



# Product Description

## SON-T

High Pressure Sodium lamp with clear tubular outer bulb

### Benefits

- SON-T is a cost-efficient and reliable solution in High Pressure Sodium

### Features

- Clear tubular 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
- Recreational sports facilities indoor and outdoor

### Versions

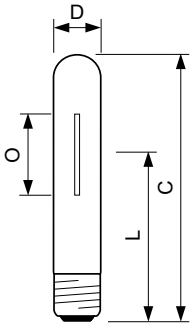


SON-T, E40



SON-T, E27

Dimensional drawing



Product	D (max)	O	L	C (max)
SON-T 1000W E E40 1SL/4	66 mm	145 mm	240 mm	390 mm
SON-T 150W E E40 SL/12	47 mm	58 mm	132 mm	209 mm
SON-T 1000W E E40 1SL/4	66 mm	145 mm	240 mm	390 mm
SON-T 1000W E40 1SL/4	66 mm	153 mm	240 mm	390 mm
SON-T 100W E E40 1SL	47 mm	44 mm	132 mm	209 mm
SON-T 100W E E40 SL/12	47 mm	44 mm	132 mm	209 mm
SON-T 400W E E40 1SL	47 mm	82 mm	175 mm	286 mm
SON-T 400W E E40 SL/12	47 mm	82 mm	175 mm	286 mm
SON-T 400W E E40 1SL/12	47 mm	82 mm	175 mm	286 mm
SON-T 250W E E40 1SL/12	47 mm	66 mm	158 mm	255 mm
SON-T 250W E E40 1SL	47 mm	66 mm	158 mm	255 mm
SON-T 250W E E40 SL/12	47 mm	66 mm	158 mm	255 mm
SON-T 100W E E40 1SL/12	44 mm	47 mm	132 mm	209 mm
SON-T 70W E E27 1SL	36 mm	42 mm	102 mm	156 mm
SON-T 70W/220 E27 1CT/12	36 mm	42 mm	102 mm	156 mm
SON-T 150W E E40 1SL	47 mm	58 mm	132 mm	209 mm
SON-T 150W E E40 1SL/12	47 mm	58 mm	132 mm	209 mm
SON-T 70W E E27 1CT/12	36 mm	42 mm	132 mm	209 mm

Controls and Dimming	
Dimmable	Yes
General Information	
Operating Position	UNIVERSAL
System Description	External Ignitor
Light Technical	
Color Code	220
Correlated Color Temperature (Nom)	2000 K
Color Rendering Index (Max)	25
Color Rendering Index (Nom)	-
Mechanical and Housing	
Bulb Finish	Clear

Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy Efficiency Label (EEL)	Mercury (Hg) Content (Nom)
928152800035	SON-T 70W/220 E27 1CT/12	77 kWh	A+	16 mg
928152800093	SON-T 70W E E27 1SL	77 kWh	A+	16 mg
928154509228	SON-T 1000W E40 1SL/4	1056 kWh	A++	23 mg
928481500092	SON-T 100W E E40 SL/12	110 kWh	A+	20.4 mg
928481500097	SON-T 100W E E40 1SL	110 kWh	A+	20.4 mg
928487100094	SON-T 150W E E40 1SL/12	162 kWh	A+	20.4 mg
928487100096	SON-T 150W E E40 SL/12	162 kWh	A+	20.4 mg
928487100097	SON-T 150W E E40 1SL	162 kWh	A+	20.4 mg
928487200094	SON-T 250W E E40 1SL/12	275 kWh	A+	20.4 mg
928487200097	SON-T 250W E E40 1SL	275 kWh	A+	20.4 mg
928487200098	SON-T 250W E E40 SL/12	275 kWh	A+	20.4 mg
928487300094	SON-T 400W E E40 1SL/12	431 kWh	A+	24.5 mg
928487300097	SON-T 400W E E40 1SL	431 kWh	A+	24.5 mg
928487300098	SON-T 400W E E40 SL/12	431 kWh	A+	24.5 mg
928487400091	SON-T 1000W E E40 1SL/4	1056 kWh	A++	22.65 mg
928487400093	SON-T 1000W E E40 1SL/4	1056 kWh	A++	22.65 mg
928494709291	SON-T 100W E E40 1SL/12	110 kWh	A+	20.2 mg
928494609291	SON-T 70W E E27 1CT/12	77 kWh	A+	16.3 mg

Operating and Electrical (1/2)

# SON-T

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928152800035	SON-T 70W/220 E27 1CT/12	0.98 A	105 V	75 V	90 V
928152800093	SON-T 70W E E27 1SL	0.98 A	105 V	75 V	90 V
928154509228	SON-T 1000W E40 1SL/4	10.6 A	115 V	85 V	100 V
928481500092	SON-T 100W E E40 SL/12	1.2 A	115 V	85 V	100 V
928481500097	SON-T 100W E E40 1SL	1.2 A	115 V	85 V	100 V
928487100094	SON-T 150W E E40 1SL/12	1.8 A	115 V	85 V	100 V
928487100096	SON-T 150W E E40 SL/12	1.8 A	115 V	85 V	100 V
928487100097	SON-T 150W E E40 1SL	1.8 A	115 V	85 V	100 V
928487200094	SON-T 250W E E40 1SL/12	3 A	115 V	85 V	100 V

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928487200097	SON-T 250W E E40 1SL	3 A	115 V	85 V	100 V
928487200098	SON-T 250W E E40 SL/12	3 A	115 V	85 V	100 V
928487300094	SON-T 400W E E40 1SL/12	4.6 A	115 V	85 V	100 V
928487300097	SON-T 400W E E40 1SL	4.6 A	115 V	85 V	100 V
928487300098	SON-T 400W E E40 SL/12	4.6 A	115 V	85 V	100 V
928487400091	SON-T 1000W E E40 1SL/4	10.6 A	115 V	85 V	100 V
928487400093	SON-T 1000W E E40 1SL/4	10.6 A	115 V	85 V	100 V
928494709291	SON-T 100W E E40 1SL/12	1.2 A	115 V	85 V	100 V
928494609291	SON-T 70W E E27 1CT/12	0.98 A	105 V	75 V	90 V

## Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
928152800035	SON-T 70W/220 E27 1CT/12	70.0 W	180 s
928152800093	SON-T 70W E E27 1SL	70.0 W	180 s
928154509228	SON-T 1000W E40 1SL/4	960.0 W	240 s
928481500092	SON-T 100W E E40 SL/12	100.0 W	120 s
928481500097	SON-T 100W E E40 1SL	100.0 W	120 s
928487100094	SON-T 150W E E40 1SL/12	147.0 W	180 s
928487100096	SON-T 150W E E40 SL/12	147.0 W	180 s
928487100097	SON-T 150W E E40 1SL	147.0 W	180 s
928487200094	SON-T 250W E E40 1SL/12	250.0 W	120 s

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
928487200097	SON-T 250W E E40 1SL	250.0 W	120 s
928487200098	SON-T 250W E E40 SL/12	250.0 W	120 s
928487300094	SON-T 400W E E40 1SL/12	392.0 W	120 s
928487300097	SON-T 400W E E40 1SL	392.0 W	120 s
928487300098	SON-T 400W E E40 SL/12	392.0 W	120 s
928487400091	SON-T 1000W E E40 1SL/4	960.0 W	240 s
928487400093	SON-T 1000W E E40 1SL/4	960.0 W	240 s
928494709291	SON-T 100W E E40 1SL/12	100 W	120 s
928494609291	SON-T 70W E E27 1CT/12	70.0 W	180 s

## General Information (1/2)

Order Code	Full Product Name	Cap-Base	Life To		
			10% Failures (Nom)	Life To 20% Failures (Nom)	Life To 50% Failures (Nom)
928152800035	SON-T 70W/220 E27 1CT/12	E27	15000 h	19000 h	28000 h
928152800093	SON-T 70W E E27 1SL	E27	15000 h	19000 h	28000 h
928154509228	SON-T 1000W E40 1SL/4	E40	10000 h	14000 h	20000 h
928481500092	SON-T 100W E E40 SL/12	E40	12000 h	-	28000 h

Order Code	Full Product Name	Cap-Base	Life To		
			10% Failures (Nom)	Life To 20% Failures (Nom)	Life To 50% Failures (Nom)
928481500097	SON-T 100W E E40 1SL	E40	12000 h	-	28000 h
928487100094	SON-T 150W E E40 1SL/12	E40	-	20000 h	28000 h
928487100096	SON-T 150W E E40 SL/12	E40	-	20000 h	28000 h
928487100097	SON-T 150W E E40 1SL	E40	-	20000 h	28000 h

Order Code	Full Product Name	Cap-Base	Life To		
			10% Failures (Nom)	Life To 20% Failures (Nom)	Life To 50% Failures (Nom)
928487200094	SON-T 250W E E40 1SL/12	E40	-	20000 h	28000 h
928487200097	SON-T 250W E E40 1SL	E40	-	20000 h	28000 h
928487200098	SON-T 250W E E40 SL/12	E40	-	20000 h	28000 h
928487300094	SON-T 400W E E40 1SL/12	E40	-	20000 h	28000 h
928487300097	SON-T 400W E E40 1SL	E40	-	20000 h	28000 h

Order Code	Full Product Name	Cap-Base	Life To		
			10% Failures (Nom)	Life To 20% Failures (Nom)	Life To 50% Failures (Nom)
928487300098	SON-T 400W E E40 SL/12	E40	-	20000 h	28000 h
928487400091	SON-T 1000W E E40 1SL/4	E40	-	14000 h	20000 h
928487400093	SON-T 1000W E E40 1SL/4	E40	-	14000 h	20000 h
928494709291	SON-T 100W E E40 1SL/12	E40	12000 h	22000 h	28000 h
928494609291	SON-T 70W E E27 1CT/12	E27	-	22000 h	28000 h

General Information (2/2)

Order Code	Full Product Name	Life To 5% Failures (Nom)	LSF 12000 h	LSF 16000 h	LSF 2000 h	LSF 20000 h	LSF 4000 h	LSF 6000 h	LSF 8000 h
			Rated	Rated	Rated	Rated	Rated	Rated	Rated
928152800035	SON-T 70W/220 E27 1CT/12	12000 h	95 %	89 %	99 %	79 %	99 %	98 %	97 %
928152800093	SON-T 70W E E27 1SL	12000 h	95 %	89 %	99 %	79 %	99 %	98 %	97 %
928154509228	SON-T 1000W E40 1SL/4	8000 h	85 %	69 %	99 %	50 %	99 %	97 %	95 %
928481500092	SON-T 100W E E40 SL/12	-	-	-	-	-	-	-	-
928481500097	SON-T 100W E E40 1SL	-	-	-	-	-	-	-	-
928487100094	SON-T 150W E E40 1SL/12	12000 h	-	-	-	-	-	-	-
928487100096	SON-T 150W E E40 SL/12	12000 h	-	-	-	-	-	-	-
928487100097	SON-T 150W E E40 1SL	12000 h	-	-	-	-	-	-	-
928487200094	SON-T 250W E E40 1SL/12	12000 h	-	-	-	-	-	-	-
928487200097	SON-T 250W E E40 1SL	12000 h	-	-	-	-	-	-	-
928487200098	SON-T 250W E E40 SL/12	12000 h	-	-	-	-	-	-	-
928487300094	SON-T 400W E E40 1SL/12	12000 h	-	-	-	-	-	-	-
928487300097	SON-T 400W E E40 1SL	12000 h	-	-	-	-	-	-	-
928487300098	SON-T 400W E E40 SL/12	12000 h	-	-	-	-	-	-	-
928487400091	SON-T 1000W E E40 1SL/4	8000 h	-	-	-	-	-	-	-
928487400093	SON-T 1000W E E40 1SL/4	8000 h	-	-	-	-	-	-	-
928494709291	SON-T 100W E E40 1SL/12	-	-	-	-	-	-	-	-
928494609291	SON-T 70W E E27 1CT/12	12000 h	-	-	-	-	-	-	-

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
928152800035	SON-T 70W/220 E27 1CT/12	350 °C
928152800093	SON-T 70W E E27 1SL	350 °C
928154509228	SON-T 1000W E40 1SL/4	450 °C
928481500092	SON-T 100W E E40 SL/12	450 °C
928481500097	SON-T 100W E E40 1SL	450 °C
928487100094	SON-T 150W E E40 1SL/12	450 °C
928487100096	SON-T 150W E E40 SL/12	450 °C
928487100097	SON-T 150W E E40 1SL	450 °C
928487200094	SON-T 250W E E40 1SL/12	450 °C

Order Code	Full Product Name	Bulb Temperature (Max)
928487200097	SON-T 250W E E40 1SL	450 °C
928487200098	SON-T 250W E E40 SL/12	450 °C
928487300094	SON-T 400W E E40 1SL/12	450 °C
928487300097	SON-T 400W E E40 1SL	450 °C
928487300098	SON-T 400W E E40 SL/12	450 °C
928487400091	SON-T 1000W E E40 1SL/4	450 °C
928487400093	SON-T 1000W E E40 1SL/4	450 °C
928494709291	SON-T 100W E E40 1SL/12	450 °C
928494609291	SON-T 70W E E27 1CT/12	350 °C

Light Technical (1/3)

Order Code	Full Product Name	Chromaticity	Chromaticity	LLMF	LLMF
		Coordinate X (Nom)	Coordinate Y (Nom)	12000 h Rated	16000 h Rated
928152800035	SON-T 70W/220 E27 1CT/12	540	413	81 %	81 %
928152800093	SON-T 70W E E27 1SL	540	413	81 %	81 %
928154509228	SON-T 1000W E40 1SL/4	-	-	84 %	82 %
928481500092	SON-T 100W E E40 SL/12	-	-	-	-
928481500097	SON-T 100W E E40 1SL	-	-	-	-
928487100094	SON-T 150W E E40 1SL/12	-	-	-	-
928487100096	SON-T 150W E E40 SL/12	-	-	-	-
928487100097	SON-T 150W E E40 1SL	-	-	-	-
928487200094	SON-T 250W E E40 1SL/12	-	-	-	-

Order Code	Full Product Name	Chromaticity	Chromaticity	LLMF	LLMF
		Coordinate X (Nom)	Coordinate Y (Nom)	12000 h Rated	16000 h Rated
928487200097	SON-T 250W E E40 1SL	-	-	-	-
928487200098	SON-T 250W E E40 SL/12	-	-	-	-
928487300094	SON-T 400W E E40 1SL/12	-	-	-	-
928487300097	SON-T 400W E E40 1SL	-	-	-	-
928487300098	SON-T 400W E E40 SL/12	-	-	-	-
928487400091	SON-T 1000W E E40 1SL/4	-	-	-	-
928487400093	SON-T 1000W E E40 1SL/4	-	-	-	-
928494709291	SON-T 100W E E40 1SL/12	-	-	-	-
928494609291	SON-T 70W E E27 1CT/12	-	-	-	-

Light Technical (2/3)

Order Code	Full Product Name	LLMF	LLMF	LLMF	LLMF	LLMF	Lumen	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 5000 h (Min)	Maintenance 5000 h (Nom)
928152800035	SON-T 70W/220 E27 1CT/12	89 %	80 %	86 %	85 %	84 %	-	-	-	-
928152800093	SON-T 70W E E27 1SL	89 %	80 %	86 %	85 %	84 %	-	-	-	-
928154509228	SON-T 1000W E40 1SL/4	95 %	80 %	93 %	89 %	88 %	90 %	95 %	80 %	90 %
928481500092	SON-T 100W E E40 SL/12	-	-	-	-	-	85 %	95 %	80 %	90 %
928481500097	SON-T 100W E E40 1SL	-	-	-	-	-	85 %	95 %	80 %	90 %
928487100094	SON-T 150W E E40 1SL/12	-	-	-	-	-	90 %	95 %	85 %	90 %
928487100096	SON-T 150W E E40 SL/12	-	-	-	-	-	90 %	95 %	85 %	90 %
928487100097	SON-T 150W E E40 1SL	-	-	-	-	-	90 %	95 %	85 %	90 %
928487200094	SON-T 250W E E40 1SL/12	-	-	-	-	-	95 %	98 %	92 %	96 %
928487200097	SON-T 250W E E40 1SL	-	-	-	-	-	95 %	98 %	92 %	96 %
928487200098	SON-T 250W E E40 SL/12	-	-	-	-	-	95 %	98 %	92 %	96 %
928487300094	SON-T 400W E E40 1SL/12	-	-	-	-	-	94 %	97 %	88 %	94 %
928487300097	SON-T 400W E E40 1SL	-	-	-	-	-	94 %	97 %	88 %	94 %
928487300098	SON-T 400W E E40 SL/12	-	-	-	-	-	94 %	97 %	88 %	94 %
928487400091	SON-T 1000W E E40 1SL/4	-	-	-	-	-	90 %	95 %	80 %	90 %
928487400093	SON-T 1000W E E40 1SL/4	-	-	-	-	-	90 %	95 %	80 %	90 %
928494709291	SON-T 100W E E40 1SL/12	-	-	-	-	-	85 %	95 %	80 %	90 %
928494609291	SON-T 70W E E27 1CT/12	-	-	-	-	-	85 %	93 %	80 %	88 %

Light Technical (3/3)

Order Code	Full Product Name	Luminous Efficacy (rated) (Nom)	Luminous Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)	Ratio Scotopic/Photopic Lumens
928152800035	SON-T 70W/220 E27 1CT/12	84 lm/W	-	6000 lm	0.50
928152800093	SON-T 70W E E27 1SL	84 lm/W	-	6000 lm	0.50
928154509228	SON-T 1000W E40 1SL/4	130 lm/W	117000 lm	130000 lm	0.65
928481500092	SON-T 100W E E40 SL/12	90 lm/W	8100 lm	9000 lm	-
928481500097	SON-T 100W E E40 1SL	90 lm/W	8100 lm	9000 lm	-
928487100094	SON-T 150W E E40 1SL/12	98 lm/W	13500 lm	15000 lm	-
928487100096	SON-T 150W E E40 SL/12	98 lm/W	13500 lm	15000 lm	-
928487100097	SON-T 150W E E40 1SL	98 lm/W	13500 lm	15000 lm	-
928487200094	SON-T 250W E E40 1SL/12	110 lm/W	25200 lm	28000 lm	-

Order Code	Full Product Name	Luminous Efficacy (rated) (Nom)	Luminous Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)	Ratio Scotopic/Photopic Lumens
928487200097	SON-T 250W E E40 1SL	110 lm/W	25200 lm	28000 lm	-
928487200098	SON-T 250W E E40 SL/12	110 lm/W	25200 lm	28000 lm	-
928487300094	SON-T 400W E E40 1SL/12	123 lm/W	43200 lm	48000 lm	-
928487300097	SON-T 400W E E40 1SL	123 lm/W	43200 lm	48000 lm	-
928487300098	SON-T 400W E E40 SL/12	123 lm/W	43200 lm	48000 lm	-
928487400091	SON-T 1000W E E40 1SL/4	130 lm/W	117000 lm	130000 lm	-
928487400093	SON-T 1000W E E40 1SL/4	130 lm/W	117000 lm	130000 lm	-
928494709291	SON-T 100W E E40 1SL/12	95 lm/W	8600 lm	9500 lm	-
928494609291	SON-T 70W E E27 1CT/12	87 lm/W	5500 lm	6100 lm	-

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
928152800035	SON-T 70W/220 E27 1CT/12	T35
928152800093	SON-T 70W E E27 1SL	T35
928154509228	SON-T 1000W E40 1SL/4	T65
928481500092	SON-T 100W E E40 SL/12	T46
928481500097	SON-T 100W E E40 1SL	T46
928487100094	SON-T 150W E E40 1SL/12	T46
928487100096	SON-T 150W E E40 SL/12	T46
928487100097	SON-T 150W E E40 1SL	T46
928487200094	SON-T 250W E E40 1SL/12	T46
928487200097	SON-T 250W E E40 1SL	T46
928487200098	SON-T 250W E E40 SL/12	T46
928487300094	SON-T 400W E E40 1SL/12	T46
928487300097	SON-T 400W E E40 1SL	T46

Order Code	Full Product Name	Bulb Shape
928487300098	SON-T 400W E E40 SL/12	T46
928487400091	SON-T 1000W E E40 1SL/4	T65
928487400093	SON-T 1000W E E40 1SL/4	T65
928494709291	SON-T 100W E E40 1SL/12	T46
928494609291	SON-T 70W E E27 1CT/12	T35

