



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

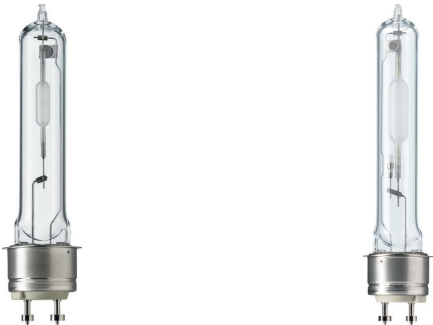
- Highly efficient white light
- Long reliable lifetime combined with highest system efficacy
- Unique new burner design and positioning in combination with best lamp fixation (PGZ12) provides best optical efficacy
- Compact size: 50% smaller than SON/HPL systems
- New electronic gear platform including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

Application

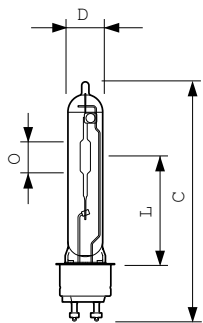
- Urban public lighting for city centers, residential areas and roads

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Versions



Dimensional drawing



Product	D (max)	D	O	L	C (max)
MASTER CosmoWhite CPO-TW Xtra 60W/728 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
MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12	20 mm	19 mm	22 mm	66 mm	150 mm

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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 Code	728
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)
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

Operating and Electrical

Order Code	Full Product Name	Voltage (Max)	Voltage (Min)	Voltage (Nom)	Power (Rated) (Nom)
928088505127	MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12	99 V	85 V	92 V	60.0 W
928093505127	MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12	98 V	86 V	92 V	90.0 W

Order Code	Full Product Name	Voltage (Max)	Voltage (Min)	Voltage (Nom)	Power (Rated) (Nom)
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)
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)

MASTER CosmoWhite CPO-TW & CPO-TW Xtra

Order Code	Full Product Name	LSF 16000 h	LSF 20000 h	LSF 24000 h	LSF 30000 h
		Rated	Rated	Rated	Rated
928088505127	MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12	99 %	97 %	90 %	63 %
928093505127	MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12	99 %	97 %	90 %	63 %

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

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
928088505127	MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12	400 °C
928093505127	MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12	470 °C

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

Light Technical (1/3)

Order Code	Full Product Name	Chromaticity Coordinate X (Nom)	Chromaticity Coordinate Y (Nom)	Colour Rendering Index (Min)	Colour Rendering Index (Nom)
928088505127	MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12	453	405	70	73
928093505127	MASTER CosmoWhite CPO-TW Xtra	449	412	67	70

Order Code	Full Product Name	Chromaticity Coordinate X (Nom)	Chromaticity Coordinate Y (Nom)	Colour Rendering Index (Min)	Colour Rendering Index (Nom)
	90W/728 PGZ12				
928088805127	MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12	440	413	-	72

Light Technical (2/3)

Order Code	Full Product Name	LLMF								
		LLMF 12000 h Rated	LLMF 16000 h Rated	LLMF 2000 h Rated	LLMF 20000 h Rated	LLMF 24000 h Rated	30000 h Rated	LLMF 4000 h Rated	LLMF 6000 h Rated	LLMF 8000 h Rated
928088505127	MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12	89 %	87 %	92 %	86 %	84 %	82 %	90 %	90 %	90 %
928093505127	MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12	92 %	91 %	94 %	90 %	-	-	93 %	93 %	93 %
928088805127	MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12	89 %	88 %	94 %	87 %	86 %	-	93 %	92 %	91 %

Light Technical (3/3)

MASTER CosmoWhite CPO-TW & CPO-TW Xtra

Order Code	Full Product Name	Luminous Efficacy (rated) (Nom)	Luminous Flux (Rated) (Nom)	Ratio Scotopic/ Photopic Lumens
928088505127	MASTER CosmoWhite CPO-TW Xtra 60W/728 PGZ12	120 lm/W	7200 lm	1.15
928093505127	MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12	120 lm/W	10800 lm	1.15
928088805127	MASTER CosmoWhite CPO-TW Xtra 140W/728 PGZ12	125 lm/W	17600 lm	1.30

