



Product Description

SON

High Pressure Sodium lamp with opalized ovoid outer bulb

Benefits

- SON Pro is a cost-efficient and reliable solution in High Pressure Sodium

Features

- Ovoid, internally white coated outer bulb
- High luminous efficacy
- Robust construction is vibration- and shock-resistant leading to a reliable life
- Dimming possible with dedicated gear

Application

- Road and residential lighting
- Decorative floodlighting
- Commercial and industrial applications

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.

| Controls and Dimming | |
|-------------------------------|--------------|
| Dimmable | Yes |
| General Information | |
| Life To 50% Failures (Nom) | 28000 h |
| Operating Position | UNIVERSAL |
| Luminaire Design Requirements | |
| Bulb Temperature (Max) | 350 °C |
| Light Technical | |
| Colour Code | 220 |
| Colour Rendering Index (Max) | 25 |
| 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) |
|--------------|-----------------------------|----------------------------------|-------------------------------------|----------------------------------|
| 928150108828 | SON 70W/220 I E27 1CT/24 | 72 kWh | 16.3 mg | 16.3 mg |
| 928486700091 | SON 70W E E27 CO 1CT/24 | 73 kWh | 16.3 mg | 16.3 mg |
| 928486800091 | SON 150W E E40 CO 1SL/12 | 162 kWh | - | 20.4 mg |

| Order Code | Full Product Name | Energy Consumption kWh/1000 h | Mercury (Hg) Content (Max) | Mercury (Hg) Content (Nom) |
|--------------|-----------------------------|----------------------------------|-------------------------------------|----------------------------------|
| 928486900091 | SON 250W E E40 CO 1SL/12 | 275 kWh | - | 20.4 mg |
| 928487000091 | SON 400W E E40 CO 1SL/12 | 440 kWh | - | 24.5 mg |

Operating and Electrical

| Order Code | Full Product Name | Lamp Current (EM) (Nom) | Voltage (Max) | Voltage (Min) | Voltage (Nom) | Power (Rated) (Nom) | Re-Ignition Time (Min) (Max) |
|--------------|--------------------------|-------------------------|---------------|---------------|---------------|---------------------|------------------------------|
| 928150108828 | SON 70W/220 I E27 1CT/24 | 0.98 A | 105 V | 75 V | 90 V | 71.5 W | - |
| 928486700091 | SON 70W E E27 CO 1CT/24 | 0.950 A | 105 V | 75 V | 95 V | 72.5 W | 180 s |
| 928486800091 | SON 150W E E40 CO 1SL/12 | 1.8 A | 115 V | 85 V | 100 V | 147.0 W | 180 s |
| 928486900091 | SON 250W E E40 CO 1SL/12 | 3 A | 115 V | 85 V | 100 V | 250 W | 120 s |
| 928487000091 | SON 400W E E40 CO 1SL/12 | 4.45 A | 120 V | 90 V | 105 V | 400.0 W | 120 s |

General Information (1/2)

| Order Code | Full Product Name | Cap-Base | Life To 10% Failures (Nom) | Life To 20% Failures (Nom) | Life To 5% Failures (Nom) | LSF 12000 h Rated | LSF 16000 h Rated | LSF 2000 h Rated |
|--------------|--------------------------|----------|-------------------------------|-------------------------------|------------------------------|----------------------|----------------------|---------------------|
| 928150108828 | SON 70W/220 I E27 1CT/24 | E27 | 13000 h | 18000 h | 10000 h | 92 % | 84 % | 99 % |
| 928486700091 | SON 70W E E27 CO 1CT/24 | E27 | - | 22000 h | 12000 h | 94 % | 86 % | 99 % |
| 928486800091 | SON 150W E E40 CO 1SL/12 | E40 | - | 20000 h | 12000 h | - | - | - |
| 928486900091 | SON 250W E E40 CO 1SL/12 | E40 | - | 20000 h | 12000 h | - | - | - |
| 928487000091 | SON 400W E E40 CO 1SL/12 | E40 | - | 20000 h | 12000 h | - | - | - |

General Information (2/2)

| Order Code | Full Product Name | LSF | LSF | LSF | LSF | System Description |
|--------------|--------------------------|---------------|--------------|--------------|--------------|----------------------|
| | | 20000 h Rated | 4000 h Rated | 6000 h Rated | 8000 h Rated | |
| 928150108828 | SON 70W/220 I E27 1CT/24 | 74 % | 99 % | 98 % | 97 % | Internal Ignitor (I) |
| 928486700091 | SON 70W E E27 CO 1CT/24 | 76 % | 99 % | 99 % | 98 % | External Ignitor (E) |
| 928486800091 | SON 150W E E40 CO 1SL/12 | - | - | - | - | External Ignitor (E) |

| Order Code | Full Product Name | LSF | LSF | LSF | LSF | System Description |
|--------------|--------------------------|---------------|--------------|--------------|--------------|----------------------|
| | | 20000 h Rated | 4000 h Rated | 6000 h Rated | 8000 h Rated | |
| 928486900091 | SON 250W E E40 CO 1SL/12 | - | - | - | - | External Ignitor (E) |
| 928487000091 | SON 400W E E40 CO 1SL/12 | - | - | - | - | External Ignitor (E) |

Light Technical (1/3)

| Order Code | Full Product Name | Chromaticity | | Correlated Colour Temperature (Nom) | Colour | | | |
|--------------|--------------------------|--------------------|--------------------|-------------------------------------|-----------------------|--------------------|--------------------|-------------------|
| | | Coordinate X (Nom) | Coordinate Y (Nom) | | Rendering Index (Nom) | LLMF 12000 h Rated | LLMF 16000 h Rated | LLMF 2000 h Rated |
| 928150108828 | SON 70W/220 I E27 1CT/24 | 0.54 | 0.42 | 1900 K | - | 80 % | 79 % | 88 % |
| 928486700091 | SON 70W E E27 CO 1CT/24 | 0.540 | 0.420 | 1900 K | - | 81 % | 79 % | 93 % |
| 928486800091 | SON 150W E E40 CO 1SL/12 | - | - | 2000 K | - | - | - | - |
| 928486900091 | SON 250W E E40 CO 1SL/12 | - | - | 2000 K | - | - | - | - |
| 928487000091 | SON 400W E E40 CO 1SL/12 | - | - | 2000 K | - | - | - | - |

Light Technical (2/3)

| Order Code | Full Product Name | LLMF | LLMF | LLMF | LLMF | Lumen | Lumen | Lumen | Lumen | Lumen |
|--------------|--------------------------|---------------|--------------|--------------|--------------|---------------------------|---------------------------|--------------------------|--------------------------|---------------------|
| | | 20000 h Rated | 4000 h Rated | 6000 h Rated | 8000 h Rated | 10000 h (Min) Maintenance | 10000 h (Nom) Maintenance | 2000 h (Min) Maintenance | 2000 h (Nom) Maintenance | 20000 h Maintenance |
| 928150108828 | SON 70W/220 I E27 1CT/24 | 78 % | 84 % | 83 % | 81 % | 70 % | 81 % | 80 % | 88 % | 78 % |
| 928486700091 | SON 70W E E27 CO 1CT/24 | 78 % | 89 % | 86 % | 84 % | - | 85 % | 85 % | 93 % | - |
| 928486800091 | SON 150W E E40 CO 1SL/12 | - | - | - | - | 80 % | 85 % | 90 % | 95 % | - |
| 928486900091 | SON 250W E E40 CO 1SL/12 | - | - | - | - | 90 % | 95 % | 95 % | 98 % | - |
| 928487000091 | SON 400W E E40 CO 1SL/12 | - | - | - | - | 81 % | 88 % | 94 % | 97 % | - |

Light Technical (3/3)

| Order Code | Full Product Name | Lumen Maintenance | | Luminous Efficacy (rated) (Nom) | Luminous Flux (Nom) | Luminous Flux (Rated) (Min) | Luminous Flux (Rated) (Nom) |
|--------------|--------------------------|-------------------|--------------|---------------------------------|---------------------|-----------------------------|-----------------------------|
| | | 5000 h (Min) | 5000 h (Nom) | | | | |
| 928150108828 | SON 70W/220 I E27 1CT/24 | 75 % | 83.5 % | 80 lm/W | 5600 lm | 5040 lm | 5600 lm |
| 928486700091 | SON 70W E E27 CO 1CT/24 | 80 % | 88 % | 80 lm/W | - | 5220 lm | 5800 lm |
| 928486800091 | SON 150W E E40 CO 1SL/12 | 85 % | 90 % | 93 lm/W | - | 12375 lm | 13750 lm |
| 928486900091 | SON 250W E E40 CO 1SL/12 | 92 % | 96 % | 106 lm/W | - | 22500 lm | 27000 lm |
| 928487000091 | SON 400W E E40 CO 1SL/12 | 88 % | 94 % | 122 lm/W | - | 42000 lm | 48000 lm |

Mechanical and Housing

| Order Code | Full Product Name | Bulb Shape | Order Code | Full Product Name | Bulb Shape |
|--------------|--------------------------|------------|--------------|--------------------------|------------|
| 928150108828 | SON 70W/220 I E27 1CT/24 | B70 | 928486800091 | SON 150W E E40 CO 1SL/12 | ED90 |
| 928486700091 | SON 70W E E27 CO 1CT/24 | BF70 | 928486900091 | SON 250W E E40 CO 1SL/12 | ED90 |

SON

| Order Code | Full Product Name | Bulb Shape |
|--------------|--------------------------|------------|
| 928487000091 | SON 400W E E40 CO 1SL/12 | ED120 |

