



# Product Description

## SON

High Pressure Sodium lamp with opalized ovoid outer bulb

### Benefits

- SON 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	Mercury (Hg)
			(Hg) Content (Max)	(Hg) Content (Nom)
18186230	SON 70W/220 I E27 1CT/24	72 kWh	16.3 mg	16.3 mg
21024130	SON 70W E E27 CO 1CT/24	73 kWh	16.3 mg	16.3 mg
21028915	SON 150W E E40 CO 1SL/12	162 kWh	-	20.4 mg

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Mercury	Mercury (Hg)
			(Hg) Content (Max)	(Hg) Content (Nom)
21038815	SON 250W E E40 CO 1SL/12	275 kWh	-	20.4 mg
21032615	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 (Nom)	Re-ignition Time (Min) (Max)
18186230	SON 70W/220 I E27 1CT/24	0.98 A	105 V	75 V	90 V	71.5 W	-
21024130	SON 70W E E27 CO 1CT/24	0.950 A	105 V	75 V	95 V	72.5 W	180 s
21028915	SON 150W E E40 CO 1SL/12	1.8 A	115 V	85 V	100 V	147.0 W	180 s
21038815	SON 250W E E40 CO 1SL/12	3 A	115 V	85 V	100 V	250 W	120 s
21032615	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%	Life To 20% Failures	Life To 5% Failures	LSF 12000 h	LSF 16000 h	LSF 2000 h
			Failures (Nom)	(Nom)	(Nom)	Rated	Rated	Rated
18186230	SON 70W/220 I E27 1CT/24	E27	13000 h	18000 h	10000 h	92 %	84 %	99 %
21024130	SON 70W E E27 CO 1CT/24	E27	-	22000 h	12000 h	94 %	86 %	99 %
21028915	SON 150W E E40 CO 1SL/12	E40	-	20000 h	12000 h	-	-	-
21038815	SON 250W E E40 CO 1SL/12	E40	-	20000 h	12000 h	-	-	-
21032615	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	
18186230	SON 70W/220 I E27 1CT/24	74 %	99 %	98 %	97 %	Internal Ignitor (I)
21024130	SON 70W E E27 CO 1CT/24	76 %	99 %	99 %	98 %	External Ignitor (E)
21028915	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	
21038815	SON 250W E E40 CO 1SL/12	-	-	-	-	External Ignitor (E)
21032615	SON 400W E E40 CO 1SL/12	-	-	-	-	External Ignitor (E)

### Light technical (1/3)

Order Code	Full Product Name	Chromaticity	Chromaticity	Correlated Colour	Colour Rendering	LLMF 12000 h	LLMF 16000 h	LLMF 2000 h
		Coordinate X (Nom)	Coordinate Y (Nom)	Temperature (Nom)	Index (Nom)	Rated	Rated	Rated
18186230	SON 70W/220 I E27 1CT/24	0.54	0.42	1900 K	-	80 %	79 %	88 %
21024130	SON 70W E E27 CO 1CT/24	0.540	0.420	1900 K	-	81 %	79 %	93 %
21028915	SON 150W E E40 CO 1SL/12	-	-	2000 K	-	-	-	-
21038815	SON 250W E E40 CO 1SL/12	-	-	2000 K	-	-	-	-
21032615	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	Maintenance 10000 h (Min)	Maintenance 10000 h (Nom)	Maintenance 2000 h (Min)	Maintenance 2000 h (Nom)	Maintenance 20000 h
18186230	SON 70W/220 I E27 1CT/24	78 %	84 %	83 %	81 %	70 %	81 %	80 %	88 %	78 %
21024130	SON 70W E E27 CO 1CT/24	78 %	89 %	86 %	84 %	-	85 %	85 %	93 %	-
21028915	SON 150W E E40 CO 1SL/12	-	-	-	-	80 %	85 %	90 %	95 %	-
21038815	SON 250W E E40 CO 1SL/12	-	-	-	-	90 %	95 %	95 %	98 %	-
21032615	SON 400W E E40 CO 1SL/12	-	-	-	-	81 %	88 %	94 %	97 %	-

### Light technical (3/3)

Order Code	Full Product Name	Lumen Maintenance	Lumen Maintenance	Luminous Efficacy	Luminous Flux	Luminous Flux	Luminous Flux
		5000 h (Min)	5000 h (Nom)	(rated) (Nom)	(Nom)	(Rated) (Min)	(Rated) (Nom)
18186230	SON 70W/220 I E27 1CT/24	75 %	83.5 %	80 lm/W	5600 lm	5040 lm	5600 lm
21024130	SON 70W E E27 CO 1CT/24	80 %	88 %	80 lm/W	-	5220 lm	5800 lm
21028915	SON 150W E E40 CO 1SL/12	85 %	90 %	93 lm/W	-	12375 lm	13750 lm
21038815	SON 250W E E40 CO 1SL/12	92 %	96 %	106 lm/W	-	22500 lm	27000 lm
21032615	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
18186230	SON 70W/220 I E27 1CT/24	B70
21024130	SON 70W E E27 CO 1CT/24	BF70
21028915	SON 150W E E40 CO 1SL/12	ED90

Order Code	Full Product Name	Bulb Shape
21038815	SON 250W E E40 CO 1SL/12	ED90
21032615	SON 400W E E40 CO 1SL/12	ED120

SON



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