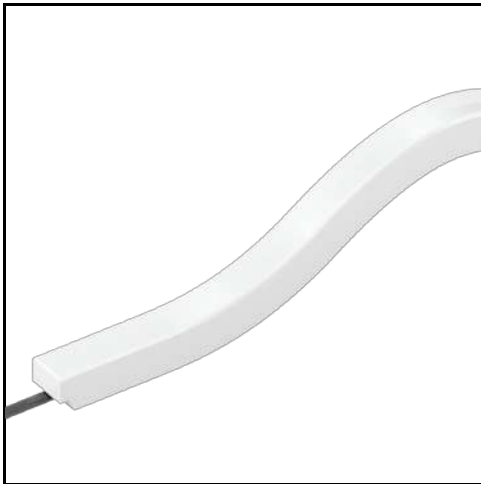## LED LINEAR™
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VarioLED™ Flex VENUS White Top View IP67

Area: **Outdoor Luminaires**
Category: **Flexible light lines**
Mounting: **Surface-mounted, Clips and profile without mounting channel / Surface-mounted, Clips and profile with mounting channel / Surface-mounted, SST Clips / Surface-mounted, Clips**
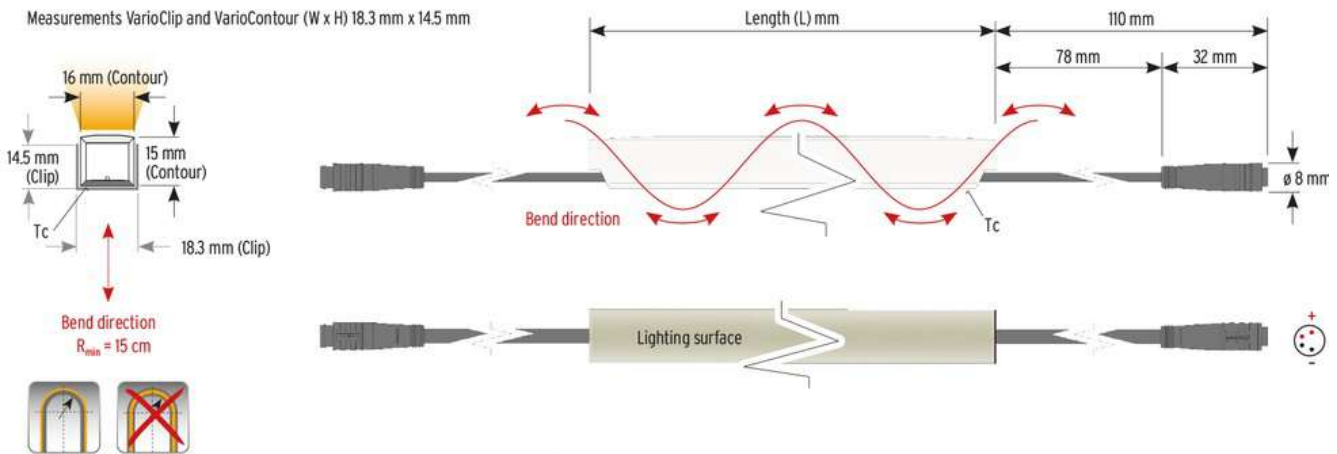

Light lines bendable in one direction (top view or side view) with a perfectly homogeneous and dot-free light surface for outdoor architectural lighting.

- VENUS is a polyurethane encapsulated luminaire. Restistance and chemical stability against urban gases.

- With an efficiency up to 95 lm/W, VENUS stands out as one of the most efficient light line available to date.

- The various lumen output and a large panel of available CCTs turns VENUS into a modular lighting design toolkit.

Detailed specification text in download section.

DIMENSIONS & AVAILABLE LENGTHS

Measurements VarioClip and VarioContour (W x H) 18.3 mm x 14.5 mm

16 mm (Contour)
14.5 mm (Clip)
15 mm (Contour)
Tc
18.3 mm (Clip)

Bend direction
R_{min} = 15 cm

Tolerance +/- 5 mm

Length (L) mm   110 mm
78 mm   32 mm
ø 8 mm

Bend direction   Tc

Lighting surface

110 mm IP67 plug in connector (male / female) on both ends
At maximum length only one side with IP67 plug in connector male, no female connector.   Tc-point (Case temp.) on the rear side of the module

Fixture build to length (not field cutable): L = (N x 62.5 mm) + 26 mm; N = 3 … 80; L_{min} = 213.5 mm: Nmax = 80; L_{max} = 5,026 mm

TECHNICAL SPECIFICATIONS

Certifications

Awards

Technical Data/Performance

Top View, Rmin = 15 cm	Static White	IP67
OneBinOnly	Lifetime	Photo-metrical code
SDCM3	CIE S-025 compliant	

LM80 compliant · Reel-to-Reel (R2R) · UV protected · Resistant to solvents · Saltwater resistant · Temporary immersion protection
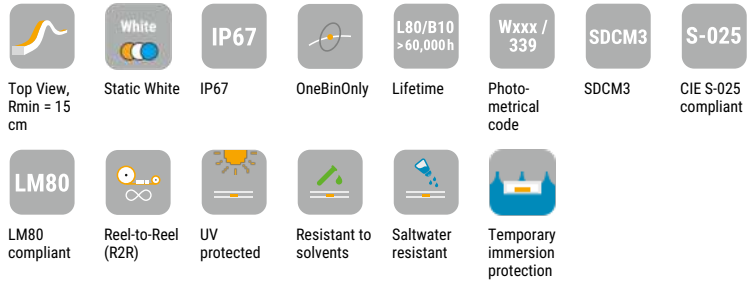
Compliant with EU ECODESIGN guidelines

LED LINEAR™

ELECTRICAL & OUTPUT DATA

Voltage	24 Volt (23 V_{min}, 25 V_{max})
Housing temperature (Tc_{min} & Tc_{max})	Tc_{min} = -25°C, Tc_{max} = specific, see Table below
Storage Temperature (Ts_{min} & Ts_{max})	Ts_{min} = −30°C, Ts_{max} = 85°C
Ambient temperature (Ta_{min} & Ta_{max})	Ta_{min} = -25°C, Ta_{max} = specific, see Table below

VarioLED™ Flex VENUS White Top View IP67	VENUS White TV	PHOBOS White TV	SKYLLA White TV
Power (W/m)[A]	6	10	15
Efficacy (lm/W)[A]	81	81	88
max. length (m)	5.03	5.03	4.03
max. serial run length (m)	5.0	5.0	4.0
CRI / R9 (up to)	95 / 82	95 / 82	85 / 32
max. Housing temperature (Tcmax) (Tc_{max})[B]	60°C	60°C	60°C
max. Ambient temperature (Ta_{max})	40°C	40°C	35°C

low output   high output

VarioLED™ Flex VENUS White Top View IP67			VENUS White TV	PHOBOS White TV	SKYLLA White TV
Color temperature[C]			luminaire lumens/meter (lm/m)[A]		
Order Code		Delivered CCT			
● W820		2,000K	290	510	870
● W822		2,200K	550	550	950
● W825		2,500K	630	630	1020
● W927	W927	2,700K	560	560	1240
● W930	W930	3,000K	570	570	1260
● W935	W935	3,500K	590	590	1300
● W940	W940	4,000K	610	610	1320
● W850		5,000K	770	770	1350

! To configure the specific luminaire please use the online configurator.

Please note: The orange values are CRI 90 specifications.

[A]The given data are typical values. Due to tolerances of the production process and the electrical components, photometric values and electrical power can vary up to 10%
[B]The Tc-point should be measured in thermal equilibrium according to IEC EN 60598-1.
[C]In case of IP67 products, tolerances in the color temperature can occur.

AVAILABLE OPTICS (FAMILY)

Polyurethane encapsulation
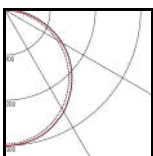
ORDER CODE

Example:

VarioLED Flex VENUS W820   TV IP67

CONFIGURE NOW!

Options for the order code:	Your selections ▢ :
Luminous flux	
VENUS ⟶ ▢	VENUS
PHOBOS ⟶ ▢	PHOBOS
SKYLLA ⟶ ▢	SKYLLA
Color temperature	
2,000 K ⟶ ▢	W820
2,200 K ⟶ ▢	W822
2,500 K ⟶ ▢	W825
2,700 K ⟶ ▢	W927 / W927
3,000 K ⟶ ▢	W930 / W930
3,500 K ⟶ ▢	W935 / W935
4,000 K ⟶ ▢	W940 / W940
5,000 K ⟶ ▢	W850

Please note: The orange values are CRI 90 specifications.

Length

L_{min}: 214 mm ⟶ ▢ 0214
L_{max}: 5,026 mm ⟶ ▢ 5026

Fixture build to length (not field cutable): L = (N x 62.5 mm) + 26 mm; N = 3 … 80; L_{min} = 213.5 mm: Nmax = 80; L_{max} = 5,026 mm

TYPICAL APPLICATIONS

MOUNTING
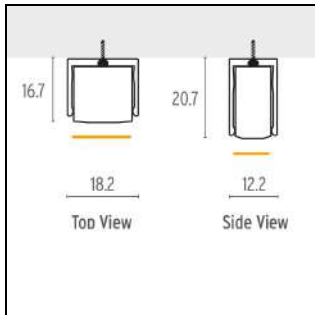
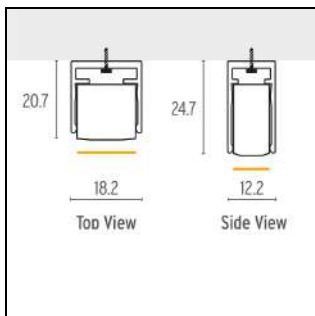| 1. Surface-mounted, Clips and profile without mounting channel	Mounting accessories	Description	Example of application
	Vario Contour TV Channel 2,000 mm aluminum profile (only for Top View light lines) Art.-#: 10000049-01	Continuous anodized aluminum surface mounting profile designed to fit Venus TV product. ! Please carefully review the pages 10 and 11 of the mounting instructions.	
	Vario Contour TV Channel 4,000 mm aluminum profile (only for Top View light lines) Art.-#: 10000049-01-4m	Continuous anodized aluminum surface mounting profile designed to fit Venus TV product. ! Please carefully review the pages 10 and 11 of the mounting instructions.	
	VarioClips VENUS TV 50 mm Mounting-Clip for Venus TV (only for Top View light lines) Art.-#: 13000010-01	Aluminum surface mounting bracket. Recommended for overhead mounting 5 brackets per meter (3 brackets for other mountings).	
	VarioContour SV Channel 2,000 mm aluminum profile (only for Side View light lines) Art.-#: 10000048-01	Continuous anodized aluminum surface mounting profile designed to fit VENUS SV product. ! Please carefully review the pages 10 and 11 of the mounting instructions.	
	VarioContour SV Channel 4,000 mm aluminum profile (only for Side View light lines) Art.-#: 10000048-01-4m	Continuous anodized aluminum surface mounting profile designed to fit Venus SV product. ! Please carefully review the pages 10 and 11 of the mounting instructions.	
	VarioClip VENUS SV 50mm Mounting-Clip for Venus SV (only for Side View light lines) Art.-#: 13000011-01	Aluminum surface mounting bracket. Recommended for overhead mounting 5 brackets per meter (3 brackets for other mountings).	

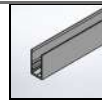| 2. Surface-mounted, Clips and profile with mounting channel	Mounting accessories	Description	Example of application
	VarioContour VENUS TV CC 2,000 mm aluminum profile with cable runway (only for Top View light lines) Art.-#: 10000339	Continuous aluminum surface mounting profile. Cable runway allows the cables to run underneath the fixture. ! Please carefully review the pages 10 and 11 of the mounting instructions.	
	VarioContour VENUS TV CC 4,000 mm aluminum profile with cable runway (only for Top View light lines) Art.-#: 10000339-4m	Continuous aluminum surface mounting profile. Cable Runway allows the cables to run underneath the fixture. ! Please carefully review the pages 10 and 11 of the mounting instructions.	
		Continuous aluminum surface mounting profile. Cable Runway	

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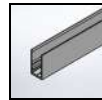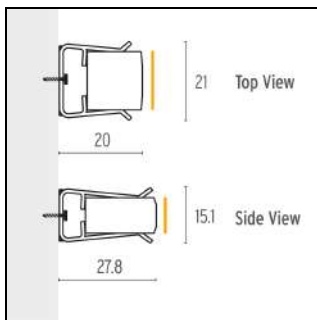|	VarioContour VENUS SV CC 2,000 mm aluminum profile with cable runway (only for Side View light lines) Art.-#: 10000520	allows the cables to run underneath the fixture. **!** Please carefully review the pages 10 and 11 of the mounting instructions.
	VarioContour VENUS SV CC 4,000 mm aluminum profile with cable runway (only for Side View light lines) Art.-#: 10000520-4m	Continuous aluminum surface mounting profile. Cable Runway allows the cables to run underneath the fixture. **!** Please carefully review the pages 10 and 11 of the mounting instructions.

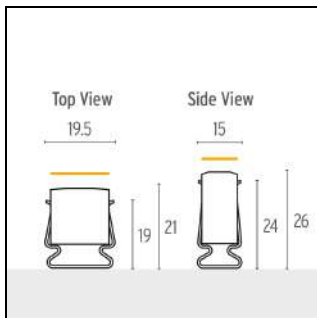| 3. Surface-mounted, SST Clips	Mounting accessories	Description	Example of application
21 Top View 20 15.1 Side View 27.8	**VarioClip TV 30mm 316L** Mounting Clamp Art.-#: 13000050-01	Special grade stainless steel surface mounting clip for harsh environments. Recommended to use for overhead mounting 5 brackets per meter (3 brackets for other mountings).	
	VarioClip SV 30mm 316L Mounting Clamp for VarioLED™ Flex VENUS / PHOBOS / SKYLLA Side View Art.-#: 13000051-01	Special grade stainless steel surface mounting clip for harsh environments. Recommended to use for overhead mounting 5 brackets per meter (3 brackets for other mountings).	

4. Surface-mounted, Clips	Mounting accessories	Description	Example of application
Top View 19.5 Side View 15 19 21 24 26	**VarioClip TV 30mm (301/1.4310/V2a)** Mounting clip for VarioLED™ Flex VENUS Top View Art.-#: 13000033-01	Stainless steel clips for surface mount application.	
	VarioClip SV 30mm (301/1.4310/V2a) Mounting clip for VarioLED™ Flex VENUS Side View Art.-#: 13000038	Stainless steel clips for surface mount application.	

If the luminaire shall be installed without our mounting accessories, please get in touch with us to check the compatibility of the mounting.

POWER SUPPLY UNIT (PSU) & CONTROLS

Recommended PSU

VarioPSU 24V/100W IP67, ON/OFF, Silver
Art.-#: 16000064

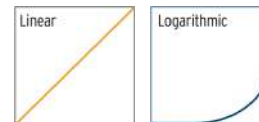| Dimensions (L x H x W) :	**220 mm x 38.8 mm x 68 mm**
Electrical Class:	**SK I**
LED Drive:	**CV**
Voltage (V):	**24 V**
Rated Power (W):	**100**
Input Voltage (Vac):	**90 − 305**
Region:	**WR**
Certificates:	**ENEC, UL**
Schutzart:	**IP67**
Indoor/Outdoor:	**Outdoor**

Recommended PSU

VarioPSU 24V/90W IP67, 0-10V, Black
Art.-#: 16000154

Dimensions (L x H x W) :	**171 mm x 37.5 mm x 63 mm**
Electrical Class:	**SK II**
LED Drive:	**CV**
Voltage (V):	**24 V**
Rated Power (W):	**90 W**
Input Voltage (Vac):	**90 − 305**
Region:	**WR**
Certificates:	**ENEC, UL**
Schutzart:	**IP67**
Indoor/Outdoor:	**Outdoor**

Recommended PSU

VarioPSU 24V/90W IP67, DALI, Black
Art.-#: 16000348

Dimensions (L x H x W) :	**171 mm x 63 mm x 37.5 mm**
Electrical Class:	**SK II**
LED Drive:	**CV**
Voltage (V):	**24 V**
Rated Power (W):	**90**
Input Voltage (Vac):	**90 − 305**
Region:	**WR**
Certificates:	**ENEC, UL**
Schutzart:	**IP67**
Indoor/Outdoor:	**Outdoor**

Recommended Control

IN.finite CASAMBI 2Ch CV
Art.-#: 16000267-EVO

Dimensions (L x H x W) :	**188 mm x 21 mm x 30 mm**
Channels	**2**
Dimming Options	**Casambi BLE**
Dimming	**PWM (f ~ 1600Hz)**
Dimming Curve	**Lin/Log/free conf.**
Dimming Range	**100% - 0%**
Voltage (V):	**12-50V**
Certificates:	**tbd**
Schutzart:	**IP10**
Indoor/Outdoor:	**Indoor**

Dimming

LED LINEAR™

CABLING ACCESSORIES

VarioCon Female Mono 2 x 0,34 mm² 0,115 m IP67
Art.-#:   **15000071**
Required quantity: **-**

VarioCon Female Mono 2 x 0,34 mm² 1 m IP67
Art.-#:   **15000090**
Required quantity: **-**

VarioCon Female Mono 2 x 0,34 mm² 2 m IP67
Art.-#:   **15000091**
Required quantity: **-**

VarioCon Female Mono 2 x 0,34 mm² 5 m IP67
Art.-#:   **15000092**
Required quantity: **-**

VarioCon Female Mono 90° 2 x 0,34 mm² 2 m IP67
Art.-#:   **15000089**
Required quantity: **-**

VarioCon Extension 4 x 0,25 mm² 5 m IP67
Art.-#:   **15000103**
Required quantity: **-**

VarioCon Protection Plug 8mm snap, black
Art.-#:   **15000115**
Required quantity: **-**

VOLTAGE DROP INFORMATION FOR THE FEED-IN LINE (PSU / CONTROL TO FIXTURE)

0.34 mm² / AWG 22

VarioLED™ Flex VENUS White Top View IP67	VENUS White TV	PHOBOS White TV	SKYLLA White TV
Product run Length	max. cable length between PSU / Control unit and the luminaire		
1 m	32.3 m	19.4 m	12.9 m
2 m	16.1 m	9.7 m	6.4 m
3 m	10.7 m	6.4 m	4.3 m
4 m	8 m	4.8 m	3.2 m
5 m	6.4 m	3.8 m	-

1.5 mm² / AWG 15

VarioLED™ Flex VENUS White Top View IP67	VENUS White TV	PHOBOS White TV	SKYLLA White TV
Product run Length	max. cable length between PSU / Control unit and the luminaire		
1 m	142.8 m	85.6 m	57.1 m
2 m	71.4 m	42.8 m	28.5 m
3 m	47.6 m	28.5 m	19 m
4 m	35.7 m	21.4 m	14.2 m
5 m	28.5 m	17.1 m	-

Calculation refers to the cable configuration on site.
The information listed in the table is only refers to the conductor-based voltage drop of max. 0.85V at 24V DC input voltage.

Regarding the electromagnetic combability (EMC) the maximum cable length is defined by the power supply manufacturer.
A cable length between power supply and planned product longer than indicated by the datasheet of the power supply is possible. However the electromagnetic combability can then be influenced by the conditions of the installation site. There is no data on electromagnetic compatibility for longer cable lengths, which might lead to the necessity of an evaluation of the electromagnetic compatibility by a third party.
Datasheets and mounting instructions of the components in combination with the planned product must be carefully read and followed.