

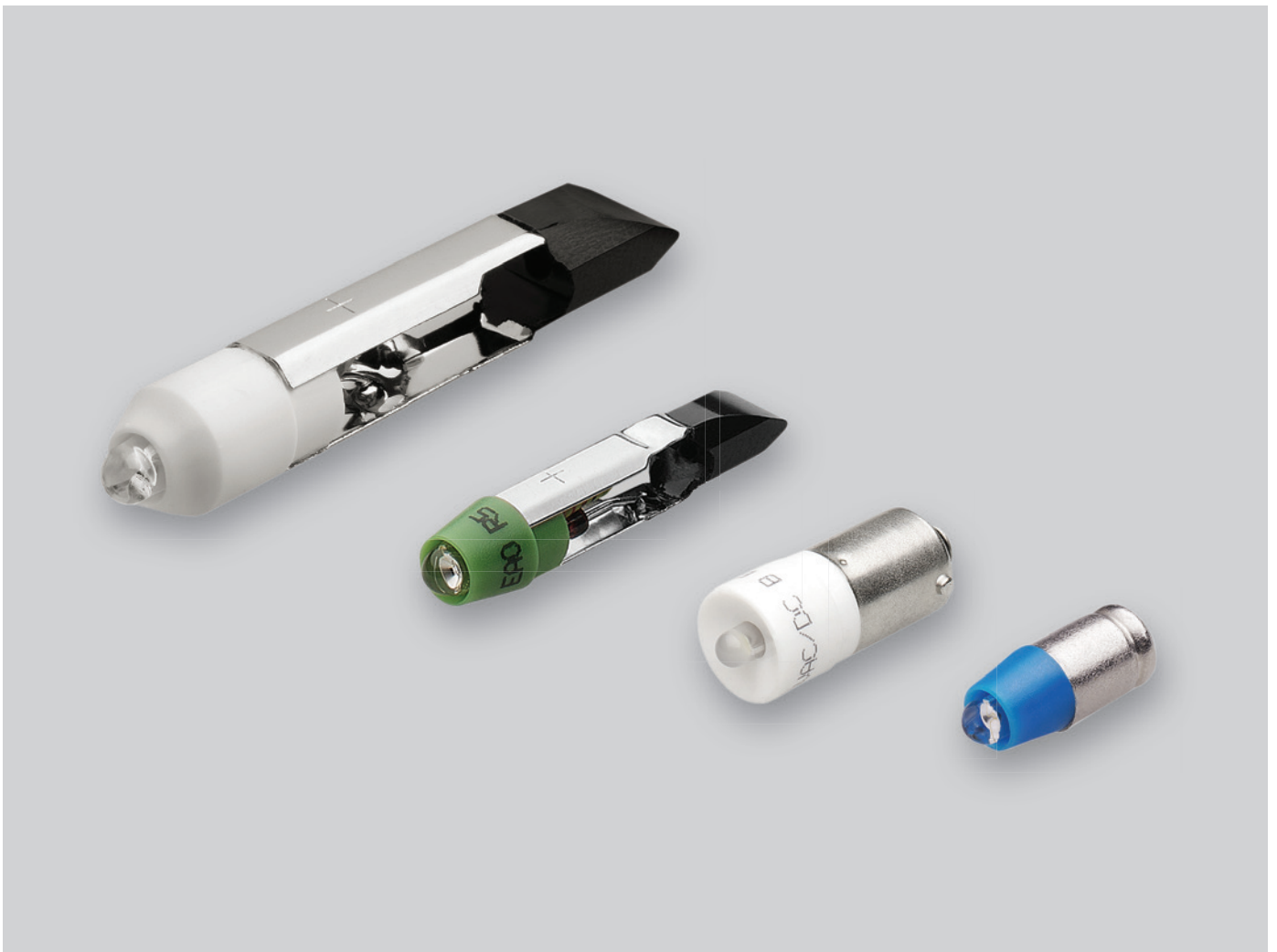
# Series 10

Series

**Characteristics**

The Series 10 are LEDs for use with all EAO's illuminated switches (as accessories).

The following pages show a representative selection of LEDs.





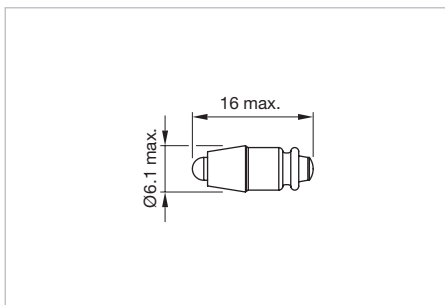
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# 10 Illumination

(Sd=BR10\_AGAU\_Single-LED\_T1\_3/4\_MG)  
**LED T1 3/4 MG**





Product can differ from the current configuration.

Dimensions [mm]

## Additional Information

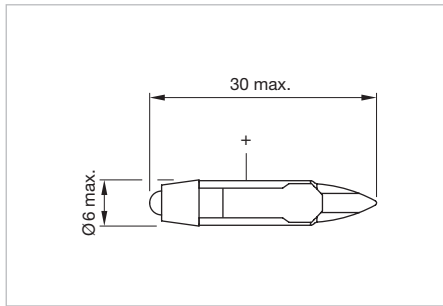
- A suitable lamp remover Part No. 61-9740.0 (Series Swisstac Part No. 300-0002-00)
- When using AC/DC types with AC operation, slight flickering can occur
- Luminous intensity data of the LEDs on direct voltage
- Electrical and optical data are measured at 25 °C
- If the 24VDC Bi-colour lamp is driven with normal polarity (plus on middle contact of the lamp) the first mentioned colour will light up, with inverted polarity the second colour will light up
- The specified versions are built with a protection diode (half wave rectifier) in series and the LED
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination

LED colour	Operating voltage	Operation current	Lumi. intensity	Dom. wavelength	Part No.	Weight
 <p><b>Single-LED</b></p>						
Single-LED red	6 VDC +10 %	15 mA ±15 %	350 mcd	630 nm	<b>10-2J06.3142</b>	0.002 kg
	12 VAC/DC +10 %	7/14 mA ±15 %	330 mcd	630 nm	<b>10-2J09.1062</b>	0.002 kg
	24 VAC/DC +10 %	7/14 mA ±15 %	330 mcd	630 nm	<b>10-2J12.1062</b>	0.002 kg
	28 VAC/DC +10 %	7/14 mA ±15 %	330 mcd	630 nm	<b>10-2J13.1062</b>	0.002 kg
	48 VAC/DC +10 %	4/8 mA ±15 %	200 mcd	630 nm	<b>10-2J19.1042</b>	0.002 kg
Single-LED yellow	6 VDC +10 %	15 mA ±15 %	300 mcd	587 nm	<b>10-2J06.3144</b>	0.002 kg
	12 VAC/DC +10 %	7/14 mA ±15 %	280 mcd	587 nm	<b>10-2J09.1064</b>	0.002 kg
	24 VAC/DC +10 %	7/14 mA ±15 %	280 mcd	587 nm	<b>10-2J12.1064</b>	0.002 kg
	28 VAC/DC +10 %	7/14 mA ±15 %	280 mcd	587 nm	<b>10-2J13.1064</b>	0.002 kg
	48 VAC/DC +10 %	4/8 mA ±15 %	180 mcd	587 nm	<b>10-2J19.1044</b>	0.002 kg
Single-LED green	6 VDC +10 %	7 mA ±15 %	1050 mcd	525 nm	<b>10-2J06.3145</b>	0.002 kg
	12 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2J09.1065</b>	0.002 kg
	24 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2J12.1065</b>	0.002 kg
	28 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2J13.1065</b>	0.002 kg
	48 VAC/DC +10 %	2/4 mA ±15 %	600 mcd	525 nm	<b>10-2J19.1045</b>	0.002 kg

LED colour	Operating voltage	Operation current	Lumi. intensity	Dom. wavelength	Part No.	Weight
Single-LED blue	6 VDC +10 %	15 mA ±15 %	680 mcd	470 nm	<b>10-2J06.3146</b>	0.002 kg
	12 VAC/DC +10 %	7/14 mA ±15 %	650 mcd	470 nm	<b>10-2J09.1066</b>	0.002 kg
	24 VAC/DC +10 %	7/14 mA ±15 %	650 mcd	470 nm	<b>10-2J12.1066</b>	0.002 kg
	28 VAC/DC +10 %	7/14 mA ±15 %	650 mcd	470 nm	<b>10-2J13.1066</b>	0.002 kg
	48 VAC/DC +10 %	4/8 mA ±15 %	400 mcd	470 nm	<b>10-2J19.1046</b>	0.002 kg
Single-LED white	6 VDC +10 %	6 mA ±15 %	900 mcd	x0.31/y0.32 nm	<b>10-2J06.3149</b>	0.002 kg
	12 VAC/DC +10 %	3/6 mA ±15 %	900 mcd	x0.31/y0.32 nm	<b>10-2J09.1069</b>	0.002 kg
	24 VAC/DC +10 %	2.5/5 mA ±15 %	750 mcd	x0.31/y0.32 nm	<b>10-2J12.1069</b>	0.002 kg
	28 VAC/DC +10 %	2.5/5 mA ±15 %	750 mcd	x0.31/y0.32 nm	<b>10-2J13.1069</b>	0.002 kg
	48 VAC/DC +10 %	2/4 mA ±15 %	600 mcd	x0.31/y0.32 nm	<b>10-2J19.1049</b>	0.002 kg
 <p><b>Bi-colour LED</b></p>						
Bi-colour LED red/green	24 VDC +10 %	15/14 mA ±15 %	600/630 mcd	625/525 nm	<b>10-A312.314A</b>	0.002 kg

# 10 Illumination

[Sd=BR10\_AGAU\_Single-LED\_T5.5]  
**Single-LED T5.5**




Product can differ from the current configuration.

Dimensions [mm]

## Additional Information

- A suitable LED remover Part No. 02-906 (Series Swisstac Part No. 300-0002-00)
- When fitting the LED elements pay attention to the polarity. An instruction can be found in the chapter «Application guidelines» of the corresponding series
- When using AC/DC types with AC operation, slight flickering can occur
- Electrical and optical data are measured at 25 °C
- Luminous intensity data of the LEDs on direct voltage
- The specified versions are built with a protection diode (half wave rectifier) in series and the LED
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination

LED colour	Operating voltage	Operation current	Lumi. intensity	Dom. wavelength	Part No.	Weight
 <p><b>Single-LED</b></p>						
Single-LED red	6 VDC +10 %	15 mA ±15 %	350 mcd	630 nm	<b>10-2106.3142</b>	0.001 kg
	12 VAC/DC +10 %	7/14 mA ±15 %	330 mcd	630 nm	<b>10-2109.1062</b>	0.001 kg
	24 VAC/DC +10 %	7/14 mA ±15 %	330 mcd	630 nm	<b>10-2112.1062</b>	0.001 kg
	28 VAC/DC +10 %	7/14 mA ±15 %	330 mcd	630 nm	<b>10-2113.1062</b>	0.001 kg
	48 VAC/DC +10 %	4/8 mA ±15 %	200 mcd	630 nm	<b>10-2119.1042</b>	0.001 kg
Single-LED yellow	6 VDC +10 %	15 mA ±15 %	300 mcd	587 nm	<b>10-2106.3144</b>	0.001 kg
	12 VAC/DC +10 %	7/14 mA ±15 %	280 mcd	587 nm	<b>10-2109.1064</b>	0.001 kg
	24 VAC/DC +10 %	7/14 mA ±15 %	280 mcd	587 nm	<b>10-2112.1064</b>	0.001 kg
	28 VAC/DC +10 %	7/14 mA ±15 %	280 mcd	587 nm	<b>10-2113.1064</b>	0.001 kg
	48 VAC/DC +10 %	4/8 mA ±15 %	180 mcd	587 nm	<b>10-2119.1044</b>	0.001 kg
Single-LED green	6 VDC +10 %	7 mA ±15 %	1050 mcd	525 nm	<b>10-2106.3145</b>	0.001 kg
	12 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2109.1065</b>	0.001 kg
	24 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2112.1065</b>	0.001 kg
	28 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2113.1065</b>	0.001 kg
	48 VAC/DC +10 %	2/4 mA ±15 %	600 mcd	525 nm	<b>10-2119.1045</b>	0.001 kg

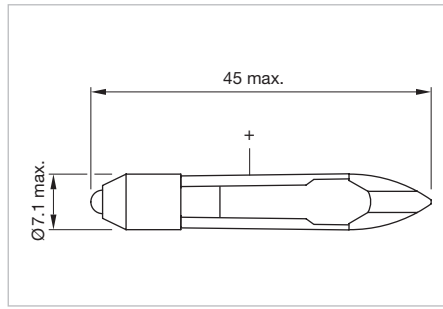
<b>LED colour</b>	<b>Operating voltage</b>	<b>Operation current</b>	<b>Lumi. intensity</b>	<b>Dom. wavelength</b>	<b>Part No.</b>	<b>Weight</b>
Single-LED blue	6 VDC +10 %	15 mA $\pm$ 15 %	680 mcd	470 nm	<b>10-2106.3146</b>	0.001 kg
	12 VAC/DC +10 %	7/14 mA $\pm$ 15 %	650 mcd	470 nm	<b>10-2109.1066</b>	0.001 kg
	24 VAC/DC +10 %	7/14 mA $\pm$ 15 %	650 mcd	470 nm	<b>10-2112.1066</b>	0.001 kg
	28 VAC/DC +10 %	7/14 mA $\pm$ 15 %	650 mcd	470 nm	<b>10-2113.1066</b>	0.001 kg
	48 VAC/DC +10 %	4/8 mA $\pm$ 15 %	400 mcd	470 nm	<b>10-2119.1046</b>	0.001 kg
Single-LED white	6 VDC +10 %	6 mA $\pm$ 15 %	900 mcd	x0.31/y0.32 nm	<b>10-2106.3149</b>	0.001 kg
	12 VAC/DC +10 %	3/6 mA $\pm$ 15 %	900 mcd	x0.31/y0.32 nm	<b>10-2109.1069</b>	0.001 kg
	24 VAC/DC +10 %	2.5/5 mA $\pm$ 15 %	750 mcd	x0.31/y0.32 nm	<b>10-2112.1069</b>	0.001 kg
	28 VAC/DC +10 %	2.5/5 mA $\pm$ 15 %	750 mcd	x0.31/y0.32 nm	<b>10-2113.1069</b>	0.001 kg
	48 VAC/DC +10 %	2/4 mA $\pm$ 15 %	600 mcd	x0.31/y0.32 nm	<b>10-2119.1049</b>	0.001 kg

# 10 Illumination

{Sd=BR10\_AGAU\_Single-LED\_T6.8}  
**Single-LED T6.8**




Product can differ from the current configuration.



Dimensions [mm]

## Additional Information

- A suitable LED remover Part No. 03-996
- When fitting the LED elements pay attention to the polarity. An instruction can be found in the chapter «Application guidelines» of the corresponding series
- When using AC/DC types with AC operation, slight flickering can occur
- Luminous intensity data of the LEDs on direct voltage
- Electrical and optical data are measured at 25 °C
- The specified versions are built with a protection diode (half wave rectifier) in series and the LED
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination

LED colour	Operating voltage	Operation current	Lumi. intensity	Dom. wavelength	Part No.	Weight
 <p><b>Single-LED</b></p>						
Single-LED red	6 VDC +10 %	17 mA ±15 %	400 mcd	630 nm	<b>10-2K06.3152</b>	0.002 kg
	12 VAC/DC +10 %	9/17 mA ±15 %	400 mcd	630 nm	<b>10-2K09.1072</b>	0.002 kg
	24 VAC/DC +10 %	9/17 mA ±15 %	400 mcd	630 nm	<b>10-2K12.1072</b>	0.002 kg
	28 VAC/DC +10 %	9/17 mA ±15 %	400 mcd	630 nm	<b>10-2K13.1072</b>	0.002 kg
	48 VAC/DC +10 %	4/8 mA ±15 %	200 mcd	630 nm	<b>10-2K19.1052</b>	0.002 kg
Single-LED yellow	6 VDC +10 %	17 mA ±15 %	340 mcd	340 nm	<b>10-2K06.3154</b>	0.002 kg
	12 VAC/DC +10 %	9/17 mA ±15 %	340 mcd	340 nm	<b>10-2K09.1074</b>	0.002 kg
	24 VAC/DC +10 %	9/17 mA ±15 %	340 mcd	340 nm	<b>10-2K12.1074</b>	0.002 kg
	28 VAC/DC +10 %	9/17 mA ±15 %	340 mcd	340 nm	<b>10-2K13.1074</b>	0.002 kg
	48 VAC/DC +10 %	4/8 mA ±15 %	180 mcd	340 nm	<b>10-2K19.1054</b>	0.002 kg
Single-LED green	6 VDC +10 %	7 mA ±15 %	1050 mcd	525 nm	<b>10-2K06.3155</b>	0.002 kg
	12 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2K09.1075</b>	0.002 kg
	24 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2K12.1075</b>	0.002 kg
	28 VAC/DC +10 %	4/7 mA ±15 %	1050 mcd	525 nm	<b>10-2K13.1075</b>	0.002 kg
	48 VAC/DC +10 %	2/4 mA ±15 %	600 mcd	525 nm	<b>10-2K19.1055</b>	0.002 kg



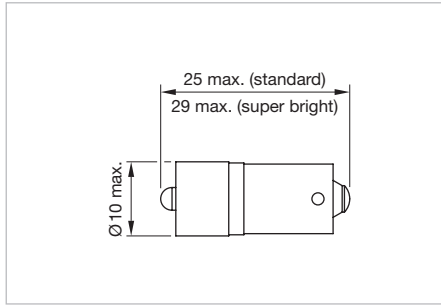
LED colour	Operating voltage	Operation current	Lumi. intensity	Dom. wavelength	Part No.	Weight
Single-LED blue	6 VDC +10 %	17 mA $\pm$ 15 %	780 mcd	470 nm	<b>10-2K06.3156</b>	0.002 kg
	12 VAC/DC +10 %	9/17 mA $\pm$ 15 %	780 mcd	470 nm	<b>10-2K09.1076</b>	0.002 kg
	24 VAC/DC +10 %	9/17 mA $\pm$ 15 %	780 mcd	470 nm	<b>10-2K12.1076</b>	0.002 kg
	28 VAC/DC +10 %	9/17 mA $\pm$ 15 %	780 mcd	470 nm	<b>10-2K13.1076</b>	0.002 kg
	48 VAC/DC +10 %	4/8 mA $\pm$ 15 %	400 mcd	470 nm	<b>10-2K19.1056</b>	0.002 kg
Single-LED white	6 VDC +10 %	6 mA $\pm$ 15 %	900 mcd	x0.31/y0.32 nm	<b>10-2K06.3159</b>	0.002 kg
	12 VAC/DC +10 %	3/6 mA $\pm$ 15 %	900 mcd	x0.31/y0.32 nm	<b>10-2K09.1079</b>	0.002 kg
	24 VAC/DC +10 %	3/6 mA $\pm$ 15 %	900 mcd	x0.31/y0.32 nm	<b>10-2K12.1079</b>	0.002 kg
	28 VAC/DC +10 %	2.5/5 mA $\pm$ 15 %	750 mcd	x0.31/y0.32 nm	<b>10-2K13.1079</b>	0.002 kg
	48 VAC/DC +10 %	2/4 mA $\pm$ 15 %	600 mcd	x0.31/y0.32 nm	<b>10-2K19.1059</b>	0.002 kg

# 10 Illumination

{Sd=BR10\_AGAU\_Single-LED\_BA9s}  
LED BA9s




Product can differ from the current configuration.



Dimensions [mm]

## Additional Information

- A suitable LED remover Part No. 700.006.0 (Series 44 Part No. 44-935)
- Luminous intensity data of the LEDs on direct voltage
- Electrical and optical data are measured at 25 °C
- The specified 6 VDC, 24 VDC Bi-colour; 130 VAC, 130 DC und 230 VAC versions are built with a protection diode
- The specified 12, 24, 28, 48 VAC/DC versions are built with a bridge rectifier
- If the 24VDC Bi-colour lamp is driven with normal polarity (plus on middle contact of the lamp) the first mentioned colour will light up, with inverted polarity the second colour will light up
- The specified 130 VAC types are developed to run on a supply voltage of 130 VAC only. An operation at a higher supply voltage using commercial lampholders with integrated resistors, is not approved
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination

LED colour	Operating voltage	Operation current	Lumi. intensity	Dom. wavelength	Part No.	Weight
 <p><b>Single-LED</b></p>						
Single-LED red	6 VDC +10 %	17 mA ±15 %	400 mcd	630 nm	<b>10-2506.1082</b>	0.002 kg
	12 VAC/DC +10 %	16 mA ±15 %	390 mcd	630 nm	<b>10-2509.1142</b>	0.002 kg
	24 VAC/DC +10 %	15 mA ±15 %	350 mcd	630 nm	<b>10-2512.1142</b>	0.002 kg
	28 VAC/DC +10 %	13 mA ±15 %	300 mcd	630 nm	<b>10-2513.1142</b>	0.002 kg
	48 VAC/DC +10 %	8 mA ±15 %	200 mcd	630 nm	<b>10-2519.1052</b>	0.002 kg
	130 VDC +10 %	3 mA ±15 %	120 mcd	630 nm	<b>10-2524.3042</b>	0.002 kg
	130 VAC +10 %	5 mA ±15 %	180 mcd	630 nm	<b>10-2H24.2052</b>	0.002 kg
Single-LED yellow	230 VAC +10 %	3 mA ±15 %	120 mcd	630 nm	<b>10-2H25.2042</b>	0.002 kg
	6 VDC +10 %	17 mA ±15 %	340 mcd	587 nm	<b>10-2506.1084</b>	0.002 kg
	12 VAC/DC +10 %	16 mA ±15 %	340 mcd	587 nm	<b>10-2509.1144</b>	0.002 kg
	24 VAC/DC +10 %	15 mA ±15 %	300 mcd	587 nm	<b>10-2512.1144</b>	0.002 kg
	28 VAC/DC +10 %	13 mA ±15 %	270 mcd	587 nm	<b>10-2513.1144</b>	0.002 kg
	48 VAC/DC +10 %	8 mA ±15 %	180 mcd	587 nm	<b>10-2519.1054</b>	0.002 kg
	130 VDC +10 %	3 mA ±15 %	110 mcd	587 nm	<b>10-2524.3044</b>	0.002 kg

LED colour	Operating voltage	Operation current	Lumi. intensity	Dom. wavelength	Part No.	Weight
Single-LED yellow	130 VAC +10 %	5 mA ±15 %	160 mcd	587 nm	<b>10-2H24.2054</b>	0.002 kg
	230 VAC +10 %	3 mA ±15 %	110 mcd	587 nm	<b>10-2H25.2044</b>	0.002 kg
Single-LED green	6 VDC +10 %	7 mA ±15 %	1050 mcd	525 nm	<b>10-2506.1085</b>	0.002 kg
	12 VAC/DC +10 %	7 mA ±15 %	1050 mcd	525 nm	<b>10-2509.1145</b>	0.002 kg
	24 VAC/DC +10 %	7 mA ±15 %	1050 mcd	525 nm	<b>10-2512.1145</b>	0.002 kg
	28 VAC/DC +10 %	7 mA ±15 %	1050 mcd	525 nm	<b>10-2513.1145</b>	0.002 kg
	48 VAC/DC +10 %	4 mA ±15 %	600 mcd	525 nm	<b>10-2519.1055</b>	0.002 kg
	130 VDC +10 %	2 mA ±15 %	300 mcd	525 nm	<b>10-2524.3045</b>	0.002 kg
	130 VAC +10 %	3 mA ±15 %	450 mcd	525 nm	<b>10-2H24.2055</b>	0.002 kg
Single-LED blue	230 VAC +10 %	2 mA ±15 %	300 mcd	525 nm	<b>10-2H25.2045</b>	0.002 kg
	6 VDC +10 %	17 mA ±15 %	780 mcd	470 nm	<b>10-2506.1086</b>	0.002 kg
	12 VAC/DC +10 %	16 mA ±15 %	720 mcd	470 nm	<b>10-2509.1146</b>	0.002 kg
	24 VAC/DC +10 %	15 mA ±15 %	680 mcd	470 nm	<b>10-2512.1146</b>	0.002 kg
	28 VAC/DC +10 %	13 mA ±15 %	590 mcd	470 nm	<b>10-2513.1146</b>	0.002 kg
	48 VAC/DC +10 %	8 mA ±15 %	400 mcd	470 nm	<b>10-2519.1056</b>	0.002 kg
	130 VDC +10 %	3 mA ±15 %	200 mcd	470 nm	<b>10-2524.3046</b>	0.002 kg
Single-LED white	130 VAC +10 %	5 mA ±15 %	230 mcd	470 nm	<b>10-2H24.2056</b>	0.002 kg
	230 VAC +10 %	3 mA ±15 %	200 mcd	470 nm	<b>10-2H25.2046</b>	0.002 kg
	6 VDC +10 %	5 mA ±15 %	750 mcd	x0.31/y0.32 nm	<b>10-2506.1089</b>	0.002 kg
	12 VAC/DC +10 %	8 mA ±15 %	1200 mcd	x0.31/y0.32 nm	<b>10-2509.1149</b>	0.002 kg
	24 VAC/DC +10 %	7 mA ±15 %	1050 mcd	x0.31/y0.32 nm	<b>10-2512.1149</b>	0.002 kg
	28 VAC/DC +10 %	5 mA ±15 %	750 mcd	x0.31/y0.32 nm	<b>10-2513.1149</b>	0.002 kg
	48 VAC/DC +10 %	5 mA ±15 %	750 mcd	x0.31/y0.32 nm	<b>10-2519.1059</b>	0.002 kg
130 VDC +10 %	1.5 mA ±15 %	225 mcd	x0.31/y0.32 nm	<b>10-2524.3049</b>	0.002 kg	
130 VAC +10 %	2 mA ±15 %	300 mcd	x0.31/y0.32 nm	<b>10-2H24.2059</b>	0.002 kg	
230 VAC +10 %	1.5 mA ±15 %	225 mcd	x0.31/y0.32 nm	<b>10-2H25.2049</b>	0.002 kg	



### Single-LED super bright

Single-LED red	28 VAC/DC +10 %	14 mA ±15 %	7700 mcd	630 nm	<b>10-2413.1132R</b>	0.002 kg
Single-LED green	28 VAC/DC +10 %	13 mA ±15 %	12400 mcd	525 nm	<b>10-2413.1125R</b>	0.002 kg
Single-LED yellow	28 VAC/DC +10 %	14 mA ±15 %	4200 mcd	589 nm	<b>10-2413.1134R</b>	0.002 kg



### Single-LED with integrated Zener diode

Single-LED red	24–30 VAC/DC +10 %	13–19 mA ±15 %	300–440 mcd	630 nm	<b>10-2H13.3162Q</b>	0.002 kg
Single-LED green	24–30 VAC/DC +10 %	12–18 mA ±15 %	1800–2700 mcd	525 nm	<b>10-2H13.3165Q</b>	0.002 kg
Single-LED yellow	24–30 VAC/DC +10 %	13–19 mA ±15 %	270–380 mcd	587 nm	<b>10-2H13.3164Q</b>	0.002 kg
Single-LED blue	24–30 VAC/DC +10 %	12–18 mA ±15 %	560–800 mcd	470 nm	<b>10-2H13.3166Q</b>	0.002 kg
Single-LED white diffuse	24–30 VAC/DC +10 %	7–11 mA ±15 %	600–900 mcd	x0.31/y0.32	<b>10-2H13.3169Q</b>	0.002 kg

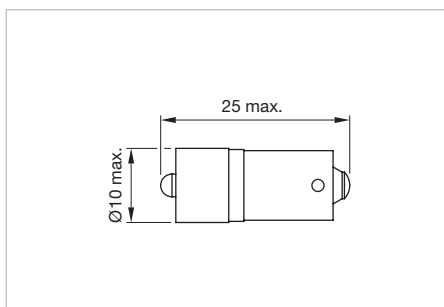


### Bi-colour LED

Bi-colour LED red/green	24 VDC +10 %	15 mA ±15 %	1200/900 mcd	625/525 nm	<b>10-2H12.314A</b>	0.002 kg
Bi-colour LED red/yellow	24 VDC +10 %	15 mA ±15 %	1200/550 mcd	625/589 nm	<b>10-2H12.314B</b>	0.002 kg
Bi-colour LED yellow/green	24 VDC +10 %	15 mA ±15 %	900/550 mcd	525/589 nm	<b>10-2H12.314C</b>	0.002 kg

# 10 Illumination

(Sd=BR10, AGAU, Single-LED, BA9s, fail\_safe)  
**LED BA9s, EN 50155, Fail Safe**




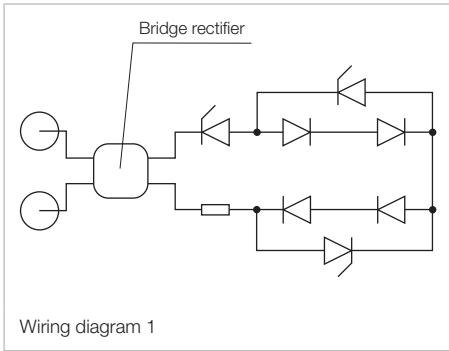
Product can differ from the current configuration.

Dimensions [mm]

## Additional Information

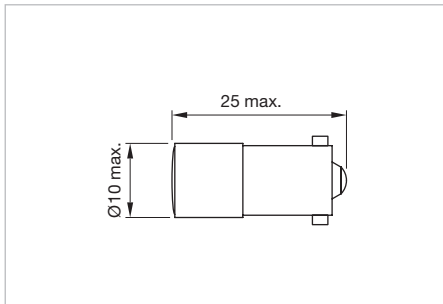
- A suitable LED remover Part No. 700.006.0 (Series 44 Part No. 44-935)
- Luminous intensity data of the LEDs on direct voltage
- Electrical and optical data are measured at 25 °C
- The specified 72 and 110 VAC/VDC versions are built with a protection diode
- Specified 72 and 110 VAC/VDC versions are built with a bridge rectifier
- In case one LED fails, the other pair of still functioning LED-s is working. The light output then is half in order to indicate the malfunction and shows this way the need for replacement
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination

LED colour	Operating voltage	Operation current	Lumi. intensity	Dom. wavelength	Part No.	Wiring diagram	Weight
 <p><b>Multi-LED Fail Safe</b></p>							
Multi-LED rot	72 VAC/DC -30%/+25 %	2.2 mA -30%/+25 %	4 x 190 mcd	625 nm	<b>10-4H21.1032P</b>	1	0.002 kg
	110 VAC/DC -30%/+25 %	2 mA -30 % /+25%	4 x 170 mcd	625 nm	<b>10-4H22.1032P</b>	1	0.002 kg
Multi-LED yellow	72 VAC/DC -30%/+25 %	2.2 mA -30%/+25 %	4 x 190 mcd	589 nm	<b>10-4H21.1034P</b>	1	0.002 kg
	110 VAC/DC -30%/+25 %	2 mA -30%/+25 %	4 x 170 mcd	589 nm	<b>10-4H22.1034P</b>	1	0.002 kg
Multi-LED green	72 VAC/DC -30%/+25 %	2.2 mA -30%/+25 %	4 x 120 mcd	525 nm	<b>10-4H21.1035P</b>	1	0.002 kg
	110 VAC/DC -30%/+25 %	2 mA -30%/+25 %	4 x 170 mcd	525 nm	<b>10-4H22.1035P</b>	1	0.002 kg
Multi-LED blue	72 VAC/DC -30%/+25 %	2.2 mA -30%/+25 %	4 x 30 mcd	465 nm	<b>10-4H21.1036P</b>	1	0.002 kg
	110 VAC/DC -30%/+25 %	2 mA -30%/+25 %	4 x 25 mcd	465 nm	<b>10-4H22.1036P</b>	1	0.002 kg
Multi-LED white	72 VAC/DC -30%/+25 %	2.2 mA -30%/+25 %	4 x 160 mcd		<b>10-4H21.1039P</b>	1	0.002 kg
	110 VAC/DC -30%/+25 %	2 mA -30%/+25 %	4 x 145 mcd		<b>10-4H22.1039P</b>	1	0.002 kg



# 10 Illumination

## LED BA9s, EN 50155




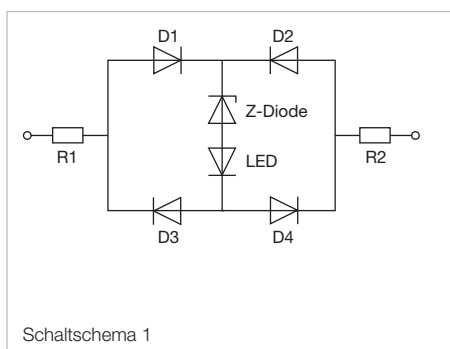
Product can differ from the current configuration.

Dimensions [mm]

### Additional Information

- A suitable LED remover Part No. 700.006.0 (Series 44 Part No. 44-935)
- Luminous intensity data of the LEDs on direct voltage
- Electrical and optical data are measured at 25 °C
- The specified 24 VAC/VDC versions are built with a protection diode
- Specified 24 VAC/VDC versions are built with a bridge rectifier
- The new, white BA9s LED operates within a range of 16VDC to 34VDC. It conforms to the norms EN 50155 and IEEE 1476.
- Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination

LED colour	Operating voltage	Operation current	Lumi. intensity	Dom. wavelength	Part No.	Wiring diagram	Weight
	<b>Multi-LED</b>						
Multi-LED white	24 VAC/DC -30%/+25 %	7.5 mA -30%/+25 %	700 mcd	625 nm	<b>10-2412.1089P</b>	1	0.002 kg




**Illumination**

(\$d=BR10\_AGAU\_LED-Zieher\_zu\_T1\_3/4\_MG)  
**LED remover for T1 3/4 MG**

**Additional Information**


▲ **Caution:** A switching process might be released when replacing the lamp

Product attribute	Part No.	Weight
 <p><b>LED remover</b></p>		
für series 22, 31, 41, 51, 61, 71	<b>61-9740.0</b>	0.003 kg
for series Swisstac	<b>300-0002-00</b>	0.003 kg

(\$d=BR10\_AGAU\_LED-zieher\_zu\_T5.5)  
**LED remover for T5.5**

**Additional Information**


▲ **Caution:** A switching process might be released when replacing the lamp

Product attribute	Part No.	Weight
 <p><b>LED remover</b></p>		
for series 01, 14	<b>02-906</b>	0.002 kg

(\$d=BR10\_AGAU\_LED-Zieher\_zu\_T6.8)  
**LED remover for T6.8**

**Additional Information**

▲ **Caution:** A switching process might be released when replacing the lamp

Product attribute	Part No.	Weight
 <p><b>LED remover</b></p>		
for series 02, 03	<b>03-996</b>	0.027 kg



# 10 Accessories

{Sd=BR10\_AGAU\_LED-Zieher\_zu\_T3\_1/4\_BA9s}

## LED remover for BA9s

### Additional Information

▲ **Caution:** A switching process might be released when replacing the lamp

Product attribute	Part No.	Weight
 <b>LED remover</b>		
for series 04	<b>700.006.0</b>	0.003 kg
 <b>LED remover</b>		
for series 44	<b>44-935</b>	0.037 kg



**Technical Data**

**Electrical characteristics**

**Operating voltage tolerance**  
+10%

**Mechanical characteristics**

**Standards**

Lamp base

Base Standard

T1 3/4 MG DIN EN 60061-1: S5,7s

T5.5 DIN 49601

T6.8 DIN 49601

BA9s DIN EN 60061-1: BA9s

**Environmental conditions**

**Storage temperature**  
-25 °C ... +80 °C

**Service temperature**  
-20 °C ... +60 °C

*EAO reserves the right to alter specifications without further notice.*

# 10 Application guidelines

## LED used in

Series	Base			
	T 1 3/4	T 5.5	T 6.8	BA9s
01		■		
02			■	
03			■	
04				■
14		■		
22	■			
31	■			
44				■
51	■			
55 – Swisstac	■	■		
61	■			
71	■			

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10-2106.3146	7	10-2J12.1064	4
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10-2109.1062	6	10-2J12.1066	5
10-2109.1064	6	10-2J12.1069	5
10-2109.1065	6	10-2J13.1062	4
10-2109.1066	7	10-2J13.1064	4
10-2109.1069	7	10-2J13.1065	4
10-2112.1062	6	10-2J13.1066	5
10-2112.1064	6	10-2J13.1069	5
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10-2119.1045	6	10-2K09.1072	8
10-2119.1046	7	10-2K09.1074	8
10-2119.1049	7	10-2K09.1075	8
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10-2506.1085	11	10-2K12.1074	8
10-2506.1086	11	10-2K12.1075	8
10-2506.1089	11	10-2K12.1076	9
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10-2509.1144	10	10-2K13.1072	8
10-2509.1145	11	10-2K13.1074	8
10-2509.1146	11	10-2K13.1075	8
10-2509.1149	11	10-2K13.1076	9
10-2512.1142	10	10-2K13.1079	9
10-2512.1144	10	10-2K19.1052	8
10-2512.1145	11	10-2K19.1054	8
10-2512.1146	11	10-2K19.1055	8
10-2512.1149	11	10-2K19.1056	9
10-2513.1142	10	10-2K19.1059	9
10-2513.1144	10	10-4H21.1032P	12
10-2513.1145	11	10-4H21.1034P	12
10-2513.1146	11	10-4H21.1035P	12
10-2513.1149	11	10-4H21.1036P	12
10-2519.1052	10	10-4H21.1039P	12
10-2519.1054	10	10-4H22.1032P	12
10-2519.1055	11	10-4H22.1034P	12
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