

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

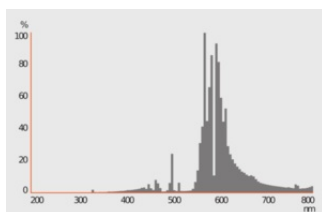
Electrical data

| | |
|------------------------|--|
| 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-tunable 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 |
|---|----------------------------------|
|  User instruction / safety instructions | High Intensity Discharge Lamp UI |

| Documents and certificates | | Document name |
|---|-----------------------------|---|
|  | 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 |
|  | 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.