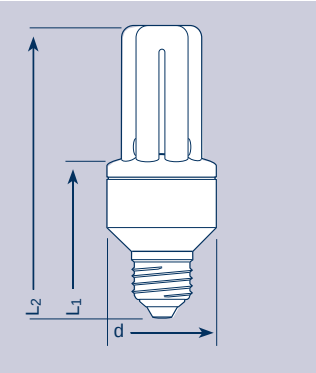
1.3.11 OSRAM DULUX® EL LONGLIFE SENSOR Plus

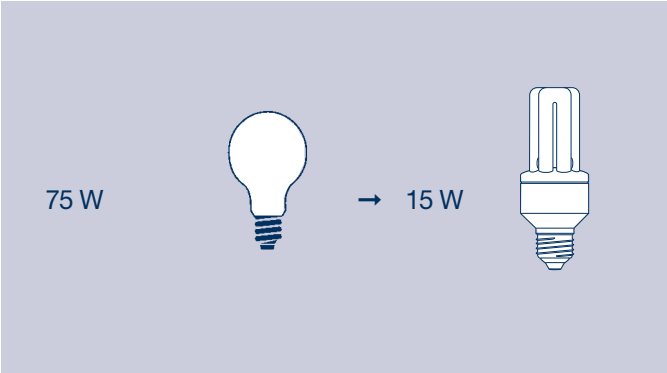
The high quality brand name compact fluorescent lamp with microprocessor technology and control based on ambient light.

Operating principle:

OSRAM DULUX® EL SENSOR Plus automatically switches on at dusk and off again at dawn. Two light sensors at the side continually measure the ambient light and determine the infra-red content of its spectral distribution; in this way the lamp is controlled according to available daylight (for details see how it works on page 20).

- OSRAM DULUX® EL SENSOR Plus is not affected by its own light; the lamp offers all the comfort and economy features of OSRAM DULUX® EL LONGLIFE technology; the OSRAM DULUX IC (integrated circuit) ensures optimum operation
- Simple „plug & play“installation for use in all standard fittings for incandescent lamps; may only be used outdoors in enclosed and ventilated luminaires
- Automatic adjustment to ambient lighting conditions A setting controller, as on the predecessor model OSRAM DULUX® EL SENSOR, is not needed
- The lamp indicates it is ready each time power is applied
- Not suitable for DC operation, emergency lighting systems, dimmers or electronic switches





LONGLIFE

NEW

Reference	DEL 15 W SENSOR Plus
Warm start (start with cathode preheating)	Yes
Power input (W)	15
Lamp current rms value (mA)	120
Peak value (mA)	360
Luminous flux (lm)	900
Luminous efficacy (lm/W)	60
Colour appearance	827
Colour rendering group	1B
Energy Label classification	A
Length l_1 (mm)	81,5
Length l_2 (mm)	140±3
Diameter d (mm)	52
Weight (g)	95
Available with base	E27, B22d
Suitable for DC operation	No
Rated average life (h)	15000

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How it works:
The lamp is controlled by infra-red (IR) radiation.
Infra-red radiation is emitted by the sun, remote controls and artificial light sources such as incandescent and halogen lamps. By contrast, fluorescent lamps emit very little IR radiation once they have reached their normal operation state. The light from such lamps does not interfere the IR sensor which could make the lamps flicker or go off.

In the case of sunlight, it can be assumed that the brightness of the visible light is proportional to the intensity of the infra-red radiation. The two sensors on the lamp (behind the red covers) detect the IR radiation in the vicinity of the lamp. A measurement signal is derived from this, and this signal is then evaluated by the electronic circuitry in the lamp:

In the evening	bright ⇒ dark Large amount of IR ⇒ Small amount of IR ⇓ Switch-on value is reached ⇓ **The lamp switches itself on**

After a maximum of 30 minutes the translucence of the luminaire is measured.

In the morning	dark ⇒ bright Small amount of IR ⇒ Large amount of IR ⇓ Switch-off value is reached ⇓ **The lamp switches itself off**

Self-test each time power is applied.

A complete lamp test is performed. All the components of the lamp are checked for correct operation. The lamp will light after about two seconds to indicate that the test has been successfully completed.