

## Accessories

### Filament bulbs

Ba 9s base Catalog No. of current: AC/DC. A lamp changing tool is required for changing bulb.

Description					Catalog No.	Ref. Code	List Price
Rated voltage V	Rated current mA	Rated output W	Service life h	Lumiance mcd			
6	200	1.2	10 000	350	<b>5911 086-11</b>	5911 086-11	<b>\$ 6.00</b>
12	100	1.2	10 000	230	<b>5911 086-12</b>	5911 086-12	
24	50	1.2	10 000	280	<b>5911 086-13</b>	5911 086-13	
30	40	1.2	10 000	250	<b>5911 086-4</b>	5911 086-4	
48	42	2	6 000	500	<b>5911 086-5</b>	5911 086-5	
60	20	1.2	5 000	190	<b>5911 086-14</b>	5911 086-14	
110	18	2	7 500	250	<b>5911 086-7</b>	5911 086-7	
130	15	2	7 500	120	<b>5911 086-15</b>	5911 086-15	

### LEDs

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 (+).

Description				Catalog No.	Ref. Code	List Price
Color	Rated current mA	Wave-length nm	Luminance mcd			
<b>Rated voltage 12 V, DC</b> Service life >50 000 h						
Red	15	630	250	<b>KA2-2011</b>	1SFA 616 921 R2011	<b>\$ 21.00</b>
Green	15	525	1000	<b>KA2-2012</b>	1SFA 616 921 R2012	
Yellow	15	592	250	<b>KA2-2013</b>	1SFA 616 921 R2013	
Blue	15	470	450	<b>KA2-2014</b>	1SFA 616 921 R2014	
White	15	x=0.31 y=0.32	600	<b>KA2-2015</b>	1SFA 616 921 R2015	
<b>Rated voltage 24 V, (AC)/DC</b> Service life >50 000 h						
Red	15	630	250	<b>KA2-2021</b>	1SFA 616 921 R2021	<b>15.00</b>
Green	15	525	800	<b>KA2-2022</b>	1SFA 616 921 R2022	
Yellow	15	592	250	<b>KA2-2023</b>	1SFA 616 921 R2023	
Blue	15	470	400	<b>KA2-2024</b>	1SFA 616 921 R2024	
White	15	x=0.31 y=0.32	500	<b>KA2-2025</b>	1SFA 616 921 R2025	
<b>Rated voltage 48 V, (AC)/DC</b> Service life >50 000 h						
Red	12	630	200	<b>KA2-2041</b>	1SFA 616 921 R2041	<b>21.00</b>
Green	12	525	1700	<b>KA2-2042</b>	1SFA 616 921 R2042	
Yellow	12	592	240	<b>KA2-2043</b>	1SFA 616 921 R2043	
Blue	12	470	720	<b>KA2-2044</b>	1SFA 616 921 R2044	
White	12	x=0.31 y=0.32	1200	<b>KA2-2045</b>	1SFA 616 921 R2045	
<b>Rated voltage 60 V, (AC)/DC</b> Service life >50 000 h						
Red	10	630	160	<b>KA2-2051</b>	1SFA 616 921 R2051	<b>21.00</b>
Green	10	525	1400	<b>KA2-2052</b>	1SFA 616 921 R2052	
Yellow	10	592	200	<b>KA2-2053</b>	1SFA 616 921 R2053	
Blue	10	470	600	<b>KA2-2054</b>	1SFA 616 921 R2054	
White	10	x=0.31 y=0.32	1000	<b>KA2-2055</b>	1SFA 616 921 R2055	
<b>Rated voltage 110-130 V, AC</b> Service life 25 000 h						
Red	4-6	630	60-100	<b>KA2-2131</b>	1SFA 616 921 R2131	<b>15.00</b>
Green	4-6	525	500-850	<b>KA2-2132</b>	1SFA 616 921 R2132	
Yellow	4-6	592	70-120	<b>KA2-2133</b>	1SFA 616 921 R2133	
Blue	4-6	470	220-350	<b>KA2-2134</b>	1SFA 616 921 R2134	
White	4-6	x=0.31 y=0.32	350-600	<b>KA2-2135</b>	1SFA 616 921 R2135	
<b>Rated voltage 110-130 V, AC/DC</b> Service life 25 000 h						
Red	4-6	630	60-100	<b>KA2-2141</b>	1SFA 616 921 R2141	<b>21.00</b>
Green	4-6	525	500-850	<b>KA2-2142</b>	1SFA 616 921 R2142	
Yellow	4-6	592	70-120	<b>KA2-2143</b>	1SFA 616 921 R2143	
Blue	4-6	470	220-350	<b>KA2-2144</b>	1SFA 616 921 R2144	
White	4-6	x=0.31 y=0.32	350-600	<b>KA2-2145</b>	1SFA 616 921 R2145	
<b>Rated voltage 230 V, AC</b> Service life 25 000 h						
Red	4	630	60	<b>KA2-2221</b>	1SFA 616 921 R2221	<b>21.00</b>
Green	4	525	500	<b>KA2-2222</b>	1SFA 616 921 R2222	
Yellow	4	592	70	<b>KA2-2223</b>	1SFA 616 921 R2223	
Blue	4	470	220	<b>KA2-2224</b>	1SFA 616 921 R2224	
White	4	x=0.31 y=0.32	350	<b>KA2-2225</b>	1SFA 616 921 R2225	

① At AC the luminance is decreased with 30 % and there is also a slight flickering.