



Product Description

SON H

High Pressure Sodium lamp with opalized outer bulb retrofit for High Pressure Mercury lamps

Benefits

- Instant and cost-effective upgrade of light level and reduction of energy use replacing HPL

Features

- Direct replacement for mercury lamps as they operate on the same control gear
- High luminous efficacy
- Robust construction is vibration- and shock-resistant leading to a reliable life

Application

- Road and residential lighting
- Commercial and industrial applications

Warnings and Safety

- For use with control gear designed for high-pressure mercury lamps
- For outdoor use only
- 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.

SON H

Versions

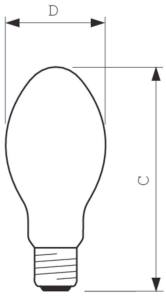


SON H, E40



SON H, E27

Dimensional drawing



Product	D (max)	C (max)
SON H 68W I E27 1CT/24	71 mm	156 mm
SON H 220W/220 E40 1SL/12	91 mm	227 mm
SON H 350W/220 E40 1SL/12	122 mm	290 mm
SON H 110W I E27 1CT/24	71 mm	156 mm

Controls and Dimming	
Dimmable	No
General Information	
LSF 2000 h Rated	99 %
Operating Position	UNIVERSAL
Luminaire Design Requirements	
Bulb Temperature (Max)	350 °C
Light Technical	
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	Energy Efficiency Label (EEL)	Mercury (Hg) Content (Nom)
928152409830	SON H 220W/220 E40 1SL/12	237 kWh	A	28.6 mg

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy Efficiency Label (EEL)	Mercury (Hg) Content (Nom)
928153509830	SON H 350W/220 E40 1SL/12	385 kWh	A+	28.6 mg

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy Efficiency Label (EEL)	Mercury (Hg) Content (Nom)
928486900191	SON H 110W I E27 1CT/24	121 kWh	A+	22.2 mg

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy Efficiency Label (EEL)	Mercury (Hg) Content (Nom)
928494909891	SON H 68W I E27 1CT/24	75 kWh	A	16.2 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)
928152409830	SON H 220W/220 E40 1SL/12	2.3 A	130 V	105 V	120 V	218.0 W	180 s
928153509830	SON H 350W/220 E40 1SL/12	3.6 A	129 V	105 V	117 V	350.0 W	180 s
928486900191	SON H 110W I E27 1CT/24	1.32 A	122 V	92 V	107 V	110.0 W	600 s
928494909891	SON H 68W I E27 1CT/24	0.84 A	122 V	92 V	107 V	68 W	600 s

General Information (1/2)

Order Code	Full Product Name	Cap-Base	Life To 10% Failures (Nom)	Life To 20% Failures (Nom)	Life To 50% Failures (Nom)	Life To 5% Failures (Nom)	LSF 12000 h Rated	LSF 16000 h Rated
928152409830	SON H 220W/220 E40 1SL/12	E40	12000 h	16000 h	26000 h	9000 h	90 %	81 %
928153509830	SON H 350W/220 E40 1SL/12	E40	12000 h	16000 h	26000 h	9000 h	90 %	81 %
928486900191	SON H 110W I E27 1CT/24	E27	-	15000 h	28000 h	7000 h	86 %	78 %
928494909891	SON H 68W I E27 1CT/24	E27	-	16000 h	28000 h	8000 h	90 %	-

General Information (2/2)

Order Code	Full Product Name	LSF 20000 h Rated	LSF 4000 h Rated	LSF 6000 h Rated	LSF 8000 h Rated	System Description
928152409830	SON H 220W/220 E40 1SL/12	69 %	99 %	98 %	96 %	-
928153509830	SON H 350W/220 E40 1SL/12	69 %	99 %	98 %	96 %	-

Order Code	Full Product Name	LSF 20000 h Rated	LSF 4000 h Rated	LSF 6000 h Rated	LSF 8000 h Rated	System Description
928486900191	SON H 110W I E27 1CT/24	69 %	98 %	96 %	93 %	Internal Ignitor
928494909891	SON H 68W I E27 1CT/24	-	99 %	97 %	95 %	Internal Ignitor

Light Technical (1/2)

Order Code	Full Product Name	Chromaticity Coordinate X (Nom)	Chromaticity Coordinate Y (Nom)	Color Code	Correlated Color Temperature (Nom)	Color Rendering Index (Nom)	LLMF 12000 h Rated	LLMF 16000 h Rated
928152409830	SON H 220W/220 E40 1SL/12	530	410	220	2000 K	-	90 %	87 %
928153509830	SON H 350W/220 E40 1SL/12	525	415	220	2000 K	-	90 %	87 %
928486900191	SON H 110W I E27 1CT/24	545	391	-	2000 K	-	94 %	92 %
928494909891	SON H 68W I E27 1CT/24	554	410	-	1810 K	-	80 %	-

Light Technical (2/2)

Order Code	Full Product Name	LLMF					Luminous Efficacy (rated) (Nom)	Luminous Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)	Ratio Scotopic/ Photopic Lumens
		LLMF 2000 h Rated	20000 h Rated	LLMF 4000 h Rated	LLMF 6000 h Rated	LLMF 8000 h Rated				
928152409830	SON H 220W/220 E40 1SL/12	98 %	84 %	96 %	95 %	93 %	85 lm/W	-	18250 lm	0.60
928153509830	SON H 350W/220 E40 1SL/12	98 %	84 %	96 %	95 %	93 %	98 lm/W	-	34000 lm	0.60
928486900191	SON H 110W I E27 1CT/24	99 %	90 %	98 %	97 %	96 %	84 lm/W	8000 lm	9600 lm	-
928494909891	SON H 68W I E27 1CT/24	86 %	-	84 %	82 %	81 %	80 lm/W	4900 lm	5440 lm	-

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape	Order Code	Full Product Name	Bulb Shape
928152409830	SON H 220W/220 E40 1SL/12	BD90	928486900191	SON H 110W I E27 1CT/24	BF70
928153509830	SON H 350W/220 E40 1SL/12	BD120	928494909891	SON H 68W I E27 1CT/24	BF70

