# **PHILIPS** Lighting



# **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

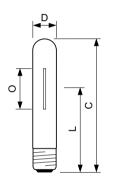
# Versions





SON-T APIA Plus Hg Free, 70W, E27

# **Dimensional drawing**



SON-T APIA Plus Hg Free E4
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Product	D (max)	0	L	C (max)
MASTER SON-T APIA Plus Hg Free 400W	47 mm	109 mm	175 mm	279 mm
E40 1SL				
MASTER SON-T APIA Plus Hg Free 70W E27	36 mm	46 mm	104 mm	156 mm
1SL				

# Product family leaflet, 2018, January 26

# MASTER SON-T APIA Plus Hg Free

Approval and Application	
Energy Efficiency Label (EEL)	A+
Controls and Dimming	
Dimmable	Yes
Operating and Electrical	
Re-Ignition Time (Min) (Max)	120 s
General Information	
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
Light Technical	
Correlated Color Temperature (Nom)	2100 K
Color Rendering Index (Max)	25
LLMF 12000 h Rated	90 %
Mechanical and Housing	
Bulb Finish	Clear

#### Approval and Application

		Energy Consumption kWh/	Mercury (Hg) Content
Order Code	Full Product Name	1000 h	(Nom)
928196209227	MASTER SON-T APIA Plus Hg Free 70W E27 1SL	77 kWh	0 mg
928199209830	MASTER SON-T APIA Plus Hg Free 400W E40 1SL	437 kWh	0.0 mg

# Operating and Electrical (1/2)

Lamp											
		Current	Voltage	Voltage	Voltage			Current	Voltage	Voltage	Voltage
Order Code	Full Product Name	(EM) (Nom)	(Max)	(Min)	(Nom)	Order Code	Full Product Name	(EM) (Nom)	(Max)	(Min)	(Nom)
928196209227	MASTER SON-T APIA	0.99 A	100 V	70 V	85 V	928199209830	MASTER SON-T APIA	4.6 A	110 V	90 V	95 V
	Plus Hg Free 70W E27						Plus Hg Free 400W E40				
	1SL						1SL				

# Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated) (Nom)	Order Code	Full Product Name	Power (Rated) (Nom)
928196209227	MASTER SON-T APIA Plus Hg Free 70W E27 1SL	70.0 W	928199209830	MASTER SON-T APIA Plus Hg Free 400W E40 1SL	397.0 W

# **General Information**

Order Code	Full Product Name	Cap-Base	Order Code	Full Product Name	Cap-Base
928196209227	MASTER SON-T APIA Plus Hg Free 70W E27 1SL	E27	928199209830	MASTER SON-T APIA Plus Hg Free 400W E40 1SL	E40

#### Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
928196209227	MASTER SON-T APIA Plus Hg Free 70W E27 1SL	350 °C

# MASTER SON-T APIA Plus Hg Free

Order Code	Full Product Name	Bulb Temperature (Max)
9281992098	0 MASTER SON-T APIA Plus Hg Free 400W E40 1SL	450 °C

### Light Technical (1/2)

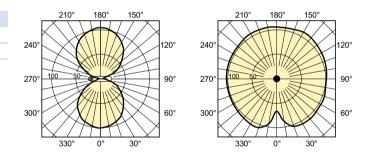
			LLMF		LLMF				LLMF		LLMF
		Color	16000 h	LLMF 2000	20000 h			Color	16000 h	LLMF 2000	20000 h
Order Code	Full Product Name	Code	Rated	h Rated	Rated	Order Code	Full Product Name	Code	Rated	h Rated	Rated
928196209227	MASTER SON-T APIA	-	86 %	98 %	83 %	928199209830	MASTER SON-T APIA	221	88 %	96 %	97 %
	Plus Hg Free 70W E27						Plus Hg Free 400W E40				
	1SL						1SL				

# Light Technical (2/2)

		LLMF 4000 h	LLMF 6000 h	LLMF 8000 h	Luminous Efficacy (rated)	Luminous Flux	Ratio Scotopic/
Order Code	Full Product Name	Rated	Rated	Rated	(Nom)	(Rated) (Nom)	Photopic Lumens
928196209227	MASTER SON-T APIA Plus Hg Free 70W E27 1SL	97 %	95 %	93 %	90 lm/W	6300 lm	0.55
928199209830	MASTER SON-T APIA Plus Hg Free 400W	94 %	92 %	91 %	136 lm/W	54000 lm	0.60
	E40 1SL						

#### Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
928196209227	MASTER SON-T APIA Plus Hg Free 70W E27 1SL	T35
928199209830	MASTER SON-T APIA Plus Hg Free 400W E40 1SL	T46





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www.lighting.philips.com 2018, January 26 - data subject to change