

# PRODUCT DATASHEET NAV 50 LED FILAMENT AMBER V 1600LM 15W 718 E27

NAV LED FILAMENT AMBER V | LED replacement for NAV lamps in design-oriented outdoor applications with reduced percentage of blue light



#### Areas of application

- Street and outdoor lighting
- Areas close to nature
- Residential areas
- Parks
- Historic buildings and districts
- Outdoor applications only in suitable luminaires

#### Product benefits

- Support wildlife protection thanks to very low percentage of blue light
- Support reduction of circadian disruption and improve the residents' life quality
- Better color rendering and enhanced visibility compared to traditional sodium vapor lamps (NAV)
- Same design as traditional NAV lamps with clear, tubular full glass bulb
- Full use of reflector of existing luminaire thanks to 360 degree beam angle
- Saves up to 70 % energy when used as replacement for sodium vapor lamps (NAV)
- Instant 100 % light, no warm-up time
- Similar light distribution as traditional NAV lamps

#### **Product features**

- Less than 1,5 % of blue light (< 500 nm)
- Very warm light color of 1800 K similar to traditional sodium vapor lamps (NAV)



15W 718 E27

- Suitable for operation with conventional control gear (CCG) or 230 V AC mains
- Power factor: 0.9
- Type of protection: IP65
- Surge protection: up to 2 kV (L-N)

# TECHNICAL DATA

# Electrical data

| Nominal wattage  | 15 W          |
|--|---------------|
| Construction wattage                                     | 15.00 W       |
| Nominal voltage  | 220240 V      |
| Operating mode   | CCG, AC Mains |
| Claimed equiv. conventional lamp power                   | 50 W          |
| Nominal current  | 65 mA         |
| Type of current  | AC            |
| Inrush current   | 3.0 A         |
| Operating frequency                                      | 50/60 Hz      |
| Mains frequency  | 50/60 Hz      |
| Max. lamp number on MCB B10 A                            | 39            |
| Max. lamp number on MCB B10 A - CCG without compensation | 123           |
| Max. lamp number on MCB B10 A - CCG with compensation    | 9             |
| Max. lamp number on MCB B16 A                            | 45            |
| Max. lamp number on MCB B16 A - CCG without compensation | 196           |
| Max. lamp number on MCB B16 A - CCG with compensation    | 12            |
| Total harmonic distortion                                | 30 %          |
| Power factor $\lambda$                                   | > 0.90        |
| Surge capability (L-N)                                   | 2 kV          |

# Photometrical data

| Luminous flux                           | 1600 lm  |
|---|----------|
| Nominal useful luminous flux 90°        | 1600 lm  |
| Luminous efficacy                       | 106 lm/W |
| Lumen main.fact.at end of nom.life time | 0.70     |
| Light color (designation)               | Amber    |
| Color temperature                       | 1800 K   |
| Color rendering index Ra                | 70       |
| Light color                             | 718      |
| Standard deviation of color matching    | ≤6 sdcm  |
| Rated LLMF at 6,000 h                   | 0.80     |
| Flickering metric (Pst LM)              | 1        |
| Stroboscope effect metric (SVM)         | 0,4      |

# Light technical data

| Beam angle          | 360 °    |
|---------------------|----------|
| Warm-up time (60 %) | < 0.50 s |
| Starting time       | < 0.5 s  |

# Dimensions & Weight



| Overall length   | 170.00 mm |
|------------------|-----------|
| Diameter         | 38.00 mm  |
| Maximum diameter | 38 mm     |
| Product weight   | 80.00 g   |

# Temperatures & operating conditions

| Ambient temperature range            | -20+50 °C <sup>1)</sup> |
|--------------------------------------|-------------------------|
| Maximum temperature at tc test point | 100 °C                  |

<sup>1)</sup> Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

# Lifespan

| Lifespan L70/B50 at 25 °C                    | 25000 h |
|--|---------|
| Number of switching cycles                   | 100000  |
| Lumen maintenance at end of service lifetime | 0.70    |
| Rated lamp survival factor at 6,000 h        | ≥ 0.90  |

# Additional product data

| Base (standard designation) | E27                        |
|-----------------------------|----------------------------|
| Mercury content             | 0.0 mg                     |
| Mercury-free                | Yes                        |
| Added function              | Insect_Wildlife_Protection |

# Capabilities

| Dimmable | No |
|----------|----|
|          |    |

# Certificates & Standards

| Energy consumption                           | 15.00 kWh/1000h |
|--|-----------------|
| Type of protection                           | IP65            |
| Standards                                    | CE / UKCA / EAC |
| Photobiological safety group acc. to EN62778 | RG1             |

# Country-specific categorizations

| Order reference | NAV 50 LED FIL |
|-----------------|----------------|
|                 |                |

# LOGISTICAL DATA

# Energy labelling regulation data acc EU 2019/2015

| Lighting technology used                             | LED        |
|--|------------|
| Non-directional or directional                       | NDLS       |
| Mains or non-mains                                   | MLS        |
| Light source cap-type (or other electric interface)  | E27        |
| Connected light source (CLS)                         | No         |
| Color-tuneable light source                          | No         |
| Envelope   | No         |
| High luminance light source                          | No         |
| Anti-glare shield                                    | No         |
| Claim of equivalent power                            | No         |
| Length   | 170.00 mm  |
| Height   | 38.00 mm   |
| Width  | 38.00 mm   |
| Chromaticity coordinate x                            | 0.549      |
| Chromaticity coordinate y                            | 0.408      |
| R9 Colour rendering index                            | 0.00       |
| Beam angle correspondence                            | SPHERE_360 |
| Survival factor                                      | 0.9        |
| Displacement factor                                  | 0.9        |
| LED light source replaces a fluorescent light source | No         |

# Safety advice

- Not suitable for operation with ignitors.
- Operation on the capacitor can lead to a reduction of the power factor of the system.
- When installed horizontally, the  $\ensuremath{t_{\text{C}}}$  point of the lamp is located on the top side of the lamp.

- Only suitable for temperatures of up to 50 °C inside of the luminaire. Use in tight luminaires and luminaires with tight reflectors not recommended.
- All electrical connections must be made by a qualified person.
- Not designed as a replacement for conventional lighting in private household.
- Do not touch the lamp if broken.

#### **DOWNLOAD DATA**

|     | Documents and certificates             |  | Document name                       |  |
|-----|--|--|-------------------------------------|--|
| POF | User instruction / safety instructions |  | NAV LED FILAMENT V                  |  |
| POF | On-Pack-Info                           |  | ELR - exempt lamps                  |  |
| POF | Legal information                      |  | Informationstext 18 Abs 4 ElektroG  |  |
| POF | Declarations of conformity             |  |                                     |  |
| POF | Declarations of conformity UKCA        |  | NAV LED FIL Amber                   |  |
|     |  |  |                                     |  |
|     | Photometric and lighting design files  |  | Document name                       |  |
|     | IES file (IES)                         |  | NAV 50 LED FIL V 1600LM 15W 718 E27 |  |
|     | LDT file (Eulumdat)                    |  | NAV 50 LED FIL V 1600LM 15W 718 E27 |  |
|     | UGR file (UGR table)                   |  | NAV 50 LED FIL V 1600LM 15W 718 E27 |  |
|     | Light distribution curve type polar    |  | NAV 50 LED FIL V 1600LM 15W 718 E27 |  |
|     |  |  |                                     |  |
|     | Tender texts                           | Document name                                  |                                     |  |
|     | Tender documents                       | NAV LED FILAMENT AMBER V 1600LM 15W 718 E27-en |                                     |  |

#### LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4058075843585 | Folding box<br>1             | 44 mm x 44 mm x 256 mm               | 123.00 g     | 0.50 dm <sup>3</sup>  |
| 4058075843592 | Shipping box<br>6            | 230 mm x 183 mm x 285 mm             | 1083.00 g    | 12.00 dm <sup>3</sup> |

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.