

# PRODUCT DATASHEET

## NAV 100 LED FIL V 7500LM 41W 740 E40

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



### Areas of application

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

### Product benefits

- Same design as traditional NAV lamps with frosted, ellipsoid 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)



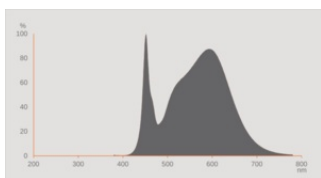
## TECHNICAL DATA

### Electrical data

Nominal wattage	41 W
Construction wattage	41.00 W
Nominal voltage	220...240 V
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 $\lambda$	> 0.90

### Photometrical data

Luminous intensity	N/A
Luminous flux	7500 lm
Nominal useful luminous flux 90°	7500 lm
Luminous efficacy	182 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	70
Light color	740
Standard deviation of color matching	≤6 sdcn
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
Rated beam angle (half peak value)	360.00 °

### 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	25000 h
Number of switching cycles	100000
Lumen maintenance at end of serv	0.70
Rated lamp survival factor at 6,000	≥ 0.90

### Additional product data

Base (standard designation)	E40
Mercury content	0.0 mg

Mercury-free	Yes
Product remark	Available from June 2023

### Capabilities

Dimmable	No
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### 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
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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)	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
Standby power	N/A
Networked standby power for CLS	N/A
Claim of equivalent power	No
Length	225.00 mm
Height	46.00 mm
Width	46.00 mm

Chromaticity coordinate x	0,38
Chromaticity coordinate y	0,38
R9 Colour rendering index	>0
Beam angle correspondence	SPHERE_360
Survival factor	0,9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	1371174
Model number	AC46365

### 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



User instruction



Declarations Of Conformity CE



Declarations Of Conformity UKCA

#### Photometric and lighting design files



IES file (IES)



LDT file (Eulumdat)



UGR file (UGR table)



LDC typ polar



Spectral power distribution

**LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854072079	Folding box 1	52 mm x 52 mm x 311 mm	241.00 g	0.84 dm <sup>3</sup>
4099854072086	Shipping box 6	329 mm x 176 mm x 133 mm	1680.00 g	7.70 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.