

Signal lamps with integrated LED, 5 mm



Pict.: red

blue

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

Other specifications

Degree of protection IP40
 from front side
 Weight 0.35 g

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Integr.
LED

Operating voltage U_B : DC voltage from 5 to 28 V

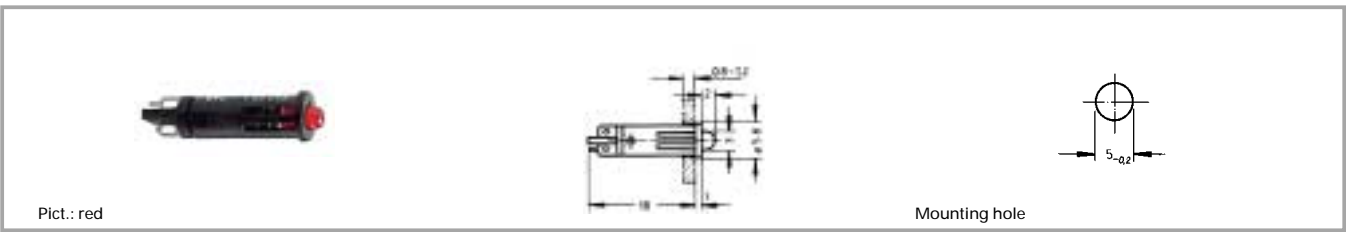
A suitable series resistor is installed in the unit; versions without series resistor must be fitted with an external one.

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



Integrated current 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	1.69.508.801/0000
no	according to series resistor 5 - 28 V	max. 20 mA	LED green	transparent green	1.69.508.807/0000
no	according to series resistor 5 - 28 V	max. 20 mA	LED yellow	transparent yellow	1.69.508.813/0000
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

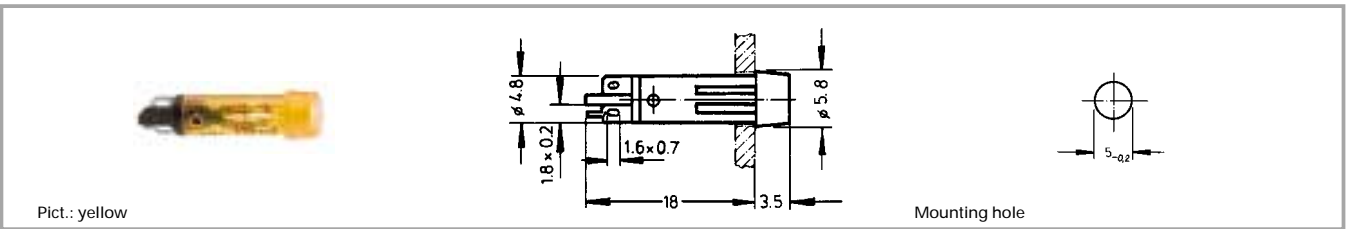
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Long terminal is anode.

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Integr.
LED

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



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	1.69.508.831/1301
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

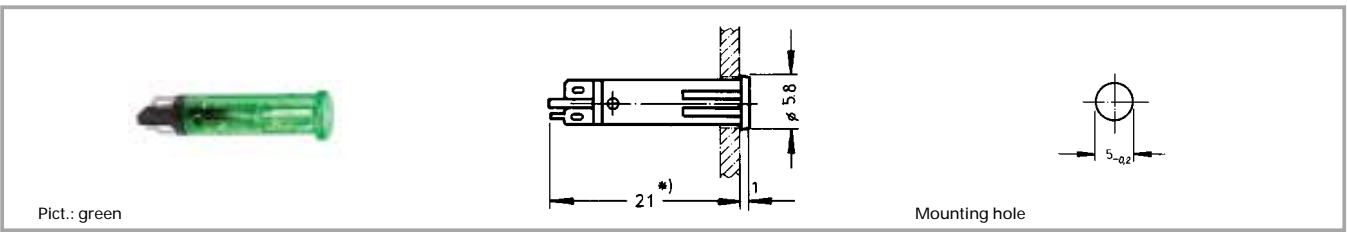
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Long terminal is anode.

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Integr. LED

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



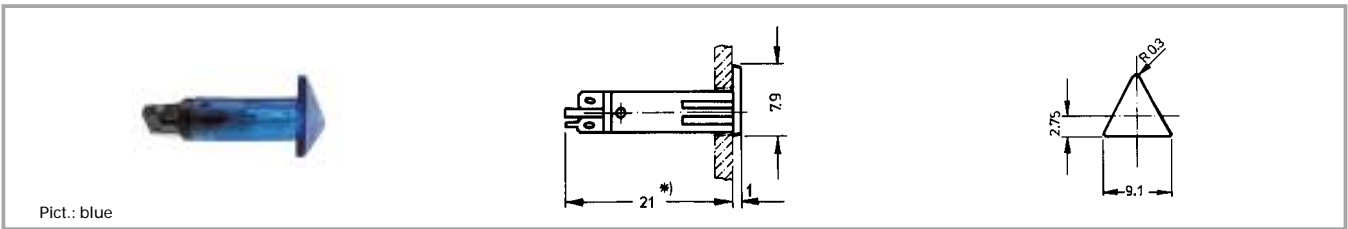
Integrated currency resistor	Operating voltage U_B	Forward current, I_F at 25°C	Lamp	Colour of lens	Order no.
no	according to series resistor 5 - 28 V	max. 20 mA	LED red	transparent red	1.69.508.861/1301
no	according to series resistor 5 - 28 V	max. 20 mA	LED green	transparent green	1.69.508.867/1503
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

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Long terminal is anode.

* Without series resistor, mounting depth = 18 mm.

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



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	1.69.508.931/1301
no	according to series resistor 5 - 28 V	max. 20 mA	LED green	transparent green	1.69.508.937/1503
no	according to series resistor 5 - 28 V	max. 20 mA	LED yellow	transparent yellow	1.69.508.943/1402
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

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Long terminal is anode.

* Without series resistor, mounting depth = 18 mm.

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