

SON High pressure sodium



SON E27

Product Description

- High-pressure sodium vapour lamps with a sintered aluminium oxide discharge tube enclosed in an evacuated hard-glass outer bulb

Product Feature

- Luminous efficacy up to 120lm/W
- Ovoid outer bulb, inside white coated
- Discharge tube filled with sodium-mercury amalgam and xenon starting gas
- SON-I have a built-in glow-discharge ignitor

Product Benefit

- SON are energy efficient and powerful light sources

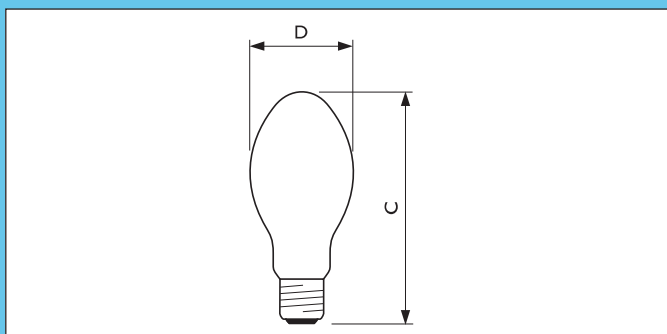
Application

- Public and urban areas
- Decorative floodlighting
- Industrial, shop and commercial lighting

System

- Require a ballast and ignitor, except for SON 70W I (Coated) ES lamps which have an internal ignitor

Dimensions in mm



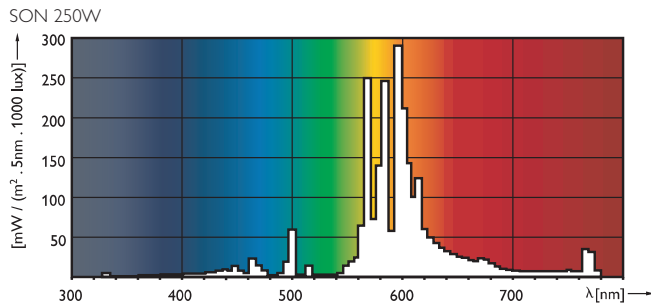
Product ID	Overall length	Diameter
	C max.	D max.
70W	156	71
150W/250W	227	91
400W	290	122

Preferred selection

Product ID	Rated Lamp Wattage (W)	Lamp Current EL (A)	Lamp Voltage (V)	Cap Base	Color Temperature (K)	Color Rendering Index (R _a)	Chromaticity Coordinate X	Chromaticity Coordinate Y
SON 70W E E27 CO 1CT	70	0.98	90	E27	2000	20	540	415
SON 70W I E27 CO 1CT	70	0.98	90	E27	2000	20	540	415
SON 150W E E40 CO SLV	150	1.8	100	E40	2000	20	535	415
SON 250W E E40 CO SLV	250	3	100	E40	2000	25	530	410
SON 400W E E40 CO SLV	400	4.45	105	E40	2000	25	525	415

Product ID	Bulb Finish	Luminous Flux Lamp EM/CuFe (lm)	Luminous Efficacy Lamp EM (lm/W)	Ignition Supply Voltage (V)	Cap-Base Temperature (C)	Bulb Temperature (C)	Nett Weight Product In Grams (gr)
SON 70W E E27 CO 1CT	Coated	5600	79	198	200	350	60
SON 70W I E27 CO 1CT	Coated	5600	79	198	200	350	64
SON 150W E E40 CO SLV	Coated	14500	99	198	250	350	202
SON 250W E E40 CO SLV	Coated	27000	106	198	250	350	185
SON 400W E E40 CO SLV	Coated	48000	122	198	250	350	240

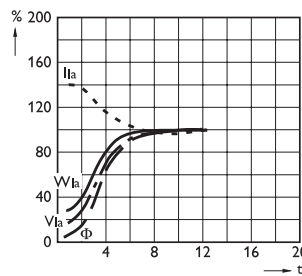
Spectral power distribution



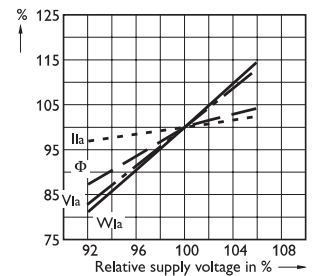
Performance diagrams

SON Pro

Lamp performance during run up



Effects of mains voltage variations



- I_{la} = Lamp current
- Φ = Luminous Flux
- V_{la} = Lamp Voltage
- W_{la} = Lamp Wattage