



The world's most efficient fluorescent lighting

MASTER TL5 High Efficiency Eco

This extremely efficient TL5 lamp (tube diameter 16 mm) saves considerable energy by simple lamp-for-lamp replacement. The TL5 HE Eco lamp offers excellent lumen maintenance and color rendering. Application areas vary from offices and industry to schools and retail environments.

Benefits

- Up to 10 % energy saving with simply changing the lamp
- The same quality of light as compared with MASTER TL5 HE lamps
- All benefits of regular TL5 lamps

Features

- High lamp efficacies up to 114 lm/W
- Up to 10% power reduction in comparison with standard MASTER TL5 HE lamps
- Fluorescent Super 80 light quality

Application

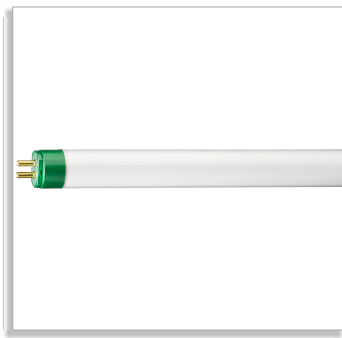
- Ideally suited for recessed, surface-mounted and suspended luminaires e.g. in offices, shops, schools, public buildings and industry (low ceiling), wherever high-quality, energy-efficient lighting is required

Warnings and Safety

- Energy reduction is only achieved with current-controlled gear
- The lamps operate perfectly with power-controlled gear, but in that case give more light output instead of using less energy
- Depending on the technical design of the ballast the increase of light output can be up to 10 % with a fully power-controlled ballast

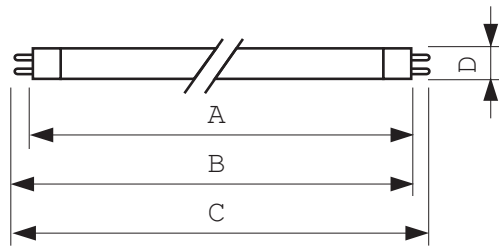


Related products



G5, T5

Dimensional drawing



G5, T5

Product	A (Max)	B (Min)	B (Max)	C (Max)	D (Max)
TL5 HE Eco 13=14W/830	549.0	553.7	556.1	563.2	17
TL5 HE Eco 13=14W/840	549.0	553.7	556.1	563.2	17
TL5 HE Eco 13=14W/865	549.0	553.7	556.1	563.2	17
TL5 HE Eco 25=28W/830	1149.0	1153.7	1156.1	1163.2	17
TL5 HE Eco 25=28W/840	1149.0	1153.7	1156.1	1163.2	17
TL5 HE Eco 25=28W/865	1149.0	1153.7	1156.1	1163.2	17
TL5 HE Eco 32=35W/830	1449.0	1453.7	1456.1	1463.2	17
TL5 HE Eco 32=35W/840	1449.0	1453.7	1456.1	1463.2	17
TL5 HE Eco 32=35W/865	1449.0	1453.7	1456.1	1463.2	17

General Characteristics (1/2)

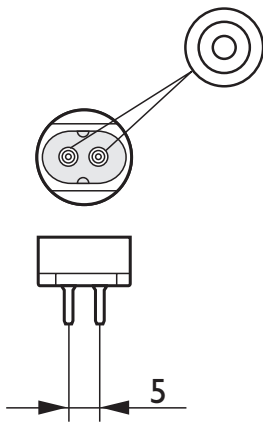
Order code	Full product name	Bulb	Cap-Base	Life to 50% fail Preheat EL,3h	Life to 10% fail Preheat EL,3h	LSF HF Preheat 20000h Rated,3h	LSF HF Preheat 12000h Rated,3h	LSF HF Preheat 8000h Rated,3h	LSF HF Preheat 6000h Rated,3h	LSF HF Preheat 4000h Rated,3h	LSF HF Preheat 2000h Rated,3h
927989883032	MASTER TL5 HE Eco 13=14W/830 1SL	T5	G5	25000	21000	92	95	97	98	98	99
927989884032	MASTER TL5 HE Eco 13=14W/840 1SL	T5	G5	25000	21000	92	95	97	98	98	99
927989886532	MASTER TL5 HE Eco 13=14W/865 1SL	T5	G5	25000	21000	92	95	97	98	98	99
927990983032	MASTER TL5 HE Eco 25=28W/830 1SL	T5	G5	25000	21000	92	95	97	98	98	99
927990984032	MASTER TL5 HE Eco 25=28W/840 1SL	T5	G5	25000	21000	92	95	97	98	98	99
927990986532	MASTER TL5 HE Eco 25=28W/865 1SL	T5	G5	25000	21000	92	95	97	98	98	99
927991183032	MASTER TL5 HE Eco 32=35W/830 1SL	T5	G5	25000	21000	92	95	97	98	98	99
927991184032	MASTER TL5 HE Eco 32=35W/840 1SL	T5	G5	25000	21000	92	95	97	98	98	99
927991186532	MASTER TL5 HE Eco 32=35W/865 1SL	T5	G5	25000	21000	92	95	97	98	98	99

General Characteristics (2/2)

Order code	Full product name	LSF HF Preheat 16000h Rated,3h
927989883032	MASTER TL5 HE Eco 13=14W/830 1SL	95
927989884032	MASTER TL5 HE Eco 13=14W/840 1SL	95
927989886532	MASTER TL5 HE Eco 13=14W/865 1SL	95
927990983032	MASTER TL5 HE Eco 25=28W/830 1SL	95
927990984032	MASTER TL5 HE Eco 25=28W/840 1SL	95

Order code	Full product name	LSF HF Preheat 16000h Rated,3h
927990986532	MASTER TL5 HE Eco 25=28W/865 1SL	95
927991183032	MASTER TL5 HE Eco 32=35W/830 1SL	95
927991184032	MASTER TL5 HE Eco 32=35W/840 1SL	95
927991186532	MASTER TL5 HE Eco 32=35W/865 1SL	95

Installation diagrams



G5

Light Technical Characteristics (1/2)

Order code	Full product name	Colour Code	Colour Designation	Chromaticity Coordinate X	Chromaticity Coordinate Y	Colour Rendering Index	Colour Temperature	Luminous Flux Lamp EL 35°C	Lum Efficacy Rated HF 25°C	Lum Efficacy Rated HF 35°C	LLMF HF 20000h Rated
927989883032	MASTER TL5 HE Eco 13=14W/830 1SL	830	Warm white	444	409	85	3000	1350	97	108	88
927989884032	MASTER TL5 HE Eco 13=14W/840 1SL	840	Cool White	383	386	85	4000	1350	97	108	88
927989886532	MASTER TL5 HE Eco 13=14W/865 1SL	865	Cool Daylight	316	336	85	6500	1260	88	96	88
927990983032	MASTER TL5 HE Eco 25=28W/830 1SL	830	Warm white	444	409	85	3000	2900	97	114	88
927990984032	MASTER TL5 HE Eco 25=28W/840 1SL	840	Cool White	383	386	85	4000	2900	97	114	88

Order code	Full product name	Colour Code	Colour Designation	Chromaticity Coordinate X	Chromaticity Coordinate Y	Colour Rendering Index	Colour Temperature	Luminous Flux Lamp EL 35°C	Lum Efficacy Rated HF 25°C	Lum Efficacy Rated HF 35°C	LLMF HF 20000h Rated
927990986532	MASTER TL5 HE Eco 25=28W/86 5 1SL	865	Cool Daylight	316	336	85	6500	2700	89	106	88
927991183032	MASTER TL5 HE Eco 32=35W/83 0 1SL	830	Warm white	444	409	85	3000	3650	97	114	88
927991184032	MASTER TL5 HE Eco 32=35W/84 0 1SL	840	Cool White	383	386	85	4000	3650	97	114	88
927991186532	MASTER TL5 HE Eco 32=35W/86 5 1SL	865	Cool Daylight	316	336	85	6500	3400	89	109	88

Light Technical Characteristics (2/2)

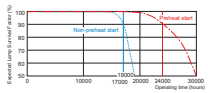
Order code	Full product name	LLMF HF 16000h Rated	LLMF HF 12000h Rated	LLMF HF 8000h Rated	LLMF HF 6000h Rated	LLMF HF 4000h Rated	LLMF HF 2000h Rated	Luminous Flux EL 25°C, Rated	Luminous Flux EL 25°C, Nominal	Design Temperature
927989883032	MASTER TL5 HE Eco 13=14W/830 1SL	90	91	93	94	95	96	1150	1150	35
927989884032	MASTER TL5 HE Eco 13=14W/840 1SL	90	91	93	94	95	96	1150	1150	35
927989886532	MASTER TL5 HE Eco 13=14W/865 1SL	90	91	93	94	95	96	1050	1050	35
927990983032	MASTER TL5 HE Eco 25=28W/830 1SL	90	91	93	94	95	96	2450	2450	35
927990984032	MASTER TL5 HE Eco 25=28W/840 1SL	90	91	93	94	95	96	2450	2450	35
927990986532	MASTER TL5 HE Eco 25=28W/865 1SL	90	91	93	94	95	96	2250	2250	35
927991183032	MASTER TL5 HE Eco 32=35W/830 1SL	90	91	93	94	95	96	3100	3100	35
927991184032	MASTER TL5 HE Eco 32=35W/840 1SL	90	91	93	94	95	96	3100	3100	35
927991186532	MASTER TL5 HE Eco 32=35W/865 1SL	90	91	93	94	95	96	2850	2850	35

Electrical Characteristics

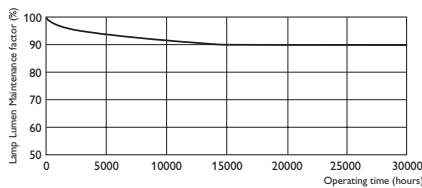
Order code	Full product name	Lamp Wattage	Dimmable	Lamp Current EL 35°C	Lamp Voltage EL 35°C	Lamp Current EL 25°C	Lamp Voltage EL 25°C	Lamp Wattage EL 35°C	Lamp Wattage EL 25°C, Rated	Lamp Wattage EL 25°C, Nominal
927989883032	MASTER TL5 HE Eco 13=14W/830 1SL	13	yes	0.170	75	0.185	69	12.5	12.6	12
927989884032	MASTER TL5 HE Eco 13=14W/840 1SL	13	yes	0.170	75	0.185	70	12.5	12.6	12
927989886532	MASTER TL5 HE Eco 13=14W/865 1SL	13	yes	0.170	75	0.185	69	12.5	12.6	12
927990983032	MASTER TL5 HE Eco 25=28W/830 1SL	25	yes	0.170	154	0.180	143	25.5	25.3	25

Order code	Full product name	Lamp Wattage	Dimmable	Lamp Current EL 35°C	Lamp Voltage EL 35°C	Lamp Current EL 25°C	Lamp Voltage EL 25°C	Lamp Wattage EL 35°C	Lamp Wattage EL 25°C, Rated	Lamp Wattage EL 25°C, Nominal
927990984032	MASTER TL5 HE Eco 25=28W/840 1SL	25	yes	0.170	154	0.180	143	25.5	25.3	25
927990986532	MASTER TL5 HE Eco 25=28W/865 1SL	25	yes	0.170	154	0.180	143	25.5	25.3	25
927991183032	MASTER TL5 HE Eco 32=35W/830 1SL	32	yes	0.170	195	0.170	188	32	32.0	32
927991184032	MASTER TL5 HE Eco 32=35W/840 1SL	32	yes	0.170	195	0.170	188	32	32.0	32
927991186532	MASTER TL5 HE Eco 32=35W/865 1SL	32	yes	0.170	190	0.170	188	32	32.0	32

Performance diagrams



Life Expectancy 3h cycle



TL5 High Efficiency Eco

Environmental Characteristics

Order code	Full product name	Energy Efficiency Label (EEL)	Mercury (Hg) Content
927989883032	MASTER TL5 HE Eco 13=14W/830 1SL	A	1.4
927989884032	MASTER TL5 HE Eco 13=14W/840 1SL	A	1.4
927989886532	MASTER TL5 HE Eco 13=14W/865 1SL	A	1.4
927990983032	MASTER TL5 HE Eco 25=28W/830 1SL	A	1.4
927990984032	MASTER TL5 HE Eco 25=28W/840 1SL	A	1.4
927990986532	MASTER TL5 HE Eco 25=28W/865 1SL	A	1.4
927991183032	MASTER TL5 HE Eco 32=35W/830 1SL	A	1.4
927991184032	MASTER TL5 HE Eco 32=35W/840 1SL	A	1.4
927991186532	MASTER TL5 HE Eco 32=35W/865 1SL	A	1.4

Measuring Conditions

Order code	Full product name	Calibration Current	HF Generator Rated Voltage	Resistor
927989883032	MASTER TL5 HE Eco 13=14W/830 1SL	0.170	160	500
927989884032	MASTER TL5 HE Eco 13=14W/840 1SL	0.170	160	500
927989886532	MASTER TL5 HE Eco 13=14W/865 1SL	0.170	160	500
927990983032	MASTER TL5 HE Eco 25=28W/830 1SL	0.170	312	950
927990984032	MASTER TL5 HE Eco 25=28W/840 1SL	0.170	312	950
927990986532	MASTER TL5 HE Eco 25=28W/865 1SL	0.170	312	950
927991183032	MASTER TL5 HE Eco 32=35W/830 1SL	170	394	1200
927991184032	MASTER TL5 HE Eco 32=35W/840 1SL	170	394	1200
927991186532	MASTER TL5 HE Eco 32=35W/865 1SL	170	394	1200