

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

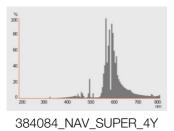
Electrical data

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



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
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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 usedHPSNon-directional or directionalNDLSMains or non-mainsNMLSLight source cap-type (or other electric interface)E40Connected light source (CLS)NoColor-tuneable light sourceNoEnvelopeSECONDHigh luminance light sourceNoAnti-glare shieldNoCorrelated colour temperature typeSINGLE_VALUEClaim of equivalent powerNo	
Mains or non-mainsNMLSLight source cap-type (or other electric interface)E40Connected light source (CLS)NoColor-tuneable light sourceNoEnvelopeSECONDHigh luminance light sourceNoAnti-glare shieldNoCorrelated colour temperature typeSINGLE_VALUEClaim of equivalent powerNo	
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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	
Envelope SECOND High luminance light source No Anti-glare shield No Correlated colour temperature type SINGLE_VALUE Claim of equivalent power No	
High luminance light source No Anti-glare shield No Correlated colour temperature type SINGLE_VALUE Claim of equivalent power No	
Anti-glare shield No Correlated colour temperature type SINGLE_VALUE Claim of equivalent power No	
Correlated colour temperature type SINGLE_VALUE Claim of equivalent power No	
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	

DOWNLOAD DATA

	Documents and certificates	Document name
POF	User Instruction	High Intensity Discharge Lamp UI
PDF	Declarations of conformity	EC Declaration of Conformity - 2021 9C1-4077887-EN-00 - HPS
PDF	Certificates	EAC RU C-DE.AYA46.B.85891 29.06.2018-28.06.2023 ROSTEST-Moskva - HPS

	Documents and certificates	Document name	
POF	Certificates	EAC N RU D-DE.MU62.B.00936_20 06.03.2020-05.03.2025 Prommash Test - HPS	
	Photometric and lighting desig	n files Document name	
1	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
4050300631813	Shipping box 12	380 mm x 300 mm x 203 mm	1677.40 g	23.14 dm ³
4052899963368	Shipping box 40	310 mm x 200 mm x 235 mm	4532.00 g	14.57 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.