



MASTER SON-T PIA Plus



MASTER SON-T PIA Plus 400W E E40 1SL/12

High Pressure Sodium lamp with clear tubular outer bulb, high output and long reliable lifetime

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.

Product data

General Information	
Cap base	E40 [E40]
Operating position	UNIVERSAL [Any or Universal (U)]
Life to 5% failures (nom.)	20500 h
Life to 10% failures (nom.)	24000 h
Life to 20% failures (nom.)	28000 h
Life to 50% failures (nom.)	36000 h
ANSI code HID	-
System description	External Ignitor (E)
LSF 2000 h Rated	100 %
LSF 4000 h Rated	99 %
LSF 6000 h Rated	99 %
LSF 8000 h Rated	99 %
LSF 12000 h Rated	99 %
LSF 16000 h Rated	98 %
LSF 20000 h Rated	95 %

	Sphere
Light Technical	
Colour Code	220 [CCT of 2,000 K]
Luminous flux (nom.)	55900 lm
Luminous flux (rated) (nom.)	55900 lm
Lumen maintenance 2,000 hours (min.)	95 %
Lumen maintenance 2,000 hours (nom.)	99 %
Lumen maintenance 20,000 hours	88 %
Lumen maintenance 5,000 hours (min.)	90.5 %
Lumen maintenance 5,000 hours (nom.)	96.5 %
Chromaticity coordinate X (nom.)	0.535
Chromaticity coordinate Y (nom.)	0.42
Correlated Colour Temperature (Nom)	2000 K
Luminous efficacy (rated) (nom.)	137 lm/W
Color rendering index (max.)	25
Colour rendering index (nom.)	-

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LLMF 2000 h Rated	99 %
LLMF 4000 h Rated	97 %
LLMF 6000 h Rated	96 %
LLMF 8000 h Rated	94 %
LLMF 12000 h Rated	92 %
LLMF 16000 h Rated	90 %
LLMF 20000 h Rated	88 %
Ratio scotopic/photopic lumens	0.60

Operating and Electrical

Power (Rated) (Nom)	408.0 W
Lamp current (EM) (nom.)	4.410 A
Ignition supply voltage (max.)	198 V
Ignition peak voltage (max.)	2800 V
Re-ignition time (min.) (max.)	120 s
Ignition time (max.)	10 s
Voltage (Max)	115 V
Voltage (Min)	85 V
Voltage (Nom)	105 V

Controls and Dimming

Dimmable	Yes
Run-up time 90% (max.)	5 min

Mechanical and Housing

Lamp Finish	Clear
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Cap-base information	na [-]
Bulb shape	T46 [T 46mm]

Approval and Application

Energy Efficiency Class	E
Mercury (Hg) content (max.)	19.6 mg
Mercury (Hg) content (nom.)	20 mg
Energy consumption kWh/1,000 hours	408 kWh
	473369

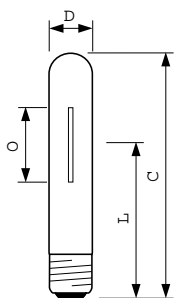
Luminaire Design Requirements

Bulb temperature (max.)	450 °C
Cap-base temperature (max.)	250 °C

Product Data

Full product code	871150017988315
Order product name	MASTER SON-T PIA Plus 400W E E40 1SL/12
EAN/UPC – product	8711500179883
Order code	17988315
SAP numerator – quantity per pack	1
Numerator – packs per outer box	12
SAP material	928144809227
SAP net weight (piece)	0.180 kg
ILCOS code	ST-400-H/E-E40

Dimensional drawing



MASTER SON-T PIA Plus 400W E E40 1SL/12

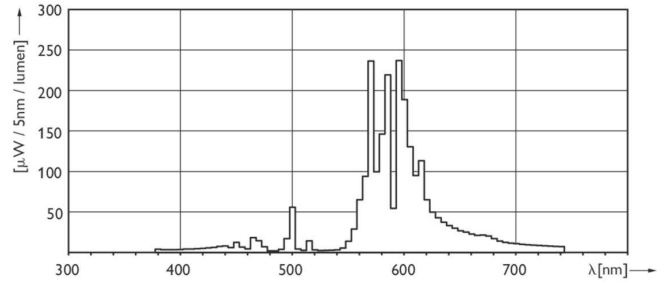
Product	D (max)	O	L	C (max)
MASTER SON-T PIA Plus 400W E E40 1SL/12	48 mm	83 mm	175 mm	279 mm

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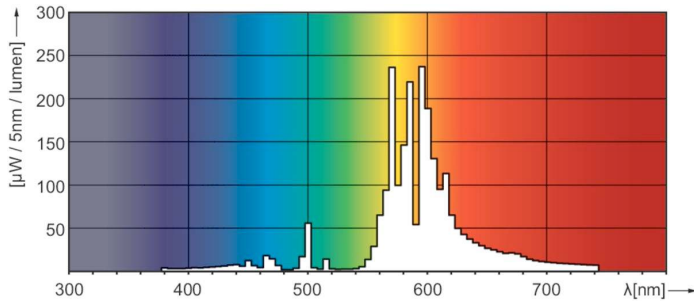
Photometric data



LDLD_SON-TPIA-Light distribution diagram

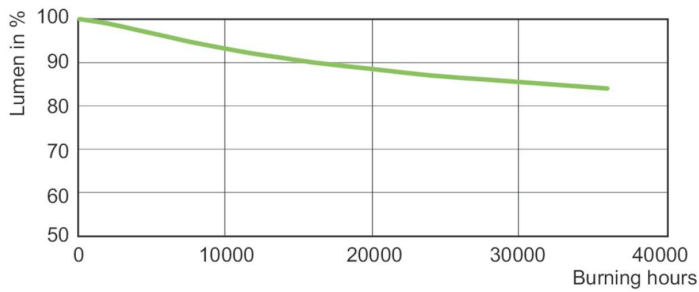


LDPB_SON-TPIA_0013-Spectral power distribution B/W

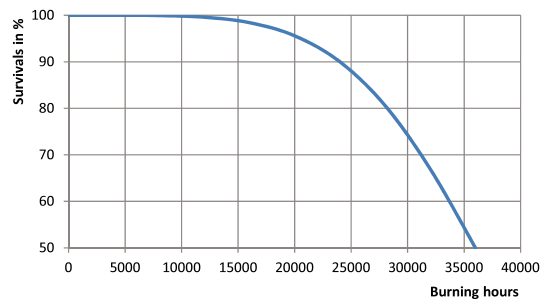


LDPO_SON-TPIA_0013-Spectral power distribution Colour

Lifetime



LDLM_SON-TPIA_0009-Lumen maintenance diagram



SON(-T) PIA Plus 150W 250W 400W Life Expectancy Diagram

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