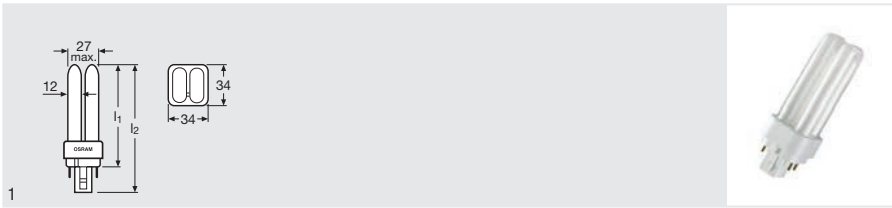


**OSRAM DULUX® D/E**  
**CFLni, 2 tubes, with 4-pin base for ECG operation**



| Product name       | GTIN (EAN)    | W  |                       |        | lm<br>25°C |
|--------------------|---------------|----|-----------------------|--------|------------|
| DULUX D/E 10 W/827 | 4050300012124 | 10 | LUMILUX INTERNA       | G24q-1 | 600        |
| DULUX D/E 10 W/830 | 4050300419435 | 10 | LUMILUX Warm White    | G24q-1 | 600        |
| DULUX D/E 10 W/840 | 4050300017587 | 10 | LUMILUX Cool White    | G24q-1 | 600        |
| DULUX D/E 13 W/827 | 4050300012131 | 13 | LUMILUX INTERNA       | G24q-1 | 900        |
| DULUX D/E 13 W/830 | 4050300389059 | 13 | LUMILUX Warm White    | G24q-1 | 900        |
| DULUX D/E 13 W/840 | 4050300017594 | 13 | LUMILUX Cool White    | G24q-1 | 900        |
| DULUX D/E 18 W/827 | 4050300012148 | 18 | LUMILUX INTERNA       | G24q-2 | 1200       |
| DULUX D/E 18 W/830 | 4050300327211 | 18 | LUMILUX Warm White    | G24q-2 | 1200       |
| DULUX D/E 18 W/840 | 4050300017617 | 18 | LUMILUX Cool White    | G24q-2 | 1200       |
| DULUX D/E 18 W/865 | 4050300564944 | 18 | LUMILUX Cool Daylight | G24q-2 | 1140       |
| DULUX D/E 26 W/827 | 4050300012230 | 26 | LUMILUX INTERNA       | G24q-3 | 1800       |
| DULUX D/E 26 W/830 | 4050300327235 | 26 | LUMILUX Warm White    | G24q-3 | 1800       |
| DULUX D/E 26 W/840 | 4050300020303 | 26 | LUMILUX Cool White    | G24q-3 | 1800       |
| DULUX D/E 26 W/865 | 4008321185877 | 26 | LUMILUX Cool Daylight | G24q-3 | 1710       |

| Product name       | Ra      | l1 max.<br>[mm] |   |    | <br>No. |
|--------------------|---------|-----------------|---|----|---------|
| DULUX D/E 10 W/827 | 80...89 | 87              | A | 10 | 1       |
| DULUX D/E 10 W/830 | 80...89 | 87              | A | 10 | 1       |
| DULUX D/E 10 W/840 | 80...89 | 87              | A | 10 | 1       |
| DULUX D/E 13 W/827 | 80...89 | 115             | A | 10 | 1       |
| DULUX D/E 13 W/830 | 80...89 | 115             | A | 10 | 1       |
| DULUX D/E 13 W/840 | 80...89 | 115             | A | 10 | 1       |
| DULUX D/E 18 W/827 | 80...89 | 130             | A | 10 | 1       |
| DULUX D/E 18 W/830 | 80...89 | 130             | A | 10 | 1       |
| DULUX D/E 18 W/840 | 80...89 | 130             | A | 10 | 1       |
| DULUX D/E 18 W/865 | 80...89 | 130             | A | 10 | 1       |
| DULUX D/E 26 W/827 | 80...89 | 149             | A | 10 | 1       |
| DULUX D/E 26 W/830 | 80...89 | 149             | A | 10 | 1       |
| DULUX D/E 26 W/840 | 80...89 | 149             | A | 10 | 1       |
| DULUX D/E 26 W/865 | 80...89 | 149             | A | 10 | 1       |



### Product features

- Average life: 20,000 h (with QUICKTRONIC®)
- Color rendering index R<sub>a</sub>: 80...89
- Dimmable (3...100 %)
- Short and compact pin-base lamp with double-turn tubes
- Single-ended four-pin plug-in G24q base
- Operates on battery, solar and AC power with suitable electronic control gear

### Product benefits

- Extremely economical
- Good quality of light
- Excellent luminous flux
- Long service life
- Improved maintenance

### Areas of application

- Offices, public buildings
- Shops
- Supermarkets and department stores
- Hotels, restaurants
- Industry
- Outdoor applications only in suitable luminaires

### Equipment / Accessories

- Suitable for operation on electronic control gears

### References / Links

For more information on QUICKTRONIC® electronic control gears, go to [www.ledvance.com/quicktronic](http://www.ledvance.com/quicktronic)

### Safety advice

In case of lamp breakage:  
[www.ledvance.com/sustainability](http://www.ledvance.com/sustainability)



## Technical data

| Lamp<br>OSRAM DULUX®<br>Wattage | Lamp voltage        |                       | Lamp current         |                        | System<br>wattage<br>ECG<br>mode* | Lumi-<br>nance<br>cd/cm <sup>2</sup><br><br>LF 827,<br>830, 840 | PF correction<br>Parallel<br>capac-<br>itor <sup>1)</sup><br>CCG<br>mode<br>230 V/50 Hz<br>µF | Series<br>capac-<br>itor <sup>2)</sup><br>CCG<br>mode<br>µF |
|---------------------------------|---------------------|-----------------------|----------------------|------------------------|-----------------------------------|---|---|---|
|                                 | at<br>50/60 Hz<br>V | at<br>HF<br>mode<br>V | at<br>50/60 Hz<br>mA | at<br>HF<br>mode<br>mA |                                   |   |   |   |
| CFL SQUARE 16                   | 103                 | 84                    | 195                  | 180                    | –                                 | –   | 2.0   | –   |
| CFL SQUARE 28                   | 108                 | 95                    | 320                  | 260                    | –                                 | –   | 3.0   | –   |
| CFL SQUARE 38                   | 110                 | 97                    | 430                  | 355                    | –                                 | –   | 4.5   | –   |
| DULUX S 5                       | 35                  | –                     | 180                  | –                      | –                                 | 2.5   | 2.2   | –   |
| DULUX S 7                       | 47                  | –                     | 175                  | –                      | –                                 | 2.6   | 2.1   | –   |
| DULUX S 9                       | 60                  | –                     | 170                  | –                      | –                                 | 2.8   | 2.0   | –   |
| DULUX S 11                      | 91                  | –                     | 155                  | –                      | –                                 | 2.7   | 1.7   | –   |
| DULUX D 10                      | 64                  | –                     | 190                  | –                      | –                                 | 4.0   | 2.2   | –   |
| DULUX D 13                      | 91                  | –                     | 175                  | –                      | –                                 | 4.0   | 1.8   | –   |
| DULUX D 18                      | 100                 | –                     | 220                  | –                      | –                                 | 4.5   | 2.2   | 1.7   |
| DULUX D 26                      | 105                 | –                     | 325                  | –                      | –                                 | 5.5   | 3.2   | 2.5   |
| DULUX T 13                      | 91                  | –                     | 175                  | –                      | –                                 | 4.2   | 1.8   | 1.4   |
| DULUX T 18                      | 100                 | –                     | 225                  | –                      | –                                 | 4.7   | 2.3   | 1.7   |
| DULUX T 26                      | 105                 | –                     | 325                  | –                      | –                                 | 6.0   | 3.3   | 2.5   |
| DULUX S/E 7                     | –                   | 37                    | –                    | 175                    | 9                                 | 2.6   | –   | –   |
| DULUX S/E 9                     | –                   | 48                    | –                    | 170                    | 12                                | 2.8   | –   | –   |
| DULUX S/E 11                    | –                   | 75                    | –                    | 150                    | 14                                | 2.7   | –   | –   |
| DULUX D/E 10                    | –                   | 51                    | –                    | 190                    | 12                                | 4.0   | –   | –   |
| DULUX D/E 13                    | –                   | 77                    | –                    | 165                    | 14                                | 4.0   | –   | –   |
| DULUX D/E 18 <sup>3)</sup>      | –                   | 80                    | –                    | 210                    | 20                                | 4.5   | –   | –   |
| DULUX D/E 26 <sup>3)</sup>      | –                   | 80                    | –                    | 300                    | 28                                | 5.5   | –   | –   |
| DULUX T/E 13                    | –                   | 77                    | –                    | 165                    | 14                                | 4.2   | –   | –   |
| DULUX T/E 18                    | –                   | 80                    | –                    | 210                    | 20                                | 4.7   | –   | –   |
| DULUX T/E 26 <sup>4)</sup>      | –                   | 80                    | –                    | 300                    | 28                                | 6.0   | –   | –   |
| DULUX T/E 32 <sup>3)4)</sup>    | –                   | 100                   | –                    | 320                    | 35                                | 6.5   | –   | –   |
| DULUX T/E 42 <sup>3)4)</sup>    | –                   | 135                   | –                    | 320                    | 46                                | 7.0   | –   | –   |
| DULUX L 18 <sup>3)5)</sup>      | 58                  | 50                    | 375                  | 320                    | 19                                | 2.1   | 4.2   | 2.7   |
| DULUX L 24 <sup>3)5)</sup>      | 87                  | 75                    | 345                  | 300                    | 27                                | 2.1   | 3.6   | 2.7   |
| DULUX L 36 <sup>3)5)</sup>      | 106                 | 90                    | 435                  | 360                    | 39                                | 2.8   | 4.4   | 3.4   |
| DULUX L 40 <sup>4)</sup>        | –                   | 126                   | –                    | 320                    | 45                                | 2.3   | –   | –   |
| DULUX L 55 <sup>3)4)</sup>      | –                   | 101                   | –                    | 550                    | 61                                | 3.2   | –   | –   |
| DULUX L 80 <sup>4)</sup>        | –                   | 145                   | –                    | 555                    | 86                                | 3.2   | –   | –   |
| DULUX L DE LUXE 36              | 106                 | 90                    | 435                  | 360                    | 39                                | 2.3   | 4.4   | 3.4   |
| DULUX L DE LUXE 55              | –                   | 101                   | –                    | 550                    | 61                                | 2.7   | –   | –   |
| DULUX L HE 26 W                 | –                   | 157                   | –                    | 170                    | 30                                | **  | –   | –   |
| DULUX L HE 28 W                 | –                   | 147                   | –                    | 190                    | 31                                | 1.9   | –   | –   |
| DULUX F 18                      | 58                  | 50                    | 375                  | 320                    | 19                                | 2.4   | 4.2   | 2.7   |
| DULUX F 24                      | 87                  | 75                    | 345                  | 300                    | 27                                | 2.5   | 3.6   | 2.7   |
| DULUX F 36                      | 106                 | 90                    | 435                  | 360                    | 39                                | 3.0   | 4.4   | 3.4   |

\* ECG also available in two-lamp version

\*\* Under clarification

For QUICKTRONIC® electronic control gears, see Section 16

For detailed technical information, see the "Technical Guides"



1) Design for cos phi = 0.95, dielectric strength of the capacitors 250 V<sub>ac</sub>, capacitance tolerance ±10 %  
2) To maintain the specified operating and preheating values, close-tolerance capacitors (±2 %) and series reactors (±1.5 %) are required for series compensation. Check the product ranges of leading manufacturers | Dielectric strength of the capacitors 450 V<sub>AC</sub>

3) Also applies to the XT version

4) Also applies to the CONSTANT version

5) Also applies to the SP version at +5 °C

For more system information, see Section 16 (ECGs)

## Technical data

### Lamp Wattage



Base

Length  
l max.

Length acc.  
to IEC l max.

Length  
l<sub>1</sub> max.

Length  
l<sub>2</sub> max.

Length acc.  
to IEC l<sub>1</sub> max.

|                                 |         |     |      |     |     |     |
|---------------------------------|---------|-----|------|-----|-----|-----|
| DULUX S 5                       | G23     | –   | –    | 85  | 108 | 85  |
| DULUX S 7                       | G23     | –   | –    | 114 | 137 | 115 |
| DULUX S 9                       | G23     | –   | –    | 144 | 167 | 145 |
| DULUX S 11                      | G23     | –   | –    | 214 | 237 | 215 |
| DULUX S/E 7                     | 2G7     | 114 | 115  | –   | –   | –   |
| DULUX S/E 9                     | 2G7     | 144 | 145  | –   | –   | –   |
| DULUX S/E 11                    | 2G7     | 214 | 215  | –   | –   | –   |
| DULUX D 10                      | G24d-1  | –   | –    | 87  | 110 | 95  |
| DULUX D 13                      | G24d-1  | –   | –    | 115 | 138 | 130 |
| DULUX D 18                      | G24d-2  | –   | –    | 130 | 153 | 140 |
| DULUX D 26                      | G24d-3  | –   | –    | 149 | 172 | 160 |
| DULUX D/E 10                    | G24q-1  | –   | –    | 87  | 103 | 95  |
| DULUX D/E 13                    | G24q-1  | –   | –    | 115 | 131 | 130 |
| DULUX D/E 18 <sup>1)</sup>      | G24q-2  | –   | –    | 130 | 146 | 140 |
| DULUX D/E 26 <sup>1)</sup>      | G24q-3  | –   | –    | 149 | 165 | 160 |
| DULUX T PLUS 13                 | GX24d-1 | –   | –    | 90  | 113 | 90  |
| DULUX T PLUS 18                 | GX24d-2 | –   | –    | 101 | 124 | 110 |
| DULUX T PLUS 26                 | GX24d-3 | –   | –    | 116 | 139 | 130 |
| DULUX T/E PLUS 13               | GX24q-1 | –   | –    | 90  | 106 | 90  |
| DULUX T/E PLUS 18               | GX24q-2 | –   | –    | 101 | 117 | 110 |
| DULUX T/E PLUS 26               | GX24q-3 | –   | –    | 116 | 132 | 130 |
| DULUX T/E PLUS 32 <sup>2)</sup> | GX24q-3 | –   | –    | 132 | 148 | 145 |
| DULUX T/E PLUS 42 <sup>2)</sup> | GX24q-4 | –   | –    | 153 | 169 | 155 |
| DULUX T/E CONSTANT 26           | GX24q-3 | –   | –    | 112 | 128 | 130 |
| DULUX T/E CONSTANT 32           | GX24q-3 | –   | –    | 128 | 144 | 145 |
| DULUX T/E CONSTANT 42           | GX24q-4 | –   | –    | 149 | 165 | 155 |
| DULUX L 18 <sup>1)</sup>        | 2G11    | 217 | 225  | –   | –   | –   |
| DULUX L 24 <sup>1)</sup>        | 2G11    | 317 | 320  | –   | –   | –   |
| DULUX L 36 <sup>1)</sup>        | 2G11    | 411 | 415  | –   | –   | –   |
| DULUX L 40 <sup>3)</sup>        | 2G11    | 533 | 535  | –   | –   | –   |
| DULUX L 55 <sup>1)3)</sup>      | 2G11    | 533 | 535  | –   | –   | –   |
| DULUX L 80 <sup>3)</sup>        | 2G11    | 565 | 565  | –   | –   | –   |
| DULUX L SP 18                   | 2G11    | 209 | 225  | –   | –   | –   |
| DULUX L SP 24                   | 2G11    | 309 | 320  | –   | –   | –   |
| DULUX L HE 26                   | 2GX11   | 533 | u.c. | –   | –   | –   |
| DULUX L HE 28                   | 2GX11   | 565 | 565  | –   | –   | –   |
| DULUX F 18                      | 2G10    | 122 | 122  | –   | –   | –   |
| DULUX F 24                      | 2G10    | 165 | 165  | –   | –   | –   |
| DULUX F 36                      | 2G10    | 217 | 217  | –   | –   | –   |

**A in mm    B in mm    C in mm    D in mm    E in mm    F in mm    G in mm**

|               |            |            |          |          |           |           |      |
|---------------|------------|------------|----------|----------|-----------|-----------|------|
| CFL SQUARE 16 | max. 138.0 | max. 141.0 | max. 9.9 | max. 4.5 | max. 42.0 | max. 33.0 | 57.0 |
| CFL SQUARE 28 | max. 205.0 | max. 207.0 | max. 9.9 | max. 4.5 | max. 42.0 | max. 33.0 | 93.0 |
| CFL SQUARE 38 | max. 205.0 | max. 207.0 | max. 9.9 | max. 4.5 | max. 42.0 | max. 33.0 | 93.0 |

For details of the geometry and diagram, see "CFLni Technical Guide"

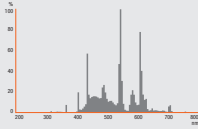


1) Also applies to the XT version  
2) Also applies to T/E XT

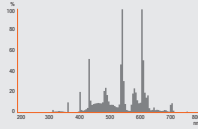
3) Also applies to the CONSTANT version

## Spectral power distribution of OSRAM LUMILUX® pin-base lamps

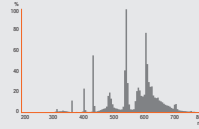
Visible range from 380 to 780 nm, relative spectral emission per 5 nm.



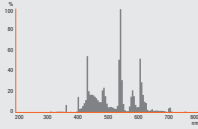
Color 954 LUMILUX®  
DE LUXE Daylight



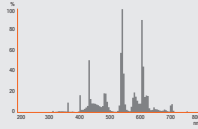
Color 940 LUMILUX®  
DE LUXE Cool White



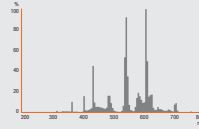
Color 930 LUMILUX®  
DE LUXE Warm White



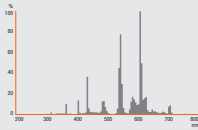
Color 865 LUMILUX®  
Cool Daylight



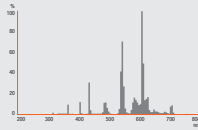
Color 840 LUMILUX®  
Cool White



Color 835 LUMILUX®  
White



Color 830 LUMILUX®  
Warm White

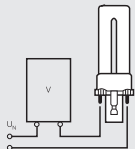


Color 827 LUMILUX  
INTERNA®





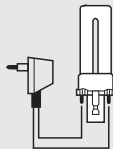
## Circuit diagrams for conventional control gears



1

Single lamp with control gear

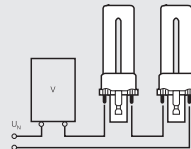
OSRAM DULUX® S 5 W, 7 W, 9 W, 11 W  
 OSRAM DULUX® D 10 W, 13 W, 18 W, 26 W  
 OSRAM DULUX® D ES 16 W, 23 W  
 OSRAM DULUX® T 13 W, 18 W, 26 W



2

Single lamp with plug-in control gear

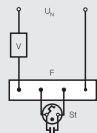
OSRAM DULUX® S 5 W, 7 W, 9 W, 11 W  
 OSRAM DULUX® D 10 W, 13 W  
 OSRAM DULUX® T 13 W



3

Series connection with control gear

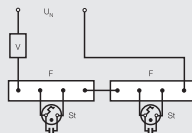
OSRAM DULUX® S 5 W, 7 W, 9 W



4

Single circuit, starter St 111  
 or DEOS® St 171

OSRAM DULUX® L 18 W, 24 W, 36 W  
 OSRAM DULUX® L 18 W SP, 24 W SP, 36 W SP  
 OSRAM DULUX® F 18 W, 24 W, 36 W



5

Series operation on 230 V only  
 with starter St 151

OSRAM DULUX® L 18 W  
 OSRAM DULUX® L 18 W SP  
 OSRAM DULUX® F 18 W

F = Four-pin holder

St = Starter

$U_n$  = Line voltage

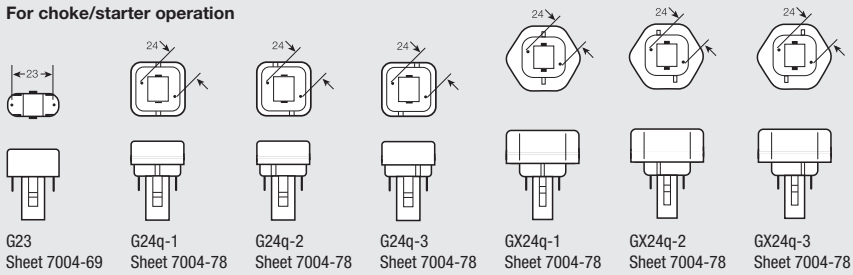
V = Control gear

For circuit diagrams for HF operation, see Section 16.

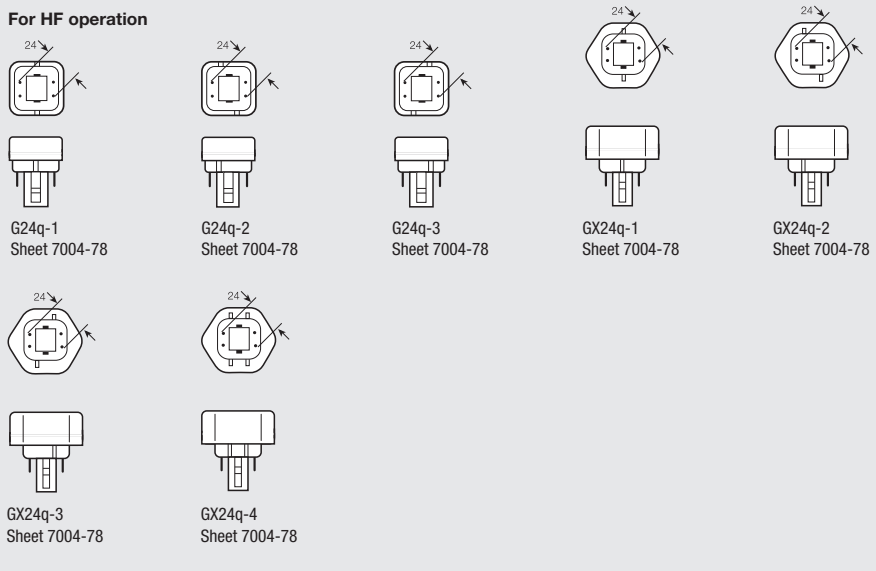


## Bases IEC/EN 60061-1

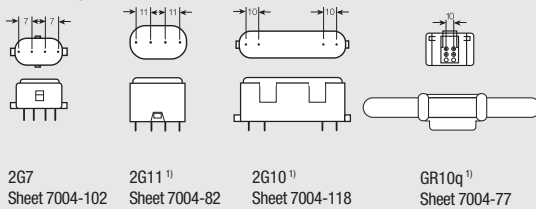
### For choke/starter operation



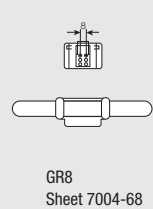
### For HF operation



### For HF operation



### For choke/starter operation



1) Also for choke/starter operation