



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

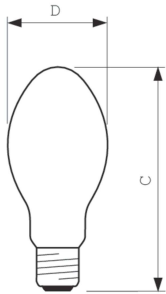


SON H, E40



SON H, E27

Dimensional drawing



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

Controls and Dimming

Dimmable	No
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General Information

LSF 2000 h Rated	99 %
LSF 20000 h Rated	69 %
Operating Position	UNIVERSAL

Luminaire Design Requirements

Bulb Temperature (Max)	350 °C
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Light Technical

Correlated Color Temperature (Nom)	2000 K
Color Rendering Index (Max)	25

Mechanical and Housing

Bulb Finish	Coated glass
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Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Mercury (Hg) Content (Nom)
18207415	SON H 220W/220 E40 1SL/12	237 kWh	28.6 mg
18213515	SON H 350W/220 E40 1SL/12	385 kWh	28.6 mg
11857200	SON H 110W I E27 1CT/24	121 kWh	22.2 mg

Operating and Electrical (1/2)

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
18207415	SON H 220W/220 E40 1SL/12	2.3 A	130 V	105 V	120 V
18213515	SON H 350W/220 E40 1SL/12	3.6 A	129 V	105 V	117 V

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
11857200	SON H 110W I E27 1CT/24	1.32 A	122 V	92 V	107 V

Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
18207415	SON H 220W/220 E40 1SL/12	218.0 W	180 s
18213515	SON H 350W/220 E40 1SL/12	350.0 W	180 s

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
11857200	SON H 110W I E27 1CT/24	110.0 W	600 s

General Information (1/2)

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 50%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
18207415	SON H 220W/220 E40 1SL/12	E40	12000 h	16000 h	26000 h
18213515	SON H 350W/220 E40 1SL/12	E40	12000 h	16000 h	26000 h

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 50%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
11857200	SON H 110W I E27 1CT/24	E27	-	15000 h	28000 h

General Information (2/2)

Order Code	Full Product Name	Life To 5% Failures	LSF 12000 h	LSF 16000 h	LSF 4000 h	LSF 6000 h	LSF 8000 h	System Description
		(Nom)	Rated	Rated	Rated	Rated	Rated	
18207415	SON H 220W/220 E40 1SL/12	9000 h	90 %	81 %	99 %	98 %	96 %	na
18213515	SON H 350W/220 E40 1SL/12	9000 h	90 %	81 %	99 %	98 %	96 %	na
11857200	SON H 110W I E27 1CT/24	7000 h	86 %	78 %	98 %	96 %	93 %	Internal Ignitor (I)

Light Technical (1/3)

Order Code	Full Product Name	Chromaticity	Chromaticity	Color	
		Coordinate X (Nom)	Coordinate Y (Nom)	Color Code	Rendering Index (Nom)
18207415	SON H 220W/220 E40 1SL/12	0.530	0.410	220	-
18213515	SON H 350W/220 E40 1SL/12	0.525	0.415	220	-

Order Code	Full Product Name	Chromaticity	Chromaticity	Color	
		Coordinate X (Nom)	Coordinate Y (Nom)	Color Code	Rendering Index (Nom)
11857200	SON H 110W I E27 1CT/24	545	391	-	-

Light Technical (2/3)

Order Code	Full Product Name	LLMF 12000	LLMF 16000	LLMF 2000	LLMF 20000	LLMF 4000	LLMF 6000	LLMF 8000	Luminous Efficacy	Luminous Flux
		h Rated	h Rated	h Rated	h Rated	h Rated	h Rated	h Rated	(rated) (Nom)	(Rated) (Min)
18207415	SON H 220W/220 E40 1SL/12	90 %	87 %	98 %	84 %	96 %	95 %	93 %	85 lm/W	-

Order Code	Full Product Name	LLMF 12000 h Rated	LLMF 16000 h Rated	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 (Rated) (Min)
18213515	SON H 350W/220 E40 1SL/12	90 %	87 %	98 %	84 %	96 %	95 %	93 %	98 lm/W	-
11857200	SON H 110W I E27 1CT/24	94 %	92 %	99 %	90 %	98 %	97 %	96 %	84 lm/W	8000 lm

Light Technical (3/3)

Order Code	Full Product Name	Luminous Flux (Rated) (Nom)	Ratio Scotopic/ Photopic Lumens
18207415	SON H 220W/220 E40 1SL/12	18250 lm	0.60
18213515	SON H 350W/220 E40 1SL/12	34000 lm	0.60

Order Code	Full Product Name	Luminous Flux (Rated) (Nom)	Ratio Scotopic/ Photopic Lumens
11857200	SON H 110W I E27 1CT/24	9600 lm	-

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
18207415	SON H 220W/220 E40 1SL/12	BD90
18213515	SON H 350W/220 E40 1SL/12	BD120

Order Code	Full Product Name	Bulb Shape
11857200	SON H 110W I E27 1CT/24	BF70

