



Powerful, ultra-slim circular lamps

T5 Circular

Philips T5 Circular lamps are ultra-slim with improved color rendering, higher efficacy, and longer life. T5 HO circular lamps offer extraordinary light output.

Benefits

- Slim profile lamp and ballast enables fixtures to be 45% smaller than T9 Circline systems.
- Long Life to assist with lowering your maintenance costs and reducing waste.
- Operates on Programmed Start Electronic Ballasts.

Features

- Design flexibility.
- Improved optical control.
- Fixtures can be 45% smaller than standard T9 circline systems.
- Dimmable for additional energy savings.
- Energy efficient.
- Less material means less waste.
- Longer life.
- Available in 22 and 40 Watts with 3000, 3500, 4100 color temperatures. T5 HO Circular Lamps are available in 55 Watt with 3000, 3500 and 4100 color temperatures.

Application

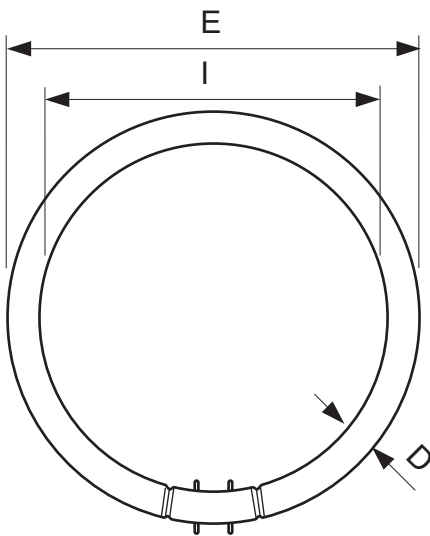
- Ideal for offices and commercial establishments where smaller, more appealing fixture designs are required

Related products



C-T5 2GX13

Dimensional drawing



22W/830 C-T5 1CT

| Product | D (Min) | D (Max) | E (Min) | E (Max) | I (Min) | I (Max) |
|---------------|---------|---------|---------|---------|---------|---------|
| TL5-C 22W/830 | 14 | 18 | 220 | 230 | 187 | 197 |
| TL5-C 22W/840 | 14 | 18 | 220 | 230 | 187 | 197 |
| TL5-C 55W/830 | 14 | 18 | 293 | 305 | 260 | 272 |
| TL5-C 55W/840 | 14 | 18 | 293 | 305 | 260 | 272 |

General Characteristics (1/2)

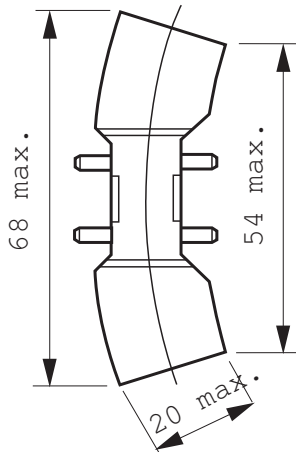
| Product number | Full product name | Base | Bulb | Life to 10% fail Preheat EL,3h | Rated Avg. Life | LSF HF Preheat 2000h Rated,3h | LSF HF Preheat 4000h Rated,3h | LSF HF Preheat 6000h Rated,3h | LSF HF Preheat 8000h Rated,3h | LSF HF Preheat 12000h Rated,3h | LSF HF Preheat 16000h Rated,3h |
|----------------|---------------------------------|-------|------|--------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|
| 166017 | MASTER TL5 Circular 22W/830 1CT | 2GX13 | C-T5 | 8000 hr | 12000 hr | 99 % | 99 % | 96 % | 89 % | 50 % | 10 % |
| 166009 | MASTER TL5 Circular 22W/840 1CT | 2GX13 | C-T5 | 8000 hr | 12000 hr | 99 % | 99 % | 96 % | 89 % | 50 % | 10 % |
| 165936 | MASTER TL5 Circular 55W/830 1CT | 2GX13 | C-T5 | 8000 hr | 12000 hr | 99 % | 99 % | 96 % | 89 % | 50 % | 10 % |
| 165928 | MASTER TL5 Circular 55W/840 1CT | 2GX13 | C-T5 | 8000 hr | 12000 hr | 99 % | 99 % | 96 % | 89 % | 50 % | 10 % |

General Characteristics (2/2)

| Product number | Full product name | LSF HF Preheat 20000h Rated,3h |
|----------------|---------------------------------|--------------------------------|
| 166017 | MASTER TL5 Circular 22W/830 1CT | 1 % |
| 166009 | MASTER TL5 Circular 22W/840 1CT | 1 % |

| Product number | Full product name | LSF HF Preheat 20000h Rated,3h |
|----------------|---------------------------------|--------------------------------|
| 165936 | MASTER TL5 Circular 55W/830 1CT | 1 % |
| 165928 | MASTER TL5 Circular 55W/840 1CT | 1 % |

Installation diagrams



2GX13

Light Technical Characteristics (1/2)

| Product number | Full product name | Color Code | Color Rendering Index | Color Designation | 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 |
|----------------|---------------------------------|------------|----------------------------------|-------------------|-------------------|------------------------------|--------------------------------|----------------------------|---------------------|---------------------|---------------------|
| 166017 | MASTER TL5 Circular 22W/830 1CT | 830 | 80 (min), 82 (nom), 85 (max) Ra8 | Warm White | 3000 K | 1800 Lm | 1800 Lm | 82 Lm/W | 91 % | 87 % | 84 % |
| 166009 | MASTER TL5 Circular 22W/840 1CT | 841 | 80 (min), 82 (nom), 85 (max) Ra8 | Cool White | 4100 K | 1800 Lm | 1800 Lm | 82 Lm/W | 91 % | 87 % | 84 % |
| 165936 | MASTER TL5 Circular 55W/830 1CT | 830 | 80 (min), 82 (nom), 85 (max) Ra8 | Warm White | 3000 K | 4200 Lm | 4200 Lm | 76 Lm/W | 91 % | 87 % | 84 % |
| 165928 | MASTER TL5 Circular 55W/840 1CT | 841 | 80 (min), 82 (nom), 85 (max) Ra8 | Cool White | 4100 K | 4200 Lm | 4200 Lm | 76 Lm/W | 91 % | 87 % | 84 % |

Light Technical Characteristics (2/2)

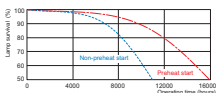
| Product number | Full product name | LLMF HF 8000h Rated | LLMF HF 12000h Rated | LLMF HF 16000h Rated | LLMF HF 20000h Rated | Design Temperature | Chromaticity Coordinate X | Chromaticity Coordinate Y |
|----------------|---------------------------------|---------------------|----------------------|----------------------|----------------------|--------------------|---------------------------|---------------------------|
| 166017 | MASTER TL5 Circular 22W/830 1CT | 81 % | 77 % | 74 % | 72 % | 35 C | 440 - | 403 - |
| 166009 | MASTER TL5 Circular 22W/840 1CT | 81 % | 77 % | 74 % | 72 % | 35 C | 380 - | 380 - |

| Product number | 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 |
|----------------|---------------------------------|---------------------|----------------------|----------------------|----------------------|--------------------|---------------------------|---------------------------|
| 165936 | MASTER TL5 Circular 55W/830 1CT | 81 % | 77 % | 74 % | 72 % | 35 C | 440 - | 403 - |
| 165928 | MASTER TL5 Circular 55W/840 1CT | 81 % | 77 % | 74 % | 72 % | 35 C | 380 - | 380 - |

Electrical Characteristics

| Product number | Full product name | Watts | Lamp Wattage EL 25°C, Rated | Lamp Wattage EL 25°C, Nominal | Lamp Voltage EL 25°C | Lamp Current EL 25°C | Dimmable |
|----------------|---------------------------------|-------|-----------------------------|-------------------------------|----------------------|----------------------|----------|
| 166017 | MASTER TL5 Circular 22W/830 1CT | 22 W | 22.3 W | 22 W | 75 V | 0.300 A | Yes |
| 166009 | MASTER TL5 Circular 22W/840 1CT | 22 W | 22.3 W | 22 W | 75 V | 0.300 A | Yes |
| 165936 | MASTER TL5 Circular 55W/830 1CT | 55 W | 55.0 W | 55 W | 101 V | 0.550 A | Yes |
| 165928 | MASTER TL5 Circular 55W/840 1CT | 55 W | 55.0 W | 55 W | 101 V | 0.550 A | Yes |

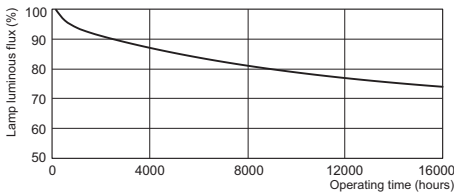
Performance diagrams



MASTER TL5 Circular

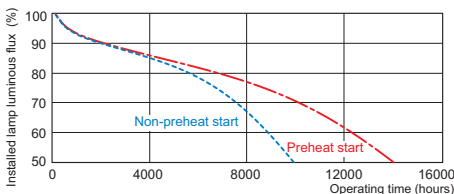
Life Expectancy 3 h

cycle



MASTER TL5 Circular Lumen Maintenance 3 h + 12

h cycle



MASTER TL5 Circular Service Lifetime 3 h cycle

Environmental Characteristics

| Product number | Full product name | Energy Efficiency Label (EEL) | Mercury (Hg) Content | Energy consumption kWh/1000h |
|----------------|---------------------------------|-------------------------------|----------------------|------------------------------|
| 166017 | MASTER TL5 Circular 22W/830 1CT | A | 2.5 mg | 25 kWh |
| 166009 | MASTER TL5 Circular 22W/840 1CT | A | 2.5 mg | 25 kWh |

| Product number | Full product name | Energy Efficiency Label (EEL) | Mercury (Hg) Content | Energy consumption kWh/1000h |
|----------------|---------------------------------|-------------------------------|----------------------|------------------------------|
| 165936 | MASTER TL5 Circular 55W/830 1CT | A | 2.5 mg | 61 kWh |
| 165928 | MASTER TL5 Circular 55W/840 1CT | A | 2.5 mg | 61 kWh |

Measuring Conditions

| Product number | Full product name | Calibration Current | HF Generator Rated Voltage | Resistor |
|----------------|------------------------------------|---------------------|----------------------------|----------|
| 166017 | MASTER TL5 Circular 22W/830 1CT | 0.300 A | 150 V | 250 ohm |
| 166009 | MASTER TL5 Circular 22W/840 1CT | 0.300 A | 150 V | 250 ohm |

| Product number | Full product name | Calibration Current | HF Generator Rated Voltage | Resistor |
|----------------|------------------------------------|---------------------|----------------------------|----------|
| 165936 | MASTER TL5 Circular 55W/830 1CT | 0.550 A | 202 V | 185 ohm |
| 165928 | MASTER TL5 Circular 55W/840 1CT | 0.550 A | 202 V | 185 ohm |



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data subject to change