



Product Description

MASTER SON-T APIA Plus Hg Free

High-pressure sodium lamp with clear tubular outer bulb, long reliable lifetime and zero mercury

Benefits

- Superior technology results in a long and reliable lifetime, high lumen maintenance and reliable ignition over lifetime
- Zero mercury makes this the most environmentally friendly product in this application area

Features

- Clear tubular outer bulb
- Ceramic discharge tube with new Active Philips Integrated Antenna (APIA) for an improved long and reliable lifetime; up to five years service lifetime
- Robust construction with few welding points is highly vibration- and shock-resistant, further reducing early failures and extending lamp life
- ZrAl getter ensures high lumen maintenance and few early failures
- "Plus" concept with high efficacy translates into high light output
- Fully compliant with EuP legislation for sodium lamps

Application

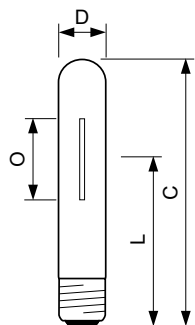
- Road and residential lighting
- Industrial area lighting
- Recreational sports facilities, indoor and outdoor
- Decorative floodlighting, illumination

MASTER SON-T APIA Plus Hg Free

Versions



Dimensional drawing



Product	D (max)	O	L	C (max)
MASTER SON-T APIA Plus Hg Free 400W E40 1SL	47 mm	109 mm	175 mm	279 mm
MASTER SON-T APIA Plus Hg Free 150W E40 1SL	47 mm	73 mm	132 mm	210 mm
MASTER SON-T APIA Plus Hg Free 250W E40 1SL	47 mm	87 mm	158 mm	257 mm

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Approval and Application

Energy Efficiency Label (EEL)	A+
Mercury (Hg) Content (Nom)	0.0 mg

Controls and Dimming

Dimmable	yes
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Operating and Electrical

Voltage (Max)	110 V
Voltage (Nom)	95 V
Re-Ignition Time (Min) (Max)	120 s

General Information

Cap-Base	E40
Life To 50% Failures (Nom)	38000 h
Life To 5% Failures (Nom)	20000 h
LSF 12000 h Rated	99 %
LSF 16000 h Rated	98 %
LSF 2000 h Rated	99 %
LSF 20000 h Rated	95 %
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

Colour Code	221
Correlated Colour Temperature (Nom)	2100 K
Colour Rendering Index (Max)	25

Mechanical and Housing

Bulb Finish	Clear (CL)
Bulb Shape	T46

Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h
928199009830	MASTER SON-T APIA Plus Hg Free 150W E40 1SL	165 kWh
928199109830	MASTER SON-T APIA Plus Hg Free 250W E40 1SL	282 kWh
928199209830	MASTER SON-T APIA Plus Hg Free 400W E40 1SL	437 kWh

Operating and Electrical

Order Code	Full Product Name	Lamp Current (EM) (Nom)	Voltage (Min)	Power (Rated) (Nom)
928199009830	MASTER SON-T APIA Plus Hg Free 150W E40 1SL	1.8 A	80 V	150.0 W
928199109830	MASTER SON-T APIA Plus Hg Free 250W E40 1SL	3 A	80 V	256.0 W

Order Code	Full Product Name	Lamp Current (EM) (Nom)	Voltage (Min)	Power (Rated) (Nom)
928199209830	MASTER SON-T APIA Plus Hg Free 400W E40 1SL	4.6 A	90 V	397.0 W

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
928199009830	MASTER SON-T APIA Plus Hg Free 150W E40 1SL	350 °C
928199109830	MASTER SON-T APIA Plus Hg Free 250W E40 1SL	450 °C

Order Code	Full Product Name	Bulb Temperature (Max)
928199209830	MASTER SON-T APIA Plus Hg Free 400W E40 1SL	450 °C

Light Technical (1/2)

MASTER SON-T APIA Plus Hg Free

Order Code	Full Product Name	LLMF	LLMF	LLMF	LLMF	Order Code	Full Product Name	LLMF	LLMF	LLMF	LLMF
		12000 h	16000 h	2000 h	20000 h			12000 h	16000 h	2000 h	20000 h
		Rated	Rated	Rated	Rated			Rated	Rated	Rated	Rated
928199009830	MASTER SON-T APIA Plus Hg Free 150W E40 1SL	86.5 %	79.5 %	99 %	73.5 %	928199209830	MASTER SON-T APIA Plus Hg Free 400W E40 1SL	90 %	88 %	96 %	97 %
928199109830	MASTER SON-T APIA Plus Hg Free 250W E40 1SL	90 %	88 %	96 %	87 %						

Light Technical (2/2)

Order Code	Full Product Name	LLMF 4000 h	LLMF 6000 h	LLMF 8000 h	Luminous Efficacy (rated)	Luminous Flux	Ratio Scotopic/
		Rated	Rated	Rated	(Nom)	(Rated) (Nom)	Photopic Lumens
928199009830	MASTER SON-T APIA Plus Hg Free 150W E40 1SL	98 %	97 %	93.5 %	114 lm/W	17100 lm	0.55
928199109830	MASTER SON-T APIA Plus Hg Free 250W E40 1SL	94 %	92 %	91 %	125 lm/W	32000 lm	0.60
928199209830	MASTER SON-T APIA Plus Hg Free 400W E40 1SL	94 %	92 %	91 %	136 lm/W	54000 lm	0.60

Light Distribution Diagrams

