

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

NAV LED FILAMENT VALUE | 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 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)





TECHNICAL DATA

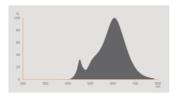
Electrical data

Nominal wattage	41 W
Construction wattage	41.00 W
Nominal voltage	220240 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 number on MCB B10 A	3
Max. lamp number on MCB B10 A - CCG without compensation	3
Max. lamp number on MCB B10 A - CCG with compensation	3
Max. lamp number on MCB B16 A	6
Max. lamp number on MCB B16 A - CCG without compensation	6
Max. lamp number on MCB B16 A - CCG with compensation	4
Total harmonic distortion	10 %
Power factor λ	> 0.90
Surge capability (L-N)	2 kV

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
---------------------------------	-----



EPREL data spectral diagram PROF LEDr 2700K

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 ¹⁾
Maximum temperature at tc test point	90 °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	
nated famp survivariactor at 0,000 m	2 0.90	
Additional product data		
Base (standard designation)	E40	
Mercury content	0.0 mg	
Mercury-free	Yes	
Capabilities		
Dimmable	No	
Diffillable	INO	
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 (lov	vest efficiency)	
Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lov Country-specific categorizations		
Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lov Country-specific categorizations Order reference	vest efficiency) NAV 100 LED FIL	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lov Country-specific categorizations Order reference LOGISTICAL DATA	NAV 100 LED FIL	
Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lov Country-specific categorizations Order reference		
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lov Country-specific categorizations Order reference LOGISTICAL DATA	NAV 100 LED FIL	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage	NAV 100 LED FIL	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015	NAV 100 LED FIL -20+80 °C	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used	NAV 100 LED FIL -20+80 °C	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lov Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional or directional	NAV 100 LED FIL -20+80 °C LED NDLS	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lov Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional or directional Mains or non-mains	NAV 100 LED FIL -20+80 °C LED NDLS MLS	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lov Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional or directional Mains or non-mains Light source cap-type (or other electric interface)	NAV 100 LED FIL -20+80 °C LED NDLS MLS E40	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional or directional Mains or non-mains Light source cap-type (or other electric interface) Connected light source (CLS)	NAV 100 LED FIL -20+80 °C LED NDLS MLS E40 No	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional or directional Mains or non-mains Light source cap-type (or other electric interface) Connected light source (CLS) Color-tuneable light source	NAV 100 LED FIL -20+80 °C LED NDLS MLS E40 No	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lov Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional or directional Mains or non-mains Light source cap-type (or other electric interface) Connected light source (CLS) Color-tuneable light source Envelope	NAV 100 LED FIL -20+80 °C LED NDLS MLS E40 No N	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional or directional Mains or non-mains Light source cap-type (or other electric interface) Connected light source (CLS) Color-tuneable light source Envelope High luminance light source	NAV 100 LED FIL -20+80 °C -20+80	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional or directional Mains or non-mains Light source cap-type (or other electric interface) Connected light source (CLS) Color-tuneable light source Envelope High luminance light source Anti-glare shield	NAV 100 LED FIL -20+80 °C LED NDLS MLS E40 No No No No No	

Height	46.00 mm
Width	46.00 mm
Chromaticity coordinate x	0,463
Chromaticity coordinate y	0,42
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
EPREL ID	1371173
Model number	AC46364,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 $t_{\rm C}$ 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.
- All electrical connections must be made by a qualified person.

DOWNLOAD DATA

	Documents and certificates	Document name
POF	User instruction / safety instructions	NAV LED FILAMENT V
POF	Legal information	Informationstext 18 Abs 4 ElektroG
POF	Declarations of conformity	HID LED FILAMENT
POF	Declarations of conformity UKCA	HID LED FILAMENT

Photometric and lighting design files	Document name
IES file (IES)	NAV 100 LED FIL V 7000LM 41W 727E40LEDV
LDT file (Eulumdat)	NAV 100 LED FIL V 7000LM 41W 727E40LEDV

Photometric and lighting design file	s Document name
UGR file (UGR table)	NAV 100 LED FIL V 7000LM 41W 727E40LEDV
Light distribution curve type polar	NAV 100 LED FIL V 7000LM 41W 727E40LEDV
Spectral power distribution	EPREL data spectral diagram PROF LEDr 2700K
Tender texts	Document name
Tender documents	NAV LED FILAMENT V 7000LM 41W 727 E40-en

LOGISTICAL DATA

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
4099854319723	Shipping box 6	235 mm x 180 mm x 340 mm	1893.00 g	14.38 dm ³
4099854072062	Shipping box 6	329 mm x 176 mm x 133 mm	1634.00 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.