
VIALOX NAV-E

High-pressure sodium vapor lamps for open and enclosed luminaires



Areas of application

- Streets
- Outdoor lighting
- Industrial installations
- Suitable for use in open and enclosed luminaires
- Outdoor applications only in suitable luminaires

Product benefits

- High luminous efficacy

Product features

- Service lifetime: 3 years (at approx. 11 h/day)
- Average lifetime: up to 24,000 hours



Product family datasheet

Technical data

Product description	Electrical data					Photometrical data					
	Nominal wattage	Rated wattage	Lamp current	Nominal voltage	Ignition voltage	Rated luminous flux	Color rendering index Ra	Color temperature	Rated LLMF at 2,000 h	Rated LLMF at 4,000 h	Rated LLMF at 6,000 h
NAV-E 50 W/E E27 ¹⁾	50.00 W	50.00 W	0.77 A	85.0 V	1.8 / 5.0 kVp ³⁾	3600 lm	≤25	2000 K	0.91	0.89	0.84
NAV-E 70 W/E E27 ¹⁾	70.00 W	70.00 W	0.98 A	90.0 V	1.8 / 5.0 kVp ³⁾	5900 lm	≤25	2000 K	0.92	0.86	0.83
NAV-E 100 W E40 ²⁾	100.00 W	97.00 W	1.2 A	100 V	3.3 / 5.0 kVp ³⁾	8800 lm	≤25	2000 K	0.91	0.90	0.89
NAV-E 150 W E40 ²⁾	150.00 W	150.00 W	1.8 A	100 V	3.3 / 5.0 kVp ³⁾	14500 lm	≤25	2000 K	0.97	0.96	0.95
NAV-E 250 W E40 ²⁾	250.00 W	250.00 W	3.0 A	100 V	3.3 / 5.0 kVp ³⁾	27000 lm	≤25	2000 K	0.97	0.96	0.95
NAV-E 400 W E40 ²⁾	400.00 W	400.00 W	4.45 A	105 V	3.3 / 5.0 kVp ³⁾	18000 lm	≤25	2000 K	0.97	0.96	0.95
NAV-E 1000 W E40 ¹⁾	1000.00 W	1000.00 W	10.3 A	110 V	3.6 / 5.0 kVp ³⁾	130000 lm	≤25	2000 K	0.98	0.95	0.93

Product description	Rated LLMF				Dimensions & weight			Temperatures & operating conditions		Lifespan		
	at 8,000 h	at 12,000 h	at 16,000 h	at 20,000 h	Diameter	Length	Product weight	Max. permitted outer bulb temperature	Max. permitted edge temperature	Rated lamp survival factor at 2,000 h	Rated lamp survival factor at 4,000 h	Rated lamp survival factor at 6,000 h
NAV-E 50 W/E E27 ¹⁾	0.83	0.82	0.81	0.80	71.0 mm	156.0 mm	52.00 g	310 °C	210 °C	0.99	0.98	0.97
NAV-E 70 W/E E27 ¹⁾	0.82	0.81	0.81	0.80	71.0 mm	156.0 mm	56.00 g	310 °C	210 °C	0.98	0.98	0.97
NAV-E 100 W E40 ²⁾	0.88	0.88	0.87	0.86	76.0 mm	183.0 mm	80.00 g	310 °C	210 °C	0.99	0.98	0.98
NAV-E 150 W E40 ²⁾	0.94	0.92	0.91	0.89	91.0 mm	227.0 mm	200.00 g	310 °C	210 °C	0.99	0.98	0.97
NAV-E 250 W E40 ²⁾	0.94	0.92	0.91	0.89	91.0 mm	227.0 mm	158.00 g	400 °C	250 °C	0.99	0.98	0.97
NAV-E 400 W E40 ²⁾	0.94	0.92	0.91	0.89	122.0 mm	290.0 mm	229.00 g	400 °C	250 °C	0.99	0.98	0.97
NAV-E 1000 W E40 ¹⁾	0.91	0.86	0.80	0.70	165.0 mm	355.0 mm	365.30 g	400 °C	250 °C	0.99	0.98	0.96

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Product description	Rated lamp survival factor at 8,000 h	Rated lamp survival factor at 12,000 h	Rated lamp survival factor at 16,000 h	Rated lamp survival factor at 20,000 h	Lifespan B50	Lifespan B10	Lifespan B5	Operation mode LLMF/LSF	Additional product data		
									Base (standard designation)	Design / version	Mercury content
NAV-E 50 W/E E27 ¹⁾	0.96	0.91	0.85	0.75	24000 h	13000 h	9000 h	50 Hz	E27	Coated	19.0 mg ⁴⁾
NAV-E 70 W/E E27 ¹⁾	0.96	0.95	0.85	0.75	24000 h	14000 h	12000 h	50 Hz	E27	Coated	19.0 mg ⁴⁾
NAV-E 100 W E40 ²⁾	0.96	0.95	0.83	0.70	24000 h	14000 h	12000 h	50 Hz	E40	Coated	19.0 mg ⁴⁾
NAV-E 150 W E40 ²⁾	0.96	0.95	0.90	0.85	24000 h	16000 h	12000 h	50 Hz	E40	Coated	19.9 mg
NAV-E 250 W E40 ²⁾	0.96	0.95	0.90	0.85	24000 h	16000 h	12000 h	50 Hz	E40	Coated	19.9 mg
NAV-E 400 W E40 ²⁾	0.96	0.95	0.90	0.85	24000 h	16000 h	12000 h	50 Hz	E40	Coated	19.9 mg
NAV-E 1000 W E40 ¹⁾	0.93	0.86	0.74	0.50	20000 h	10000 h	7000 h		E40	Coated	39.0 mg

Product description	Capabilities			Certificates & standards		Country specific categorizations
	Dimmable	Burning position	Enclosed luminaire required	Energy efficiency class	Energy consumption	ILCOS
NAV-E 50 W/E E27 ¹⁾	Yes ⁵⁾	Any	No	A	55 kWh/1000h	SE-50-H/E/SL-E27-71/156
NAV-E 70 W/E E27 ¹⁾	Yes ⁵⁾	Any	No	A	77 kWh/1000h	SE-70-H/E/SL-E27-71/156
NAV-E 100 W E40 ²⁾	Yes ⁵⁾	Any	No	A+	107 kWh/1000h	SE-100-H/E/SL-E40-76/183
NAV-E 150 W E40 ²⁾	Yes ⁵⁾	Any	No	A+	165 kWh/1000h	SE-150-H/E/SL-E40-91/226
NAV-E 250 W E40 ²⁾	Yes ⁵⁾	Any	No	A+	275 kWh/1000h	SE-250-H/E/SL-E40-91/226
NAV-E 400 W E40 ²⁾	Yes	Any	No	A+	440 kWh/1000h	SE-400-H/E/SL-E40-122/290
NAV-E 1000 W E40 ¹⁾	Yes	Any	No	A+	1100 kWh/1000h	SE-1000-H/E/SL-E40-165/355

¹⁾ ErP compliant according to EU Regulation 245/2009

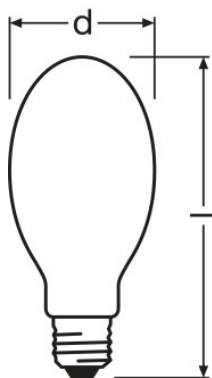
²⁾ Phased out in the EU as non ErP compliant according to EU directive 245/2009

³⁾ Minimum

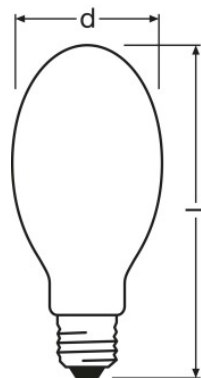
⁴⁾ Maximum

⁵⁾ In combination with POWERTRONIC PTO

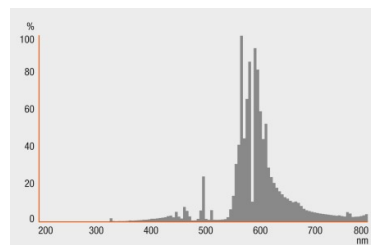
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NAV-E 50 W/E E27, NAV-E 70 W/E E27



NAV-E 100 W E40, NAV-E 150 W E40,
NAV-E 250 W E40, NAV-E 400 W E40,
NAV-E 1000 W E40



NAV-E 50 W/E E27, NAV-E 70 W/E E27,
NAV-E 1000 W E40

Application advice

For more detailed application information and graphics please see product datasheet.

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4050300015750	NAV-E 50 W/E E27	Shipping carton box 24	360 mm x 356 mm x 288 mm	36.91 dm ³	1967.00 g
4050300015767	NAV-E 70 W/E E27	Shipping carton box 24	360 mm x 356 mm x 285 mm	36.53 dm ³	1967.00 g

Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321087300	NAV-E 100 W E40	Shipping carton box 12	380 mm x 203 mm x 300 mm	23.14 dm ³	1677.40 g
4050300015613	NAV-E 150 W E40	Shipping carton box 12	427 mm x 255 mm x 334 mm	36.37 dm ³	3086.17 g
4050300015620	NAV-E 250 W E40	Shipping carton box 12	427 mm x 255 mm x 334 mm	36.37 dm ³	3320.00 g
4050300015637	NAV-E 400 W E40	Shipping carton box 12	545 mm x 322 mm x 420 mm	73.71 dm ³	4364.00 g
4050300015644	NAV-E 1000 W E40	Shipping carton box 6	564 mm x 383 mm x 420 mm	90.73 dm ³	3902.50 g

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.