

FlexHarmony (FlexCove G3)

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IPS Segment
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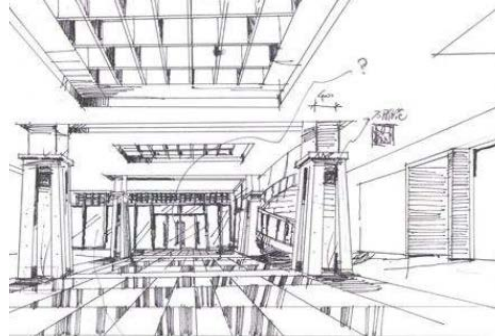


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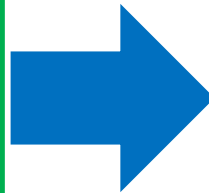
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- Product Specifications & Recommended drivers
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Value Proposition



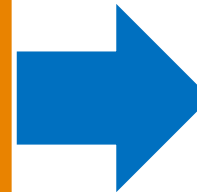
Why this product

- To save your energy in shopping mall, hotel and fashion
- To create comfortable lighting ambience
- To cater to various needs for different customers/applications
- To give extreme flexibility in terms of dimension and installation
- To offer dynamic lighting for enhanced experience



How to realize

- Energy efficiency
- Superior light quality
- Great diversity to cater to different customers' needs
- Mechanical flexibility
- Dimming compatibility & Tunable White

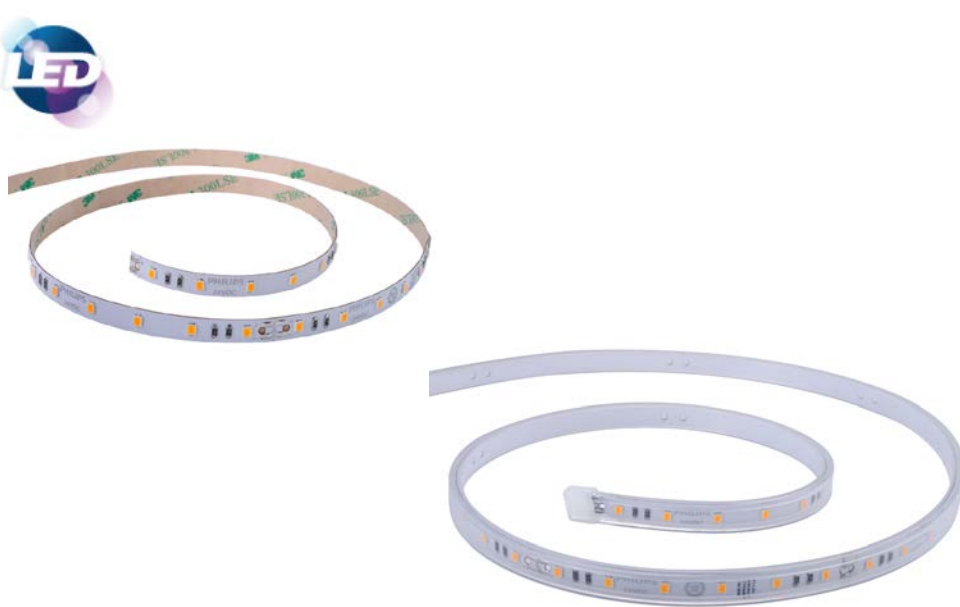


What we offer

- Efficacy up to 105lm/W
- SDCM 3 , CRI 80 & 90
- 3 lumens x 5 CCTs x 2 CRIs x 2 IP ratings
- Min cut length -100mm
- 1-10V, PWM & CCT changeable (1000~4000K)

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FlexCove G3 – Features and benefits



Features and benefits:

- Energy efficient - System efficacy up to **105 lm/W**
- Product diversity – **3** lumens, **5** CCTs, CRI 80 & **90**, IP20 & **IP44** available
- Excellent light quality – **SDCM 3** for 2400/2700/4000K (between rolls), SDCM 4 for 5700K
- Reliable performance - Lifetime **30,000hours** L70 Ta 25° C
- **Dimming flexibility** – On/off, 1-10V.PWM dimming compatible, **Tunable white** available

Applications

- Hotel
- Shopping mall
- Retail store
- Restaurant
- Supermarket
- Conference center



FlexCove G3 Designation

LS161S LED8 8 40 IP20 L5000

1

2

3

4

5

1 Lumen package

LS160S LED4 – 400lm

LS161S LED8 - 800lm

LS162S LED12- 1200lm

2 Color rendering

8 XX – CRI 80

9 XX – CRI 90

3 CCT

X 24 – 2400K

X 27 - 2700K

X 40 – 4000K

X 57 - 5700K

TNW – Tunable White 1000~4000K

4 IP rating

IP20 - without silicon tube

IP44 - with silicon tube

5 Dimension

L5000 – 5m/roll (1pc)



IP20



IP44

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FlexCove G3 Accessories

AC160Z PC-OP L1000 – PC optical cover 1m in length ①

AC160Z TR-U L1000 – U track 1m in length ②

AC160Z TR-V L1000 – V track 1m in length ③

AC160Z mounting clip – fixation kit for IP20 version (including screws) ④

AC160Z mounting clip WP – fixation kit for IP44 version (including screws) ⑤

AC160Z connector – for mechanical connection after cutting ⑥

AC160Z Connector with leader cable – for electrical connection after cutting ⑦

AC160Z end cap – for IP44 version after cutting ⑧



①



②



③



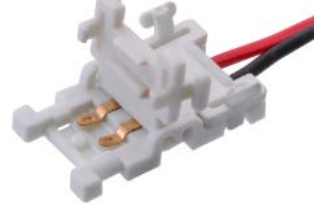
④



⑤



⑥



⑦

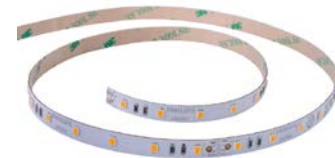


⑧

Remarks

- There is another set of accessories for Tunable white version which has different PCB width (10mm) from the above (PCB width 8mm). Ordering codes of Tunable white accessories can be found in the page of Accessory Ordering Information
- Optical cover and tracks are NOT necessary accessories in flexcove application but for fixed linear lighting (like batten) application, details can be found in the mounting instruction

Technical Specifications – IP20 Version



		FlexCove G3 IP20				
		824	827	840	857	927
System performance	Working temperature range	—20°C ~ +35°C				
	Lifetime (ta 25°C) @L70B50	30,000 hours				
	Ambient temperature of operation	25°C				
Optical	Color consistency	SDCM ≤3(between rolls); SDCM≤4 @ 5700K				
	CRI	≥80, R9>0				≥90, R9>0
	CCT	2400K±62K	2700K±62K	4000K±118K	700K±203K	2700K±62K
	Initial lumen output range/steady state (include tolerance)	1. Typical: 400 lm/m, Range: 360-440 lm/m 2. Typical: 800 lm/m, Range: 720-880 lm/m 3. Typical: 1200 lm/m, Range: 1080-1320 lm/m				
	System Efficacy Typ.	90 lm/W	95lm/W	105lm/W	105lm/W	80lm/W
Mechanical & appearance	IP rating	IP20				
	Min cut length	10cm				
Electrical	Supply Voltage	24VDC ±10%				
Others	Control function	Two types: on/off & Dimmable (1-10V, PWM)				
	Approbation	LM79, Thermal test report				
	ETO option	2200K / 3000K				2400K/3000K/4000K

Remarks

Compatible transformers – (1) 913710032267 LED Transformer 60W 24VDC
OR (2) 913710032567 LED Transformer 120W 24VDC
 Dimming controller – (3) DDMC-GRMS from Dynalite



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Technical Specifications – IP44 Version



		FlexCove G3 IP44					
		824	827	840	857	927	Tunable White
System performance	Working temperature range	—20°C ~ +35°C					
	Lifetime (ta 25°C) @L70B50	30,000 hours					
	Ambient temperature of operation	25°C					
Optical	Color consistency	SDCM ≤3(between rolls) (accept SDCM≤4 @ 5700K)					NA
	CRI	≥80, R9>0				≥90, R9>0	≥80
	CCT	2400K±62K	2700K±62K	4000K±118K	5700K±203K	2700K±62K	1000K— 4000K
	Initial lumen output range/steady state (include tolerance)	1. Typical: 400 lm/m, Range: 360-440 lm/m 2. Typical: 800 lm/m, Range: 720-880 lm/m 3. Typical: 1200 lm/m, Range: 1080-1320 lm/m					Typ.800 lm/m (Full On) Red full on: 170lm/m; 2200K-full on: 270lm/m 4000K-full on: 360lm/m
	Efficacy	85lm/W	90lm/W	100lm/W	100lm/W	80lm/W	NA
Mechanical & appearance	IP rating	IP44					
	Min cut length	10cm					
	IK	IK03					
Electrical	Supply Voltage	24VDC ±10%					
Others	Control function	Two types: on/off & Dimmable (1-10V, PWM)					
	Approbation	LM79, Thermal test report					
	ETO option on CCTs	2200K / 3000K				2400/3000/4000	NA

Remarks

Compatible transformers – (1) 913710032267 LED Transformer 60W 24VDC
OR (2) 913710032567 LED Transformer 120W 24VDC
 Dimming/Tunable White controller – (3) DDMC-GRMS from Dynalite



1



2



3

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FlexCove 2.0 vs FlexCove 3.0

	FlexCove 2.0	FlexCove 3.0
Lumen option/ m	400lm, 800lm, 1000lm	400lm, 800lm, 1200lm
System efficacy	Up to 90lm/W	Up to 105lm/W
CCT	2700K, 4000K, 5700K	2400K, 2700K, 4000K, 5700K (ETO-3000K)
CRI	70	80 & 90
SDCM	≤3.5 (between rolls); ≤5 @ 5700K	≤3 (between rolls); ≤4 @ 5700K
IP rating	IP20	IP20 & IP44 (with silicon tube)
Dimming function	PWM, 1-10V	PWM, 1-10V, Tunable white (1000~4000K)
Lifetime	30,000hours L70 Ta 25° C	30,000hours L70 Ta 25° C
Price index	1	0.6

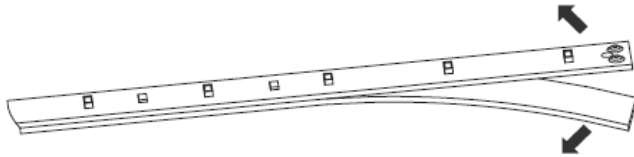


Benchmarking

Best
Worst
To be noticed

Company		PHILIPS	LUCI			Koledo
General Info	Model No.	Flex Cove G3	Power Flex	Power Flex EX	Power Flex THOF	Slimbright 300iWHT
Electrical	LED pitch(mm)	17mm	15/50(0.9m) 20/30	15/20	20	17.8
	Power (W/m)	4~15W	13.9/3.9/(0.9m) 10.5/6W	18.2/12.1W	11W	12W
	Voltage	DC 24V	DC 24V	DC 24V	DC 24V	DC 24V
Photometric	Lm/m @2700K	400/800/1200	711/212/(0.9m) 563/361	1436/988@2700K	545(L30L19 100%)	1200@2700K
	System efficacy	Up to 105lm/W	51/54/(0.9m) 53/60	78.9/81.6@2700K	49.6(L30L19 100%)	100
Chromatic	CCT (K)	2400/2700/4000/5700K (ETO2200 & 3000K)	2400/2700/3000/3500/4200	2700/3000/4000	L30L19:3000~1900 NL27:5300~2700	2200/2700/4000/6500
	CRI	80 90(2400/2700/4000K)	90 (2700K~4200K) 87 (2400K)	83 (2700K&3000K) 85 (4000K)	80(L30L19 100%) 90(NL27100%)	80+
	R9	>0	NA	NA	NA	NA
	SDCM	3	NA	NA	NA	3
Mechanical	Size	11mm x 4mm	15X4.5mm	15X4.5mm	15X4.5mm	11X3mm
	Cuttable unit (mm)	100~120mm	2LED: 30/100(0.9m)40/66.6/	6 LED: 83.2/125	4LED: 83.2	125mm
	Max connect length	5m	4.5/6(0.9m) 5/5/m	5m	5m	5m
	IP	IP44, IP20	Indoor			IP21
Other Key Items	Lifetime	30k hours L70B50 @25C Ta	NA	NA	NA	50k hours L70B50 @25C Ta
	Warranty	3yrs	NA	NA	NA	NA
	Operating Temperature	-20℃ to +35℃	NA	NA	NA	NA
	System	Driver list to support on/off & dimmable driver (PWM, 1-10V) Tunable White	Dimmable	Dimmable	Tunable White	PWM
	Accessory	Installation 3 choices Light cover 1 choices	Installation 4 choices	Installation 4 choices		Installation 3 choices Light cover 1 choices
	Price Index	1	1.5			1.2

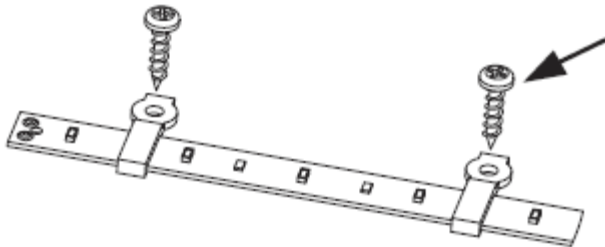
Product Installation



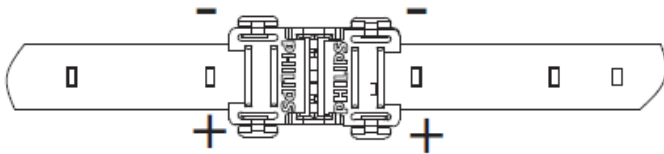
IP20 -Tear off the adhesive tape for installation



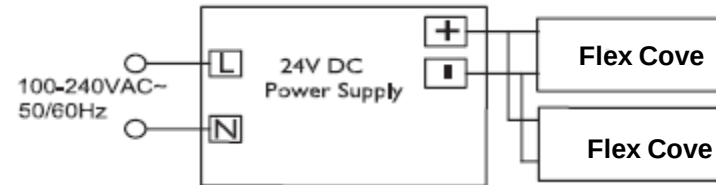
IP44 - Mounting clip for fixation



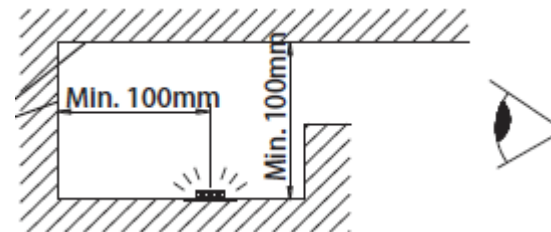
IP20 -Mounting clip for fixation



IP20 - Connection after cutting



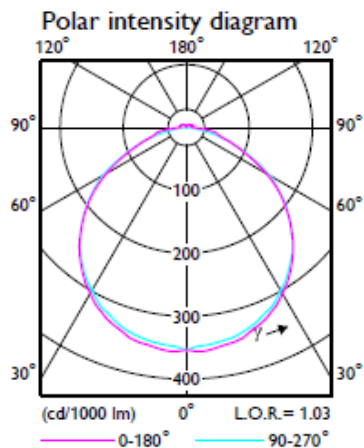
Power supply wiring



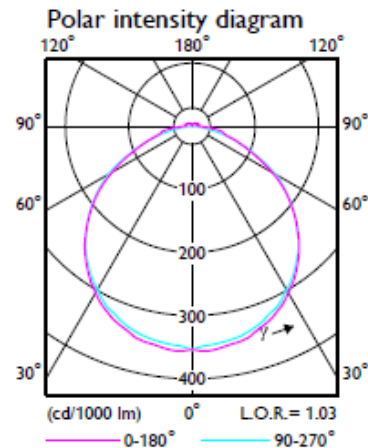
Recommended min, distance between FlexCove and visible illuminated surface

More details about installation and connection can be found in the mounting instruction

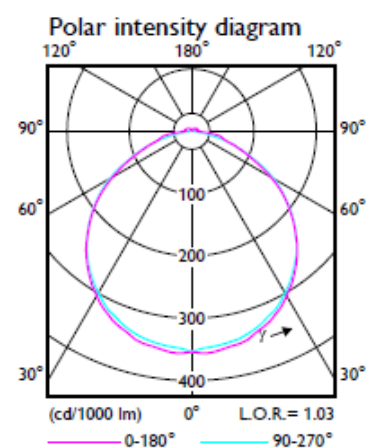
Product Photometry



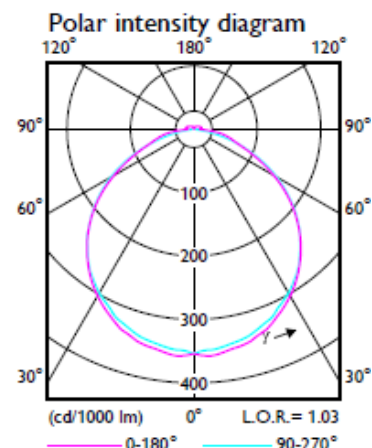
IP20 400lm CRI80



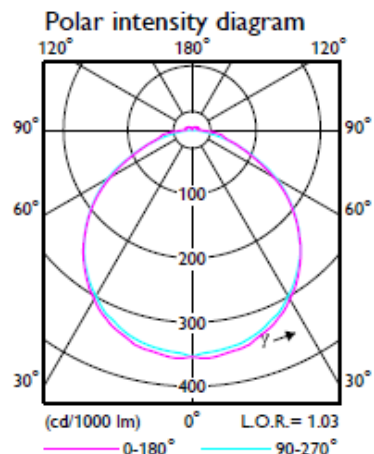
IP20 800lm CRI80



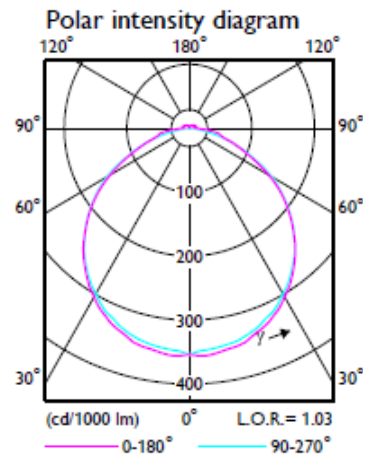
IP20 1200lm CRI80



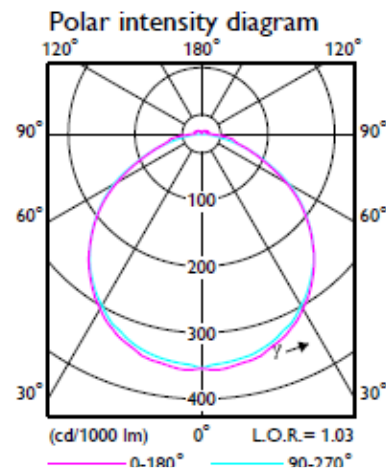
IP44 1200lm CRI90



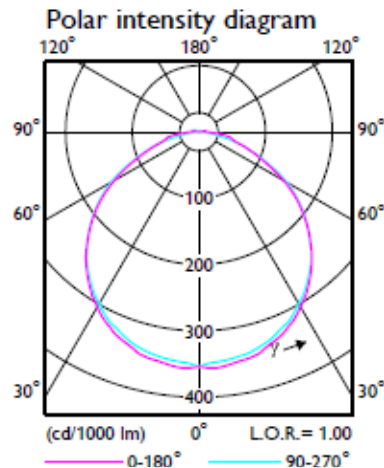
IP44 400lm CRI80



IP44 800lm CRI80



IP44 1200lm CRI80



Tunable with 800lm

More types of photometric files available on request

Product ordering information

12NC	Description	Typ.Lumen	CCT	CRI	IP Rating	MOQ (pc)
911401689203	LS160S LED4 824 IP20 L5000	400lm	2400K	80	IP20	10
911401689303	LS160S LED4 827 IP20 L5000	400lm	2700K	80	IP20	10
911401689403	LS160S LED4 840 IP20 L5000	400lm	4000K	80	IP20	10
911401689503	LS160S LED4 857 IP20 L5000	400lm	5700K	80	IP20	10
911401689603	LS161S LED8 824 IP20 L5000	800lm	2400K	80	IP20	10
911401689703	LS161S LED8 827 IP20 L5000	800lm	2700K	80	IP20	10
911401689803	LS161S LED8 840 IP20 L5000	800lm	4000K	80	IP20	10
911401689903	LS161S LED8 857 IP20 L5000	800lm	5700K	80	IP20	10
911401690003	LS162S LED12 824 IP20 L5000	1200lm	2400K	80	IP20	10
911401690103	LS162S LED12 827 IP20 L5000	1200lm	2700K	80	IP20	10
911401690203	LS162S LED12 840 IP20 L5000	1200lm	4000K	80	IP20	10
911401690303	LS162S LED12 857 IP20 L5000	1200lm	5700K	80	IP20	10
911401690403	LS160S LED4 824 IP44 L5000	400lm	2400K	80	IP44	10
911401690503	LS160S LED4 827 IP44 L5000	400lm	2700K	80	IP44	10
911401690603	LS160S LED4 840 IP44 L5000	400lm	4000K	80	IP44	10
911401690703	LS160S LED4 857 IP44 L5000	400lm	5700K	80	IP44	10
911401690803	LS161S LED8 824 IP44 L5000	800lm	2400K	80	IP44	10
911401690903	LS161S LED8 827 IP44 L5000	800lm	2700K	80	IP44	10
911401691003	LS161S LED8 840 IP44 L5000	800lm	4000K	80	IP44	10
911401691103	LS161S LED8 857 IP44 L5000	800lm	5700K	80	IP44	10
911401691203	LS162S LED12 824 IP44 L5000	1200lm	2400K	80	IP44	10
911401691303	LS162S LED12 827 IP44 L5000	1200lm	2700K	80	IP44	10
911401691403	LS162S LED12 840 IP44 L5000	1200lm	4000K	80	IP44	10
911401691503	LS162S LED12 857 IP44 L5000	1200lm	5700K	80	IP44	10
911401691603	LS161S LED8 TNW IP44 L5000	800lm	1000-4000K	80	IP44	10
911401691703	LS160S LED4 927 IP20 L5000	400lm	2700K	90	IP20	10
911401691803	LS161S LED8 927 IP20 L5000	800lm	2700K	90	IP20	10
911401691903	LS162S LED12 927 IP20 L5000	1200lm	2700K	90	IP20	10
911401692003	LS160S LED4 927 IP44 L5000	400lm	2700K	90	IP44	10
911401692103	LS161S LED8 927 IP44 L5000	800lm	2700K	90	IP44	10
911401692203	LS162S LED12 927 IP44 L5000	1200lm	2700K	90	IP44	10

Accessory ordering information

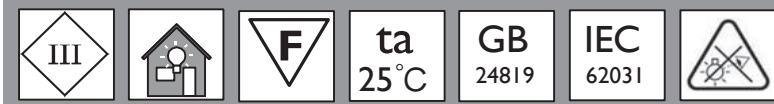
12NC	Description	Remarks	MOQ (pc)
911401692303	AC160Z PC-OP L1000	Opal diffused cover	50
911401692403	AC160Z TR-U L1000	U type track	50
911401692503	AC160Z TR-V L1000	V type track	50
911401692603	AC160Z mounting clip	Fixation kit for IP20 version (screws included)	500
911401692604	AC160Z mounting clip WP	Fixation kit for IP44 version (screws included)	500
911401692703	AC160Z connector	Connecting two ends of FlexCove after cutting	100
911401692803	AC160Z connector with leader cable	Connection wiring after cutting	100
911401692903	AC160Z End cap	End cap for IP44 version after cutting	300
911401693003	AC160Z PC-OP L1000 TW	For Tunable White version	50
911401693103	AC160Z TR-U L1000 TW	For Tunable White version	50
911401693203	AC160Z TR-V L1000 TW	For Tunable White version	50
911401693303	AC160Z connector TW	For Tunable White version	100
911401693403	AC160Z connector with leader cable TW	For Tunable White version	100
911401693503	AC160Z End cap TW	For Tunable White version	300





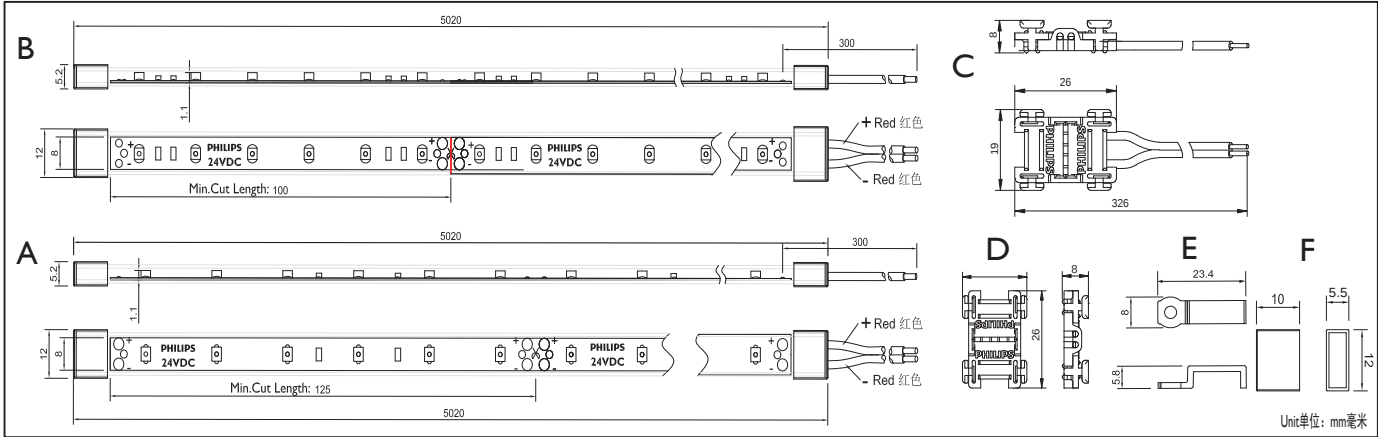
FlexCove G3 /LED 柔性灯带

Mounting instrution/ 安装说明书



Type 型号	Lamp/M 光源/米	Voltage 电压	Power/M 功率/米	M/per roll 米/卷	Appearance 外观	kg
LS160S LED4 824 IP44 L5000	48xSMD2835LED	24VDC	4W/M	5M(米)	A	0.15
LS160S LED4 827 IP44 L5000	48xSMD2835LED	24VDC	3.8W/M	5M(米)	A	0.15
LS160S LED4 840 IP44 L5000	48xSMD2835LED	24VDC	3.4W/M	5M(米)	A	0.15
LS160S LED4 857 IP44 L5000	48xSMD2835LED	24VDC	3.4W/M	5M(米)	A	0.15
LS161S LED8 824 IP44 L5000	60xSMD2835LED	24VDC	8.4W/M	5M(米)	B	0.15
LS161S LED8 827 IP44 L5000	60xSMD2835LED	24VDC	8.3W/M	5M(米)	B	0.15
LS161S LED8 840 IP44 L5000	60xSMD2835LED	24VDC	7.2W/M	5M(米)	B	0.15
LS161S LED8 857 IP44 L5000	60xSMD2835LED	24VDC	7.2W/M	5M(米)	B	0.15
LS162S LED12 824 IP44 L5000	60xSMD2835LED	24VDC	13.2W/M	5M(米)	B	0.15
LS162S LED12 827 IP44 L5000	60xSMD2835LED	24VDC	12.8W/M	5M(米)	B	0.15
LS162S LED12 840 IP44 L5000	60xSMD2835LED	24VDC	11.6W/M	5M(米)	B	0.15
LS162S LED12 857 IP44 L5000	60xSMD2835LED	24VDC	11.6W/M	5M(米)	B	0.15
LS160S LED4 927 IP44 L5000	48xSMD2835LED	24VDC	4.6W/M	5M(米)	A	0.15
LS161S LED8 927 IP44 L5000	60xSMD2835LED	24VDC	9.7W/M	5M(米)	B	0.15
LS162S LED12 927 IP44 L5000	60xSMD2835LED	24VDC	14.4W/M	5M(米)	B	0.15

可选购附件：
1.AC160Z connector with leader cable
外观如C所示
2.AC160Z connector
外观如D所示
3.AC160Z mounting clip WP
外观如E所示
4. AC160Z End cap
外观如F所示



Please read this manual carefully before using the product 使用本产品前，请先仔细阅读本手册

- The manufacturer will not be held responsible for improper usage or modifications of the product.
所用不当使用或自行更改产品结构而导致损坏，生产商不负任何责任。
- Recommend to Philips power supply, The power supply must accord with independent driver requirements of IEC61347-2-13/GB19510.14.
推荐同飞利浦电源驱动器配套使用。电源驱动器必须符合 IEC61347-2-13/GB19510.14的独立式要求。

- This product must be used together with the connector appointed by Philips.
The connectour must in accordance wiht IEC60838-2-2/GB19651.3.
此灯带要指定的飞利浦连接器配套使用连接器必须符合 IEC60838-2-2/GB19651.3标准。
- Indoor use only.
仅限室内使用。
- The part of lighting strip cannot be replaced; if it is damaged ,the product shall be destroyed.
灯带的电器元件不可替换，如果损坏请废弃整个灯带。

Operation instruction 使用操作说明：

- Please take staticproof measure when installing and maintaining the luminares.
安装和维护灯具时，请做好防静电措施。
- In case of operation failure, please switch off the power and contact your near-est Philips dealer.
如发现异常或操作有任何问题，请务必先切断电源，然后与飞利浦经销商联系。

Maintenance 保养方法：

- In order to ensure optimum performance, please clean the product regularly(recommended twice a year).VWhen cleaning the porduct, please use soft dry cottoncloth only.

为了保持灯带明亮效果，请定期（年一次）时行清洁。灯带不洁处需擦拭时请用柔软干燥的布料擦拭。

- Don't use chemical solvents to clean the lighting strip, it m might damane the surface.
请不要用香蕉水等挥发性物质擦拭灯带表面，请不要对灯具喷洒任何化学药剂，否则灯具可能会变色或损坏。

Attention 注意：

- Please shut off the power supply before mounting and maintaining lighting Strip!
安装和维护灯带时，请务必先关闭电源！
- The lighting strip shall be installed by a qualified electrician and wired in accordance with the latest IEE regulations or the national requirements.
灯带应由有资格的电工安装，接线符合 IEE 电气标准或国家标准。
- The lighting strip shall not be covered with thermal insulation or similar matrial under any circumstance.
灯带不允许被隔热或类似材料覆盖。
- The lighting strip should not be used in directly exposed environment containing hazardous substances for silicone rubber, consult your local Philips office for use in any special applications.
灯带不得用于直接暴露在硅胶有害的环境中。如用于有特定场合请咨询当地飞利浦代表处。
- The corrosive atmosphere or hazardous materials such as sulfur, chlorine, phthalate, etc must be avoided during the use and storage.
灯具避免在腐蚀性环境或者含有有害物质，例如硫化物，卤化物，邻苯二甲酸酯等环境中存储和使用。

灯带剪断后，剪开端处理方式：

1. Use the Connectors使用连接器连接



Note: in removing the outer silicone case, shall not damage the electrical components. Only for the use of IP20
注意：去除外层硅胶保护套，不得伤及灯带电器元件，仅作IP20使用。



2. Without the connectors 不使用连接器连接

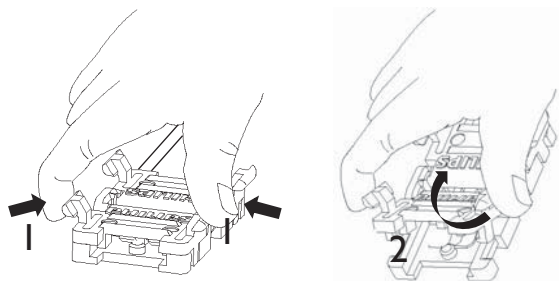
Neutral silicon glue is required for the sealing between end cap and FlexCove.
剪断后安装端盖，请在灯带与端盖接合处涂覆中性密封胶，以达到密封效果。



Note: For sealing, mono-component neutral silicon glue is required.
注意：胶水采用单组份中性密封胶。



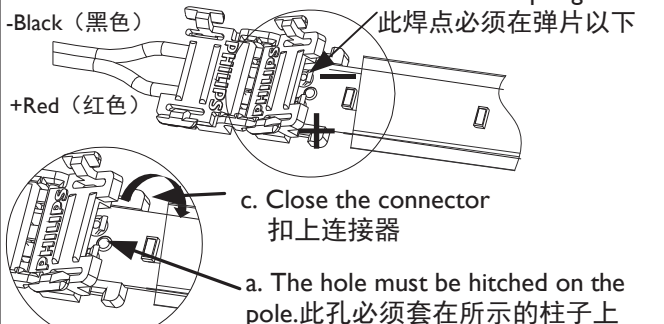
I How to use the connector-ACI60Z connector LED柔性灯带连接器 ACI60Z connector 的使用方法



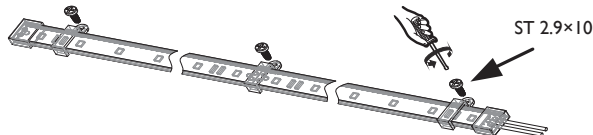
2 Correctly connect the electrodes 正确连接电极

-Black (黑色)

+Red (红色)

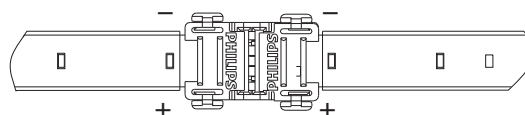


3 How to use ACI60Z mounting clip wp LED柔性灯带配件 mounting clip wp 的使用方法



推荐20cm一个压片
Recommend mounting clip/20cm

4 How to use the connector-ACI60Z connector LED柔性灯带配件 ACI60Z connector 的使用方法



5

并联使用示意图



电源可支持灯带长度

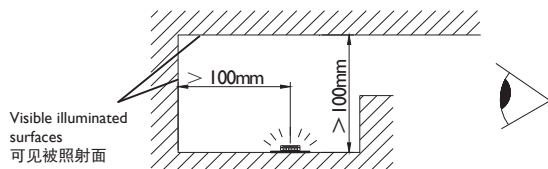
TYPE 型号	30W can support luminaires' length 30W电源可支持灯带长度	60W can support luminaires' length 60W电源可支持灯带长度	120W can support luminaires' length 120W电源可支持灯带长度
LSI60S	5M(米)	10M(米)	21M(米)
LSI61S	2M(米)	5M(米)	10M(米)
LSI62S	1M(米)	3M(米)	6M(米)

Note: The power supply and other cable be bought by end users; the wires must be at least 0.75mm².

注意：电源及其它连接线由客户自行购买；电线至少为0.75mm²。

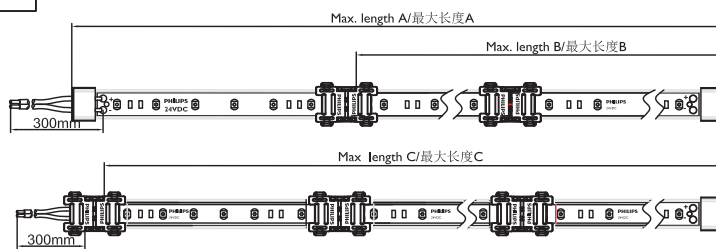
7

To achieve optimized lighting effect, the distance between the luminaire and the visible illuminated surface should be over 10 mm.
为获得最佳混光效果，灯带距可见被照射面距离应大于10厘米



6

Max length control/灯带串接长度控制



TYPE 型号	Max length A/最大长度A	Max length B/最大长度B	Max length C/最大长度C
LSI60S	10M(米)	9M(米)	9M(米)
LSI61S	6M(米)	5M(米)	5M(米)
LSI62S	5M(米)	3M(米)	3M(米)

用户资料

用户姓名：_____ 身份证号码：_____
地址：_____
联系电话：_____ 邮政编码：_____
产品名称：_____ 产品型号：_____
出售单位及地址：_____
购买日期：_____ 年 _____ 月 _____ 日 发票号码：_____

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1268号天府软件园E3座10层
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电话：024-31286092
邮政编码：110013

仅限中国大陆地区

飞利浦灯具产品 专用说明书 保修条例

本公司保证该产品在正常使用及保养下能发挥其优越性能，同时本公司将为持证用户提供一年之保修服务（不含光源）。

1 自制造日起一年内，凡经本公司维修人员确认为正常使用情况下因制造工艺或材料而导致的故障及损坏，您都将获得免费门市维修服务；

- 2 此免费保修服务包括附件、辅助装置、运输费；
- 3 维修时，保修证及发票正本或其他有效凭证同时使用方为有效；
- 4 以下情况将不能享受免费服务：
 - 1) 接不适当电源，使用不适当之安装而造成的损坏；
 - 2) 非经本公司认可之维修和改装而造成的损坏；
 - 3) 错误或疏忽使用或不适当配件而造成的损坏；
 - 4) 因运输及其他意外而造成的损坏；
 - 5 此证若经涂改即作废；
 - 6 此证仅限在中国境内使用有效。

顾客热线：8008201201

飞利浦灯具（上海）有限公司

仅限中国大陆地区