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DULUX® D/E

IMPROVED LIFE TIME & OSRAM SYSTEM + GUARANTEE

DULUX® D/E | QTP-D/E 2x10-13 | OSRAM System+ Guarantee

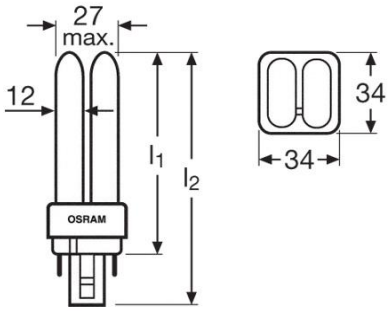
Benefits

- Extremely economical
- Good quality of light
- Excellent luminous flux
- Long service life time[1]
- OSRAM System+ Guarantee LUMILUX® with OSRAM QUICKTRONIC® ECG
- Environmental friendly

Product Features

- Improved average lamp life: up to 20.000 h (with QUICKTRONIC®)
- Good color rendering index 1B (R_a 80…89)
- Improved lumen maintenance
- Dimmable from 3…100%
- For operation on electronic control gear (ECG)
- Available light colors: Cool Daylight (865), Cool White (840), White (835), Warm White (830), Extra Warm White (827)

Dimensions



Description	Base	Max Length L1 [mm]	Max Length L1 IEC [mm]	Max Length L2 [mm]
DULUX® D/E 10 W	G24q-1	87	95	103
DULUX® D/E 13 W	G24q-1	115	130	131
DULUX® D/E 18 W	G24q-2	130	140	146
DULUX® D/E 26 W	G24q-3	149	160	165

[1] Service life time is the mathematical life time (maintenance multiplied with the % of failed lamps e.g. B10) for lamps in an installation after which the installation luminous flux (100 h value) decreased by 30% (decrease in luminous flux and failed lamps) for indoor lighting

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Electrical Data[2]

Lamps operated with HF[3] reference control gear at 25 °C (100 h aged) ambient temperature

DULUX® D/E	Lamp Voltage rated [V]	Lamp Current rated [mA]	Lamp Power rated [W]
10 W	51	190	9.5
13 W	77	165	12.5
18 W	80	210	16.5
26 W	80	300	24.0

Photometrical Data at 25 °C (100 h aged) ambient temperature[4]

DULUX® D/E	Light Color LUMILUX®	Color Rendering Index (CRI), Ra	Lumi-nance (LC[5] 840) [cd/cm²]	Target Color Coordinate X	Target Color Coordinate Y	Nominal Luminous Flux [lm]	Efficacy 25 °C [lm/W]	Energy Efficiency Class
10 W	827 INTERNA	80 … 89	4.0	0.455	0.415	600	63	B
10 W	830 Warm White	80 … 89	4.0	0.440	0.403	600	63	B
10 W	835 White	80 … 89	4.0	0.409	0.394	600	63	B
10 W	840 Cool White	80 … 89	4.0	0.380	0.380	600	63	B
13 W	827 INTERNA	80 … 89	4.0	0.455	0.415	900	72	A
13 W	830 Warm White	80 … 89	4.0	0.440	0.403	900	72	A
13 W	835 White	80 … 89	4.0	0.409	0.394	900	72	A
13 W	840 Cool White	80 … 89	4.0	0.380	0.380	900	72	A
18 W	827 INTERNA	80 … 89	4.5	0.455	0.415	1200	73	B
18 W	830 Warm White	80 … 89	4.5	0.440	0.403	1200	73	B
18 W	835 White	80 … 89	4.5	0.409	0.394	1200	73	B
18 W	840 Cool White	80 … 89	4.5	0.380	0.380	1200	73	B
18 W	865 Cool Daylight	80 … 89	4.5	0.313	0.337	1140	73	B
26 W	827 INTERNA	80 … 89	5.5	0.455	0.415	1800	75	B
26 W	830 Warm White	80 … 89	5.5	0.440	0.403	1800	75	B
26 W	835 White	80 … 89	5.5	0.409	0.394	1800	75	B
26 W	840 Cool White	80 … 89	5.5	0.380	0.380	1800	75	B
26 W	865 Cool Daylight	80 … 89	5.5	0.313	0.337	1710	75	B

[2] According to IEC 60901
[3] High Frequency
[4] Measurement in accordance with IEC 60901, annex C and the relevant annex on rated colour characteristics in IEC 60081.
[5] Light Color

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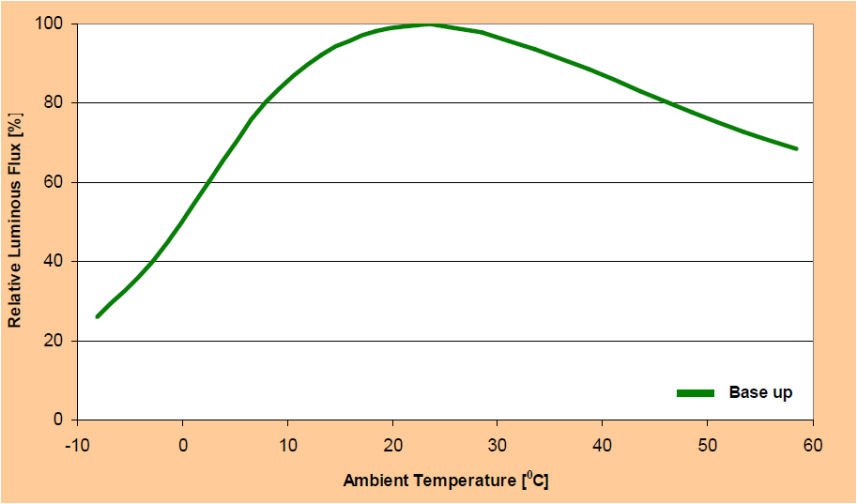
Relative Luminous Flux / Ambient Temperature



For more detailed information please refer to our technical guide – Compact Flourescent Lamps. Free download at www.osram.com

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Lifetime[6]

	ECG[7] preheated IEC switching cycle[8]
B50[9]	20,000 h
Service life time[10]	13,000 h
LLMF[11] 2.000 h	0.90
LLMF 4.000 h	0.84
LLMF 6.000 h	0.82
LLMF 8.000 h	0.81
LLMF 12.000 h	0.78
LLMF 16.000 h	0.78
LLMF 20.000 h	0.76
LSF[12] 2.000 h	0.99
LSF 4.000 h	0.99
LSF 6.000 h	0.99
LSF 8.000 h	0.99
LSF 12.000 h	0.95
LSF 16.000 h	0.80
LSF 20.000 h	0.50

[6] Measurement in accordance with IEC 60901
[7] Electronic Control Gear
[8] Switching cycle 165 min. on, 15 min. off (according to IEC)
[9] Average rated lamp life (B50) is the average value of the life time for an entity of lamps operated under standardized conditions until 50% failure. In other words, this is the operation time at which, for a standardized 3-hour switching cycle (165 minutes on / 15 minutes off (according to IEC)), 50% of a sample population of lamps have failed.
[10] Service life time is the mathematical life time (maintenance multiplied with the % of failed lamps e.g. B10) for lamps in an installation after which the installation luminous flux (100 h value) decreased by 30% (decrease in luminous flux and failed lamps) for indoor lighting
[11] Lamp Lumen Maintenance Factor (Lamp luminous flux in %): Ratio of the luminous flux of a specific quantity of lamps at a defined number of hours of operation to their luminous flux at 100 h
[12] Lamp Survival Factor (Lamp Survival in %): Ratio of the number of electrically intact lamps to the total number of lamps

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Logistic Data

Description	EAN 10	EAN 40	Packaging Unit
DULUX® D/E 10W/827	4050300012124	4050300245423	10
DULUX® D/E 10W/830	4050300419435	4050300419442	10
DULUX® D/E 10W/835	4050300450933	4050300450940	10
DULUX® D/E 10W/840	4050300017587	4050300251172	10
DULUX® D/E 13W/827	4050300012131	4050300245430	10
DULUX® D/E 13W/830	4050300389059	4050300389066	10
DULUX® D/E 13W/835	4050300450957	4008321577894	10
DULUX® D/E 13W/840	4050300017594	4050300450964	10
DULUX® D/E 18W/827	4050300012148	4050300251189	10
DULUX® D/E 18W/830	4050300327211	4050300962009	10
DULUX® D/E 18W/835	4050300450971	4050300325996	10
DULUX® D/E 18W/840	4050300017617	4050300962054	10
DULUX® D/E 18W/865	4050300564944	4008321577917	10
DULUX® D/E 26W/827	4050300012230	4050300327228	10
DULUX® D/E 26W/830	4050300327235	4050300962047	10
DULUX® D/E 26W/835	4050300450995	4050300450988	10
DULUX® D/E 26W/840	4050300020303	4050300326030	10
DULUX® D/E 26W/865	4008321185877	4050300962030	10

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Lamp/ECG System Combination

Lamp	ECG	EAN 10 ECG	Luminous flux @25°C [lm]	System power [W]	I_N [A]	Power Factor ECG [λ]	System luminous efficacy [lm/W]	Length [mm]	Width [mm]	Height [mm]	Distance between holes [mm]	T_a [°C]
DULUX® D/E 10 W	QTP-D/E 1x10-13	4008321181572	600	11.5	0.050	0.95	52	93	58	1200	17.5	-20 … +50
	QTP-D/E 2x10-13	4008321181596	1200	21.0	0.090	0.95	57	123	79	33	129.5	-20 … +50
	DT-D/E 10-13/220-240 L	4008321181497	600	12.0	0.090	0.6c	50	95	40	64	30.0	-15 … +50
	DT-D/E 10-13/220-240 C	4008321181510	600	12.0	0.090	0.6c	50	68	Ø = 59			-15 … +50
	DT-D/E 10-13/220-240 P	4008321181534	600	12.0	0.090	0.6c	50	72	Ø = 59			-15 … +50
	QT-ECO 1x4-16/220-240 S	4050300638584	600	11.5	0.080	0.6c	52	80	40	22	72-75	-15 … +50
	QT-ECO 1x4-16/220-240 L	4050300660370	600	11.5	0.080	0.6c	52	150	22	22	140.0	-15 … +50
	QT-ECO 2x5-11/220-240 S	4050300821504	1200	20.0	0.140	0.6c	60	80	40	22	72-75	-15 … +50
DULUX® D/E 13 W	QTP-D/E 1x10-13	4008321181572	900	15.0	0.070	0.95	60	93	58	29	96.0	-20 … +50
	QTP-D/E 2x10-13	4008321181596	1800	29.0	0.130	0.95	62	123	79	33	129.5	-20 … +50
	DT-D/E 10-13/220-240 L	4008321181497	900	15.5	0.110	0.6c	58	95	40	64	30.0	-15 … +50
	DT-D/E 10-13/220-240 C	4008321181510	900	15.5	0.110	0.6c	58	68	Ø = 59			-15 … +50
	DT-D/E 10-13/220-240 P	4008321181534	900	15.5	0.110	0.6c	58	72	Ø = 59			-15 … +50
	QT-ECO 1x4-16/220-240 S	4050300638584	800	14.0	0.100	0.6c	58	80	40	22	72-75	-15 … +50
	QT-ECO 1x4-16/220-240 L	4050300660370	800	14.0	0.100	0.6c	58	150	22	22	140.0	-15 … +50
DULUX® D/E 18 W	QTi DALI-T/E 1x18-57 DIM	4008321060808	1200	20.0	0.090	0.95	60	123	79	33	129.5	+10…+50
	QTi DALI-T/E 2x18-42 DIM	4008321060822	2400	38.0	0.170	0.95	63	123	79	33	129.5	+10…+50
	QTi-T/E 1x18-57 DIM	4008321060860	1200	20.0	0.090	0.95	60	123	79	33	129.5	+10…+50
	QTi-T/E 2x18-42 DIM	4008321060846	2400	38.0	0.170	0.95	63	123	79	33	129.5	+10…+50
	QTP T/E 1x18, 2x18 (1x)	4008321537065	1200	19.0	0.090	0.9c	63	103	67	31	110.0	-20 … +50
	QTP T/E 1x18.. 2x18 (2x)		2400	36.0	0.160	0.98	67					
	QTP-T/E 1x18	4008321181701	1200	19.0	0.085	0.98	63	103	67	31	110.0	-20 … +50
	QTP-T/E 2x18	4008321181619	2400	38.0	0.170	0.98	63	123	79	33	129.5	-20 … +50
	DT-T/E 18/230-240 L	4050300406404	1200	17.5	0.100	0.85-0.9c	69	95	40	64	30.0	-20 … +50
	DT-T/E 18/230-240 C	4050300421384	1200	17.5	0.100	0.85-0.9c	69	68	Ø = 59			-20 … +50
	DT-T/E 18/230-240 P	4050300421421	1200	17.5	0.100	0.85-0.9c	69	72	Ø = 59			-20 … +50
	QT-ECO 1x18-21/220-240 S	4050300794907	1150	19.0	0.140	0.6c	61	80	40	22	72-75	-15 … +50
	QT-ECO T/E 2x18/220-240	4050300803982	2300	36.0	0.180	0.95	64	150	41	28	140.0	-15 … +50

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Lamp	ECG	EAN 10 ECG	Luminous flux @25°C [lm]	System power [W]	I_N [A]	Power Factor ECG [λ]	System luminous efficacy [lm/W]	Length [mm]	Width [mm]	Height [mm]	Distance between holes [mm]	T_a [°C]
DULUX® D/E 26W	QTi DALI-T/E 1x18-57 DIM	4008321060808	1800	29.0	0.130	0.97	62	123	79	33	129.5	+10…+50
	QTi DALI-T/E 2x18-42 DIM	4008321060822	3600	56.0	0.250	0.98	64	123	79	33	129.5	+10…+50
	QTi-T/E 1x18-57 DIM	4008321060860	1800	29.0	0.130	0.97	62	123	79	33	129.5	+10…+50
	QTi-T/E 2x18-42 DIM	4008321060846	3600	56.0	0.250	0.98	64	123	79	33	129.5	+10…+50
	QTP-M 1x26-42	4008321329134	1750	27.0	0.120	0.95	65	103	67	31	110.0	-20 … +50
	QTP-M 2x26-32	4008321329158	3500	53.0	0.240	0.97	66	123	79	33	129.5	-20 … +50
	QTP-M 2x26-42	4008321110022	3600	54.0	0.230	0.97	67	123	79	33	129.5	-20 … +50
	QTP-T/E 1x26-42, 2x26 (1x)	4008321537089	1750	28.0	0.130	0.95	63	103	67	31	110.0	-20 … +50
	QTP-T/E 1x26-42. 2x26 (2x)		3500	54.0	0.240	0.98	65					
	QT-ECO 1x26/220-240 S	4008321065971	1600	23.5	0.180	0.6c	68	80	40	22	72-75	-15 … +50
	QT-ECO T/E 2x26/220-240	4050300804002	3500	53.0	0.250	0.95	66	150	41	28	140.0	-15 … +50

For more information on ECG refer to http://www.osram.com/ecg

For more information on System Guarantee refer to http://www.osram.com/guarantee

In case of lamp breakage: www.osram.com/brokenlamp

For more information technical Information see Technical guide. Free download at www.osram.com

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