



Product Description

MASTER SON-T PIA Plus

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

Benefits

- 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

Features

- Clear tubular 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

Application

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

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.

MASTER SON-T PIA Plus

General Information

Cap-Base	E40
Operating Position	UNIVERSAL
System Description	External Ignitor (E)

Luminaire Design Requirements

Bulb Temperature (Max)	450 °C
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Light Technical

Colour Code	220
Correlated Colour Temperature (Nom)	2000 K
Colour Rendering Index (Max)	25

Mechanical and Housing

Bulb Finish	Clear
Bulb Shape	T46

Approval and Application

Order Code	Full Product Name	Energy Consumption	Energy Efficiency	Mercury (Hg)
		kWh/1000 h	Label (EEL)	Content (Nom)
928144709295	SON-T PIA PLUS 250W E E40 1SL/12	286 kWh	A+	15.1 mg
928158409227	MASTER SON-T PIA Plus 600W/220 E40 1SL/12	663 kWh	A++	24 mg
928483400095	MASTER SON-T PIA Plus 150W E40 1SL/12	169 kWh	A+	13.9 mg

Controls and Dimming

Order Code	Full Product Name	Dimmable
928144709295	SON-T PIA PLUS 250W E E40 1SL/12	Yes
928158409227	MASTER SON-T PIA Plus 600W/220 E40 1SL/12	No

Order Code	Full Product Name	Dimmable
928483400095	MASTER SON-T PIA Plus 150W E40 1SL/12	No

Operating and Electrical (1/2)

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928144709295	SON-T PIA PLUS 250W E E40 1SL/12	0.300 A	115 V	85 V	100 V
928158409227	MASTER SON-T PIA Plus 600W/220 E40 1SL/12	5.8 A	125 V	95 V	110 V

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928483400095	MASTER SON-T PIA Plus 150W E40 1SL/12	1.8 A	115 V	85 V	100 V

Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
928144709295	SON-T PIA PLUS 250W E E40 1SL/12	255.0 W	120 s
928158409227	MASTER SON-T PIA Plus 600W/220 E40 1SL/12	603 W	60 s

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
928483400095	MASTER SON-T PIA Plus 150W E40 1SL/12	154.0 W	180 s

General Information (1/2)

MASTER SON-T PIA Plus

Order Code	Full Product Name	Life To		Life To	
		Life To 10% Failures (Nom)	20% Failures (Nom)	50% Failures (Nom)	Life To 5% Failures (Nom)
928144709295	SON-T PIA PLUS 250W E E40 1SL/12	24000 h	28000 h	36000 h	20500 h
928158409227	MASTER SON-T PIA Plus	15000 h	20000 h	30000 h	12000 h

Order Code	Full Product Name	Life To		Life To	
		Life To 10% Failures (Nom)	20% Failures (Nom)	50% Failures (Nom)	Life To 5% Failures (Nom)
	600W/220 E40 1SL/12				
928483400095	MASTER SON-T PIA Plus 150W E40 1SL/12	24000 h	28000 h	32000 h	20500 h

General Information (2/2)

Order Code	Full Product Name	LSF 12000 h Rated	LSF 16000 h Rated	LSF 2000 h Rated	LSF 20000 h Rated	LSF 4000 h Rated	LSF 6000 h Rated	LSF 8000 h Rated
928144709295	SON-T PIA PLUS 250W E E40 1SL/12	99 %	98 %	100 %	95 %	99 %	99 %	99 %
928158409227	MASTER SON-T PIA Plus 600W/220 E40 1SL/12	-	-	-	-	-	-	-
928483400095	MASTER SON-T PIA Plus 150W E40 1SL/12	-	-	-	-	-	-	-

Light Technical (1/3)

Order Code	Full Product Name	Chromaticity		LLMF	
		Coordinate X (Nom)	Coordinate Y (Nom)	12000 h Rated	16000 h Rated
928144709295	SON-T PIA PLUS 250W E E40 1SL/12	0.535	0.420	96 %	95 %
928158409227	MASTER SON-T PIA Plus	0.526	0.424	-	-

Order Code	Full Product Name	Chromaticity		LLMF	
		Coordinate X (Nom)	Coordinate Y (Nom)	12000 h Rated	16000 h Rated
	600W/220 E40 1SL/12				
928483400095	MASTER SON-T PIA Plus 150W E40 1SL/12	0.535	0.420	-	-

Light Technical (2/3)

Order Code	Full Product Name	LLMF		LLMF		Lumen		Lumen		Lumen	
		2000 h Rated	20000 h Rated	4000 h Rated	6000 h Rated	8000 h Rated	Maintenance 2000 h (Min)	Maintenance 2000 h (Nom)	Maintenance 20000 h	Maintenance 5000 h (Min)	
928144709295	SON-T PIA PLUS 250W E E40 1SL/12	99 %	94 %	98 %	97 %	96 %	-	-	-	-	
928158409227	MASTER SON-T PIA Plus 600W/220 E40 1SL/12	-	-	-	-	-	85 %	96 %	77 %	80 %	
928483400095	MASTER SON-T PIA Plus 150W E40 1SL/12	-	-	-	-	-	94 %	97 %	-	88 %	

Light Technical (3/3)

Order Code	Full Product Name	Lumen	Luminous	Luminous	Luminous	Ratio
		Maintenance 5000 h (Nom)	Efficacy (rated) (Nom)	Flux (Rated) (Min)	Flux (Rated) (Nom)	Scotopic/Photopic Lumens
928144709295	SON-T PIA PLUS 250W E	-	126 lm/W	-	32100 lm	0.60

Order Code	Full Product Name	Lumen	Luminous	Luminous	Luminous	Ratio
		Maintenance 5000 h (Nom)	Efficacy (rated) (Nom)	Flux (Rated) (Min)	Flux (Rated) (Nom)	Scotopic/Photopic Lumens
	E40 1SL/12					

MASTER SON-T PIA Plus

Order Code	Full Product Name	Lumen Maintenance 5000 h (Nom)	Luminous Efficacy (rated) (Nom)	Luminous Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)	Ratio Scotopic/Photopic Lumens
928158409227	MASTER SON-T PIA Plus 600W/22 0 E40 1SL/12	90 %	143.5 lm/W	-	86500 lm	0.60
928483400095	MASTER SON-T	95 %	117 lm/W	14500 lm	18000 lm	-

Order Code	Full Product Name	Lumen Maintenance 5000 h (Nom)	Luminous Efficacy (rated) (Nom)	Luminous Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)	Ratio Scotopic/Photopic Lumens
	PIA Plus 150W E40 1SL/12					

