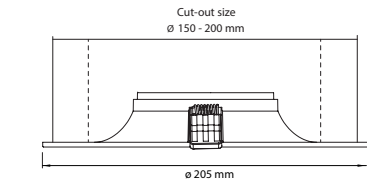
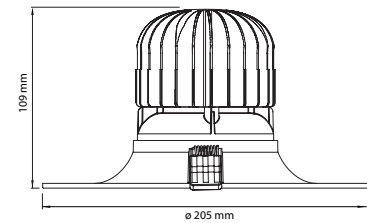




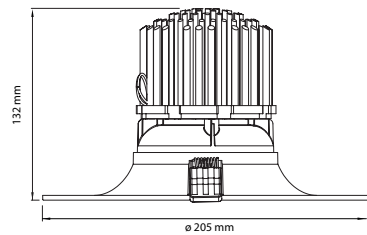
## Emerald M



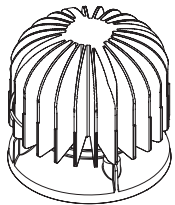
4 serie - Max. 15 Watt    5 serie - Max. 20 Watt    6 serie - Max. 28 Watt



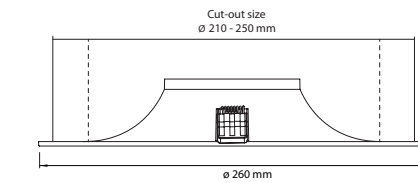
7 serie - Max. 36 Watt



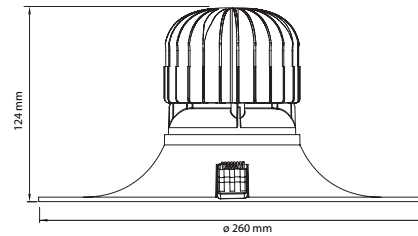
4 serie - Max. 15 Watt  
5 serie - Max. 20 Watt  
6 serie - Max. 28 Watt



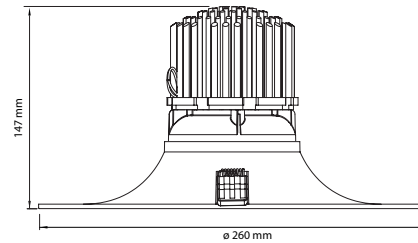
## Emerald L



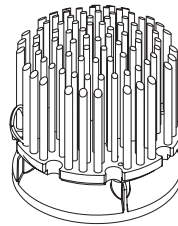
4 serie - Max. 15 Watt    5 serie - Max. 20 Watt    6 serie - Max. 28 Watt



7 serie - Max. 36 Watt



7 serie - Max. 36 Watt



### Emerald 4 serie

LED: 1 x High Power CoB  
Available colours: CRI-80: 2500K & 2700K  
CRI-90: 2700K, 3000K, 3500K & 4000K  
CRI-95: 2700K, 3000K & 4000K  
CRI-98: 2700K, 3000K, 3500K & 4000K  
Beam angle: 50° or 71°  
Power supply: Max. 350mA  
Power consumption: Max. 15 Watt  
Housing: PC / aluminium  
Weight: Emerald M: 246 gr  
Emerald L: 336 gr  
IP value: IP40  
Measurements: Emerald M: 109 x 205 mm (hxø)  
Emerald L: 124 x 260 mm (hxø)  
Ambient temperature: -10° C till +40° C

### Emerald 5 serie

LED: 1 x High Power CoB  
Available colours: CRI-80: 2500K & 2700K  
CRI-90: 2700K, 3000K, 3500K & 4000K  
CRI-95: 2700K, 3000K & 4000K  
CRI-98: 2700K, 3000K, 3500K & 4000K  
Beam angle: 50° or 71°  
Power supply: Max. 500mA  
Power consumption: Max. 20 Watt  
Housing: PC / aluminium  
Weight: Emerald M: 324 gr  
Emerald L: 464 gr  
IP value: IP40  
Measurements: Emerald M: 109 x 205 mm (hxø)  
Emerald L: 124 x 260 mm (hxø)  
Ambient temperature: -10° C till +40° C

### Emerald 6 serie

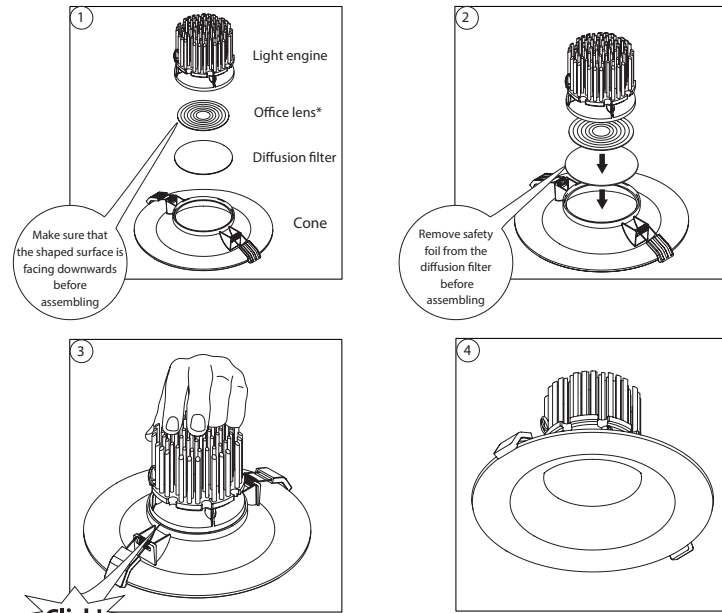
LED: 1 x High Power CoB  
Available colours: CRI-80: 2500K & 2700K  
CRI-90: 2700K, 3000K, 3500K & 4000K  
CRI-95: 2700K, 3000K & 4000K  
CRI-98: 2700K, 3000K, 3500K & 4000K  
Dim To Warm: 1800K-3000K  
Beam angle: 60° or 83°  
Power supply: Max. 700mA  
Power consumption: Max. 28 Watt  
Housing: PC / aluminium  
Weight: Emerald M: 324 gr  
Emerald L: 464 gr  
IP value: IP40  
Measurements: Emerald M: 109 x 205 mm (hxø)  
Emerald L: 124 x 260 mm (hxø)  
Ambient temperature: -10° C till +40° C

### Emerald 7 serie

LED: 1 x High Power CoB  
Available colours: CRI-80: 2500K, 2700K  
CRI-90: 2700K, 3000K, 3500K & 4000K  
CRI-95: 2700K, 3000K & 4000K  
CRI-98: 2700K, 3000K, 3500K & 4000K  
Dim To Warm: 1800K-3000K  
Beam angle: 60° or 83°  
Power supply: Max. 900mA  
Power consumption: Max. 36 Watt  
Housing: PC / aluminium  
Weight: Emerald M: 484 gr  
Emerald L: 570 gr  
IP value: IP40  
Measurements: Emerald M: 132 x 205 mm (hxø)  
Emerald L: 147 x 260 mm (hxø)  
Ambient temperature: -10° C till +40° C

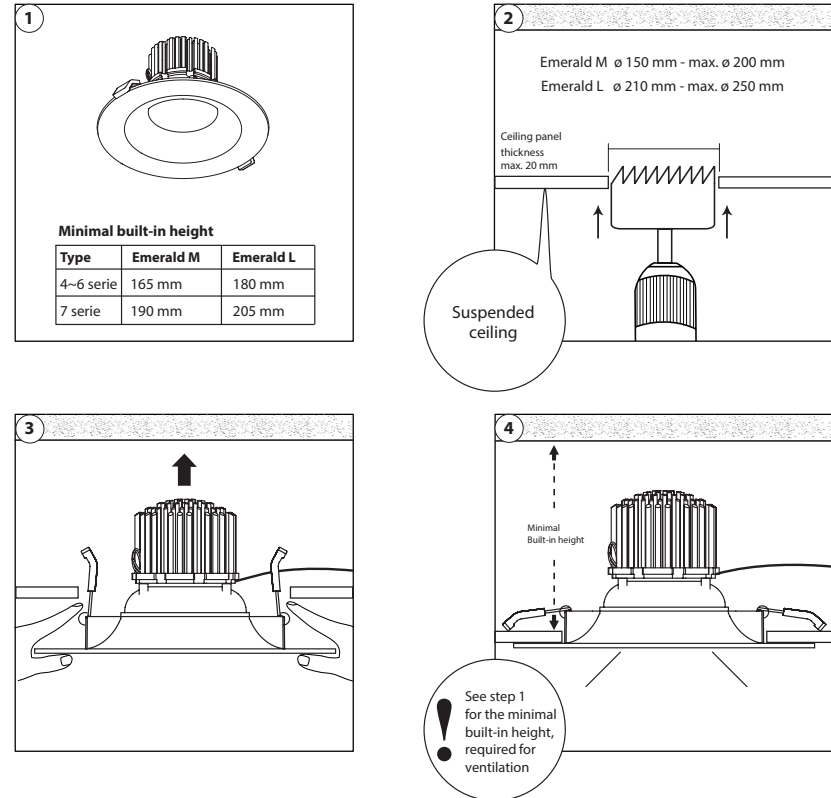
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# ASSEMBLY



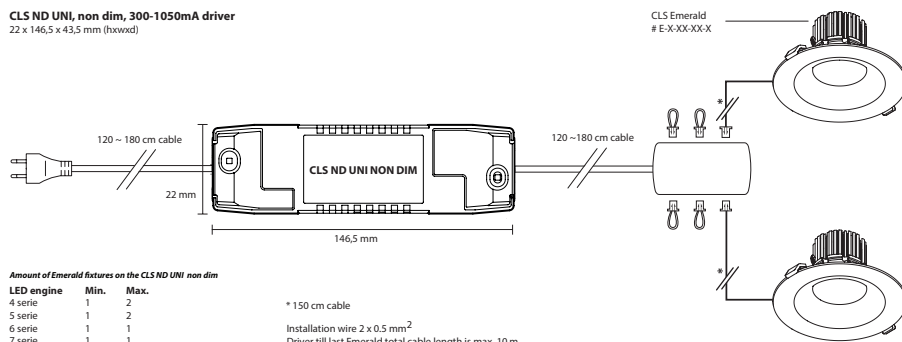
\* Only included by the Emerald Office series

# INSTALLATION



## WIRING DIAGRAM UNI NON DIM DRIVER

CLS ND UNI, non dim, 300-1050mA driver  
22 x 146,5 x 43,5 mm (h x w x d)

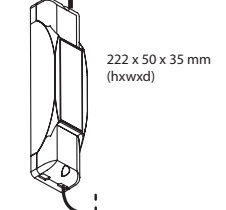
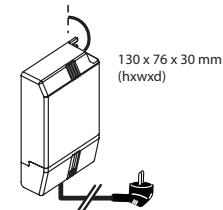
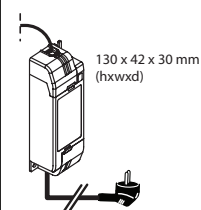


### Drivers (included)

Emerald 4 serie - Max. 15 Watt  
Emerald 5 serie - Max. 20 Watt  
Emerald 6 serie - Max. 28 Watt

Emerald 7 serie - Max. 36 Watt

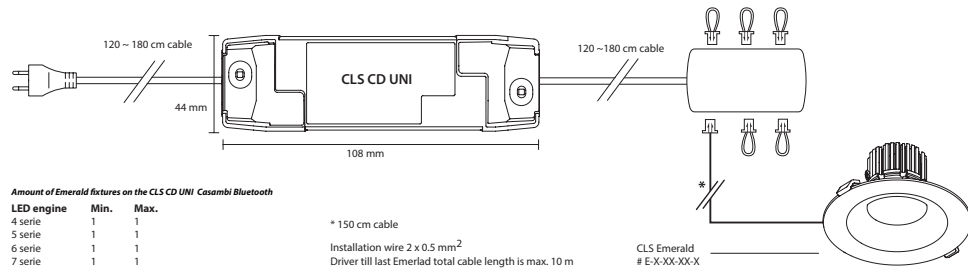
Emerald 4-7 serie



# WIRING DIAGRAM CASAMBI BLUETOOTH

**! Always switch off mains power of the driver before connecting any fixtures!**

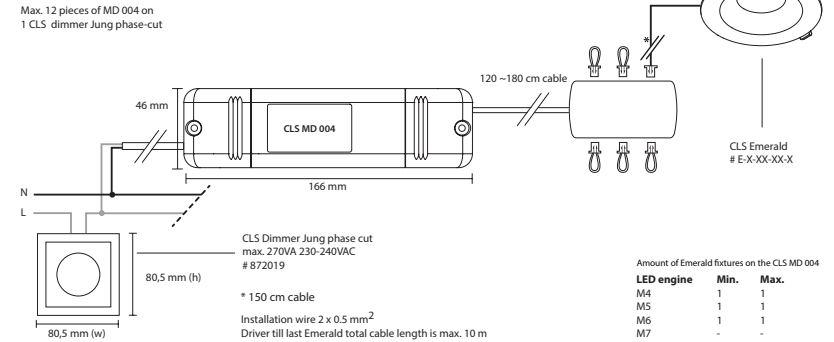
**CLS CD UNI, Casambi Bluetooth, 350-700mA driver**  
30 x 108 x 44 mm (hxxwxd)



# WIRING DIAGRAM MAINS DIM DRIVER

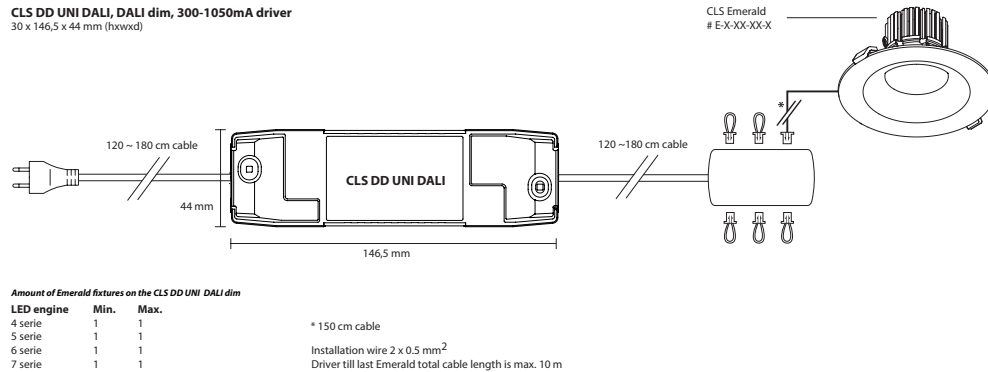
**! Always switch off mains power of the driver before connecting any fixtures!**

**CLS MD 004, mains dimmable, 250-700mA driver**  
34 x 166 x 46 mm (hxxwxd)



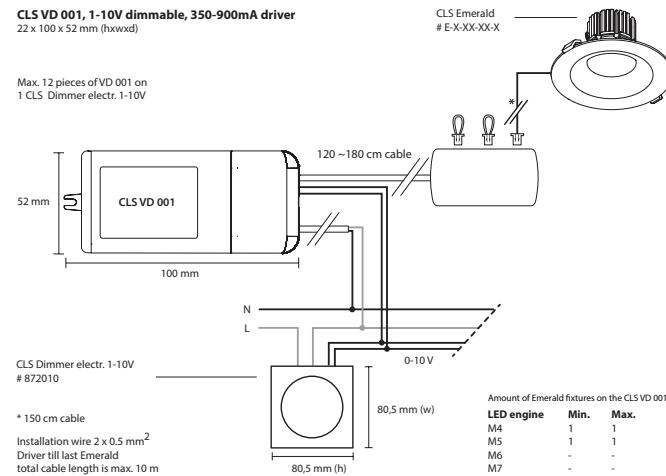
# WIRING DIAGRAM UNI DALI DIM DRIVER

**CLS DD UNI DALI, DALI dim, 300-1050mA driver**  
30 x 146,5 x 44 mm (hxxwxd)



# WIRING DIAGRAM 1-10V DIM DRIVER

**CLS VD 001, 1-10V dimmable, 350-900mA driver**  
22 x 100 x 52 mm (hxxwxd)

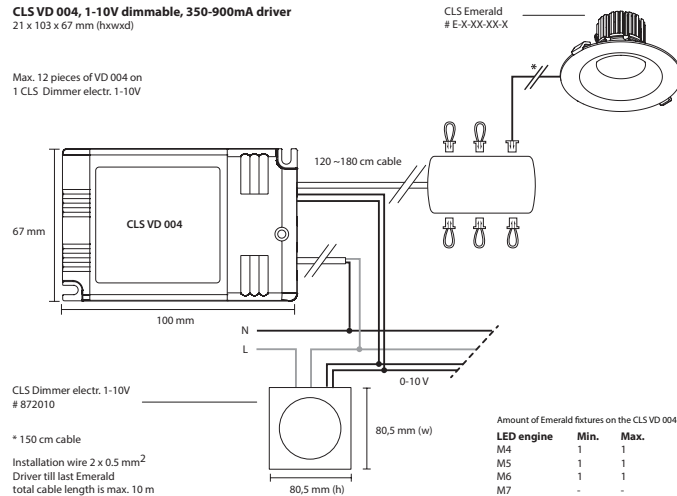


# WIRING DIAGRAM 1-10V DIM DRIVER

**! Always switch off mains power of the driver before connecting any fixtures!**

**CLS VD 004, 1-10V dimmable, 350-900mA driver**  
21 x 103 x 67 mm (hxwxwd)

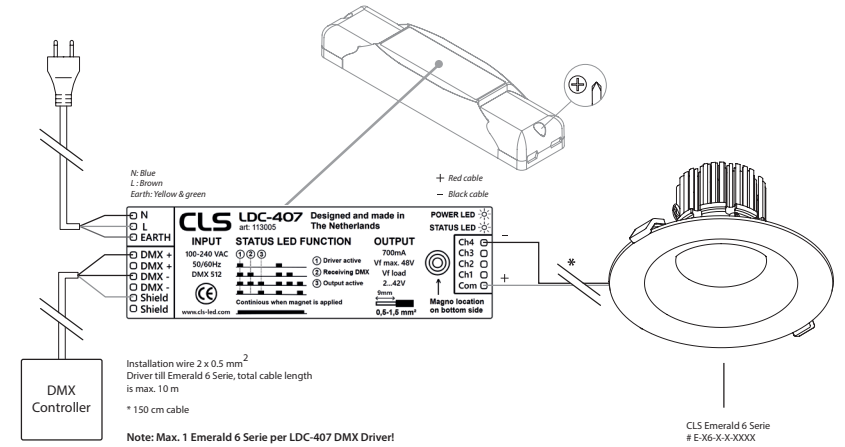
Max. 12 pieces of VD 004 on  
1 CLS Dimmer electr. 1-10V



# WIRING DIAGRAM LDC-407 DRIVER

ONLY FOR THE EMERALD 6 SERIE

**! Always switch off mains power of the driver before connecting any fixtures!**

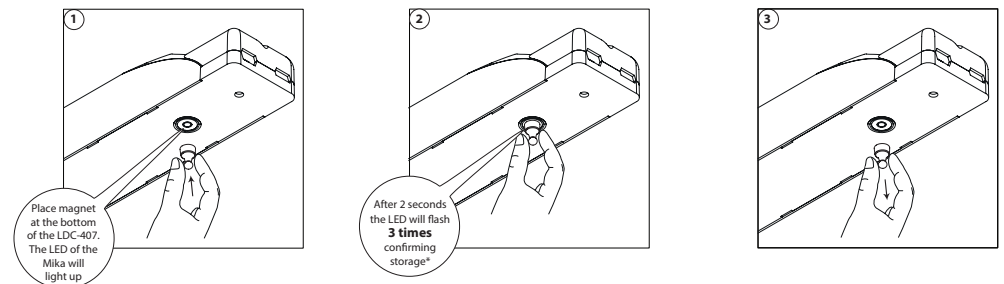


## PROGRAMMING

All settings can be configured via DMX. Settings can be configured at once or separately. When one or a couple settings needs to be changed just leave all other setting values zero. This keeps those settings unchanged. Please check the table for more information.

Always use a DMX controller with digital interface. If not available, you can purchase the CLS D-ta DMX addresser unit (#122200).

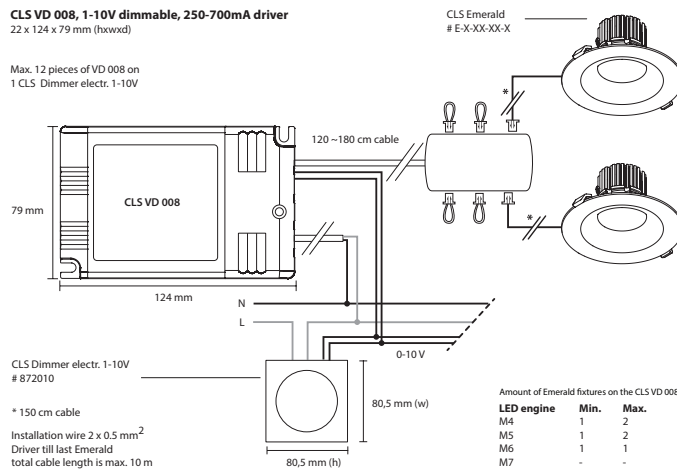
First make sure to set the DATA on the DMX controller. To program the setting into the LED fixture follow the next steps.



\* If the LEDs flashes 10 times, something went wrong. Please try again. If the problem continues to occur, please contact your local sales distributor.

**CLS VD 008, 1-10V dimmable, 250-700mA driver**  
22 x 124 x 79 mm (hxwxwd)

Max. 12 pieces of VD 008 on  
1 CLS Dimmer electr. 1-10V



# PROGRAMMING TABLE

# LIST OF SYMBOLS

PROGRAMMING TABLE				
DMX	Function	Data	Parameters	Description
CH1	Set address 001 to 255	0	0 = no change	Use this DMX channel to set address from 1 to 255. ( DMX address is called "n")
		1...255	DMX address = 1...255	
CH2	Set address 256 to 508	0	no change	Use this DMX channel to set address from 256 to 508. (DMX address is called "n")
		1...255	DMX address = 256...508	
CH3	Static behavior	0	no change	If no DMX is present the fixture will respond like set in this function.
		1	last DMX value	
		2	output off	
		3	load static values	
CH4	Soft dim	0	no change	When dynamic softdim is activated an extra DMX channel behind the colours and/or master controls the soft dim reaction. If fixed no extra DMX channel is used.
		1	off	
		2	Dynamic	
		3-250	Fixed interpolation delay	
CH5	Master control	0	no change	If master is first channel is selected the channel will be DMX channel "n". If master is last channel is selected the channel will be "n+x" ("x" is calculated in the output patch).
		1	no master used	
		2	master is first channel	
		3	master is last channel	
CH6	Output 1 patch	0	no change	Each output channel can be patched to respond to the desired DMX channel. This enables the user to mix up the colours according to the controller that is used.
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH7	Output 2 patch	0	no change	<b>Example: all outputs are patched as 1</b> All outputs will be controlled by DMX channel "n". If master is used total DMX channels will be 2 otherwise it uses 1 channel ("x" = 1).
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH8	Output 3 patch	0	no change	<b>Example: output 1&amp;2 are patched as 1 and 3&amp;4 are patched as 2</b> Output 1 & 2 will be controlled by DMX channel "n". Output 3 & 4 will be controlled by DMX channel "n+1". If master is used total DMX channels will be 3 otherwise it uses 2 channels ("x" = 2).
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH9	Output 4 patch	0	no change	If master is used total DMX channels will be 3 otherwise it uses 2 channels ("x" = 2).
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH10	Static output 1	0	no change	Each output channel can be set to a static intensity.
		1	output off	
CH11	Static output 2	0	no change	If no DMX is present and Static behavior is set to "load static values". The outputs will be set to the configured intensity values.
		1	output off	
CH12	Static output 3	0	no change	
		1	output off	
CH13	Static output 4	0	no change	
		1	output off	
CH14	Load default settings	0	no change	This function resets all settings to the Factory setting.
		1	Load Factory settings.	

LED colour	Number of DMX channels needed			
	1	2	3	4
Single colour	✓			
Tunable White		×		
ColourFlow				×

	<b>Protection class</b> One, two or three		<b>Retail &amp; Food LED modules</b> Clothing, furniture, kitchens, jewellery, shoes, bread, meat, fish and vegetables & fruit.
	<b>Application area</b> Indoor or outdoor		<b>Colour</b> Available colours: Amber, blue, red or green
	<b>Application area</b> Floor, wall or ceiling		<b>White colour temperature</b> In different Kelvin values: Cold white, neutral white, warm white or extra warm white
	<b>Swivel</b> Fixture is horizontally rotatable, indicated in degrees		<b>Curve</b> Minimal bending curve in centimeters
	<b>Swivel</b> Fixture is vertically rotatable, indicated in degrees		<b>Cutting length</b> Indicated by the cutting marks
	<b>Multiple connection</b> Daisychain connectivity		<b>LED pitch</b> Pitch between the LEDs in millimeters
	<b>Installation depth</b> In centimeters		<b>Power supply</b> In VDC, VAC or milliAmpere
	<b>Installation size</b> In centimeters		<b>Power consumption</b> In VA or Watt
	<b>Cable length</b> Maximum cable attached to the fixture in centimeters		<b>Dimmable</b> 1-10 Volt, Phase, Individual, DMX dimmable or DALI
	<b>Driver</b> Inclusive or exclusive Internal or external		<b>PWM dimming</b> Traditional PWM dimming, DMX analog or DMX Hybrid dim
	<b>Weight</b> In grams/kilograms		<b>Bluetooth controlled</b> By Casambi Casambi & Local Dim
	<b>Pressure</b> Maximum pressure on the fixture in kg/cm <sup>2</sup>		<b>Magno dimming</b> Accurate dimming from 100 - 1% by using a magnet
	<b>Lifespan</b> Of the light source in hours		<b>Dynamic Control</b> Dynamic Power Control or Dynamic Temperature Control
	<b>Lenses</b> Available lenses, indicated in degrees		<b>DMX input</b> Fixture works on DMX512 protocol or Wireless DMX
	<b>Performance Zoom</b> Adjustable beam angle		<b>Combined product</b> Compose your own fixture
	<b>LEDs</b> Kind of LED used in the fixture		<b>Warranty</b> 3 or 5 years warranty on the product
	<b>Plug &amp; play</b> Easy connection using the SmartConnect system		<b>Conformité Européenne</b> CE marking for free marketability of industrial goods within the EU
	<b>IP value</b> Ingress Protection classifies the degrees of protection provided against the intrusion of the product		<b>Energy label</b>
	<b>Colour changing</b> RGB, RGB-W, RGB-A, AWB or Tunable White		<b>Lightsource</b> Equipped with a CLS, Bridgelux or a Xicato LED module