



The longest life and most reliable solution in road lighting

MASTER SON-T APIA Plus Xtra

High Pressure Sodium lamp with clear tubular outer bulb shape, 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

- Completely lead-free lamps with tubular outer bulb
- Ceramic discharge tube with new Active Philips Integrated Antenna (APIA) for up to 6 years service lifetime (Xtra)
- Robust construction with few welding points is highly vibration- and shock-resistant, further reducing early failures and extending lamp life
- "Plus" concept with high efficacy for high light output
- Special versions of the 250W and 400W lamps of the MASTER SON(-T) APIA Plus Xtra range are compatible with electronic gear using HF operation of the lamps. HF Control gear requirements (LDi guideline) and lamp performance specifications on HF ballasts can be obtained from the local Philips representative

Application

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

MASTER SON-T APIA Plus Xtra

Warnings and Safety

- Control gear must include end-of-life protection (IEC60662, IEC 62035)
- HF gear must comply with Philips LDi guideline
- 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

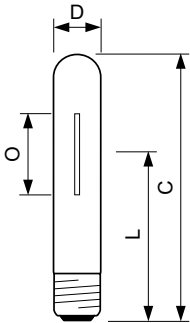


SON-T APIA Plus Xtra, E27



SON-T APIA Plus Xtra, E40

Dimensional drawing



Product	D (max)	O	L	C (max)
MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	48 mm	83 mm	175 mm	283 mm
MASTER SON-T APIA Plus Xtra 150W E40 1SL/12	48 mm	61 mm	132 mm	210 mm
MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	48 mm	47 mm	132 mm	210 mm
MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	36 mm	42 mm	102 mm	156 mm
MASTER SON-T APIA Plus Xtra 50W E27 1SL/12	36 mm	35 mm	102 mm	156 mm
MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	48 mm	65 mm	158 mm	257 mm

MASTER SON-T 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)

Light Technical

Color Code	-
Correlated Color Temperature (Nom)	1950 K
Color Rendering Index (Max)	25

Mechanical and Housing

Bulb Finish	Clear
-------------	-------

Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy	
			Efficiency Label (EEL)	Mercury (Hg) Content (Nom)
93358100	MASTER SON-T APIA Plus Xtra 50W E27 1SL/12	58 kWh	A	9.8 mg
92290500	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	83 kWh	A+	12.2 mg
92323000	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	112 kWh	A+	16.3 mg
92733700	MASTER SON-T APIA Plus Xtra 150W E40 1SL/12	169 kWh	A+	15.1 mg
92737500	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	281 kWh	A+	15.1 mg
92741200	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	433 kWh	A++	19.6 mg

Operating and Electrical (1/2)

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
93358100	MASTER SON-T APIA Plus Xtra 50W E27 1SL/12	0.75 A	100 V	70 V	86 V
92290500	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	0.96 A	105 V	75 V	92 V
92323000	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	0.118 A	115 V	85 V	103 V

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
92733700	MASTER SON-T APIA Plus Xtra 150W E40 1SL/12	0.178 A	115 V	85 V	98 V
92737500	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	0.293 A	115 V	85 V	99 V
92741200	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	0.453 A	115 V	85 V	98 V

Operating and Electrical (2/2)

Order Code	Full Product Name	Re-Ignition	
		Power (Rated) (Nom)	Time (Min) (Max)
93358100	MASTER SON-T APIA Plus Xtra 50W E27 1SL/12	54.0 W	30 s
92290500	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	75 W	30 s
92323000	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	103.0 W	120 s

Order Code	Full Product Name	Re-Ignition	
		Power (Rated) (Nom)	Time (Min) (Max)
92733700	MASTER SON-T APIA Plus Xtra 150W E40 1SL/12	154 W	180 s
92737500	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	255.0 W	120 s
92741200	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	397.0 W	120 s

General Information (1/2)

MASTER SON-T 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)
93358100	MASTER SON-T APIA Plus Xtra 50W E27 1SL/12	E27	25000 h	29500 h	38000 h
92290500	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	E27	28000 h	32000 h	40000 h
92323000	MASTER SON-T 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)
92733700	MASTER SON-T APIA Plus Xtra 150W E40 1SL/12	E40	32000 h	36500 h	45000 h
92737500	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	E40	32000 h	36500 h	45000 h
92741200	MASTER SON-T 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
		Failures (Nom)	16000 h Rated	20000 h Rated
93358100	MASTER SON-T APIA Plus Xtra 50W E27 1SL/12	21000 h	98 %	96 %
92290500	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	24000 h	99 %	97 %
92323000	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	24000 h	99 %	97 %

Order Code	Full Product Name	Life To 5%	LSF	LSF
		Failures (Nom)	16000 h Rated	20000 h Rated
92733700	MASTER SON-T APIA Plus Xtra 150W E40 1SL/12	28000 h	99 %	99 %
92737500	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	28000 h	99 %	99 %
92741200	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	28000 h	99 %	99 %

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
93358100	MASTER SON-T APIA Plus Xtra 50W E27 1SL/12	350 °C
92290500	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	350 °C
92323000	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	450 °C

Order Code	Full Product Name	Bulb Temperature (Max)
92733700	MASTER SON-T APIA Plus Xtra 150W E40 1SL/12	450 °C
92737500	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	450 °C
92741200	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	450 °C

Light Technical (1/2)

Order Code	Full Product Name	Chromaticity	Chromaticity	LLMF	LLMF
		Coordinate X (Nom)	Coordinate Y (Nom)	12000 h Rated	16000 h Rated
93358100	MASTER SON-T APIA Plus Xtra 50W E27 1SL/12	540	420	87 %	86 %
92290500	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	540	420	87 %	86 %
92323000	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	535	420	92 %	90 %

Order Code	Full Product Name	Chromaticity	Chromaticity	LLMF	LLMF
		Coordinate X (Nom)	Coordinate Y (Nom)	12000 h Rated	16000 h Rated
92733700	MASTER SON-T APIA Plus Xtra 150W E40 1SL/12	535	420	96 %	95 %
92737500	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	530	420	96 %	95 %
92741200	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	525	425	96 %	95 %

Light Technical (2/2)

MASTER SON-T APIA Plus Xtra

Order Code	Full Product Name	LLMF 2000	LLMF 20000	LLMF 4000	LLMF 6000	LLMF 8000	Luminous Efficacy (rated) (Nom)	Luminous Flux (Rated) (Nom)	Ratio Scotopic/ Photopic Lumens
		h Rated	h Rated	h Rated	h Rated	h Rated			
93358100	MASTER SON-T APIA Plus Xtra 50W E27 1SL/12	92 %	86 %	90 %	89 %	88 %	83 lm/W	4500 lm	0.50
92290500	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	92 %	86 %	90 %	89 %	88 %	96 lm/W	7200 lm	0.50
92323000	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	98 %	89 %	96 %	95 %	94 %	110 lm/W	11300 lm	0.55
92733700	MASTER SON-T APIA Plus Xtra 150W E40 1SL/12	99 %	94 %	98 %	97 %	96 %	118.51 lm/W	18200 lm	0.55
92737500	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	99 %	94 %	98 %	97 %	96 %	132.16 lm/W	33800 lm	0.60
92741200	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	99 %	94 %	98 %	97 %	96 %	140.74 lm/W	55800 lm	0.60

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
93358100	MASTER SON-T APIA Plus Xtra 50W E27 1SL/12	T35
92290500	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	T35
92323000	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	T46
92733700	MASTER SON-T APIA Plus Xtra 150W E40 1SL/12	T46
92737500	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	T46
92741200	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	T46

