

PRODUCT DATASHEET

PLANTASTAR 400 W E40

PLANTASTAR®-T | High-pressure sodium vapor lamps for open and enclosed luminaires



Areas of application

- Greenhouses
- Suitable for growth of fruit due to emission of photosynthesis optimised light
- Application only in suitable luminaires

Product benefits

- Shorter production times
- Control over blossoming

Product features



- Provides light for the photosynthesis in plants
- Photon flux: > 90 % after 12,000 h
- High-pressure sodium lamp especially for greenhouse lighting

TECHNICAL DATA

Electrical data

Nominal wattage	400 W
Nominal voltage	100 V
Ignition voltage	4.0/5.0 kVp ¹⁾
Operating mode	Conventional control gear (CCG) and ignitor
Nominal current	4.52 A
PFC capacitor at 50 Hz	45 µF

¹⁾ Minimum / Maximum

Photometrical data

Luminous flux	56500 lm
Luminous efficacy	136 lm/W
Color temperature	2000 K
Color rendering index Ra	≤25
Light color	220
Rated LLMF at 2,000 h	0.98
Rated LLMF at 4,000 h	0.97
Rated LLMF at 6,000 h	0.96
Rated LLMF at 8,000 h	0.95
Rated LLMF at 12,000 h	0.94
Rated LLMF at 16,000 h	0.94
Rated LLMF at 20,000 h	0.94
UV protection	No

Dimensions & Weight

Overall length	285.00 mm
Length	285.00 mm
Light center length (LCL)	175,0 mm
Diameter	47 mm
Product weight	150.00 g

Temperatures & operating conditions

Maximum permitted outer bulb temperature	400 °C
Maximum permitted base edge temperature	250 °C

Lifespan

Rated lamp survival factor at 2,000 h	0.99
Rated lamp survival factor at 4,000 h	0.99
Rated lamp survival factor at 6,000 h	0.98
Rated lamp survival factor at 8,000 h	0.97
Rated lamp survival factor at 12,000 h	0.96
Rated lamp survival factor at 16,000	0.95
Rated lamp survival factor at 20,000 h	0.93
Lifespan B10	24000 h
Lifespan B5	20000 h
Lifespan B50	32000 h

Additional product data

Base (standard designation)	E40
Mercury content	21.6 mg
Design / version	Clear
Product remark	Not for general lighting

Capabilities

Dimmable	No
Burning position	Any
Enclosed luminaire required	No
Hot restart	No

Certificates & Standards

Energy consumption	417.00 kWh/1000h
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Country-specific categorizations

ILCOS	ST-400-H/E-E40-47/285
Order reference	PLANTASTAR 400W

DOWNLOAD DATA

Documents and certificates		Document name
	User instruction / safety instructions	High Intensity Discharge Lamp UI
	Declarations of conformity	EC Declaration of Conformity - 2021 9C1-4083706-EN-00 - HPS PLANTA

Documents and certificates		Document name
	Certificates	EAC RU C-DE.AYA46.B.85891 29.06.2018-28.06.2023 ROSTEST-Moskva - HPS
	Certificates	EAC N RU D-DE.MU62.B.00936_20 06.03.2020-05.03.2025 Prommash Test - HPS
Photometric and lighting design files		Document name
	Spectral power distribution	384085_PLANTASTAR

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4050300620084	Sleeve 1	52 mm x 52 mm x 325 mm	192.00 g	0.88 dm ³
4050300620091	Shipping box 12	266 mm x 216 mm x 342 mm	2694.00 g	19.65 dm ³

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.