



The world's most efficient and brightest fluorescent lighting

MASTER TL5 High Output Eco

This extremely efficient TL5 lamp (tube diameter 16 mm) saves considerable energy by simple lamp-for-lamp replacement. The TL5 HO Eco lamp is optimized for installations requiring high light output and 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 HO lamps
- All benefits of regular TL5 lamps

Features

- High lamp efficacies up to 109 lm/W
- Up to 10% power reduction in comparison with standard MASTER TL5 HO lamps

Application

- Offers very economic solutions for high-ceiling lighting in shops, industry and department stores
- The high luminous flux gives optimal results in aesthetic pendants and furniture-mounted luminaires in offices, workshops, restaurants and reception areas

Warnings and Safety

- A reduction in energy consumption is only achieved with current-controlled gear.
- The lamps operate perfectly with power-controlled gear, but in that case the light output can be up to 10% higher.
- A lamp breaking is extremely unlikely to have any impact on your health. If a lamp breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves. Put them in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner.

MASTER TL5 High Output Eco

Versions



G5, T5

Dimensional drawing

Product	D (max)	A (max)	B (max)	B (min)	C (max)
MASTER TL5 HO Eco 20=24W/830 UNP/40	17 mm	549.0 mm	556.1 mm	553.7 mm	563.2 mm
MASTER TL5 HO Eco 73=80W/830 UNP/40	17 mm	1449.0 mm	1456.1 mm	1453.7 mm	1463.2 mm
MASTER TL5 HO Eco 45=49W/840 UNP/40	17 mm	1449.0 mm	1456.1 mm	1453.7 mm	1463.2 mm
MASTER TL5 HO Eco 50=54W/830 UNP/40	17 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm
MASTER TL5 HO Eco 45=49W/830 UNP/40	17 mm	1449.0 mm	1456.1 mm	1453.7 mm	1463.2 mm
MASTER TL5 HO Eco 50=54W/840 UNP/40	17 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm
MASTER TL5 HO Eco 20=24W/840 UNP/40	17 mm	549.0 mm	556.1 mm	553.7 mm	563.2 mm
MASTER TL5 HO Eco 73=80W/840 UNP/40	17 mm	1449.0 mm	1456.1 mm	1453.7 mm	1463.2 mm

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Approval and Application

Energy Efficiency Label (EEL)	A+
Mercury (Hg) Content (Nom)	1.4 mg

Controls and Dimming

Dimmable	Yes
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General Information

Cap-Base	G5
Life To 50% Failures Preheat (Nom)	30000 h
LSF Preheat 16000 h Rated	99 %
LSF Preheat 20000 h Rated	94 %
LSF Preheat 2000 h Rated	99 %
LSF Preheat 4000 h Rated	99 %
LSF Preheat 6000 h Rated	99 %
LSF Preheat 8000 h Rated	99 %

Light Technical

Color Rendering Index (Max)	85
Color Rendering Index (Min)	80
LLMF 12000 h Rated	92 %
LLMF 16000 h Rated	91 %
LLMF 2000 h Rated	96 %
LLMF 20000 h Rated	90 %
LLMF 4000 h Rated	95 %
LLMF 6000 h Rated	94 %
LLMF 8000 h Rated	93 %

Mechanical and Housing

Bulb Shape	T5
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Temperature

Design Temperature (Nom)	35 °C
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Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h
88084700	MASTER TL5 HO Eco 20=24W/830 UNP/40	22 kWh
88086100	MASTER TL5 HO Eco 20=24W/840 UNP/40	22 kWh
82590900	MASTER TL5 HO Eco 50=54W/830 UNP/40	54 kWh
82591600	MASTER TL5 HO Eco 50=54W/840 UNP/40	54 kWh
82594700	MASTER TL5 HO Eco 45=49W/830 UNP/40	50 kWh
82595400	MASTER TL5 HO Eco 45=49W/840 UNP/40	50 kWh
82596100	MASTER TL5 HO Eco 73=80W/830 UNP/40	80 kWh
82597800	MASTER TL5 HO Eco 73=80W/840 UNP/40	80 kWh

Operating and Electrical

Order Code	Full Product Name	Lamp Current (Nom)	Power (Rated) (Nom)
88084700	MASTER TL5 HO Eco 20=24W/830 UNP/40	0.300 A	19.5 W
88086100	MASTER TL5 HO Eco 20=24W/840 UNP/40	0.300 A	19.5 W
82590900	MASTER TL5 HO Eco 50=54W/830 UNP/40	0.460 A	48 W
82591600	MASTER TL5 HO Eco 50=54W/840 UNP/40	0.460 A	48 W

Order Code	Full Product Name	Lamp Current (Nom)	Power (Rated) (Nom)
82594700	MASTER TL5 HO Eco 45=49W/830 UNP/40	0.260 A	44.6 W
82595400	MASTER TL5 HO Eco 45=49W/840 UNP/40	0.260 A	44.6 W
82596100	MASTER TL5 HO Eco 73=80W/830 UNP/40	0.550 A	73.3 W
82597800	MASTER TL5 HO Eco 73=80W/840 UNP/40	0.550 A	73.3 W

Light Technical (1/2)

MASTER TL5 High Output Eco

Order Code	Full Product Name	Color Code	Color Designation	Correlated Color Temperature (Nom)	Color Rendering Index (Nom)
88084700	MASTER TL5 HO Eco 20=24W/830 UNP/40	830	Warm White (WW)	3000 K	82
88086100	MASTER TL5 HO Eco 20=24W/840 UNP/40	840	Cool White (CW)	4000 K	82
82590900	MASTER TL5 HO Eco 50=54W/830 UNP/40	830	Warm White (WW)	3000 K	85
82591600	MASTER TL5 HO Eco 50=54W/840 UNP/40	840	Cool White (CW)	4000 K	85

Order Code	Full Product Name	Color Code	Color Designation	Correlated Color Temperature (Nom)	Color Rendering Index (Nom)
82594700	MASTER TL5 HO Eco 45=49W/830 UNP/40	830	Warm White (WW)	3000 K	82
82595400	MASTER TL5 HO Eco 45=49W/840 UNP/40	840	Cool White (CW)	4000 K	82
82596100	MASTER TL5 HO Eco 73=80W/830 UNP/40	830	Warm White (WW)	3000 K	82
82597800	MASTER TL5 HO Eco 73=80W/840 UNP/40	840	Cool White (CW)	4000 K	82

Light Technical (2/2)

Order Code	Full Product Name	Luminous Efficacy (@ Max Lumen, Rated) (Nom)	Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
88084700	MASTER TL5 HO Eco 20=24W/830 UNP/40	99 lm/W	85 lm/W	1950 lm	1650 lm
88086100	MASTER TL5 HO Eco 20=24W/840 UNP/40	99 lm/W	85 lm/W	1950 lm	1650 lm
82590900	MASTER TL5 HO Eco 50=54W/830 UNP/40	102 lm/W	93 lm/W	5000 lm	4450 lm
82591600	MASTER TL5 HO Eco 50=54W/840 UNP/40	102 lm/W	93 lm/W	5000 lm	4450 lm

Order Code	Full Product Name	Luminous Efficacy (@ Max Lumen, Rated) (Nom)	Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
82594700	MASTER TL5 HO Eco 45=49W/830 UNP/40	108 lm/W	92 lm/W	4900 lm	4100 lm
82595400	MASTER TL5 HO Eco 45=49W/840 UNP/40	108 lm/W	92 lm/W	4900 lm	4100 lm
82596100	MASTER TL5 HO Eco 73=80W/830 UNP/40	95 lm/W	89 lm/W	7000 lm	6550 lm
82597800	MASTER TL5 HO Eco 73=80W/840 UNP/40	95 lm/W	89 lm/W	7000 lm	6550 lm

