



The most energy-efficient reliable white light solution for Outdoor

MASTER CosmoWhite CPO-TW & CPO-TW Xtra

New-generation ceramic metal halide lamps used in Outdoor offering efficient and pleasant white light

Benefits

- Attractive white light
- Best optical efficacy allows greater spacing between luminaires, thereby reducing investment
- Highest energy saving and lowest cost of ownership

Features

- Highly efficient white light
- Long reliable lifetime combined with highest system efficacy
- Unique new burner design and positioning in combination with best lamp fixation (PGZ12) provides best optical efficacy
- Compact size: 50% smaller than SON/HPL systems
- New electronic gear platform including dimming options

Application

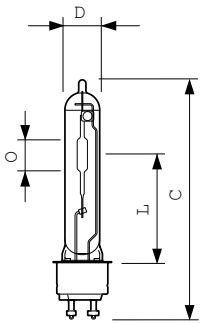
- Urban public lighting for city centers, residential areas and roads

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Versions



Dimensional drawing



| Product | D (max) | D | O | L | C (max) |
|--|---------|-------|-------|-------|---------|
| MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12 | 20 mm | 19 mm | 22 mm | 66 mm | 150 mm |
| MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12 | 20 mm | 19 mm | 14 mm | 59 mm | 132 mm |
| MASTER CosmoWhite CPO-TW Xtra 45W/628 PGZ12 | 20 mm | 19 mm | 14 mm | 59 mm | 132 mm |
| MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12 | 20 mm | 19 mm | 18 mm | 66 mm | 143 mm |

Approval and Application

Energy Efficiency Label (EEL) A+

Controls and Dimming

Dimmable yes

Operating and Electrical

Re-ignition Time (Min) (Max) 900 s

General Information

Cap-Base PGZ12

LSF 12000 h Rated 99 %

LSF 2000 h Rated 99 %

LSF 4000 h Rated 99 %

LSF 6000 h Rated 99 %

LSF 8000 h Rated 99 %

Operating Position UNIVERSAL

Light Technical

Colour Designation White (WH)

Mechanical and Housing

Bulb Finish Clear (CL)

Bulb Shape T19

Approval and Application

| Order Code | Full Product Name | Energy Consumption kWh/1000 h | Mercury (Hg) Content (Nom) |
|--------------|--|-------------------------------|----------------------------|
| 928083805127 | MASTER CosmoWhite CPO-TW Xtra 45W/628 PGZ12 | 50 kWh | 2.0 mg |
| 928088505127 | MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12 | 66 kWh | 2.0 mg |
| 928093505127 | MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12 | 99 kWh | 3.0 mg |
| 928088805127 | MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12 | 154 kWh | 3.9 mg |

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Operating and Electrical

| Order Code | Full Product Name | Voltage (Max) | Voltage (Min) | Voltage (Nom) | Power (Rated) (Nom) |
|--------------|---|---------------|---------------|---------------|---------------------|
| 928083805127 | MASTER CosmoWhite CPO-TW Xtra 45W/628 PGZ12 | 98 V | 84 V | 91 V | 45.0 W |
| 928088505127 | MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12 | 99 V | 85 V | 92 V | 60.0 W |

| Order Code | Full Product Name | Voltage (Max) | Voltage (Min) | Voltage (Nom) | Power (Rated) (Nom) |
|--------------|--|---------------|---------------|---------------|---------------------|
| 928093505127 | MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12 | 98 V | 86 V | 92 V | 90.0 W |
| 928088805127 | MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12 | 100 V | 88 V | 94 V | 140.0 W |

General Information (1/2)

| Order Code | Full Product Name | Life To 10% Failures (Nom) | Life To 20% Failures (Nom) | Life To 50% Failures (Nom) | Life To 5% Failures (Nom) |
|--------------|---|----------------------------|----------------------------|----------------------------|---------------------------|
| 928083805127 | MASTER CosmoWhite CPO-TW Xtra 45W/628 PGZ12 | 24000 h | 27000 h | 32000 h | 21500 h |
| 928088505127 | MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12 | 24000 h | 27000 h | 32000 h | 21500 h |
| 928093505127 | MASTER CosmoWhite CPO- | 24000 h | 27000 h | 32000 h | 21500 h |

| Order Code | Full Product Name | Life To 10% Failures (Nom) | Life To 20% Failures (Nom) | Life To 50% Failures (Nom) | Life To 5% Failures (Nom) |
|--------------|--|----------------------------|----------------------------|----------------------------|---------------------------|
| | TW Xtra 90W/728 PGZ12 | | | | |
| 928088805127 | MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12 | 20000 h | 24000 h | 30000 h | 18000 h |

General Information (2/2)

| Order Code | Full Product Name | LSF 16000 h Rated | LSF 20000 h Rated | LSF 24000 h Rated | LSF 30000 h Rated |
|--------------|---|-------------------|-------------------|-------------------|-------------------|
| 928083805127 | MASTER CosmoWhite CPO-TW Xtra 45W/628 PGZ12 | 99 % | 97 % | 90 % | 63 % |
| 928088505127 | MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12 | 99 % | 97 % | 90 % | 63 % |

| Order Code | Full Product Name | LSF 16000 h Rated | LSF 20000 h Rated | LSF 24000 h Rated | LSF 30000 h Rated |
|--------------|--|-------------------|-------------------|-------------------|-------------------|
| 928093505127 | MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12 | 99 % | 97 % | 90 % | 63 % |
| 928088805127 | MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12 | 97 % | 90 % | 80 % | 50 % |

Luminaire Design Requirements

| Order Code | Full Product Name | Bulb Temperature (Max) |
|--------------|---|------------------------|
| 928083805127 | MASTER CosmoWhite CPO-TW Xtra 45W/628 PGZ12 | 380 °C |
| 928088505127 | MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12 | 400 °C |

| Order Code | Full Product Name | Bulb Temperature (Max) |
|--------------|--|------------------------|
| 928093505127 | MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12 | 470 °C |
| 928088805127 | MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12 | 550 °C |

Light Technical (1/3)

MASTER CosmoWhite CPO-TW & CPO-TW Xtra

| Order Code | Full Product Name | Chromaticity | Chromaticity | Colour | |
|--------------|--|--------------------|--------------------|--------|-----------------------|
| | | Coordinate X (Nom) | Coordinate Y (Nom) | Code | Rendering Index (Min) |
| 928083805127 | MASTER CosmoWhite CPO-TW Xtra 45W/628 PGZ12 | 459 | 412 | 628 | 63 |
| 928088505127 | MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12 | 453 | 405 | 728 | 70 |
| 928093505127 | MASTER CosmoWhite | 449 | 412 | 728 | 67 |

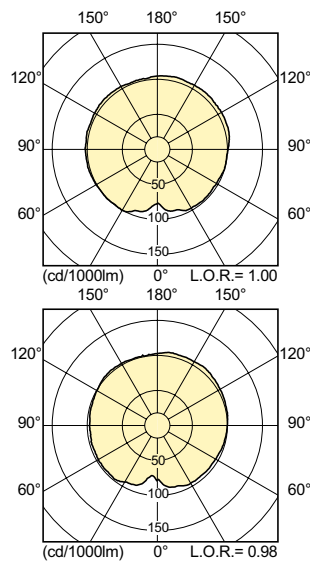
| Order Code | Full Product Name | Chromaticity | Chromaticity | Colour | |
|--------------|---|--------------------|--------------------|--------|-----------------------|
| | | Coordinate X (Nom) | Coordinate Y (Nom) | Code | Rendering Index (Min) |
| | CPO-TW Xtra 90W/728 PGZ12 | | | | |
| 928088805127 | MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12 | 440 | 413 | 728 | - |

Light Technical (2/3)

| Order Code | Full Product Name | Colour | LLMF | | | | LLMF | | | |
|--------------|--|-----------------------|--------------------|--------------------|-------------------|--------------------|---------------|---------------|-------------------|-------------------|
| | | Rendering Index (Nom) | LLMF 12000 h Rated | LLMF 16000 h Rated | LLMF 2000 h Rated | LLMF 20000 h Rated | 24000 h Rated | 30000 h Rated | LLMF 4000 h Rated | LLMF 6000 h Rated |
| 928083805127 | MASTER CosmoWhite CPO-TW Xtra 45W/628 PGZ12 | 66 | 89 % | 87 % | 92 % | 86 % | 84 % | 82 % | 90 % | 90 % |
| 928088505127 | MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12 | 73 | 89 % | 87 % | 92 % | 86 % | 84 % | 82 % | 90 % | 90 % |
| 928093505127 | MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12 | 70 | 92 % | 91 % | 94 % | 90 % | - | - | 93 % | 93 % |
| 928088805127 | MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12 | 72 | 89 % | 88 % | 94 % | 87 % | 86 % | - | 93 % | 92 % |

Light Technical (3/3)

| Order Code | Full Product Name | LLMF | Luminous | Luminous | Ratio |
|--------------|---|--------------|------------------------|--------------------|--------------------------|
| | | 8000 h Rated | Efficacy (rated) (Nom) | Flux (Rated) (Nom) | Scotopic/Photopic Lumens |
| 928083805127 | MASTER CosmoWhite CPO-TW Xtra 45W/628 PGZ12 | 90 % | 110 lm/W | 4950 lm | 1.15 |
| 928088505127 | MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12 | 90 % | 120 lm/W | 7200 lm | 1.15 |
| 928093505127 | MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12 | 93 % | 120 lm/W | 10800 lm | 1.15 |
| 928088805127 | MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12 | 91 % | 125 lm/W | 17600 lm | 1.30 |



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