

PRODUCT DATASHEET

NAV-E 100 W SUPER XT

VIALOX® NAV®-E SUPER XT | 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
- Alternative to sodium twin arc lamps

Product benefits

- Very long lifetime
- Very high luminous efficacy
- Extended service time (lamp replacement cycle): 8 years (at approx. 11 h/day)
- Very good luminous flux maintenance throughout the life of the lamp
- Optimum energy efficiency on POWERTRONIC® PTo 3DIM ECGs

Product features

- Lamp survival rate: 95 % after 28,000 h burning time
- Lamp maintenance factor: ≥ 80 % after 24,000 h burning time (according to DIN 13201)
- Dimmable on conventional control gears and electronic control gears



TECHNICAL DATA

Electrical data

Nominal wattage	100 W
Construction wattage	104.60 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	10400 lm
Luminous efficacy	99 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	0.87
Rated LLMF at 20,000 h	0.86
UV protection	No



384084_NAV_SUPER_4Y

Dimensions & Weight

Overall length	180.00 mm
Diameter	76.00 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	0.99
Rated lamp survival factor at 6,000 h	0.99
Rated lamp survival factor at 8,000 h	0.99
Rated lamp survival factor at 12,000 h	0.99
Rated lamp survival factor at 16,000	0.99
Rated lamp survival factor at 20,000 h	0.98
Lifespan B10	34000 h
Lifespan B5	28000 h
Lifespan B50	48000 h

Additional product data

Base (standard designation)	E40
Mercury content	18.0 mg
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
Hot restart	No

¹⁾ In combination with POWERTRONIC PTo

Certificates & Standards

Energy efficiency class	F
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Energy consumption	105.00 kWh/1000h
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Country-specific categorizations


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


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	76.00 mm
Width	76.00 mm
Chromaticity coordinate x	0,535
Chromaticity coordinate y	0,420
Beam angle correspondence	SPHERE_360
EPREL ID	546598
Model number	AC34393

DOWNLOAD DATA

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

Documents and certificates		Document name
	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
4058075803596	Round wrap 1	80 mm x 80 mm x 183 mm	108.00 g	1.17 dm ³
4058075803725	Shipping box 12	380 mm x 300 mm x 203 mm	1677.00 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.