PRODUCT DATASHEET
NAV-E 100 W SUPER 4Y

VIALOX® NAV®-E SUPER 4Y® | High-pressure sodium vapor lamps for open and enclosed luminaires

Areas of application

– Streets
– Outdoor lighting
– Industrial installations
– Suitable for use in open and enclosed luminaires
– Outdoor applications only in suitable luminaires

Product benefits

– Very high luminous efficacy
– Very good luminous flux maintenance throughout the life of the lamp
– Energy savings of up to 50 % when replacing mercury vapor lamps (HQL)
– Optimum energy efficiency on POWERTRONIC® PTo 3DIM ECGs

Product features

– Lamp survival factor: 95 % after 16,000 h burning time
– Lamp maintenance factor: ≥ 80 % after 16,000 h burning time (according to DIN 13201)
– Service lifetime: 4 years (at approx. 11 h/day)
– Dimmable on conventional control gears and electronic control gears

TECHNICAL DATA

Electrical data

Nominal wattage	100 W
Construction wattage	103.60 W
Nominal voltage	100 V
Ignition voltage	3.3/5.0 kVp [1]
Operating mode	Conventional control gear (CCG) and ignitor, Electronic control gear (ECG)
Nominal current	1.2 A
PFC capacitor at 50 Hz	12 µF

[1] Minimum / Maximum

Photometrical data

Luminous flux	10100 lm
Luminous efficacy	97 lm/W
Color temperature	2000 K
Color rendering index Ra	≤25
Light color	220
Rated LLMF at 2,000 h	0.94
Rated LLMF at 4,000 h	0.92
Rated LLMF at 6,000 h	0.90
Rated LLMF at 8,000 h	0.89
Rated LLMF at 12,000 h	0.88
Rated LLMF at 16,000 h	0.86
Rated LLMF at 20,000 h	0.85
UV protection	No

384084_NAV_SUPER_4Y

Dimensions & Weight

Overall length	180.00 mm
Diameter	76 mm
Product weight	80.00 g

Temperatures & operating conditions

Maximum permitted outer bulb temperature	310 °C
Maximum permitted base edge temperature	210 °C

Lifespan

Rated lamp survival factor at 2,000 h	0.99
Rated lamp survival factor at 4,000 h	0.98
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	0.90
Lifespan B10	20000 h
Lifespan B5	16000 h
Lifespan B50	36000 h

Additional product data

Base (standard designation)	E40
Mercury content	14.4 mg
Mercury-free	No
Design / version	Coated
Product remark	Important: Before replacing for NAV Standard lamps in existing installations, check that the igniters are suitable

Capabilities

Dimmable	Yes [1]
Burning position	Any
Enclosed luminaire required	No

[1] In combination with POWERTRONIC PTo

Certificates & Standards

Energy efficiency class	F

Energy consumption	104.00 kWh/1000h

Country-specific categorizations

ILCOS	SE-100-H/E/SL-E40-76/183
Order reference	NAV-E 100W SUPE

Energy labelling regulation data acc EU 2019/2015

Lighting technology used	HPS
Non-directional or directional	NDLS
Mains or non-mains	NMLS
Light source cap-type (or other electric interface)	E40
Connected light source (CLS)	No
Color-tuneable light source	No
Envelope	SECOND
High luminance light source	No
Anti-glare shield	No
Correlated colour temperature type	SINGLE_VALUE
Claim of equivalent power	No
Length	180.00 mm
Height	76 mm
Width	76 mm
Chromaticity coordinate x	0,535
Chromaticity coordinate y	0,420
Beam angle correspondence	SPHERE_360
EPREL ID	546580
Model number	AC34372,AC34372

Safety advice

– Disconnect mains before installation.
– Must not be used if outer bulb is defective.
– Protect from spray water.

DOWNLOAD DATA

	Documents and certificates	Document name
PDF	Declarations of conformity	EC Declaration of Conformity - 2021 9C1-4077887-EN-00 - HPS

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	384084_NAV_SUPER_4Y

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4050300015774	Round wrap 1	80 mm x 80 mm x 183 mm	108.00 g	1.17 dm^3
4052899963368	Shipping box 40	310 mm x 200 mm x 235 mm	4532.00 g	14.57 dm^3
4050300631813	Shipping box 12	380 mm x 300 mm x 203 mm	1677.40 g	23.14 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.