

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

NAV LED FILAMENT AMBER VALUE | 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**

1600LM 15W 718 E27

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



- 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

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

Ouday vafayanaa	NAV FO LED EII
Order reference	NAV 50 LED FIL

# LOGISTICAL DATA

Temperature range at storage	-20+80 °C
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# 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	1
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)		IAV 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 1	44 mm x 44 mm x 256 mm	123.00 g	0.50 dm <sup>3</sup>
4058075843592	Shipping box 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.