



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

Mechanical and Housing

Bulb Finish	Coated glass
-------------	--------------

Approval and Application

Order Code	Full Product Name	Energy Consumption	Energy Efficiency	Mercury (Hg)
		kWh/1000 h	Label (EEL)	Content (Nom)
928150108828	SON 70W/220 I E27 1CT/24	77 kWh	A	16.3 mg
928486700091	SON 70W E E27 CO 1CT/24	77 kWh	A	16.3 mg
928486800091	SON 150W E E40 CO 1SL/12	162 kWh	A+	20.4 mg
928486900091	SON 250W E E40 CO 1SL/12	275 kWh	A+	20.4 mg
928487000091	SON 400W E E40 CO 1SL/12	440 kWh	A+	24.5 mg

Operating and Electrical (1/2)

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928150108828	SON 70W/220 I E27 1CT/24	0.98 A	105 V	75 V	90 V
928486700091	SON 70W E E27 CO 1CT/24	0.98 A	105 V	75 V	90 V
928486800091	SON 150W E E40 CO 1SL/12	1.8 A	115 V	85 V	100 V

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928486900091	SON 250W E E40 CO 1SL/12	3 A	115 V	85 V	100 V
928487000091	SON 400W E E40 CO 1SL/12	4.45 A	120 V	90 V	105 V

Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
928150108828	SON 70W/220 I E27 1CT/24	70.0 W	-
928486700091	SON 70W E E27 CO 1CT/24	70.0 W	180 s
928486800091	SON 150W E E40 CO 1SL/12	147.0 W	180 s

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
928486900091	SON 250W E E40 CO 1SL/12	250 W	120 s
928487000091	SON 400W E E40 CO 1SL/12	400.0 W	120 s

General Information (1/2)

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 5%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
928150108828	SON 70W/220 I E27 1CT/24	E27	13000 h	18000 h	10000 h
928486700091	SON 70W E E27 CO 1CT/24	E27	-	22000 h	12000 h
928486800091	SON 150W E E40 CO 1SL/12	E40	-	20000 h	12000 h

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 5%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
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 12000 h	LSF 16000 h	LSF 2000 h	LSF 20000 h	LSF 4000 h	LSF 6000 h	LSF 8000 h	System Description
		Rated	Rated	Rated	Rated	Rated	Rated	Rated	
928150108828	SON 70W/220 I E27 1CT/24	92 %	84 %	99 %	74 %	99 %	98 %	97 %	Internal Ignitor
928486700091	SON 70W E E27 CO 1CT/24	94 %	86 %	99 %	76 %	99 %	99 %	98 %	External Ignitor
928486800091	SON 150W E E40 CO 1SL/12	-	-	-	-	-	-	-	External Ignitor
928486900091	SON 250W E E40 CO 1SL/12	-	-	-	-	-	-	-	External Ignitor
928487000091	SON 400W E E40 CO 1SL/12	-	-	-	-	-	-	-	External Ignitor

Light Technical (1/3)

Order Code	Full Product Name	Chromaticity		Colour	
		Coordinate X	Coordinate Y	Rendering Index	LLMF 12000 h
Order Code	Full Product Name	Chromaticity (Nom)	Chromaticity (Nom)	Colour Rendering (Nom)	LLMF 12000 h Rated
928150108828	SON 70W/220 I E27 1CT/24	540	415	-	80 %
928486700091	SON 70W E E27 CO 1CT/24	-	-	-	81 %
928486800091	SON 150W E E40 CO 1SL/12	-	-	-	-

Order Code	Full Product Name	Chromaticity		Colour	
		Coordinate X	Coordinate Y	Rendering Index	LLMF 12000 h
Order Code	Full Product Name	Chromaticity (Nom)	Chromaticity (Nom)	Colour Rendering (Nom)	LLMF 12000 h Rated
928486900091	SON 250W E E40 CO 1SL/12	-	-	-	-
928487000091	SON 400W E E40 CO 1SL/12	-	-	-	-

Light Technical (2/3)

Order Code	Full Product Name	LLMF 16000 h	LLMF 2000 h	LLMF 20000 h	LLMF 4000 h	LLMF 6000 h	LLMF 8000 h	Lumen Maintenance 10000 h (Min)	Lumen Maintenance 10000 h (Nom)	Lumen Maintenance 2000 h (Min)
		Rated	Rated	Rated	Rated	Rated	Rated			
928150108828	SON 70W/220 I E27 1CT/24	79 %	88 %	78 %	84 %	83 %	81 %	70 %	81 %	80 %
928486700091	SON 70W E E27 CO 1CT/24	79 %	93 %	78 %	89 %	86 %	84 %	-	85 %	85 %
928486800091	SON 150W E E40 CO 1SL/12	-	-	-	-	-	-	80 %	85 %	90 %
928486900091	SON 250W E E40 CO 1SL/12	-	-	-	-	-	-	90 %	95 %	95 %
928487000091	SON 400W E E40 CO 1SL/12	-	-	-	-	-	-	81 %	88 %	94 %

Light Technical (3/3)

Order Code	Full Product Name	Lumen Maintenance 2000 h (Nom)	Lumen Maintenance 20000 h	Lumen Maintenance 5000 h (Min)	Lumen Maintenance 5000 h (Nom)	Luminous Efficacy (rated) (Nom)	Luminous Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)
		928150108828	SON 70W/220 I E27 1CT/24	88 %	78 %	75 %	83.5 %	80 lm/W
928486700091	SON 70W E E27 CO 1CT/24	93 %	-	80 %	88 %	80 lm/W	4500 lm	5600 lm
928486800091	SON 150W E E40 CO 1SL/12	95 %	-	85 %	90 %	93 lm/W	12375 lm	13750 lm
928486900091	SON 250W E E40 CO 1SL/12	98 %	-	92 %	96 %	106 lm/W	22500 lm	27000 lm
928487000091	SON 400W E E40 CO 1SL/12	97 %	-	88 %	94 %	122 lm/W	42000 lm	48000 lm

Mechanical and Housing

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

Order Code	Full Product Name	Bulb Shape
928486900091	SON 250W E E40 CO 1SL/12	ED90
928487000091	SON 400W E E40 CO 1SL/12	ED120

