



Signal lamps

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General information

Signal Lamps with integral lamps/LEDs

The soldered lamps/LEDs without base cannot be replaced.

Signal Lamps with lamp socket

An integral lamp socket allows replacement of lamps/LEDs 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.

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CE-Conformity

The CE-Conformity of the products of Chapter "Signal Lamps" can be divided into the following groups – corresponding to the Low-Voltage Directives 72/23/EWG:

All products with voltage > 50 V

For these components the Low-Voltage Directive 73/23/EWG applies.

All products with voltage < 50 V

No directive applies for these components.

EMC-Law

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

Declaration of conformity

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

Marking

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

Lens colour suitability for illumination

Lens color transparent	Suitable for:		Lens colour opaque	Suitable for:	
	Filament lamps	Neon lamps		Filament lamps	Neon lamps
colourless	limited	good	white	limited	not suitable
red	good	good	red	good	not suitable
yellow	good	good	yellow	good	not suitable
green	good	limited*	green	limited	not suitable
blue	limited	limited*	blue	limited	not suitable

*Neon glow lamps are well suitable

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.

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	white
5	0,6	yellow, green, blue	white
6	0,7	opaque:	
8	0,8	black and dark grey	white
10	1	white, red, yellow, green	black
12,5	1,2	blue and light grey	black

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

