



# Product Description

## MASTER TL5 High Efficiency

Low-pressure mercury discharge lamps with a tubular 16 mm envelope

### Benefits

- Allows system miniaturisation and maximum luminaire design freedom
- Lamp lengths enable easy fitting into ceiling module systems
- Offers higher efficiencies and energy savings compared with TL-D lamps
- Virtually constant lumen level with excellent lumen maintenance
- Good colour rendering

### Features

- 40% thinner than TL-D lamps
- High lamp efficacies up to 104 lm/W
- Highly efficient 3-band fluorescent coating in combination with precoating
- Specifically designed for operation with electronic gear and well suited for dimming
- Maximum light output reached at approx. 35 °C in free-burning position if an electronic ballast without additional electrode heating is used
- Can be ignited from -15 to +50 °C

### Application

- Ideally suited for recessed, surface-mounted and suspended luminaires in applications like offices, shops, schools, public buildings and industry, wherever high-quality, energy-effective lighting is required

### Warnings and Safety

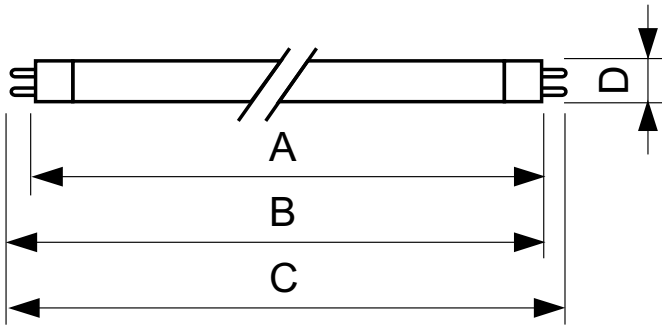
- A lamp breaking is extremely unlikely to have any impact on your health. If a lamp breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves. Put them in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner.

# MASTER TL5 High Efficiency

## Versions



## Dimensional drawing



Product	D (max)	A (max)	B (max)	B (min)	C (max)
MASTER TL5 HE 21W/840 SLV/40	17 mm	849.0 mm	856.1 mm	853.7 mm	863.2 mm
MASTER TL5 HE 14W/830 SLV/40	17 mm	549.0 mm	556.1 mm	553.7 mm	563.2 mm
MASTER TL5 HE 35W/865 SLV/40	17 mm	1449.0 mm	1456.1 mm	1453.7 mm	1463.2 mm
MASTER TL5 HE 21W/830 SLV/40	17 mm	849.0 mm	856.1 mm	853.7 mm	863.2 mm
MASTER TL5 HE 21W/865 SLV/40	17 mm	849.0 mm	856.1 mm	853.7 mm	863.2 mm
MASTER TL5 HE 35W/830 SLV/40	17 mm	1449.0 mm	1456.1 mm	1453.7 mm	1463.2 mm
MASTER TL5 HE 21W/827 SLV/40	17 mm	849.0 mm	856.1 mm	853.7 mm	863.2 mm
MASTER TL5 HE 35W/827 SLV/40	17 mm	1449.0 mm	1456.1 mm	1453.7 mm	1463.2 mm
MASTER TL5 HE 14W/840 SLV/40	17 mm	549.0 mm	556.1 mm	553.7 mm	563.2 mm
MASTER TL5 HE 28W/840 SLV/40	17 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm
MASTER TL5 HE 28W/830 SLV/40	17 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm
MASTER TL5 HE 28W/865 SLV/40	17 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm
MASTER TL5 HE 35W/840 SLV/40	17 mm	1449.0 mm	1456.1 mm	1453.7 mm	1463.2 mm
MASTER TL5 HE 28W/827 SLV/40	17 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm
MASTER TL5 HE 14W/865 SLV/40	17 mm	549.0 mm	556.1 mm	553.7 mm	563.2 mm
MASTER TL5 HE 14W/827 SLV/40	17 mm	549.0 mm	556.1 mm	553.7 mm	563.2 mm

# MASTER TL5 High Efficiency

## 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)	24000 h
LSF Preheat 16000 h Rated	97 %
LSF Preheat 20000 h Rated	84 %
LSF Preheat 2000 h Rated	99 %
LSF Preheat 4000 h Rated	99 %
LSF Preheat 6000 h Rated	99 %
LSF Preheat 8000 h Rated	99 %
System Description	High Efficiency

## Light Technical

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/1000 h
927926082755	MASTER TL5 HE 14W/827 SLV/40	15 kWh
927926083055	MASTER TL5 HE 14W/830 SLV/40	15 kWh
927926084055	MASTER TL5 HE 14W/840 SLV/40	15 kWh
927926086555	MASTER TL5 HE 14W/865 SLV/40	15 kWh
927926282755	MASTER TL5 HE 21W/827 SLV/40	23 kWh
927926283055	MASTER TL5 HE 21W/830 SLV/40	23 kWh
927926284055	MASTER TL5 HE 21W/840 SLV/40	23 kWh
927926286555	MASTER TL5 HE 21W/865 SLV/40	23 kWh
927926582755	MASTER TL5 HE 28W/827 SLV/40	31 kWh
927926583055	MASTER TL5 HE 28W/830 SLV/40	31 kWh
927926584055	MASTER TL5 HE 28W/840 SLV/40	31 kWh
927926586555	MASTER TL5 HE 28W/865 SLV/40	31 kWh
927927082755	MASTER TL5 HE 35W/827 SLV/40	38 kWh
927927083055	MASTER TL5 HE 35W/830 SLV/40	38 kWh
927927084055	MASTER TL5 HE 35W/840 SLV/40	38 kWh
927927086555	MASTER TL5 HE 35W/865 SLV/40	38 kWh

## Operating and Electrical

Order Code	Full Product Name	Lamp Current (Nom)	Power (Rated) (Nom)
927926082755	MASTER TL5 HE 14W/827 SLV/40	0.165 A	14 W
927926083055	MASTER TL5 HE 14W/830 SLV/40	0.165 A	14 W
927926084055	MASTER TL5 HE 14W/840 SLV/40	0.165 A	14 W
927926086555	MASTER TL5 HE 14W/865 SLV/40	0.165 A	14 W
927926282755	MASTER TL5 HE 21W/827 SLV/40	0.165 A	20.6 W
927926283055	MASTER TL5 HE 21W/830 SLV/40	0.165 A	20.6 W
927926284055	MASTER TL5 HE 21W/840 SLV/40	0.165 A	20.6 W
927926286555	MASTER TL5 HE 21W/865 SLV/40	0.165 A	20.6 W

Order Code	Full Product Name	Lamp Current (Nom)	Power (Rated) (Nom)
927926582755	MASTER TL5 HE 28W/827 SLV/40	0.170 A	27.9 W
927926583055	MASTER TL5 HE 28W/830 SLV/40	0.170 A	27.9 W
927926584055	MASTER TL5 HE 28W/840 SLV/40	0.170 A	27.9 W
927926586555	MASTER TL5 HE 28W/865 SLV/40	0.170 A	27.9 W
927927082755	MASTER TL5 HE 35W/827 SLV/40	0.175 A	35.5 W
927927083055	MASTER TL5 HE 35W/830 SLV/40	0.175 A	35.5 W
927927084055	MASTER TL5 HE 35W/840 SLV/40	0.175 A	35.5 W
927927086555	MASTER TL5 HE 35W/865 SLV/40	0.175 A	35.5 W

## Light Technical (1/2)

## MASTER TL5 High Efficiency

Order Code	Full Product Name	Colour Code	Colour Designation	Correlated Colour	Colour Rendering
				Temperature (Nom)	Index (Nom)
927926082755	MASTER TL5 HE 14W/827 SLV/40	827	Incandescent White	2700 K	82
927926083055	MASTER TL5 HE 14W/830 SLV/40	830	Warm white (WW)	3000 K	>80
927926084055	MASTER TL5 HE 14W/840 SLV/40	840	Cool White (CW)	4000 K	82
927926086555	MASTER TL5 HE 14W/865 SLV/40	865	Cool Daylight	6500 K	82
927926282755	MASTER TL5 HE 21W/827 SLV/40	827	Incandescent White	2700 K	82
927926283055	MASTER TL5 HE 21W/830 SLV/40	830	Warm white (WW)	3000 K	>80
927926284055	MASTER TL5 HE 21W/840 SLV/40	840	Cool White (CW)	4000 K	82
927926286555	MASTER TL5 HE 21W/865 SLV/40	865	Cool Daylight	6500 K	82

Order Code	Full Product Name	Colour Code	Colour Designation	Correlated Colour	Colour Rendering
				Temperature (Nom)	Index (Nom)
927926582755	MASTER TL5 HE 28W/827 SLV/40	827	Incandescent White	2700 K	82
927926583055	MASTER TL5 HE 28W/830 SLV/40	830	Warm white (WW)	3000 K	>80
927926584055	MASTER TL5 HE 28W/840 SLV/40	840	Cool White (CW)	4000 K	82
927926586555	MASTER TL5 HE 28W/865 SLV/40	865	Cool Daylight	6500 K	82
927927082755	MASTER TL5 HE 35W/827 SLV/40	827	Incandescent White	2700 K	82
927927083055	MASTER TL5 HE 35W/830 SLV/40	830	Warm white (WW)	3000 K	82
927927084055	MASTER TL5 HE 35W/840 SLV/40	840	Cool White (CW)	4000 K	82
927927086555	MASTER TL5 HE 35W/865 SLV/40	865	Cool Daylight	6500 K	82

### Light Technical (2/2)

Order Code	Full Product Name	Luminous Efficacy (@ Max Lumen, Rated)		Luminous Flux (Nom)	Luminous Flux (Rated)
		(Nom)	(Nom)	(Nom)	(Nom)
927926082755	MASTER TL5 HE 14W/827 SLV/40	99 lm/W	86 lm/W	1350 lm	1200 lm
927926083055	MASTER TL5 HE 14W/830 SLV/40	99 lm/W	86 lm/W	1350 lm	1200 lm
927926084055	MASTER TL5 HE 14W/840 SLV/40	99 lm/W	86 lm/W	1350 lm	1200 lm
927926086555	MASTER TL5 HE 14W/865 SLV/40	91 lm/W	80 lm/W	1250 lm	1125 lm
927926282755	MASTER TL5 HE 21W/827 SLV/40	101 lm/W	90 lm/W	2100 lm	1850 lm

Order Code	Full Product Name	Luminous Efficacy (@ Max Lumen, Rated)		Luminous Flux (Nom)	Luminous Flux (Rated)
		(Nom)	(Nom)	(Nom)	(Nom)
927926283055	MASTER TL5 HE 21W/830 SLV/40	101 lm/W	90 lm/W	2100 lm	1850 lm
927926284055	MASTER TL5 HE 21W/840 SLV/40	101 lm/W	90 lm/W	2100 lm	1850 lm
927926286555	MASTER TL5 HE 21W/865 SLV/40	94 lm/W	84 lm/W	1950 lm	1725 lm
927926582755	MASTER TL5 HE 28W/827 SLV/40	104 lm/W	96 lm/W	2900 lm	2675 lm
927926583055	MASTER TL5 HE 28W/830 SLV/40	104 lm/W	96 lm/W	2900 lm	2675 lm

## MASTER TL5 High Efficiency

Order Code	Full Product Name	Luminous			
		Efficacy (@ Max Lumen, Rated) (Nom)	Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
927926584055	MASTER TL5 HE 28W/840 SLV/40	104 lm/W	96 lm/W	2900 lm	2675 lm
927926586555	MASTER TL5 HE 28W/865 SLV/40	97 lm/W	90 lm/W	2700 lm	2500 lm
927927082755	MASTER TL5 HE 35W/827 SLV/40	105 lm/W	94 lm/W	3650 lm	3325 lm

Order Code	Full Product Name	Luminous			
		Efficacy (@ Max Lumen, Rated) (Nom)	Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
927927083055	MASTER TL5 HE 35W/830 SLV/40	105 lm/W	94 lm/W	3650 lm	3325 lm
927927084055	MASTER TL5 HE 35W/840 SLV/40	105 lm/W	94 lm/W	3650 lm	3325 lm
927927086555	MASTER TL5 HE 35W/865 SLV/40	98 lm/W	87 lm/W	3400 lm	3100 lm

