

PHILIPS

LED strips



Design guide

Lighting possibilities and installation guidance
for Philips MASTER and CorePro LEDstrips

**REAL
PROs
REAL
QUALITY**

Philips LED strips. More performance and flexibility for simply great lighting.

The right LED strips can transform any location giving it a modern look and sophisticated flair. The new LED strips from Philips offer you a wide choice of high-quality lighting that fits diverse applications and budgets. So, whether it's the CorePro LEDstrip for great value-for-money performance or the MASTER LEDstrip with superior light quality and even more choice, you have the quality, reliability and installation ease you expect from Philips.

A wide portfolio of matching electronic components and accessories gives you the flexibility to meet every customer demand and application requirement. Including the possibility to integrate the LED strips into a smart lighting system like Interact – simply add the Interact Ready RF connector and a DALI LED transformer.

This guide provides you with the steps and information on which Philips LED strips and components are right for the great results you and your customers want to see.

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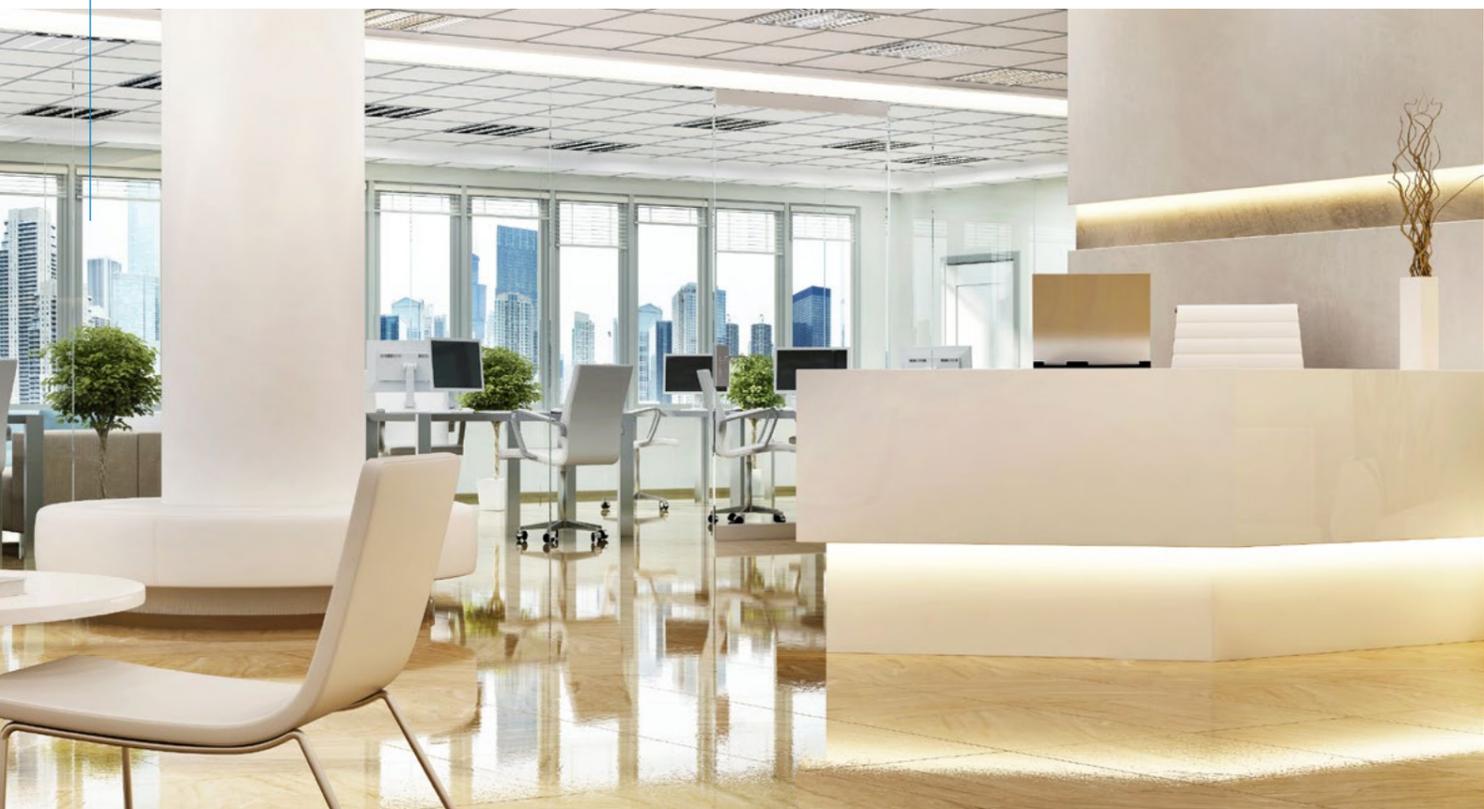


MASTER LEDstrip

- Five different lumen outputs
- Four color temperatures
- Superior light quality with CRI 90
- Extra-long lifetime of 60,000 hrs
- Ultra flexible installation thanks to cut size of only 5 cm

CorePro LEDstrip

- Four different lumen outputs
- Four color temperatures
- Very good light quality with CRI 80
- Durable: lifetime of 35,000 hrs
- Flexible and easy installation (cut size 10 cm)



Make your LED strip smart!

Philips MASTER and CorePro LEDstrips can also be used with the smart Interact system for even more personalization and optimization of your lighting installation. The Interact Ready LED strip kit* consists of:



Interact Ready RF connector

DALI LED Transformer

Philips LED strip

Learn more about the Interact system at interact-lighting.com/pro

*Products shown are available as separate commercial selling units

Performance runs in the family

LED strips should not only fit their surroundings but budgets and plans as well. That's why Philips LED strips come in two families: MASTER and CorePro. Each offers exceptional lighting with energy efficiency and installation ease, while giving every location its own, unique touch.

Smart pro tip

When placed or glued on a surface, Philips LED strips can be used in surrounding temperatures of up to 40°C – no cooling required!



MASTER LEDstrip

Value and features:



Need exceptional lighting that offers diverse brightness and color options and more sustainable and smart performance? Then make the MASTER family part of your perfect solution.

- Superior light quality (CRI 90, SDCM ≤3)
- Five different lumen outputs (500–2,500 lm/m at 4000 K) and four color temperatures (2,700–6,500 K) to fit a large variety of different applications
- Connected capability – use Interact Ready kit to include in smart lighting system
- Easy installation
- Hassle-free planning thanks to flexible 5 m length and cut size of only 5 cm
- Extremely durable: 60,000 hours lifetime and 5 years warranty
- IP20 rating



Specifications

Lumen/m @ 4000K * (lm/m)	500	270	2.3	4.5	6.6
Lumen/roll (5m) @4000K	2100	4200	6300	8400	10500
LEDs/m	140				
Power/m (W)	4.3	8.3	12.5	16.6	21.3
Power/5m (W)	19	37	52	67	81
CCT options (K)	2700 / 3000 / 4000 / 6500				
CRI	90				
SDCM	3				
IP rating	IP20				
Lifetime	60,000 hrs L70B50 @ T25 °C				
Input voltage	24V, DC				
Operating temp	-20°C < Ta < 40°C				
Length/roll	5 m				
Width	8 mm				
Cut size	5 cm				

* Lumen/meter refers to 4000K, other CCTs will be slightly different

CorePro LEDstrip

Value and features:



Looking for reliable, value-for-money LED strips that are slim, bright and ready to meet everyday lighting demands while saving more? Welcome to the CorePro family!

- Very good quality of light (CRI 80, SDCM ≤5)
- Four different lumen outputs (300–1,600 lm/m at 4000 K) and four color temperatures (2,700–6,500 K) for greater variety in different applications
- Connected capability – use Interact Ready kit to include in smart lighting system
- Easy installation
- Hassle-free planning thanks to flexible 5 m length and cut size of 10 cm
- Durable: 35,000 hours lifetime and 3 years warranty
- IP20 rating



Specifications

Lumen/m @ 4000K * (lm/m)	300	800	1200	1600
Lumen/roll (5m) @4000K	1250	3400	5000	6800
LEDs/m	70			
Power/m (W)	2.6	6	9.2	12.3
Power/5m (W)	10.5	27	39	52
CCT options (K)	2700 / 3000 / 4000 / 6500			
CRI	80			
SDCM	5			
IP rating	IP20			
Lifetime	35,000 hrs L70B50 @ T25 °C			
Input voltage	24V, DC			
Operating temp	-20°C < Ta < 40°C			
Length/roll	5 m			
Width	8 mm			
Cut size	10 cm			

Outstanding in every application

Whether retail, hospitality, or office spaces, Philips LED strips let every location shine in the light it deserves. Different color temperatures and up to five luminous fluxes give you the tools you need to create the right atmosphere for every demand – from emotivating offices and atmospheric restaurant lighting - to luxurious retail settings and relaxing hotel stays. Just right for all applications where people should feel comfortable and welcome.

Segments



Retail

The right lighting can have a major influence on the shopping experience. Philips LED strips create the right ambiance and let displayed products shine in their best light.

Ambient/cove/general lighting

Recommended LED strips:

- MASTER 475lm~1500lm/m, 2700/3000/4000K CRI90
- CorePro 270lm~1600lm/m, 2700K/3000/4000K CRI80



Hospitality

Create welcoming and inspiring spaces with the right light accents in hotels, restaurants and lounges.

Ambient/cove lighting

Recommended LED strips:

- MASTER 475lm~1380lm/m, 2700/3000K CRI90
- CorePro 270lm~750lm/m, 2700K/3000K CRI80



Office

Get the motivation started by installing the right LED strips while simultaneously increasing sustainable performance!

Ambient/cove/general lighting

Recommended LED strips:

- MASTER 1380~2500lm/m, 3000/4000/6500K CRI90
- CorePro 1080lm~1600lm/m, 3000/4000/6500K CRI80

General lighting

Enjoy bright, welcoming light that adds to any atmosphere while providing the energy efficacy that is necessary for locations where lighting is on a great part of the day. Both Philips CorePro and MASTER LEDstrips offer luminous fluxes of 1,000 to 2,000 lm/m that are ideal for general lighting.

Recommended LED strips:

- MASTER 12.5W 1380~1500lm/m, CRI90
- MASTER 16.6W 1830~2000lm/m CRI90
- MASTER 21.3W 2400~2500lm/m CRI90
- CorePro 9.2W 1080~1200lm/m, CRI80
- CorePro 12.3W 1450~1600lm/m, CRI80

Cove/shelf lighting

Get the cozy, indirect lighting that sets the right accents in all areas where an intimate and private atmosphere is desired. Luminous fluxes from 500 to 1,000 lm/m are available in both ranges.

Recommended LED strips:

- MASTER 8.3W 920lm/m, 2700K/3000K CRI90
- MASTER 12.5W 1380lm/m, 2700K/3000K CRI90
- CorePro 6W 750lm/m, 2700K/3000K CRI80
- CorePro 9.2W 1080lm/m, 2700K/3000K CRI80

Ambient lighting

Create the right accent lighting with subdued lighting nuances: Philips LED strips come in luminous fluxes from 300 to 700 lm/m and four white light colours. A dimmable transformer lets you create even more atmospheric notes.

Recommended LED strips:

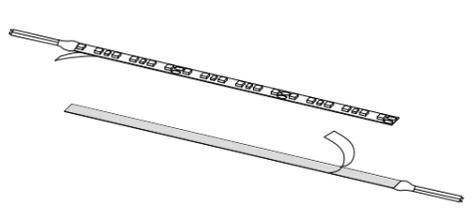
- MASTER 4.3W 475lm/m, 2700K/3000K CRI90
- MASTER 8.3W 920lm/m, 2700K/3000K CRI90
- CorePro 2.3W 270lm/m, 2700K/3000K CRI80
- CorePro 6W 750lm/m, 2700K/3000K CRI80



Installation the easy way

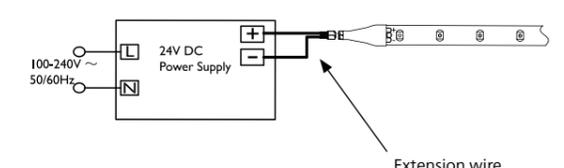
Both Philips MASTER and CorePro LEDstrips offer easy and flexible out-of-the-box installation for a long lifetime of energy savings, reliability and robust durability.

Installation of LED strip (without cutting)

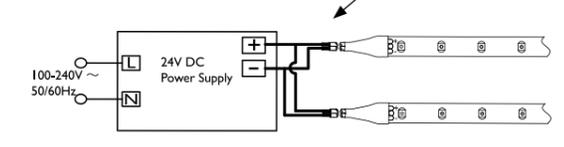


- Peel off protective foil from back of LED tape prior to gluing the tape on chosen surface.
- In case of using extension connectors first peel off only 10 mm of protective foil, apply connectors and then peel off the rest of protective foil.

Power supply connection diagram

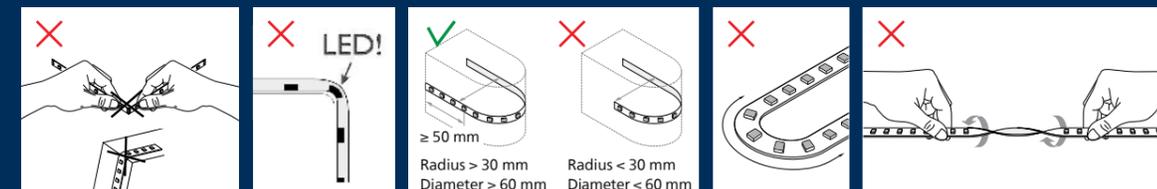


Parallel connection diagram



- Do not exceed 90% of the maximum load indicated on the transformer
- Maximum LED tape length vs maximum transformer power (take 90% rule in account)
- The total length of extension wire and LED tape should not exceed 10 m. In case of exceeding 10m brightness will be reduced.
- If maximum length of LED tape is reached (see table on page 11) then LED tapes can be placed in parallel in order to use full transformer power.

Notes on handling



Attention:

- Do not fold, bend or twist the LED strip
- Cut only in designated areas
- Make a straight cut
- Note ESD protection

Maximum length of extension wire vs cross section of extension wire

Square mm	Max length (m)
0.5	1
0.75	1.5
1	3
1.5	5
2	8
2.5	10

Make amazing even better

Use constant voltage (CV) LED transformers to unleash the full potential of your LED strip installation. Philips offers two transformers that work perfectly with either the MASTER or CorePro LEDstrip, both with global approvals and certifications.



DALI LED transformer

- Combined DALI 2 and Touch and Dim control interface
- Independent use for Insulation Class II application
- Stable output voltage
- Wide ambient temperature range
- Protection against overpower and overvoltage
- Output short-circuit shutdown feature with automatic restart



CertaDrive LED transformer

- Built-in use for Insulation Class I and II applications
- Stable output voltage
- Wide ambient temperature range
- Protection against overpower
- Output short-circuit shutdown feature with automatic restart

Recommended transformers with max. length

Product type	LED transformer/max. length (m)								
	60W 24VDC TD 220-240V	100W 24VDC TD 220-240V	150W 24VDC TD 220-240V	20W 24VDC 120-277V	40W 24VDC 120-277V	60W 24VDC 220-240V	120W 24VDC 220-240V	150W 24VDC 220-240V	
MAS LEDstrip									
4.3W927 475LM/M 5M	10 m	10 m	10 m	4 m	9 m	10 m	10 m	10 m	
4.3W930 475LM/M 5M	10 m	10 m	10 m	4 m	9 m	10 m	10 m	10 m	
4.3W940 500LM/M 5M	10 m	10 m	10 m	4 m	9 m	10 m	10 m	10 m	
4.3W965 500LM/M 5M	10 m	10 m	10 m	4 m	9 m	10 m	10 m	10 m	
8.3W927 920LM/M 5M	7 m	10 m	10 m	2 m	4 m	7 m	10 m	10 m	
8.3W930 920LM/M 5M	7 m	10 m	10 m	2 m	4 m	7 m	10 m	10 m	
8.3W940 1000LM/M 5M	7 m	10 m	10 m	2 m	4 m	7 m	10 m	10 m	
8.3W965 950LM/M 5M	7 m	10 m	10 m	2 m	4 m	7 m	10 m	10 m	
12.5W927 1380LM/M 5M	4 m	8 m	10 m	1 m	3 m	4 m	10 m	10 m	
12.5W930 1380LM/M 5M	4 m	8 m	10 m	1 m	3 m	4 m	10 m	10 m	
12.5W940 1500LM/M 5M	4 m	8 m	10 m	1 m	3 m	4 m	10 m	10 m	
12.5W965 1450LM/M 5M	4 m	8 m	10 m	1 m	3 m	4 m	10 m	10 m	
16.6W927 1830LM/M 5M	3 m	6 m	9 m	1 m	2 m	3 m	7 m	9 m	
16.6W930 1830LM/M 5M	3 m	6 m	9 m	1 m	2 m	3 m	7 m	9 m	
16.6W940 2000LM/M 5M	3 m	6 m	9 m	1 m	2 m	3 m	7 m	9 m	
16.6W965 2000LM/M 5M	3 m	6 m	9 m	1 m	2 m	3 m	7 m	9 m	
21.3W927 2400LM/M 5M	2 m	4 m	7 m	-	1 m	2 m	5 m	7 m	
21.3W930 2400LM/M 5M	2 m	4 m	7 m	-	1 m	2 m	5 m	7 m	
21.3W940 2500LM/M 5M	2 m	4 m	7 m	-	1 m	2 m	5 m	7 m	
21.3W965 2450LM/M 5M	2 m	4 m	7 m	-	1 m	2 m	5 m	7 m	
CorePro LEDstrip	CertaDrive 30W 24VDC	CertaDrive 60W 24VDC	CertaDrive 120W 24VDC	CertaDrive 180W 24VDC	CertaDrive 250W 24VDC				
2.3W827 270LM/M 5M	10 m	10 m	10 m	10 m	10 m				
2.3W830 270LM/M 5M	10 m	10 m	10 m	10 m	10 m				
2.3W840 300LM/M 5M	10 m	10 m	10 m	10 m	10 m				
2.3W865 300LM/M 5M	10 m	10 m	10 m	10 m	10 m				
6W827 750LM/M 5M	5 m	10 m	10 m	10 m	10 m				
6W830 750LM/M 5M	5 m	10 m	10 m	10 m	10 m				
6W840 800LM/M 5M	5 m	10 m	10 m	10 m	10 m				
6W865 780LM/M 5M	5 m	10 m	10 m	10 m	10 m				
9.2W827 1080LM/M 5M	3 m	6 m	10 m	10 m	10 m				
9.2W830 1080LM/M 5M	3 m	6 m	10 m	10 m	10 m				
9.2W840 1200LM/M 5M	3 m	6 m	10 m	10 m	10 m				
9.2W865 1180LM/M 5M	3 m	6 m	10 m	10 m	10 m				
12.3W827 1450LM/M 5M	2 m	4 m	9 m	10 m	10 m				
12.3W830 1450LM/M 5M	2 m	4 m	9 m	10 m	10 m				
12.3W840 1600LM/M 5M	2 m	4 m	9 m	10 m	10 m				
12.3W865 1580LM/M 5M	2 m	4 m	9 m	10 m	10 m				

Made for strong connections

LED strip connectors provide a quick-connect solution for you to install LED strips in numerous ways without having to use any tools. Philips offers different types of connectors for every application need.



Corner connector
(929003167702)

- Flexible tape-to-tape connection



Tape-to-wire connector
(929003167902)

- Connection of tape and transformer

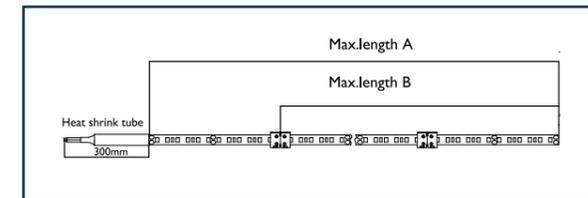


Tape-to-tape connector
(929003167802)

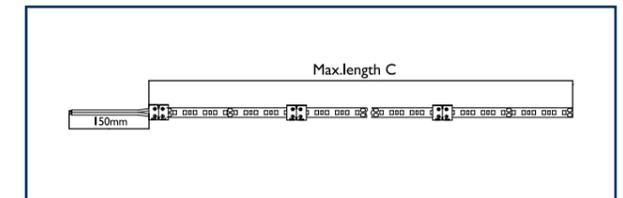
- Tape-to-tape direct connection

Maximum LED strip length (by cutting and reconnecting)

When using connectors please take account of the limitation on the maximum length of tape.
Warning: Load after connector can be 48W maximum.



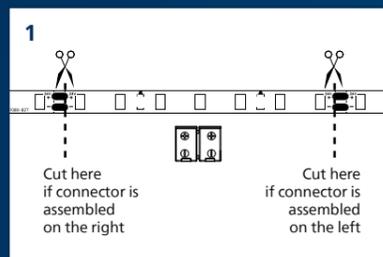
A: Maximum length of LED tape in case tape starts with heat shrink tube (soldered wires to LED tape).
B: Maximum length of LED tape behind position where connector (929003167802) is used for extension of LED tape.



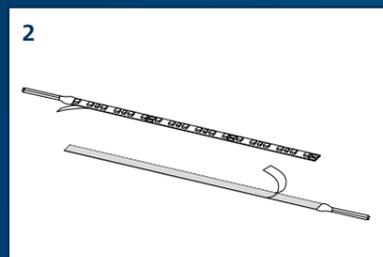
C: Maximum length of LED tape if connector (929003167902) is used at beginning of LED tape.

Product type	Max. length from LED strip heat shrink tube (A)	Max. length after connector (929003167802) used for extension (B)	Max. length after connector (929003167902) used connecting to transformer (C)
MAS LEDstrip 4.3W927 475LM/M 5M	10 m	9 m	9 m
MAS LEDstrip 4.3W930 475LM/M 5M	10 m	9 m	9 m
MAS LEDstrip 4.3W940 500LM/M 5M	10 m	9 m	9 m
MAS LEDstrip 4.3W965 500LM/M 5M	10 m	9 m	9 m
MAS LEDstrip 8.3W927 920LM/M 5M	8 m	5 m	5 m
MAS LEDstrip 8.3W930 920LM/M 5M	8 m	5 m	5 m
MAS LEDstrip 8.3W940 1000LM/M 5M	8 m	5 m	5 m
MAS LEDstrip 8.3W965 950LM/M 5M	8 m	5 m	5 m
MAS LEDstrip 12.5W927 1380LM/M 5M	6 m	3 m	3 m
MAS LEDstrip 12.5W930 1380LM/M 5M	6 m	3 m	3 m
MAS LEDstrip 12.5W940 1500LM/M 5M	6 m	3 m	3 m
MAS LEDstrip 12.5W965 1450LM/M 5M	6 m	3 m	3 m
MAS LEDstrip 16.6W927 1830LM/M 5M	5 m	2 m	2 m
MAS LEDstrip 16.6W930 1830LM/M 5M	5 m	2 m	2 m
MAS LEDstrip 16.6W940 2000LM/M 5M	5 m	2 m	2 m
MAS LEDstrip 16.6W965 2000LM/M 5M	5 m	2 m	2 m
MAS LEDstrip 21.3W927 2400LM/M 5M	5 m	2 m	2 m
MAS LEDstrip 21.3W930 2400LM/M 5M	5 m	2 m	2 m
MAS LEDstrip 21.3W940 2500LM/M 5M	5 m	2 m	2 m
MAS LEDstrip 21.3W965 2450LM/M 5M	5 m	2 m	2 m
CorePro LEDstrip 2.3W827 270LM/M 5M	10 m	9 m	9 m
CorePro LEDstrip 2.3W830 270LM/M 5M	10 m	9 m	9 m
CorePro LEDstrip 2.3W840 300LM/M 5M	10 m	9 m	9 m
CorePro LEDstrip 2.3W865 300LM/M 5M	10 m	9 m	9 m
CorePro LEDstrip 6W827 750LM/M 5M	9 m	7 m	7 m
CorePro LEDstrip 6W830 750LM/M 5M	9 m	7 m	7 m
CorePro LEDstrip 6W840 800LM/M 5M	9 m	7 m	7 m
CorePro LEDstrip 6W865 780LM/M 5M	9 m	7 m	7 m
CorePro LEDstrip 9.2W827 1080LM/M 5M	6 m	4 m	4 m
CorePro LEDstrip 9.2W830 1080LM/M 5M	6 m	4 m	4 m
CorePro LEDstrip 9.2W840 1200LM/M 5M	6 m	4 m	4 m
CorePro LEDstrip 9.2W865 1180LM/M 5M	6 m	4 m	4 m
CorePro LEDstrip 12.3W827 1450LM/M 5M	5 m	3 m	3 m
CorePro LEDstrip 12.3W830 1450LM/M 5M	5 m	3 m	3 m
CorePro LEDstrip 12.3W840 1600LM/M 5M	5 m	3 m	3 m
CorePro LEDstrip 12.3W865 1580LM/M 5M	5 m	3 m	3 m

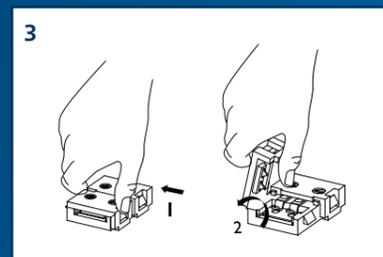
How to use connectors



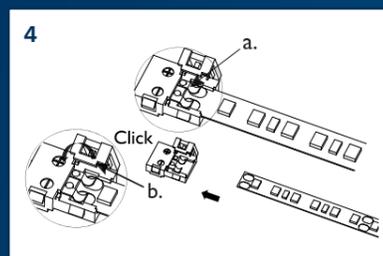
Keep in mind the correct cutting position which depends on the assembly side of the connector.



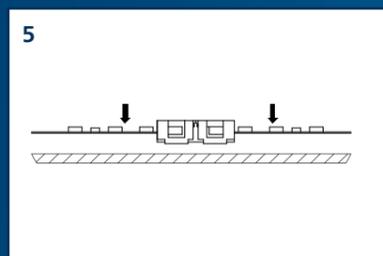
Peel off protective foil from back of LED tape prior to gluing the tape on chosen surface. In case of using extension connectors first peel off only 10 mm of protective foil, apply connectors and then peel off the rest of protective foil.



In case of using connectors for extension of the LED strip, check the information on the next page for the maximum length of a series connection. Never exceed 2A or 48W for a series connection.



a. The soldering point on LED strip must be under the springs on connector.
b. Close the connector.



Detach entire protective layer from 3 m tape before gluing the tape on chosen surface.

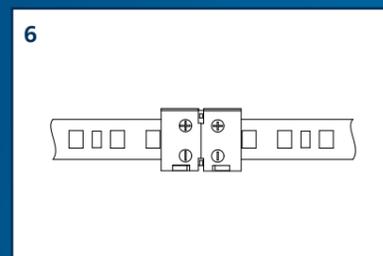


Diagram of assembly after completion.

Order information

MASTER LEDstrip

60,000h 10 Pack

Product type	LEDs/m	Lumen output	Power/	Power/	Power/	Power/	Power/	m/roll	EOC code
			1m	2m	3m	4m	5m		
			lm/m	W	W	W	W	W	
MAS LEDstrip 4.3W927 475LM/M 5M	140	475	4.3	8.5	13	17	19	5	34432700
MAS LEDstrip 4.3W930 475LM/M 5M		5						34434100	
MAS LEDstrip 4.3W940 500LM/M 5M		500						5	34436500
MAS LEDstrip 4.3W965 500LM/M 5M								5	34438900
MAS LEDstrip 8.3W927 920LM/M 5M								5	34440200
MAS LEDstrip 8.3W930 920LM/M 5M		920	8.3	16	23	29.5	37	5	34442600
MAS LEDstrip 8.3W940 1000LM/M 5M		1000						5	34444000
MAS LEDstrip 8.3W965 950LM/M 5M		950						5	34446400
MAS LEDstrip 12.5W927 1380LM/M 5M		1380						12.5	24
MAS LEDstrip 12.5W930 1380LM/M 5M		5	34450100						
MAS LEDstrip 12.5W940 1500LM/M 5M		1500	5	34452500					
MAS LEDstrip 12.5W965 1450LM/M 5M		1450	5	34454900					
MAS LEDstrip 16.6W927 1830LM/M 5M		1830	16.6	31	43	52	67		
MAS LEDstrip 16.6W930 1830LM/M 5M		5						34458700	
MAS LEDstrip 16.6W940 2000LM/M 5M		2000						5	34460000
MAS LEDstrip 16.6W965 2000LM/M 5M		5						34462400	
MAS LEDstrip 21.3W927 2400LM/M 5M		2400	21.3	42	60	74	81	5	34464800
MAS LEDstrip 21.3W930 2400LM/M 5M		5						34466200	
MAS LEDstrip 21.3W940 2500LM/M 5M		2500						5	34468600
MAS LEDstrip 21.3W965 2450LM/M 5M		2450						5	34470900

CorePro LEDstrip

35,000h 10 Pack

Product type	LEDs/m	Lumen output	Power/	Power/	Power/	Power/	Power/	m/roll	EOC code
			1m	2m	3m	4m	5m		
			lm/m	W	W	W	W	W	
CorePro LEDstrip 2.3W827 270LM/M 5M	70	270	2.3	4.5	6.6	8.8	10.5	5	34400600
CorePro LEDstrip 2.3W830 270LM/M 5M		5						34402000	
CorePro LEDstrip 2.3W840 300LM/M 5M		300						5	34404400
CorePro LEDstrip 2.3W865 300LM/M 5M								5	34406800
CorePro LEDstrip 6W827 750LM/M 5M								5	34408200
CorePro LEDstrip 6W830 750LM/M 5M		750	6	11.5	17	22	27	5	34410500
CorePro LEDstrip 6W840 800LM/M 5M		800						5	34412900
CorePro LEDstrip 6W865 780LM/M 5M		780						5	34414300
CorePro LEDstrip 9.2W827 1080LM/M 5M		1080						9.2	18
CorePro LEDstrip 9.2W830 1080LM/M 5M		5	34418100						
CorePro LEDstrip 9.2W840 1200LM/M 5M		1200	5	34420400					
CorePro LEDstrip 9.2W865 1180LM/M 5M		1180	5	34422800					
CorePro LEDstrip 12.3W827 1450LM/M 5M		1450	12.3	24	35	44	52		
CorePro LEDstrip 12.3W830 1450LM/M 5M		5						34426600	
CorePro LEDstrip 12.3W840 1600LM/M 5M		1600						5	34428000
CorePro LEDstrip 12.3W865 1580LM/M 5M		1580						5	34430300

Accessories

50 Pack



Product type	EOC code
1 LS mounting clips IP20 50pcs EU	35497500
2 LS corner connector IP20 50pcs EU6500	35499900
3 LS tape-to-tape connector IP20 50pcs EU	35501900
4 LS tape-to-wire connector IP20 50pcs EU	35503300

Transformers



Product type	Pack	EOC code
1 Transformer for MASTER LEDstrip		
LED Transformer 60W 24VDC TD 220~240V	20	93150500
LED Transformer 100W 24VDC TD 220~240V	10	93152900
LED Transformer 150W 24VDC TD 220~240V	10	93154300
LED Transformer 20W 24VDC 120~277V	20	77531500
LED Transformer 40W 24VDC 120~277V	24	77532200
LED Transformer 60W 24VDC 220-240V	20	72909000
LED Transformer 120W 24VDC 220-240V	20	10202000
LED Transformer 150W 24VDC 220~240V	10	77534600
2 Transformer for CorePro LEDstrip		
CertaDrive LED Transformer 30W 24VDC	50	90946700
CertaDrive LED Transformer 60W 24VDC	20	90948100
CertaDrive LED Transformer 120W 24VDC	20	90950400
CertaDrive LED Transformer 180W 24VDC	9	90952800



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