

# GLS 8,000 hours

Compact Fluorescent Lamps Integrated  
8W, 12W, 15W and 20W



## Product information

The 8,000 hours CFL GLS lamps offer traditional incandescent shape, long life and elegant light. Suitable for general home lighting, GE Lighting's Decor CFL range is an ideal and eco-friendly solution.

## Features

Compact Fluorescent Lamps (CFL) have an important role to play in the future of lighting, helping to protect the environment by using less energy and creating less CO<sub>2</sub> emissions. In addition, CFL lamps contribute to the reduction of maintenance costs, ensuring that financial benefits are enjoyed alongside environmental benefits.

There are a variety of performance advantages afforded by GE Lighting CFL lamps. They use almost 80% less energy and last eight times longer than their incandescent predecessors, are rated energy class 'A' and offer high quality light.

With continuing technological advancements and miniaturisation, today's CFL GLS lamps are similar to the incandescent lamps that they replace to ensure that they are discreet – yet high performing.

- 8,000 hours life
- Small dimensions
- 'A' energy class

## Application areas

CFL GLS lamps are recommended for general indoor applications such as:

- Home lighting
- Retail lighting
- Hotels
- Restaurants
- Corridors, hallways

## Product range

CFL GLS lamps are available in a full range of:

- 8, 12, 15, 20 wattages
- E14, E27, B22 caps
- T2 and T3 tubes
- Warm (2700K) colour
- Box and blister packs



# Compliance

## Standards

- IEC 60061-1: Lamp caps and holders together with gauges for the control of interchangeability and safety
- IEC or EN 60969: Self ballasted lamps for general lighting services – performance requirements
- IEC or EN 60968: Self-ballasted lamps for general lighting services – safety requirements
- CIE S 009/E:2002: Photobiological safety of lamps and lamp systems
- EN 61547: Requirement for general lighting purposes – EMC immunity requirement
- EN 55015 or CISPR 15: Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
- EN 61000-3-2: Electromagnetic compatibility (EMC) – Part 3-2: Limits – limits for harmonic current emissions (equipment input current up to and including 16A per phase)
- EN 61000-3-3: Electromagnetic compatibility (EMC) – Part 3-3: Limits – limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current up to 16A
- EN 62493 Assessment of lighting equipment related to human exposure to electromagnetic fields

## European Directives:

- CE mark: 93/68/EEC; LVD: 2006/95/EC; EMC: 2004/108/EC, Ecodesign 2005/32/EC, ROHS 2011/65/EU
- Energy Labelling: Directive 2010/30/EU, 874/2012/EU energy labelling of electrical lamps and luminaires
- RoHS: Directive 2011/65/EU on Restrictions of the use of certain Hazardous Substances (RoHS)
- WEEE: Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE)
- REACH: Directive 2006/1907/EC on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- ErP ecodesign: Directive 2005/32/EC, 2009/244/EC ecodesign requirements (of Energy-related Products) for non-directional household lamps

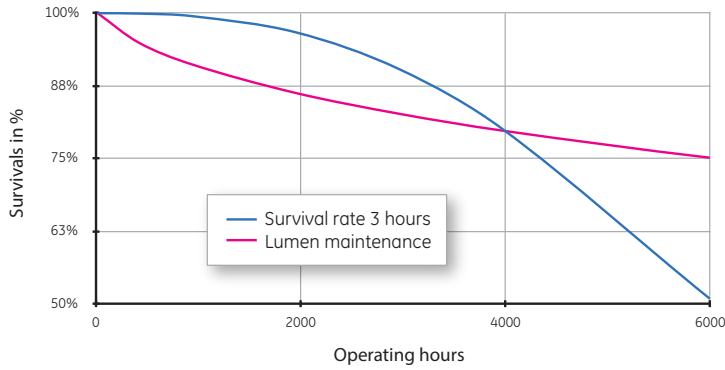
## Basic data

Rated* Wattage [W]	Volts [V]	Cap	Product Description	Product Code GE Box pack	Product Code GE Blister pack	Rated* Lumen [lm]	CCT [K]	CRI [Ra]	Rated* Life [h]	Length [mm]	Diameter [mm]	Pack Qty	EuP Inca Watt Equivalent	EEC	Energy consumption [kWh/1000h]
8	220-240	E14	FLE8GLS/T2/827/E14	33773		370	2700	82	8000	100,5	51,5	8	35	A	8
8	220-240	E27	FLE8GLS/T2/827/E27	33777		370	2700	82	8000	97	51,5	8	35	A	8
12	220-240	E14	FLE12GLS/T2/827/E14	33925		625	2700	82	8000	110,5	55	6	51	A	12
12	220-240	E27	FLE12GLS/T2/827/E27	33927	33906	625	2700	82	8000	107	55	6 (box)/ 10 (blister)	51	A	12
12	220-240	B22	FLE12GLS/T2/827/B22	33926		625	2700	82	8000	106	55	6	51	A	12
15	220-240	E27	FLE15GLS/T3/827/E27	33772	33768	830	2700	82	8000	118	60	6 (box)/ 10 (blister)	66	A	15
15	220-240	B22	FLE15GLS/827/B22	33769		830	2700	82	8000	117	60	6	66	A	15
20	220-240	E27	FLE20GLS/T3/827E27	73273		1160	2700	82	8000	145	65	6	86	A	19

\*Rated wattage, life and lumen are equivalent to nominal values, which are indicated on product packaging

# Survival rate and lumen maintenance

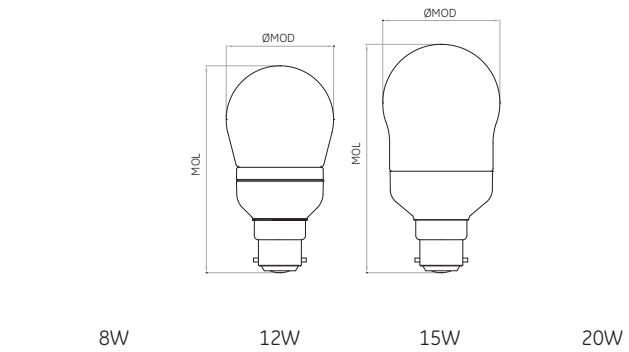
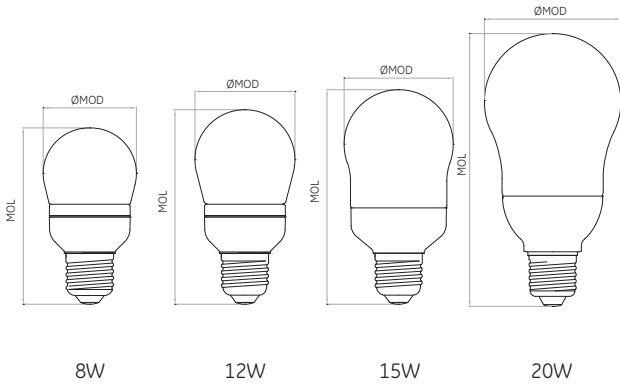
Life Expectancy and Lumen Maintenance  
GLS 8, 12, 15 and 20W 8,000 hours



Test condition: 50Hz 230V 3 hours cycling - according to IEC60969

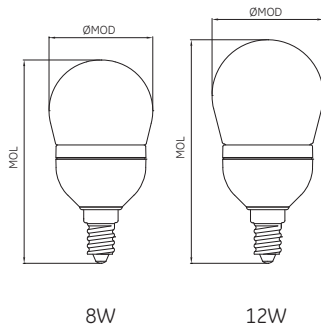
Hours	Survival rate 3 hours	Lumen maintenance
100	1.00	1.00
2,000	0.98	0.85
4,000	0.90	0.81
6,000	0.72	0.78
8,000	0.50	0.75

# Dimensions



E27 cap		
	MOL [mm]	MOD [mm]
8W	97	51.5
12W	107	55
15W	118	60
20W	145	65

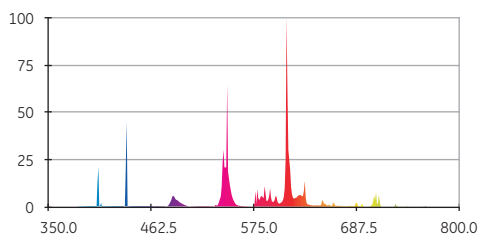
B22 cap		
	MOL [mm]	MOD [mm]
12W	106	55
15W	117	60



E14 cap		
	MOL [mm]	MOD [mm]
8W	100.5	51.5
12W	110.5	55

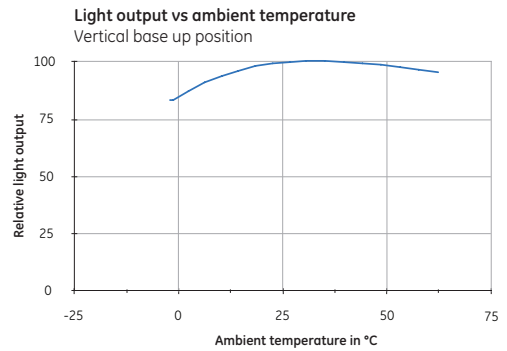
# Spectral power distribution

Spectral Distribution 2700K

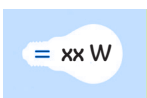


## Influence of ambient temperature on light output

Photometrical and light parameters of a fluorescent lamp depend on the mercury vapor pressure inside the lamp. Mercury vapor pressure in turn is controlled by temperature. When installed in a luminaire, the temperature of the air surrounding the lamp cap changes and this can affect the light output of the lamp. The effects of changes in ambient temperature for a typical lamp are shown on the graph.



## Additional information – ErP Compliance



**Incandescent watt equivalence:** select the preferred wattage to enjoy the same light output as the original incandescent bulb while at the same time achieving significant energy savings. The Basic Data table and the updated EuP packaging include the CFL-Incandescent wattage equivalences according to the new EuP luminous flux standards.



**Switching cycle:** switching endurance is minimum the lamp lifetime expressed in hours if the starting time max. 0.3 sec. or minimum 30 000 if the starting time more than 0,3 sec. based on official EU standard – one minute on, three minutes off.



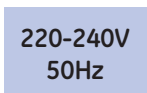
**Starting time:** the time needed for the lamp to start fully and remain alight. GE Lighting's CFL lamps are usually instant light on. Starting categories are: instant on (<0.3sec), quick (0.3-1sec), standard (1-1.5sec).  
**GLS 8,000 hours starting time: standard**



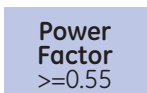
**Warm-up:** Lamp warm-up time to 60% lumens. Based on official EU standard the requirements are <40sec or <100sec for lamps containing mercury in amalgam form.



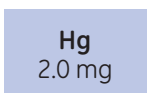
**Dimming:** not recommended to use with dimmers.



**220-240V 50Hz:** all lamps operate on 220-240 Volt (-10%; +6%), 50 Hertz



**Power Factor:** ratio of the measured active input power to the product of the supply voltage (r.m.s.) and the supply current (r.m.s.). measures how efficiently the current is being converted into real power. Lamps of power factor >0.9 are referred to as High Power Factor lamps, below that as Low Power Factor lamps. All CFL lamps above 25 watts sold in EU need to be High Power Factor lamp.

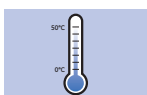


**Mercury content:** GE Lighting's CFL lamps contain a minimised level of mercury, some of our best-in class lamps as low as 0.9mg vs. the max. 2.5mg allowed by RoHS.

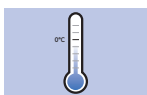


**Website:** instructions on how to dispose of lamps at end of life or in the case of accidental lamp breakage are available on the GE Lighting website.

## Application information

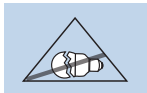


**Ambient temperature range:** temperature at which a lighting product can be safely used and can meet the claimed rated life. Outside of this temperature range, the product might still operate, although the life could be reduced.  
**GLS 8,000 hours 8, 12 and 15W, 20W ambient operating temperature range: 0-50°C**



**Minimum starting temperature:** the lowest temperature condition at which the product can reliably start at within 3sec at 230V.  
**GLS 8,000 hours 8, 12 and 15W, 20W minimum starting temperature: 0°C**

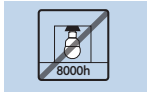
## Cautionary notices



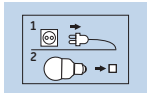
Lamp may shatter and cause injury if broken.



Usage in recessed fixtures could result in reduced life.



Do not use the lamp in enclosed fixtures.



Switch off electricity before changing the bulb.



Do not grab the bulb when install/screw-in the lamp.