



The highly efficient and most reliable solution in road lighting

MASTER SON APIA Plus Xtra

High Pressure Sodium lamp with opalized outer bulb, 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

- Ovoid-shaped coated outer bulb
- Ceramic discharge tube with new Active Philips Integrated Antenna (APIA) concept for an improved and prolonged lifetime of up to 6 years
- "Plus" concept with high efficacy translates into high light output and improved lumen maintenance
- Robust construction with few welding points is highly vibration- and shock-resistant, further reducing early failures and extending lamp life
- Dimmable

Application

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

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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.

Versions

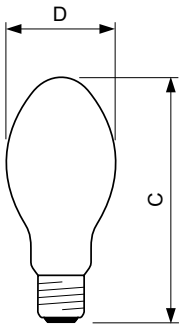


SON APIA Plus Xtra, E27



SON APIA Plus Xtra, E40

Dimensional drawing



| Product | D (max) | C (max) |
|---|---------|---------|
| MASTER SON APIA Plus Xtra 50W E27 1SL/24 | 71 mm | 156 mm |
| MASTER SON APIA Plus Xtra 100W E40 1SL/12 | 76 mm | 186 mm |
| MASTER SON APIA Plus Xtra 70W E27 1SL/24 | 71 mm | 156 mm |
| MASTER SON APIA Plus Xtra 150W E40 1SL/12 | 91 mm | 227 mm |
| MASTER SON APIA Plus Xtra 250W E40 1SL/12 | 91 mm | 227 mm |

MASTER SON APIA Plus Xtra

Controls and Dimming

| | |
|----------|-----|
| Dimmable | Yes |
|----------|-----|

General Information

| | |
|--------------------|------------------|
| LSF 12000 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 |

Luminaire Design Requirements

| | |
|------------------------|--------|
| Bulb Temperature (Max) | 350 °C |
|------------------------|--------|

Light Technical

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

Mechanical and Housing

| | |
|-------------|--------------|
| Bulb Finish | Coated glass |
|-------------|--------------|

Approval and Application

| Order Code | Full Product Name | Energy Consumption kWh/1000 h | Mercury (Hg) Content (Max) | Mercury (Hg) Content (Nom) |
|--------------|---|-------------------------------|----------------------------|----------------------------|
| 928150619835 | MASTER SON APIA Plus Xtra 50W E27 1SL/24 | 51 kWh | 9.8 mg | 9.8 mg |
| 928150719835 | MASTER SON APIA Plus Xtra 70W E27 1SL/24 | 74 kWh | 12.2 mg | 12.2 mg |
| 928150819827 | MASTER SON APIA Plus Xtra 100W E40 1SL/12 | 100 kWh | 16.3 mg | 16.3 mg |
| 928150919827 | MASTER SON APIA Plus Xtra 150W E40 1SL/12 | 154 kWh | 15.1 mg | 15.1 mg |
| 928151019830 | MASTER SON APIA Plus Xtra 250W E40 1SL/12 | 260 kWh | 15.1 mg | 15.1 mg |

Operating and Electrical (1/2)

| Order Code | Full Product Name | Lamp Current (EM) (Nom) | Voltage (Max) | Voltage (Min) | Voltage (Nom) |
|--------------|---|-------------------------|---------------|---------------|---------------|
| 928150619835 | MASTER SON APIA Plus Xtra 50W E27 1SL/24 | 0.76 A | 100 V | 70 V | 81 V |
| 928150719835 | MASTER SON APIA Plus Xtra 70W E27 1SL/24 | 0.96 A | 105 V | 75 V | 92 V |
| 928150819827 | MASTER SON APIA Plus Xtra 100W E40 1SL/12 | 1.2 A | 115 V | 85 V | 97 V |

| Order Code | Full Product Name | Lamp Current (EM) (Nom) | Voltage (Max) | Voltage (Min) | Voltage (Nom) |
|--------------|---|-------------------------|---------------|---------------|---------------|
| 928150919827 | MASTER SON APIA Plus Xtra 150W E40 1SL/12 | 0.179 A | 115 V | 85 V | 97 V |
| 928151019830 | MASTER SON APIA Plus Xtra 250W E40 1SL/12 | 0.296 A | 115 V | 85 V | 96 V |

Operating and Electrical (2/2)

| Order Code | Full Product Name | Power (Rated) (Nom) | Re-Ignition Time (Min) (Max) |
|--------------|---|---------------------|------------------------------|
| 928150619835 | MASTER SON APIA Plus Xtra 50W E27 1SL/24 | 51.0 W | 180 s |
| 928150719835 | MASTER SON APIA Plus Xtra 70W E27 1SL/24 | 74.0 W | 180 s |
| 928150819827 | MASTER SON APIA Plus Xtra 100W E40 1SL/12 | 100.0 W | 120 s |

| Order Code | Full Product Name | Power (Rated) (Nom) | Re-Ignition Time (Min) (Max) |
|--------------|---|---------------------|------------------------------|
| 928150919827 | MASTER SON APIA Plus Xtra 150W E40 1SL/12 | 154.0 W | 180 s |
| 928151019830 | MASTER SON APIA Plus Xtra 250W E40 1SL/12 | 260.0 W | 120 s |

General Information (1/2)

MASTER SON 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) |
| 928150619835 | MASTER SON APIA Plus Xtra 50W E27 1SL/24 | E27 | 25000 h | 29500 h | 38000 h |
| 928150719835 | MASTER SON APIA Plus Xtra 70W E27 1SL/24 | E27 | 28000 h | 32000 h | 40000 h |
| 928150819827 | MASTER SON 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) |
| 928150919827 | MASTER SON APIA Plus Xtra 150W E40 1SL/12 | E40 | 32000 h | 36500 h | 45000 h |
| 928151019830 | MASTER SON APIA Plus Xtra 250W E40 1SL/12 | E40 | 32000 h | 36500 h | 45000 h |

General Information (2/2)

| Order Code | Full Product Name | Life To 5% | LSF | LSF |
|--------------|---|----------------|---------------|------------------|
| | | Failures (Nom) | 16000 h Rated | LSF 2000 h Rated |
| 928150619835 | MASTER SON APIA Plus Xtra 50W E27 1SL/24 | 21000 h | 98 % | 99 % |
| 928150719835 | MASTER SON APIA Plus Xtra 70W E27 1SL/24 | 24000 h | 99 % | 99 % |
| 928150819827 | MASTER SON APIA Plus Xtra 100W E40 1SL/12 | 24000 h | 99 % | 99 % |

| Order Code | Full Product Name | Life To 5% | LSF | LSF |
|--------------|---|----------------|---------------|------------------|
| | | Failures (Nom) | 16000 h Rated | LSF 2000 h Rated |
| 928150919827 | MASTER SON APIA Plus Xtra 150W E40 1SL/12 | 28000 h | 99 % | 100 % |
| 928151019830 | MASTER SON APIA Plus Xtra 250W E40 1SL/12 | 28000 h | 99 % | 100 % |

Light Technical (1/2)

| Order Code | Full Product Name | Chromaticity Coordinate X (Nom) | Correlated | | |
|--------------|---|---------------------------------|-------------------------|--------------------|--------------------|
| | | | Color Temperature (Nom) | LLMF 12000 h Rated | LLMF 16000 h Rated |
| 928150619835 | MASTER SON APIA Plus Xtra 50W E27 1SL/24 | 0.54 | 1900 K | 85 % | 84 % |
| 928150719835 | MASTER SON APIA Plus Xtra 70W E27 1SL/24 | 0.54 | 1900 K | 85 % | 84 % |
| 928150819827 | MASTER SON APIA Plus Xtra 100W E40 1SL/12 | 0.535 | 2000 K | 92 % | 90 % |

| Order Code | Full Product Name | Chromaticity Coordinate X (Nom) | Correlated | | |
|--------------|---|---------------------------------|-------------------------|--------------------|--------------------|
| | | | Color Temperature (Nom) | LLMF 12000 h Rated | LLMF 16000 h Rated |
| 928150919827 | MASTER SON APIA Plus Xtra 150W E40 1SL/12 | 0.535 | 2000 K | 96 % | 95 % |
| 928151019830 | MASTER SON APIA Plus Xtra 250W 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 |
| 928150619835 | MASTER SON APIA Plus Xtra 50W E27 1SL/24 | 91 % | 84 % | 88 % | 87 % | 86 % | 76.47 lm/W | 3900 lm | 3900 lm | 0.50 |

MASTER SON APIA Plus Xtra

| Order Code | Full Product Name | LLMF | | LLMF | | 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 | | | | |
| 928150719835 | MASTER SON APIA Plus Xtra 70W E27 1SL/24 | 91 % | 84 % | 88 % | 87 % | 86 % | 89.19 lm/W | 6600 lm | 6600 lm | 0.50 |
| 928150819827 | MASTER SON APIA Plus Xtra 100W E40 1SL/12 | 98 % | 89 % | 96 % | 95 % | 94 % | 100 lm/W | 10000 lm | 10000 lm | 0.55 |
| 928150919827 | MASTER SON APIA Plus Xtra 150W E40 1SL/12 | 99 % | 94 % | 98 % | 97 % | 96 % | 113.64 lm/W | 17600 lm | 17600 lm | 0.55 |
| 928151019830 | MASTER SON APIA Plus Xtra 250W E40 1SL/12 | 99 % | 94 % | 98 % | 97 % | 96 % | 120.77 lm/W | 31400 lm | 31400 lm | 0.60 |

Mechanical and Housing

| Order Code | Full Product Name | Bulb Shape |
|--------------|---|------------|
| 928150619835 | MASTER SON APIA Plus Xtra 50W E27 1SL/24 | B70 |
| 928150719835 | MASTER SON APIA Plus Xtra 70W E27 1SL/24 | B70 |
| 928150819827 | MASTER SON APIA Plus Xtra 100W E40 1SL/12 | B75 |
| 928150919827 | MASTER SON APIA Plus Xtra 150W E40 1SL/12 | BD90 |
| 928151019830 | MASTER SON APIA Plus Xtra 250W E40 1SL/12 | BD90 |

