



The highly efficient and most reliable solution in road lighting

MASTER SON APIA Plus Xtra

High Pressure Sodium lamp with opalized outer bulb, high output and longest reliable lifetime

Benefits

- Most-cost effective solution (both initial as well as running cost) in this category
- 6 years service life
- Highest lumen output, maintained over life

Features

- Ovoid-shaped coated outer bulb
- Ceramic discharge tube with new Active Philips Integrated Antenna (APIA) concept for an improved and prolonged lifetime of up to 6 years
- "Plus" concept with high efficacy translates into high light output and improved lumen maintenance
- Robust construction with few welding points is highly vibration- and shock-resistant, further reducing early failures and extending lamp life
- Dimmable

Application

- Road and residential lighting
- Decorative floodlighting, illumination
- Industrial area lighting
- Recreational sports facilities indoor and outdoor

MASTER SON APIA Plus Xtra

Versions

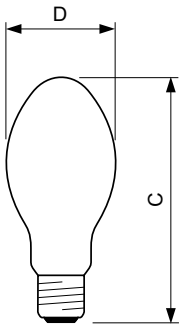


SON APIA Plus Xtra, E27



SON APIA Plus Xtra, E40

Dimensional drawing



Product	D (max)	C (max)
MASTER SON APIA Plus Xtra 400W E40 1SL/12	121.5 mm	290 mm
MASTER SON APIA Plus Xtra 250W E40 1SL/12	91 mm	227 mm
MASTER SON APIA Plus Xtra 50W E27 1SL/24	71 mm	156 mm
MASTER SON APIA Plus Xtra 70W E27 1SL/24	71 mm	156 mm
MASTER SON APIA Plus Xtra 100W E40 1SL/12	76 mm	186 mm
MASTER SON APIA Plus Xtra 150W E40 1SL/12	91 mm	227 mm

Controls and Dimming

Dimmable	Yes
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General Information

LSF 12000 h Rated	99 %
LSF 4000 h Rated	99 %
LSF 6000 h Rated	99 %
LSF 8000 h Rated	99 %

Operating Position	UNIVERSAL
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System Description	External Ignitor
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Luminaire Design Requirements

Bulb Temperature (Max)	350 °C
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Light Technical

Color Code	-
Color Rendering Index (Max)	25

Mechanical and Housing

Bulb Finish	Coated glass
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Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy Efficiency Label (EEL)	Mercury (Hg) Content (Nom)
928150619835	MASTER SON APIA Plus Xtra 50W E27 1SL/24	55 kWh	A	9.8 mg
928150719835	MASTER SON APIA Plus Xtra 70W E27 1SL/24	84 kWh	A+	12.0 mg
928150819827	MASTER SON APIA Plus Xtra 100W E40 1SL/12	110 kWh	A+	16 mg
928150919827	MASTER SON APIA Plus Xtra 150W E40 1SL/12	169 kWh	A+	15 mg
928151019830	MASTER SON APIA Plus Xtra 250W E40 1SL/12	286 kWh	A+	15.1 mg
928151119830	MASTER SON APIA Plus Xtra 400W E40 1SL/12	445 kWh	A++	20 mg

Operating and Electrical (1/2)

MASTER SON APIA Plus Xtra

Order Code	Full Product Name	Lamp	Voltage (Max)	Voltage (Min)	Voltage (Nom)
		Current (EM) (Nom)			
928150619835	MASTER SON APIA Plus Xtra 50W E27 1SL/24	0.76 A	100 V	70 V	85 V
928150719835	MASTER SON APIA Plus Xtra 70W E27 1SL/24	0.98 A	105 V	75 V	90 V
928150819827	MASTER SON APIA Plus Xtra 100W E40 1SL/12	1.2 A	115 V	85 V	100 V

Order Code	Full Product Name	Lamp	Voltage (Max)	Voltage (Min)	Voltage (Nom)
		Current (EM) (Nom)			
928150919827	MASTER SON APIA Plus Xtra 150W E40 1SL/12	1.8 A	115 V	85 V	100 V
928151019830	MASTER SON APIA Plus Xtra 250W E40 1SL/12	2.85 A	115 V	85 V	100 V
928151119830	MASTER SON APIA Plus Xtra 400W E40 1SL/12	4.3 A	120 V	90 V	105 V

Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated) (Nom)	Re-Ignition
			Time (Min) (Max)
928150619835	MASTER SON APIA Plus Xtra 50W E27 1SL/24	50.0 W	180 s
928150719835	MASTER SON APIA Plus Xtra 70W E27 1SL/24	76.5 W	180 s
928150819827	MASTER SON APIA Plus Xtra 100W E40 1SL/12	100.0 W	120 s

Order Code	Full Product Name	Power (Rated) (Nom)	Re-Ignition
			Time (Min) (Max)
928150919827	MASTER SON APIA Plus Xtra 150W E40 1SL/12	154.0 W	180 s
928151019830	MASTER SON APIA Plus Xtra 250W E40 1SL/12	260.0 W	120 s
928151119830	MASTER SON APIA Plus Xtra 400W E40 1SL/12	405.0 W	120 s

General Information (1/2)

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 50%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
928150619835	MASTER SON APIA Plus Xtra 50W E27 1SL/24	E27	25000 h	29500 h	38000 h
928150719835	MASTER SON APIA Plus Xtra 70W E27 1SL/24	E27	28000 h	32000 h	40000 h
928150819827	MASTER SON APIA Plus Xtra 100W E40 1SL/12	E40	28000 h	32000 h	40000 h

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 50%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
928150919827	MASTER SON APIA Plus Xtra 150W E40 1SL/12	E40	32000 h	36500 h	45000 h
928151019830	MASTER SON APIA Plus Xtra 250W E40 1SL/12	E40	32000 h	36500 h	45000 h
928151119830	MASTER SON APIA Plus Xtra 400W E40 1SL/12	E40	32000 h	36500 h	45000 h

General Information (2/2)

Order Code	Full Product Name	Life To 5%	LSF	LSF	LSF
		Failures (Nom)	16000 h Rated	2000 h Rated	20000 h Rated
928150619835	MASTER SON APIA Plus Xtra 50W E27 1SL/24	21000 h	98 %	99 %	96 %
928150719835	MASTER SON APIA Plus Xtra 70W E27 1SL/24	24000 h	99 %	99 %	97 %

Order Code	Full Product Name	Life To 5%	LSF	LSF	LSF
		Failures (Nom)	16000 h Rated	2000 h Rated	20000 h Rated
928150819827	MASTER SON APIA Plus Xtra 100W E40 1SL/12	24000 h	99 %	99 %	97 %
928150919827	MASTER SON APIA Plus Xtra 150W E40 1SL/12	28000 h	99 %	100 %	99 %

MASTER SON APIA Plus Xtra

Order Code	Full Product Name	Life To 5%	LSF	LSF	LSF
		Failures (Nom)	16000 h Rated	2000 h Rated	20000 h Rated
928151019830	MASTER SON APIA Plus Xtra 250W E40 1SL/12	28000 h	99 %	100 %	99 %

Order Code	Full Product Name	Life To 5%	LSF	LSF	LSF
		Failures (Nom)	16000 h Rated	2000 h Rated	20000 h Rated
928151119830	MASTER SON APIA Plus Xtra 400W E40 1SL/12	28000 h	99 %	100 %	99 %

Light Technical (1/2)

Order Code	Full Product Name	Chromaticity Coordinate X (Nom)	Chromaticity Coordinate Y (Nom)	Correlated	
				Color Temperature (Nom)	LLMF 12000 h Rated
928150619835	MASTER SON APIA Plus Xtra 50W E27 1SL/24	540	415	1900 K	85 %
928150719835	MASTER SON APIA Plus Xtra 70W E27 1SL/24	540	415	1900 K	85 %
928150819827	MASTER SON APIA Plus Xtra 100W E40 1SL/12	535	420	1950 K	92 %
928150919827	MASTER SON APIA Plus Xtra	535	420	1950 K	96 %

Order Code	Full Product Name	Chromaticity Coordinate X (Nom)	Chromaticity Coordinate Y (Nom)	Correlated	
				Color Temperature (Nom)	LLMF 12000 h Rated
	150W E40 1SL/12				
928151019830	MASTER SON APIA Plus Xtra 250W E40 1SL/12	530	420	1950 K	96 %
928151119830	MASTER SON APIA Plus Xtra 400W E40 1SL/12	525	425	1950 K	96 %

Light Technical (2/2)

Order Code	Full Product Name	LLMF			LLMF			Luminous		Ratio
		16000 h Rated	2000 h Rated	20000 h Rated	LLMF 4000 h Rated	LLMF 6000 h Rated	LLMF 8000 h Rated	Efficacy (rated) (Nom)	Luminous Flux (Rated) (Nom)	Scotopic/Photopic Lumens
928150619835	MASTER SON APIA Plus Xtra 50W E27 1SL/24	84 %	91 %	84 %	88 %	87 %	86 %	76 lm/W	3900 lm	0.50
928150719835	MASTER SON APIA Plus Xtra 70W E27 1SL/24	84 %	91 %	84 %	88 %	87 %	86 %	90 lm/W	6900 lm	0.50
928150819827	MASTER SON APIA Plus Xtra 100W E40 1SL/12	90 %	98 %	89 %	96 %	95 %	94 %	100 lm/W	10000 lm	0.55
928150919827	MASTER SON APIA Plus Xtra 150W E40 1SL/12	95 %	99 %	94 %	98 %	97 %	96 %	114 lm/W	17500 lm	0.55
928151019830	MASTER SON APIA Plus Xtra 250W E40 1SL/12	95 %	99 %	94 %	98 %	97 %	96 %	120 lm/W	31300 lm	0.60
928151119830	MASTER SON APIA Plus Xtra 400W E40 1SL/12	95 %	99 %	94 %	98 %	97 %	96 %	136.5 lm/W	55400 lm	0.60

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
928150619835	MASTER SON APIA Plus Xtra 50W E27 1SL/24	B70
928150719835	MASTER SON APIA Plus Xtra 70W E27 1SL/24	B70

Order Code	Full Product Name	Bulb Shape
928150819827	MASTER SON APIA Plus Xtra 100W E40 1SL/12	B75
928150919827	MASTER SON APIA Plus Xtra 150W E40 1SL/12	BD90

MASTER SON APIA Plus Xtra

Order Code	Full Product Name	Bulb Shape
928151019830	MASTER SON APIA Plus Xtra 250W E40 1SL/12	BD90
928151119830	MASTER SON APIA Plus Xtra 400W E40 1SL/12	BD90

