



# 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

## Warnings and Safety

- Control gear must include end-of-life protection (IEC60662, IEC 62035)
- A lamp breaking is extremely unlikely to have any impact on your health. If a lamp breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves. Put them in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner.

## Versions

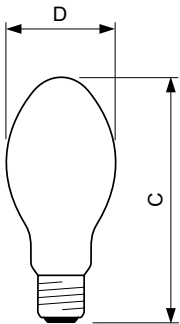


SON APIA Plus Xtra, E27



SON APIA Plus Xtra, E40

## Dimensional drawing



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

# MASTER SON APIA Plus Xtra

## Controls and Dimming

Dimmable	Yes
----------	-----

## 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
System Description	External Ignitor (E)

## Luminaire Design Requirements

Bulb Temperature (Max)	350 °C
------------------------	--------

## Light Technical

Color Code	-
Color Rendering Index (Max)	25

## Mechanical and Housing

Bulb Finish	Coated glass
-------------	--------------

## Approval and Application

Order Code	Full Product Name	Energy Consumption	Energy Efficiency	Mercury (Hg)
		kWh/1000 h	Label (EEL)	Content (Nom)
92813600	MASTER SON APIA Plus Xtra 50W E27 1SL/24	56 kWh	A	9.8 mg
92817400	MASTER SON APIA Plus Xtra 70W E27 1SL/24	81 kWh	A+	12.2 mg
92743600	MASTER SON APIA Plus Xtra 100W E40 1SL/12	110 kWh	A+	16.3 mg
92745000	MASTER SON APIA Plus Xtra 150W E40 1SL/12	169 kWh	A+	15.1 mg
92773300	MASTER SON APIA Plus Xtra 250W E40 1SL/12	286 kWh	A+	15.1 mg

## Operating and Electrical (1/2)

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
92813600	MASTER SON APIA Plus Xtra 50W E27 1SL/24	0.76 A	100 V	70 V	81 V
92817400	MASTER SON APIA Plus Xtra 70W E27 1SL/24	0.96 A	105 V	75 V	92 V
92743600	MASTER SON APIA Plus Xtra 100W E40 1SL/12	1.2 A	115 V	85 V	97 V

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
92745000	MASTER SON APIA Plus Xtra 150W E40 1SL/12	0.179 A	115 V	85 V	97 V
92773300	MASTER SON APIA Plus Xtra 250W E40 1SL/12	0.296 A	115 V	85 V	96 V

## Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
92813600	MASTER SON APIA Plus Xtra 50W E27 1SL/24	51.0 W	180 s
92817400	MASTER SON APIA Plus Xtra 70W E27 1SL/24	74.0 W	180 s
92743600	MASTER SON APIA Plus Xtra 100W E40 1SL/12	100 W	120 s

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
92745000	MASTER SON APIA Plus Xtra 150W E40 1SL/12	154 W	180 s
92773300	MASTER SON APIA Plus Xtra 250W E40 1SL/12	260 W	120 s

## General Information (1/2)

# MASTER SON APIA Plus Xtra

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 50%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
92813600	MASTER SON APIA Plus Xtra 50W E27 1SL/24	E27	25000 h	29500 h	38000 h
92817400	MASTER SON APIA Plus Xtra 70W E27 1SL/24	E27	28000 h	32000 h	40000 h
92743600	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)
92745000	MASTER SON APIA Plus Xtra 150W E40 1SL/12	E40	32000 h	36500 h	45000 h
92773300	MASTER SON APIA Plus Xtra 250W 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	LSF 2000 h Rated	20000 h Rated
92813600	MASTER SON APIA Plus Xtra 50W E27 1SL/24	21000 h	98 %	99 %	96 %
92817400	MASTER SON APIA Plus Xtra 70W E27 1SL/24	24000 h	99 %	99 %	97 %
92743600	MASTER SON APIA Plus Xtra 100W E40 1SL/12	24000 h	99 %	99 %	97 %

Order Code	Full Product Name	Life To 5%	LSF	LSF	LSF
		Failures (Nom)	16000 h Rated	LSF 2000 h Rated	20000 h Rated
92745000	MASTER SON APIA Plus Xtra 150W E40 1SL/12	28000 h	99 %	100 %	99 %
92773300	MASTER SON APIA Plus Xtra 250W 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
92813600	MASTER SON APIA Plus Xtra 50W E27 1SL/24	540	415	1900 K	85 %
92817400	MASTER SON APIA Plus Xtra 70W E27 1SL/24	540	415	1900 K	85 %
92743600	MASTER SON APIA Plus Xtra	535	420	1950 K	92 %

Order Code	Full Product Name	Chromaticity Coordinate X (Nom)	Chromaticity Coordinate Y (Nom)	Correlated	
				Color Temperature (Nom)	LLMF 12000 h Rated
	100W E40 1SL/12				
92745000	MASTER SON APIA Plus Xtra 150W E40 1SL/12	535	420	1950 K	96 %
92773300	MASTER SON APIA Plus Xtra 250W E40 1SL/12	530	420	1950 K	96 %

## Light Technical (2/2)

# MASTER SON APIA Plus Xtra

Order Code	Full Product Name	LLMF 16000	LLMF 2000	LLMF 20000	LLMF 4000	LLMF 6000	LLMF 8000	Luminous Efficacy	Luminous Flux	Ratio
		h Rated	h Rated	h Rated	h Rated	h Rated	h Rated	(rated) (Nom)	(Rated) (Nom)	Scotopic/ Photopic Lumens
92813600	MASTER SON APIA Plus Xtra 50W E27 1SL/24	84 %	91 %	84 %	88 %	87 %	86 %	76.47 lm/W	3900 lm	0.50
92817400	MASTER SON APIA Plus Xtra 70W E27 1SL/24	84 %	91 %	84 %	88 %	87 %	86 %	89.19 lm/W	6600 lm	0.50
92743600	MASTER SON APIA Plus Xtra 100W E40 1SL/12	90 %	98 %	89 %	96 %	95 %	94 %	100 lm/W	10000 lm	0.55
92745000	MASTER SON APIA Plus Xtra 150W E40 1SL/12	95 %	99 %	94 %	98 %	97 %	96 %	113.64 lm/W	17600 lm	0.55
92773300	MASTER SON APIA Plus Xtra 250W E40 1SL/12	95 %	99 %	94 %	98 %	97 %	96 %	120.77 lm/W	31400 lm	0.60

## Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
92813600	MASTER SON APIA Plus Xtra 50W E27 1SL/24	B70
92817400	MASTER SON APIA Plus Xtra 70W E27 1SL/24	B70
92743600	MASTER SON APIA Plus Xtra 100W E40 1SL/12	B75
92745000	MASTER SON APIA Plus Xtra 150W E40 1SL/12	BD90
92773300	MASTER SON APIA Plus Xtra 250W E40 1SL/12	BD90

