

Building Biology Products and services



- natural LED lamp as an alternative to the conventional G9 high-voltage halogen lamp with excellent colour rendering and "flicker-free" light
- Iow energy consumption, long lifetime
- building biology optimised illuminant for daily use
- fits in many existing shielded Biologa Danell lamps \*







# Light sources LED LED G9 - LM-LED-G9-55

Technical datatotal height: $54,5 \text{ mm } \pm 0,5$ height of light fitting: $20 \text{ mm } \pm 0,5$ diameter: $18 \text{ mm } \pm 0,5$ power consumption: $5,5 \text{ W}$ (Watt) $\approx 41 \text{ W}$ incandescent lampluminous flux ( $\Phi$ ): $485 \text{ Im}$ (Lumen)colour temperature: $2970 \text{ K}$ (Kelvin) warm whitecolour rendering index: $95 (CRI \text{ oder Ra})$ design / Construction:clearenergy efficiency class:F (from 09.2021) A+ (before 09.2021) A+ (before 09.2021)energy consumption: $(5,5 \text{ kWh / 1000 h)$ light emission angle: $270^{\circ}$ base:G9mercury-free:yeswarm-up time: $< 0,3 \text{ Seconds}$ dimmable:noaverage life span:> 20.000 h (Hours)switching cycles:up to 20.000operating temperature: $-25 ^{\circ}$ C bis +40 $^{\circ}$ Cmains voltage:220 bis 240 V / 50Hzweight:15 gother features:"flicker-free" pulsating light pulsation < 1%		
height of light fitting:20 mm ± 0,5diameter:18 mm ± 0,5power consumption:5,5 W (Watt) ≈ 41 W incandescent lampluminous flux (Φ):485 lm (Lumen)colour temperature:2970 K (Kelvin) warm whitecolour rendering index:95 (CRI oder Ra)design / Construction:clearenergy efficiency class:F (from 09.2021) A+ (before 09.2021)energy consumption:(5,5 kWh / 1000 h)light emission angle:270°base:G9mercury-free:yeswarm-up time:< 0,3 Secondsdimmable:noaverage life span:> 20.000 h (Hours)switching cycles:up to 20.000operating temperature:-25 °C bis +40 °Cmains voltage:220 bis 240 V / 50Hzweight:15 gother features:"flicker-free" pulsating light	Technical data	
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operating temperature:-25 °C bis +40 °Cmains voltage:220 bis 240 V / 50Hzweight:15 gother features:"flicker-free" pulsating light	average life span:	> 20.000 h (Hours)
mains voltage: 220 bis 240 V / 50Hz   weight: 15 g   other features: "flicker-free" pulsating light	switching cycles:	up to 20.000
weight: 15 g   other features: "flicker-free" pulsating light	operating temperature:	-25 °C bis +40 °C
other features: "flicker-free" pulsating light	mains voltage:	220 bis 240 V / 50Hz
" pulsating light	weight:	15 g
	other features:	" pulsating light

### Type of application

for luminaires with existing G9 base

suitable for many shielded Biologa Danell Iuminaires. \* Adapter LMA-G9-E14 (41-7104) or LMA-G9-E27 (41-7126)

for use in all luminaires with E14 or E27 socket -- \* Adapter LMA-G9-E14 (41-7104) or LMA-G9-E27 (41-7126)

## Scope of application

all private living spaces

public buildings, hotels, office buildings

outdoor use only with suitable outdoor lamps

**Order-No.: 7311454 - 41-9624** Short-Desc.: LM-LED-G9-55



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### **Accessories Shielded lamps**

#### LED G9 - LM-LED-G9-55

- The quasi-continuous spectrum of the emitted light is close to that of incandescent or halogen lamps, without the portion of thermal radiation (IR or infrared radiation).
- The colour rendering index (Ra or CRI) describes the effect of light on the colour appearance of objects by comparison with daylight (not dependent on colour temperature). This LED has a very good CRI of 95 compared to an incandescent lamp with a CRI of 100.
- The colour temperature is a measure of the respective colour impression of a light source. Warm light colours (warm white, 2700 to 3000 K) have a low Kelvin number, cold light colours (cold white, 5000 K) have a high Kelvin number.
- The light emission angle of 270° is very well suited for all applications where incandescent lamps were previously used.
- LED lamps are made of a semiconductor and are operated with an integrated ballast. The resulting voltage produces a strong "light flicker" (pulsation) in any conventional LED light bulb, which cannot usually be perceived by the naked eye. However, the light flicker can trigger stress in our bodies. The pulsation could be reduced to a minimum (below 1%) with this building biology optimised LED.
- Energy efficiency class EEK: Classification of all household lamps. Watts, lumens and burning hours are taken into account. EU Directive 98/11/EC includes classes E (low efficiency) to A++ (very efficient).
- Plug-in base G9: Can be used in conjunction with the G9 adapter for E14 lampholders (41-7104) and G9 adapter for E27 lampholders (41-7126) for almost all commercially available luminaires with screw bases. Their advantage for domestic stock-keeping is that only one type of lamp is needed for both types of lampholder. Replacement is possible by simply pulling and plugging.



#### Please note after use:

The LED bulb has integrated electronics (no mercury!), please still hand it in at the municipal building yard or an electronic waste collection point (do not dispose of it in household waste).



Spectrum LM-LED-G9-55 (41-9646) - This product







Spectrum compact fluorescent lamp (energy-saving lamp)



Spectrum sunlight

Further information at www.biologadanell.com