Lens, rectangular, transparent red, for LED: **5.49.275.036/1301**
Lens, rectangular, transparent red, for filament lamp: **5.49.275.036/1303**
Lens, rectangular, transparent yellow, for filament lamp or 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**

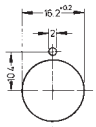
Accessoires:
Diffuser, square, for filament lamp, without legend: **5.73.013.000/0202**
Diffuser, square, for LED, without legend: **5.73.013.000/0214**

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

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

Pict.: with green lens





Panel cut-out

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

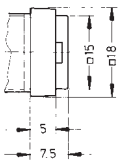
Technical data see page 3 - 64

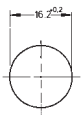
Lenses:
Lens, rectangular, transparent colourless, for filament lamp or LED: **5.49.275.032/1002**
Lens, rectangular, transparent red, for LED: **5.49.275.032/1301**
Lens, rectangular, transparent red, for filament lamp: **5.49.275.032/1303**
Lens, rectangular, transparent yellow, for filament lamp or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

Accessoires:
Diffuser, rectangular, for filament lamp, without legend: **5.73.012.000/0202**
Diffuser, rectangular, for LED, without legend: **5.73.012.000/0214**

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

Pict.: with red lens





Mounting hole

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

Technical data see page 3 - 64

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**

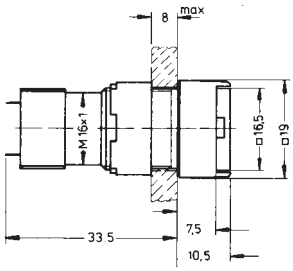
Accessoires:
Diffuser, square, for filament lamp, without legend: **5.73.013.000/0202**
Diffuser, square, for LED, without legend: **5.73.013.000/0214**

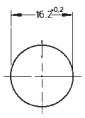
Stock items are marked by **bold printed order numbers.**

RAFI
SOLUTIONS WITH PASSION

LUMOTAST 75 IP65 - Signal lamp

Pict.: with red lens





Mounting hole

Technical Data

General information

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

Dimensions

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

Mechanical design

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

Electrical characteristics

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

Other specifications

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

3

With Socket

Approvals

IEC 61058 UL 508 C22.2 No. 14-M91

Typical accessories LUMOTAST 75 IP65 - Signal lamp

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

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

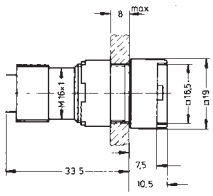
Typical accessories LUMOTAST 75 IP65 - Signal lamp

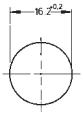
Description	Photo	Order no.	Additional accessories see page
LEDT 4.5 superbright, yellow, 24 V		**1.90.690.333/0000**	5 - 16
LEDT 4.5 superbright, blue, 24 V		**1.90.690.334/0000**	5 - 16
LEDT 4.5 superbright, white, 24 V		**1.90.690.335/0000**	5 - 16
LEDT 4.5, red, 2-3 V (use external resistor)		**1.90.692.001/0000**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

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

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

Pict.: with red lens





Mounting hole

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

Technical data see page 3 - 68

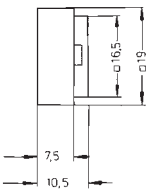
Lenses:
Lens, square, transparent colourless, for filament lamp or LED: **5.49.277.052/1002**
Lens, square, transparent red, for LED: **5.49.277.052/1301**
Lens, square, transparent red, for filament lamp: **5.49.277.052/1303**
Lens, square, transparent yellow, for filament lamp or LED: **5.49.277.052/1402**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

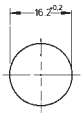
Accessoires:
Legend insert, square, without legend: **5.70.629.000/2000**

For assembly, press the lens as far as possible.

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

Pict.: with green lens





Mounting hole

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

Technical data see page 3 - 68

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

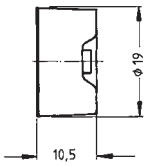
Accessoires:
Legend insert, square, without legend: **5.70.629.000/2000**

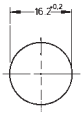
For assembly, press the lens as far as possible.

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

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

Pict.: with yellow lens





Mounting hole

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

Technical data see page 3 - 68

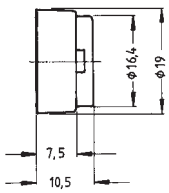
Lenses:
Lens, round, transparent colourless, for filament lamp or LED: **5.49.259.013/1002**
Lens, round, transparent red, for LED: **5.49.259.013/1301**
Lens, round, transparent red, for filament lamp: **5.49.259.013/1303**
Lens, round, transparent yellow, for filament lamp or LED: **5.49.259.013/1402**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

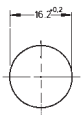
Accessoires:
Legend insert, round, without legend: **5.70.059.000/2000**

For assembly, press the lens as far as possible.

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

Pict.: with blue lens





Mounting hole

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

Technical data see page 3 - 68

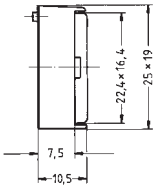
Lenses:
Lens, round, transparent colourless, for filament lamp or LED: **5.49.259.013/1002**
Lens, round, transparent red, for LED: **5.49.259.013/1301**
Lens, round, transparent red, for filament lamp: **5.49.259.013/1303**
Lens, round, transparent yellow, for filament lamp or LED: **5.49.259.013/1402**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

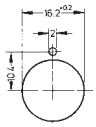
Accessoires:
Legend insert, round, without legend: **5.70.059.000/2000**

For assembly, press the lens as far as possible.

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

Pict.: with colourless lens





Panel cut-out

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

Technical data see page 3 - 68

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

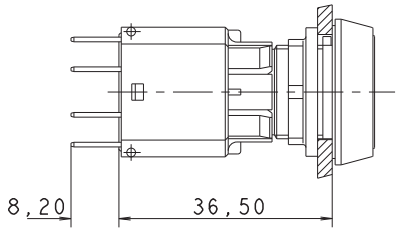
Accessoires:
Legend insert, rectangular without legend: 5.70.630.000/2000

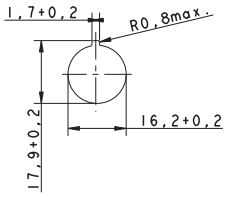
For assembly, press the lens as far as possible.

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

RAFIX 16 - Signal indicator

Pict.: transparent yellow





Panel cut-out

Technical Data

General information

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

Dimensions

Collar dimensions	see order block
Overall height	see order block
Mounting depth	30.5 / 44.7 mm
Mounting hole	16.2 mm
Key grid	25 x 25 mm

Mechanical design

Mounting	ring nut

Other specifications

Degree of protection from front side	IP65
Operation temperature min.	-25 °C
Ambient temp. operating max. without lamp /LED	+70 °C
Ambient temp. operating max. with lamp /LED	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Environmental restistance	acc. to IEC 60068-2 -14, -30, -33 and -78

Approvals

IEC 61058

C22.2 No. 14-M91

Typical accessories RAFIX 16 - Signal indicator

Description	Photo	Order no.	Additional accessories see page
RAFIX 16 - Lamp socket W 2 x 4.6 d, quick-connect terminals		**1.71.212.001/0000**	2 - 91
RAFIX 16 - Lamp socket W 2 x 4.6 d, quick-connect terminals		**1.71.212.011/0000**	2 - 91
LED W 2 x 4.6d superbright, white, 24 V		**1.90.690.365/0000**	5 - 14
Disassembly tool for LUMOTAST 25, RAFIX 16		**5.05.800.042/0000**	2 - 94
Label holder, flush, for square collar		**5.07.620.004/0000**	2 - 96

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

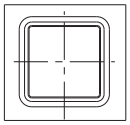
Typical accessories RAFIX 16 - Signal indicator

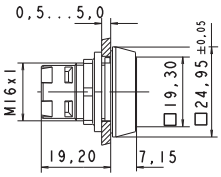
Description	Photo	Order no.	Additional accessories see page
Fixing spanner for hexagon nut		**5.58.002.034/0000**	2 - 95

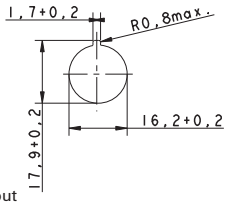
For suitable LEDs and filament lamps, refer to the chapter „RAFIX 16 lamp sockets"; for additional accessories, refer to the chapter „RAFIX 16 special accessories".

RAFIX 16 - Signal indicator, square lens

Pict.: transparent green







Panel cut-out

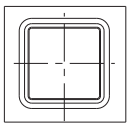
Form of lens	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
lens square	transparent colourless	**1.65.124.001/1002**	1.65.124.101/0000	5.49.263.006/1002
lens square	transparent red	**1.65.124.001/1306**	1.65.124.101/0000	5.49.263.006/1306
lens square	transparent yellow	**1.65.124.001/1403**	1.65.124.101/0000	5.49.263.006/1403
lens square	transparent green	**1.65.124.001/1505**	1.65.124.101/0000	5.49.263.006/1505
lens square	transparent blue	**1.65.124.001/1607**	1.65.124.101/0000	5.49.263.006/1607

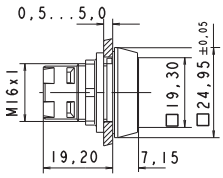
Technical data see page 3 - 74

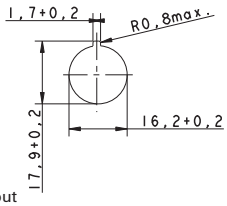
Legending can only be made externally on a label holder.

RAFIX 16 - Signal indicator, square collar, flush lens

Pict.: transparent colourless







Panel cut-out

Form of lens	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
flat lens	transparent colourless	1.65.124.301/1002	1.65.124.401/0000	5.49.077.011/1002
flat lens	transparent red	1.65.124.301/1306	1.65.124.401/0000	5.49.077.011/1306
flat lens	transparent yellow	1.65.124.301/1403	1.65.124.401/0000	5.49.077.011/1403
flat lens	transparent green	1.65.124.301/1505	1.65.124.401/0000	5.49.077.011/1505
flat lens	transparent blue	1.65.124.301/1607	1.65.124.401/0000	5.49.077.011/1607

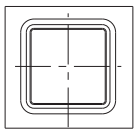
Technical data see page 3 - 74

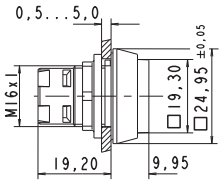
Accessoires:
Legend insert, blank, use only for transparent lenses: 5.70.635.000/2000

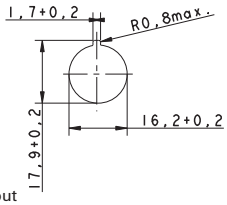
3

RAFIX 16 - Signal indicator, square collar, protruding lens

Pict.: transparent red







Panel cut-out

Form of lens	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
protruding lens	transparent colourless	1.65.124.351/1002	1.65.124.451/0000	5.49.077.012/1002
protruding lens	transparent red	1.65.124.351/1306	1.65.124.451/0000	5.49.077.012/1306
protruding lens	transparent yellow	1.65.124.351/1403	1.65.124.451/0000	5.49.077.012/1403
protruding lens	transparent green	1.65.124.351/1505	1.65.124.451/0000	5.49.077.012/1505
protruding lens	transparent blue	1.65.124.351/1607	1.65.124.451/0000	5.49.077.012/1607

Technical data see page 3 - 74

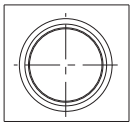
Accessoires:
Legend insert, blank, use only for transparent lenses: 5.70.635.000/2000

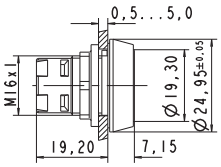
With Socket

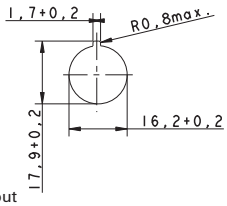
Stock items are marked by **bold printed order numbers.**

RAFIX 16 - Signal indicator, round lens

Pict.: transparent yellow







Panel cut-out

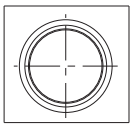
Form of lens	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
lens round	transparent colourless	**1.65.124.021/1002**	1.65.124.101/0000	5.49.263.007/1002
lens round	transparent red	**1.65.124.021/1306**	1.65.124.101/0000	5.49.263.007/1306
lens round	transparent yellow	**1.65.124.021/1403**	1.65.124.101/0000	5.49.263.007/1403
lens round	transparent green	**1.65.124.021/1505**	1.65.124.101/0000	5.49.263.007/1505

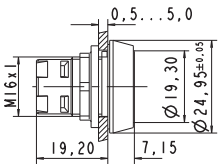
Technical data see page 3 - 74

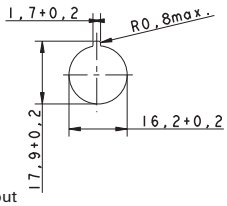
Legending can only be made externally on a label holder.

RAFIX 16 - Signal indicator, round collar, flush lens

Pict.: transparent yellow







Panel cut-out

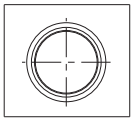
Form of lens	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
flat lens	transparent colourless	1.65.124.321/1002	1.65.124.421/0000	5.49.259.017/1002
flat lens	transparent red	1.65.124.321/1306	1.65.124.421/0000	5.49.259.017/1306
flat lens	transparent yellow	1.65.124.321/1403	1.65.124.421/0000	5.49.259.017/1403
flat lens	transparent green	1.65.124.321/1505	1.65.124.421/0000	5.49.259.017/1505
flat lens	transparent blue	1.65.124.321/1607	1.65.124.421/0000	5.49.259.017/1607

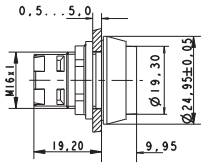
Technical data see page 3 - 74

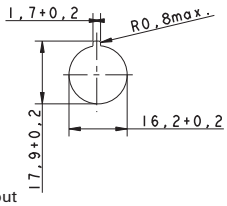
Accessoires:
Legend insert, blank, use only for transparent lenses: **5.70.637.000/2000**

RAFIX 16 - Signal indicator, round collar, protruding lens

Pict.: transparent yellow







Panel cut-out

Form of lens	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
protruding lens	transparent colourless	1.65.124.371/1002	1.65.124.471/0000	5.49.259.018/1002
protruding lens	transparent red	1.65.124.371/1306	1.65.124.471/0000	5.49.259.018/1306
protruding lens	transparent yellow	1.65.124.371/1403	1.65.124.471/0000	5.49.259.018/1403
protruding lens	transparent green	1.65.124.371/1505	1.65.124.471/0000	5.49.259.018/1505
protruding lens	transparent blue	1.65.124.371/1607	1.65.124.471/0000	5.49.259.018/1607

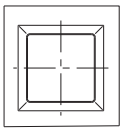
Technical data see page 3 - 74

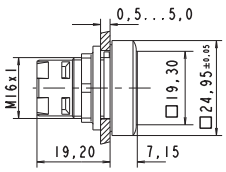
Accessoires:
Legend insert, blank, use only for transparent lenses: 5.70.637.000/2000

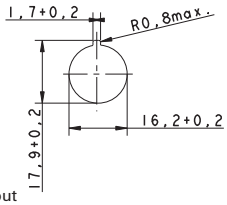
3

RAFIX 16 - Signal indicator, square collar, alignable without gaps, flush lens

Pict.: transparent green







Panel cut-out

Form of lens	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
flat lens	transparent colourless	1.65.124.551/1002	1.65.124.651/0000	5.49.077.011/1002
flat lens	transparent red	1.65.124.551/1306	1.65.124.651/0000	5.49.077.011/1306
flat lens	transparent yellow	1.65.124.551/1403	1.65.124.651/0000	5.49.077.011/1403
flat lens	transparent green	1.65.124.551/1505	1.65.124.651/0000	5.49.077.011/1505
flat lens	transparent blue	1.65.124.551/1607	1.65.124.651/0000	5.49.077.011/1607

Technical data see page 3 - 74

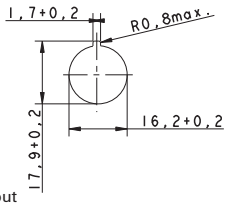
Accessoires:
Legend insert, blank, use only for transparent lenses: 5.70.635.000/2000

With Socket

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

RAFIX 16 - Signal indicator, square collar, alignable without gaps, protruding lens

Pict.: transparent red



Panel cut-out

Form of lens	Colour of lens	Order no. complete	Order no. single parts	
			Housing	Lens
protruding lens	transparent colourless	1.65.124.501/1002	1.65.124.661/0000	5.49.077.012/1002
protruding lens	transparent red	1.65.124.501/1306	1.65.124.661/0000	5.49.077.012/1306
protruding lens	transparent yellow	1.65.124.501/1403	1.65.124.661/0000	5.49.077.012/1403
protruding lens	transparent green	1.65.124.501/1505	1.65.124.661/0000	5.49.077.012/1505
protruding lens	transparent blue	1.65.124.501/1607	1.65.124.661/0000	5.49.077.012/1607

Technical data see page 3 - 74

Accessoires:
Legend insert, blank, use only for transparent lenses: 5.70.635.000/2000

RAFIX 16 F - Signal indicator

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	see order block

Dimensions

Collar dimensions	see order block
Overall height	see order block
Mounting depth with contact block	50 mm
Key grid	see order block
Mounting hole	see order block

Mechanical design

Mounting	ring nut
Contact function	-
Illumination	yes

Other specifications

Operating life (operations)	-
Degree of protection from front side	IP65
Operation temperature min.	-25 °C
Ambient temp. operating max. without lamp /LED	-
Ambient temp. operating max. with lamp /LED	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Environmental restistance	acc. to IEC 60068-2 -14, -30, -33 and -78

3

With Socket

Approvals

XX

IEC 61058

Typical accessories RAFIX 16 F - Signal indicator

Description	Photo	Order no.	Additional accessories see page
RAFIX 16 - Lamp socket W 2 x 4.6 d, quick-connect terminals		**1.71.212.001/0000**	2 - 91
RAFIX 16 - Lamp socket W 2 x 4.6 d, quick-connect terminals		**1.71.212.011/0000**	2 - 91
LED W 2 x 4.6d superbright, white, 24 V		**1.90.690.365/0000**	5 - 14

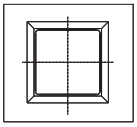
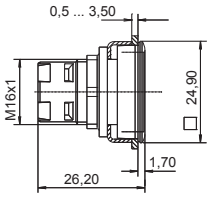
Stock items are marked by **bold printed order numbers.**

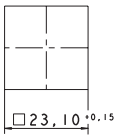
Typical accessories RAFIX 16 F - Signal indicator

Description	Photo	Order no.	Additional accessories see page
Disassembly tool for LUMOTAST 25, RAFIX 16		**5.05.800.042/0000**	2 - 94
Fixing spanner for hexagon nut		**5.58.002.034/0000**	2 - 95
Legend insert, blank, use only for transparent lenses		**5.70.635.000/2000**	

For additional accessories, refer to the chapter „RAFIX 16 special accessories".

RAFIX 16 F - Signal indicator, flush lens, square black collar



Panel cut-out

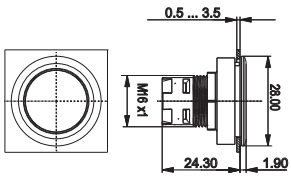
Colour of collar	Form of lens	Overall height	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
black	flat lens	1.7 mm	transparent colourless	**1.65.126.301/1000**	1.65.126.401/0000	**5.49.077.011/1002**
black	flat lens	1.7 mm	transparent red	**1.65.126.301/1300**	1.65.126.401/0000	**5.49.077.011/1306**
black	flat lens	1.7 mm	transparent yellow	**1.65.126.301/1400**	1.65.126.401/0000	**5.49.077.011/1403**
black	flat lens	1.7 mm	transparent green	**1.65.126.301/1500**	1.65.126.401/0000	**5.49.077.011/1505**
black	flat lens	1.7 mm	transparent blue	**1.65.126.301/1600**	1.65.126.401/0000	**5.49.077.011/1607**

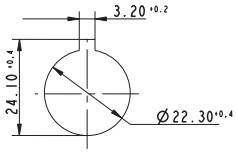
Technical data see page 3 - 80

Accessoires:
Legend insert, blank, use only for transparent lenses: **5.70.635.000/2000**

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

RAFIX 16 F - Signal indicator, flush lens, round black collar





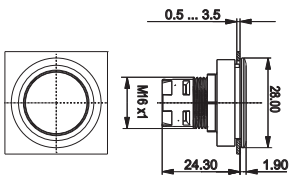
Panel cut-out to IEC 60947-5-1

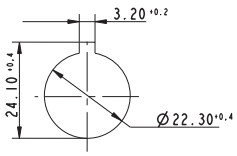
Colour of collar	Form of lens	Overall height	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
black	flat lens	1.9 mm	transparent colourless	**1.65.126.001/1000**	1.65.126.101/0000	5.49.259.017/1002
black	flat lens	1.9 mm	transparent red	**1.65.126.001/1300**	1.65.126.101/0000	5.49.259.017/1306
black	flat lens	1.9 mm	transparent yellow	**1.65.126.001/1400**	1.65.126.101/0000	5.49.259.017/1403
black	flat lens	1.9 mm	transparent green	**1.65.126.001/1500**	1.65.126.101/0000	5.49.259.017/1505
black	flat lens	1.9 mm	transparent blue	**1.65.126.001/1600**	1.65.126.101/0000	5.49.259.017/1607

Technical data see page 3 - 80

NEW

RAFIX 16 F - Signal indicator, flush lens, round metallized collar





Panel cut-out to IEC 60947-5-1

Colour of collar	Form of lens	Overall height	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
metallic	flat lens	1.9 mm	transparent colourless	**1.65.126.011/1000**	-	-
metallic	flat lens	1.9 mm	transparent red	**1.65.126.011/1300**	-	-
metallic	flat lens	1.9 mm	transparent yellow	**1.65.126.011/1400**	-	-
metallic	flat lens	1.9 mm	transparent green	**1.65.126.011/1500**	-	-
metallic	flat lens	1.9 mm	transparent blue	**1.65.126.011/1600**	-	-

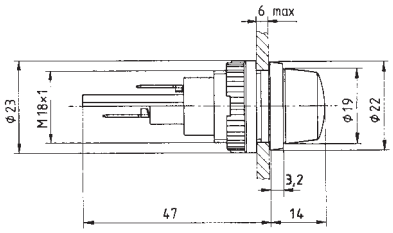
Technical data see page 3 - 80

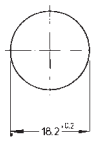
Stock items are marked by **bold printed order numbers.**

RAFI
SOLUTIONS WITH PASSION

Signal lamps with lamp socket - BA 9s (MBC/MCC), 18.2 mm

Pict.: green





Mounting hole

Technical Data

General information

Form of lens	round
Colour of lens	see order block
Diameter of collar	22 mm

Dimensions

Overall height	14 mm
Mounting depth	47 mm
Mounting hole	18.2 mm

Mechanical design

Mounting	ring nut
Terminals	solder/quick connector 6.3x0.8 / 2x 2.8x0.8mm
Lamp socket	BA 9 s
Lamp	filament lamp

Electrical characteristics

Voltage limit max.	250 V
Power limit max.	2 W

Other specifications

Degree of protection from front side	IP65
Weight	22 g

3

With Socket

Approvals

VDE 0710

Typical accessories Signal lamps with lamp socket - BA 9s (MBC/MCC), 18.2 mm

Description	Photo	Order no.	Additional accessories see page
Filament lamp, BA 9s base (MBC/MCC), 12 - 15 V		**1.90.060.132/0000**	5 - 7
Filament lamp, BA 9s base (MBC/MCC), 24 - 30 V		**1.90.060.133/0000**	5 - 7
Filament lamp, BA 9s base (MBC/MCC), 110 - 130 V		**1.90.060.137/0000**	5 - 7

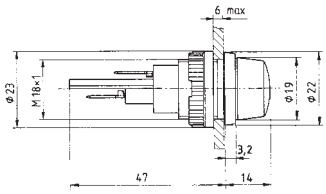
Stock items are marked by **bold printed order numbers.**

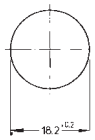
Typical accessories Signal lamps with lamp socket - BA 9s (MBC/MCC), 18.2 mm

Description	Photo	Order no.	Additional accessories see page
Protective sleeve for terminals made of Buna N (NBR)		**5.52.011.027/0100**	

Signal lamps with lamp socket - BA 9s (MBC/MCC), 18.2 mm, round lens

Pict.: green





Mounting hole

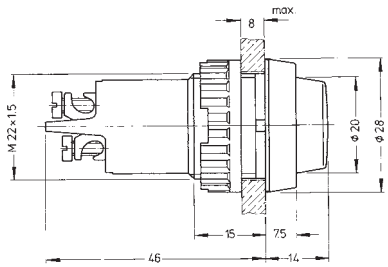
Voltage limit max.	Power limit max.	Lamp	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
250 V	2 W	filament lamp	transparent colourless	**1.63.018.001/1002**	1.63.018.091/0000	5.49.205.018/1002
250 V	2 W	filament lamp	transparent red	**1.63.018.001/1301**	1.63.018.091/0000	5.49.205.018/1301
250 V	2 W	filament lamp	transparent yellow	**1.63.018.001/1402**	1.63.018.091/0000	5.49.205.018/1402
250 V	2 W	filament lamp	transparent green	**1.63.018.001/1502**	1.63.018.091/0000	5.49.205.018/1502

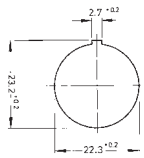
Technical data see page 3 - 84

Please order luminous elements separately. When ordering as single parts, please add 1 x sealing ring 5.30.120.009/0100 for each signal lamp to your order.

Signal lamps with lamp socket - E 14, 22.3 mm

Pict.: red





Panel cut-out

Technical Data

General information

Form of lens	round
Colour of lens	see order block
Diameter of collar	28 mm

Dimensions

Overall height	14 mm
Mounting depth	46 mm
Mounting hole	22.3 mm

Mechanical design

Mounting	ring nut
Terminals	see order block
Lamp socket	E 14
Lamp	filament lamp

Electrical characteristics

Voltage limit max.	250 V
Power limit max.	2 W

Other specifications

Degree of protection from front side	see order block
Weight	21 g

Approvals

VDE T 85°

Typical accessories Signal lamps with lamp socket - E 14, 22.3 mm

Description	Photo	Order no.	Additional accessories see page
Filament lamp, E 14 base, 24 - 30 V		**1.90.020.033/0000**	5 - 10
Sealing ring for IP65		5.30.075.010/0100	5 - 24
Protection against contact to VBG 4		5.50.240.063/0209	5 - 25
Protective sleeve for terminals made of Buna N (NBR)		**5.52.011.029/0100**	

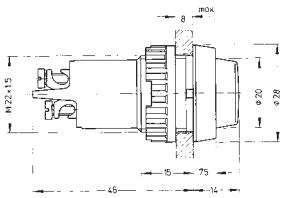
Stock items are marked by **bold printed order numbers.**

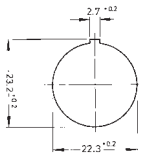
Typical accessories Signal lamps with lamp socket - E 14, 22.3 mm

Description	Photo	Order no.	Additional accessories see page
Fixing spanner M 20, M 22, for ring nut		**5.58.002.018/0105**	5 - 21

Signal lamps with lamp socket - E 14, IP40, 22.3 mm

Pict.: red





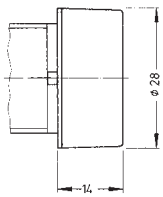
Panel cut-out

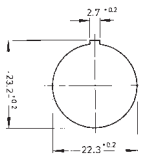
Voltage limit max.	Degree of protection from front side	Terminals	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
250 V	IP40	screw terminals brass nickel-plated	transparent colourless	1.61.012.011/1002	1.61.012.099/0000	5.00.350.726/1002
250 V	IP40	screw terminals brass nickel-plated	transparent red	1.61.012.011/1301	1.61.012.099/0000	5.00.350.726/1301
250 V	IP40	screw terminals brass nickel-plated	transparent yellow	1.61.012.011/1402	1.61.012.099/0000	5.00.350.726/1402
250 V	IP40	screw terminals brass nickel-plated	transparent green	1.61.012.011/1502	1.61.012.099/0000	5.00.350.726/1502

Technical data see page 3 - 86

Signal lamps with lamp socket - E 14, 22.3 mm, screw-on lens, IP40

Pict.: yellow



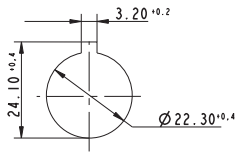


Panel cut-out

Voltage limit max.	Degree of protection from front side	Terminals	Colour of lens	Order no. complete	Order no. single parts	
					Housing	Lens
250 V	IP40	screw terminals brass nickel-plated	transparent colourless	1.61.012.061/1002	1.61.012.099/0000	5.49.229.006/1002
250 V	IP40	screw terminals brass nickel-plated	transparent red	1.61.012.061/1301	1.61.012.099/0000	5.49.229.006/1301
250 V	IP40	screw terminals brass nickel-plated	transparent yellow	1.61.012.061/1402	1.61.012.099/0000	5.49.229.006/1402
250 V	IP40	screw terminals brass nickel-plated	transparent green	1.61.012.061/1502	1.61.012.099/0000	5.49.229.006/1502

Technical data see page 3 - 86

RAFIX 22 QR - Signal indicator



Pict.: yellow

Panel cut-out to IEC 60947-5-1

Technical Data

General information

Form of lens	see order block
Colour of lens	see order block
Legend insert accomodation	see order block
Form of collar	see order block

Dimensions

Dimensions of collar	see order block
Overall height	see order block
Mounting depth	56.4 mm
Mounting hole	Ø 22.3 mm
Mounting grid	50 x 30 mm

Mechanical design

Mounting	ring nut
Illuminability	yes

Electrical characteristics

Protection class	-

Other specifications

Degree of protection from front side	IP65
Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental restistance	acc. to IEC 60068-2 -14, -30, -33 and -78

Approvals

IEC 61058 | UL 508,C22.2 No. 14-M91 | 2004 Steel Vessel Rules | Rules for the Classification of Steel Ships | Classification of Ships....Rules | Marine, offshore and industrial use | German Lloyds type approval

Typical accessories RAFIX 22 QR - Signal indicator

Bezeichnung	Foto	Bestell-Nr.	Seitenverweise/ Weiteres Zubehör
RAFIX 22 QR contact block AS-I, standard, white LED		1.20.129.121/0000	2 - 157
RAFIX 22 QR - Lamp socket assembly, screw terminals, with coupling		**1.71.213.001/0000**	2 - 162
RAFIX 22 QR - Lamp socket assembly, screw terminals, with coupling, diode and series resistor 130 V		**1.71.213.004/0000**	2 - 162

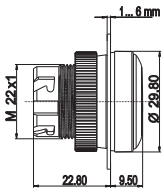
Stock items are marked by **bold printed order numbers.**

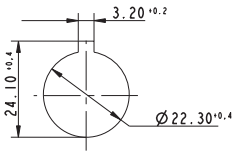
Typical accessories RAFIX 22 QR - Signal indicator

Bezeichnung	Foto	Bestell-Nr.	Seitenverweise/ Weiteres Zubehör
RAFIX 22 QR - Lamp socket assembly, spring-type terminals, with coupling		**1.71.214.001/0000**	2 - 162
Fixing spanner for ring nut and front ring		**5.05.800.062/0000**	5 - 21
Legend insert without legend, use only in combination with transparent lenses		**5.70.803.000/2000**	

RAFIX 22 QR - Signal indicator, flat, round collar, for legend inserts

Pict.: yellow





Panel cut-out to IEC 60947-5-1

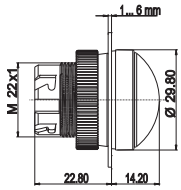
Colour of lens	Form of collar	Order no.
transparent colourless	round	**1.74.505.501/1000**
transparent red	round	**1.74.505.501/1300**
transparent yellow	round	**1.74.505.501/1400**
transparent green	round	**1.74.505.501/1500**
transparent blue	round	**1.74.505.501/1600**

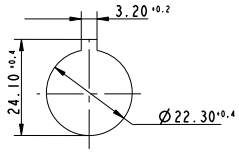
Technical data see page 3 - 88

Accessoires:
Legend insert without legend, use only in combination with transparent lenses.: **5.70.803.000/2000**

NEW

RAFIX 22 QR - Signal indicator, high, round collar





Panel cut-out to IEC 60947-5-1

Colour of lens	Form of collar	Order no.
transparent colourless	round	**1.74.505.511/1000**
transparent red	round	**1.74.505.511/1300**
transparent yellow	round	**1.74.505.511/1400**
transparent green	round	**1.74.505.511/1500**
transparent blue	round	**1.74.505.511/1600**

Technical data see page 3 - 88

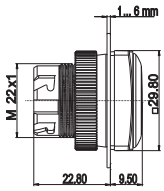
Legend insert on request

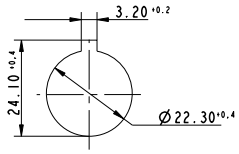
3

RAFIX 22 QR - Signal indicator, flat, square collar, for legend inserts

With Socket

Pict.: red





Panel cut-out to IEC 60947-5-1

Colour of lens	Form of collar	Order no.
transparent colourless	square	**1.74.505.551/1000**
transparent red	square	**1.74.505.551/1300**
transparent yellow	square	**1.74.505.551/1400**
transparent green	square	**1.74.505.551/1500**
transparent blue	square	**1.74.505.551/1600**

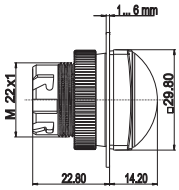
Technical data see page 3 - 88

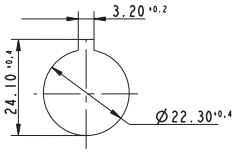
Accessoires:
Legend insert without legend, use only in combination with transparent lenses.: **5.70.803.000/2000**

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

NEW

RAFIX 22 QR - Signal indicator, high, square collar





Panel cut-out to IEC 60947-5-1

Colour of lens	Form of collar	Order no.
transparent colourless	square	**1.74.505.561/1000**
transparent colourless	square	**1.74.505.561/1600**
transparent red	square	**1.74.505.561/1300**
transparent yellow	square	**1.74.505.561/1400**
transparent green	square	**1.74.505.561/1500**

Technical data see page 3 - 88

Legend insert on request

3

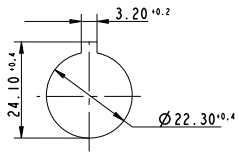
With Socket

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

RAFIX 22 FS - Signal indicator

Pict.: yellow

red



Panel cut-out to IEC 60947-5-1

Technical Data

General information	
Form of lens	see order block
Colour of lens	see order block
Form of collar	see order block
Dimensions	
Length of collar	see order block
Overall height	see order block
Mounting depth	see order block
Mounting hole	22.3 mm
Key grid	30 x 30 mm
Mechanical design	
Mounting	ring nut
Illuminability	yes

Mechanical characteristics	
Robustness min.	100 N
Other specifications	
Degree of protection from front side	IP65
Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Approvals	see order block
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental restistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Salt spray	IEC 600 68-2-11

Approvals

IEC 60947-5-x, 60904, 60073

UL 508,C22.2 No. 14-M91

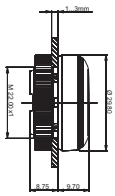
Typical accessories RAFIX 22 FS - Signal indicator

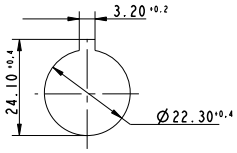
Description	Photo	Order no.	Additional accessories see page
3 mm LED superbright red		**1.90.690.269/0000**	2 - 237, 5 - 17
Fixing spanner for ring nut and front ring		**5.05.800.062/0000**	5 - 21
LED base for signal indicators, height 5 mm		**5.30.109.020/0756**	2 - 236
RAFIX 22 FS - Socket for LED-Clip, quick-connect terminals		**5.55.104.419/0700**	2 - 235

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

RAFIX 22 FS - Signal indicator, round collar, flat

Pict.: yellow





Panel cut-out to IEC 60947-5-1

Form of collar	Colour of lens	Order no.
round	transparent colourless	**1.74.506.001/1000**
round	transparent red	**1.74.506.001/1300**
round	transparent yellow	**1.74.506.001/1400**
round	transparent green	**1.74.506.001/1500**
round	transparent blue	**1.74.506.001/1600**

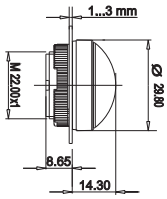
Technical data see page 3 - 92

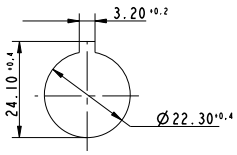
Legending on request

RAFIX 22 FS - Signal indicator, round collar, high

NEW

Pict.: red





Panel cut-out to IEC 60947-5-1

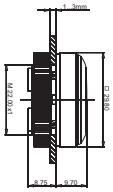
Form of collar	Colour of lens	Order no.
round	transparent colourless	1.74.506.011/1000
round	transparent red	1.74.506.011/1300
round	transparent yellow	1.74.506.011/1400
round	transparent green	1.74.506.011/1500
round	transparent blue	1.74.506.011/1600

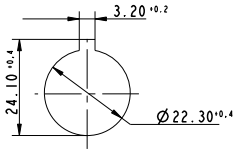
Technical data see page 3 - 92

Legending on request

RAFIX 22 FS - Signal indicator, square collar, flat

Pict.: red





Panel cut-out to IEC 60947-5-1

Form of collar	Colour of lens	Order no.
square	transparent colourless	**1.74.506.051/1000**
square	transparent red	**1.74.506.051/1300**
square	transparent yellow	**1.74.506.051/1400**
square	transparent green	**1.74.506.051/1500**
square	transparent blue	**1.74.506.051/1600**

Technical data see page 3 - 92

Legending on request

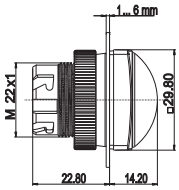
3

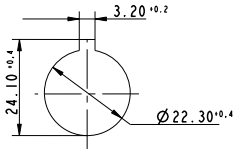
NEW

With Socket

RAFIX 22 FS - Signal indicator, round collar, high

Pict.: yellow





Panel cut-out to IEC 60947-5-1

Form of collar	Colour of lens	Order no.
square	transparent colourless	1.74.506.061/1000
square	transparent red	1.74.506.061/1300
square	transparent yellow	1.74.506.061/1400
square	transparent green	1.74.506.061/1500
square	transparent blue	1.74.506.061/1600

Technical data see page 3 - 92

Legending on request

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

Signal lamps with lamp socket - E 14, 30.5 mm

Pict.: with lens form 1, red

with lens form 2, yellow

with lens form 3, grün

Technical Data

General information

Form of lens	round
Colour of lens	see order block
Diameter of collar	36 mm

Dimensions

Overall height	see order block
Mounting depth	58 mm
Mounting hole	$30{,}5^{+0{,}5}$ mm

Mechanical design

Mounting	ring nut
Terminals	quick connector for 2 x 2.8 x 0.8 mm
Lamp socket	E 14
Lamp	filament lamp

Electrical characteristics

Voltage limit max.	250 V
Power limit max.	5 W

Other specifications

Degree of protection from front side	see order block
Weight	40 g

3

Typical accessories Signal lamps with lamp socket - E 14, 30.5 mm

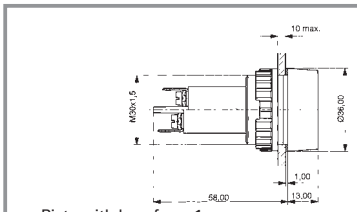
With Socket

Description	Photo	Order no.	Additional accessories see page
Filament lamp, E 14 base, 24 - 30 V		**1.90.020.033/0000**	5 - 10
Filament lamp, E 14 base, 24 V		**1.90.020.053/0000**	5 - 11
Filament lamp, E 14 base, 220 - 260 V		**1.90.020.061/0000**	5 - 11
Filament lamp, E 14 base, 24 - 30 V		**1.90.020.105/0000**	5 - 11
Filament lamp, E 14 base, 220 - 260 V		**1.90.020.115/0000**	5 - 11
Protection against contact to VBG 5		5.50.240.065/0200	5 - 25
Protective sleeve for terminals		**5.52.011.031/0100**	
Fixing spanner M 25, M 30		**5.58.002.020/0105**	5 - 21

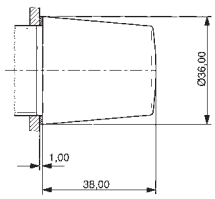
The filament lamps 1.90.020.105/0000 and 1.20.090.115/0000 can only be used in combination with the lens form 2. Because of their height, they support the best illumination of this lens shape.

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

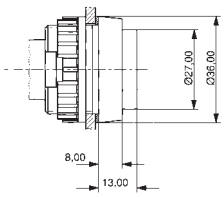
Signal lamps with lamp socket - E 14, IP40, 30.5 mm



Pict.: with lens form 1



lens form 2



lens form 3

Voltage limit max.	Power limit max.	Degree of protection from front side	Order no. without lens	Note
250 V	5 W	IP40	1.61.021.099/0000	Please include the desired lens in your order.

Technical data see page 3 - 96

Lenses:
Screw-on lens, form 3, transparent colourless: 5.00.350.013/1002
Screw-on lens, form 3, transparent red: 5.00.350.013/1301
Screw-on lens, form 3, transparent yellow: 5.00.350.013/1402
Screw-on lens, form 3, transparent green: 5.00.350.013/1502
Screw-on lens, form 1, transparent colourless: 5.49.233.005/1002
Screw-on lens, form 1, transparent red: 5.49.233.005/1301
Screw-on lens, form 1, transparent yellow: 5.49.233.005/1402
Screw-on lens, form 1, transparent green: 5.49.233.005/1502
Screw-on lens, form 2, transparent colourless: 5.49.233.008/1002
Screw-on lens, form 2, transparent red: 5.49.233.008/1301
Screw-on lens, form 2, transparent yellow: 5.49.233.008/1402
Screw-on lens, form 2, transparent green: 5.49.233.008/1502

Single-wire screw terminal with clamp: 2 x 0.75 to 2.5 mm², stranded core with wire end sleeve: 2 x 0.75 to 1.5 mm², quick-connect terminal suitable for 2 x 2.8 x 0.8 tin-plated for soldering.

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

RAFI SOLUTIONS WITH PASSION

Signal lamps with lamp socket - BA 15d, 30.5 mm

Pict.: with lens form 1, red

with lens form 2, yellow

with lens form 3, grün

Technical Data

General information

Form of lens	round
Colour of lens	see order block
Diameter of collar	36 mm

Dimensions

Overall height	see order block
Mounting depth	58 mm
Mounting hole	$30{,}5^{+0{,}5}$ mm

Mechanical design

Mounting	ring nut
Terminals	quick connector for 2 x 2.8 x 0.8 mm
Lamp socket	BA 15 d
Lamp	filament lamp

Electrical characteristics

Voltage limit max.	250 V
Power limit max.	5 W

Other specifications

Degree of protection from front side	see order block
Weight	40 g

3

Typical accessories Signal lamps with lamp socket - BA 15d, 30.5 mm

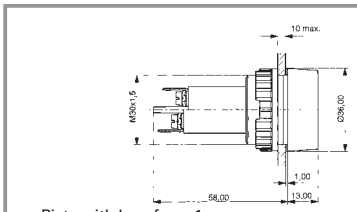
With Socket

Description	Photo	Order no.	Additional accessories see page
Filament lamp, BA 15d base, 12 - 15 V		**1.90.070.003/0000**	5 - 8
Filament lamp, BA 15d base, 24 - 30 V		**1.90.070.004/0000**	5 - 8
Filament lamp, BA 15d base, 24 V		**1.90.070.053/0000**	5 - 9
Filament lamp, BA 15d base, 220 - 260 V		1.90.070.061/0000	5 - 9
Filament lamp, BA 15d base, 24 - 30 V		**1.90.070.105/0000**	5 - 9
Protection against contact to VBG 5		5.50.240.065/0200	5 - 25
Protective sleeve for terminals		**5.52.011.031/0100**	
Fixing spanner M 25, M 30		**5.58.002.020/0105**	5 - 21

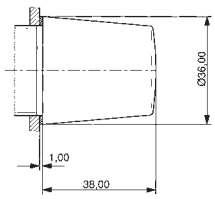
The filament lamps 1.90.070.105/0000 can only be used in combination with the lens form 2. Because of their height, they support the best illumination of this lens shape.

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

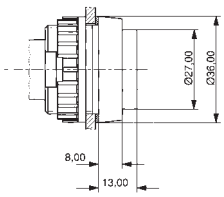
Signal lamps with lamp socket - BA 15d, IP40, 30.5 mm



Pict.: with lens form 1



lens form 2



lens form 3

Voltage limit max.	Power limit max.	Degree of protection from front side	Colour of lens	Order no. without lens	Note
250 V	5 W	IP40	-	1.63.521.099/0000	Please include the desired lens in your order.

Technical data see page 3 - 98

Lenses:
Screw-on lens, form 3, transparent colourless: 5.00.350.013/1002
Screw-on lens, form 3, transparent red: 5.00.350.013/1301
Screw-on lens, form 3, transparent yellow: 5.00.350.013/1402
Screw-on lens, form 3, transparent green: 5.00.350.013/1502
Screw-on lens, form 1, transparent colourless: 5.49.233.005/1002
Screw-on lens, form 1, transparent red: 5.49.233.005/1301
Screw-on lens, form 1, transparent yellow: 5.49.233.005/1402
Screw-on lens, form 1, transparent green: 5.49.233.005/1502
Screw-on lens, form 2, transparent colourless: 5.49.233.008/1002
Screw-on lens, form 2, transparent red: 5.49.233.008/1301
Screw-on lens, form 2, transparent yellow: 5.49.233.008/1402
Screw-on lens, form 2, transparent green: 5.49.233.008/1502

Single-wire screw terminal with clamp: 2 x 0.75 to 2.5 mm², stranded core with wire end sleeve: 2 x 0.75 to 1.5 mm², quick-connect terminal suitable for 6.8 x 0.8 mm / 2 x 2.8 x 0.8 mm, tin-plated for soldering.

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

General Data

Sockets to accommodate filament lamps and LEDs with bases.

Content

Panel mounting sockets - W 2 x 4.6d **3 - 102**
Panel mounting sockets - W 2 x 4.6d 3 - 103

Panel mounting sockets - Tubular lamp holders **3 - 104**
Panel mounting sockets - Tubular lamp holders 3 - 104

Panel mounting sockets - BA 15d **3 - 106**
Panel mounting sockets - BA 15d 3 - 106

Panel mounting sockets - W 2 x 4.6d

Technical Data

Mechanical design

Mounting	see order block
Terminals	see order block
Lamp socket	W 2 x 4.6d

Electrical characteristics

Limit values	35 V/1.5 W

Other specifications

Weight	1 g

3

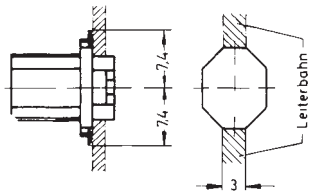
Typical accessories Panel mounting sockets - W 2 x 4.6d

Description	Photo	Order no.	Additional accessories see page
Filament lamp, W 2 x 4.6d base, 24 - 30 V		**1.90.120.005/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 60 V		**1.90.120.009/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 48 V		**1.90.120.010/0000**	5 - 4
Filament lamp, W 2 x 4.6d base, 24 V		**1.90.120.011/0000**	5 - 4
LED W 2 x 4.6d superbright, red, 24 V		**1.90.690.361/0000**	5 - 14
LED W 2 x 4.6d superbright, green, 24 V		**1.90.690.362/0000**	5 - 14
LED W 2 x 4.6d superbright, yellow, 24 V		**1.90.690.363/0000**	5 - 14
LED W 2 x 4.6d superbright, blue, 24 V		**1.90.690.364/0000**	5 - 14
LED W 2 x 4.6d superbright, white, 24 V		**1.90.690.365/0000**	5 - 14

Socket

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

Panel mounting sockets - W 2 x 4.6d



Lamp socket	Limit values	Terminals	Mounting	Order no.
W 2 x 4.6d	35 V/1.5 W	2 spring contacts	90° turn	1.72.401.021/0000

Technical data see page 3 - 102

Panel mounting sockets - Tubular lamp holders

Technical Data

Mechanical design

Mounting	cut-out in housing
Terminals	screw terminals
Lamp socket	S 8.5
Insulation group	according to VDE 0110 b/DIN 57110 b

Electrical characteristics

Limit values	2 A / 35 V

Other specifications

Weight	11 g

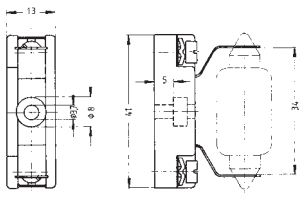
3

Typical accessories Panel mounting sockets - Tubular lamp holders

Description	Photo	Order no.	Additional accessories see page
Filament lamp, S 8.5 base, 24 V, shape L		**1.90.111.003/0000**	5 - 12
Filament lamp, S 8.5 base, 24 V, shape K		1.90.111.103/0000	5 - 12

Panel mounting sockets - Tubular lamp holders

Socket



Lamp socket	Limit values	Terminals	Mounting	Order no.
S 8.5	2 A/35 V	screw terminals	cut-out in housing	1.02.570.021/0000

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

Panel mounting sockets - BA 15d

Technical Data

Mechanical design

Mounting	see order block
Terminals	see order block
Lamp socket	BA 15 d

Electrical characteristics

Limit values	see order block

Other specifications

Weight	see order block

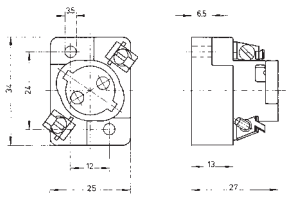
3

Approvals

VDET 135°, max. 4 W / 2 A

Panel mounting sockets - BA 15d

Socket



Lamp socket	Limit values	Terminals	Mounting	Order no.
BA 15 d	250 V/4 W	quick connector	cut-out in housing	1.02.582.002/0000

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