



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

- Tubular outer bulb
- Ceramic discharge tube with new Active Philips Integrated Antenna (APIA) for an improved and prolonged long and reliable lifetime 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 translated into high light output
- Completely lead-free lamps

Application

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

Warnings and Safety

- Control gear must include end-of-life protection (IEC60662, IEC 62035)

MASTER SON-T APIA Plus Xtra

Controls and Dimming

Dimmable	Yes
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General Information

LSF 12000 h Rated	99 %
LSF 16000 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

Chromaticity Coordinate Y (Nom)	0.42
Colour Code	-
Colour Rendering Index (Max)	25
Colour Rendering Index (Nom)	-

Mechanical and Housing

Bulb Finish	Clear
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Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Mercury (Hg) Content (Max)	Mercury (Hg) Content (Nom)
928150119227	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	75 kWh	12.2 mg	12.2 mg
928150219230	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	103 kWh	16.3 mg	16.3 mg
928150419230	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	255 kWh	15.1 mg	15.1 mg
928150519227	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	397 kWh	19.6 mg	19.6 mg

Operating and Electrical (1/2)

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928150119227	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	0.96 A	105 V	75 V	92 V
928150219230	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)
928150419230	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	0.293 A	115 V	85 V	99 V
928150519227	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)
928150119227	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	75.0 W	30 s
928150219230	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)
928150419230	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	255.0 W	120 s
928150519227	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)
928150119227	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	E27	28000 h	32000 h	40000 h
928150219230	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)
928150419230	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	E40	32000 h	36500 h	45000 h
928150519227	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 2000 h Rated	LSF 20000 h Rated
		Failures (Nom)		
928150119227	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	24000 h	99 %	97 %
928150219230	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	24000 h	99 %	97 %

Order Code	Full Product Name	Life To 5%	LSF 2000 h Rated	LSF 20000 h Rated
		Failures (Nom)		
928150419230	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	28000 h	100 %	99 %
928150519227	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	28000 h	100 %	99 %

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
928150119227	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	350 °C
928150219230	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	450 °C
928150419230	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	450 °C

Order Code	Full Product Name	Bulb Temperature (Max)
928150519227	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	450 °C

Light Technical (1/2)

Order Code	Full Product Name	Chromaticity Coordinate X (Nom)	Correlated Colour Temperature (Nom)	LLMF 12000 h Rated	LLMF 16000 h Rated
928150119227	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	0.54	1900 K	87 %	86 %
928150219230	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	0.535	2000 K	92 %	90 %

Order Code	Full Product Name	Chromaticity Coordinate X (Nom)	Correlated Colour Temperature (Nom)	LLMF 12000 h Rated	LLMF 16000 h Rated
928150419230	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	0.535	2000 K	96 %	95 %
928150519227	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	0.535	2000 K	96 %	95 %

Light Technical (2/2)

Order Code	Full Product Name	LLMF 2000 h Rated	LLMF 20000 h Rated	LLMF 4000 h Rated	LLMF 6000 h Rated	LLMF 8000 h Rated	Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated)	Ratio Scotopic/Photopic Lumens
928150119227	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	92 %	86 %	90 %	89 %	88 %	96 lm/W	7200 lm	7200 lm	0.50

MASTER SON-T APIA Plus Xtra

Order Code	Full Product Name	LLMF					Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)	Ratio Scotopic/Photopic Lumens
		LLMF 2000 h Rated	LLMF 20000 h Rated	LLMF 4000 h Rated	LLMF 6000 h Rated	LLMF 8000 h Rated				
928150219230	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	98 %	89 %	96 %	95 %	94 %	110 lm/W	11300 lm	11300 lm	0.55
928150419230	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	99 %	94 %	98 %	97 %	96 %	132 lm/W	33700 lm	33700 lm	0.60
928150519227	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	99 %	94 %	98 %	97 %	96 %	140 lm/W	55400 lm	55400 lm	0.60

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape	Order Code	Full Product Name	Bulb Shape
928150119227	MASTER SON-T APIA Plus Xtra 70W E27 1SL/12	T35	928150419230	MASTER SON-T APIA Plus Xtra 250W E40 1SL/12	T46
928150219230	MASTER SON-T APIA Plus Xtra 100W E40 1SL/12	T46	928150519227	MASTER SON-T APIA Plus Xtra 400W E40 1SL/12	T46

