

# Fluorescent lamp Spectralux®Plus

NL-T8 18W/827/G13

Radium

Product Datasheet Date: 19.10.2025



A

G

1350

2700K

20 000h

Dimmable

## General Data

|                           |                   |
|---------------------------|-------------------|
| Article No.               | 31112218          |
| Code                      | NL-T8 18W/827/G13 |
| Product EAN               | 4008597122187     |
| Box quantitiy (pcs.)      | 25                |
| EAN Box                   | 4008597422188     |
| Gross weight of box in kg | 2.634             |
| Length of box in m        | 0.64              |
| Width of box in m         | 0.15              |
| Height of box in m        | 0.15              |
| Product weight            | 84 g              |
| Product status            | Inactive          |

## Electric Parameters

|                      |        |
|----------------------|--------|
| Wattage              | 18.0 W |
| Lamp nominal wattage | 18 W   |
| Lamp voltage         | 57 V   |
| Mains voltage        | 230 V  |
| Nominal current (mA) | 370 mA |

Electric Parameters

|                                           |        |
|-------------------------------------------|--------|
| Compensation capacitor for 50Hz operation | 4.5 µF |
| dimnable                                  | Yes    |

Light Application Parameters

|                             |         |
|-----------------------------|---------|
| Luminous flux               | 1350 lm |
| Rated lamp luminous flux    | 1350 lm |
| max. luminous flux at       | 25 °C   |
| Beam angle                  | 360 °   |
| Efficacy                    | 75 lm/W |
| Total mains efficacy        | 75 lm/W |
| Light colour                | Intra   |
| Code of light color         | 827     |
| Colour temperature          | 2700 K  |
| Color rendering index       | 80-89   |
| Mean luminance              | 1       |
| Lumen maintenance at 2000h  | 0.96    |
| Lumen maintenance at 4000h  | 0.94    |
| Lumen maintenance at 6000h  | 0.93    |
| Lumen maintenance at 8000h  | 0.91    |
| Lumen maintenance at 12000h | 0.91    |
| Lumen maintenance at 16000h | 0.90    |
| Lumen maintenance at 20000h | 0.89    |

Service Life

|                                |         |
|--------------------------------|---------|
| Average life                   | 20000 h |
| Mean service life, HF 3h cycle | 20000 h |
| Lamp survival factor at 2000h  | 0.99    |
| Lamp survival factor at 4000h  | 0.99    |
| Lamp survival factor at 6000h  | 0.99    |
| Lamp survival factor at 8000h  | 0.99    |
| Lamp survival factor at 12000h | 0.99    |
| Lamp survival factor at 16000h | 0.90    |
| Lamp survival factor at 20000h | 0.50    |

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## Specification

|                        |                                                    |
|------------------------|----------------------------------------------------|
| Energylabel notice     | old label, no EPREL registration, no EU data sheet |
| Energylabel (G -> A)   | G                                                  |
| Energylabel (E -> A++) | A                                                  |
| Diameter max.          | 26 mm                                              |
| Tube diameter          | 26 mm                                              |
| Length                 | 590 mm                                             |
| Length                 | 590 mm                                             |
| Mercury content        | 2.5 mg                                             |
| Lamp shape             | Rod                                                |
| Base                   | G13                                                |
| Colour                 | White                                              |

## Information especially for EPREL

|                    |                                                    |
|--------------------|----------------------------------------------------|
| Energylabel notice | old label, no EPREL registration, no EU data sheet |
| EPREL ID number    | 863856                                             |

## Miscellaneous

|                      |            |
|----------------------|------------|
| EU-date of phase-out | 25.08.2023 |
| EU Directive         | RoHS       |

## Notes

Fluorescent lamp T8 - 26mm diameter, light colour 827, high luminous efficiency, good colour rendering, long life, base G13. Controllable by Dim-ECG.

Please, refer to [www.radium.de/recycling](http://www.radium.de/recycling) for notes on disposal of burned-out lamps as well as lamp breakage.

The "lifespan L70" described for LED lamps indicates the number of hours when the luminous flux has decreased to 70% of its initial value.

The optimal field 'info about service life' contains the frame conditions according to standards based on which the specific service life has been determined. So, for example, "12B50, 50Hz" means that the mean service life (B50) has been determined with a 12h switching cycle at mains (frequency 50Hz), "3B50, HF" is based on a 3h switching cycle at electronic control gear (high frequency).

### Base



G13  
IEC/EN 60061-1  
sheet 7004-51-8

### Spectrum

Natural daylight is a mixture of direct sunlight and the light of the sky. Therefore, its spectral composition changes permanently due to the changing time of day. The standardised light classification D65 corresponds to a daylight with a colour temperature of approximately 6500 K.

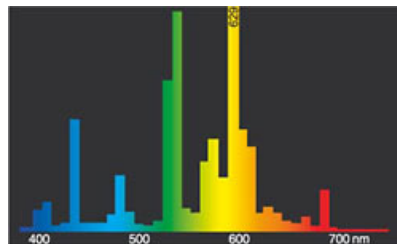
Every fluorescent lamp type has got an individual spectral power distribution according to its phosphor coating inside the bulb. From this result important properties light colour or colour rendering.

Visible region from 380 to 780 nm; height of graph corresponding with relative spectral emission (400mW/klm) per 10nm.

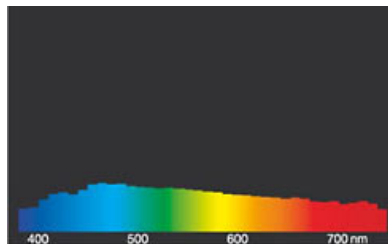
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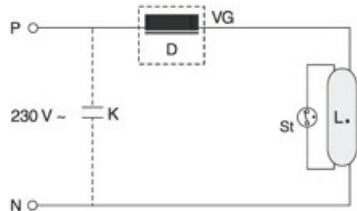


light colour 827 Spectralux® Intra (41)



daylight(D 65)

## Circuit diagram(s)



### One-lampe circuit inductive

#### Key:

D = choke

L. = lamp

St = starter

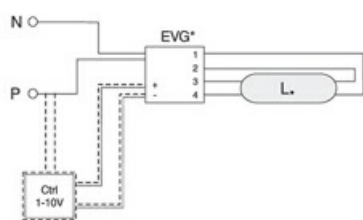
VG = electromagnetic ballast (KVG/VVG)

P = phase

N = zero potential

K = p. f. correction capacitor

The required control gear (here starter and ballast) for the lamps operation is usually mounted in the suitable luminaire in an appropriate electric circuit. Changes of any kind are to be conducted by qualified and specialised staff, only. Thus, this circuit example is to be understood merely as a technical background information for interested users.



### One-lampe circuit with electronic ballast

#### Key:

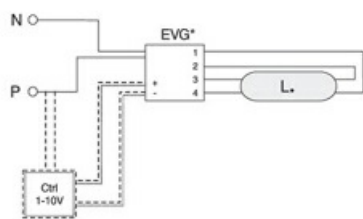
VG = ballast electronic (ECG)

P = phase

N = zero potential

Ctrl = Controller, dimmer

background information for interested users.



### One-lampe circuit with electronic ballast

#### Key:

VG = ballast electronic (ECG)

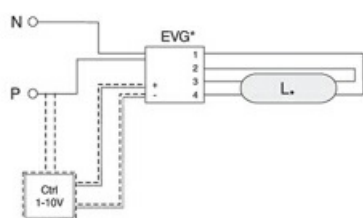
P = phase

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#### Key:

VG = ballast electronic (ECG)

P = phase

N = zero potential

Ctrl = Controller, dimmer

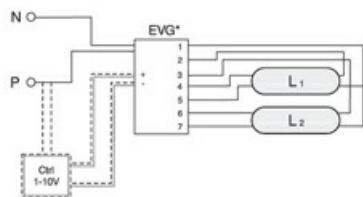
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Circuit with multi electronic ballast

Key:

VG = ballast electronic (ECG)

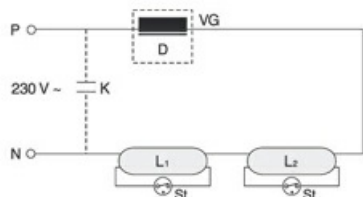
P = phase

N = zero potential

Ctrl = Controller, dimmer

The required control gear (here electronic ballast) for the lamps operation is usually mounted in the suitable luminaire in an appropriate electric circuit. Changes of any kind are to be conducted by qualified and specialised staff, only. Thus, this circuit example is to be understood merely as a technical

background information for interested users.



Serious connection with conventional (low loss) ballast

Key:

D = choke

L. = lamp

St = starter

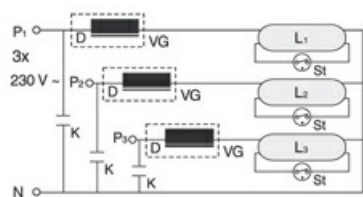
VG = ballast electromagnetic (KVG/VVG)

P = phase

N = zero potential

K = p. f. correction capacitor

The required control gear (here starter and ballast) for the lamps operation is usually mounted in the suitable luminaire in an appropriate electric circuit. Changes of any kind are to be conducted by qualified and specialised staff, only. Thus, this circuit example is to be understood merely as a technical background information for interested users.



Three phase current connection

Key:

D = choke

L. = lamp

St = starter

VG = ballast electromagnetic (KVG/VVG)

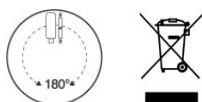
P = phase

N = zero potential

K = p. f. correction capacitor

The required control gear (here starter and ballast) for the lamps operation is usually mounted in the suitable luminaire in an appropriate electric circuit. Changes of any kind are to be conducted by qualified and specialised staff, only. Thus, this circuit example is to be understood merely as a technical background information for interested users.

## Special features



## General notes

The technical design data in accordance with DIN and IEC. The producer does not take any responsibility for damage to persons or property in case of unsuitable operation or handling of the product. Operating data and dimensions are valid within the usual tolerances. Related lamp types (different bases, mains voltages) may be available on request. Sale and delivery are effected in accordance with the Radium Terms of Delivery and Payment valid on the day of conclusion of contract. Packing units offer economical advantages to the purchase and logistic department. Please match your quantity volume accordingly. For orders of a minimum quantity (clefts) with a lamp model the amount lower than the volume of each packaging unit, we will invoice 10 % additional charge per lamp type. Technical changes and terms of delivery are reserved. Manipulation of any kind to packaging or product is not permissible as this will violate Radium brand rights. Furthermore, technical properties of the product can change to its disadvantage or even destruction. Therefore, Radium cannot be responsible for consequential damages.

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All technical data without guarantee.