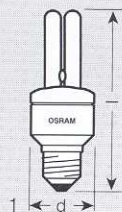
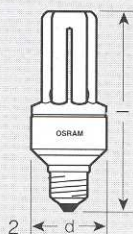


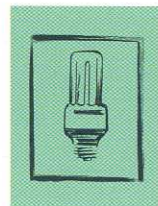
OSRAM DULUX® EL LONGLIFE E27



25 W	→	5 W
40 W	→	7 W
60 W	→	11 W



75 W	→	15 W
100 W	→	20 W
120 W	→	23 W



Product
reference

Product
number



OSRAM DULUX® EL LONGLIFE E27

DULUX EL LL 5 W/827 E27	4050300357430	5	220 ... 240/50 ... 60	40	LUMILUX INTERNA®	1 B
DULUX EL LL 7 W/827 E27	4050300288819	7	220 ... 240/50 ... 60	55	LUMILUX INTERNA® ¹⁾	1 B
DULUX EL LL 11 W/827 E27	4050300288833	11	220 ... 240/50 ... 60	115	LUMILUX INTERNA® ^{1) 2)}	1 B
DULUX EL LL 15 W/827 E27	4050300275857	15	220 ... 240/50 ... 60	130	LUMILUX INTERNA® ^{1) 2)}	1 B
DULUX EL LL 20 W/827 E27	4050300275970	20	220 ... 240/50 ... 60	165	LUMILUX INTERNA® ^{1) 2)}	1 B
DULUX EL LL 23 W/827 E27	4050300028965	23	220 ... 240/50 ... 60	185	LUMILUX INTERNA® ^{1) 2)}	1 B

Product
reference



DULUX EL LL 5 W/827 E27	240	E27	36	121 ± 2	60	1	15
DULUX EL LL 7 W/827 E27	400	E27	45	131.5 ± 3	60	1	15
DULUX EL LL 11 W/827 E27	660	E27	45	143 ± 3	65	1	15
DULUX EL LL 15 W/827 E27	900	E27	52	140 ± 3	85	2	15
DULUX EL LL 20 W/827 E27	1200	E27	52	153.5 ± 3	90	2	15
DULUX EL LL 23 W/827 E27	1500	E27	58	173 ± 3	100	2	15

OSRAM DULUX® EL LONGLIFE lamps with B22d base available on request.

OSRAM DULUX® EL LONGLIFE lamps are not suitable for use with dimmers or electronic switches.

Use outdoors only in enclosed and ventilated luminaires.

OSRAM DULUX® EL LONGLIFE lamps are super compact premium quality fluorescent lamps with electronic control gear and E27 and B22d bases.

These compact fluorescent lamps offer high luminous efficacy with up to 80% savings in electricity costs. The E27 base means they can be easily fitted instead of ordinary light bulbs. These lamps also have excellent colour rendering and excellent light distribution.

- Around 12 years life (if used for around 3 hours a day).
- Universal burning position.
- Low weight.
- Flicker-free starting and flicker-free operation.
- Starts reliably down to -30°C (5 W down to -20°C).
- More light without temperature problems in luminaires designed for ordinary light bulbs.
- 5 W and 7 W suitable for emergency lighting on 230 V DC.
- OSRAM DULUX® EL 15 W and 20 W lamps are also available in 110 – 145 V versions (some of the technical data is different).

Commercial applications:

Restaurants, hotels, foyers, ticket offices, corridors, doctors' surgeries and offices.
Major advantage: much longer relamping intervals.

Domestic applications:

All rooms, especially where the lamps need to last a long time or have to withstand frequent on/off switching.



OSRAM DULUX® EL LONGLIFE lamps are ideal for constant economical lighting.

¹⁾ Also available in LUMILUX® Cool White.

²⁾ Also available in LUMILUX® Daylight (approx. 5% lower luminous flux).

* To ensure that your order reaches you quickly, please order standard pack quantities (15 per SP from summer 2002).

Technical data

Lamp OSRAM DULUX® Watt	Lamp voltage for 50/60Hz V		Lamp current for 50/60Hz mA		Wattage with control gear CCG ¹⁾ ECG W		Lumi- nance cd/cm ² LF 827, 830, 840	Compensation Parallel capacitor ²⁾ CCG 230V/50Hz µF	Series capacitor ³⁾ CCG µF
		for HF V		for HF mA		ECG W			
DULUX S 5	35	—	180	—	10	—	2.5	2.2	—
DULUX S 7	47/45	—	175/180	—	11	—	2.6	2.1	—
DULUX S 9	60/59	—	170/180	—	13	—	2.8	2.0	—
DULUX S 11	91/—	—	155/—	—	15	—	2.7	1.7	—
DULUX D 10	64	—	190	—	15	—	4.0	2.2	1.4
DULUX D 13	91	—	175	—	17	—	4.0	1.8	1.4
DULUX D 18	100	—	220	—	23	—	4.5	2.2	1.7
DULUX D 26	105	—	325	—	31	—	5.5	3.2	2.5
DULUX T 13	91	—	175	—	17	—	4.2	1.8	1.4
DULUX T 18	100	—	225	—	23	—	4.7	2.3	1.7
DULUX T 26	105	—	325	—	31	—	6.0	3.3	2.5
DULUX S/E 5	—	27	—	190	—	7.5	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	—	80	—	210	—	20	4.5	—	—
DULUX D/E 26	—	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	—	80	—	300	—	28	6.0	—	—
DULUX T/E 32	—	100	—	320	—	35	6.5	—	—
DULUX T/E 42	—	135	—	320	—	46	7.0	—	—
DULUX T/E 57	—	182	—	320	—	62	7.0	—	—
DULUX L 18	58	50	375	320	24	19	2.1	4.2	2.7
DULUX L 24	87	75	345	300	30	27	2.1	3.6	2.7
DULUX L 36	106	90	435	360	43	39	2.8	4.4	3.4
DULUX L 40	—	126	—	320	—	45	2.3	—	—
DULUX L 55	—	101	—	550	—	61	3.2	—	—
DULUX L 80	—	4)	—	4)	—	4)	4)	—	—
DULUX F 18	58	50	375	320	24	19	2.4	4.2	2.7
DULUX F 24	87	75	345	300	29	27	2.5	3.6	2.7
DULUX F 36	106	90	435	360	43	39	3.0	4.4	3.4

* ECG also available in two-lamp version.

For QUICKTRONIC® electronic control gear see Section 9.

For detailed technical information see the "Technical Guide".

1) Approximate values for low-loss control gear – depending on the control gear

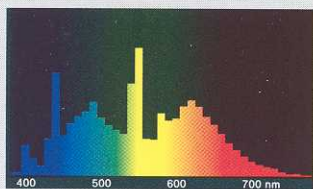
2) Design for cos phi = 0.95

Dielectric strength of the capacitors 250 V AC
Capacitance tolerance ± 10%.

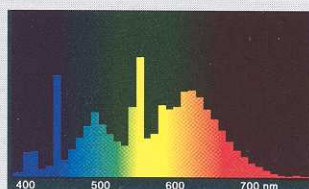
3) To maintain the specified operating and preheating values, close-tolerance capacitors (± 2%) and series resistors (± 1.5%) are required for series compensation. Check the product ranges of leading manufacturers. Dielectric strength of the capacitors = 450 V AC.

4) In preparation.

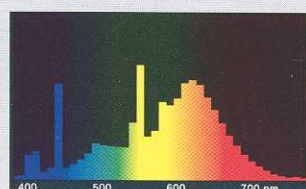
Spectral power distribution of OSRAM DULUX® lamps



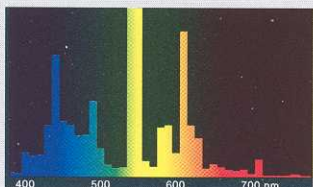
Colour 950 LUMILUX® DE LUXE
Daylight



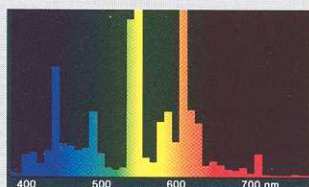
Colour 940 LUMILUX® DE LUXE
Cool White



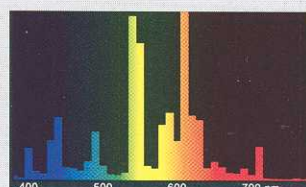
Colour 930 LUMILUX® DE LUXE
Warm White



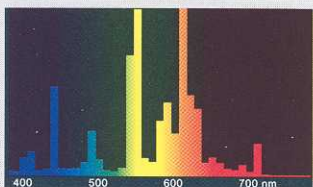
Colour 860 LUMILUX® Daylight



Colour 840 LUMILUX® Cool White



Colour 830 LUMILUX®
Warm White



Colour 827 LUMILUX INTERNA®

Spectral power distribution of OSRAM DULUX® lamps

Visible range from 380 to 780 nm

Vertical scale $\frac{400 \text{ mW}}{1000 \text{ lm} \cdot 10 \text{ nm}}$



Colour appearances and colour rendering properties of fluorescent lamps to DIN 5035

Colour appearances and colour rendering properties of fluorescent lamps to DIN 5035

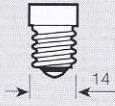
Group 1	1 A	950 LUMILUX® DE LUXE	940 LUMILUX® DE LUXE	930 LUMILUX® DE LUXE
excellent	R_a 90 ... 100	Daylight	Cool White	Warm White
		5400 K	3800 K	3000 K
very good	1 B	860 LUMILUX®	840 LUMILUX®	830 LUMILUX®
	R_a 80 ... 89	Daylight	Cool White	Warm White
		6000 K	4000 K	3000 K
				827 LUMILUX INTERNA®
				2700 K

For an explanation of the colour appearances see page 4.23.

Bases

IEC/EN 60061-1

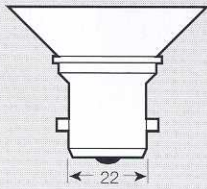
For direct connection to mains



E14
Sheet 7004-23

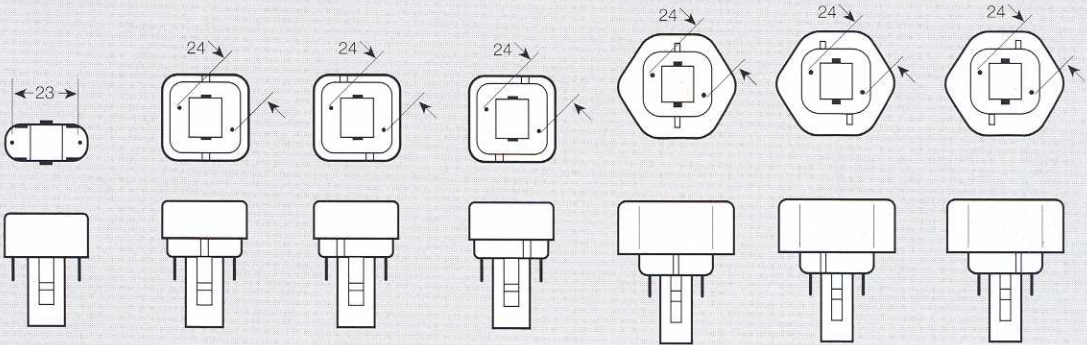


E27
Sheet 7004-21



B22d
Sheet 7004-10

For switch-start operation



G23
Sheet 7004-69

G24d-1
Sheet 7004-78

G24d-2
Sheet 7004-78

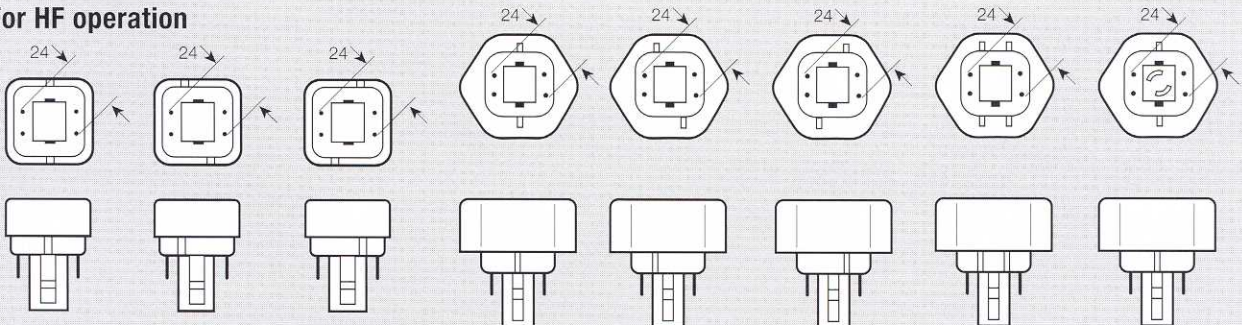
G24d-3
Sheet 7004-78

GX24d-1
Sheet 7004-78

GX24d-2
Sheet 7004-78

GX24d-3
Sheet 7004-78

For HF operation



G24q-1
Sheet 7004-78

G24q-2
Sheet 7004-78

G24q-3
Sheet 7004-78

GX24q-1
Sheet 7004-78

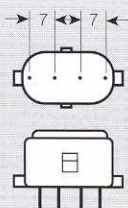
GX24q-2
Sheet 7004-78

GX24q-3
Sheet 7004-78

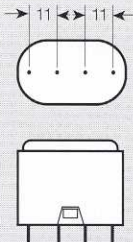
GX24q-4
Sheet 7004-78

GX24q-5

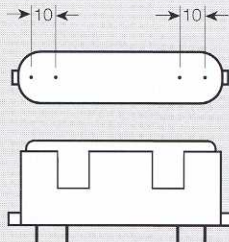
For HF operation



2G7
Sheet 7004-102

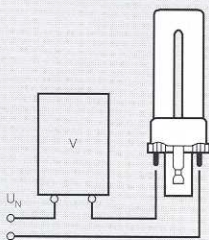


2G11
Sheet 7004-82

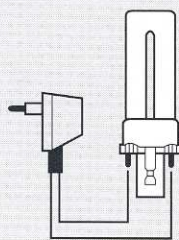


2G10
Sheet 7004-118

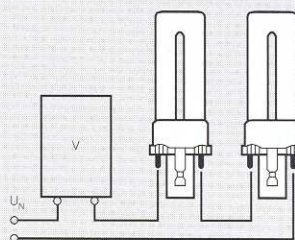
Circuit diagrams for conventional control gear



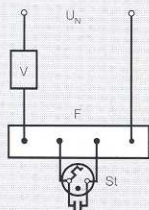
1
Single lamp with control gear
OSRAM DULUX® S 5W, 7W, 9W, 11W
OSRAM DULUX® D 10W, 13W, 18W, 26W
OSRAM DULUX® T 13W, 18W, 26W



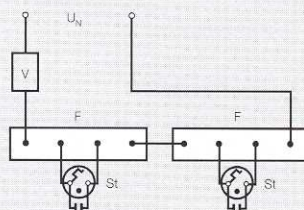
2
Single lamp with plug-in control gear
OSRAM DULUX® S 5W, 7W, 9W, 11W
OSRAM DULUX® D 10W, 13W
OSRAM DULUX® T 13W



3
Series connection with control gear
OSRAM DULUX® S 5W, 7W, 9W



4
Single lamp with starter St 111
or DEOS® St 171
OSRAM DULUX® L 18W, 24W, 36W
OSRAM DULUX® L 18W SP, 24W SP
OSRAM DULUX® F 18W, 24W, 36W



5
Series connection to 230V/240V
with starter St 151
OSRAM DULUX® L 18W
OSRAM DULUX® L 18W SP
OSRAM DULUX® F 18W

F = Four-pin lampholder
St = Starter
 U_N = Supply voltage
V = Control gear

Circuit diagrams for HF operation see Section 9.

