



# MASTER SON PIA Plus

## MASTER SON PIA Plus 150W/220 E40 1SL/12

High Pressure Sodium lamp with opalized ovoid 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
System Description	External Ignitor
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 %
Flux measurement reference	Sphere

Light technical	
Color Code	220 [ CCT of 2000K]
Luminous Flux (Nom)	16600 lm
Luminous Flux (Rated) (Nom)	16600 lm
Chromaticity Coordinate X (Nom)	0.535
Chromaticity Coordinate Y (Nom)	0.42
Correlated Color Temperature (Nom)	2000 K
Luminous Efficacy (rated) (Nom)	107.79 lm/W
Color Rendering Index (Max)	25
Color Rendering Index (Nom)	-
LLMF 2000 h Rated	99 %
LLMF 4000 h Rated	98 %
LLMF 6000 h Rated	97 %
LLMF 8000 h Rated	96 %
LLMF 12000 h Rated	96 %
LLMF 16000 h Rated	95 %
LLMF 20000 h Rated	94 %

# MASTER SON PIA Plus

Ratio Scotopic/Photopic Lumens	0.55
<b>Operating and electrical</b>	
Power (Nom)	154.0 W
Lamp Current (EM) (Nom)	0.178 A
Ignition Supply Voltage (Max)	198 V
Ignition Peak Voltage (Max)	2800 V
Re-Ignition Time (Min) (Max)	180 s
Ignition Time (Max)	5 s
Voltage (Max)	115 V
Voltage (Min)	85 V
Voltage (Nom)	100 V
<b>Controls and dimming</b>	
Dimmable	Yes
Run-Up Time 90% (Max)	4 min
<b>Mechanical and housing</b>	
Bulb Finish	Coated glass
Bulb Shape	BD90 [ BD 90mm]
<b>Approval and application</b>	
Energy Efficiency Class	F

Mercury (Hg) Content (Max)	15.1 mg
Mercury (Hg) Content (Nom)	15 mg
Energy Consumption kWh/1000 h	154 kWh
EPREL Registration Number	473387

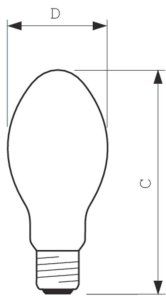
## Luminaire design requirements

Bulb Temperature (Max)	350 °C
Cap-Base Temperature (Max)	250 °C

## Product data

Full product code	871150018228915
Order product name	MASTER SON PIA Plus 150W/220 E40 1SL/12
EAN/UPC - Product	8711500182289
Order code	928151409827
Numerator - Quantity Per Pack	1
Numerator - Packs per outer box	12
Material Nr. (12NC)	928151409827
Net Weight (Piece)	0.156 kg
ILCOS Code	SE-150-H/S-E40

## Dimensional drawing

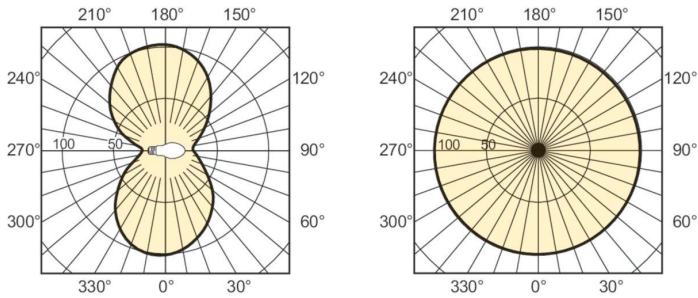


MASTER SON PIA Plus 150W/220 E40 1SL/12

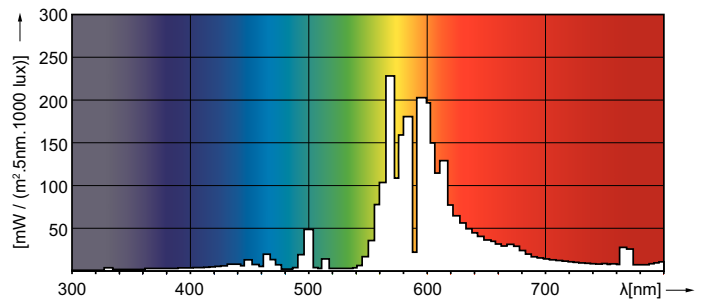
Product	D (max)	C (max)
MASTER SON PIA Plus 150W/220 E40 1SL/12	91 mm	227 mm

# MASTER SON PIA Plus

## Photometric data

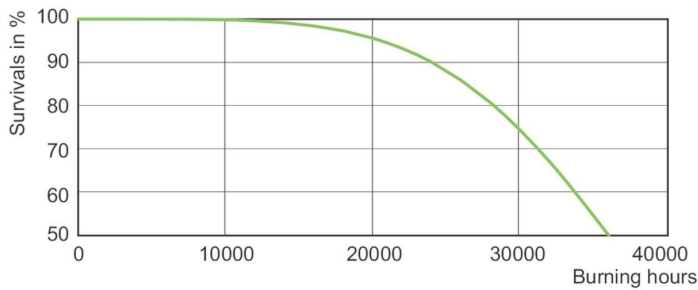


LDLD\_SON-PIA\_0001-Light distribution diagram

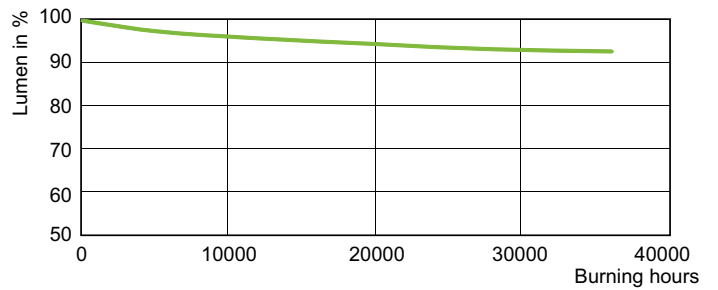


LDPO\_SON-PIA\_0001-Spectral power distribution Colour

## Lifetime



LDLE\_SON-PIA\_0004-Life expectancy diagram



LDLM\_SON-PIA\_0004-Lumen maintenance diagram

