



Compact Fluorescent Lamps



Compact Fluorescent Lamps
with Integral Starter For Conventional Control Gear (CCG) 74-75



Compact Fluorescent Lamps
For External Starters, Conventional and Electronic Control Gear (ECG) and Dimmer Systems 76-77



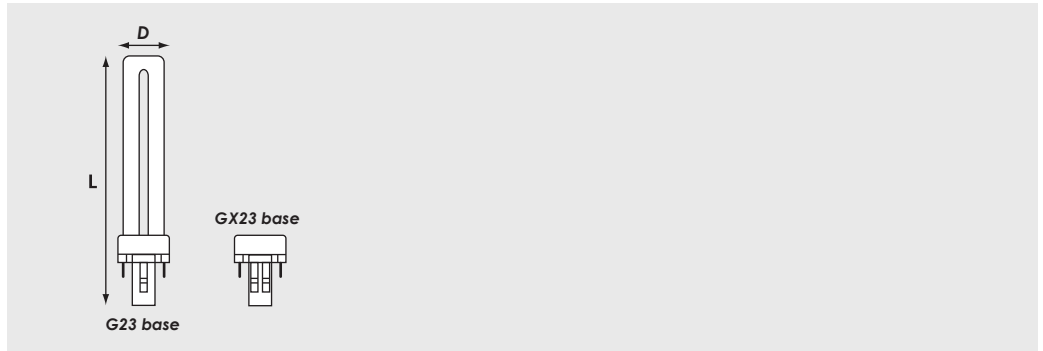
Compact Fluorescent Lamps
FLAT Lamps for External Starters, Conventional and Electronic Control Gear 78



Compact Fluorescent Lamps
2D shape, Premium Tri-Phosphors 79

Compact Fluorescent Lamps

with Integral Starter For Conventional Control Gear (CCG)

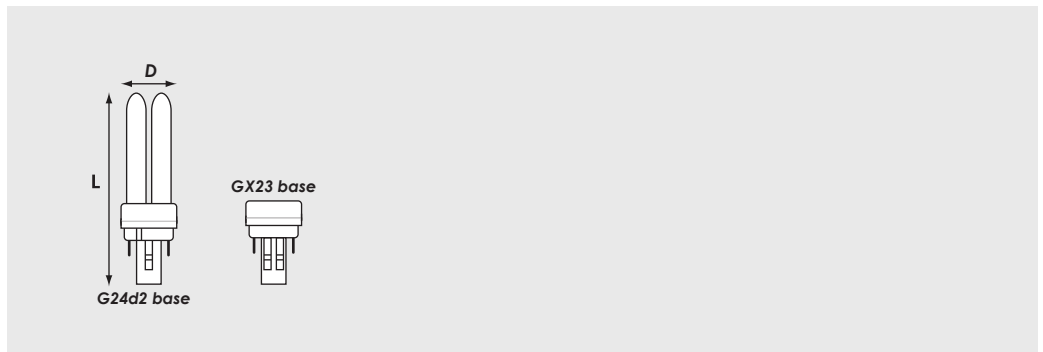


Lamp Code	Voltage (V)	Wattage (W)	CRI (Ra)	Base	Diameter D (mm)	Length L (mm)	Lumen	Energy Efficiency Class
FLS-5W	110-130 / 220-240	5	80-89, 1B	G23	32	108	250	B
FLS-7W	110-130 / 220-240	7	80-89, 1B	G23	32	137	400	B
FLS-9W	110-130 / 220-240	9	80-89, 1B	G23	32	167	605	A
FLS-11W	220 – 240	11	80-89, 1B	G23	32	237	905	A
North American System								
F13TT	110 – 130	13	80-89, 1B	GX23	32	185	905	

- Extremely slim with small dimensions
- 10 times the life and only 20% of power consumption of ordinary light bulbs
- Excellent colour rendition 80-89, 1B
- Colours available:
 - 827 = 2700K
 - 830 = 3000K
 - 835 = 3500K
 - 840 = 4200K
 - 865 = 6500K



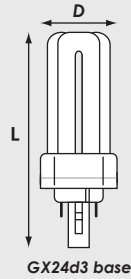
Comply to EU Ecodesign Requirements - Commission Regulation No. 245/2009



Lamp Code	Voltage (V)	Wattage (W)	CRI (Ra)	Base	Diameter D (mm)	Length L (mm)	Lumen	Energy Efficiency Class
FLD-10W	220 – 240	10	80-89, 1B	G24d1	41	110	600	B
FLD-13W	220 – 240	13	80-89, 1B	G24d1	41	138	900	A
FLD-18W	220 – 240	18	80-89, 1B	G24d2	41	153	1210	B
FLD-26W	220 – 240	26	80-89, 1B	G24d3	41	172	1800	B
North American System								
F9DTT	110 – 130	9	80-89, 1B	G23-2	41	109	600	
F13DTT	110 – 130	13	80-89, 1B	GX23-2	41	120	900	

Compact Fluorescent Lamps

with Integral Starter For Conventional Control Gear (CCG)

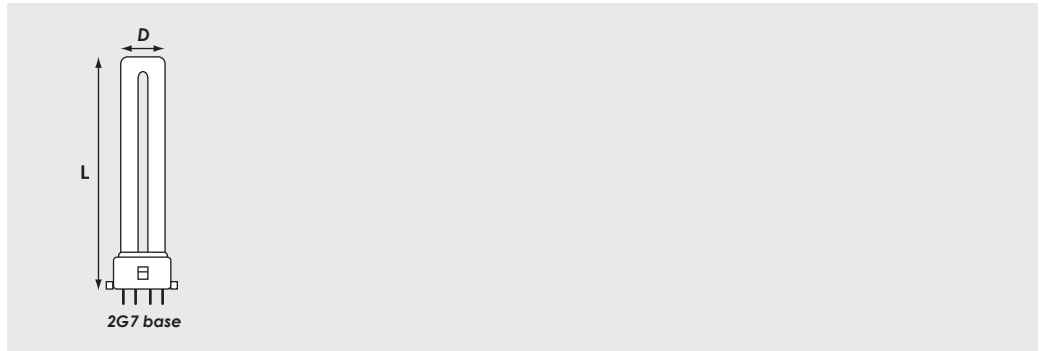


- Extremely slim with small dimensions
- 10 times the life and only 20% of power consumption of ordinary light bulbs
- Excellent colour rendition 80-89, 1B
- Colours available:

827	=	2700K
830	=	3000K
835	=	3500K
840	=	4200K
865	=	6500K
- Comply to EU Ecodesign Requirements - Commission Regulation No. 245/2009

Lamp Code	Voltage (V)	Wattage (W)	CRI (Ra)	Base	Diameter D (mm)	Length L (mm)	Lumen	Energy Efficiency Class
FLT-13W	220 – 240	13	80-89, 1B	GX24d1	49	113	900	A
FLT-18W	220 – 240	18	80-89, 1B	GX24d2	49	123	1210	B
FLT-26W	220 – 240	26	80-89, 1B	GX24d3	49	138	1800	B

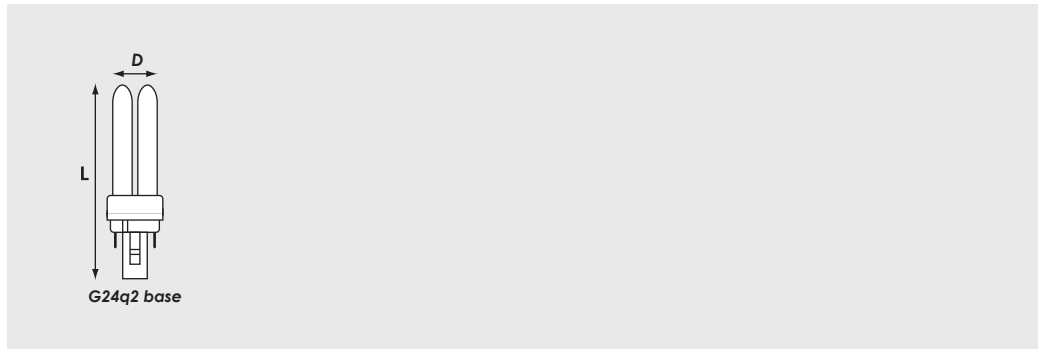
Compact Fluorescent Lamps For External Starters, Conventional and Electronic Control Gear (ECG) and Dimmer Systems



Lamp Code	Wattage (W)	CRI (Ra)	Base	Diameter D (mm)	Length (w/o pins) L (mm)	Lumen (lm)	Energy Efficiency Class
FLS/E-5W	5	80-89, 1B	2G7	37	85	250	B
FLS/E-7W	7	80-89, 1B	2G7	37	115	400	B
FLS/E-9W	9	80-89, 1B	2G7	37	145	605	A
FLS/E-11W	11	80-89, 1B	2G7	37	214	905	A

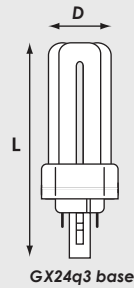


- Extremely slim with small dimensions
- 10 times the life and only 20% of power consumption of ordinary light bulbs
- Excellent color rendition
- Colours available:
 - 827 = 2700K
 - 830 = 3000K
 - 835 = 3500K
 - 840 = 4200K
 - 865 = 6500K
- Comply to EU Ecodesign Requirements - Commission Regulation No. 245/2009



Lamp Code	Wattage (W)	CRI (Ra)	Base	Diameter D (mm)	Length L (mm)	Lumen (lm)	Energy Efficiency Class
FLD/E-10W	10	80-89, 1B	G24q1	41	103	600	B
FLD/E-13W	13	80-89, 1B	G24q1	41	131	900	A
FLD/E-18W	18	80-89, 1B	G24q2	41	146	1210	B
FLD/E-26W	26	80-89, 1B	G24q3	41	165	1800	B

Compact Fluorescent Lamps For External Starters, Conventional and Electronic Control Gear (ECG) and Dimmer Systems



Lamp Code	Wattage (W)	CRI (Ra)	Base	Diameter D (mm)	Length L (mm)	Lumen (lm)	Energy Star
FLT/E-13W	13	80-89, 1B	GX24q1	49	106	900	A
FLT/E-18W	18	80-89, 1B	GX24q2	49	116	1210	B
FLT/E-26W	26	80-89, 1B	GX24q3	49	131	1800	B
FLT/E-32W	32	80-89, 1B	GX24q3	49	147	2400	B
FLT/E-42W	42	80-89, 1B	GX24q4	49	168	3200	B

- Extremely slim with small dimensions
- Eight times the life and only 20% of power consumption of ordinary light bulbs
- Excellent color rendition
- Colours available:
 - 827 = 2700K
 - 830 = 3000K
 - 835 = 3500K
 - 840 = 4200K
 - 865 = 6500K



Comply to EU Ecodesign Requirements - Commission Regulation No. 245/2009

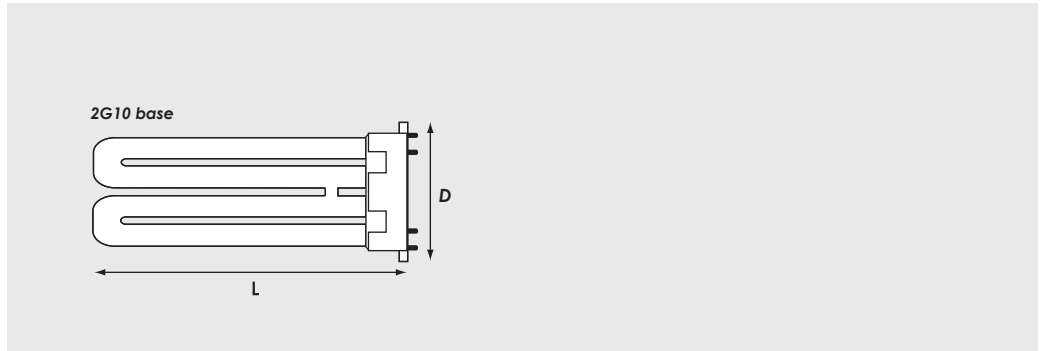


Lamp Code	Wattage (W)	CRI (Ra)	Base	Diameter D (mm)	Length (w/o pins) L (mm)	Lumen (lm)	Energy Star
FLL-18W	18	80-89, 1B	2G11	43	217	1210	B
FLL-24W	24	80-89, 1B	2G11	43	317	1800	B
FLL-36W	36	80-89, 1B	2G11	43	411	2920	A
FLL-L-34W	34	80-89, 1B	2G11	43	533	2790	A
FLL-L-36W	36	80-89, 1B	2G11	43	533	2920	A
FLL-40W*	40	80-89, 1B	2G11	43	533	3450	A
FLL-55W*	55	80-89, 1B	2G11	43	533	4800	A
North American Rapid Start ECG only					MOL (w/pins)		
FLL-18W/RS	18	80-89, 1B	2G11	43	10.5 in.	1210	
FLL-40W/RS	40	80-89, 1B	2G11	43	20.5 in.	3450	

* for ECG operation only

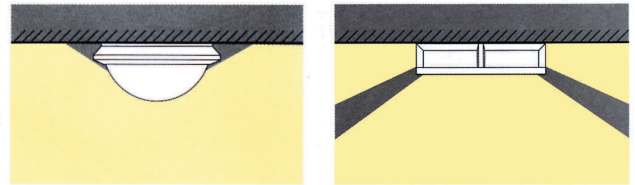
Compact Fluorescent Lamps FLAT Lamps for External Starters

Conventional and Electronic Control Gear



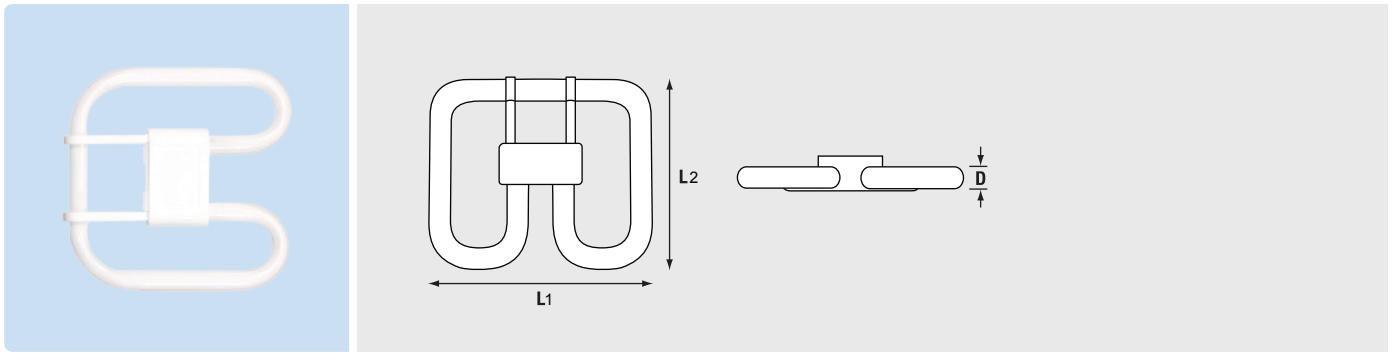
- Flat compact fluorescent lamps with high luminous efficacy
- Eight times the life and only 20% of power consumption of ordinary light bulbs
- Use with easily available conventional or electronic control gear common for T8 and FLL(2G11 base) lamps
- Two 18W lamps can be used in tandem with one 36W conventional ballast on 220-240V circuitry, savings on circuitry wiring costs
- Ideal for compact luminaries, especially for square modular, surface-mounted or recessed luminaries, low profile wall and ceiling luminaries, downlights and uplights.
- Excellent colour rendition
- Colours available:

827	=	2700K
830	=	3000K
840	=	4200K
865	=	6500K
- **Comply to EU Ecodesign Requirements**
- Commission Regulation No. 245/2009



Lamp Code	Wattage (W)	CRI (Ra)	Base	Diameter D (mm)	Length (w/o pins) L (mm)	Lumen (lm)	Energy Efficiency Class
FLF-18W/827	18	80-89, 1B	2G10	90	122	1100	B
FLF-18W/830	18	80-89, 1B	2G10	90	122	1100	B
FLF-18W/840	18	80-89, 1B	2G10	90	122	1100	B
FLF-18W/865	18	80-89, 1B	2G10	90	122	1000	B
FLF-24W/827	24	80-89, 1B	2G10	90	165	1705	B
FLF-24W/830	24	80-89, 1B	2G10	90	165	1705	B
FLF-24W/840	24	80-89, 1B	2G10	90	165	1705	B
FLF-24W/865	24	80-89, 1B	2G10	90	165	1535	B
FLF-36W/827	36	80-89, 1B	2G10	90	217	2810	B
FLF-36W/830	36	80-89, 1B	2G10	90	217	2810	B
FLF-36W/840	36	80-89, 1B	2G10	90	217	2810	B
FLF-36W/865	36	80-89, 1B	2G10	90	217	2530	B

Compact Fluorescent Lamps 2D shape



- Coated with high efficiency tri-phosphors with high CRI Ra 80-89
- Tri-Phosphor colours:

827	=	Incand. Warm White	2700K
835	=	White	3500K
840	=	Cool White	4200K
860/865	=	Daylight	6000/6500K
- Comply to EU Ecodesign Requirements - Commission Regulation No. 245/2009

Lamp Code	Wattage (W)	Colour Appearance	CRI (Ra)	Length L ₁ (mm)	Length L ₂ (mm)	Tube Diameter D (mm)	Lumen (lm)	Energy Efficiency Class
GR10q-4 (4-pin base) For ECG operation, with external starter if use with CCG								
F10/2D/827/4P	10	Incand. Warm White	80-89, 1B	92	95	14	650	A
F10/2D/835/4P	10	White	80-89, 1B	92	95	14	650	A
F10/2D/840/4P	10	Cool White	80-89, 1B	92	95	14	650	A
F16/2D/827/4P	16	Incand. Warm White	80-89, 1B	138	141	15	1056	B
F16/2D/835/4P	16	White	80-89, 1B	138	141	15	1056	B
F16/2D/840/4P	16	Cool White	80-89, 1B	138	141	15	1056	B
F21/2D/827/4P	21	Incand. Warm White	80-89, 1B	138	141	15	1350	B
F21/2D/835/4P	21	White	80-89, 1B	138	141	15	1350	B
F21/2D/840/4P	21	Cool White	80-89, 1B	138	141	15	1350	B
F28/2D/827/4P	28	Incand. Warm White	80-89, 1B	205	207	19	2050	B
F28/2D/835/4P	28	White	80-89, 1B	205	207	19	2050	B
F28/2D/840/4P	28	Cool White	80-89, 1B	205	207	19	2050	B
F38/2D/827/4P	38	Incand. Warm White	80-89, 1B	205	207	19	2850	B
F38/2D/835/4P	38	White	80-89, 1B	205	207	19	2850	B
F38/2D/840/4P	38	Cool White	80-89, 1B	205	207	19	2850	B
GRY10q-3 (4-pin base) For ECG operation, with external starter if use with CCG								
F55/2D/827/4P	55	Incand. Warm White	80-89, 1B	205	207	19	4000	B
F55/2D/835/4P	55	White	80-89, 1B	205	207	19	4000	B
F55/2D/840/4P	55	Cool White	80-89, 1B	205	207	19	4000	B
GR8q-2 (2-pin base), with integral starter for CCG								
F16/2D/827/2P	16	Incand. Warm White	80-89, 1B	138	141	15	1056	B
F16/2D/835/2P	16	White	80-89, 1B	138	141	15	1056	B
F16/2D/840/2P	16	Cool White	80-89, 1B	138	141	15	1056	B
F28/2D/827/2P	28	Incand. Warm White	80-89, 1B	205	207	19	2050	B
F28/2D/835/2P	28	White	80-89, 1B	205	207	19	2050	B
F28/2D/840/2P	28	Cool White	80-89, 1B	205	207	19	2050	B