

Product Information

LEDinestra® advanced frosted S14d, S14s



Product Overview

Product	Wattage	CCT	lm	Base
LEDinestra 9W advanced frosted S14s	9	2700	450	S14s
LEDinestra 9W advanced frosted S14d	9	2700	450	S14d

Benefits

- With original glass bulb
- 1:1 exchange with Linestra® incandescent lamps
- Low energy consumption and maintenance costs
- Dimmable¹
- Longer lifetime²
- Made in Germany

Key Features

- 9W LED lamp as high-quality replacement for Linestra® incandescent lamp
- Available in 2700K warm white color temperature
- Energy efficiency class A
- 20,000 hours lifetime³
- UV and NIR radiation free
- Mercury free
- 3 years Osram Guarantee (www.osram.com/guarantee)

Product	Wattage	CCT	lm	Base	Diameter	Length	Weight	EAN10	EAN40 (ship.unit)	Ship. unit
LEDinestra 9W adv frosted S14s	9	2700	450	S14s	29 mm	500 mm	110 g	4008321979193	4008321979209	5
LEDinestra 9W adv frosted S14d	9	2700	450	S14d	29 mm	500 mm	110 g	4008321979216	4008321979223	5

¹With many common dimmers, see also www.osram.com/dim

² Typical values. All the technical parameters apply to the entire lamp. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values.

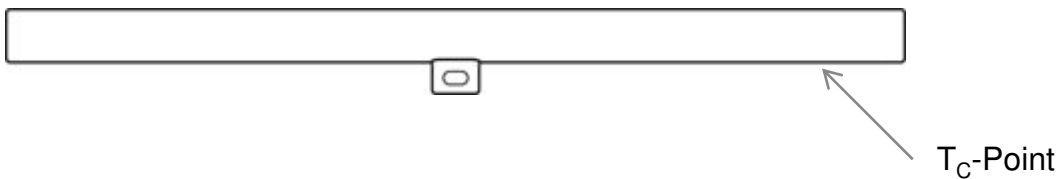
³ The average lifetime of LED lamps is defined as the number of hours when the light output of 50% of a large group of identical lamps goes below 70% of its initial luminous flux (L70B50, IEC60969). The lifetime is estimated at room temperature (25°C), free air burning, base up burning position and at rated voltage.

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Common Characteristics³

Average lifetime ⁴	Switching cycles (30s on, 30s off)	Casing material	Starting time	Warm up time for 60% light	Power factor
20,000 hrs	100,000	glass	< 0.1 s	0.0 s	0.9
Nominal current	Tc temperature max.5	CRI	Mercury max.		
39 mA	50°C	80	0.0 mg		



Good heat exchange supports ideal performance

Disposal information

- Lamps with WEEE sign can be returned at specific collection points.
- LED lamps have to be disposed as special waste.



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⁴ The average lifetime of LED lamps is defined as the number of hours when the light output of 50% of a large group of identical lamps goes below 70% of its initial luminous flux (L70B50, IEC60969). The lifetime is estimated at room temperature (25°C), free air burning, base up burning position and at rated voltage.

⁵ The Tc is defined as the highest permissible temperature which may occur on the outer surface of the LED lamp (in the indicated position) under normal operating conditions and at the rated voltage/current/power or the maximum of the rated voltage/current/power range (DIN EN 62031: 2009-01)

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Application information

- Suitable for indoor application.
- For outdoor applications and operation in damp locations special approved fixture are required.
- Input voltage: 230V
- Storage temperature & humidity conditions (-20°C up to +40°C, at max. 95% relative humidity)
- Operating temperature & humidity conditions (-20°C up to +40°C, at max. 95% relative humidity)

Lamp conformity

- 2004/108/EC Electromagnetic compatibility (EMC)
- 244/2009 Ecodesign requirements for non-directional household lamps
- 2009/125/EC Ecodesign requirements for energy related products
- 2011/65/EC Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)
- 1907/2006 Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH Regulation)
- 2002/96/EC Waste Electrical and Electronic Equipment Directive (WEEE)
- EN 62471 Photobiological safety of lamps and lamp systems
- EN 55015 Limits and methods of measurement of radio disturbance
- EN 61000-3-2 Electromagnetic compatibility – Limits for harmonic current emission
- EN61547 Electromagnetic compatibility immunity requirements
- 1194/2012 Eco design requirement for directional lamps, light emitting diode lamps and related equipment (DIM II)
- IEC 62560 self-ballasted LED-lamps for general lighting services by voltage >50V – Safety specifications
- 874/2012/EU Energy labeling of electrical lamps and luminaires
- EN 62493 Assessment of lighting equipment related to human exposure to electromagnetic fields
- 2006/95/EC Requirements for electrical equipment designed for use within certain voltage limits

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Dimming behaviours⁶

Brand	Model	Type ⁷	Min range	Max range
BJC	10538	L	20%	96%
Busch	2247	L	14%	93%
Busch	2250	L	24%	95%
Clipsal	32E450TM	T	9%	98%
Dimtronic	MH-300	T	9%	94%
Gira	0300 00 / I01	L	18%	94%
Gira	2262 00 / I01	L	7%	94%
Gira	30600	L	10%	91%
Hager	EVN004	U	11%	99%
Jung	266GDE	L	8%	94%
Jung	225TDE	T	15%	96%
LK-Fuga	MEK200	L	10%	93%
Merten	5771-99	T	21%	96%
Merten	MEG5131-0000	L	0%	93%
Merten	5721	T	4%	94%
Merten	SBD420RCRL	U	8%	94%
Merten	5725	L	9%	98%
Niessen	8060BA	L	9%	98%
PEHA	433HAB	T	13%	96%
PEHA	435HAB	T	13%	88%
PEHA	LR180	L	16%	96%

⁷ LED lamps contain several electronic components. Under unfavorable conditions these can lead to acoustic noise. In case of resonance even low noise can cause audible effect. Possible factors influencing this are the installation, the design of the lamp holder and the luminaire (acoustic resonance effect) as well as the dimmer or the transformer (harmonics or electronic resonance).

Legend

L / leading edge T / trailing edge U / universal

⁶ Typical values: The test results reflect the measurement of the individual devices that were used in tests. OSRAM does not take over any responsibility, warranty or liability that this results can also be achieved by using the devices under other conditions or when using successor models of the tested devices or different models of the same manufacturer. The test results were also achieved by using the above mentioned LED-lamp types. OSRAM does not take over any responsibility, warranty or liability that this results can also be achieved when using other LED-lamp types.