

Johannesburg Branch



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Mimic Cape



LED Indicators For Panel Mounting



MIMIC COMPONENTS

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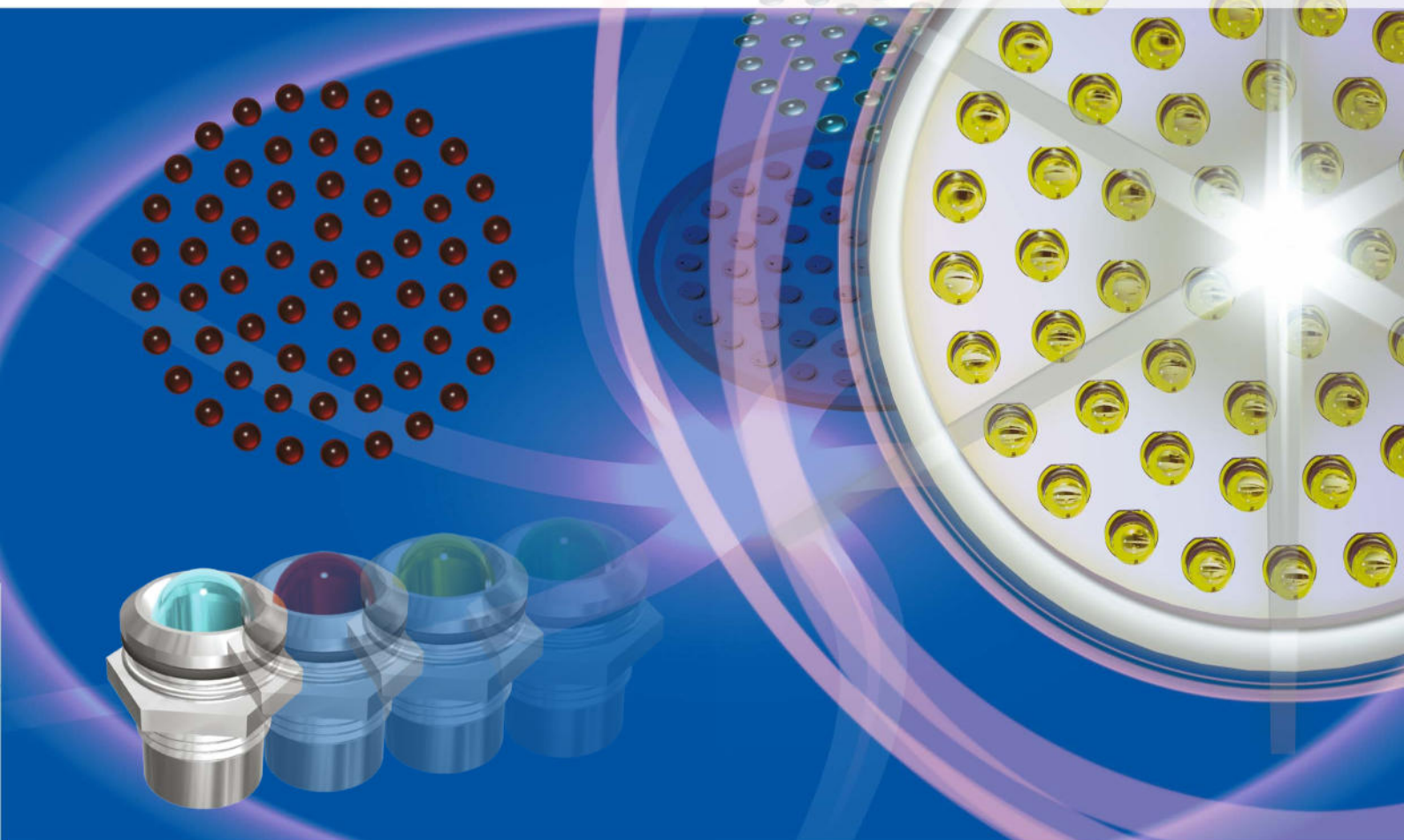
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Passion for LED's since 4 decades

Nowadays LED's are state of the art for effective light systems. It's not a miracle that many providers are competing for market shares. If you are demanding optimal prices and service, SIGNAL-CONSTRUCT will be the right address! We are one of the pioneers on LED market, dealing exclusively with this technology since 1978. This great know how is flowing into every product. Self-evident is best quality, designs and product development being oriented permanently to the market, and an individual contact to our customers all over the world.

We take "Made in Germany" in the literal sense

We don't have to talk about the countless application possibilities of LED's, you'll find some examples in the catalogue. Let's talk about the fact, that SIGNAL-CONSTRUCT is developing and manufacturing all products on its own. Very often we are in close contact with our customers during development process. Our well-trained and highly motivated staff is manufacturing with machines and equipment of newest technology. This results in products setting standards on the market since a long time. You should benefit from this!



SMSD22x3x



LED Indicators

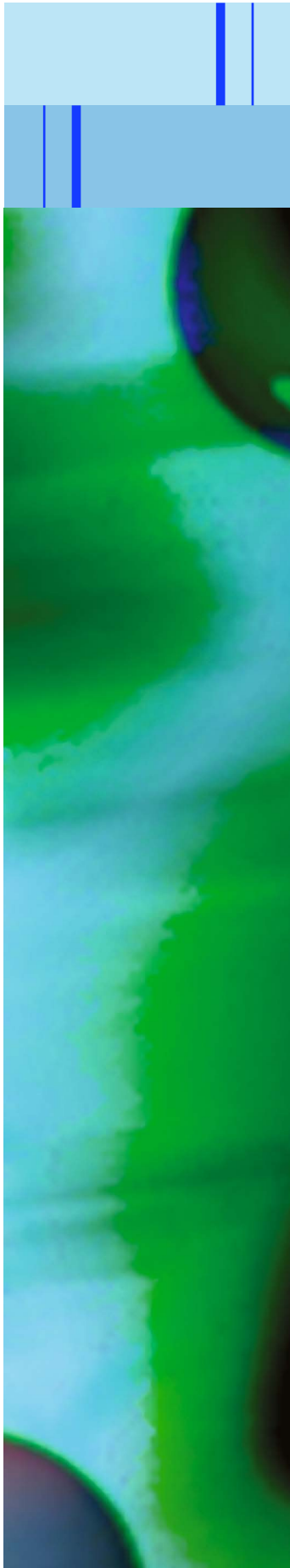
Jumbo LED Ø 20 mm



SMFC14x22x



AMEE16x + Adapter



Basic Lighting Knowledge

What you should know about light -
with 9 terms to a (nearly) light professional

What is light?

Light is an electromagnetic oscillation which is perceived by human eye in brightness and color. The visible range for humans extends from ultraviolet with approx. 380 nm wavelength to approx. 780 nm. Light above 780nm is indicated as infrared radiation and is perceived as heat radiation.

Light Color / Wavelength (nm)

The definition of light color with a wavelength (in nm) is only possible in the normal color spectrum from the UV range to blue, green, yellow, red and infrared. For white, only the color tone can be determined (see below color temperature).

Color Temperature (K)

As white results from a mix of different basic colors (red, green, blue), it is not possible to indicate a wavelength. In this case, the color tone is expressed with the so-called color temperature (measured in Kelvin=K). This extends for example from the sunlight color of approx. 3000K (slightly yellow) up to 10000K (white with a high proportion of blue), similar to a clear blue sky on cold winter days. Whilst color temperatures from 2700K to 3500K are optimally suitable for living areas, the range from 4500K to 6000K is ideally suited for reading or workplace lighting.

Color Coordinates

The common simplified representation of different colors is displayed in the so-called system of coordinates X/Y diagram according to CIE (International Commission on Illumination). This allows the determination of all colors and color tones – including white – with the respective X/Y value.

Basic Lighting Knowledge

Color Rendering Index (CRI)

This value, in general known as CRI (Color Rendering Index) or Ra, determines which qualitative color impression an illuminant displays. A value of 100% would be an absolutely authentic color impression equal to daylight. Nowadays, LEDs are in the range of 70 to 85, energy-saving lamps are normally clearly below.

Luminous Flux (Lumen)

The luminous flux (lm – symbol Φ) describes the total radiation of a lamp/light source perceptible by the sensibility curve (V-Lambda-Curve) of a human eye – independently of the beam radiation. Simplified: the total radiated light quantity.

Illuminance (Lux)

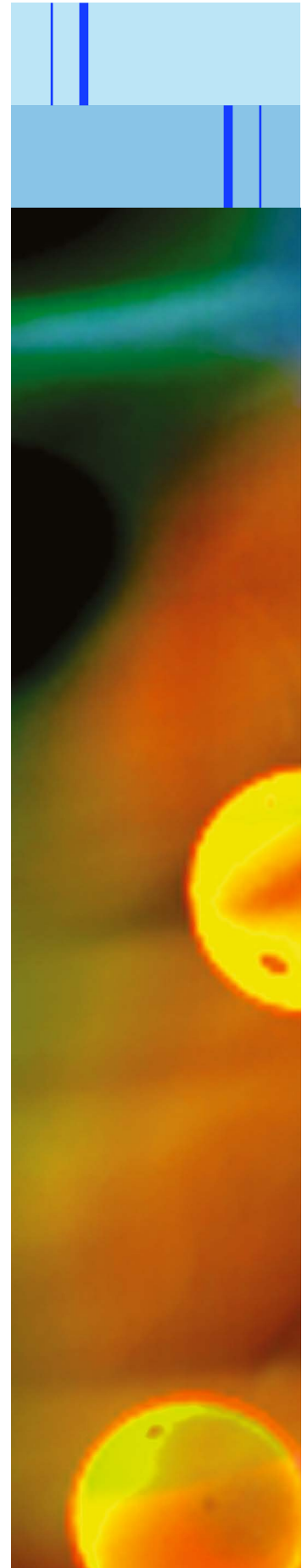
The luminous flux from a light source falling on a given surface is defined as illuminance (symbol E). This results from the formula "lumen per unit area" (lm/m^2). The illuminance has several standards which defines the minimum requirements for different activities in professional and private environment. By measuring at a distance of 1m from the light source, the lux value corresponds to the Cd value ($1\text{Lx}=1\text{lm}/\text{m}^2$).

Luminous intensity (Candela)

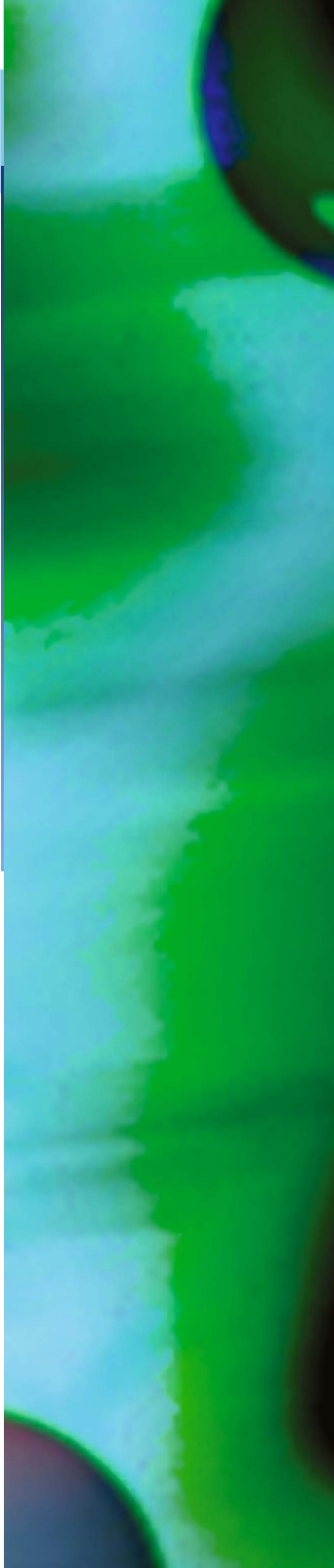
The luminous intensity (cd) is the measure of the power emitted by a light source in a particular direction (in distance of 1m, see Illuminance).

Luminance

The luminance describes the amount of light from a luminous or reflecting surface. The unit is Candela per square meter (cd/m^2), the symbol is L . The indication of this value is only possible for panel radiators like displays (luminous flux per unit area + solid angle).



Overview symbols



Viewing angle



Protection class acc. to DIN EN 60529

First digit (protection against accidental contact and foreign particles)

4 = protected from solid debris larger than 1 mm

5 = dust-proof

6 = dust-tight

Second digit (protection against water)

0 = unprotected

4 = protected against splashing water

5 = protected against jets of water

7 = protected against the effects of immersion



Only for AC operation



Only for DC operation



One-way rectification - polarity has to be respected at DC

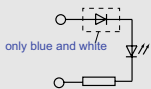
Power consumption/brightness for AC is reduced by approx. 50% compared to the DC-operation



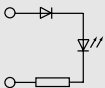
Full-wave rectification - reverse polarity protection

Overview

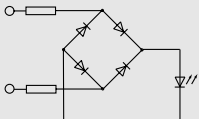
Electrical circuits



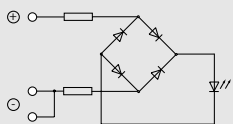
Diode in series with supply voltage only by the colours blue and white. Polarity must be respected at DC:
(in case of reverse polarity, the device receives no current)
The power consumption/brightness for alternating voltage is reduced by approx. 50% compared to the DC-operation.



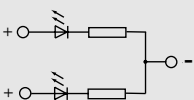
Diode in series with supply voltage. Polarity must be respected at DC:
(in case of reverse polarity, the device receives no current).
The power consumption/brightness for alternating voltage is reduced by approx. 50% compared to the DC-operation.



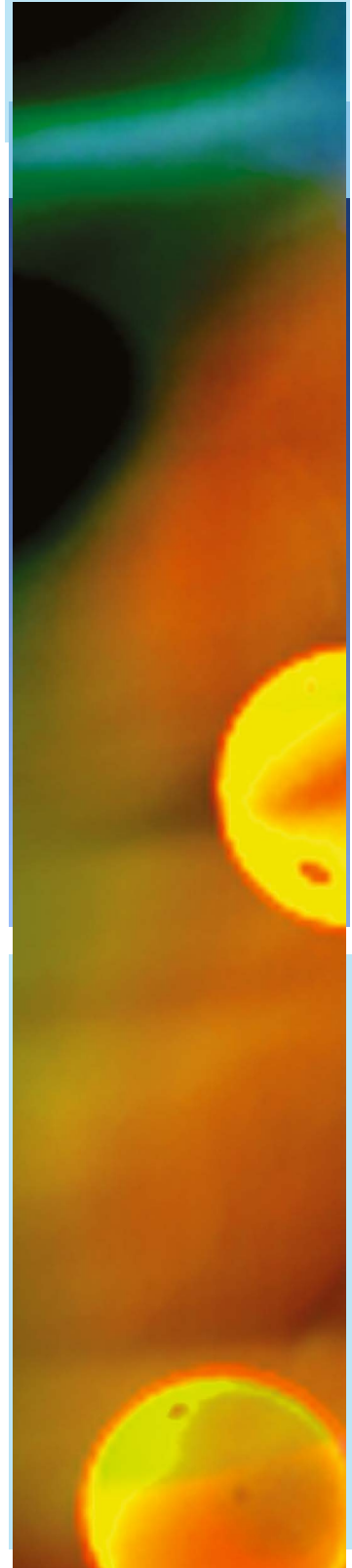
Circuit with bridge rectifier (2-way rectification)
Advantage: Protection against polarity reversal, the same power consumption/brightness with DC and AC



Circuit with bridge rectifier (2-way rectification).
The ground connection is equipped with a double contact.
Advantage: Protection against polarity reversal, the same power consumption/brightness with DC and AC, mounting of several indicators.

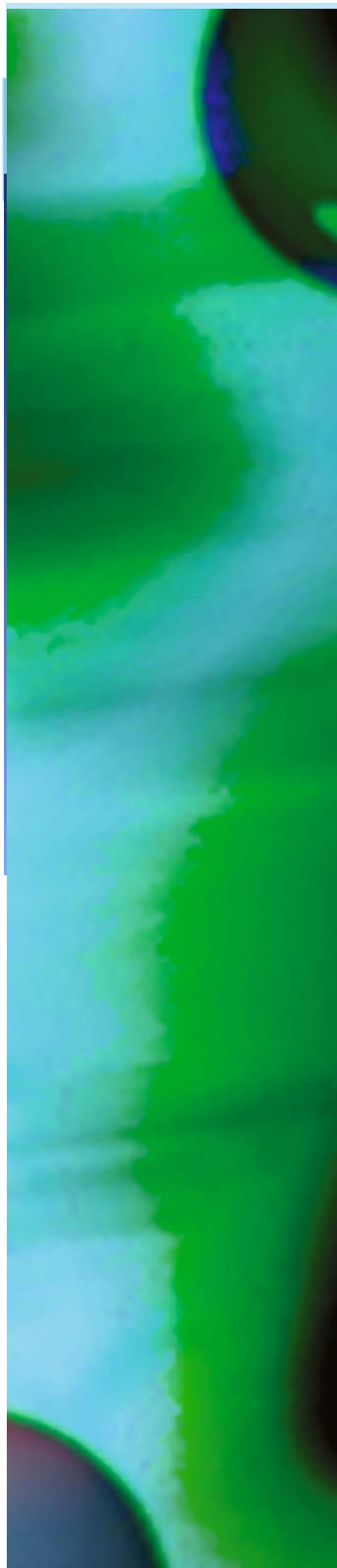


Circuit at bicolored LEDs with a series resistor.
Red / GREEN = anode
The cathodes of the LED are combined and wired to the middle connector.



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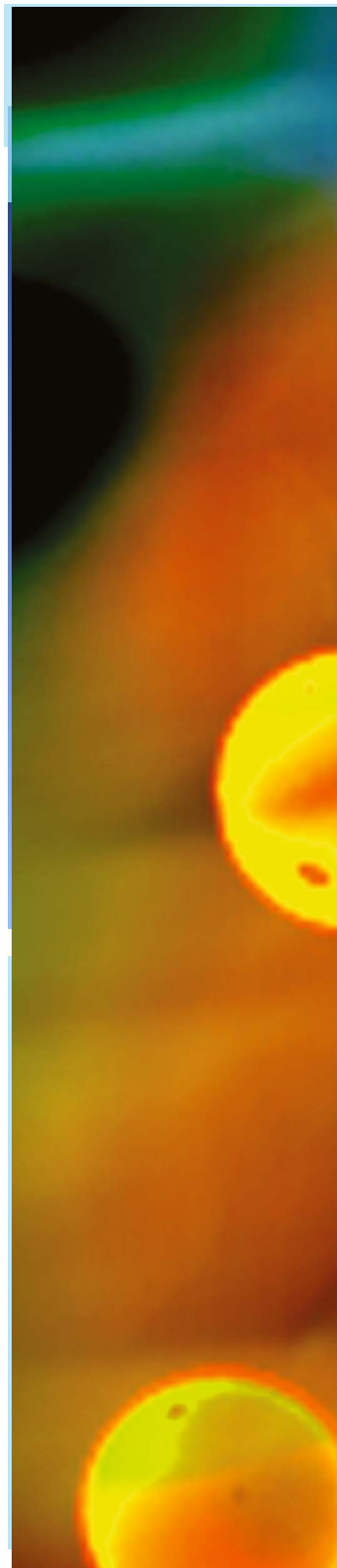
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LED Indicator Ø4,1 mm for rear panel mounting

LED indicator with mounting-Ø4,1 mm for press-in or glue-in mounting in rear panel, thus enabling flush mounting, e.g. behind plastic films.

Ø4,1mm



For all types page 10
Specification:
mounting-hole: Ø 4,2 mm

fixing: press-in / glue-in
lum. surface: Ø 4,1 mm
Material:
housing: PC colored transparent
insulating part: PC
Option:
- housing clear transparent
Accessory:
- prefabricated connecting cable KDS2
for types with soldering/plug-in tab

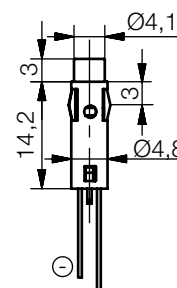


SKNU05x

Connection: 2-pin

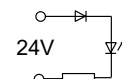


Type	Luminous intensity 20mA	Part No. LED voltage
red	2400 mcd	SKNU050
yellow	1800 mcd	SKNU051
blue	2760 mcd	SKNU054
white	3680 mcd	SKNU056
green	10320 mcd	SKNU057

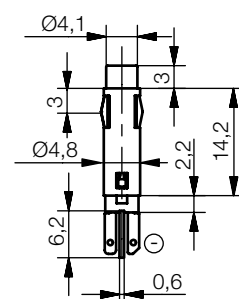


SKNU05x0x

Connection: Soldering/plug-in tab 1.5x0.3mm

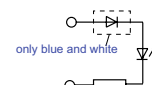


Type	Luminous intensity 20mA	LED voltage	Part No. 24/28V _{DC(AC)}
red	2400 mcd	SKNU05000	SKNU05004
yellow	1800 mcd	SKNU05100	SKNU05104
blue	2760 mcd	SKNU05400	SKNU05404
white	3680 mcd	SKNU05600	SKNU05604
green	10320 mcd	SKNU05700	SKNU05704

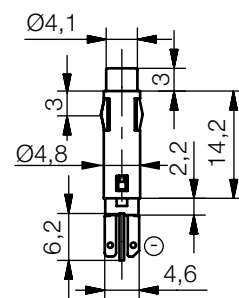


SKND05x0x

Connection: Soldering/plug-in tab 1.5x0.3mm



Type	Luminous intensity 20mA	Part No. 12/14V _{DC(AC)}	Part No. 24/28V _{DC(AC)}
red	40 mcd	SKND05002	SKND05004
yellow	30 mcd	SKND05102	SKND05104
green	40 mcd	SKND05202	SKND05204
blue	700 mcd	SKND05402	SKND05404



LED Symbol Indicator Ø5 mm

round / square / arrow / triangular

LED symbol indicator for mounting-Ø5 mm with superflat, surface plan lens head.
The frosted surface allows a clear on-off contrast and a high light transmission.

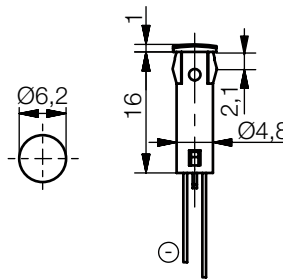
SKGD05x / SKHD05x / SKID05x / SKJD05x

Connection: 2-pin



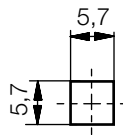
round lens head

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	SKGD050
yellow	30 mcd	SKGD051
green	40 mcd	SKGD052
blue	700 mcd	SKGD054
white	3680 mcd	SKGD056



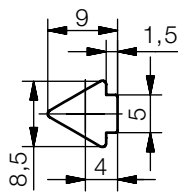
squared lens head

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	SKHD050
yellow	30 mcd	SKHD051
green	40 mcd	SKHD052
blue	700 mcd	SKHD054
white	3680 mcd	SKHD056



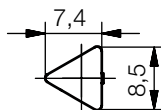
arrow lens head

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	SKID050
yellow	30 mcd	SKID051
green	40 mcd	SKID052
blue	700 mcd	SKID054
white	3680 mcd	SKID056



triangular lens head

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	SKJD050
yellow	30 mcd	SKJD051
green	40 mcd	SKJD052
blue	700 mcd	SKJD054
white	3680 mcd	SKJD056



Ø5 mm

For all types page 11
Specification:
mounting-hole: Ø 5+0.2 mm

fixing: snap-in

Material:
housing: PC colored transparent
insulating part: PC

Option:
- housing clear transparent
- wire connection is possible
- also available with high brightness LED

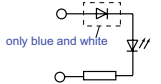
LED Symbol Indicator Ø5 mm

round / square / arrow / triangular

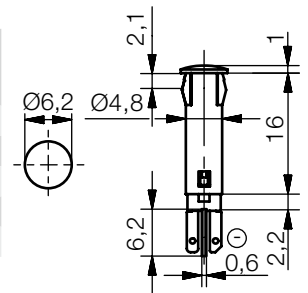
LED symbol indicator for mounting-Ø5 mm with superflat, surface plan lens head.
The frosted surface allows a clear on-off contrast and a high light transmission.

SKGD05x0x / SKHD05x0x / SKID05x0x / SKJD05x0x

Connection: Soldering/plug-in tab 1.5x0.3mm
round lens head

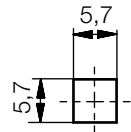


Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SKGD05002	SKGD05004
yellow	30 mcd	SKGD05102	SKGD05104
green	40 mcd	SKGD05202	SKGD05204
blue	700 mcd	SKGD05402	SKGD05404
white	3680 mcd	SKGD05602	SKGD05604



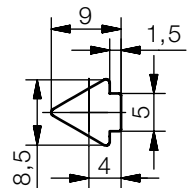
squared lens head

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SKHD05002	SKHD05004
yellow	30 mcd	SKHD05102	SKHD05104
green	40 mcd	SKHD05202	SKHD05204
blue	700 mcd	SKHD05402	SKHD05404
white	3680 mcd	SKHD05602	SKHD05604



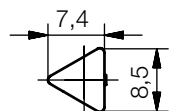
arrow lens head

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SKID05002	SKID05004
yellow	30 mcd	SKID05102	SKID05104
green	40 mcd	SKID05202	SKID05204
blue	700 mcd	SKID05402	SKID05404
white	3680 mcd	SKID05602	SKID05604



triangular lens head

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SKJD05002	SKJD05004
yellow	30 mcd	SKJD05102	SKJD05104
green	40 mcd	SKJD05202	SKJD05204
blue	700 mcd	SKJD05402	SKJD05404
white	3680 mcd	SKJD05602	SKJD05604



Ø 5 mm



For all types page 12
Specification:
mounting-hole: Ø 5+0.2 mm

fixing: snap-in
Material:
housing: PC colored transparent
insulating part: PC
Option:
- housing clear transparent
- also available with high brightness LED
Accessory:
- solderless connector cable KDS2



LED Indicator Ø5 mm Outside reflector

LED indicator, mounting-Ø5 mm, with plastic housing for snap-In fastening.

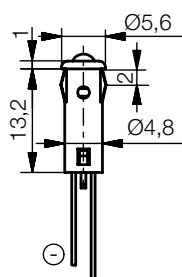
SKRD05x

Connection: 2-pin



PC black

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	SKRD050
yellow	30 mcd	SKRD051
green	40 mcd	SKRD052
blue	700 mcd	SKRD054
white	630 mcd	SKRD056



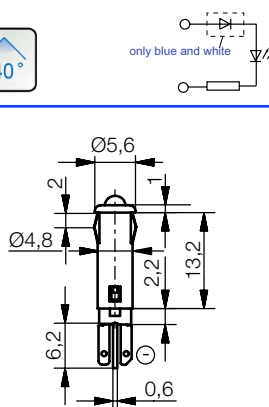
SKRD05x0x

Connection: Soldering/plug-in tab 1.5x0.3mm



PC black

Type	Luminous intensity 20mA	Part No. 12/14V _{DC(AC)}	Part No. 24/28V _{DC(AC)}
red	40 mcd	SKRD05002	SKRD05004
yellow	30 mcd	SKRD05102	SKRD05104
green	40 mcd	SKRD05202	SKRD05204
blue	700 mcd	SKRD05402	SKRD05404
white	630 mcd	SKRD05602	SKRD05604



Ø 5 mm



SKRD05x



SKRD05x0x

For all types page 13
Specification:
mounting-hole: Ø 5+0.2 mm

fixing: snap-In

Material:

housing: PC

insulating part: PC

Option:

- wire connection is possible

Accessory:

- prefabricated connecting cable KDS2
for types with soldering/plug-in tab



LED Indicator Ø6 mm Lens head form A

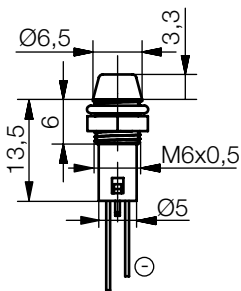
LED indicator with lens head for mounting-Ø6 mm. Plastic housing for screw fastening with fixing material.

SKAD06x

Connection: 2-pin

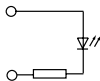


Type	Luminous intensity	Part No.
	10mA	LED voltage
red	20 mcd	SKAD060
yellow	15 mcd	SKAD061
green	20 mcd	SKAD062

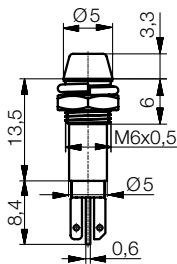


SKAD06x0x

Connection: Soldering/plug-in tab 1.5x0.3mm



Type	Luminous intensity 10mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red	20 mcd	SKAD06002	SKAD06004
yellow	15 mcd	SKAD06102	SKAD06104
green	20 mcd	SKAD06202	SKAD06204



For all types page 14

Specification:

mounting-hole: Ø 6+0.2 mm

fixing: screw fastening

Material:

housing: PC

insulating part: PC

lens head: PC colored transparent

washer: FE nickel plated

nut: brass nickel plated

Option:

- wire connection is possible

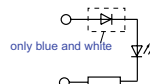
LED Symbol Indicator Ø6 mm

round / square / arrow

LED symbol indicator for mounting-Ø6 mm with superflat, surface plan lens head.
The frosted surface allows a clear on-off contrast and a high light transmission.

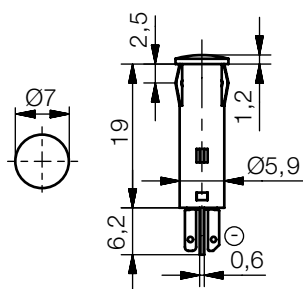
SKGD06x0x / SKHD06x0x / SKID06x0x

Connection: Soldering/plug-in tab 1.5x0.3mm



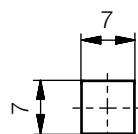
Round lens head

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SKGD06002	SKGD06004
yellow	30 mcd	SKGD06102	SKGD06104
green	40 mcd	SKGD06202	SKGD06204
blue	700 mcd	SKGD06402	SKGD06404
white	3680 mcd	SKGD06602	SKGD06604



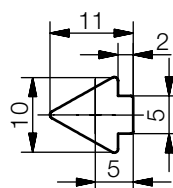
Squared lens head

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SKHD06002	SKHD06004
yellow	30 mcd	SKHD06102	SKHD06104
green	40 mcd	SKHD06202	SKHD06204
blue	700 mcd	SKHD06402	SKHD06404
white	3680 mcd	SKHD06602	SKHD06604



Arrow lens head

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SKID06002	SKID06004
yellow	30 mcd	SKID06102	SKID06104
green	40 mcd	SKID06202	SKID06204
blue	700 mcd	SKID06402	SKID06404
white	3680 mcd	SKID06602	SKID06604



Ø 6 mm

For all types page 15
Specification:
mounting-hole: Ø 6+0.2 mm

fixing: snap-in
Material:
housing: PC colored transparent
insulating part: PC
Option:
- housing clear transparent
- also available with high brightness LED
Accessory:
- solderless connector cable KDS2



LED Indicator Ø6 mm Inside reflector

LED indicator with inside reflector for mounting Ø6 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

Ø 6 mm



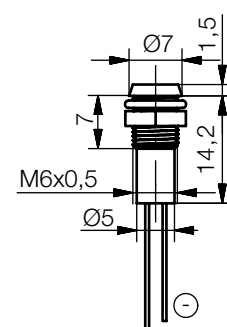
SMBD06x / SMDD06x



Connection: 2-pin

chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	SMBD060
yellow	30 mcd	SMBD061
green	40 mcd	SMBD062
blue	700 mcd	SMBD064
white	630 mcd	SMBD066



black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	SMDD060
yellow	30 mcd	SMDD061
green	40 mcd	SMDD062
blue	700 mcd	SMDD064
white	630 mcd	SMDD066

SMBE062xx / SMDE062xx bicolor



Connection: 3-pin

chromium plated

Type	Luminous intensity 20mA	LED voltage	Part No. 24/28VDC
red-green*	45 mcd 30 mcd	SMBE062	SMBE06204

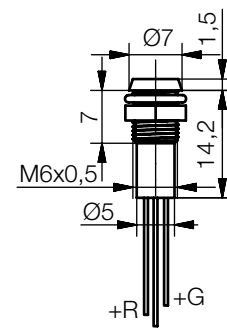
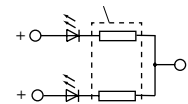
*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	LED voltage	Part No. 24/28VDC
red-green*	45 mcd 30 mcd	SMDE062	SMDE06204

*mixed color yellow

only in 24V versions



For all types page 16
Specification:
mounting-hole: Ø 6+0.2 mm

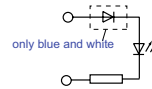
fixing: screw fastening
Material:
housing: brass chromium plated
insulating part: PC
washer: FE nickel plated
nut: brass nickel plated
Option:
- housing frosted chromium plated
- wire connection is possible
- IP67 on request
- other color combinations for the bicolor version are possible

LED Indicator Ø6 mm Inside reflector

LED indicator with inside reflector for mounting Ø6 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

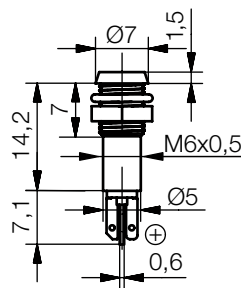
SMBD06x0x / SMDD06x0x

Connection: Soldering/plug-in tab 1.5x0.3mm



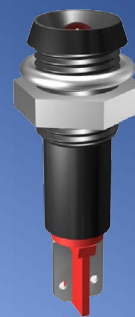
chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SMBD06002	SMBD06004
yellow	30 mcd	SMBD06102	SMBD06104
green	40 mcd	SMBD06202	SMBD06204
blue	700 mcd	SMBD06402	SMBD06404
white	630 mcd	SMBD06602	SMBD06604



black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SMDD06002	SMDD06004
yellow	30 mcd	SMDD06102	SMDD06104
green	40 mcd	SMDD06202	SMDD06204
blue	700 mcd	SMDD06402	SMDD06404
white	630 mcd	SMDD06602	SMDD06604



SMDD06x0x

Ø 6 mm

For all types page 17

Specification:

mounting-hole: Ø 6+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC in luminous color

washer: FE nickel plated

nut: brass nickel plated

Option:

- housing frosted chromium plated

- IP67 on request

Accessory:

- solderless connector cable KDS2



LED Indicator Ø6 mm Inside reflector cylindrical head

LED indicator with cylindrical head and inside reflector for mounting-Ø6 mm.
Chromium plated metal housing for screw fastening with fixing material.
Optionally as protection class IP67 (front side) with additional sealing disk.

Ø 6 mm



SMZD06x / SMUD06x

Connection: 2-pin

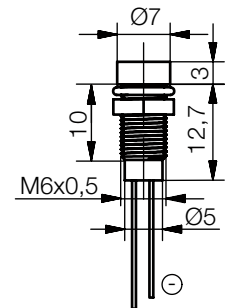


chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	SMZD060
yellow	30 mcd	SMZD061
green	40 mcd	SMZD062
blue	700 mcd	SMZD064
white	630 mcd	SMZD066

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	SMUD060
yellow	30 mcd	SMUD061
green	40 mcd	SMUD062
blue	700 mcd	SMUD064
white	630 mcd	SMUD066



For all types page 18
Specification:
mounting-hole: Ø 6+0.2 mm

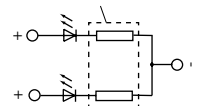
fixing: screw fastening
Material:
housing: brass chromium plated
insulating part: PC
washer: FE nickel plated
nut: brass nickel plated
Option:
- wire connection is possible
- IP67 on request
- other color combinations for the
bicolor version are possible

SMZE062xx / SMUE062xx bicolor

Connection: 3-pin



only in 24V versions



chromium plated

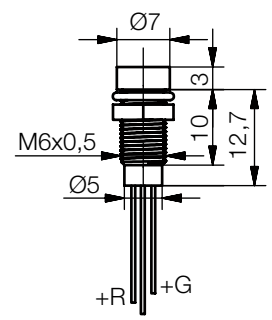
Type	Luminous intensity 20mA	Part No. LED voltage	24/28VDC
red-green*	45 mcd 30 mcd	SMZE062	SMZE06204

*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage	24/28VDC
red-green*	45 mcd 30 mcd	SMUE062	SMUE06204

*mixed color yellow

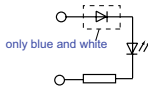


LED Indicator Ø6 mm Inside reflector cylindrical head

LED indicator with cylindrical head and inside reflector for mounting-Ø6 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

SMZD06x1x / SMUD06x1x

Connection: 2x tab terminal 2,0x0.5 mm

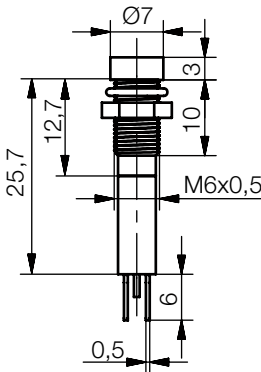


chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SMZD06012	SMZD06014
yellow	30 mcd	SMZD06112	SMZD06114
green	40 mcd	SMZD06212	SMZD06214
blue	700 mcd	SMZD06412	SMZD06414
white	630 mcd	SMZD06612	SMZD06614

black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SMUD06012	SMUD06014
yellow	30 mcd	SMUD06112	SMUD06114
green	40 mcd	SMUD06212	SMUD06214
blue	700 mcd	SMUD06412	SMUD06414
white	630 mcd	SMUD06612	SMUD06614



Ø 6 mm



SMZD06x1x

For all types page 19
Specification:
 mounting-hole: Ø 6+0.2 mm
 fixing: screw fastening
Material:
 housing: brass chromium plated
 insulating part: PC in luminous color
 washer: FE nickel plated
 nut: brass nickel plated
Option:
 - housing frosted chromium plated
 - IP67 on request

LED Indicator Ø6 mm Inside reflector flat top LED

LED indicator with inside reflector for mounting Ø6 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

Ø 6 mm



SMCP06x

SMCP06x / SMEP06x

Connection: 2-pin

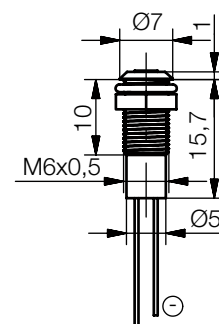
chromium plated



Type	Luminous intensity 20mA	Part No. LED voltage
red	10 mcd	SMCP060
yellow	6 mcd	SMCP061
green	12 mcd	SMCP062
blue	100 mcd	SMCP064
white	50 mcd	SMCP066

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	10 mcd	SMEP060
yellow	6 mcd	SMEP061
green	12 mcd	SMEP062
blue	100 mcd	SMEP064
white	50 mcd	SMEP066



For all types page 20

Specification:

mounting-hole: Ø 6+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC

washer: FE nickel plated

nut: brass nickel plated

Option:

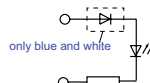
- housing frosted chromium plated
- wire connection is possible
- IP67 on request

LED Indicator Ø6 mm Inside reflector flat top LED

LED indicator with inside reflector for mounting Ø6 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

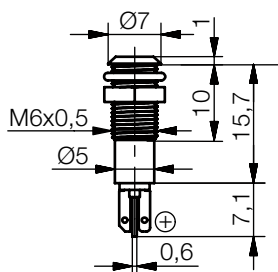
SMCP06x0x / SMEP06x0x

Connection: Soldering/plug-in tab 1.5x0.3 mm



chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	10 mcd	SMCP06002	SMCP06004
yellow	6 mcd	SMCP06102	SMCP06104
green	12 mcd	SMCP06202	SMCP06204
blue	100 mcd	SMCP06402	SMCP06404
white	50 mcd	SMCP06602	SMCP06604

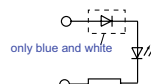


black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	10 mcd	SMEP06002	SMEP06004
yellow	6 mcd	SMEP06102	SMEP06104
green	12 mcd	SMEP06202	SMEP06204
blue	100 mcd	SMEP06402	SMEP06404
white	50 mcd	SMEP06602	SMEP06604

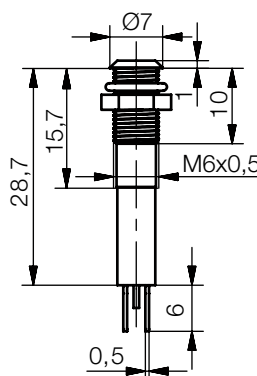
SMCP06x1x / SMEP06x1x

Connection: 2x tab terminal 2,0x0.5 mm



chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	10 mcd	SMCP06012	SMCP06014
yellow	6 mcd	SMCP06112	SMCP06114
green	12 mcd	SMCP06212	SMCP06214
blue	100 mcd	SMCP06412	SMCP06414
white	50 mcd	SMCP06612	SMCP06614



black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	10 mcd	SMEP06012	SMEP06014
yellow	6 mcd	SMEP06112	SMEP06114
green	12 mcd	SMEP06212	SMEP06214
blue	100 mcd	SMEP06412	SMEP06414
white	50 mcd	SMEP06612	SMEP06614

Ø 6 mm



SMCP06x0x



SMEP06x1x

For all types page 21

Specification:

mounting-hole: Ø 6+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC in luminous color

washer: FE nickel plated

nut: brass nickel plated

Option:

- housing frosted chromium plated

- IP67 on request

Accessory:

- solderless connector cable KDS2 for type with soldering/plug-in tab

LED Indicator Ø6 mm Outside reflector

LED indicator with outside reflector for mounting-Ø6 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

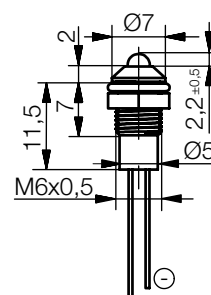
SMQD06x / SMRD06x



Connection: 2-pin

chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	SMQD060
yellow	30 mcd	SMQD061
green	40 mcd	SMQD062
blue	700 mcd	SMQD064
white	3680 mcd	SMQD066



black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	SMRD060
yellow	30 mcd	SMRD061
green	40 mcd	SMRD062
blue	700 mcd	SMRD064
white	3680 mcd	SMRD066

SMRD06x

SMQE06xx

SMQE062xx / SMRE062xx bicolor



Connection: 3-pin

chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red-green*	45 mcd 30 mcd	SMQE062 SMQE06204

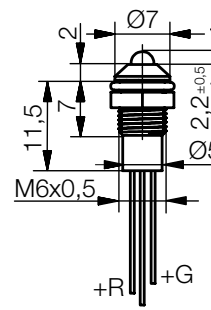
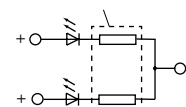
*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red-green*	45 mcd 30 mcd	SMRE062 SMRE06204

*mixed color yellow

only in 24V versions



For all types page 22

Specification:

mounting-hole: Ø 6+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC

washer: FE nickel plated

nut: brass nickel plated

Option:

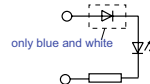
- housing frosted chromium plated
- wire connection is possible
- IP67 on request
- other color combinations for the bicolor version are possible

LED Indicator Ø6 mm Outside reflector

LED indicator with outside reflector for mounting-Ø6 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

SMQD06x0x / SMRD06x0x

Connection: Soldering/plug-in tab 1.5x0.3 mm

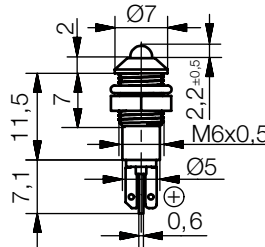


chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SMQD06002	SMQD06004
yellow	30 mcd	SMQD06102	SMQD06104
green	40 mcd	SMQD06202	SMQD06204
blue	700 mcd	SMQD06402	SMQD06404
white	630 mcd	SMQD06602	SMQD06604

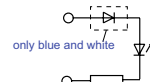
black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SMRD06002	SMRD06004
yellow	30 mcd	SMRD06102	SMRD06104
green	40 mcd	SMRD06202	SMRD06204
blue	700 mcd	SMRD06402	SMRD06404
white	630 mcd	SMRD06602	SMRD06604



SMQD06x1x / SMRD06x1x

Connection: 2x tab terminal 2,0x0.5 mm

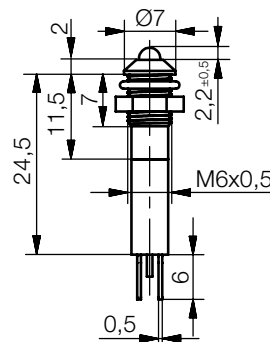


chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SMQD06012	SMQD06014
yellow	30 mcd	SMQD06112	SMQD06114
green	40 mcd	SMQD06212	SMQD06214
blue	700 mcd	SMQD06412	SMQD06414
white	630 mcd	SMQD06612	SMQD06614

black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd	SMRD06012	SMRD06014
yellow	30 mcd	SMRD06112	SMRD06114
green	40 mcd	SMRD06212	SMRD06214
blue	700 mcd	SMRD06412	SMRD06414
white	630 mcd	SMRD06612	SMRD06614



Ø 6 mm



SMQD06x0x



SMQD06x1x

For all types page 23

Specification:

mounting-hole: Ø 6±0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC in luminous color

washer: FE nickel plated

nut: brass nickel plated

Option:

- housing frosted chromium plated

- IP67 on request

Accessory:

- solderless connector cable KDS2 for type with soldering/plug-in tab

LED Indicator Ø6 mm with optical lens

IP67

LED indicator with optical lens for mounting-Ø6 mm. Chromium plated metal housing for screw fastening with fixing material. Front side IP67 protected at build-in condition.

SMLD06x / SMLU06x

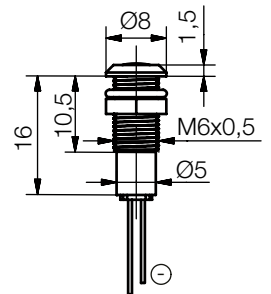
Connection: 2-pin



chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd ¹	SMLD060
yellow	30 mcd ¹	SMLD061
green	40 mcd ¹	SMLD062
blue	700 mcd ¹	SMLD064
white	630 mcd ¹	SMLD066

Type	Luminous intensity 20mA	Part No. LED voltage
red	2400 mcd ¹	SMLU060
yellow	1800 mcd ¹	SMLU061
blue	2760 mcd ¹	SMLU064
white	6510 mcd ¹	SMLU066
green	10320 mcd ¹	SMLU067



SMLD06x
SMLU06x

SMLE062xx

SMLE062xx bicolor



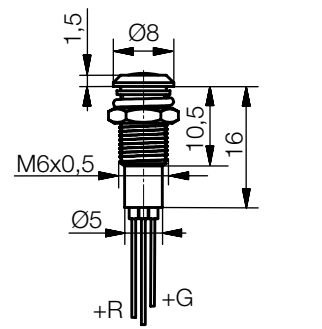
Connection: 3-pin



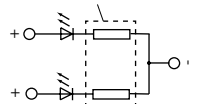
chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage	24/28VDC
red-green*	45 mcd ¹	SMLE062	SMLE06204
	30 mcd ¹		

*mixed color yellow



only in 24V versions



For all types page 24

Specification:

mounting-hole: Ø 6+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC (SMLD/SMLU)

lens: glass

washer: FE nickel plated

nut: brass nickel plated

sealing disk: NBR 70

Option:

- wire connection is possible
- other color combinations for the bicolor version are possible

Increasing effect of the glass lense have not been considered. The lens reduces the viewing angle by 50% and increases the light output by factor 4.

LED Indicator Ø6 mm with optical lens IP67

LED indicator with optical lens for mounting-Ø6 mm. Chromium plated metal housing for screw fastening with fixing material. Front side IP67 protected at build-in condition.

SMLD06x0x

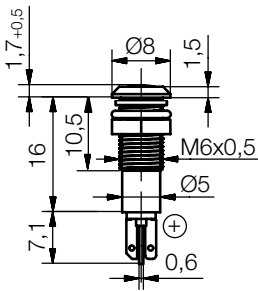
Connection: Soldering/plug-in tab 1.5x0.3 mm
chromium plated

IP50

DC(AC)

40°

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	40 mcd ¹	SMLD06002	SMLD06004
yellow	30 mcd ¹	SMLD06102	SMLD06104
green	40 mcd ¹	SMLD06202	SMLD06204
blue	700 mcd ¹	SMLD06402	SMLD06404
white	630 mcd ¹	SMLD06602	SMLD06604



SMLD06x0x

Ø 6 mm

For all types page 25
Specification:
mounting-hole: Ø 6+0.2 mm

- fixing: screw fastening
Material:
housing: brass chromium plated
insulating part: PC in luminous color
lens: glass
washer: FE nickel plated
nut: brass nickel plated
sealing disk: NBR 70
Accessory:
- solderless connector cable KDS2



KDS2Lxxx

Increasing effect of the glass lense have not been considered. The lens reduces the viewing angle by 50% and increases the light output by factor 4.

LED Indicator Ø7 mm

Lens head form A / Outside reflector / rear panel mounting

LED indicator, mounting-Ø7 mm, with plastic housing for snap-In fastening. LED through rear panel changeable.

The front area of the SKND07 is identical to a usual flat top LED Ø5 mm. Specially designed for front-flush installation from the rear side. The basic version is designed for a front panel thickness of 4 mm. For smaller panels from 2 mm up to 3 mm distance rings are available.

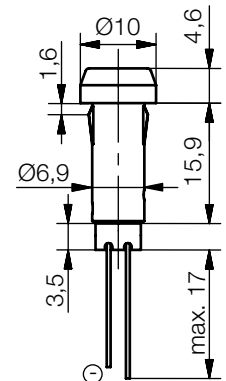
SKAD07x with lens head

Connection: 2-pin



PC grey

Type	Luminous intensity 20mA	Part No. LED voltage
red	38 mcd	SKAD070
yellow	58 mcd	SKAD071
green	38 mcd	SKAD072



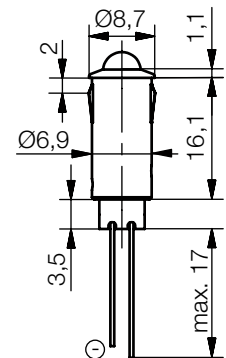
SKRD07x outside reflector

Connection: 2-pin



PC black

Type	Luminous intensity 20mA	Part No. LED voltage
red	38 mcd	SKRD070
yellow	58 mcd	SKRD071
green	38 mcd	SKRD072



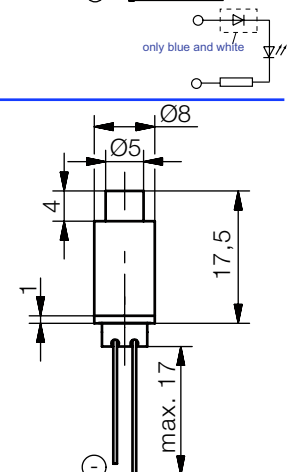
SKND07x0x rear panel mounting

Connection: 2-pin



PC colored transparent

Type	Luminous intensity 20mA	Part No. 12/14V _{DC(AC)}	Part No. 24/28V _{DC(AC)}
red	40 mcd	SKND07002	SKND07004
yellow	30 mcd	SKND07102	SKND07104
green	40 mcd	SKND07202	SKND07204
blue	700 mcd	SKND07402	SKND07404
white	3680 mcd	SKND07602	SKND07604



Specification SKAD07 /SKRD07:
mounting-hole: Ø 7+0.2 mm

fixing: snap-In

Material:

housing: PC

insulating part: PA6.6

Lens head: PC colored transparent (SKAD)

Option:

- wire connection is possible

Specification SKND07:

mounting-hole: Ø 5,1 mm

fixing: press-in / glue-in

lum. surface: Ø 5 mm

Material:

housing: PC colored transparent

insulating part: PA6.6

Option:

- housing clear transparent

LED Indicator Ø8 mm Lens head form A

LED indicator with lens head for mounting-Ø8 mm. Plastic housing for screw fastening with fixing material. On the version with pin, the LED is changeable through the rear panel.

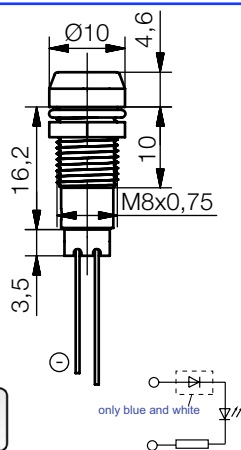
SKAD08x

Connection: 2-pin



PC grey

Type	Luminous intensity 20mA	Part No. LED voltage
red	38 mcd	SKAD080
yellow	58 mcd	SKAD081
green	38 mcd	SKAD082



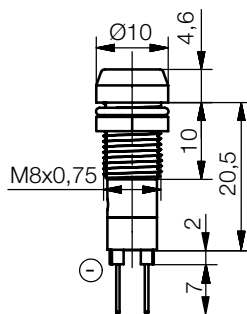
SKAD08x1x

Connection: 2x tab terminal 2,8x0.5 mm



PC grey

Type	Luminous intensity 20mA	Part No. 12/14V _{DC(AC)}	Part No. 24/28V _{DC(AC)}
red	38 mcd	SKAD08012	SKAD08014
yellow	58 mcd	SKAD08112	SKAD08114
green	38 mcd	SKAD08212	SKAD08214
blue	1400 mcd	SKAD08412	SKAD08414
white	2320 mcd	SKAD08612	SKAD08614



Ø8 mm

For all types page 27

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: PC

insulating part: PC / PA6.6

lens head: PC colored transparent

washer: FE nickel plated

nut: brass nickel plated

Option:

- wire connection is possible

- IP67 with additional sealing disc

- SKAD08x1x also available as version without integrated resistor

LED Indicator Ø8 mm Inside reflector

LED indicator with inside reflector for mounting Ø8 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk. LED through rear panel changeable.

Ø 8 mm



SMBD08x / SMDD08x

Connection: 2-pin

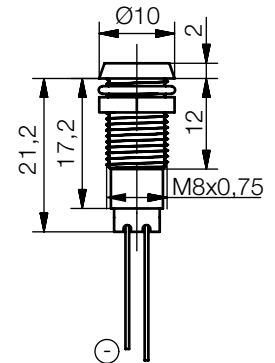


chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	38 mcd	SMBD080
yellow	58 mcd	SMBD081
green	38 mcd	SMBD082
blue	1400 mcd	SMBD084
white	2320 mcd	SMBD086

black chromium plated

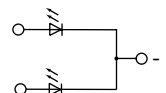
Type	Luminous intensity 20mA	Part No. LED voltage
red	38 mcd	SMDD080
yellow	58 mcd	SMDD081
green	38 mcd	SMDD082
blue	1400 mcd	SMDD084
white	2320 mcd	SMDD086



SMBE082 / SMDE082 bicolor



Connection: 3-pin



chromium plated

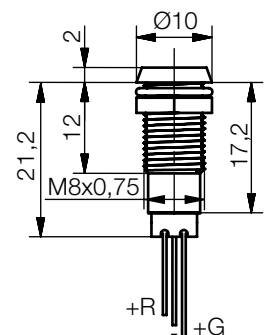
Type	Luminous intensity 20mA	Part No. LED voltage
red-green*	60 mcd 50 mcd	SMBE082

*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red-green*	60 mcd 50 mcd	SMDE082

*mixed color yellow



For all types page 28

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PA6.6

washer: FE nickel plated

nut: brass nickel plated

Option:

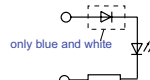
- housing frosted chromium plated
- wire connection is possible
- IP67 with additional sealing disc
- other color combinations for the bicolor version are possible

LED Indicator Ø8 mm Inside reflector

LED indicator with inside reflector for mounting Ø8 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

SMBD08x1x / SMDD08x1x

Connection: 2x tab terminal 2,8x0.5 mm

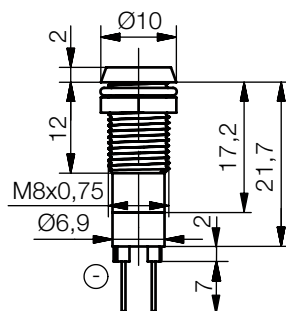


chromium plated

Type	Luminous intensity		Part No.	
	20mA		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	38 mcd		SMBD08012	SMBD08014
yellow	58 mcd		SMBD08112	SMBD08114
green	38 mcd		SMBD08212	SMBD08214
blue	1400 mcd		SMBD08412	SMBD08414
white	2320 mcd		SMBD08612	SMBD08614

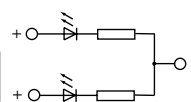
black chromium plated

Type	Luminous intensity		Part No.	
	20mA		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	38 mcd		SMDD08012	SMDD08014
yellow	58 mcd		SMDD08112	SMDD08114
green	38 mcd		SMDD08212	SMDD08214
blue	1400 mcd		SMDD08412	SMDD08414
white	2320 mcd		SMDD08612	SMDD08614



Ø 8 mm

SMBE0821x / SMDE0821x bicolor



Connection: 2x tab terminal 2,8x0.5 mm, 1x pin

chromium plated

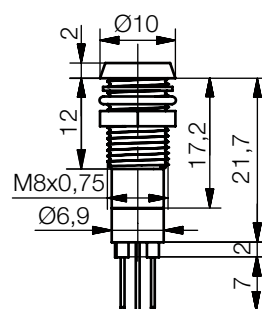
Type	Luminous intensity		Part No.	
	20mA		12/14V _{DC}	24/28V _{DC}
red-green*	60 mcd		SMBE08212	SMBE08214
	50 mcd			

*mixed color yellow

black chromium plated

Type	Luminous intensity		Part No.	
	20mA		12/14V _{DC}	24/28V _{DC}
red-green*	60 mcd		SMDE08212	SMDE08214
	50 mcd			

*mixed color yellow



For all types page 29

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC

washer: FE nickel plated

nut: brass nickel plated

Option:

- housing frosted chromium plated
- IP67 with additional sealing disc
- also available as version without integrated resistor
- other color combinations for the bicolor version are possible

LED Indicator Ø8 mm Inside reflector

IP67

LED indicator with inside reflector for mounting Ø8 mm. Chromium plated metal housing for screw fastening with fixing material. Front side IP67 protected at build-in condition.

Ø 8 mm

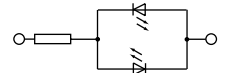


SWBF0821x / SWDF0821x bipolar

IP67

DC

60°



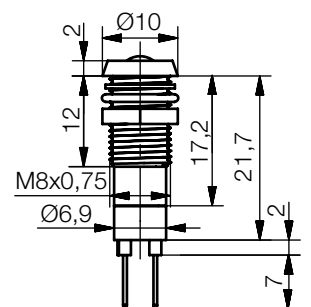
Connection: 2x tab terminal 2,8x0.5 mm

chromium plated

Type	Luminous intensity	Part No.	
	20mA	12/14V _{DC}	24/28V _{DC}
red-green	30 mcd 20 mcd	SWBF08212	SWBF08214

black chromium plated

Type	Luminous intensity	Part No.	
	20mA	12/14V _{DC}	24/28V _{DC}
red-green	30 mcd 20 mcd	SWDF08212	SWDF08214

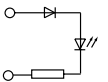


SWBU08x1x / SWDU08x1x

IP67

DC(AC)

30-60°



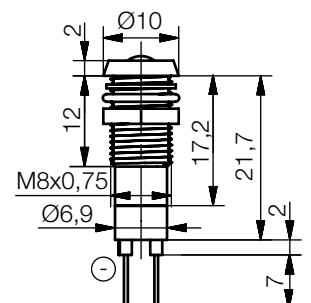
Connection: 2x tab terminal 2,8x0.5 mm

chromium plated

Type	Luminous intensity	Part No.	
	20mA	12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	2400 mcd	SWBU08012	SWBU08014
yellow	1800 mcd	SWBU08112	SWBU08114
green	2760 mcd	SWBU08212	SWBU08214
blue	3680 mcd	SWBU08412	SWBU08414
white	10320 mcd	SWBU08612	SWBU08614

black chromium plated

Type	Luminous intensity	Part No.	
	20mA	12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	2400 mcd	SWDU08012	SWDU08014
yellow	1800 mcd	SWDU08112	SWDU08114
green	2760 mcd	SWDU08212	SWDU08214
blue	3680 mcd	SWDU08412	SWDU08414
white	10320 mcd	SWDU08612	SWDU08614



For all types page 30

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC

LED look cap: PC colored transparent

in type SWxU08

washer: FE nickel plated

nut: brass nickel plated

sealing disk: NBR 70

LED Indicator Ø8 mm Inside reflector cylindrical head

LED indicator with cylindrical head and inside reflector for mounting-Ø8 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

SMZF0821 / SMUF0821 bipolar

Connection: 2x tab terminal 2,8x0.5 mm

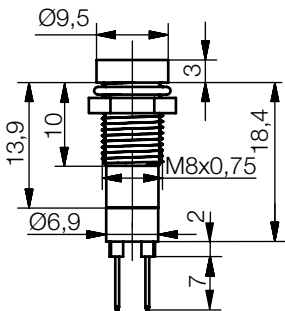


chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red-green	30 mcd 20 mcd	SMZF0821

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red-green	30 mcd 20 mcd	SMUF0821



Ø 8 mm

SMZE0822x / SMUE0822x bicolor

Connection: 3x tab terminal 2,0x0.5 mm



chromium plated

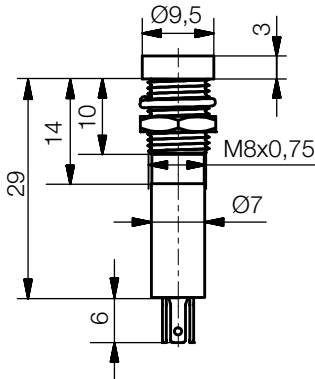
Type	Luminous intensity 20mA	Part No. 12/14V _{DC}	Part No. 24/28V _{DC}
red-green*	60 mcd 50 mcd	SMZE08222	SMZE08224

*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	Part No. 12/14V _{DC}	Part No. 24/28V _{DC}
red-green*	60 mcd 50 mcd	SMUE08222	SMUE08224

*mixed color yellow



For all types page 31
Specification:
mounting-hole: Ø 8+0.2 mm

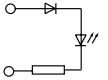
- fixing: screw fastening
Material:
housing: brass chromium plated
insulating part: PC
washer: FE nickel plated
nut: brass nickel plated
Option:
- housing frosted chromium plated
- IP67 with additional sealing disc
- other color combinations for the bicolor version are possible

LED Indicator Ø8 mm Inside reflector cylindrical head

LED indicator with cylindrical head and inside reflector for mounting-Ø8 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

SMZD08x2x / SMUD08x2x

Connection: 2x tab terminal 2,8x0.8 mm

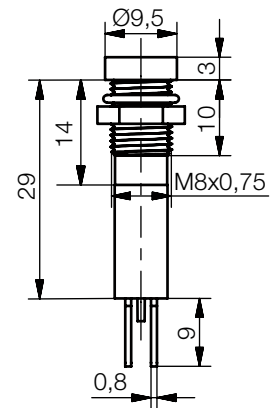


chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	38 mcd	SMZD08022	SMZD08024
yellow	58 mcd	SMZD08122	SMZD08124
green	38 mcd	SMZD08222	SMZD08224
blue	1400 mcd	SMZD08422	SMZD08424
white	2320 mcd	SMZD08622	SMZD08624

black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	38 mcd	SMUD08022	SMUD08024
yellow	58 mcd	SMUD08122	SMUD08124
green	38 mcd	SMUD08222	SMUD08224
blue	1400 mcd	SMUD08422	SMUD08424
white	2320 mcd	SMUD08622	SMUD08624



Ø 8 mm



SMZD08x2x

For all types page 32

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC in luminous color

washer: FE nickel plated

nut: brass nickel plated

Option:

- housing frosted chromium plated

- IP67 with additional sealing disc

LED Indicator Ø8 mm Inside reflector cylindrical head

IP67

LED indicator with cylindrical head and inside reflector for mounting-Ø8 mm. Chromium plated metal housing for screw fastening with fixing material (230V version with 2-part sleeve for protection against contact). Front side IP67 protected at build-in condition.

SWZU08x2x / SWUU08x2x

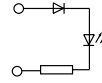
Connection: 2x tab terminal 2,8x0.8 mm

IP67

AC

DC(AC)

30-60°



chromium plated

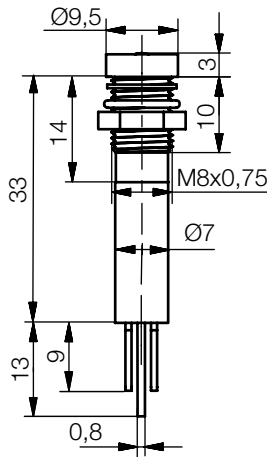
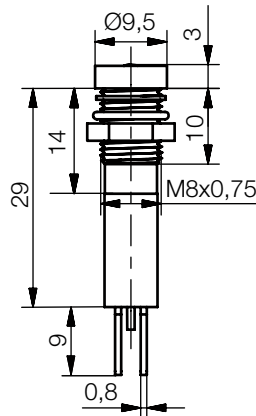
Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	1300 mcd	SWZU08022A	SWZU08024A
yellow	1600 mcd	SWZU08122A	SWZU08124A
blue	1400 mcd	SWZU08422A	SWZU08424A
white	2300 mcd	SWZU08622A	SWZU08624A
green	1200 mcd	SWZU08722A	SWZU08724A

Type	Luminous intensity 20mA	Part No.	
		230V _{AC}	
red	1300 mcd	SWZU08028A	
yellow	1600 mcd	SWZU08128A	
blue	1400 mcd	SWZU08428A	
white	2300 mcd	SWZU08628A	
green	1200 mcd	SWZU08728A	

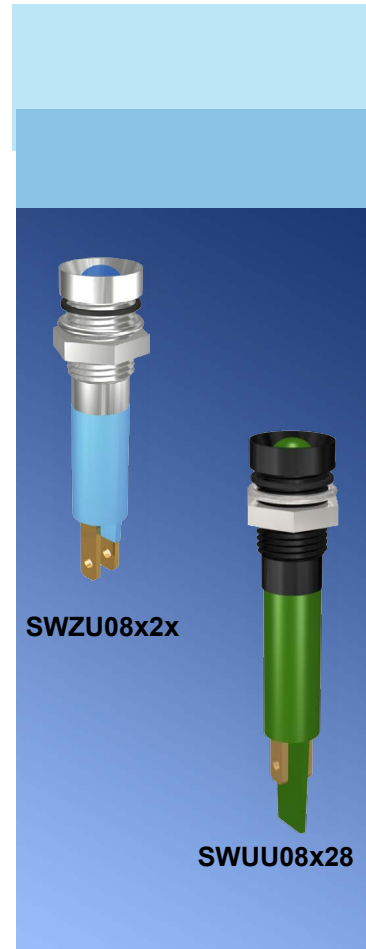
black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	1300 mcd	SWUU08022 A	SWUU08024A
yellow	1600 mcd	SWUU08122A	SWUU08124A
blue	1400 mcd	SWUU08422A	SWUU08424A
white	2300 mcd	SWUU08622A	SWUU08624A
green	1200 mcd	SWUU08722A	SWUU08724A

Type	Luminous intensity 20mA	Part No.	
		230V _{AC}	
red	1300 mcd	SWUU08028A	
yellow	1600 mcd	SWUU08128A	
blue	1400 mcd	SWUU08428A	
white	2300 mcd	SWUU08628A	
green	1200 mcd	SWUU08728A	



230V Verison



Ø 8 mm

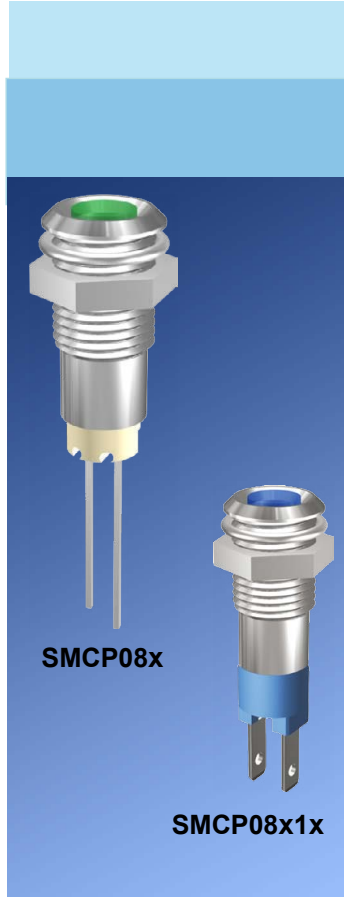
For all types page 33
Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening
Material:
housing: brass chromium plated in-
sulating part: PC in luminous color
washer: FE nickel plated
nut: brass nickel plated
sealing disk: NBR 70
Option:
- housing frosted chromium plated

LED Indicator Ø8 mm Inside reflector flat top LED

LED indicator with inside reflector for mounting-Ø8 mm. Chromium plated metal housing for screw fastening with fixing material. On the version with pin, the LED is changeable through the rear panel.

Ø 8 mm



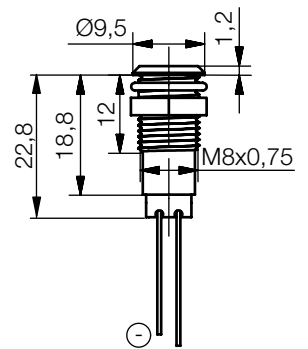
SMCP08x / SMEP08x

Connection: 2-pin



chromium plated

Type	Luminous intensity 20mA	Part No.
red	12 mcd	SMCP080
yellow	6 mcd	SMCP081
green	6 mcd	SMCP082
blue	50 mcd	SMCP084
white	25 mcd	SMCP086



black chromium plated

Type	Luminous intensity 20mA	Part No.
red	12 mcd	SMEP080
yellow	6 mcd	SMEP081
green	6 mcd	SMEP082
blue	50 mcd	SMEP084
white	25 mcd	SMEP086

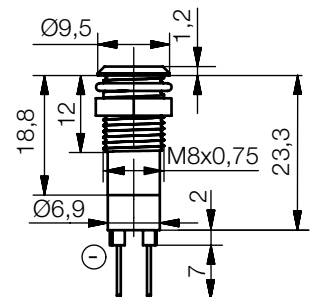
SMCP08x1x / SMEP08x1x

Connection: 2x tab terminal 2,8x0.5 mm



chromium plated

Type	Luminous intensity 20mA	Part No.
red	12 mcd	SMCP08012
yellow	6 mcd	SMCP08112
green	6 mcd	SMCP08212
blue	50 mcd	SMCP08412
white	25 mcd	SMCP08612



black chromium plated

Type	Luminous intensity 20mA	Part No.
red	12 mcd	SMEP08012
yellow	6 mcd	SMEP08112
green	6 mcd	SMEP08212
blue	50 mcd	SMEP08412
white	25 mcd	SMEP08612

For all types page 34

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC / PA6.6

washer: FE nickel plated

nut: brass nickel plated

Option:

- housing frosted chromium plated

- wire connection is possible

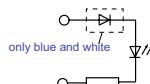
- SMCP08x1x und SMEP08x1x also available as version without integrated resistor

LED Indicator Ø8 mm Inside reflector flat top LED

LED indicator with inside reflector for mounting Ø8 mm. Chromium plated metal housing for screw fastening with fixing material.

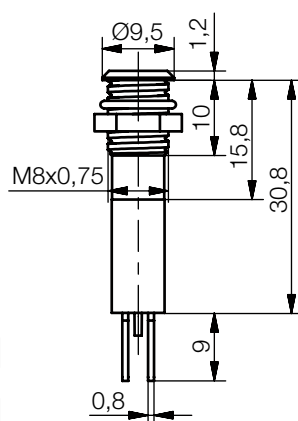
SMCP08x2x / SMEP08x2x

Connection: 2x tab terminal 2,8x0.8 mm



chromium plated

Type	Luminous intensity 20mA	Part No.	Part No.
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	12 mcd	SMCP08012	SMCP08014
yellow	6 mcd	SMCP08112	SMCP08114
green	6 mcd	SMCP08212	SMCP08214
blue	50 mcd	SMCP08412	SMCP08414
white	25 mcd	SMCP08612	SMCP08614



black chromium plated

Type	Luminous intensity 20mA	Part No.	Part No.
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	12 mcd	SMEP08022	SMEP08024
yellow	6 mcd	SMEP08122	SMEP08124
green	6 mcd	SMEP08222	SMEP08224
blue	50 mcd	SMEP08422	SMEP08424
white	25 mcd	SMEP08622	SMEP08624

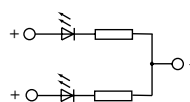


SMEP08x2x



SMCE0822x

SMCE0822x / SMEE0822x bicolor



Connection: 3x tab terminal 2,0x0.5 mm

chromium plated

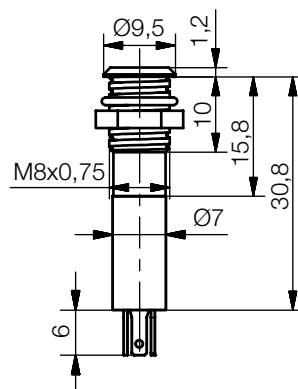
Type	Luminous intensity 20mA	Part No.	Part No.
		12/14V _{DC}	24/28V _{DC}
red-green*	10 mcd	SMCE08222	SMCE08224
	10 mcd		

*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	Part No.	Part No.
		12/14V _{DC}	24/28V _{DC}
red-green*	10 mcd	SMEE08222	SMEE08224
	10 mcd		

*mixed color yellow



For all types page 35

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC

washer: FE nickel plated

nut: brass nickel plated

Option:

- housing frosted chromium plated

- other color combinations for the bicolor version are possible

LED Indicator Ø8 mm Outside reflector

LED indicator with outside reflector for mounting-Ø8 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

SMQD08x / SMRD08x

Connection: 2-pin

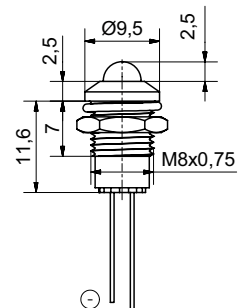


chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	38 mcd	SMQD080
yellow	58 mcd	SMQD081
green	38 mcd	SMQD082
blue	1400 mcd	SMQD084
white	2320 mcd	SMQD086

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	38 mcd	SMRD080
yellow	58 mcd	SMRD081
green	38 mcd	SMRD082
blue	1400 mcd	SMRD084
white	2320 mcd	SMRD086



SMQD08x

SMQE082

SMQE082 / SMRE082 bicolor



Connection: 3-pin

chromium plated

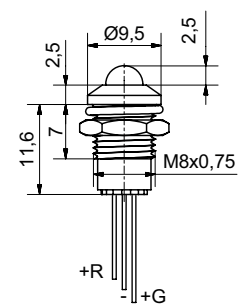
Type	Luminous intensity 20mA	Part No. LED voltage
red-green*	60 mcd 50 mcd	SMQE082

*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red-green*	60 mcd 50 mcd	SMRE082

I *mixed color yellow



For all types page 36
Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening
Material:
housing: brass chromium plated
insulating part: PA6.6
washer: FE nickel plated
nut: brass nickel plated
Option:
- housing frosted chromium plated
- wire connection is possible
- IP67 with additional sealing disc
- other color combinations for the bicolor version are possible

LED Indicator Ø8 mm Outside reflector

LED indicator with outside reflector for mounting-Ø8 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

SMQD08x1x / SMRD08x1x

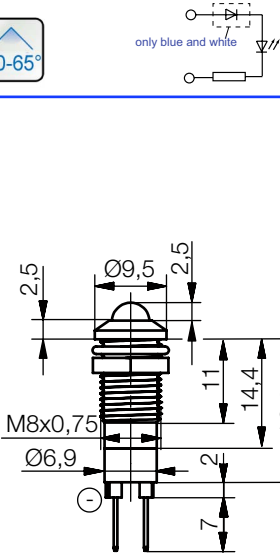
Connection: 2x tab terminal 2,8x0.5 mm

chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	38 mcd	SMQD08012	SMQD08014
yellow	58 mcd	SMQD08112	SMQD08114
green	38 mcd	SMQD08212	SMQD08214
blue	1400 mcd	SMQD08412	SMQD08414
white	2320 mcd	SMQD08612	SMQD08614

black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	38 mcd	SMRD08012	SMRD08014
yellow	58 mcd	SMRD08112	SMRD08114
green	38 mcd	SMRD08212	SMRD08214
blue	1400 mcd	SMRD08412	SMRD08414
white	2320 mcd	SMRD08612	SMRD08614



Ø 8 mm

SMQE0821x / SMRE0821x bicolor

Connection: 2x tab terminal 2,8x0.5 mm, 1x pin

chromium plated

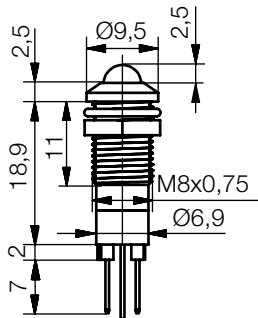
Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red-green*	60 mcd 50 mcd	SMQE08212	SMQE08214

*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red-green*	60 mcd 50 mcd	SMRE08212	SMRE08214

*mixed color yellow



For all types page 37

Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening
Material:
housing: brass chromium plated
insulating part: PC
washer: FE nickel plated
nut: brass nickel plated
Option:
- housing frosted chromium plated
- IP67 with additional sealing disc
- also available as version without integrated resistor
- other color combinations for the bicolor version are possible

LED Indicator Ø8 mm Outside reflector

LED indicator with outside reflector for mounting-Ø8 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 front side)with additional sealing disk.

Ø 8 mm



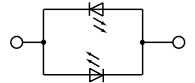
SMQF0821 / SMRF0821 bipolar

Connection: 2x tab terminal 2,8x0.5 mm

IP50

DC

60°

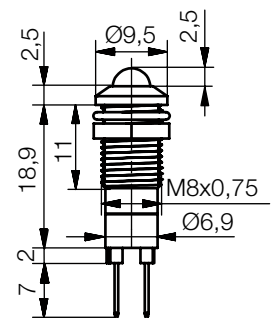


chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red- green	30 mcd 20 mcd	SMQF0821

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red- green	30 mcd 20 mcd	SMRF0821



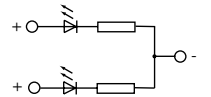
SMQE0822x / SMRE0822x bicolor

Connection: 3x tab terminal 2,0x0.5 mm

IP50

DC

60°



chromium plated

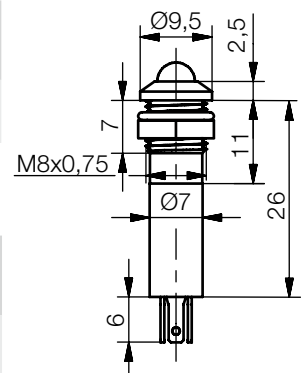
Type	Luminous intensity 20mA	Part No. 12/14V _{DC}	Part No. 24/28V _{DC}
red- green*	60 mcd 50 mcd	SMQE08222	SMQE08224

*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	Part No. 12/14V _{DC}	Part No. 24/28V _{DC}
red- green*	60 mcd 50 mcd	SMRE08222	SMRE08224

*mixed color yellow



For all types page 38
Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening
Material:
housing: brass chromium plated
insulating part: PC
washer: FE nickel plated
nut: brass nickel plated
Option:
- housing frosted chromium plated
- IP67 with additional sealing disc
- other color combinations for the bicolor version are possible

LED Indicator Ø8 mm Outside reflector

LED indicator with outside reflector for mounting-Ø8 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

SMQD08x2x / SMRD08x2x

Connection: 2x tab terminal 2,8x0.8 mm

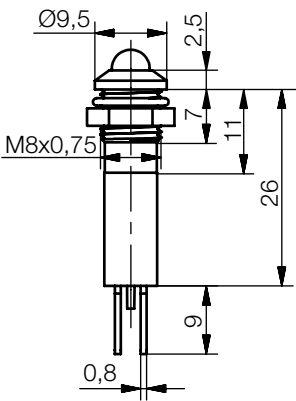


chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	38 mcd	SMQD08022	SMQD08024
yellow	58 mcd	SMQD08122	SMQD08124
green	38 mcd	SMQD08222	SMQD08224
blue	1400 mcd	SMQD08422	SMQD08424
white	2320 mcd	SMQD08622	SMQD08624

black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	38 mcd	SMRD08022	SMRD08024
yellow	58 mcd	SMRD08122	SMRD08124
green	38 mcd	SMRD08222	SMRD08224
blue	1400 mcd	SMRD08422	SMRD08424
white	2320 mcd	SMRD08622	SMRD08624



SMQD08x2x

Ø 8 mm

For all types page 39

Specification:

mounting-hole: Ø 8+0.2 mm
fixing: screw fastening

Material:

housing: brass chromium plated
insulating part: PC in luminous color
washer: FE nickel plated
nut: brass nickel plated

Option:

- housing frosted chromium plated
- IP67 with additional sealing disc

IP67

LED Indicator Ø8 mm Outside reflector

LED indicator with outside reflector for mounting-Ø8 mm. Chromium plated metal housing for screw fastening with fixing material (230V version with 2-part sleeve for protection against contact). Front side IP67 protected at build-in condition.

SWQU08x2x / SWRU08x2x

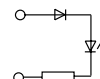
Connection: 2x tab terminal 2,8x0.8 mm

IP67

AC

DC(AC)

30-60°



chromium plated

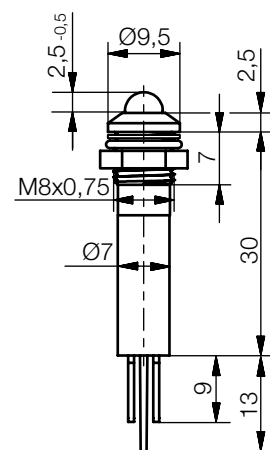
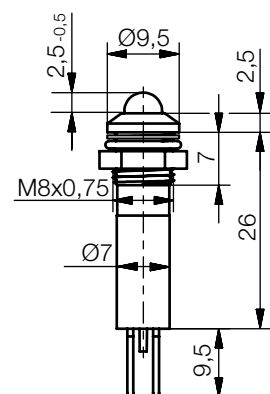
Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	1300 mcd	SWQU08022A	SWQU08024A
yellow	1600 mcd	SWQU08122A	SWQU08124A
blue	1400 mcd	SWQU08422A	SWQU08424A
white	2300 mcd	SWQU08622A	SWQU08624A
green	1200 mcd	SWQU08722A	SWQU08724A

Type	Luminous intensity 20mA	Part No.	
		230V _{AC}	
red	1300 mcd	SWQU08028A	
yellow	1600 mcd	SWQU08128A	
blue	1400 mcd	SWQU08428A	
white	2300 mcd	SWQU08628A	
green	1200 mcd	SWQU08728A	

black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	1300 mcd	SWRU08022A	SWRU08024A
yellow	1600 mcd	SWRU08122A	SWRU08124A
blue	1400 mcd	SWRU08422A	SWRU08424A
white	2300 mcd	SWRU08622A	SWRU08624A
green	1200 mcd	SWRU08722A	SWRU08724A

Type	Luminous intensity 20mA	Part No.	
		230V _{AC}	
red	1300 mcd	SWRU08028A	
yellow	1600 mcd	SWRU08128A	
blue	1400 mcd	SWRU08428A	
white	2300 mcd	SWRU08628A	
green	1200 mcd	SWRU08728A	



230V Version

Ø 8 mm



For all types page 40

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC in luminous color

washer: FE nickel plated

nut: brass nickel plated

sealing disk: NBR 70

Option:

- housing frosted chromium plated

LED Indicator Ø8 mm Outside reflector PC

LED indicator with outside reflector for mounting-Ø8 mm. Plastic housing for screw fastening with fixing material On the version with pin, the LED is changeable through the rear panel.

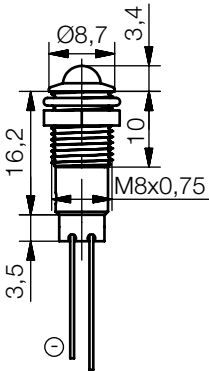
SKRD08x



Connection: 2-pin

Plastic black

Type	Luminous intensity	Part No.
	20mA LED voltage	
red	38 mcd	SKRD080
yellow	58 mcd	SKRD081
green	38 mcd	SKRD082



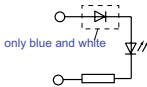
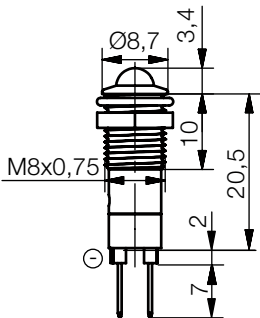
SKRD08x1x



Connection: 2x tab terminal 2,8x0.5 mm

Plastic black

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	38 mcd	SKRD08012	SKRD08014
yellow	58 mcd	SKRD08112	SKRD08114
green	38 mcd	SKRD08212	SKRD08214
blue	1400 mcd	SKRD08412	SKRD08414
white	2320 mcd	SKRD08612	SKRD08614



Ø 8 mm

For all types page 41
Specification:
mounting-hole: Ø 8+0.2 mm

- fixing: screw fastening
Material:
housing: PC black
insulating part: PC / PA6.6
washer: FE nickel plated
nut: brass nickel plated
Option:
- wire connection is possible

IP67

LED Indicator Ø8 mm with optical lens

LED indicator with optical lens for mounting Ø8mm. Chromium plated metal housing for screw fastening with fixing material. LED through rear panel changeable. Front side IP67 protected at build-in condition.

SMLD08x / SMLU08x

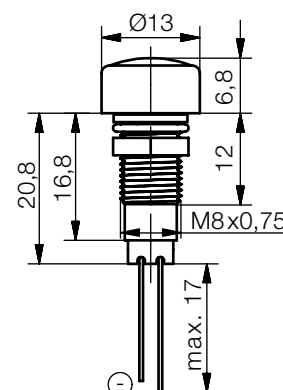


Connection: 2-pin

chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	38 mcd	SMLD080
yellow	58 mcd	SMLD081
green	38 mcd	SMLD082
blue	1400 mcd	SMLD084
white	2320 mcd	SMLD086

Type	Luminous intensity 20mA	Part No. LED voltage
red	10000 mcd	SMLU080
yellow	10000 mcd	SMLU081
blue	6020 mcd	SMLU084
white	2320 mcd	SMLU086
green	14800 mcd	SMLU087



SMLD08x
SMLU08x

SMLE082

SMLE082 bicolor

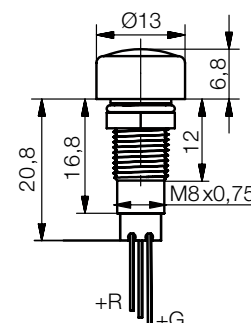


Connection: 3-pin

chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red- green*	60 mcd 50 mcd	SMLE082

*mixed color yellow



For all types page 42

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

cap: brass chromium plated

insulating part: PA6.6

lens: glass

washer: FE nickel plated

nut: brass nickel plated

sealing disk: NBR 70

Option:

- wire connection is possible
- other color combinations for the bicolor version are possible

Increasing effect of the glass lense have not been considered. The lens reduces the viewing angle by 50% and increases the light output by factor 4.

LED Indicator Ø8 mm with optical lens IP67

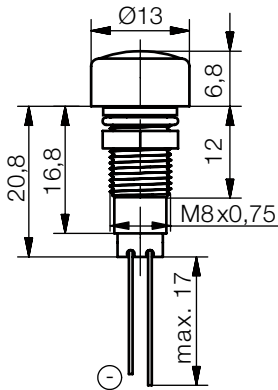
LED indicator with optical lens for mountingØ8mm. Chromium plated metal housing for screw fastening with fixing material. LED through rear panel changeable. Front side IP67 protected at build-in condition.

SMLF082 bipolar ●●

Connection: 2-pin

chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red-	30 mcd	SMLF082
green	20 mcd	



Ø 8 mm

SMLF082

For all types page 43
Specification:
mounting-hole: Ø 8+0.2 mm

- fixing: screw fastening
Material:
housing: brass chromium plated
cap: brass chromium plated
insulating part: PA6.6
lens: glass
washer: FE nickel plated
nut: brass nickel plated
sealing disk: NBR 70
Option:
- wire connection is possible

Increasing effect of the glass lensehave not been considered. The lens reduces the viewing angle by 50% and increases the light output by factor 4.

LED Indicator Ø8 mm with optical lens

IP67

Ø 8 mm



LED indicator with optical lens for mounting Ø8mm. Chromium plated metal housing for screw fastening with fixing material. Front side IP67 protected at build-in condition.

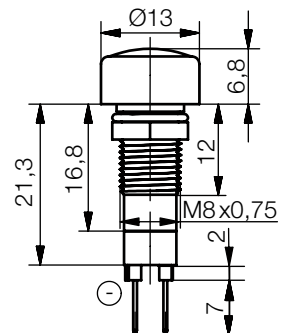
SMLD08x1x / SMLU08x1x



Connection: 2x tab terminal 2,8x0.5 mm

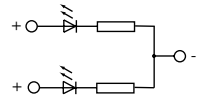
chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	38 mcd	SMLD08012	SMLD08014
yellow	58 mcd	SMLD08112	SMLD08114
green	38 mcd	SMLD08212	SMLD08214
blue	1400 mcd	SMLD08412	SMLD08414
white	2320 mcd	SMLD08612	SMLD08614



Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	10000 mcd	SMLU08012	SMLU08014
yellow	10000 mcd	SMLU08112	SMLU08114
blue	6020 mcd	SMLU08212	SMLU08214
white	2320 mcd	SMLU08412	SMLU08414
green	14800 mcd	SMLU08612	SMLU08614

SMLE0821x bicolor

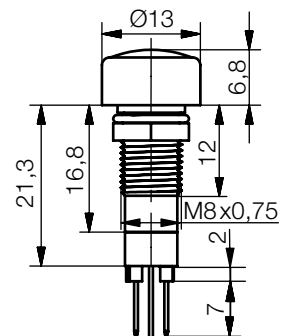


Connection: 2x tab terminal 2,8x0.5 mm, 1x pin

chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red-green*	60 mcd 50 mcd	SMLE08212	SMLE08214

*mixed color yellow



For all types page 44

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing/cap: brass chromium plated

insulating part: PC

lens: glass

washer: FE nickel plated

nut: brass nickel plated

sealing disk: NBR 70

Option:

- also available as version without integrated resistor

- other color combinations for the bicolor version are possible

Increasing effect of the glass lense have not been considered. The lens reduces the viewing angle by 50% and increases the light output by factor 4.

LED Indicator Ø8 mm with optical lens

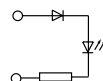
IP67

LED indicator with optical lens for mounting Ø8mm. Chromium plated metal housing for screw fastening with fixing material. Front side IP67 protected at build-in condition.

SMLD08x2x / SMLU08x2x

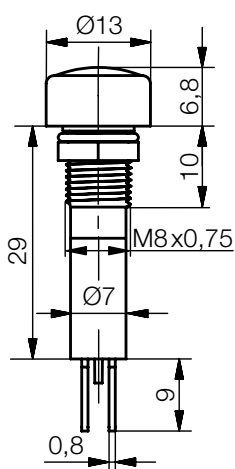
Connection: 2x tab terminal 2,8x0,8 mm

chromium plated



Type	Luminous intensity 20mA	Part No.
		12/14V _{DC(AC)} 24/28V _{DC(AC)}
red	38 mcd	SMLD08022 SMLD08024
yellow	58 mcd	SMLD08122 SMLD08124
green	38 mcd	SMLD08222 SMLD08224
blue	1400 mcd	SMLD08422 SMLD08424
white	2320 mcd	SMLD08622 SMLD08624

Type	Luminous intensity 20mA	Part No.
		230V _{AC}
red	10000 mcd	SMLU08028
yellow	10000 mcd	SMLU08128
blue	4700 mcd	SMLU08228
white	2320 mcd	SMLU08428
green	14800 mcd	SMLU08628

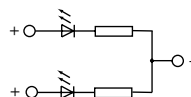


Ø 8 mm

SMLE0822x bicolor

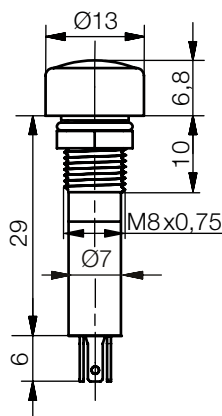
Connection: 3x tab terminal 2,0x0,5 mm

chromium plated



Type	Luminous intensity 20mA	Part No.
		12/14V _{DC} 24/28V _{DC}
red-green*	60 mcd 50 mcd	SMLE08222 SMLE08224

*mixed color yellow



For all types page 45

Specification:
mounting-hole: Ø 8+0,2 mm

fixing: screw fastening
Material:
housing: brass chromium plated
cap: brass chromium plated
insulating part: PC
lens: glass
washer: FE nickel plated
nut: brass nickel plated
sealing disk: NBR 70

Option:
- other color combinations for the bicolor version are possible

Increasing effect of the glass lense have not been considered. The lens reduces the viewing angle by 50% and increases the light output by factor 4.

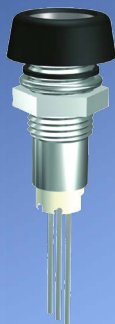
LED Indicator Ø8 mm with glass cover

IP67

Ø 8 mm



**SMPD08x
SMPF08x**



SMPE082

For all types page 46
Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening
Material:
housing: brass chromium plated
cap: brass black chromium pl.
insulating part: PA6.6
cover: glass
washer: FE nickel plated
nut: brass nickel plated
sealing disk: NBR 70
Option:
- wire connection is possible
- other color combinations for the
bicolor version are possible

LED indicator with glass cover for mounting Ø8mm. Chromium plated metal housing for screw fastening with fixing material. LED through rear panel changeable. Front side IP67 protected at build-in condition.

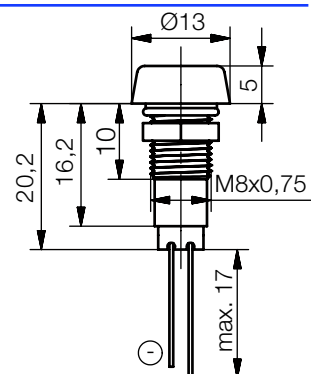
SMPD08x



Connection: 2-pin

Cap black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	38 mcd	SMPD080
yellow	58 mcd	SMPD081
green	38 mcd	SMPD082
blue	1400 mcd	SMPD084
white	2320 mcd	SMPD086



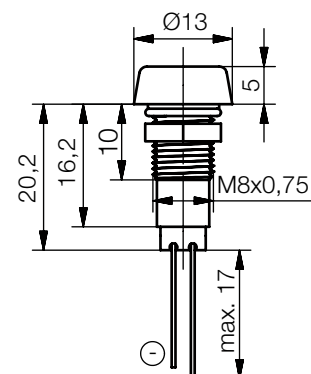
SMPF082 bipolar



Connection: 2-pin

Cap black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red- green	30 mcd 20 mcd	SMPF082



SMPE082 bicolor

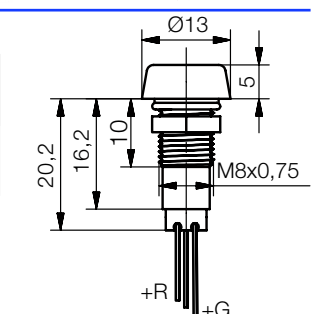


Connection: 3-pin

Cap black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red- green*	60 mcd 50 mcd	SMPE082

*mixed color yellow



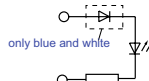
IP67

LED Indicator Ø8 mm with glass cover

LED indicator with glass cover for mounting Ø8mm. Chromium plated metal housing for screw fastening with fixing material. Front side IP67 protected at build-in condition.

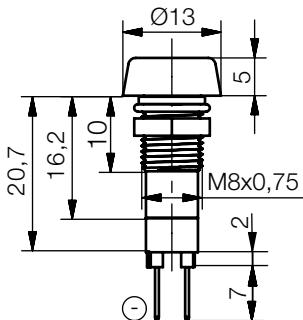
SMPD08x1x

Connection: 2x tab terminal 2,8x0.5 mm



Cap black chromium plated

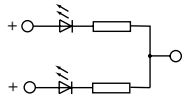
Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	38 mcd	SMPD08012	SMPD08014
yellow	58 mcd	SMPD08112	SMPD08114
green	38 mcd	SMPD08212	SMPD08214
blue	1400 mcd	SMPD08412	SMPD08414
white	2320 mcd	SMPD08612	SMPD08614



SMPE0821x bicolor



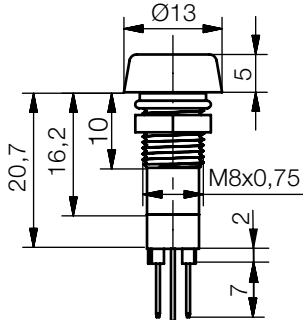
Connection: 2x tab terminal 2,8x0.5 mm, 1x pin



Cap black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red-green*	60 mcd	SMPE08212	SMPE08214
	50 mcd		

*mixed color yellow



Ø 8 mm



SMPD08x1x



SMPE0821x

For all types page 47

Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening
Material:
 housing: brass chromium plated
 cap: brass black chromium pl.
 insulating part: PC
 cover: glass
 washer: FE nickel plated
 nut: brass nickel plated
 sealing disk: NBR 70
Option:
 - also available as version without integrated resistor
 - other color combinations for the bicolor version are possible

LED Indicator Ø8 mm with glass dome

IP67

LED indicator with glass dome for mounting Ø8mm. Chromium plated metal housing for screw fastening with fixing material. On the version with pin, the LED is changeable through the rear panel. Front side IP67 protected at build-in condition.

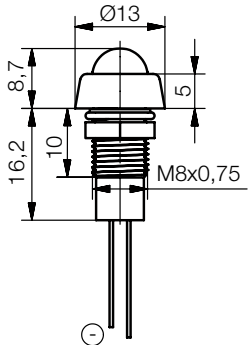
SMKD08x



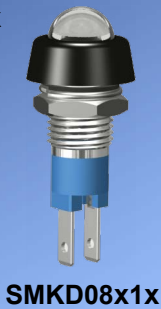
Connection: 2-pin

Cap black chromium plated

Type	Luminous intensity	Part No.
	20mA LED voltage	
red	38 mcd	SMKD080
yellow	58 mcd	SMKD081
green	38 mcd	SMKD082
blue	1400 mcd	SMKD084
white	2320 mcd	SMKD086



SMKD08x



SMKD08x1x

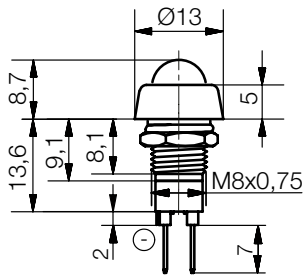
SMKD08x1x



Connection: 2x tab terminal 2,8x0.5 mm

Cap black chromium plated

Type	Luminous intensity	Part No.	
	20mA 12/14V _{DC(AC)} 24/28V _{DC(AC)}		
red	38 mcd	SMKD08012	SMKD08014
yellow	58 mcd	SMKD08112	SMKD08114
green	38 mcd	SMKD08212	SMKD08214
blue	1400 mcd	SMKD08412	SMKD08414
white	2320 mcd	SMKD08612	SMKD08614



For all types page 48
Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening
Material:
housing: brass chromium plated
cap: brass black chromium plated
insulating part: PC / PA6.6
dome: glass
washer: FE nickel plated
nut: brass nickel plated
sealing disk: NBR 70
Option:
- wire connection is possible

LED Indicator Ø8 mm super flat with cover

Vandal-proof

IP67

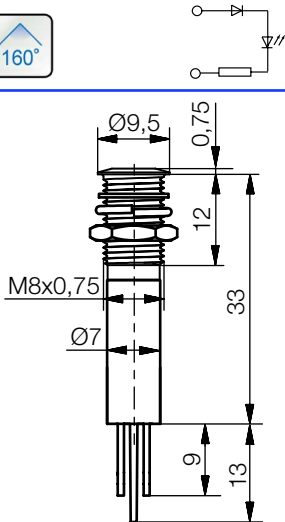
LED indicator with aperture for mounting-Ø8mm. Stainless steel housing for screw fastening with fixing material. Front side IP67 protected at build-in condition and additional vandal-proof protection.

SVLU08x28

Connection: 2x tab terminal 2,8x0.8 mm

Stainless steel

Type	Luminous intensity 20mA	Part No. 230V _{AC}
red	1300 mcd	SVLU08028
yellow	1600 mcd	SVLU08128
blue	1400 mcd	SVLU08428
white	2300 mcd	SVLU08628
green	1200 mcd	SVLU08728



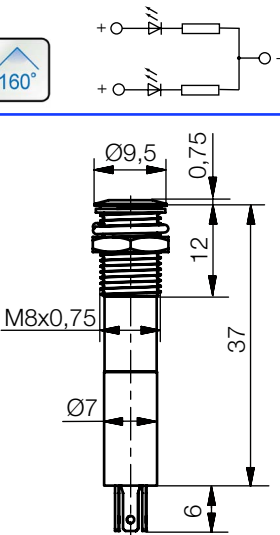
SVLE0822x bicolor

Connection: 3x tab terminal 2,0x0.5 mm

Edelstahl / Stainless steel

Type	Luminous intensity 20mA	Part No. 12/14V _{DC}	Part No. 24/28V _{DC}
red-green*	45 mcd 30 mcd	SVLE08222	SVLE08224

*mixed color yellow



For all types page 49Specification:
mounting-hole: Ø 8+0.2 mm

- fixing: screw fastening
- Material:**
- housing: stainless steel
 - insulating part: PC in light color
 - cover: PMMA
 - sealing disk: NBR 70
 - washer: FE nickel plated
 - nut: brass nickel plated
- Option:**
- different connecting possibilities
 - other color combinations for the bicolor version are possible

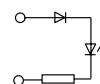
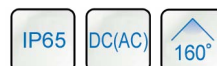
LED Indicator Ø8 mm super flat with cover

IP67

LED indicator with flat reflector head and white cover for mounting-Ø8 mm. Chromium plated metal housing for screw fastening with fixing material. Front side IP67 protected at build-in condition.

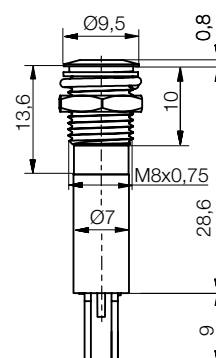
SFFU08x2x5 / SFEU08x2x5

Connection: 2x tab terminal 2,8x0.8 mm



frosted chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	2400 mcd	SFFU080225	SFFU080245
yellow	1800 mcd	SFFU081225	SFFU081245
blue	2760 mcd	SFFU084225	SFFU084245
white	3680 mcd	SFFU086225	SFFU086245
green	10320 mcd	SFFU087225	SFFU087245

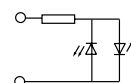


black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	2400 mcd	SFEU080225	SFEU080245
yellow	1800 mcd	SFEU081225	SFEU081245
blue	2760 mcd	SFEU084225	SFEU084245
white	3680 mcd	SFEU086225	SFEU086245
green	10320 mcd	SFEU087225	SFEU087245

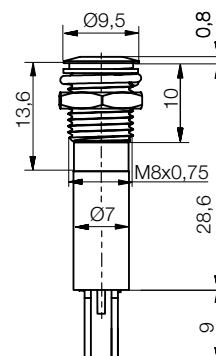
SFFT08x2x5 / SFET08x2x5 bipolar

Connection: 2x tab terminal 2,8x0.8 mm



frosted chromium plated

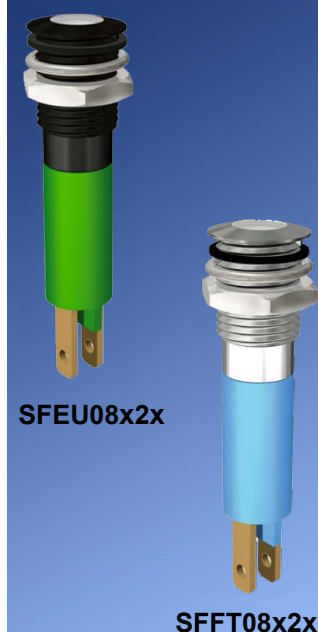
Type	Luminous intensity 20mA	Part No.	
		12/14V _{AC/DC}	24/28V _{AC/DC}
red	400 mcd	SFFT080225	SFFT080245
yellow	400 mcd	SFFT081225	SFFT081245
blue	300 mcd	SFFT084225	SFFT084245
white	600 mcd	SFFT086225	SFFT086245
green	400 mcd	SFFT087225	SFFT087245



black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{AC/DC}	24/28V _{AC/DC}
red	400 mcd	SFET080225	SFET080245
yellow	400 mcd	SFET081225	SFET081245
blue	300 mcd	SFET084225	SFET084245
white	600 mcd	SFET086225	SFET086245
green	400 mcd	SFET087225	SFET087245

Ø 8 mm



For all types page 50 Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PC in luminous color

cover: PC

washer: FE nickel plated

nut: brass nickel plated

sealing disk: NBR 70

Option:

- Virtual the same level of brightness by different luminous colors

LED Symbol Indicator Ø10 mm

round / square / arrow

LED symbol indicator for mounting-Ø10 mm with superflat, surface plan lens head. The frosted surface allows a clear on-off contrast and a high light transmission.

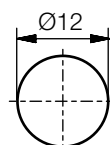
SKGx10x2x / SKHx10x2x / SKIx10x2x

Connection: 2x tab terminal 2,8x0.8 mm



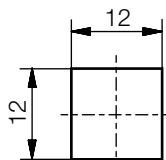
Round lens head

Type	Luminous intensity 20mA	Part No.	
		24/28V _{DC(AC)}	230V _{AC}
red	1300 mcd	SKGH10024	SKGU10028
yellow	1600 mcd	SKGH10124	SKGU10128
blue	1400 mcd	SKGH10424	SKGU10428
white	2320 mcd	SKGH10624	SKGU10628
green	1200 mcd	SKGH10724A	SKGU10728A



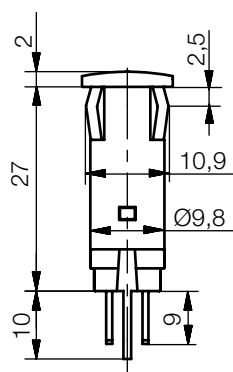
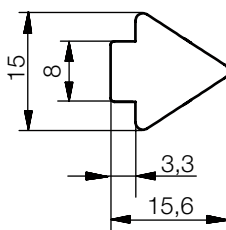
Squared lens head

Type	Luminous intensity 20mA	Part No.	
		24/28V _{DC(AC)}	230V _{AC}
red	1300 mcd	SKHH10024	SKHU10028
yellow	1600 mcd	SKHH10124	SKHU10128
blue	1400 mcd	SKHH10424	SKHU10428
white	2320 mcd	SKHH10624	SKHU10628
green	1200 mcd	SKHH10724A	SKHU10728A



Arrow lens head

Type	Luminous intensity 20mA	Part No.	
		24/28V _{DC(AC)}	230V _{AC}
red	1300 mcd	SKIH10024	SKIU10028
yellow	1600 mcd	SKIH10124	SKIU10128
blue	1400 mcd	SKIH10424	SKIU10428
white	2320 mcd	SKIH10624	SKIU10628
green	1200 mcd	SKIH10724A	SKIU10728A



Ø 10 mm



For all types page 51 Specification:
mounting-hole: Ø 10+0.2 mm

fixing: snap-In
Material: PC colored transparent
housing: PC
insulating part: PC
Option:
- housing clear transparent
- other voltages available
- mounting of other LED types possible
- also available as version without integrated resistor

LED Indicator Ø10 mm Inside reflector

LED indicator, mounting-Ø10 mm, with plastic housing for snap-In mounting. Suitable for panel thickness from 0,5 mm up to 2,0 mm.

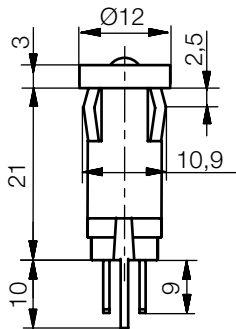
SKDH10x2x

Connection: 2x tab terminal 2,8x0.8 mm



PC black

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	10000 mcd	SKDH10022	SKDH10024
yellow	10000 mcd	SKDH10122	SKDH10124
green	200 mcd	SKDH10222	SKDH10224



SKDH10x2x

For all types page 52

Specification:

mounting-hole: Ø 10+0.2 mm

fixing: snap-In

Material:

housing: PC

insulating part: PC

LED Indicator Ø10 mm super flat with cover

IP67

LED indicator for mounting-Ø10 mm with flat reflector head and cover.

SMFH10x2x / SMEH10x2x

Connection: 2x tab terminal 2,8x0.8 mm

IP67

DC(AC)

20-65°

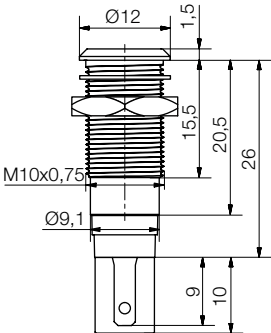


natural anodized

Type	Luminous intensity 20mA	Part No.	
		12/24V _{DC(AC)}	24/28V _{DC(AC)}
red	1300 mcd	SMFH10022	SMFH10024
yellow	1600 mcd	SKFH10122	SKFH10124
blue	1400 mcd	SKFH10422	SKFH10424
white	2320 mcd	SKFH10622	SKFH10624
green	1200 mcd	SKFH10722	SKFH10724

black anodized

Type	Luminous intensity 20mA	Part No.	
		12/24V _{DC(AC)}	24/28V _{DC(AC)}
red	1300 mcd	SMEH10022	SMEH10024
yellow	1600 mcd	SKEH10122	SKEH10124
blue	1400 mcd	SKEH10422	SKEH10424
white	2320 mcd	SKEH10622	SKEH10624
green	1200 mcd	SKEH10722	SKEH10724



Ø 10 mm

SMEH10x2x

For all types page 53
Specification:
mounting-hole: Ø 10+0.2 mm

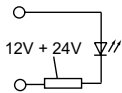
- fixing: screw fastening
- Material:
- housing: Aluminium anodized
- insulating part: PC
- washer: FE nickel plated
- nut: brass nickel plated
- sealing disk: NBR 70
- Option:
- other voltages available
- wire connection
- IP69k is possible with wire version

LED Indicator Ø12 mm Inside reflector

LED indicator with inside reflector for mounting Ø12 mm. Chromium plated metal housing for screw fastening with fixing material.

SMBD12x / SMBD12x0x / SMDD12x / SMDD12x0x

Connection: 2-pin



chromium plated

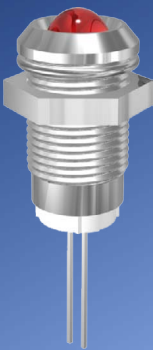
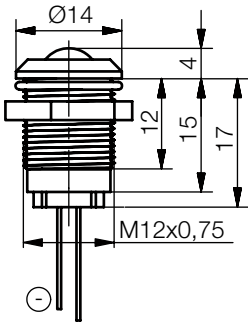
Type	Luminous intensity 20mA	Part No. LED voltage
red	600 mcd	SMBD120
yellow	550 mcd	SMBD121
green	220 mcd	SMBD122

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red	600 mcd	SMBD12002	SMBD12004
yellow	550 mcd	SMBD12102	SMBD12104
green	220 mcd	SMBD12202	SMBD12204

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	600 mcd	SMDD120
yellow	550 mcd	SMDD121
green	220 mcd	SMDD122

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red	600 mcd	SMDD12002	SMDD12004
yellow	550 mcd	SMDD12102	SMDD12104
green	220 mcd	SMDD12202	SMDD12204



SMBD12x

For all types page 54
Specification:
mounting-hole: Ø 12+0.2 mm

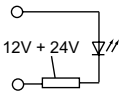
fixing: screw fastening
Material:
housing: brass chromium plated
insulating part: PC
washer: FE nickel plated
nut: brass nickel plated
Option:
- wire connection is possible

LED Indicator Ø12 mm Outside reflector

LED indicator with outside reflector for mounting-Ø12 mm. Chromium plated metal housing for screw fastening with fixing material.

SMQD12x / SMQD12x0x / SMRD12x / SMRD12x0x

Connection: 2-pin



chromium plated

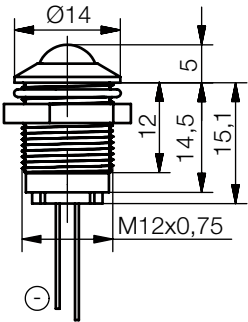
Type	Luminous intensity 20mA	Part No. LED voltage
red	600 mcd	SMQD120
yellow	550 mcd	SMQD121
green	220 mcd	SMQD122

Type	Luminous intensity 20mA	Part No. 12/14V _{DC}	Part No. 24/28V _{DC}
red	600 mcd	SMQD12002	SMQD12004
yellow	550 mcd	SMQD12102	SMQD12104
green	220 mcd	SMQD12202	SMQD12204

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	600 mcd	SMRD120
yellow	550 mcd	SMRD121
green	220 mcd	SMRD122

Type	Luminous intensity 20mA	Part No. 12/14V _{DC}	Part No. 24/28V _{DC}
red	600 mcd	SMRD12002	SMRD12004
yellow	550 mcd	SMRD12102	SMRD12104
green	220 mcd	SMRD12202	SMRD12204



SMRD12x

Ø 12 mm

For all types page 55
Specification:
mounting-hole: Ø 12+0.2 mm

- fixing: screw fastening
Material:
housing: brass chromium plated
insulating part: PC
washer: FE nickel plated
nut: brass nickel plated
Option:
- wire connection is possible

LED Indicator Ø12 mm with cover

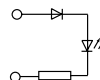
LED indicator, mounting-Ø12 mm, with plastic housing for screw fastening.
Matted illuminating area for optimum on/off contrast. The required mounting material is included in delivery.

Ø 12 mm



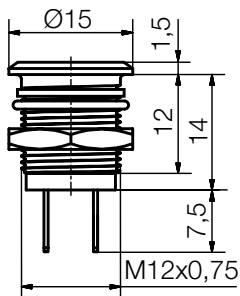
SKED12x1x

Connection: 2x tab terminal 2,8x0.5 mm



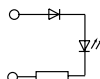
PC black

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	230 mcd	SKED12012	SKED12014
yellow	1250 mcd	SKED12112	SKED12114
blue	250 mcd	SKED12412	SKED12414
white	1250 mcd	SKED12612	SKED12614
green	860 mcd	SKED12712	SKED12714



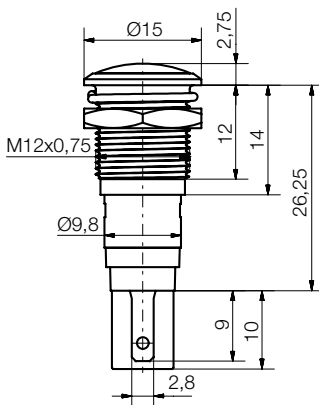
SKLH12x2x / SKMH12x2x

Connection: 2x tab terminal 2,8x0.8 mm



PC white

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	650 mcd	SKLH12022	SKLH12024
yellow	1600 mcd	SKLH12122	SKLH12124
blue	1400 mcd	SKLH12422	SKLH12424
white	2320 mcd	SKLH12622	SKLH12624
green	1200 mcd	SKLH12722	SKLH12724



PC black

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	650 mcd	SKMH12022	SKMH12024
yellow	1600 mcd	SKMH12122	SKMH12124
blue	1400 mcd	SKMH12422	SKMH12424
white	2320 mcd	SKMH12622	SKMH12624
green	1200 mcd	SKMH12722	SKMH12724

-For all types page 56
Specification:
mounting-hole: Ø 12+0.2 mm

fixing: screw fastening
connection: tab terminal 2.8x0.8mm
Material:
housing: PC
cover: PC
sealing disk: NBR 70
washer: FE nickel plated
nut: brass nickel plated
Option:
- wire connection is possible

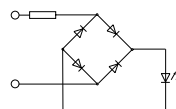
LED Indicator Ø14 mm super flat with cover

IP67

LED indicator, mounting-Ø14 mm, with flat reflector head for screw fastening. Matted illuminating area for optimum on/off contrast. The required mounting material is included in delivery.

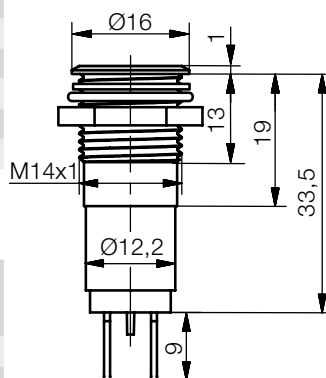
SMCC14x2x / SMFC14x2x

Connection: 2x tab terminal 2,8x0.8 mm



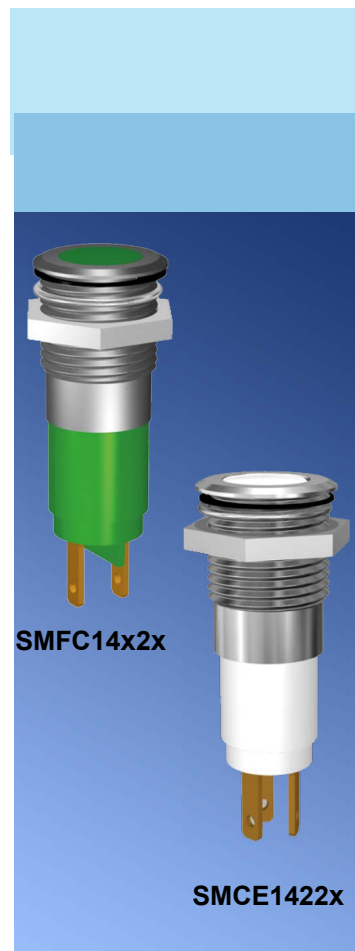
chromium plated

Type	Luminous intensity		Part No.	
	20mA		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	230 mcd		SMCC14022	SMCC14024
yellow	180 mcd		SMCC14122	SMCC14124
blue	250 mcd		SMCC14422	SMCC14424
white	1250 mcd		SMCC14622	SMCC14624
green	860 mcd		SMCC14722	SMCC14724



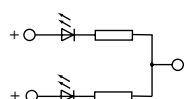
frosted chromium plated

Type	Luminous intensity		Part No.	
	20mA		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	230 mcd		SMFC14022	SMFC14024
yellow	180 mcd		SMFC14122	SMFC14124
blue	250 mcd		SMFC14422	SMFC14424
white	1250 mcd		SMFC14622	SMFC14624
green	860 mcd		SMFC14722	SMFC14724



Ø 14 mm

SMCE1422x / SMFE1422x bicolor

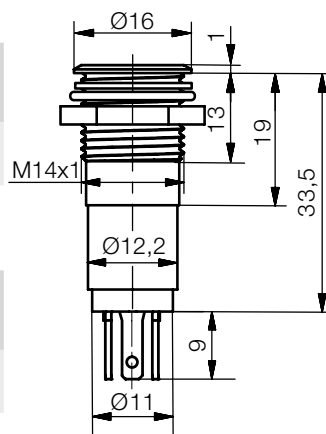


Connection: 3x tab terminal 2,8x0.8 mm

chromium plated

Type	Luminous intensity		Part No.	
	20mA		12/14V _{DC}	24/28V _{DC}
red-green*	300 mcd		SMCE14222	SMCE14224
	130 mcd			

*mixed color yellow



frosted chromium plated

Type	Luminous intensity		Part No.	
	20mA		12/14V _{DC}	24/28V _{DC}
red-green*	300 mcd		SMFE14222	SMFE14224
	130 mcd			

*mixed color yellow

For all types page 57

Specification:
mounting-hole: Ø 14+0.2 mm

fixing: screw fastening
Material:
housing: brass chromium plated
cover: PC
insulating part: PC in light color
sealing disk: NBR 70
washer: FE nickel plated
nut: brass nickel plated
Option:
- other color combinations for the bicolor version are possible
- cover in white

LED Indicator Ø14 mm Inside reflector

LED indicator with inside reflector for mounting Ø14 mm. Chromium plated metal housing for screw fastening with fixing material.



SMBD14x / SMDD14x

Connection: 2-pin

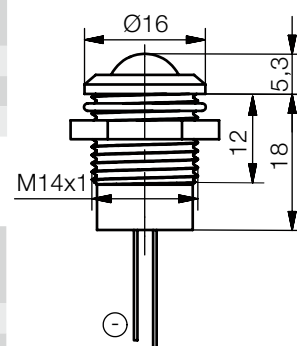


chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	900 mcd	SMBD140
yellow	2000 mcd	SMBD141
green	220 mcd	SMBD142

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	900 mcd	SMDD140
yellow	2000 mcd	SMDD141
green	220 mcd	SMDD142



SWBU14x / SWDU14x

Connection: 2-pin

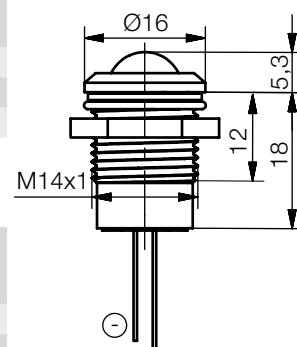


chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	10000 mcd	SWBU140
yellow	10000 mcd	SWBU141
green	14800 mcd	SWBU147

black chromium plated

Type	Luminous intensity 20mA	Part No. LED voltage
red	10000 mcd	SWDU140
yellow	10000 mcd	SWDU141
green	14800 mcd	SWDU147



For all types page 58

Specification:
mounting-hole: Ø 14+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

insulating part: PE (SMxD14x)

insulating part: PC (SWxU14x)

LED look cap: PC colored transparent (SWxU14x)

washer: FE nickel plated

nut: brass nickel plated

sealing disk: NBR 70 (SWxU14x)

Option:

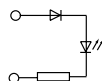
- wire connection is possible

LED Indicator Ø14 mm Inside reflector

LED indicator with inside reflector for mounting Ø14 mm. Chromium plated metal housing for screw fastening with fixing material. Optionally as protection class IP67 (front side) with additional sealing disk.

SMBD14x2x / SMDD14x2x

Connection: 2x tab terminal 2,8x0.8 mm

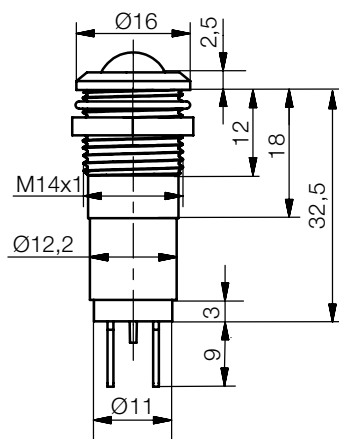


chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	900 mcd	SMBD14022	SMBD14024
yellow	2000 mcd	SMBD14122	SMBD14124
green	220 mcd	SMBD14222	SMBD14224

black chromium plated

Type	Luminous intensity 20mA	Voltage	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	900 mcd	SMDD14022	SMDD14024
yellow	2000 mcd	SMDD14122	SMDD14124
green	220 mcd	SMDD14222	SMDD14224



SMBD14x2x



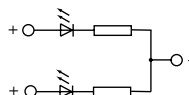
SMDE1422x

Ø 14 mm

SMBE1422x / SMDE1422x bicolor



Connection: 3x tab terminal 2,8x0.8 mm



chromium plated

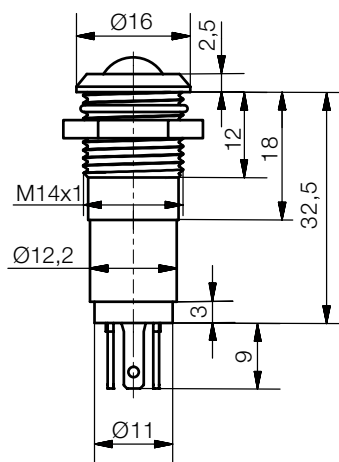
Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red-green*	750 mcd 130 mcd	SMBE14222	SMBE14224

*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red-green*	750 mcd 130 mcd	SMDE14222	SMDE14224

*mixed color yellow



For all types page 59
Specification:
mounting-hole: Ø 14+0.2 mm

fixing: screw fastening
Material:
housing: brass chromium plated
insulating part: PC
washer: FE nickel plated
nut: brass nickel plated
Option:
- IP67 with additional sealing disc and higher brightness
- other color combinations for the bicolor version are possible

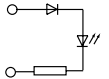
LED Indicator Ø14 mm Inside reflector

IP67

LED indicator with inside reflector for mounting Ø14 mm. Chromium plated metal housing for screw fastening with fixing material (230V version with 2-part sleeve for protection against contact). Front side IP67 protected at build-in condition.

SWBU14x2x / SWDU14x2x

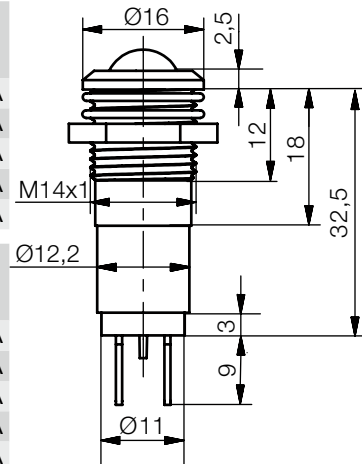
Connection: 2x tab terminal 2,8x0.8 mm



chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	900 mcd	SWBU14022A	SWBU14024A
yellow	2000 mcd	SWBU14122A	SWBU14124A
blue	500 mcd	SMBU14422A	SWBU14424A
white	1000 mcd	SWBU14622A	SWBU14624A
green	1900 mcd	SWBU14722A	SWBU14724A

Type	Luminous intensity 20mA	Part No.	
		130V _{AC}	230V _{AC}
red	900 mcd	SWBU14027A	SWBU14028A
yellow	2000 mcd	SWBU14127A	SWBU14128A
blue	500 mcd	SMBU14427A	SWBU14428A
white	1000 mcd	SWBU14627A	SWBU14628A
green	1900 mcd	SWBU14727A	SWBU14728A



black chromium plated

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC(AC)}	24/28V _{DC(AC)}
red	900 mcd	SWDU14022A	SWDU14024A
yellow	2000 mcd	SWDU14122A	SWDU14124A
blue	500 mcd	SMDU14422A	SWDU14424A
white	1000 mcd	SWDU14622A	SWDU14624A
green	1900 mcd	SWDU14722A	SWDU14724A

Type	Luminous intensity 20mA	Part No.	
		130V _{AC}	230V _{AC}
red	900 mcd	SWDU14027A	SWDU14028A
yellow	2000 mcd	SWDU14127A	SWDU14128A
blue	500 mcd	SMDU14427A	SWDU14428A
white	1000 mcd	SWDU14627A	SWDU14628A
green	1900 mcd	SWDU14727A	SWDU14728A

For all types page 60

Specification:

mounting-hole: Ø 14+0.2 mm

fixing: screw fastening

connection: tab terminal 2.8x0.8mm

Material:

housing: brass chromium plated

insulating part: PC in light color

sealing disk: NBR 70

washer: FE nickel plated

nut: brass nickel plated

SWBU14x2x

Ø 14 mm

LED Indicator Ø16 mm super flat with cover

IP67

Ultra thin LED Indicator with matted illuminating area for optimum on/off contrast.
The housing has 2 flat parts with wrench size of 15 mm as rotation safety.
Front side IP67 protected at build-in condition.

Symbols for cover plates

Selection of symbols for cover plates. Individual designs are also possible.



SMFP16x2x / SMEP16x2x

Connection: 2x tab terminal 2,8x0.8 mm

IP67

DC

160°

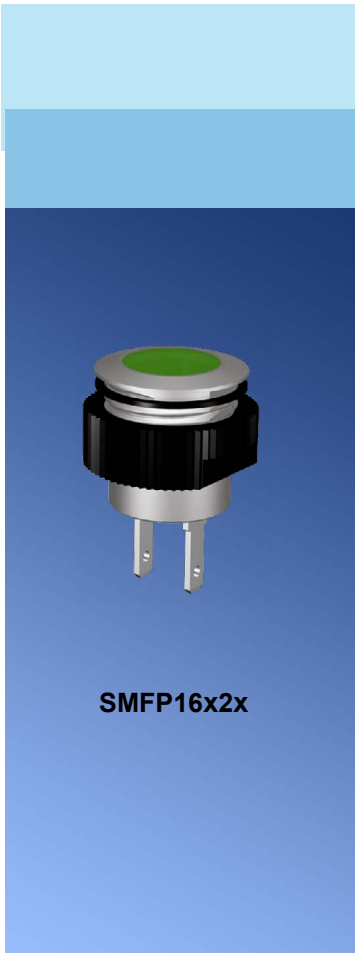
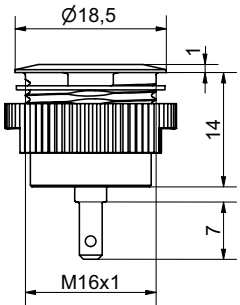


natural anodized

Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC}	24/28V _{DC}
red	1,0 lm	1,0 lm	SMFP16022	SMFP16024
yellow	4,0 lm	3,5 lm	SMFP16122	SMFP16124
blue	0,3 lm	0,3 lm	SMFP16422	SMFP16424
white	4,0 lm	4,0 lm	SMFP16622	SMFP16624
green	1,0 lm	1,0 lm	SMFP16722	SMFP16724

black anodized

Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC}	24/28V _{DC}
red	1,0 lm	1,0 lm	SMEP16022	SMEP16024
yellow	4,0 lm	3,5 lm	SMEP16122	SMEP16124
blue	0,3 lm	0,3 lm	SMEP16422	SMEP16424
white	4,0 lm	4,0 lm	SMEP16622	SMEP16624
green	1,0 lm	1,0 lm	SMEP16722	SMEP16724



Ø 16 mm

SMFP16x2x

For all types page 61
Specification:
mounting-hole: Ø 16+0.5 mm

- fixing: screw fastening
Material:
housing: Aluminium anodized
cover: PC
sealing disk: NBR 70
nut: PA6.6
Option:
- mounting of labelled cover plates are possible

LED Indicator Ø16 mm with lens head

IP67

LED indicator, mounting-Ø16 mm, with large signal surface for a homogeneous illumination. The required mounting material is included in delivery. Front side IP67 protected at build-in condition.

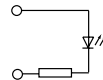
SKCH16x2x / SKEH16x2x

Connection: 2x tab terminal 2,8x0.8 mm

IP67

DC

160°

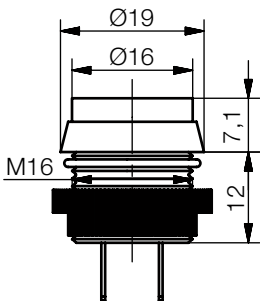


housing PC metallized

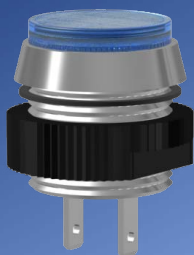
Type	Luminous intensity 25mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red	900 mcd	SKCH16022	SKCH16024
yellow	2900 mcd	SKCH16122	SKCH16124
blue	580 mcd	SKCH16422	SKCH16424
white	5900 mcd	SKCH16622	SKCH16624
green	3400 mcd	SKCH16722	SKCH16724

housing PC black

Type	Luminous intensity 25mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red	900 mcd	SKEH16022	SKEH16024
yellow	2900 mcd	SKEH16122	SKEH16124
blue	580 mcd	SKEH16422	SKEH16424
white	5900 mcd	SKEH16622	SKEH16624
green	3400 mcd	SKEH16722	SKEH16724



Ø 16 mm



SKEH16x2x

For all types page 62

Specification:

mounting-hole: Ø 16+0.5 mm

fixing: screw fastening

Material:

housing: PC

cover: PC

sealing disk: NBR 70

nut: PA6.6

Option:

- mounting of labelled cover plates are possible

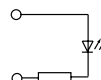
LED Indicator Ø16 mm with lens head

IP67

LED indicator, mounting-Ø16 mm, with large signal surface for a homogeneous illumination. The required mounting material is included in delivery. Front side IP67 protected at build-in condition.

SKCD16x1x / SKED16x1x

Connection: 2x tab terminal 2,8x0.5 mm

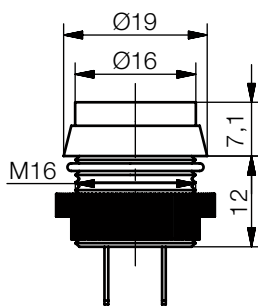


housing PC metallized

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red	230 mcd	SKCD16012	SKCD16014
yellow	180 mcd	SKCD16112	SKCD16114
blue	250 mcd	SKCD16412	SKCD16414
white	1250 mcd	SKCD16612	SKCD16614
green	860 mcd	SKCD16712	SKCD16714

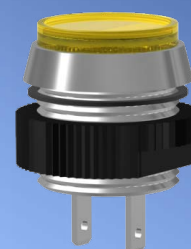
housing PC black

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red	230 mcd	SKED16012	SKED16014
yellow	180 mcd	SKED16112	SKED16114
blue	250 mcd	SKED16412	SKED16414
white	1250 mcd	SKED16612	SKED16614
green	860 mcd	SKED16712	SKED16714



SKEE16212

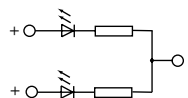
Ø 16 mm



SKCD16x1x

SKCE16212K / SKEE16212K bicolor

Connection: 3x tab terminal 2,8x0.5 mm



housing PC metallized

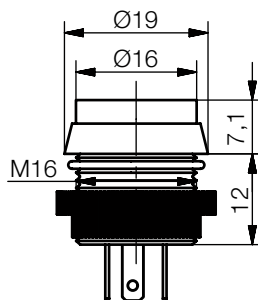
Type	Luminous intensity 15mA / 19mA	Part No.
		12/14V _{DC}
red-green	1800 mcd	SKCE16212K

*mixed color is possible

housing PC black

Type	Luminous intensity 15mA / 19mA	Part No.
		12/14V _{DC}
red-green	1800 mcd	SKEE16212K

*mixed color is possible



For all types page 63

Specification:

mounting-hole: Ø 16+0.5 mm

fixing: screw fastening

Material:

housing: PC

cover: PC

sealing disk: NBR 70

nut: PA6.6

Option:

- mounting of labelled cover plates are possible
- other color combinations for the bicolor version are possible

LED Indicator Ø16 mm with unscrewable lens head

IP67

LED indicator, mounting-Ø16 mm, with large signal surface for a homogeneous illumination. The required mounting material is included in delivery. Front side IP67 protected at build-in condition.

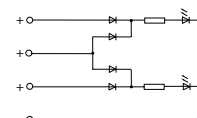
SKCE1621x / SKEE1621x bicolor



IP67

DC

160°



Connection: 4x tab terminal 2,8x0.5 mm

housing PC metallized

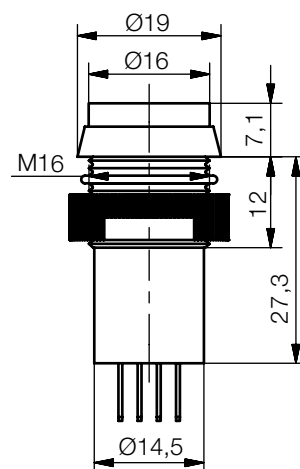
Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red-green*	750 mcd 2100 mcd	SKCE16212	SKCE16214

*mixed color is possible

housing PC black

Type	Luminous intensity 20mA	Part No.	
		12/14V _{DC}	24/28V _{DC}
red-green*	750 mcd 2100 mcd	SKEE16212	SKEE16214

*mixed color is possible



Ø 16 mm



SKCE16x1x

For all types page 64

Specification:

mounting-hole: Ø 16+0.5 mm

fixing: screw fastening

Material:

housing: PC

insulating part: PC

sealing disk: NBR 70

nut: PA6.6

Option:

- mounting of labelled cover plates are possible
- other color combinations for the bicolor version are possible

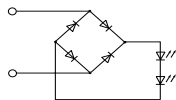
LED Indicator Ø16 mm with lens head

IP67

LED indicator, mounting-Ø16 mm, with large signal surface for a homogeneous illumination.Front side IP67 protected at build-in condition.

SMEE16x2

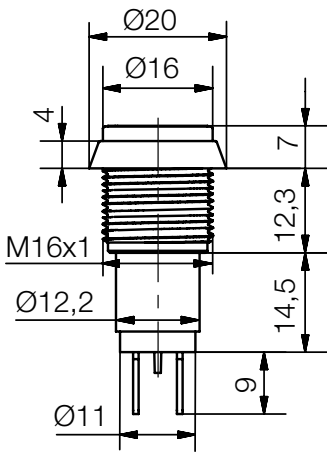
Connection: 2x tab terminal 2,8x0.8mm



aluminium black anodized

Type	Luminous intensity 20mA	Part No. LED-SpannungLED voltage
red	420 mcd	SMEE1602
yellow	360 mcd	SMEE1612
blue	500 mcd	SMEE1642
white	2500 mcd	SMEE1662
green	2250 mcd	SMEE1672

Operation only with an external resistor!

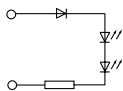


Ø 16 mm

SMEE16

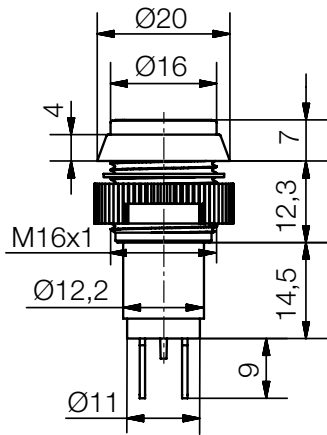
SMEE16x2x

Connection: 2x tab terminal 2,8x0.8mm



aluminium black anodized

Type	Luminous intensity 20mA	Part No. 24/28VDC
red	420 mcd	SMEE16024
yellow	360 mcd	SMEE16124
blue	500 mcd	SMEE16424
white	2500 mcd	SMEE16624
green	2250 mcd	SMEE16724



For all types page 65
Specification:
mounting-hole: Ø 16+0.5 mm

- fixing: screw fastening
Material:
housing: aluminium anodized
insulating part: PC in light color
sealing disk: NBR 70 (SMEE16x2x)
nut: PA6.6 (SMEE16x2x)
Option:
- mounting of labelled cover plates are possible
- housing natural anodized

LED Indicator Ø22 mm super flat with cover

IP67

Ultra thin LED Indicator with matted illuminating area for optimum on/off contrast. The housing has 2 flat parts with wrench size of 21 mm as rotation safety. Bi-color version as standard available with common cathode. Option with common anode. The required mounting material is included in delivery. Front side IP67 protected at build-in condition.

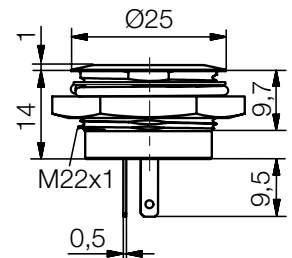
SMFL22x1x

Connection: 2x tab terminal 2,8x0.5 mm

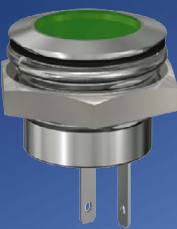


frosted chromium plated

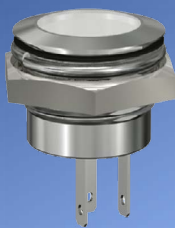
Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC}	24/28V _{DC}
red	0,9 lm	0,8 lm	SMFL22012	SMFL22014
yellow	3,0 lm	3,0 lm	SMFL22112	SMFL22114
blue	0,6 lm	0,8 lm	SMFL22412	SMFL22414
white	3,6 lm	4,8 lm	SMFL22612	SMFL22614
green	1,1 lm	1,8 lm	SMFL22712	SMFL22714



Ø 22 mm



SMFL22x1x



SMFE22x1x

SMFE22x1x bicolor



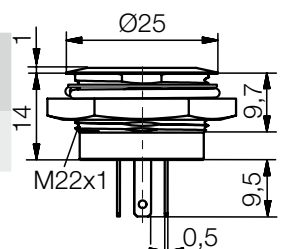
Connection: 3x tab terminal 2,8x0.5 mm



frosted chromium plated

Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC}	24/28V _{DC}
red-green*	0,9 lm	0,8 lm	SMFE22212	SMFE22214
	1,1 lm	1,8 lm		

*mixed color yellow



For all types page 66 Specification:
mounting-hole: Ø 22+0.5 mm

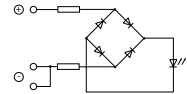
- fixing: screw fastening
- Material:**
- housing: brass chromium plated
 - cover: PC
 - sealing disk: NBR 70
 - washer: FE nickel plated
 - nut: brass nickel plated
- Option:**
- housing black chromium plated on request
 - common anode
 - other color combinations for the bicolor version are possible

LED Indicator Ø22 mm super flat / Inside reflector IP67

LED indicator super flat or with inside reflector for mounting-Ø22 mm. Matt surface for optimum on/off contrast. The ground connection is equipped with a double contact. The required mounting material is included in delivery. Furthermore a 2-part sleeve for protection against contact for 230V types is supplied. Front side IP67 protected at build-in condition.

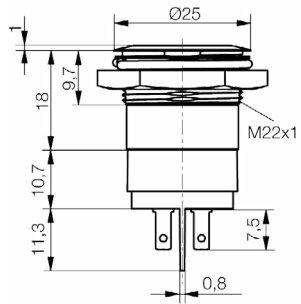
SAFH22x2x

Connection: 3x tab terminal 2,8x0.8 mm



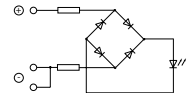
natur anodized

Type	Luminous flux		Part No.	
	24V _{DC}	230V _{AC}	24/28V _{AC/DC}	230V _{AC/DC}
red	1,1 lm	0,3 lm	SAFH22022	SAFH22028
yellow	2,2 lm	0,2 lm	SAFH22122	SAFH22128
blue	0,3 lm	0,1 lm	SAFH22422	SAFH22428
green	2,0 lm	0,3 lm	SAFH22722	SAFH22728



SSBD22Hx2x9 / SSDD22Hx2x9

Connection: 3x tab terminal 2,8x0.8 mm

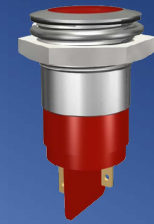
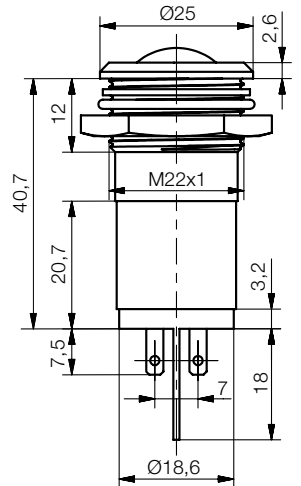


chromium plated

Type	Luminous flux		Part No.	
	24V _{DC}	230V _{AC}	24/28V _{AC/DC}	230V _{AC/DC}
red	0,3 lm	0,1 lm	SSBD22H0249	SSBD22H0289
yellow	0,8 lm	0,2 lm	SSBD22H1249	SSBD22H1289
blue	0,3 lm	0,1 lm	SSBD22H4249	SSBD22H4289
white	2,2 lm	0,4 lm	SSBD22H6249	SSBD22H6289
green	0,6 lm	0,2 lm	SSBD22H7249	SSBD22H7289

black chromium plated

Type	Luminous flux		Part No.	
	24V _{DC}	230V _{AC}	24/28V _{AC/DC}	230V _{AC/DC}
red	0,3 lm	0,1 lm	SSDD22H0249	SSDD22H0289
yellow	0,8 lm	0,2 lm	SSDD22H1249	SSDD22H1289
blue	0,3 lm	0,1 lm	SSDD22H4249	SSDD22H4289
white	2,2 lm	0,4 lm	SSDD22H6249	SSDD22H6289
green	0,6 lm	0,2 lm	SSDD22H7249	SSDD22H7289



SAFH22x2x



SSBD22Hx2x9

Ø 22 mm

For all types page 67

Specification:

mounting-hole: Ø 22+0.5 mm

fixing: screw fastening

Material:

housing SAFH: aluminium anodized

housing SSxD: brass chromium plated

insulating part: PC in light color

LED look cap: PC colored transparent

sealing disk: NBR 70

washer: FE nickel plated

nut: brass nickel plated

LED Indicator Ø22 mm Inside reflector

IP67

LED signal indicator for screw fastening with matt surface for optimum on/off contrast. The required mounting material is included in delivery. Bi-colour version as standard available with common cathode. Option with common anode. Front side IP67 protected at build-in condition.

SMTD22x3x / SMDD22x3x

Connection: Screw terminal max. 1.5 mm²

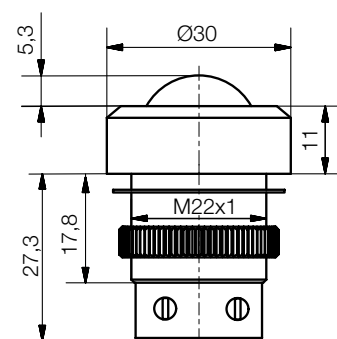


Reflector frosted chromium plated

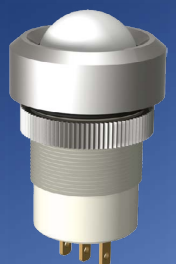
Type	Luminous flux		Part No.	
	24V _{DC}	230V _{AC}	24/28V _{AC/DC}	230V _{AC}
red	2,0 lm	1,1 lm	SMTD22034	SMTD22038
yellow	2,1 lm	1,3 lm	SMTD22134	SMTD22138
blue	1,3 lm	0,9 lm	SMTD22434	SMTD22438
white	10,1 lm	5,9 lm	SMTD22634	SMTD22638
green	2,6 lm	1,8 lm	SMTD22734	SMTD22738

Reflector black chromium plated

Type	Luminous flux		Part No.	
	24V _{DC}	230V _{AC}	24/28V _{AC/DC}	230V _{AC}
red	2,0 lm	1,1 lm	SMDD22034	SMDD22038
yellow	2,1 lm	1,3 lm	SMDD22134	SMDD22138
blue	1,3 lm	0,9 lm	SMDD22434	SMDD22438
white	10,1 lm	5,9 lm	SMDD22634	SMDD22638
green	2,6 lm	1,8 lm	SMDD22734	SMDD22738



Ø 22 mm



SMTD22x2x



SMDD22x3x

For all types page 68

Specification:

mounting-hole: Ø 22+0.5 mm

fixing: screw fastening

Material:

reflector: brass chromium plated

housing: PA6.6

sealing disk: NBR 70

nut: aluminium

Option:

- common anode

- wire connection is possible as AC/DC or DC version

- other color combinations for the bicolor version are possible

SMTE22224 / SMDE22224 bicolor



Connection: 3x tab terminal 2,8x0.8 mm



Reflector frosted chromium plated

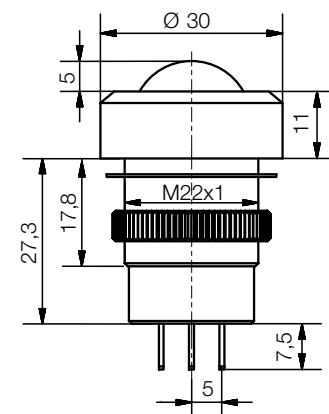
Type	Luminous flux		Part No.
	24V _{DC}	24/28V _{DC}	
red-green*	0,8 lm		SMTE22224
	0,9 lm		

*mixed color is possible

Reflector black chromium plated

Type	Luminous flux		Part No.
	24V _{DC}	24/28V _{DC}	
red-green*	0,8 lm		SMDE22224
	0,9 lm		

*mixed color is possible



LED Indicator Ø22 mm Outside reflector

IP67

LED signal indicator for screw fastening with matt surface for optimum on/off contrast. The required mounting material is included in delivery. Bi-colour version as standard available with common cathode. Option with common anode. Front side IP67 protected at build-in condition.

SMSD22x3x / SMRD22x3x

Connection: Screw terminal max. 1.5 mm²

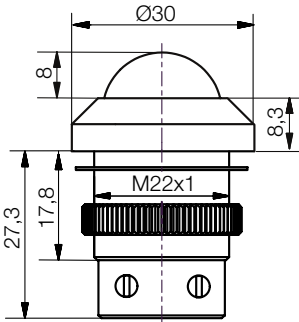


Reflector frosted chromium plated

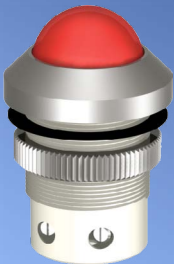
Type	Luminous flux		Part No.	
	24V _{DC}	230V _{AC}	24/28V _{AC/DC}	230V _{AC}
red	2,0 lm	1,1 lm	SMSD22034	SMSD22038
yellow	2,1 lm	1,3 lm	SMSD22134	SMSD22138
blue	1,3 lm	0,9 lm	SMSD22434	SMSD22438
white	10,1 lm	5,9 lm	SMSD22634	SMSD22638
green	2,6 lm	1,8 lm	SMSD22734	SMSD22738

Reflector black chromium plated

Type	Luminous flux		Part No.	
	24V _{DC}	230V _{AC}	24/28V _{AC/DC}	230V _{AC}
red	2,0 lm	1,1 lm	SMRD22034	SMRD22038
yellow	2,1 lm	1,3 lm	SMRD22134	SMRD22138
blue	1,3 lm	0,9 lm	SMRD22434	SMRD22438
white	10,1 lm	5,9 lm	SMRD22634	SMRD22638
green	2,6 lm	1,8 lm	SMRD22734	SMRD22738



SMRE22x2x



SMSD22x3x

Ø 22 mm

SMSE22224 / SMRE22224 bicolor

Connection: 3x tab terminal 2,8x0.8 mm



Reflector frosted chromium plated

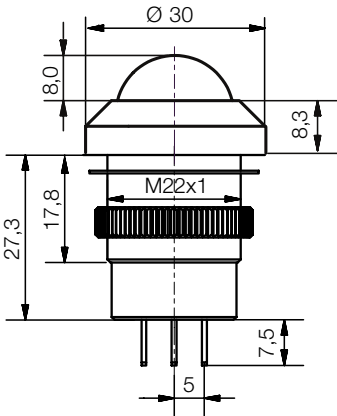
Type	Luminous flux		Part No.
	24V _{DC}	24/28V _{DC}	
red-green*	0,8 lm		SMSE22224
	0,9 lm		

*mixed color is possible

Reflector black chromium plated

Type	Luminous flux		Part No.
	24V _{DC}	24/28V _{DC}	
red-green*	0,8 lm		SMRE22224
	0,9 lm		

*mixed color is possible



For all types page 69 Specification: mounting-hole: Ø 22+0.5 mm

- fixing: screw fastening
- Material:**
- reflector: brass chromium plated
 - housing: PA6.6
 - sealing disk: NBR 70
 - nut: aluminium
- Option:**
- common anode
 - wire connection is possible as AC/DC or DC version
 - other color combinations for the bicolor version are possible

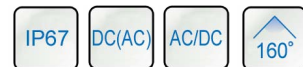
LED Indicator Ø30 mm super flat with cover

IP67

Super flat LED Indicator with matted illuminating area for optimum on/off contrast. Bi-colour version as standard available with common cathode Option with common anode. The required mounting material is included in delivery. Front side IP67 protected at build-in condition.

SMFL30x2x / SMEL30x2x

Connection: 2x tab terminal 2,8x0.8 mm

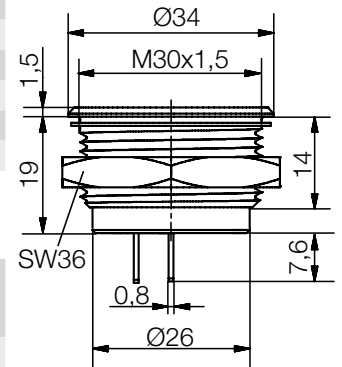


frosted chromium plated

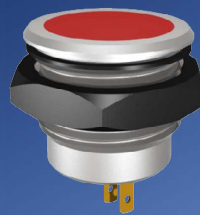
Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC(AC)}	24/28V _{AC/DC}
red	0,9 lm	0,8 lm	SMFL30022	SMFL30024
yellow	1,1 lm	0,9 lm	SMFL30122	SMFL30124
blue	0,5 lm	0,6 lm	SMFL30422	SMFL30424
white	3,7 lm	4,2 lm	SMFL30622	SMFL30624
green	0,9 lm	1,7 lm	SMFL30722	SMFL30724

black chromium plated

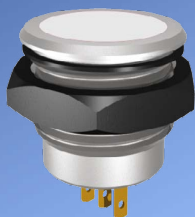
Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC(AC)}	24/28V _{AC/DC}
red	0,9 lm	0,8 lm	SMEL30022	SMEL30024
yellow	1,1 lm	0,9 lm	SMEL30122	SMEL30124
blue	0,5 lm	0,6 lm	SMEL30422	SMEL30424
white	3,7 lm	4,2 lm	SMEL30622	SMEL30624
green	0,9 lm	1,7 lm	SMEL30722	SMEL30724



Ø 30 mm



SMFL30x2x



SMFE30x2x

For all types page 70
Specification:
mounting-hole: Ø 30+0.5 mm

fixing: screw fastening
Material:
housing: brass chromium plated
cover: PC
sealing disk: NBR 70
nut: PA6.6

Option bicolor:
- common anode
- other color combinations for the bicolor version are possible

SMFE30x2x / SMEE30x2x bicolor

Connection: 3x tab terminal 2,8x0.8 mm



frosted chromium plated

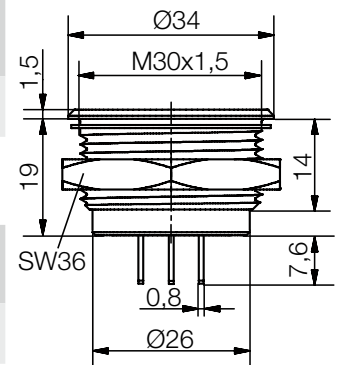
Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC}	24/28V _{DC}
red-green*	0,8 lm	0,8 lm	SMFE30222	SMFE30224
	2,6 lm	1,0 lm		

*mixed color is possible

black chromium plated

Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC}	24/28V _{DC}
red-green*	0,8 lm	0,8 lm	SMEE30222	SMEE30224
	2,6 lm	1,0 lm		

*mixed color is possible



LED Indicator Ø22 mm super flat with cover

IP67

Super flat LED Indicator with matted illuminating area for optimum on/off contrast. All different colours of this series are visually aligned to the same impression of brightness. The ground connection is equipped with a double contact. The required mounting material is included in delivery. Furthermore a 2-part sleeve for protection against contact for 230V types is supplied. Front side IP67 protected at build-in condition.

SMFP30Hx2x9 / SMEP30Hx2x9

Connection: 3x tab terminal 2,8x0.8 mm

IP67

AC/DC

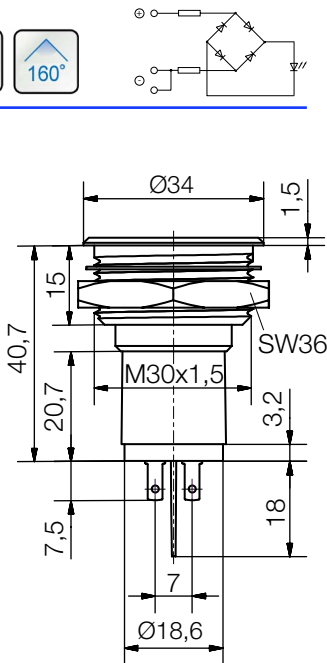
160°

frosted chromium plated

Type	Luminous flux		Part No.	
	24V _{DC}	230V _{AC}	24/28V _{AC/DC}	230V _{AC/DC}
red	0,6 lm	0,1 lm	SMFP30H0249	SMFP30H0289
yellow	1,9 lm	0,6 lm	SMFP30H1249	SMFP30H1289
blue	0,4 lm	0,1 lm	SMFP30H4249	SMFP30H4289
white	3,0 lm	0,7 lm	SMFP30H6249	SMFP30H6289
green	1,3 lm	0,4 lm	SMFP30H7249	SMFP30H7289

black chromium plated

Type	Luminous flux		Part No.	
	24V _{DC}	230V _{AC}	24/28V _{AC/DC}	230V _{AC/DC}
red	0,6 lm	0,1 lm	SMEP30H0249	SMEP30H0289
yellow	1,9 lm	0,6 lm	SMEP30H1249	SMEP30H1289
blue	0,4 lm	0,1 lm	SMEP30H4249	SMEP30H4289
white	3,0 lm	0,7 lm	SMEP30H6249	SMEP30H6289
green	1,3 lm	0,4 lm	SMEP30H7249	SMEP30H7289



Ø 30 mm

SMFP30Hx2x9

For all types page 71
Specification:
mounting-hole: Ø 30+0.5 mm
fixing: screw fastening
Material:
housing: brass chromium plated
COVER: pc
insulating part: PC in light color
sealing disk: NBR 70
nut: PA6.6

Lighting Element Ø8mm for AS Adapter

LED element with mounting-Ø8 mm for screw fastening. Easy adaption to diverse supply voltages thanks to separation of LED element and power supply. Version with lens head or outside reflector. The required mounting material is included in delivery.

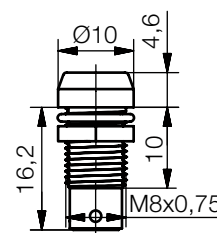
AKAD08x2 Lens head form A

Connection: AS adapter



PC grey

Type	Luminous intensity 20mA	Part No.
red	38 mcd	AKAD0802
yellow	58 mcd	AKAD0812
green	38 mcd	AKAD0822
blue	1400 mcd	AKAD0842
white	2320 mcd	AKAD0862



AKA08x2



AKR08x2

AS-Ø8

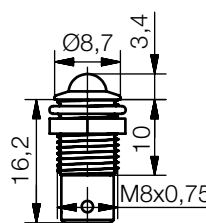
AKRD08x2 Outside reflector

Connection: AS adapter



PC black

Type	Luminous intensity 20mA	Part No.
red	38 mcd	AKRD0802
yellow	58 mcd	AKRD0812
green	38 mcd	AKRD0822
blue	1400 mcd	AKRD0842
white	2320 mcd	AKRD0862



For all types page 72

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: PC

lens head: PC colored transparent

coding plug: PC in green

washer: FE nickel plated

nut: brass nickel plated

Option:

- AKRD08x2 also as bicolor type available

Accessory:

- AS adapter

Lighting Element Ø8 mm for AS Adapter

LED element with mounting-Ø16 mm for screw fastening. Easy adaption to diverse supply voltages thanks to separation of LED element and power supply. Version with outside or inside reflector. The required mounting material is included in delivery.

AMBD08x2 / AMDD08x2 Inside reflector

Connection: AS adapter

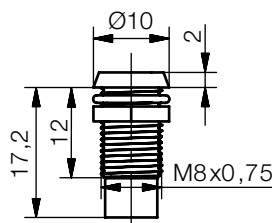


chromium plated

Type	Luminous intensity 20mA	Part No.
red	38 mcd	AMBD0802
yellow	58 mcd	AMBD0812
green	38 mcd	AMBD0822
blue	1400 mcd	AMBD0842
white	2320 mcd	AMBD0862

black chromium plated

Type	Luminous intensity 20mA	Part No.
red	38 mcd	AMDD0802
yellow	58 mcd	AMDD0812
green	38 mcd	AMDD0822
blue	1400 mcd	AMDD0842
white	2320 mcd	AMDD0862



AMBD08x2



AMRD08x2

AS-Ø8

AMQD08x2 / AMRD08x2 Outside reflector

Anschluss: AS Adapter

Connection: AS adapter

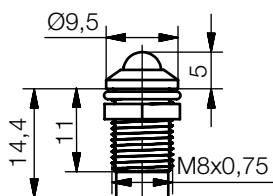


chromium plated

Type	Luminous intensity 20mA	Part No.
red	38 mcd	AMQD0802
yellow	58 mcd	AMQD0812
green	38 mcd	AMQD0822
blue	1400 mcd	AMQD0842
white	2320 mcd	AMQD0862

black chromium plated

Type	Luminous intensity 20mA	Part No.
red	38 mcd	AMRD0802
yellow	58 mcd	AMRD0812
green	38 mcd	AMRD0822
blue	1400 mcd	AMRD0842
white	2320 mcd	AMRD0862



For all types page 73

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

coding plug: PC in green

washer: FE nickel plated

nut: brass nickel plated

Option:

- housing frosted chromium plated

- IP67 with additional sealing disc

Accessory:

- AS adapter

AS-Ø8



AMBE082



AMRE082

Lighting Element Ø8 mm for AS Adapter

Bicoloured LED element with mounting-Ø8 mm for AS adapter for screw fastening. Easy adaption to diverse supply voltages thanks to separation of LED element and power supply. Version with inside or outside reflector. The required mounting material is included in delivery.

AMBE082 / AMDE082 bicolor Inside reflector

Connection: AS adapter



chromium plated

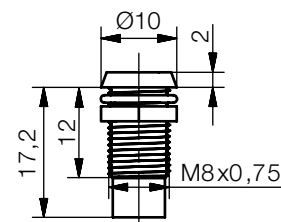
Type	Luminous intensity 20mA	Part No.
red-green*	60 mcd 50 mcd	AMBE082

*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	Part No.
red-green*	60 mcd 50 mcd	AMDE082

*mixed color yellow



For all types page 74
Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening
Material:
housing: brass chromium plated
coding plug: PC in green
washer: FE nickel plated
nut: brass nickel plated
Option:
- housing frosted chromium plated
- other color combinations possible
- IP67
Accessory:
- AS adapter

AMQE082 / AMRE082 bicolor Outside reflector

Connection: AS adapter



chromium plated

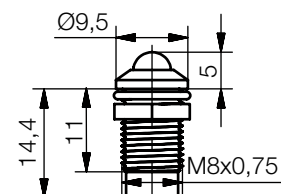
Type	Luminous intensity 20mA	Part No.
red-green*	60 mcd 50 mcd	AMQE082

*mixed color yellow

black chromium plated

Type	Luminous intensity 20mA	Part No.
red-green*	60 mcd 50 mcd	AMRE082

*mixed color yellow



Lighting Element Ø8 mm for AS Adapter

LED element with mounting-Ø8 mm for screw fastening. Easy adaption to diverse supply voltages thanks to separation of LED element and power supply. Version with inside reflector and flat top LED. The required mounting material is included in delivery.

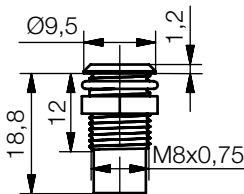
AMCP08x2 / AMEP08x2 Inside reflector

Connection: AS adapter



chromium plated

Type	Luminous intensity 20mA	Part No.
red	12 mcd	AMCP0802
yellow	6 mcd	AMCP0812
green	6 mcd	AMCP0822
blue	50 mcd	AMCP0842
white	25 mcd	AMCP0862



black chromium plated

Type	Luminous intensity 20mA	Part No.
red	12 mcd	AMEP0802
yellow	6 mcd	AMEP0812
green	6 mcd	AMEP0822
blue	50 mcd	AMEP0842
white	25 mcd	AMEP0862



AMCP08x2

AS-Ø8

For all types page 75

Specification:
mounting-hole: Ø 8+0.2 mm

- fixing: screw fastening
- Material:**
- housing: brass chromium plated
- coding plug: PC in green
- washer: FE nickel plated
- nut: brass nickel plated
- Option:**
- housing frosted chromium plated
- Accessory:**
- AS adapter

Lighting Element Ø8 mm for AS Adapter

IP67

LED element with mounting-Ø8 mm for screw fastening. Easy adaption to diverse supply voltages thanks to separation of LED element and power supply. Version with optical lens. The required mounting material is included in delivery. Front side IP67 protected at build-in condition.

AS-Ø8



AMLx08

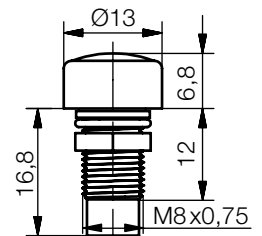
AMLD08x2 with optical lens

Connection: AS adapter



chromium plated

Type	Luminous intensity 20mA	Part No.
red	38 mcd	AMLD0802
yellow	58 mcd	AMLD0812
green	38 mcd	AMLD0822
blue	1400 mcd	AMLD0842
white	2320 mcd	AMLD0862



AMLE082 bicolor with optical lens

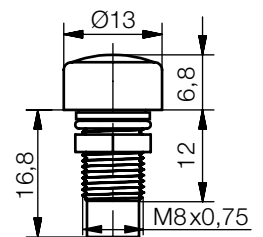
Connection: AS adapter



chromium plated

Type	Luminous intensity 20mA	Part No.
red-green*	60 mcd 50 mcd	AMLE082

*mixed color yellow



For all types page 76

Specification:

mounting-hole: Ø 8+0.2 mm

fixing: screw fastening

Material:

housing: brass chromium plated

cap: brass chromium plated

lens: glass

coding plug: PC in green

sealing disk: NBR 70

washer: FE nickel plated

nut: brass nickel plated

Accessory:

- AS adapter

Lighting Element Ø8 mm for AS Adapter

IP67

LED element with mounting-Ø8 mm for screw fastening. Easy adaption to diverse supply voltages thanks to separation of LED element and power supply. Version with glass cover. The required mounting material is included in delivery. Front side IP67 protected at build-in condition.

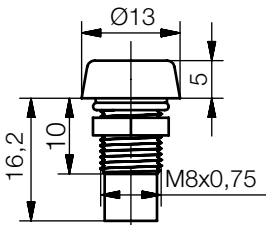
AMPD08x2 with glass cover

Connection: AS adapter



Cap black chromium plated

Type	Luminous intensity 20mA	Part No.
red	38 mcd	AMPD0802
yellow	58 mcd	AMPD0812
green	38 mcd	AMPD0822
blue	1400 mcd	AMPD0842
white	2320 mcd	AMPD0862



AMPD08x2

AS-Ø8

For all types page 77
Specification:
mounting-hole: Ø 8+0.2 mm

- fixing: screw fastening
Material:
housing: brass chromium plated
cap: brass chromium plated
cover: glass
coding plug: PC in green
sealing disk: NBR 70
washer: FE nickel plated
nut: brass nickel plated
Option:
- also as bicolor typ available
Accessory:
- AS adapter

Lighting Element Ø12 mm for AS Adapter

AS-Ø12



AMBD12x



AMQD12x

For all types page 78
Specification:
 mounting-hole: Ø 12+0.2 mm

fixing: screw fastening
Material:
 housing: brass chromium plated
 coding plug: PC in luminous color
 washer: FE nickel plated
 nut: brass nickel plated
Option:
 - housing frosted chromium plated
 - IP67 with additional sealing disc
 - also as bicolor type available
Accessory:
 - AS adapter

LED element with mounting-Ø12 mm for screw fastening. Easy adaption to diverse supply voltages thanks to separation of LED element and power supply. Version with inside or outside reflector. The required mounting material is included in delivery.

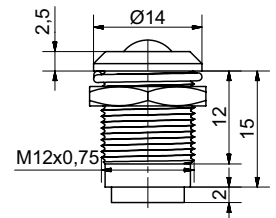
AMBD12x / AMDD12x Inside reflector

Connection: AS adapter



chromium plated

Type	Luminous intensity 20mA	Part No.
red	600 mcd	AMBD120
yellow	550 mcd	AMBD121
green	220 mcd	AMBD122



black chromium plated

Type	Luminous intensity 20mA	Part No.
red	600 mcd	AMDD120
yellow	550 mcd	AMDD121
green	220 mcd	AMDD122

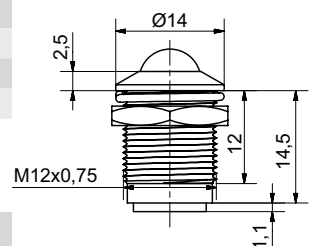
AMQD12x / AMRD12x Outside reflector

Connection: AS adapter



chromium plated

Type	Luminous intensity 20mA	Part No.
red	600 mcd	AMQD120
yellow	550 mcd	AMQD121
green	220 mcd	AMQD122



black chromium plated

Type	Luminous intensity 20mA	Part No.
red	600 mcd	AMRD120
yellow	550 mcd	AMRD121
green	220 mcd	AMRD122

Lighting Element Ø14 mm for AS Adapter

LED element with mounting-Ø14 mm for screw fastening. Easy adaption to diverse supply voltages thanks to separation of LED element and power supply. The required mounting material is included in delivery.

AMBD14x / AMDD14x Inside reflector

Connection: AS adapter

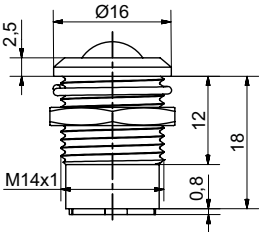


chromium plated

Type	Luminous intensity 20mA	Part No.
red	900 mcd	AMBD140
yellow	500 mcd	AMBD141
green	220 mcd	AMBD142

black chromium plated

Type	Luminous intensity 20mA	Part No.
red	900 mcd	AMDD140
yellow	500 mcd	AMDD141
green	220 mcd	AMDD142



AMBD14x

AS-Ø14

For all types page 79
Specification:
mounting-hole: Ø 14+0.2 mm

- fixing: screw fastening
Material:
housing: brass chromium plated
coding plug: PC in luminous color
washer: FE nickel plated
nut: brass nickel plated
Option:
- housing frosted chromium plated
- IP67 with additional sealing disc
- also as bicolor typ available
Accessory:
- AS adapter

Lighting Element Ø16 mm for AS Adapter

IP67

AS-Ø16



AMCE16x

LED element with mounting-Ø16 mm for screw fastening. Easy adaption to diverse supply voltages thanks to separation of LED element and power supply. Version with with large signal surface for a homogeneous illumination. The required mounting material is included in delivery. Front side IP67 protected at build-in condition.

AMCE16x / AMEE16x with lens head

Connection: AS adapter

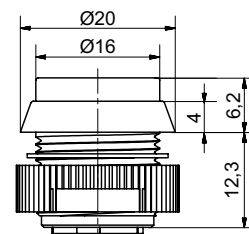


aluminium natural anodized

Type	Luminous intensity 20mA	Artikel-Nr. Part No.
red	450 mcd	AMCE160
yellow	450 mcd	AMCE161
blue	500 mcd	AMCE164
white	2500 mcd	AMCE166
green	1750 mcd	AMCE167

aluminium black anodized

Type	Luminous intensity 20mA	Part No.
red	450 mcd	AMEE160
yellow	450 mcd	AMEE161
blue	500 mcd	AMEE164
white	2500 mcd	AMEE166
green	1750 mcd	AMEE167



For all types page 80 Specification:
mounting-hole: Ø 16+0.5 mm

fixing: screw fastening

Material:

housing: aluminium, anodized

coding plug: PC in luminous color

sealing disk: NBR 70

nut: PA6.6

Option:

- mounting of labelled aperture-plates are possible

Accessory:

- AS adapter

Power Supply for Lighting Elements

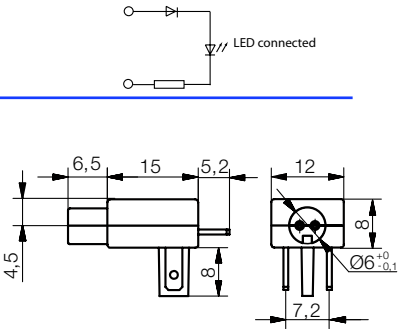
Adapter for power supply of LED elements, ranging from mounting-Ø8 mm to Ø16 mm.

AS-Adapter ATx

Connection: 2x tab terminal 2.8x0.8mm

PC grey

Type	Current consumption	Part No.
6V DC (AC)	18 mA	AT1
12V DC (AC)	17 mA	AT2
24V DC (AC)	16 mA	AT4
48V DC (AC)	12 mA	AT5
60V DC (AC)	8 mA	AT6

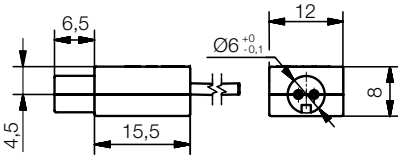


AS-Adapter AKx

Connection: stranded wire 0.5 mm²

PC grey

Type	Current consumption	Part No.
24V DC (AC)	16 mA	AK4L020
24V DC (AC)	16 mA	AK4L100
24V DC (AC)	16 mA	AK4L125



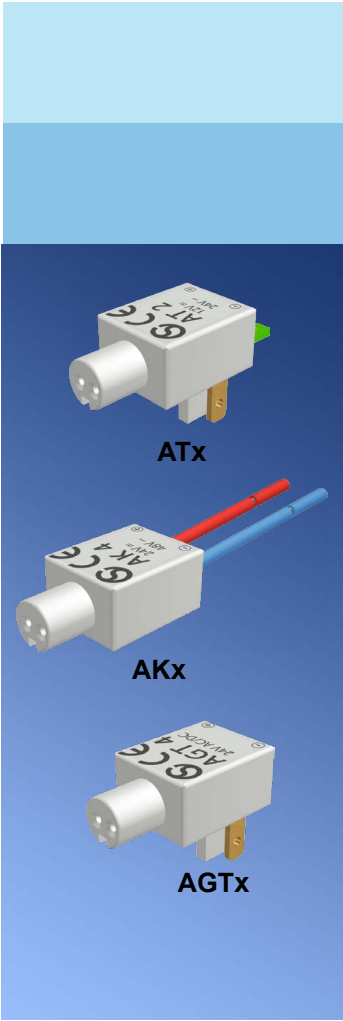
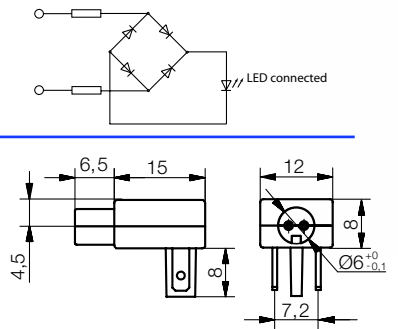
L = stranded wire length in cm

AS-Adapter AGTx

Connection: 2x tab terminal 2.8x0.8mm

PC grey

Type	Current consumption	Part No.
24V AC/DC	16 mA	AGT4
130V AC/DC	12 mA	AGT7
230V AC/DC	8 mA	AGT8



AS-Power

For all types page 81

Specification:

Material:

housing: PC grey

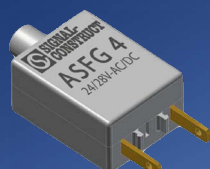
Option:

- special voltage

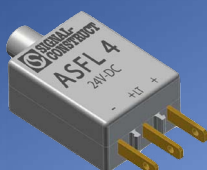
mounting example

Power Supply for Lighting Elements

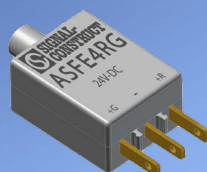
Adapter for power supply of LED elements, ranging from mounting-Ø8 mm to Ø16 mm.



ASFGx



ASFLx



ASFE4xx

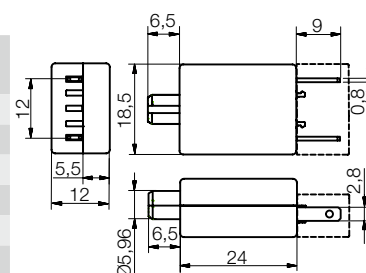
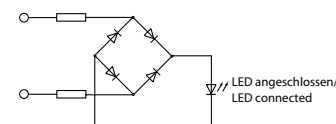
AS-Adapter ASFGx

Connection: 2x tab terminal 2.8x0.8mm

PC grey

Type	Current consumption	Part No.
12V AC/DC	17 mA	ASFG2
24V AC/DC	16 mA	ASFG4
48V AC/DC	13 mA	ASFG5
60V AC/DC	13 mA	ASFG6
130V AC/DC	6 mA	ASFG7*
230V AC/DC	5 mA	ASFG8*

* with sleeve for electrical shock protection

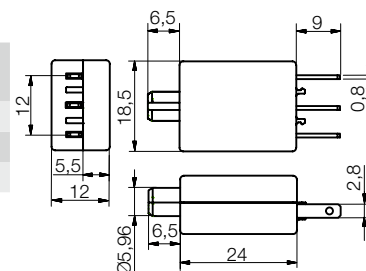
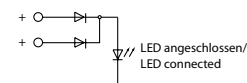


AS-Adapter ASFLx

Connection: 3x tab terminal 2.8x0.8mm with lamp test

PC grey

Type	Current consumption	Part No.
12V DC	17 mA	ASFL2
24V DC	16 mA	ASFL4
48/60V DC	13 mA	ASFL6



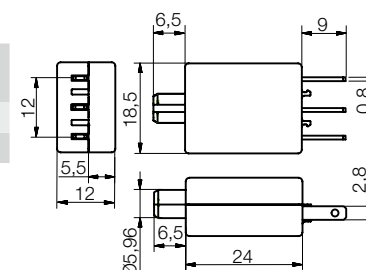
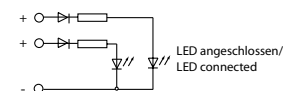
AS-Adapter ASFE4xx bicolor

Connection: 3x tab terminal 2.8x0.8mm bicolored

PC grey

Type	Current consumption	Part No.
24V DC	16 mA	ASFE4RG ¹
24V DC	16 mA	ASFE4YG ²

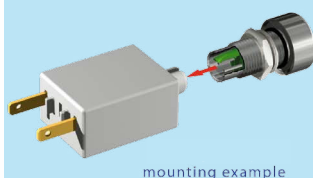
red/green
yellow/green



AS-Power

For all types page 82
Specification:
Material:

housing: PC grey
Option:
- special voltage



mounting example

Power Supply for Lighting Elements

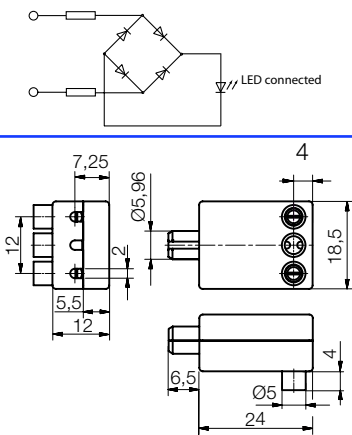
Adapter for power supply of LED elements, ranging from mounting-Ø8 mm to Ø16 mm.

AS-Adapter ASKGx

Connection: 2x screw clamp for 0.5-1.5 mm²

PC grey

Type	Current consumption	Part No.
12V AC/DC	17 mA	ASKG2
24V AC/DC	16 mA	ASKG4
48V AC/DC	13 mA	ASKG5
60V AC/DC	13 mA	ASKG6
130V AC/DC	6 mA	ASKG7
230V AC/DC	5 mA	ASKG8



ASKGx



ASKLx



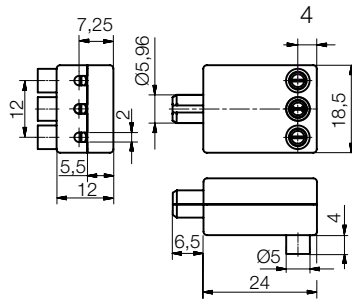
ASKE4xx

AS-Adapter ASKLx

Connection: 3x screw clamp for 0.5-1.5 mm² with lamp test

PC grey

Type	Current consumption	Part No.
12V DC	17 mA	ASKL2
24V DC	16 mA	ASKL4
48/60V DC	13 mA	ASKL6



For all types page 83
Specification:
Material:

housing: PC grey
Option:
- special voltage

AS-Power

AS-Adapter ASKE4xx bicolor

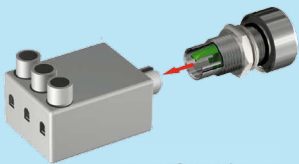
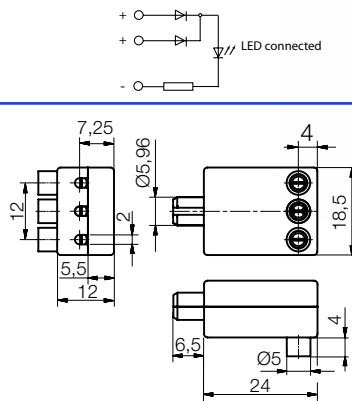


Connection: 3x screw clamp for 0.5-1.5 mm² bicolored

PC grey

Type	Current consumption	Part No.
24V DC	16 mA	ASKE4RG 1
24V DC	16 mA	ASKE4YG 2

red/green
yellow/green



mounting example

AH-SYS



SKN07x

Plastic Housing Ø5 mm for AH-System

The front area is identical to a usual flat top LED Ø5 mm. Specifically suitable for front-flush installation from the rear side. The basic version is designed for a front panel thickness of 4mm. For smaller panels from 2mm and 3mm, distance rings are available.

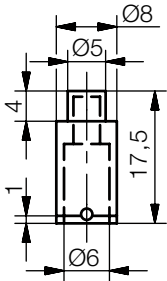
SKN07x for rear panel mounting

Connection: LED element with strand connection

PC colored transparent

IP67

Type	Part No.
red	SKN070
yellow	SKN071
green	SKN072
bleu	SKN074
clear	SKN075



For all types page 84

Specification:

mounting-hole: Ø 6,1 mm

fixing: press-in / glue-in

lum. surface: Ø 5,0 mm

Material:

housing: PC colored transparent

Accessory:

- LED element ALD3 / ARD3



Plastic Housing Ø8 mm for A-System

LED housing, mounting-Ø8 mm, for screw fastening. The housings may be mounted separately into the front panel, the LED elements can then be fixed into the housing by snap-in mounting from behind. No more threading of long connections. The required mounting material is included in delivery.

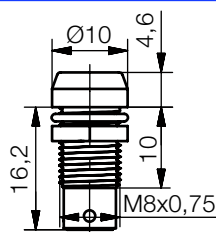
SKA08x Lens head form A

IP50

Connection: LED element with strand connection

PC grey

Type	Part No.
red	SKA080
yellow	SKA081
green	SKA082
clear	SKA085



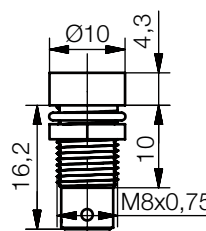
SKF08 Inside reflector white

IP50

Connection: LED element with strand connection

PC grey

Type	Part No.
all colours	SKF08



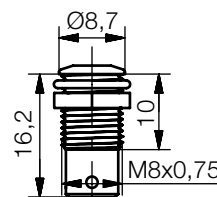
SKR08 Outside reflector black

IP50

Connection: LED element with strand connection

PC black

Type	Part No.
all colours	SKR08



SKA08x



SKF08



SKR08

For all types page 85
Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening
Material:
housing: PC
washer: FE nickel plated
nut: brass nickel plated
Accessory:
- LED element ALD5 / ARD5



A-SYS

Metal Housing Ø8 mm for A-System

LED housing, mounting-Ø8 mm, for screw fastening. The housings may be mounted separately into the front panel, the LED elements can then be fixed into the housing by snap-in mounting from behind. No more threading of long connections. The required mounting material is included in delivery.



AMB08



AMQ08

AMB08 / AMD08 Inside reflector

IP50

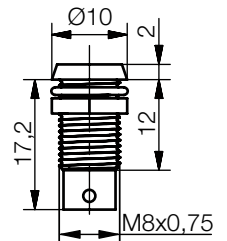
Connection: LED element with strand connection

chromium plated

Type	Part No.
all colours	AMB08

black chromium plated

Type	Part No.
all colours	AMD08



AMQ08 / AMR08 Outside reflector

IP50

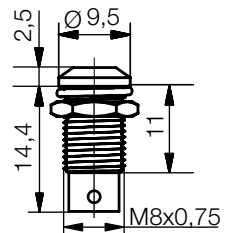
Connection: LED element with strand connection

chromium plated

Type	Part No.
all colours	AMQ08

black chromium plated

Type	Part No.
all colours	AMR08



A-SYS

For all types page 86
Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening
Material: brass chromium plated
housing: FE nickel plated
washer: brass nickel plated
nut:
Option:

- housing frosted chromium plated
 - IP67 with LED look cap
- Accessory:
- LED element ALD5 / ARD



Metal Housing Ø8 mm for A-System

IP67

LED housing, mounting-Ø8 mm, for screw fastening. The housings may be mounted separately into the front panel, the LED elements can then be fixed into the housing by snap-in mounting from behind. No more threading of long connections.
The required mounting material is included in delivery. Front side IP67 protected at build-in condition.

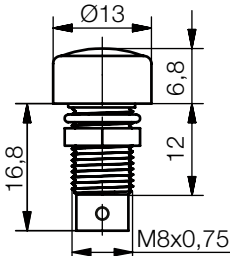
AML08 with optical lens

IP67

Connection: LED element with strand connection

chromium plated

Type	Part No.
all colours	AML08



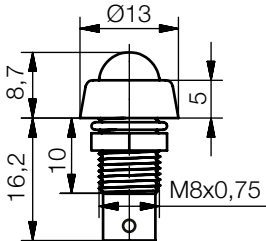
AMK08 with glass dome

IP67

Connection: LED element with strand connection

Cap black chromium plated

Type	Part No.
all colours	AMK08



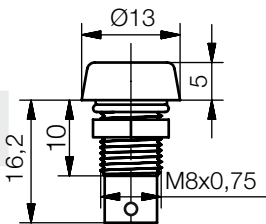
AMP08 with glass cover

IP67

Connection: LED element with strand connection

Cap black chromium plated

Type	Part No.
	AMP08



A-SYS

For all types page 87
Specification:
mounting-hole: Ø 8+0.2 mm

fixing: screw fastening
Material:
housing: brass chromium plated
cap: brass chromium plated
lens, dome
or cover: glass
sealing disk: NBR 70
washer: FE nickel plated
nut: brass nickel plated
Accessory:
- LED element ALD5 / ARD5



LED Element Ø10 mm for A10-System

LED housing for mounting-Ø10 mm with super flat, surface plan lens head. The frosted surface allows a clear on-off contrast and a high light transmission. Suitable for panel thickness from 1,5 mm.

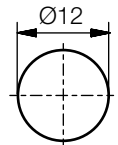
SKG10x / SKH10x / SKI10x round, square, arrow

Connection: LED element with strand connection

IP40

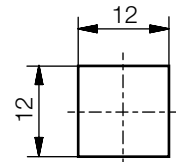
Round lens head

Type	Part No.
red transparent	SKG100
yellow transparent	SKG101
green transparent	SKG102
blue transparent	SKG104
clear transparent	SKG105
black transparent	SKG109



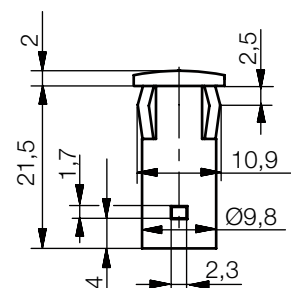
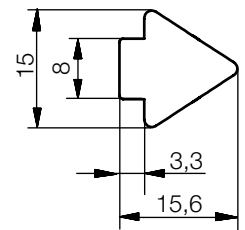
Squared lens head

Type	Part No.
red transparent	SKH100
yellow transparent	SKH101
green transparent	SKH102
blue transparent	SKH104
clear transparent	SKH105
black transparent	SKH109



Arrow lens head

Type	Part No.
red transparent	SKI100
yellow transparent	SKI101
green transparent	SKI102
blue transparent	SKI104
clear transparent	SKI105
black transparent	SKI109



SKG10x



SKH10x



SKI10x

For all types page 88
Specification:
mounting-hole: Ø 10+0.2 mm

fixing: snap-In
connection: tab terminal 2.8x0.8mm
Material:
housing: PC colored transparent
Accessory:
- LED element ALU1



LED Element Ø3 mm for AH-System

LED Element with Ø3mm LED for AH system housing. Optional with ribbon cable or single stranded wire.

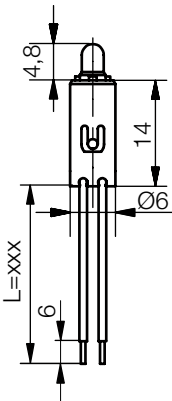
ALD3x

LED element with discrete wire



Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	ALD300Lxxx
yellow	30 mcd	ALD310Lxxx
green	40 mcd	ALD320Lxxx
blue	700 mcd	ALD340Lxxx
white	630 mcd	ALD360Lxxx

Type	Luminous intensity 20mA	Part No. 12/14V_{DC(AC)} 24/28V_{DC(AC)}
red	40 mcd	ALD302Lxxx ALD304Lxxx
yellow	30 mcd	ALD312Lxxx ALD314Lxxx
green	40 mcd	ALD322Lxxx ALD324Lxxx
blue	700 mcd	ALD342Lxxx ALD344Lxxx
white	630 mcd	ALD362Lxxx ALD364Lxxx



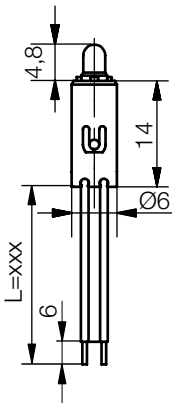
ARD3x

LED element with ribbon cable



Type	Luminous intensity 20mA	Part No. LED voltage
red	40 mcd	ARD300Lxxx
yellow	30 mcd	ARD310Lxxx
green	40 mcd	ARD320Lxxx
blue	700 mcd	ARD340Lxxx
white	630 mcd	ARD360Lxxx

Type	Luminous intensity 20mA	Part No. 12/14V_{DC(AC)} 24/28V_{DC(AC)}
red	40 mcd	ARD302Lxxx ARD304Lxxx
yellow	30 mcd	ARD312Lxxx ARD314Lxxx
green	40 mcd	ARD322Lxxx ARD324Lxxx
blue	700 mcd	ARD342Lxxx ARD344Lxxx
white	630 mcd	ARD362Lxxx ARD364Lxxx



For all ALD types

Specification:

connection: single stranded wire

wire: 0,22mm² AWG 24

insulating color: red / black

Material:

insulating part: PA6.6

For all ARD types

Specification:

connection: ribbon cable

wire: 0,22mm² AWG 24

insulating color: black with white color line

Material:

insulating part: PA6.6

LEDs

LED Element Ø5 mm for A-System

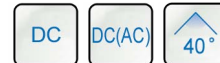
LED Element with Ø5 mm LED for A system housing. Optional with ribbon cable or single stranded wire.

LEDs



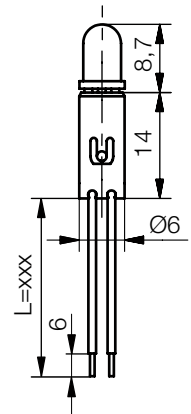
ALD5x

LED element with discrete wire



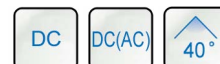
Type	Luminous intensity 20mA	Part No. LED voltage
red	38 mcd	ALD500Lxxx
yellow	58 mcd	ALD510Lxxx
green	38 mcd	ALD520Lxxx
blue	1400 mcd	ALD540Lxxx
white	2320 mcd	ALD560Lxxx

Type	Luminous intensity 20mA	Part No. 12/14V _{DC(AC)}	Part No. 24/28V _{DC(AC)}
red	38 mcd	ALD502Lxxx	ALD504Lxxx
yellow	58 mcd	ALD512Lxxx	ALD514Lxxx
green	38 mcd	ALD522Lxxx	ALD524Lxxx
blue	1400 mcd	ALD542Lxxx	ALD544Lxxx
white	2320 mcd	ALD562Lxxx	ALD564Lxxx



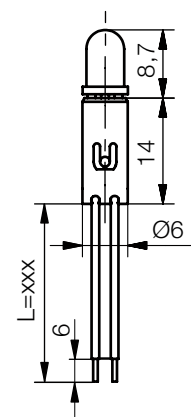
ARD5x

LED element with ribbon cable



Type	Luminous intensity 20mA	Part No. LED voltage
red	38 mcd	ARD500Lxxx
yellow	58 mcd	ARD510Lxxx
green	38 mcd	ARD520Lxxx
blue	1400 mcd	ARD540Lxxx
white	2320 mcd	ARD560Lxxx

Type	Luminous intensity 20mA	Part No. 12/14V _{DC(AC)}	Part No. 24/28V _{DC(AC)}
red	38 mcd	ARD502Lxxx	ARD504Lxxx
yellow	58 mcd	ARD512Lxxx	ARD514Lxxx
green	38 mcd	ARD522Lxxx	ARD524Lxxx
blue	1400 mcd	ARD542Lxxx	ARD544Lxxx
white	2320 mcd	ARD562Lxxx	ARD564Lxxx



For all ALD types

Specification:

connection: single stranded wire
wire: 0,22mm² AWG 24
insulating color: red / black

Material:

insulating part: PA6.6

For all ARD types

Specification:

connection: ribbon cable
wire: 0,22mm² AWG 24
insulating color: black with white color line

Material:

insulating part: PA6.6

LED Element Ø5 mm for A System

2-coloured LED element with Ø5mm LED for A system housing with single stranded wire.

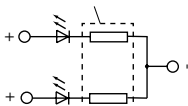
ALE5x bicolor



LED element with discrete wire

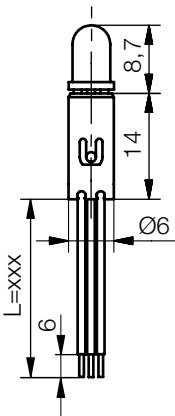


only in 12/24V versions



Type	Luminous intensity		Part No.		
	20mA	LED voltage	12/14VDC	24/28VDC	
red-green*	60 mcd		ALE520Lxxx	ALE522Lxxx	ALE524Lxxx
	50 mcd				

*mixed color yellow



LEDs

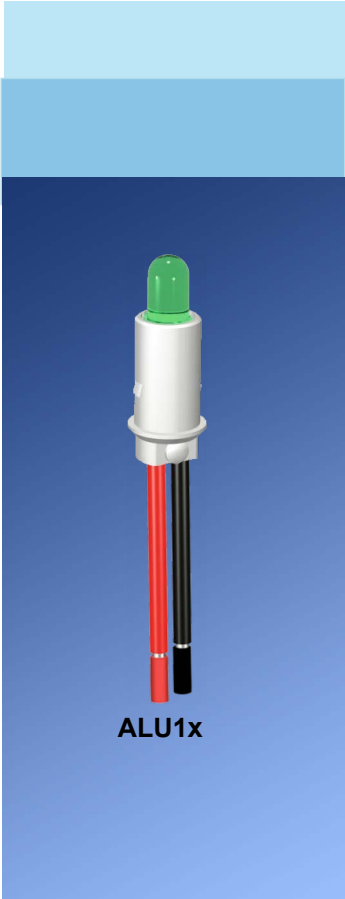
ALE5x

For all types page 91
Specification:
connection: single stranded wire
wire: 0,22mm² AWG 24
insulating color: red / green / black
Material:
insulating part: PA6.6
Option:
- other color combinations possible

LED Element Ø5 mm for A10 System

LED Element with Ø5mm LED for A10 system housing SK10. Optionally with or without integrated series resistor available.

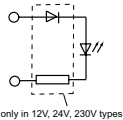
LEDs



ALU1x

ALU1x

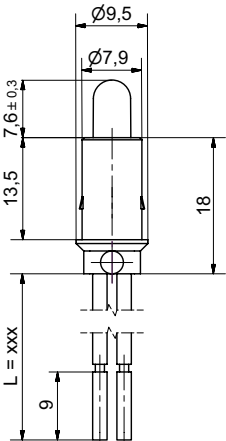
LED element with discrete wire



Type	Luminous intensity 20mA	Part No. LED voltage
red	1300 mcd	ALU100Lxxx
yellow	1600 mcd	ALU110Lxxx
blue	6000 mcd	ALU140Lxxx
white	2320 mcd	ALU160Lxxx
green	14800 mcd	ALU170Lxxx

Type	Luminous intensity 20mA	Part No. 12/14V _{DC(AC)}	Part No. 24/28V _{DC(AC)}
red	1300 mcd	ALU102Lxxx	ALU104Lxxx
yellow	1600 mcd	ALU112Lxxx	ALU114Lxxx
blue	6000 mcd	ALU142Lxxx	ALU144Lxxx
white	2320 mcd	ALU162Lxxx	ALU164Lxxx
green	14800 mcd	ALU172Lxxx	ALU174Lxxx

Type	Luminous intensity 20mA	Part No. 130V _{DC} / 230V _{AC}
red	1300 mcd	ALU108Lxxx
yellow	1600 mcd	ALU118Lxxx
blue	6000 mcd	ALU148Lxxx
white	2320 mcd	ALU168Lxxx
green	14800 mcd	ALU178Lxxx



For all types page 92

Specification:

connection: single stranded wire
wire: 0,56mm² AWG 20
insulating color: red / black
Material:
insulating part: PC

Flat top LED Ø18 mm

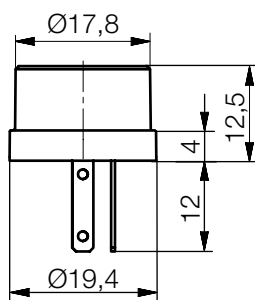
Matt surface for good on-off contrast.

LP18x1x

Connection: 2x tab terminal 2,8x0.5 mm



Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC}	24/28V _{DC}
red	0,9 lm	0,8 lm	LP18012	LP18014
yellow	3,0 lm	3,0 lm	LP18112	LP18114
blue	0,6 lm	0,8 lm	LP18412	LP18414
white	3,6 lm	4,8 lm	LP18612	LP18614
green	1,1 lm	1,8 lm	LP18712	LP18714



LP18x1x



LE1821x
LK1821x

LEDs

LE1821x / LK1821x bicolor

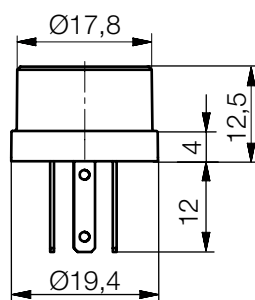
Connection: 3x tab terminal 2,8x0.5 mm



common cathode

Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC}	24/28V _{DC}
red-green*	0,9 lm	0,8 lm	LE18212	LE18214

*mixed color is possible



common anode

Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC}	24/28V _{DC}
red-green*	0,9 lm	0,8 lm	LK18212	LK18214

*mixed color is possible

For all types page 93
Specification:
Material:

housing: PC transparent

Option:

- available as complete lamp
- other color combinations for the bicolor version are possible

Jumbo LED Ø20 mm

Matt surface for good on-off contrast.

LEDs



LD20x2x



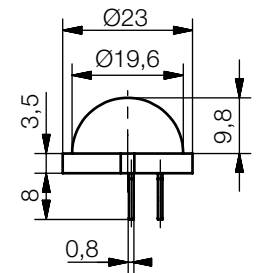
LE20x2x
LK20x2x

LD20x2x

Connection: 2x tab terminal 2,8x0,8 mm



Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC(AC)}	24/28V _{AC/DC}
red	0,8 lm	0,7 lm	LD20022	LD20024
yellow	1,0 lm	0,9 lm	LD20122	LD20124
blue	0,6 lm	0,6 lm	LD20422	LD20424
white	4,2 lm	4,2 lm	LD20622	LD20624
green	0,8 lm	1,6 lm	LD20722	LD20724



LE2022x / LK2022x bicolor



Connection: 3x tab terminal 2,8x0,8 mm



common cathode

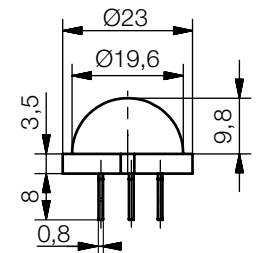
Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC}	24/28V _{DC}
red-green*	0,8 lm	0,7 lm	LE20222	LE20224
	0,8 lm	0,8 lm		
blue-white	0,6 lm	0,6 lm	LE20622	LE20624
	4,2 lm	4,2 lm		

*mixed color is possible

common anode

Type	Luminous flux		Part No.	
	12V _{DC}	24V _{DC}	12/14V _{DC}	24/28V _{DC}
red-green*	0,8 lm	0,7 lm	LK20222	LK20224
	0,8 lm	0,8 lm		
blue-white	0,6 lm	0,6 lm	LK20622	LK20624
	4,2 lm	4,2 lm		

*mixed color is possible



For all types page 94
Specification:

connection: tab terminal 2,8x0,8mm

Material:

housing LD20: PC colored transparent

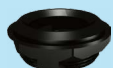
housing LE20: PC white transparent

Option:

- available as complete lamp
- available as 6V type
- other color combinations for the bicolor version are possible

Accessory:

- Mounting clip DMC22



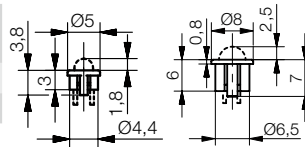
LED mounting clips and LED covers

Mounting solutions for single LEDs and snap-in mounting. LED cover for front panel installation.

DMC30 / DMC50

Mounting clip for Ø3 / Ø5 mm LED

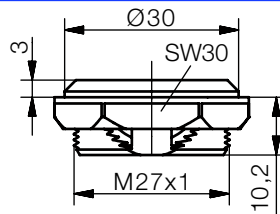
Type	Part No.
black for Ø3mm	DMC30
black for Ø5mm	DMC50



DMC22

mounting clip for 20 mm LEDs

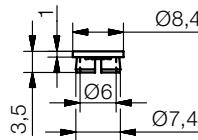
Type	Part No.
black	DMC22



DZB01x

LED cover Ø 8,4 mm for panel mounting

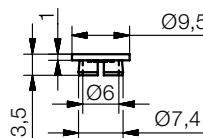
Type	Part No.
red transparent	DZB010
yellow transparent	DZB011
green transparent	DZB012
blue transparent	DZB014
clear transparent	DZB015
black	DZB019



DZB02x

LED cover Ø 9,5 mm for panel mounting

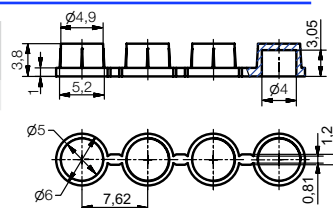
Type	Part No.
red transparent	DZB020
yellow transparent	DZB021
green transparent	DZB022
blue transparent	DZB024
clear transparent	DZB025
black	DZB029



XEEK001

LED cover 4 fold Ø 5 mm

Type	Part No.
clear transparent	XEEK001



Clips
Cover

DMC22

Clips ohne LED
clips without LED

DZB01x

DZB02x

XEEK001

For all types page 95

Specification:

fixing: snap-in

Material:

housing: PA6.6 (DMC22)
POM (DMC30/50)
PC (DZ+XEEK)

Blind covers

The housings of the lamps may be used as blind cover for many mounting-Ø.

Cover



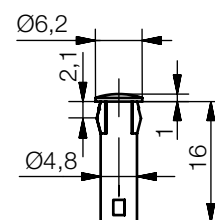
For all types page 96
Specification:

fixing: snap-in
Material: PC
housing:

SKG05x

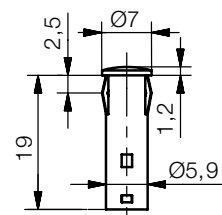
Dummy cover Ø 5 mm

Type	Part No.
red transparent	SKG050
yellow transparent	SKG051
green transparent	SKG052
blue transparent	SKG054
clear transparent	SKG055
black	SKG059



SKG06x

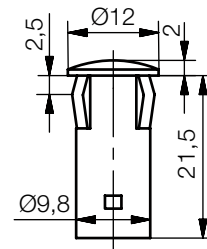
Type	Part No.
red transparent	SKG060
yellow transparent	SKG061
green transparent	SKG062
blue transparent	SKG064
clear transparent	SKG065
black	SKG069



SKG10x

Dummy cover Ø 10 mm

Type	Part No.
red transparent	SKG100
yellow transparent	SKG101
green transparent	SKG102
blue transparent	SKG104
clear transparent	SKG105
black	SKG109



Connection Solutions

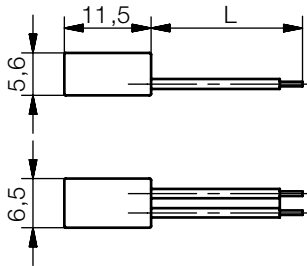
Plugable connection wire for soldering/plug-in tab 1.5 x 0.3 mm. Suitable for the indicator series SK05/06 and series SM06.

By plugging the distributor plug sleeve onto the indicator tab terminal or the AS Adapter terminal, two additional connections are at disposal,for example to connect the ground connections. Suitabe for tab terminal 2,8x0,5 mm and tab terminal 2,8x0,8 mm.

KDS2Lxxx

Connection wire for soldering/plug-in tab

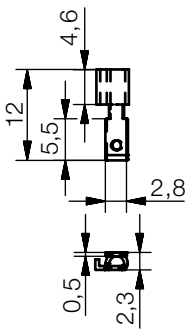
Lenght	Part No.
30 cm	KDS2L030
50 cm	KDS2L050
100 cm	KDS2L100
200 cm	KDS2L200



KMV05

Plug sleeve suitable for all LED Indicators with tab terminal 2,8 x0,5 mm

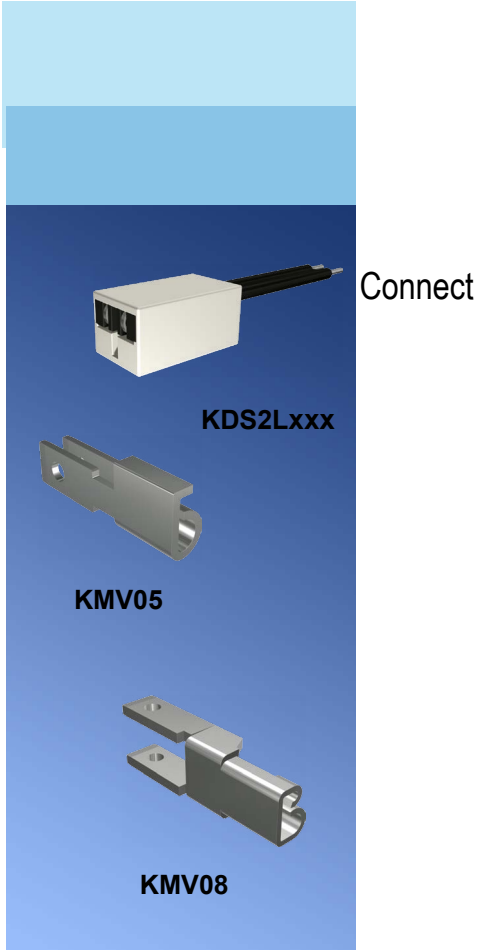
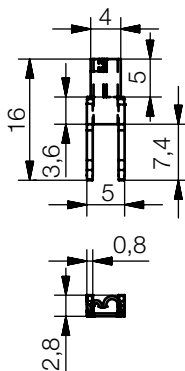
Tab terminal	Part No.
2,8x0,5 mm	KMV05



KMV08

Plug sleeve suitable for all LED Indicators with tab terminal 2,8 x0,8 mm

Tab terminal	Part No.
2,8x0,8 mm	KMV08



For all KDS types
Specification:
connection: ribbon cable
wire: 0,22mm² AWG 24
insulating color: black with white color line
Material:
insulating part: PA6.6

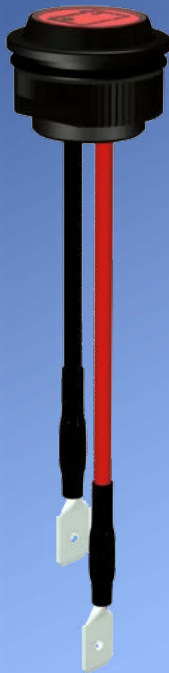
For all KMV types
Material: brass tinned

Special Indicators

Special



SPAD08x



SKEX16x6x

LED indicator Ø8 mm for rear panel mounting with inside reflector. Back anodized aluminium housing for screw fastening with knurled nut works as fastener against the front panel.

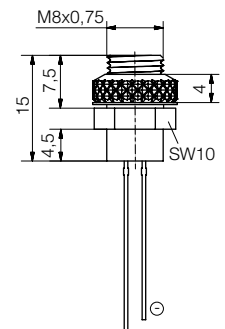
SPAD08x IP67

Connection: 2-pin



Aluminum black anodized

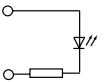
Type	Luminous intensity 20mA	Part No. LED voltage
red	12 mcd	SPAD080
yellow	6 mcd	SPAD081
green	6 mcd	SPAD082



LED indicator, mounting-Ø16 mm, with large signal surface for a homogeneous illumination. The required mounting material is included in delivery. Mounting of labelled cover plates are possible.

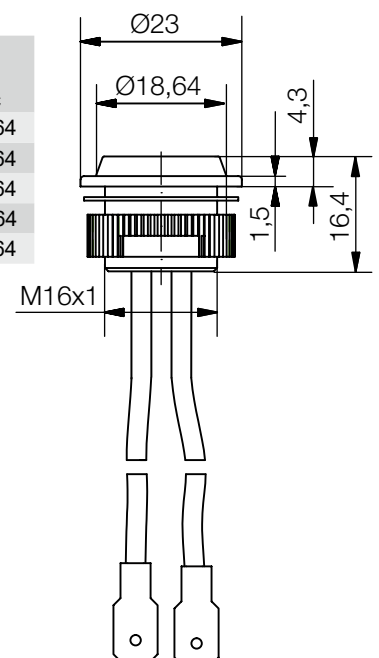
SKEX16x6x

Connection: stranded wire 1,5 mm²



housing PC black

Type	Luminous intensity 25mA	Part No. 12/14V _{DC}	Part No. 24/28V _{DC}
red	900 mcd	SKEX16062	SKEX16064
yellow	2900 mcd	SKEX16162	SKEX16164
blue	580 mcd	SKEX16462	SKEX16464
white	5900 mcd	SKEX16662	SKEX16664
green	3400 mcd	SKEX16762	SKEX16764



Special Indicators

Infrared LED indicator for screw fastening.
The required mounting material is included in delivery.

SMSI2204Lxxx / SMRI2204Lxxx

Connection: stranded wire 0,56 mm²

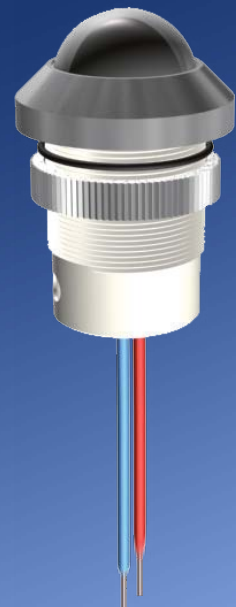
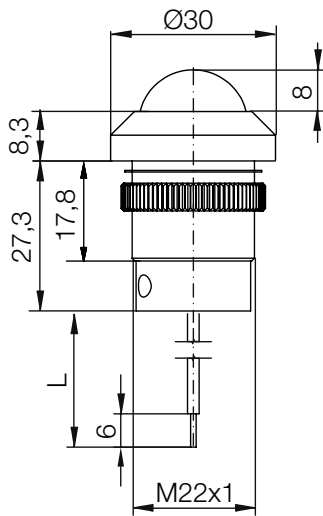


Reflector frosted chromium plated

Type	Wavelength	Part No.
	100mA	24/28V _{AC/DC}
red	940 nm	SMSI2204Lxxx

Reflector black chromium plated

Type	Wavelength	Part No.
	100mA	24/28V _{AC/DC}
red	940 nm	SMRI2204Lxxx



SMSI2204

Special

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