



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.

Versions



SON (Internal Ignitor) E27

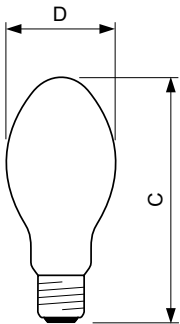


SON, E26/E27



SON, E39/E40

Dimensional drawing



Product	D (max)	C (max)
SON 150W E E40 CO 1SL/12	91 mm	226 mm
SON 250W E E40 CO 1SL/12	91 mm	226 mm
SON 400W E E40 CO 1SL/12	122 mm	290 mm
SON 70W E E27 CO 1CT/24	71 mm	156 mm
SON 70W/220 I E27 1CT/24	71 mm	155 mm

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	
Color Code	220
Color 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)
			Content (Max)	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	Mercury (Hg)
			Content (Max)	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 (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%	Life To 20% Failures	Life To 5% Failures	LSF 12000 h	LSF 16000 h	LSF 2000 h
			Failures (Nom)	(Nom)	(Nom)	Rated	Rated	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	Chromaticity	Correlated Color	Color Rendering	LLMF 12000 h	LLMF 16000 h	LLMF 2000 h
		Coordinate X (Nom)	Coordinate Y (Nom)	Temperature (Nom)	Index (Nom)	Rated	Rated	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	Maintenance 10000 h (Min)	Maintenance 10000 h (Nom)	Maintenance 2000 h (Min)	Maintenance 2000 h (Nom)	Maintenance 20000 h
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 %	-

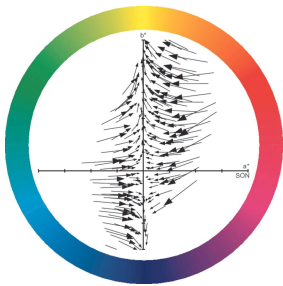
Light technical (3/3)

Order Code	Full Product Name	Lumen Maintenance	Lumen Maintenance	Luminous Efficacy	Luminous Flux	Luminous Flux	Luminous Flux
		5000 h (Min)	5000 h (Nom)	(rated) (Nom)	(Nom)	(Rated) (Min)	(Rated) (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	BD-17	928486900091	SON 250W E E40 CO 1SL/12	ED-28
928486700091	SON 70W E E27 CO 1CT/24	BF70	928487000091	SON 400W E E40 CO 1SL/12	ED120
928486800091	SON 150W E E40 CO 1SL/12	ED-28			

Colour Rendering Diagrams



LDCR_SON-Colour rendering diagram

SON

