LEDSPOTS CC

NEXT 111

NEXT 111

Smaller Dimensions increase fixation possibilities

Your NEXT 111 has been substantially improved to maximise performance and simplify installation. The NEXT 111 is a unique AR111 LED spot with aluminium reflector.

NEXT 111
- Replacement for AR111 lamps
- Interchangeable reflectors
- Front part available in black or white

Typical applications
Integration in luminaires
- Retail lighting
- Hospitality lighting
- Museum lighting
- Residential lighting

NEXT 111

- **MODULAR SYSTEM: ENGINE + REFLECTOR**
- **ROBUST COB WITH ALUMINIUM PCB**
- **NARROW COLOUR TOLERANCES: 3 STEP MACADAM**
- **FOUR DIFFERENT BEAM ANGLES**
- **COLOUR RENDERING INDEX: CRI 92 (DIFFERENT CRI, PEARL WHITE, CLEAR WHITE AND FOOD ON REQUEST)**
- **LUMINOUS FLUX UP TO 3100 LM**

LIGHTING SOLUTIONS
Vossloh-Schwabe Deutschland GmbH · Stuttgarter Straße 61/1 · 73614 Schorndorf · Germany · Phone +49 7181/8002-0 · Fax +49 7181/8002-122 · www.vossloh-schwabe.com

NEXT 111

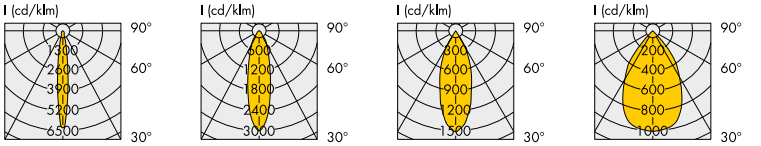
Technical notes

Dimensions (ØxH)
- VCA2-128: Ø111x59.4 mm (heat sink: 20 mm)
- VCA2-1211: Ø111x79.4 mm (heat sink: 40 mm)

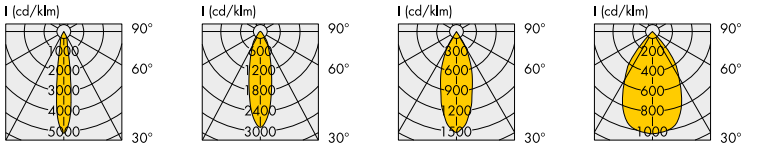
Reflector: aluminium, bayonet fixing, interchangeable
Heat sink material: aluminium
Lumen maintenance: L80/B10; 50,000 hrs.
- 65 °C at t_p point

Colour accuracy initially: 3 SDCM
Use of external LED constant-current drivers
Plastic clear cover to protect reflector
(opaque cover on request)
Leads: Cu tinned, stranded conductors AWG22,
- FEP-insulation and PVC sleeve, length: 600 mm

With integrated cord grip
Versions in white have a black heatsink



NEXT 16° (VCA2-128) NEXT 25° (VCA2-128) NEXT 36° (VCA2-128) NEXT 55° (VCA2-128)



NEXT 20° (VCA2-1211) NEXT 30° (VCA2-1211) NEXT 40° (VCA2-1211) NEXT 55° (VCA2-1211)

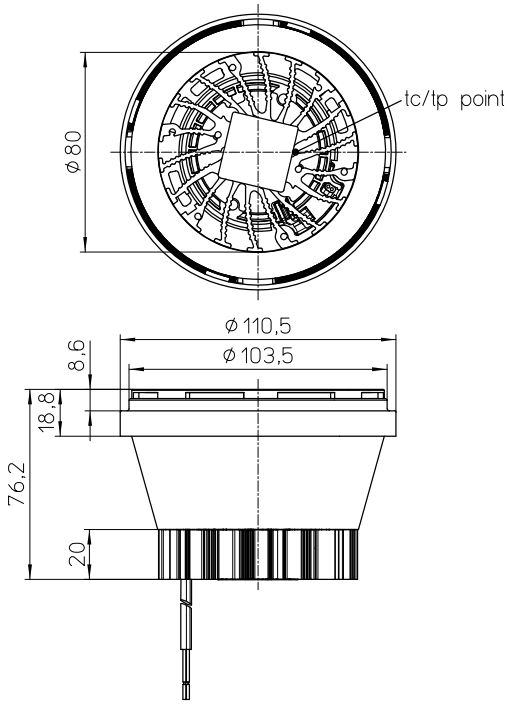
Maximum ratings

Exceeding the maximum ratings can lead to reduction of service life or destruction of the modules.

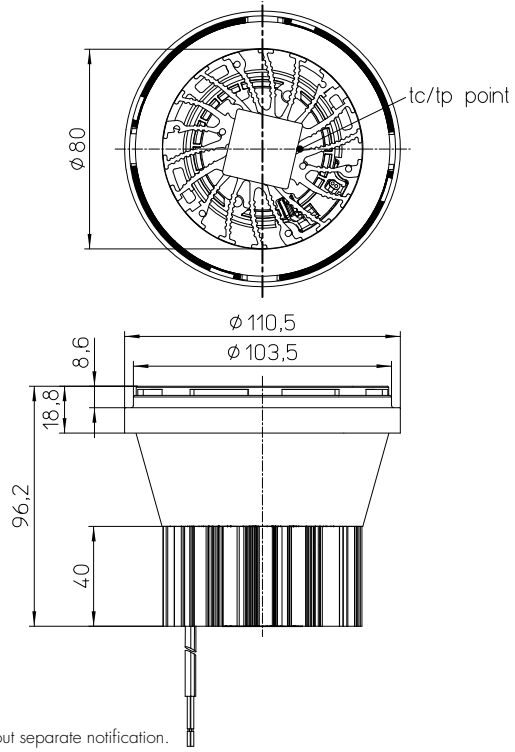
Type	Ambient temperature range (t_a)		Operation temperature range at t_c point		Storage temperature range		Max. allowed repetitive peak current
	°C min.	°C max.	°C min.	°C max.	°C min.	°C max.	mA
VCA2-128	–25	+45	–25	+80	–40	+90	1400
VCA2-1211	–25	+45	–25	+80	–40	+90	2000

Temperatures depend on installation situation and has to be checked by the luminaire manufacturer.

VCA2-128



VCA2-1211



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NEXT 111

Optical characteristics

at t_p = 65 °C

Type	Ref. No. for black LEDSpots	Ref. No. for white LEDSpots	Colour	Correlated colour temperature K	Typ. luminous flux and typical voltage ($U_{typ.}$) and power consumption (P_{el})* 350 mA lm	350 mA lm/W	500 mA lm	500 mA lm/W	Light intensity at max. current Candela	Beam angle °	CRI R_a
Type VCA2-128					P_{el} = 11.3 W		P_{el} = 16.5 W				
Heat sink height = 20 mm					V_f = 32.4 V		V_f = 33.1 V				
Next 111 VCA2-128_930	**572043**	**572051**	warm white	3000	1520	135	2085	126	16390	16°	92
Next 111 VCA2-128_940	**572047**	**572055**	neutral white	4000	1565	138	2140	130	16820	16°	92
Next 111 VCA2-128_930	**572044**	**572052**	warm white	3000	1540	136	2105	128	7000	25°	92
Next 111 VCA2-128_940	**572048**	**572056**	neutral white	4000	1580	140	2165	131	7200	25°	92
Next 111 VCA2-128_930	**572045**	**572053**	warm white	3000	1555	138	2130	129	4200	36°	92
Next 111 VCA2-128_940	**572049**	**572057**	neutral white	4000	1600	142	2190	133	4320	36°	92
Next 111 VCA2-128_930	**572046**	**572054**	warm white	3000	1520	135	2085	126	2840	55°	92
Next 111 VCA2-128_940	**572050**	**572058**	neutral white	4000	1565	138	2140	130	2920	55°	92

* Production tolerance of luminous flux, voltage and power consumption: ±10%
Versions with other colour temperature, different CRI, special white colour (pearl or clear) or food on request

Optical characteristics

at t_p = 65 °C

Type	Ref. No. for black LEDSpots	Ref. No. for white LEDSpots	Colour	Correlated colour temperature K	Typ. luminous flux and typical voltage ($U_{typ.}$) and power consumption (P_{el})* 500 mA lm	500 mA lm/W	600 mA lm	600 mA lm/W	700 mA lm	700 mA lm/W	Light intensity at max. current Candela	Beam angle °	CRI R_a
Type VCA2-1211					P_{el} = 16.2 W		P_{el} = 19.7 W		P_{el} = 23.3 W				
Heat sink height = 40 mm					V_f = 32.4 V		V_f = 32.9 V		V_f = 33.2 V				
Next 111 VCA2-1211_930	**572059**	**572067**	warm white	3000	2190	135	2610	132	2995	129	15500	20°	92
Next 111 VCA2-1211_940	**572063**	**572071**	neutral white	4000	2255	139	2685	136	3085	132	15960	20°	92
Next 111 VCA2-1211_930	**572060**	**572068**	warm white	3000	2215	137	2640	134	3030	130	8450	30°	92
Next 111 VCA2-1211_940	**572064**	**572072**	neutral white	4000	2280	141	2720	138	3120	134	8700	30°	92
Next 111 VCA2-1211_930	**572061**	**572069**	warm white	3000	2240	138	2670	136	3065	132	5450	40°	92
Next 111 VCA2-1211_940	**572065**	**572073**	neutral white	4000	2305	142	2750	140	3160	136	5620	40°	92
Next 111 VCA2-1211_930	**572062**	**572070**	warm white	3000	2190	135	2610	132	2995	129	3920	55°	92
Next 111 VCA2-1211_940	**572066**	**572074**	neutral white	4000	2255	139	2685	136	3085	132	4040	55°	92

* Production tolerance of luminous flux, voltage and power consumption: ±10%
Versions with other colour temperature, different CRI or pearl white on request

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LED Engines NEXT 111

Optical characteristics

at t_p = 65 °C

Type	Ref. No. for black LEDSpots	Ref. No. for white LEDSpots	Colour	Correlated colour temperature K	Typ. luminous flux and typical voltage ($U_{typ.}$) and power consumption (P_{el})* 350 mA lm	500 mA lm	CRI R_a
Type VCA2-128					P_{el} = 11.3 W	P_{el} = 16.5 W	
Heat sink height = 20 mm					V_f = 32.4 V	V_f = 33.1 V	
E.Next 111 VCA2-128_930	**572035**	**572037**	warm white	3000	1990	2425	92
E.Next 111 VCA2-128_940	**572036**	**572038**	neutral white	4000	2050	2495	92

* Production tolerance of luminous flux, voltage and power consumption: ±10%
Versions with other colour temperature, different CRI, special white colour (pearl or clear) or food on request

Optical characteristics

at t_p = 65 °C

Type	Ref. No. for black LEDSpots	Ref. No. for white LEDSpots	Colour	Correlated colour temperature K	Typ. luminous flux and typical voltage ($U_{typ.}$) and power consumption (P_{el})* 500 mA lm	600 mA lm	700 mA lm	CRI R_a
Type VCA2-1211					P_{el} = 16.2 W	P_{el} = 19.7 W	P_{el} = 23.3 W	
Heat sink height = 40 mm					V_f = 32.4 V	V_f = 32.9 V	V_f = 33.2 V	
E.Next 111 VCA2-1211_930	**572039**	**572041**	warm white	3000	2550	3040	3490	92
E.Next 111 VCA2-1211_940	**572040**	**572042**	neutral white	4000	2625	3130	3595	92

* Production tolerance of luminous flux, voltage and power consumption: ±10%
Versions with other colour temperature, different CRI or pearl white on request

Reflectors for LED Engines NEXT 111

Technical notes

Bayonet fixation
Diameter: 111 mm (reflector: 90 mm)
Material: aluminium
Operating temperature: –25 to 90 °C
Storage temperature: –40 to 90 °C
Packaging units: 18 pcs.

Ref. No.	Beam characteristics	Beam angle (°) VCA2-128	VCA2-1211
557359	narrow	16°	20°
557360	medium	25°	30°
557361	wide	36°	40°
563446	extra wide	55°	55°

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LEDSpot NEXT 111

General information
Performance acc. to IEC 62717: t_p = 75 °C; 100,000 hrs.

LED Constant Current Drivers

Please visit our homepage for details for suitable
LED constant current drivers: www.vossloh-schwabe.com

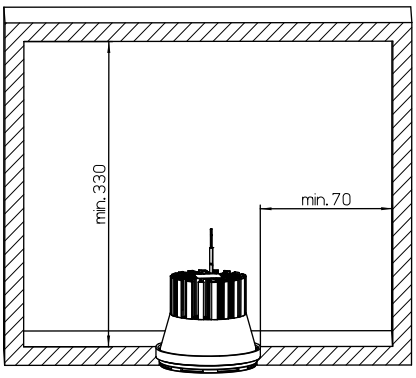
Packaging unit

Type	Packaging unit pcs.	Box dimensions (LxWxH) mm	Weight single (g)	Gross weight packaging unit (g)
NEXT 111 VCA2-128	6	380x260x110	220	1720
NEXT 111 VCA2-1211	6	380x260x110	350	2500
E.NEXT 111 VCA2-128	6	380x260x110	200	1600
E.NEXT 111 VCA2-1211	6	380x260x110	330	2380
Reflector NEXT 111	18	118x118x160	20	540

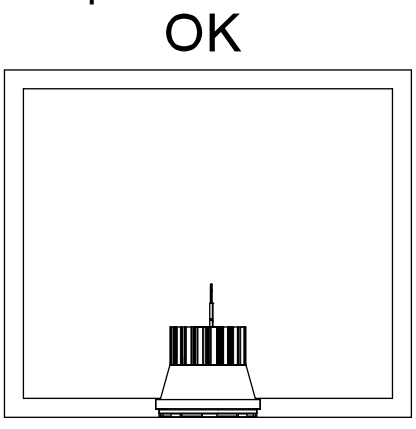
Product guarantee
- 5 years
- The conditions for the Product Guarantee of the Vossloh-Schwabe Group shall apply as published on our homepage (www.vossloh-schwabe.com). We will be happy to send you these conditions upon request.

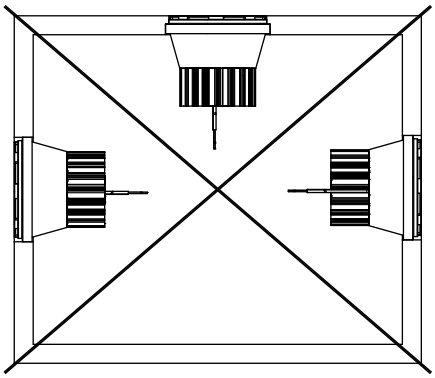
General safety and installation instructions
- VS product may only be installed and commissioned by authorised and fully qualified staff.
- These instructions must be carefully read before installing and commissioning the system, as this is the only way to ensure safe and correct handling.
- An external constant-current driver is required.
- Before any work is carried out on the equipment, it must be disconnected from the mains.
- All valid safety and accident-prevention regulations must be observed.
- The products should never be inexpertly opened. Repairs may only be undertaken by the manufacturer

Built-in



Correct position





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Assembly and Safety Information

Installation must be carried out under observation of the relevant regulations and standards. The LED modules are designed for operation within a casing or luminaire. Safety regulations acc. to EN 60598 has to be observed. Installation must be carried out in a voltage-free state (i.e.disconnection from the mains).

- Mains frequency: 0 Hz
- LED built-in modules must not be subjected to any undue mechanical stress, e. g.:
  - handle LED modules carefully
  - avoid shear and compressive forces onto the optics during handling and installation
  - do not carry or move the LED engines by using the wires
- When installing/screwing the module into a luminaire, please ensure that the cables are not squeezed between luminaire and LED engine.
- The LED engine must not be used in hermetically sealed casings.
- Safe operation only possible by the use of external constant current sources ($I_{max.}$ see table "Electrical Characteristics").
- Operation is dependent on constant current drivers that should provide the following protective measures:
  - short-circuit protection
  - overload protection
  - overheating protection
  - SELV; Umax ≤ 60 V
  - Imax must not be exceede
- Please ensure the correct polarity of the leads prior to commissioning. Reversed polarity can destroy the modules.
- The maximum output of the power supply must be observed.
- For optimal load of used constant current driver the modules can only be connected in series. The quantity of LED modules is limited by the sum of forward voltage and the capacity of used constant current driver. Safety regulations acc. to EN 60598 has to be observed if the sum of forward voltage exceed the permitted touchable value.
- A parallel connection of the LED engines is not allowed.
- Measurement tolerances:
  - luminous flux: ± 10 %
  - voltage: ± 3 %
  - CRI: ± 1 %
- Maximum allowed number of switching cycles: 15,000
- Please ensure standard ESD (electrostatic discharge) protection measures are employed when handling and installing LED modules. Electrostatic discharge can damage LEDs.
- To ensure problem-free operation, the specified maximum temperature at the t_c and t_p point (see "Operating Life") must be observed (measured in accordance with EN 60598-1). To satisfy this point, it is necessary to put measures in place to ensure any heat is dissipated from the LED engine to the environment.
- To ensure good thermal behaviour take care about "general safety and installation instructions".
- In the event of outdoor applications or applications in damp locations, care must be taken to protect LED assembly modules against humidity, splashes and jets of water. Any corrosion damage resulting from humidity or contact with condensation will not be recognised as a defect or manufacturing fault. LED assembly modules are not specially protected against foreign bodies or dust. Depending on the type of application, further protection must be ensured to prevent dust and foreign bodies from entering.
- Operating LED modules in the presence of certain chemical substances or in chemically enriched (aggressive) environments can impair module functionality or even cause total module failure. Detailed information can be found in our "Chemical Incompatibility" PDF on our website www.vossloh-schwabe.com
- The photobiological safety of the LED modules must be classified into risk groups in accordance with EN 62471
  Rating in accordance with IEC / TR 62778

The following LED modules are in risk group 1:

Up to 4000 K

LED module type	Max. allowed luminous flux per module (lm)	For higher luminous flux: E threshold to RG1 (lx)
VCA2-128	4512	1464
VCA2-1211	6204	1464

Applied Standards

EN 62031
LED modules for general lighting – Safety specifications

EN 62471-2
Photobiological safety of lamps and lamp systems

EPREL information

Containing product Next 111/E.Next111 Types	Light Source Type	EPREL Reg.No.	EE Class
Next 111 VCA2-128_930	VCA2-128-930	857352	E
E.Next 111 VCA2-128_930	VCA2-128-930	857352	E
Next 111 VCA2-128_940	VCA2-128-940	856367	E
E.Next 111 VCA2-128_940	VCA2-128-940	856367	E
Next 111 VCA2-1211_930	VCA2-1211-930	857402	E
E.Next 111 VCA2-1211_930	VCA2-1211-930	857402	E
Next 111 VCA2-1211_940	VCA2-1211-940	857408	E
E.Next 111 VCA2-1211-940	VCA2-1211-940	857408	E

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