PRODUCT DATASHEET
NAV 100 LED FILAMENT V 7000LM 41W 727 E40

NAV LED FILAMENT V | LED replacement for NAV lamps in design-oriented outdoor applications



VALUE CLASS

Areas of application

- Streets
- Area lighting
- Pedestrian zones
- Parks
- Outdoor applications only in suitable luminaires

Product benefits

- 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 78 % 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

- Suitable for operation with conventional control gear (CCG) or 230 V AC mains
- Very high efficiency of up to 190 lm/W
- Power factor: 0.9
- Type of protection: IP65
- Surge protection: up to 2 kV (L-N)





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TECHNICAL DATA

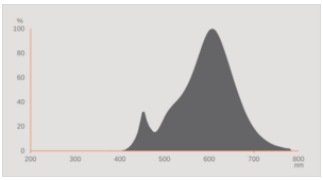
Electrical data

Nominal wattage	41 W
Construction wattage	41.00 W
Nominal voltage	220…240 V
Operating mode	CCG, AC Mains
Claimed equiv. conventional lamp power	100 W
Nominal current	175 mA
Type of current	AC
Inrush current	9.1 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	3
Max. lamp no. on circuit break. B10 A - CCG without compensation	4
Max. lamp no. on circuit break. B10 A - CCG with compensation	8
Max. lamp no. on circuit break. 16 A (B)	6
Max. lamp no. on circuit break. B16 A - CCG without compensation	7
Max. lamp no. on circuit break. B16 A - CCG with compensation	13
Total harmonic distortion	10 %
Power factor λ	> 0.90

Photometrical data

Luminous intensity	Not relevant
Luminous flux	7000 lm
Nominal useful luminous flux 90°	7000 lm
Luminous efficacy	170 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Warm White
Color temperature	2700 K
Color rendering index Ra	70
Light color	727
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

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Light technical data

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

Dimensions & Weight



Overall length	225.00 mm
Diameter	46.00 mm
Maximum diameter	46 mm
Product weight	170.00 g

Temperatures & operating conditions

Ambient temperature range	-20…+50 °C
Maximum temperature at tc test point	90 °C

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)	E40
Mercury content	0.0 mg

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Mercury-free	Yes

Capabilities

Dimmable	No

Certificates & Standards

Energy efficiency class	C [1)]
Energy consumption	41.00 kWh/1000h
Type of protection	IP65
Standards	CE / EAC / UKCA
Photobiological safety group acc. to EN62778	RG1

1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

Country-specific categorizations

Order reference	NAV 100 LED FIL

LOGISTICAL DATA

Temperature range at storage	-20...+80 °C

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)	E40
Connected light source (CLS)	No
Color-tuneable light source	No
Envelope	No
High luminance light source	No
Anti-glare shield	No
Correlated colour temperature type	SINGLE_VALUE
Claim of equivalent power	No
Length	225.00 mm
Height	46.00 mm
Width	46.00 mm
Chromaticity coordinate x	0,463
Chromaticity coordinate y	0,42
R9 Colour rendering index	0.00

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Beam angle correspondence	SPHERE_360
Survival factor	0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	1371173
Model number	AC46364,AC46364

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.
- Use in tight luminaires and luminaires with tight reflectors not recommended.
- Only suitable for temperatures of up to 50°C inside of the luminaire. Use in tight luminaires and luminaires with tight reflectors not recommended.

DOWNLOAD DATA

	Documents and certificates
PDF	User instruction
PDF	Declarations Of Conformity CE
PDF	Declarations Of Conformity UKCA

	Photometric and lighting design files
IES	IES file (IES)
LDT	LDT file (Eulumdat)
	UGR file (UGR table)
	LDC typ polar
	Spectral power distribution

LOGISTICAL DATA

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Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854072055	Folding box 1	52 mm x 52 mm x 311 mm	241.00 g	0.84 dm^3
4099854072062	Shipping box 6	329 mm x 176 mm x 133 mm	1560.00 g	7.70 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.

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