



Extended design possibilities

MASTER TL5 Circular

This circular TL5 lamp (tube diameter 16 mm) offers extended design possibilities. The slim tube allows the creation of extremely flat luminaires and enables omnidirectional light distribution. It is suitable for a wide range of professional and semi-professional applications, and is ideal for use in shops, offices and public areas with unconventional layouts.

Benefits

- Slim 16 mm tube allows creation of extremely flat luminaires
- Allows appealing circular designs
- High lamp efficacy
- Good color rendering
- Higher average system efficiency

Features

- Perfect circular shape
- Highly efficient 3-band fluorescent coating
- Specifically designed for operation with electronic gear
- Amalgam technology (55 and 60W only)

Application

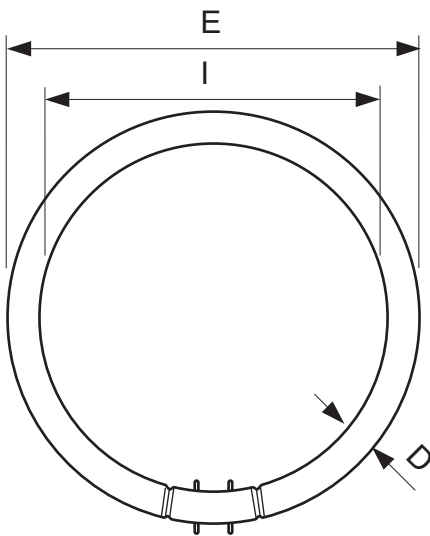
- Brings the benefits of TL5 lighting to an even wider range of attractive applications
- Suitable for a wide range of professional and semi-professional applications
- Ideal for use in shops, offices and public areas with non-traditional lay-outs
- Amalgam lamps 55W and 60W are limited suitable for dimming applications

Related products



C-T5 2GX13

Dimensional drawing



MASTER TL5 Circular 22W/827 1CT

Product	D (Min)	D (Max)	E (Min)	E (Max)	I (Min)	I (Max)
TL5-C 22W/827	14	18	220	230	187	197
TL5-C 22W/830	14	18	220	230	187	197
TL5-C 22W/840	14	18	220	230	187	197
TL5-C 22W/865	14	18	220	230	187	197
TL5-C 40W/827	14	18	293	305	260	272
TL5-C 40W/830	14	18	293	305	260	272
TL5-C 40W/835	14	18	293	305	260	272
TL5-C 40W/840	14	18	293	305	260	272
TL5-C 40W/865	14	18	293	305	260	272
TL5-C 55W/830	14	18	293	305	260	272
TL5-C 55W/840	14	18	293	305	260	272
TL5-C 55W/865	14	18	293	305	260	272
TL5-C 60W/830	14	18	367	379	334	346
TL5-C 60W/840	14	18	367	379	334	346

General Characteristics (1/2)

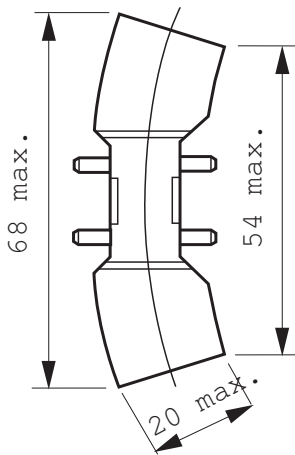
Order code	Full product name	Cap-Base	Bulb	Life to 10% fail Preheat EL,3h	Life to 50% fail Preheat EL,3h	LSF HF Preheat 2000h Rated,3h	LSF HF Preheat 4000h Rated,3h	LSF HF Preheat 6000h Rated,3h	LSF HF Preheat 8000h Rated,3h	LSF HF Preheat 12000h Rated,3h	LSF HF Preheat 16000h Rated,3h
927965082713	MASTER TL5 Circular 22W/827 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927965083013	MASTER TL5 Circular 22W/830 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927965084013	MASTER TL5 Circular 22W/840 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927965086513	MASTER TL5 Circular 22W/865 1CT	2GX13	C-T5	8000 hr	10000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927965582713	MASTER TL5 Circular 40W/827 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927965583013	MASTER TL5 Circular 40W/830 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927965583501	40W/835 WH 2GX13 C-T5 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927965584013	MASTER TL5 Circular 40W/840 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927965586513	MASTER TL5 Circular 40W/865 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927965783013	MASTER TL5 Circular 55W/830 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927965784013	MASTER TL5 Circular 55W/840 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927965786513	MASTER TL5 Circular 55W/865 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927966083013	MASTER TL5 Circular 60W/830 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %
927966084013	MASTER TL5 Circular 60W/840 1CT	2GX13	C-T5	8000 hr	12000 hr	99 %	99 %	96 %	89 %	50 %	10 %

General Characteristics (2/2)

Order code	Full product name	LSF HF Preheat 20000h Rated,3h
927965082713	MASTER TL5 Circular 22W/827 1CT	1 %
927965083013	MASTER TL5 Circular 22W/830 1CT	1 %
927965084013	MASTER TL5 Circular 22W/840 1CT	1 %
927965086513	MASTER TL5 Circular 22W/865 1CT	1 %
927965582713	MASTER TL5 Circular 40W/827 1CT	1 %
927965583013	MASTER TL5 Circular 40W/830 1CT	1 %
927965583501	40W/835 WH 2GX13 C-T5 1CT	1 %
927965584013	MASTER TL5 Circular 40W/840 1CT	1 %

Order code	Full product name	LSF HF Preheat 20000h Rated,3h
927965586513	MASTER TL5 Circular 40W/865 1CT	1 %
927965783013	MASTER TL5 Circular 55W/830 1CT	1 %
927965784013	MASTER TL5 Circular 55W/840 1CT	1 %
927965786513	MASTER TL5 Circular 55W/865 1CT	1 %
927966083013	MASTER TL5 Circular 60W/830 1CT	1 %
927966084013	MASTER TL5 Circular 60W/840 1CT	1 %

Installation diagrams



2GX13

Light Technical Characteristics (1/2)

Order code	Full product name	Color Code	Color Rendering Index	Color Designation (text)	Color Temperature	Luminous Flux EL 25°C, Rated	Luminous Flux EL 25°C, Nominal	Lum Efficacy Rated HF 25°C	LLMF HF 2000h Rated	LLMF HF 4000h Rated	LLMF HF 6000h Rated
927965082713	MASTER TL5 Circular 22W/827 1CT	827	80 (min), 85 (nom), 85 (max) Ra8	Incandescent White	2700 K	1800 Lm	1800 Lm	82 Lm/W	91 %	87 %	84 %
927965083013	MASTER TL5 Circular 22W/830 1CT	830	80 (min), 85 (nom), 85 (max) Ra8	Warm White	3000 K	1800 Lm	1800 Lm	82 Lm/W	91 %	87 %	84 %
927965084013	MASTER TL5 Circular 22W/840 1CT	840	80 (min), 85 (nom), 85 (max) Ra8	Cool White	4000 K	1800 Lm	1800 Lm	82 Lm/W	91 %	87 %	84 %
927965086513	MASTER TL5 Circular 22W/865 1CT	865	80 (min), 82 (nom), 85 (max) Ra8	Cool Daylight	6500 K	1740 Lm	1740 Lm	79 Lm/W	91 %	87 %	84 %
927965582713	MASTER TL5 Circular 40W/827 1CT	827	80 (min), 85 (nom), 85 (max) Ra8	Incandescent White	2700 K	3300 Lm	3300 Lm	83 Lm/W	91 %	87 %	84 %
927965583013	MASTER TL5 Circular 40W/830 1CT	830	80 (min), 85 (nom), 85 (max) Ra8	Warm White	3000 K	3300 Lm	3300 Lm	83 Lm/W	91 %	87 %	84 %
927965583501	40W/835 WH 2GX13 C-T5 1CT	835	80 (min), 82 (nom), 85 (max) Ra8	White	3500 K	3300 Lm	3300 Lm	83 Lm/W	91 %	87 %	84 %
927965584013	MASTER TL5 Circular 40W/840 1CT	840	80 (min), 85 (nom), 85 (max) Ra8	Cool White	4000 K	3300 Lm	3300 Lm	83 Lm/W	91 %	87 %	84 %
927965586513	MASTER TL5 Circular 40W/865 1CT	865	80 (min), 82 (nom), 85 (max) Ra8	Cool Daylight	6500 K	3100 Lm	3100 Lm	78 Lm/W	91 %	87 %	84 %
927965783013	MASTER TL5 Circular 55W/830 1CT	830	80 (min), 85 (nom), 85 (max) Ra8	Warm White	3000 K	4200 Lm	4200 Lm	76 Lm/W	91 %	87 %	84 %
927965784013	MASTER TL5 Circular 55W/840 1CT	840	80 (min), 85 (nom), 85 (max) Ra8	Cool White	4000 K	4200 Lm	4200 Lm	76 Lm/W	91 %	87 %	84 %

Order code	Full product name	Color Code	Color Rendering Index	Color Designation (text)	Color Temperature	Luminous Flux EL 25°C, Rated	Luminous Flux EL 25°C, Nominal	Lum Efficacy Rated HF 25°C	LLMF HF 2000h Rated	LLMF HF 4000h Rated	LLMF HF 6000h Rated
927965786513	MASTER TL5 Circular 55W/865 1CT	865	80 (min), 82 (nom), 85 (max) Ra8	Cool Daylight	6500 K	4000 Lm	4000 Lm	73 Lm/W	91 %	87 %	84 %
927966083013	MASTER TL5 Circular 60W/830 1CT	830	80 (min), 85 (nom), 85 (max) Ra8	Warm White	3000 K	5000 Lm	5000 Lm	83 Lm/W	91 %	87 %	84 %
927966084013	MASTER TL5 Circular 60W/840 1CT	840	80 (min), 85 (nom), 85 (max) Ra8	Cool White	4000 K	5000 Lm	5000 Lm	83 Lm/W	91 %	87 %	84 %

Light Technical Characteristics (2/2)

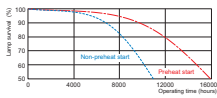
Order code	Full product name	LLMF HF 8000h Rated	LLMF HF 12000h Rated	LLMF HF 16000h Rated	LLMF HF 20000h Rated	Design Temperature	Chromaticity Coordinate X	Chromaticity Coordinate Y
927965082713	MASTER TL5 Circular 22W/827 1CT	81 %	77 %	74 %	72 %	35 C	463 -	420 -
927965083013	MASTER TL5 Circular 22W/830 1CT	81 %	77 %	74 %	72 %	35 C	440 -	403 -
927965084013	MASTER TL5 Circular 22W/840 1CT	81 %	77 %	74 %	72 %	35 C	380 -	380 -
927965086513	MASTER TL5 Circular 22W/865 1CT	81 %	77 %	74 %	72 %	35 C	313 -	337 -
927965582713	MASTER TL5 Circular 40W/827 1CT	81 %	77 %	74 %	72 %	35 C	463 -	420 -
927965583013	MASTER TL5 Circular 40W/830 1CT	81 %	77 %	74 %	72 %	35 C	440 -	403 -
927965583501	40W/835 WH 2GX13 C-T5 1CT	81 %	77 %	74 %	72 %	35 C	409 -	394 -
927965584013	MASTER TL5 Circular 40W/840 1CT	81 %	77 %	74 %	72 %	35 C	380 -	380 -
927965586513	MASTER TL5 Circular 40W/865 1CT	81 %	77 %	74 %	72 %	35 C	313 -	337 -
927965783013	MASTER TL5 Circular 55W/830 1CT	81 %	77 %	74 %	72 %	35 C	440 -	403 -
927965784013	MASTER TL5 Circular 55W/840 1CT	81 %	77 %	74 %	72 %	35 C	380 -	380 -
927965786513	MASTER TL5 Circular 55W/865 1CT	81 %	77 %	74 %	72 %	35 C	313 -	337 -
927966083013	MASTER TL5 Circular 60W/830 1CT	81 %	77 %	74 %	72 %	35 C	440 -	403 -
927966084013	MASTER TL5 Circular 60W/840 1CT	81 %	77 %	74 %	72 %	35 C	380 -	380 -

Electrical Characteristics

Order code	Full product name	Lamp Wattage	Lamp Wattage EL 25°C, Rated	Lamp Wattage EL 25°C, Nominal	Lamp Voltage EL 25°C	Lamp Current EL 25°C	Dimmable
927965082713	MASTER TL5 Circular 22W/827 1CT	22 W	22.3 W	22 W	75 V	0.300 A	Yes
927965083013	MASTER TL5 Circular 22W/830 1CT	22 W	22.3 W	22 W	75 V	0.300 A	Yes
927965084013	MASTER TL5 Circular 22W/840 1CT	22 W	22.3 W	22 W	75 V	0.300 A	Yes
927965086513	MASTER TL5 Circular 22W/865 1CT	22 W	22.3 W	22 W	75 V	0.300 A	Yes
927965582713	MASTER TL5 Circular 40W/827 1CT	40 W	39.9 W	40 W	126 V	0.320 A	Yes

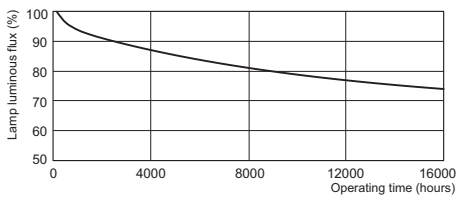
Order code	Full product name	Lamp Wattage	Lamp Wattage EL 25°C, Rated	Lamp Wattage EL 25°C, Nominal	Lamp Voltage EL 25°C	Lamp Current EL 25°C	Dimmable
927965583013	MASTER TL5 Circular 40W/830 1CT	40 W	39.9 W	40 W	126 V	0.320 A	Yes
927965583501	40W/835 WH 2GX13 C-T5 1CT	40 W	39.9 W	40 W	126 V	0.320 A	Yes
927965584013	MASTER TL5 Circular 40W/840 1CT	40 W	39.9 W	40 W	126 V	0.320 A	Yes
927965586513	MASTER TL5 Circular 40W/865 1CT	40 W	39.9 W	40 W	126 V	0.320 A	Yes
927965783013	MASTER TL5 Circular 55W/830 1CT	55 W	55.0 W	55 W	101 V	0.550 A	Yes
927965784013	MASTER TL5 Circular 55W/840 1CT	55 W	55.0 W	55 W	101 V	0.550 A	Yes
927965786513	MASTER TL5 Circular 55W/865 1CT	55 W	55.0 W	55 W	101 V	0.550 A	Yes
927966083013	MASTER TL5 Circular 60W/830 1CT	60 W	60.0 W	60 W	129 V	0.470 A	Yes
927966084013	MASTER TL5 Circular 60W/840 1CT	60 W	60.0 W	60 W	129 V	0.470 A	Yes

Performance diagrams

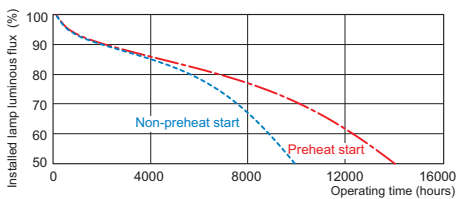


MASTER TL5 Circular

Life Expectancy 3 h cycle



MASTER TL5 Circular Lumen Maintenance 3 h + 12 h cycle



MASTER TL5 Circular Service Lifetime 3 h cycle

Environmental Characteristics

Order code	Full product name	Energy Efficiency Label (EEL)	Mercury (Hg) Content	Energy consumption kWh/1000h
927965082713	MASTER TL5 Circular 22W/827 1CT	A	2.5 mg	25 kWh
927965083013	MASTER TL5 Circular 22W/830 1CT	A	2.5 mg	25 kWh
927965084013	MASTER TL5 Circular 22W/840 1CT	A	2.5 mg	25 kWh
927965086513	MASTER TL5 Circular 22W/865 1CT	-	2.5 mg	-

Order code	Full product name	Energy Efficiency Label (EEL)	Mercury (Hg) Content	Energy consumption kWh/1000h
927965582713	MASTER TL5 Circular 40W/827 1CT	A	2.5 mg	44 kWh
927965583013	MASTER TL5 Circular 40W/830 1CT	A	2.5 mg	44 kWh
927965583501	40W/835 WH 2GX13 C-T5 1CT	A	2.5 mg	-
927965584013	MASTER TL5 Circular 40W/840 1CT	A	2.5 mg	44 kWh

Order code	Full product name	Energy Efficiency Label (EEL)	Mercury (Hg) Content	Energy consumption kWh/1000h
927965586513	MASTER TL5 Circular 40W/865 1CT	A	2.5 mg	-
927965783013	MASTER TL5 Circular 55W/830 1CT	A	2.5 mg	61 kWh
927965784013	MASTER TL5 Circular 55W/840 1CT	A	2.5 mg	61 kWh
927965786513	MASTER TL5 Circular 55W/865 1CT	B	2.5 mg	-
927966083013	MASTER TL5 Circular 60W/830 1CT	A	2.5 mg	66 kWh
927966084013	MASTER TL5 Circular 60W/840 1CT	A	2.5 mg	66 kWh

Order code	Full product name	Calibration Current	HF Generator Rated Voltage	Resistor
927965086513	MASTER TL5 Circular 22W/865 1CT	0.300 A	150 V	250 ohm
927965582713	MASTER TL5 Circular 40W/827 1CT	0.320 A	254 V	400 ohm
927965583013	MASTER TL5 Circular 40W/830 1CT	0.320 A	254 V	400 ohm
927965583501	40W/835 WH 2GX13 C-T5 1CT	0.320 A	254 V	400 ohm
927965584013	MASTER TL5 Circular 40W/840 1CT	0.320 A	254 V	400 ohm
927965586513	MASTER TL5 Circular 40W/865 1CT	0.320 A	254 V	400 ohm
927965783013	MASTER TL5 Circular 55W/830 1CT	0.550 A	202 V	185 ohm
927965784013	MASTER TL5 Circular 55W/840 1CT	0.550 A	202 V	185 ohm
927965786513	MASTER TL5 Circular 55W/865 1CT	0.550 A	202 V	185 ohm
927966083013	MASTER TL5 Circular 60W/830 1CT	0.470 A	258 V	275 ohm
927966084013	MASTER TL5 Circular 60W/840 1CT	0.470 A	258 V	275 ohm

Measuring Conditions

Order code	Full product name	Calibration Current	HF Generator Rated Voltage	Resistor
927965082713	MASTER TL5 Circular 22W/827 1CT	0.300 A	150 V	250 ohm
927965083013	MASTER TL5 Circular 22W/830 1CT	0.300 A	150 V	250 ohm
927965084013	MASTER TL5 Circular 22W/840 1CT	0.300 A	150 V	250 ohm



© 2015 Koninklijke Philips N.V. (Royal Philips)
All rights reserved.

Specifications are subject to change without notice. Trademarks are the property of Koninklijke Philips N.V. (Royal Philips) or their respective owners.

www.philips.com/lighting

2015, January 16
data subject to change