



# 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 colour 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



### Approval and Application

Mercury (Hg) Content (Nom)	1.4 mg
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### 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

Colour Code	840
Colour Designation	Cool White (CW)
Correlated Colour Temperature (Nom)	4000 K
Colour Rendering Index (Max)	85
Colour 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/	Mercury (Hg) Content
		1000 h	(Max)
88086100	MASTER TL5 HO Eco 20=24W/840 UNP/40	20 kWh	1.4 mg
82591600	MASTER TL5 HO Eco 50=54W/840 UNP/40	50 kWh	1.4 mg
82595400	MASTER TL5 HO Eco 45=49W/840 UNP/40	46 kWh	1.4 mg
82597800	MASTER TL5 HO Eco 73=80W/840 UNP/40	80 kWh	-

## Operating and Electrical

## MASTER TL5 High Output Eco

Order Code	Full Product Name	Lamp Current (Nom)	Power (Rated) (Nom)
88086100	MASTER TL5 HO Eco 20=24W/840 UNP/40	0.300 A	19.3 W
82591600	MASTER TL5 HO Eco 50=54W/840 UNP/40	0.460 A	49.3 W

Order Code	Full Product Name	Lamp Current (Nom)	Power (Rated) (Nom)
82595400	MASTER TL5 HO Eco 45=49W/840 UNP/40	0.260 A	45.4 W
82597800	MASTER TL5 HO Eco 73=80W/840 UNP/40	0.550 A	73.3 W

### Light Technical (1/2)

Order Code	Full Product Name	Chromaticity Coordinate X (Nom)	Chromaticity Coordinate Y (Nom)	Colour Rendering Index (Nom)	Luminous Efficacy (@ Max Lumen, Rated) (Nom)
88086100	MASTER TL5 HO Eco 20=24W/840 UNP/40	0.38	0.38	80	99 lm/W
82591600	MASTER TL5 HO Eco 50=54W/840 UNP/40	0.38	0.38	80	102 lm/W
82595400	MASTER TL5 HO Eco	0.38	0.38	80	108 lm/W

Order Code	Full Product Name	Chromaticity Coordinate X (Nom)	Chromaticity Coordinate Y (Nom)	Colour Rendering Index (Nom)	Luminous Efficacy (@ Max Lumen, Rated) (Nom)
	45=49W/840 UNP/40				
82597800	MASTER TL5 HO Eco 73=80W/840 UNP/40	-	-	82	95 lm/W

### Light Technical (2/2)

Order Code	Full Product Name	Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
88086100	MASTER TL5 HO Eco 20=24W/840 UNP/40	85 lm/W	1650 lm	1650 lm
82591600	MASTER TL5 HO Eco 50=54W/840 UNP/40	93 lm/W	4400 lm	4450 lm

Order Code	Full Product Name	Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
82595400	MASTER TL5 HO Eco 45=49W/840 UNP/40	92 lm/W	4225 lm	4100 lm
82597800	MASTER TL5 HO Eco 73=80W/840 UNP/40	89 lm/W	7000 lm	6550 lm

