

## SON High pressure sodium

## SON-T PIA Plus



SON-T Plus E40

**Product Description**

- High Pressure Sodium lamp with clear tubular outer bulb, high output and long reliable lifetime

**Product Feature**

- Ovoid, internally white coated outer bulb
- Ceramic discharge tube with Philips Integrated Antenna (PIA) for a long and reliable lifetime
- Robust construction with few welding points is highly vibration- and shock-resistant, further reducing early failures and extending lamp life
- ZrCo getter ensures high lumen maintenance and few early failures
- "Plus" concept with high efficacy translated into high light output
- Completely lead-free lamps

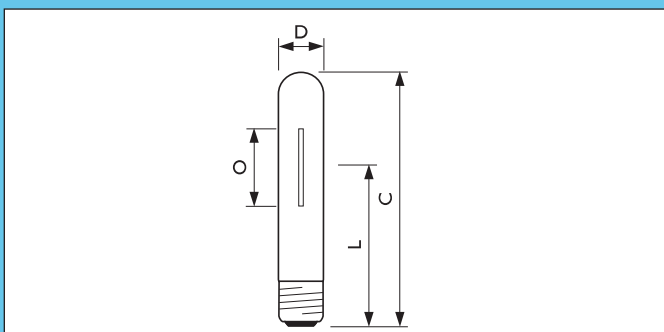
**Product Benefit**

- Superior technology results in a long and reliable lifetime, high lumen maintenance and a reliable ignition over lifetime
- High energy efficacy and absence of lead (Pb) makes this a sound environmental offer
- High luminous efficacy makes this the most energy efficient HPS lamp

**Application**

- Road and residential lighting
- Decorative floodlighting, illumination
- Industrial area lighting
- Recreational sports facilities Outdoor and Indoor
- Horticultural lighting

Dimensions in mm



	Overall length	Diameter	Light center length	Arc length
Product ID	C max.	D max.	L nom.	O nom.
70W	156	39	104	42
100W	210	47	132	47
150W	210	47	132	61
250W	257	47	158	64
400W	283	47	175	83
600W	283	47	174.2	126

Preferred selection

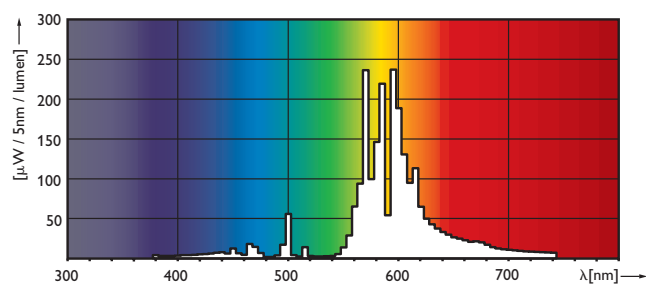
Product ID	Rated Lamp Wattage (W)	Lamp Current EL (A)	Lamp Voltage (V)	Cap Base	Color Temperature (K)	Color Rendering Index (Ra)
MASTER SON-T PIA Plus 70W E E27 SLV	70	0.975	93	E27	2000	20
MASTER SON-T PIA Plus 100W E E40 SLV	100	1.2	100	E40	2000	20
MASTER SON-T PIA Plus 150W E E40 SLV	150	1.8	100	E40	2000	20
MASTER SON-T PIA Plus 250W E E40 SLV	250	3	100	E40	2000	25
MASTER SON-T PIA Plus 400W E E40 SLV	400	4.5	100	E40	2000	25

Product ID	Color Temperature Technical (K)	Chromaticity Coordinate X	Chromaticity Coordinate Y	Bulb Finish	Luminous Flux Lamp EM/CuFe (lm)	Luminous Efficacy Lamp EM (lm/W)
MASTER SON-T PIA Plus 70W E E27 SLV	1900	540	420	Clear	6600	91
MASTER SON-T PIA Plus 100W E E40 SLV	2000	525	420	Clear	10700	107
MASTER SON-T PIA Plus 150W E E40 SLV	2000	535	420	Clear	18000	117
MASTER SON-T PIA Plus 250W E E40 SLV	2000	530	420	Clear	33200	128
MASTER SON-T PIA Plus 400W E E40 SLV	1950	525	425	Clear	56500	138

Product ID	Ignition Supply Voltage (V)	Cap-Base Temperature (C)	Bulb Temperature (C)	Nett Weight Product In Grams (gr)
MASTER SON-T PIA Plus 70W E E27 SLV	198	200	350	83
MASTER SON-T PIA Plus 100W E E40 SLV	198	250	450	155
MASTER SON-T PIA Plus 150W E E40 SLV	198	250	450	155
MASTER SON-T PIA Plus 250W E E40 SLV	198	250	450	175
MASTER SON-T PIA Plus 400W E E40 SLV	198	250	450	190

Spectral power distribution

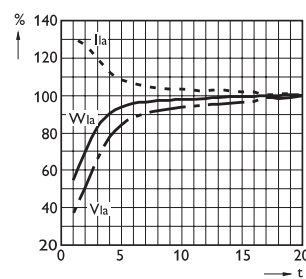
SON-T PIA Plus



Performance diagrams

SON-T PIA Plus

Lamp performance during run up



$I_{la}$  = Lamp current  
 $\Phi$  = Luminous Flux  
 $V_{la}$  = Lamp Voltage  
 $W_{la}$  = Lamp Wattage

Effects of mains voltage variations

