

# PRODUCT DATASHEET

## NAV 70 LED FILAMENT AMBER V 2500LM

### 23W 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)



- 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)

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**TECHNICAL DATA****Electrical data**

Nominal wattage	23 W
Construction wattage	23.00 W
Nominal voltage	220...240 V
Operating mode	CCG, AC Mains
Claimed equiv. conventional lamp power	70 W
Nominal current	105 mA
Type of current	AC
Inrush current	9.7 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	8
Max. lamp number on MCB B10 A - CCG without compensation	9
Max. lamp number on MCB B10 A - CCG with compensation	3
Max. lamp number on MCB B16 A	12
Max. lamp number on MCB B16 A - CCG without compensation	15
Max. lamp number on MCB B16 A - CCG with compensation	6
Total harmonic distortion	30 %
Power factor $\lambda$	> 0.90
Surge capability (L-N)	2 kV

**Photometrical data**

Luminous flux	2500 lm
Nominal useful luminous flux 90°	2500 lm
Luminous efficacy	108 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 sdc <sub>m</sub>
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	210.00 mm
Diameter	38.00 mm
Maximum diameter	38 mm
Product weight	120.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C <sup>1)</sup>
Maximum temperature at tc test point	110 °C

1) 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
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Certificates & Standards

Energy consumption	23.00 kWh/1000h
Type of protection	IP65
Standards	CE / UKCA / EAC
Photobiological safety group acc. to EN62778	RG1

### Country-specific categorizations

Order reference	NAV 70 LED FIL
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### 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	210.00 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  $t_c$  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
	User instruction / safety instructions	NAV LED FILAMENT V
	On-Pack-Info	ELR - exempt lamps
	Legal information	Informationstext 18 Abs 4 ElektroG
	Declarations of conformity	
	Declarations of conformity UKCA	NAV LED FIL Amber

Photometric and lighting design files		Document name
	IES file (IES)	NAV 70 LED FIL V 2500LM 23W 718 E27
	LDT file (Eulumdat)	NAV 70 LED FIL V 2500LM 23W 718 E27
	UGR file (UGR table)	NAV 70 LED FIL V 2500LM 23W 718 E27
	Light distribution curve type polar	NAV 70 LED FIL V 2500LM 23W 718 E27

Tender texts	Document name	
	Tender documents	NAV LED FILAMENT AMBER V 2500LM 23W 718 E27-en

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075843608	Folding box 1	44 mm x 44 mm x 296 mm	170.00 g	0.57 dm³
4058075843615	Shipping box 6	230 mm x 183 mm x 325 mm	1441.00 g	13.68 dm³

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.

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## DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.