

Accessories LED bulbs



LED bulbs

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Description	Wavelength nm	Luminance mcd	Catalog number	Weight oz.
LED bulbs				
With one diode chip mounted on a Ba 9s base. Choose the same color for the LED and the lamp cap or else use a clear lamp cap.				
For white light use white LED with clear lamp cap. At DC the lamp base have to be connected to cathode (-) and the bottom contact to anode (+).				
Rated voltage 12 V, DC, rated current 15 mA, service life >50 000 h				
Red	630	250	KA2-2011	0.18
Green	525	1000	KA2-2012	0.18
Yellow	592	250	KA2-2013	0.18
Blue	470	450	KA2-2014	0.18
White	¹⁾	600	KA2-2015	0.18
Rated voltage 24 V, (AC)/DC, rated current 15 mA, service life >50 000 h				
Red	630	250	KA2-2021	0.18
Green	525	800	KA2-2022	0.18
Yellow	592	250	KA2-2023	0.18
Blue	470	400	KA2-2024	0.18
White	¹⁾	500	KA2-2025	0.18
Rated voltage 36 V, (AC)/DC, rated current 12 mA, service life >50 000 h				
Red	630	200	KA2-2031	0.18
Green	525	2000	KA2-2032	0.18
Yellow	592	200	KA2-2033	0.18
Blue	470	750	KA2-2034	0.18
White	¹⁾	1400	KA2-2035	0.18
Rated voltage 48 V, (AC)/DC, rated current 12 mA, service life >50 000 h				
Red	630	200	KA2-2041	0.18
Green	525	1700	KA2-2042	0.18
Yellow	592	240	KA2-2043	0.18
Blue	470	720	KA2-2044	0.18
White	¹⁾	1200	KA2-2045	0.18
Rated voltage 60 V, (AC)/DC, rated current 10 mA, service life >50 000 h				
Red	630	160	KA2-2051	0.18
Green	525	1400	KA2-2052	0.18
Yellow	592	200	KA2-2053	0.18
Blue	470	600	KA2-2054	0.18
White	¹⁾	1000	KA2-2055	0.18
Rated voltage 110-130 V, AC, rated current 4-6 mA, service life 25 000 h				
Red	630	60-100	KA2-2131	0.18
Green	525	500-850	KA2-2132	0.18
Yellow	592	70-120	KA2-2133	0.18
Blue	470	220-350	KA2-2134	0.18
White	¹⁾	350-600	KA2-2135	0.18
Rated voltage 110-130 V, AC/DC, rated current 4-6 mA, service life 25 000 h				
Red	630	60	KA2-2141	0.18
Green	525	500	KA2-2142	0.18
Yellow	592	70	KA2-2143	0.18
Blue	470	220	KA2-2144	0.18
White	¹⁾	350	KA2-2145	0.18
Rated voltage 230 V, AC, rated current 4 mA, service life 25 000 h				
Red	630	60	KA2-2221	0.18
Green	525	500	KA2-2222	0.18
Yellow	592	70	KA2-2223	0.18
Blue	470	220	KA2-2224	0.18
White	¹⁾	350	KA2-2225	0.18

Note: Care should be taken for DC supply where + and - must be correctly connected. This is marked X1 (+) and X2 (-) on the product.

Choose the same color on the LED as on the lamp cap.

¹⁾ X=0.31, Y=0.32 according to the ICI Chromaticity Diagram.

Technical data

Lamp block ratings as per IEC 60 947-5-1

Rated Insulation Voltage	230 V
Base	BA 9s
Permissible power, up to	2 W

Transformer block

Suitable for Filament bulb 6 or 24 V AC, 1.2 W and LED 24 V.	
Rated Power	1.5 W
Rated Insulation Voltage acc. to IEC 70 °C (DT)	Class E

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Service Life for LED bulbs means number of service hours until the brightness has been reduced down 50 %. Service Life 50 000 h	
Color of white LED	x=0.31 Y=0.32 means the position of color in the ICI Chromaticity Diagram
Voltage Tolerance on LED bulbs	-30 to +10 % voltage is acceptable without affecting the Service Life
Voltage Peaks on LED bulbs	Voltage Peaks up to 1000 V Current Peaks up to 500 mA during a few msec
Glowing light	All integrated LED bulbs have a function built in to cut leakage currents.