



# MASTER SON-T PIA Plus

## MASTER SON-T PIA Plus 250W 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                  |
| 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)                | 32100 lm            |
| Luminous Flux (Rated) (Nom)        | 32100 lm            |
| Chromaticity Coordinate X (Nom)    | 0.535               |
| Chromaticity Coordinate Y (Nom)    | 0.420               |
| Correlated Color Temperature (Nom) | 2000 K              |
| Luminous Efficacy (rated) (Nom)    | 125 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 %                |

# MASTER SON-T PIA Plus

|                                |      |
|--------------------------------|------|
| LLMF 16000 h Rated             | 95 % |
| LLMF 20000 h Rated             | 94 % |
| Ratio Scotopic/Photopic Lumens | 0.60 |

## Operating and Electrical

|                               |              |
|-------------------------------|--------------|
| Lamp supply voltage           | 230 V [ 230] |
| Power (Nom)                   | 257.0 W      |
| Lamp Current (EM) (Nom)       | 0.290 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)                 | 102 V        |

## Controls and Dimming

|                       |       |
|-----------------------|-------|
| Dimmable              | Yes   |
| Run-Up Time 90% (Max) | 5 min |

## Mechanical and Housing

|                      |               |
|----------------------|---------------|
| Bulb Finish          | Clear         |
| Cap-Base Information | 45            |
| Bulb Shape           | T46 [ T 46mm] |

## Approval and Application

|                               |         |
|-------------------------------|---------|
| Energy Efficiency Class       | E       |
| Mercury (Hg) Content (Max)    | 15.1 mg |
| Mercury (Hg) Content (Nom)    | 15.1 mg |
| Energy Consumption kWh/1000 h | 257 kWh |
| EPREL Registration Number     | 473368  |

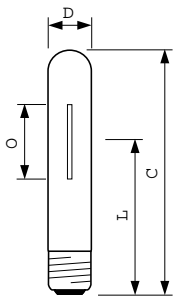
## Luminaire Design Requirements

|                            |        |
|----------------------------|--------|
| Bulb Temperature (Max)     | 450 °C |
| Cap-Base Temperature (Max) | 250 °C |

## Product Data

|                                 |                                       |
|---------------------------------|---------------------------------------|
| Full product code               | 871829118075300                       |
| Order product name              | MASTER SON-T PIA Plus 250W E40 1SL/12 |
| EAN/UPC - Product               | 8718291180753                         |
| Order code                      | 928144709293                          |
| Numerator - Quantity Per Pack   | 1                                     |
| Numerator - Packs per outer box | 12                                    |
| Material Nr. (12NC)             | 928144709293                          |
| Net Weight (Piece)              | 0.135 kg                              |
| ILCOS Code                      | ST-250-H/E-E40                        |

## Dimensional drawing

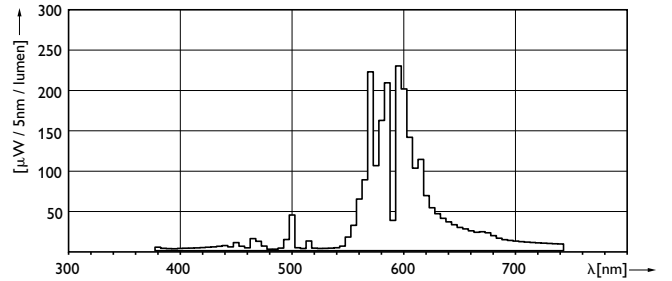


SON-T Plus 250W/220 E40

| Product                               | D (max) | O     | L      | C (max) |
|---------------------------------------|---------|-------|--------|---------|
| MASTER SON-T PIA Plus 250W E40 1SL/12 | 48 mm   | 64 mm | 158 mm | 257 mm  |

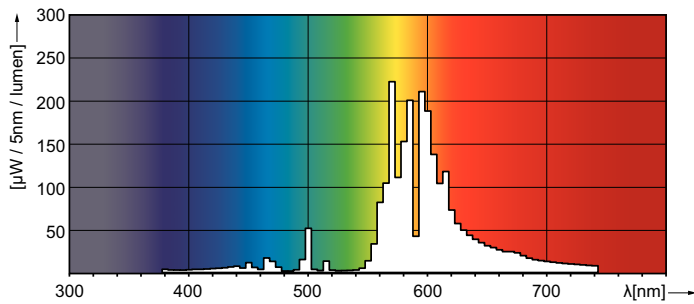
# MASTER SON-T PIA Plus

## Photometric data



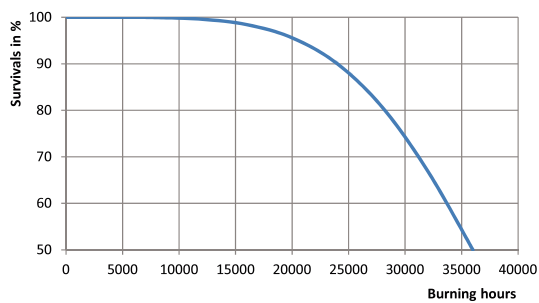
LDLD\_SON-TPIA-Light distribution diagram

LDPB\_SON-TPIA\_0012-Spectral power distribution B/W

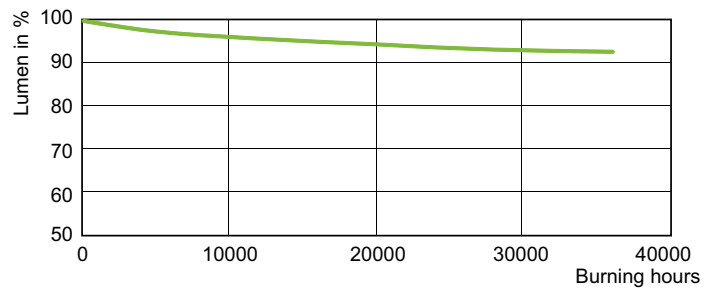


LDPO\_SON-TPIA\_0012-Spectral power distribution Colour

## Lifetime



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



LDLM\_SON-TPIA\_0004-Lumen maintenance diagram

## MASTER SON-T PIA Plus

