

12V Series Vehicle



Designed without compromise

Choose iLuXx Vehicle lighting solutions if you're looking for serious lighting that will get the job done. It has been designed specifically to be driven from a standard 12 Vdc automotive battery - no additional power supply is required. It is a robust LED Lighting device made from an anodized aluminum profile and a polycarbonate lens.

- ▶ Wide operating voltage range (10 to 16vdc) with full light intensity throughout the range
- ▶ Built with **Lineo Drive** technology for superior efficiency and maximum battery autonomy.
- ▶ Protection against humidity and condensation of the electronic circuit with conformal coating.

General Technical Characteristics

Input supply range

10 to 16 vdc

Color

3000K / 4000K / 6000K

Dimmable

Yes 100% - 0% with PWM dimmers

Beam angle

120 degree

Lead wire length

18 in. (46 cm)

Lifetime

50 000 hours

Operating temperature

-30°C to 55°C

Built-in protection against:

- Over current (auto reset)
- Over temperature (auto reset)
- Humidity and condensation with conformal coating

Warranty

3 years

Lineo Drive

Maximum Light Output - Maximum Efficiency - Minimum Size

The Technology

Lineo Drive could be considered as an hybrid between constant voltage and constant current systems. Contrary to typical constant voltage Led bars we don't use resistors to regulate the LED current. Micro "LED Drivers" are embedded into each LED string at the printed circuit board level thus permitting:

1- Better efficiency

At equal light output **Lineo Drive** draws 35% less current then typical constant voltage Led bars.

2- 100% light output on a wide input supply range

With traditional constant voltage Led bars light output is proportional to the input voltage (less voltage = less light). With **Lineo Drive** full output is maintained through a very wide input range (see Fig. 1).

3- Maximum lifetime

Traditional constant voltage led bars are designed to run on a steady 12vdc. The reality is quite different. For example, the operating voltage on a vehicle with engine running is around 13,8 Vdc. That situation is detrimental to conventional Led bars (shorter lifetime and reduced light output over time) but with **Lineo Drive** maximum lifetime is guaranteed through the full input voltage range



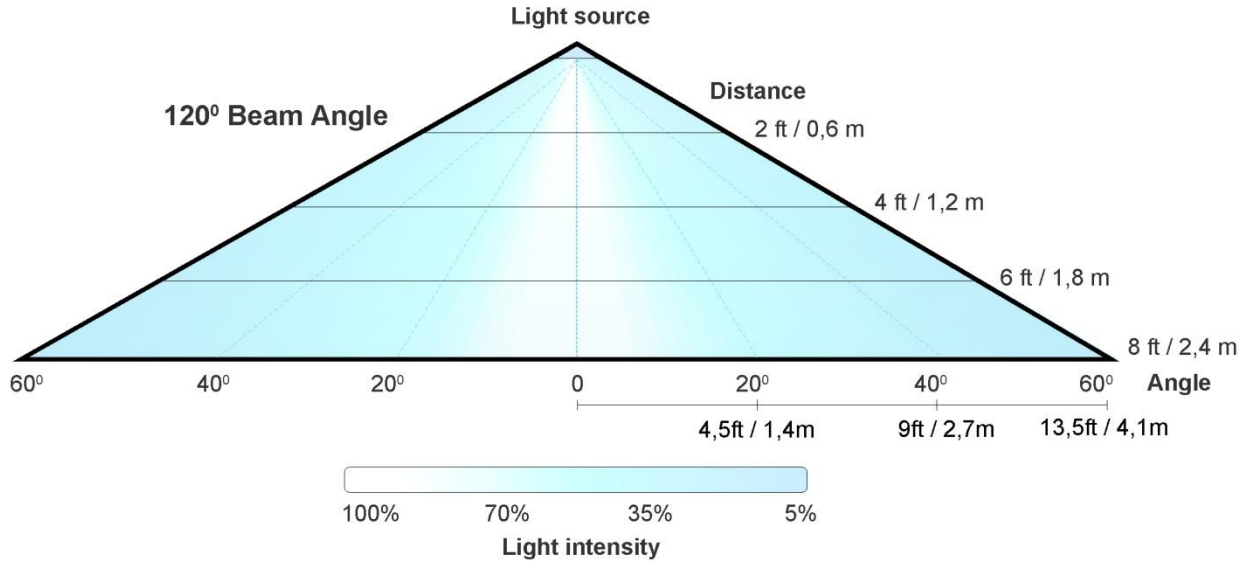
One of the key feature of our **Lineo Drive** technology is that you get the full light output on the whole voltage input range.

Fig. 1 Light output vs Input voltage

Input Voltage	Light output	Current draw (A)
14,0	100%	0,96
13,5	100%	0,96
13,0	100%	0,96
12,5	100%	0,96
12,0	100%	0,96
11,5	100%	0,96
11,0	100%	0,96
10,5	100%	0,96
10,0	100%	0,96
9,5	83%	0,80
9,0	60%	0,58




Typical light distribution

According to beam angle and distance from the light source



12V Series Vehicle

Lighting effect based on lens type

Clear	Lens type	Diffused
1. Maximum light output		1. 25% less light output than clear lens
2. LED dots are visible		2. LED dots are less visible - light is more diffused
3. Best for indirect lighting applications		3. Best for direct lighting applications



Light intensity

Lumen

The industry is using lumen as the unit of measure for light intensity. It's not perfect because it measures luminosity of the light source (how much light is coming out of the LED) but it does not consider the optical efficiency of the lighting fixture. We're giving you these figures also because everyone else does it and it gives you figures to compare.

Formula for fixture with clear lens:

$$\text{Lumen} = \text{Wattage (of lighting fixture)} \times \text{lm/w (lumen per watt of LED as specified by manufacturer)}$$

Formula for fixture with diffused lens:

$$\text{Lumen} = \text{Wattage} \times \text{Lm/w} \times 75\%$$

Dimming

Fully dimmable (100% to 0%) using a PWM switch / dimmer. Excellent way to maximize the battery autonomy. Use with a mechanical switch. Please consult our "Installation recommendations" for more details.



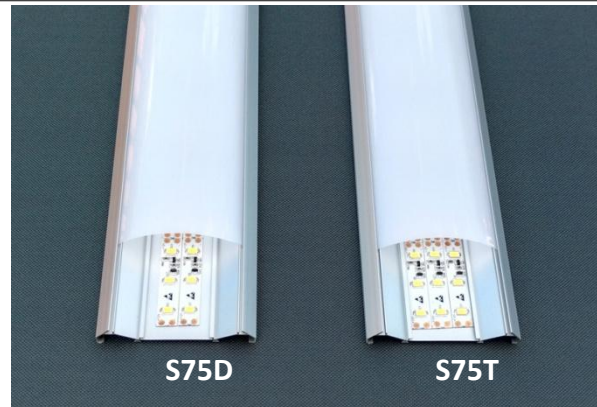
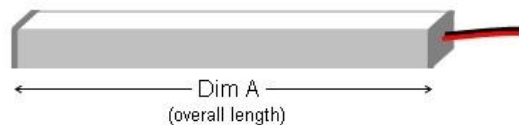
S75 Series



12V Series Vehicle

Technical Data

Version	Length (in)	Lens	Current draw @	Power	Lumen	Dim A (mm/in)
S75D	12	Diffused	0,53	6,7	625	340/13,4
S75T			0,80	10,0	937	
S75D	24	Diffused	1,17	14,7	1374	640/25,2
S75T			1,75	22,0	2062	
S75D	36	Diffused	1,80	22,7	2124	940/37,0
S75T			2,70	34,1	3186	
S75D	48	Diffused	2,33	29,4	2749	1200/47,2
S75T			3,50	44,1	4123	



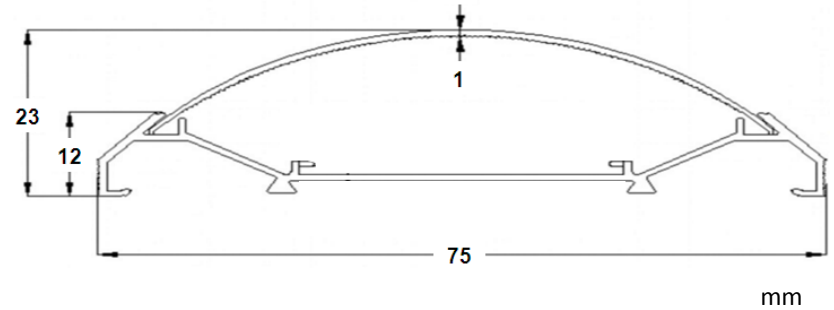


S75 Series



12V Series Vehicle

- 1- High output lighting solution for vehicles
- 2- Surface mount installation using included mounting clips
- 3- Great for ceilings and under cabinets applications





S75 Series

Applications notes

A- How does the lighting output of the S75 Series compare to fluorescent tubes usable light?

1 feet of S75D = 2 feet of a standard T8 fluorescent tube like the F32T8

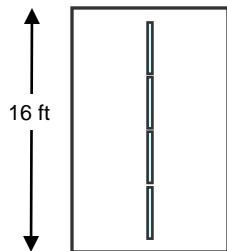
1 feet of S75T = 3 feet of a standard T8 fluorescent tube like the F32T8

B- How many luminaires do I need to light a trailer?

Next we show 3 typical lighting layouts that will help you evaluate how many luminaires are required to obtain the desired level of lighting.



12V Series Vehicle



Typical lighting layouts for trailers

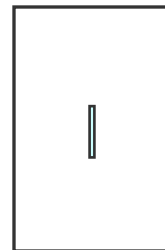
1 x 12 linear ft

Very bright environment suitable for precision work. ratio = $12/16 = 0,75$ ft of light per ft of trailer



6 linear ft

Bright environment suitable for work and storage. Ratio = $6/16 = 0,375$ ft of light per ft of trailer



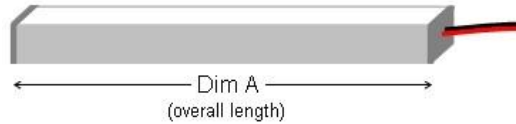
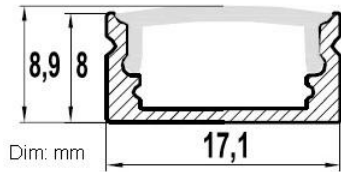
3 linear ft

Not enough to work comfortably but enough to be able to read. Perfect for delivery trucks and general storage. Ratio = $3/16 = 0,187$ ft of light per ft of trailer.

S8 Series



Side wiring

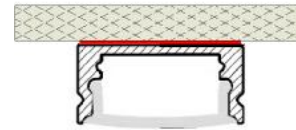


12V Series Vehicle

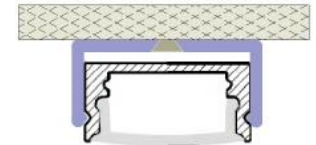
Technical Data

Series	Length (in)	Lens	Current draw @ 12,6vdc	Power (Watt)	Lumen output	Dim A (in/mm)	Dim B (in/mm)
S8	12	Clear Diffused	0,32 A	4 W	500 lm 375 lm	13,0 / 330	n/a
	24	Clear Diffused	0,64 A	8 W	1000 lm 750 lm	24,8 / 630	n/a
	36	Clear Diffused	0,96 A	12 W	1500 lm 1125 lm	36,6 / 930	n/a

Installation options



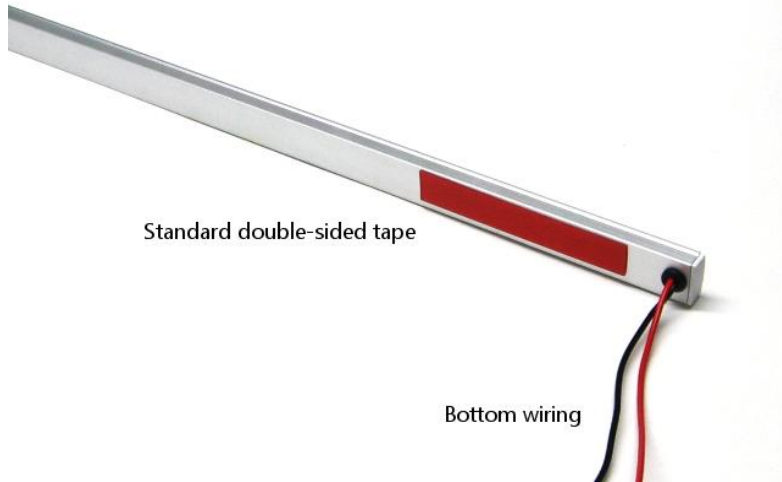
With VHB double- sided
tape - included



With mounting clip p/n:
MDB12PC - included



S8 Series



12V Series Vehicle

- 1- Surface mount installation using included double-sided tape (automotive VHB type) or included mounting clips.
- 2- Available in two wiring style: side or bottom lead wire
- 3- Great for ceilings, walls or under cabinets

Mounting clips: MDB12PC





S8 Series

Applications notes

A- How does the lighting output of the S8 Series compare to fluorescent tubes usable light?

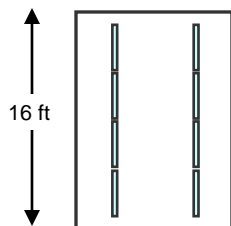
1 feet of S8 = 1 feet of a standard T8 fluorescent tube like the F32T8

B- How many luminaires do I need to light a trailer?

Next we show 3 typical lighting layouts that will help you evaluate how many luminaires are required to obtain the desired level of lighting.



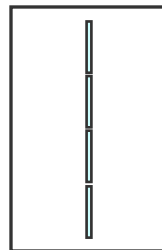
12V Series Vehicle



Typical lighting layouts for trailers

2 x 12 linear ft

Very bright environment suitable for precision work. Ratio = $24/16 = 1,5$ ft of light per ft of trailer



1 x 12 linear ft

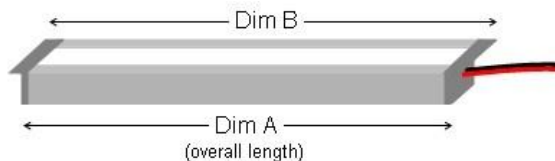
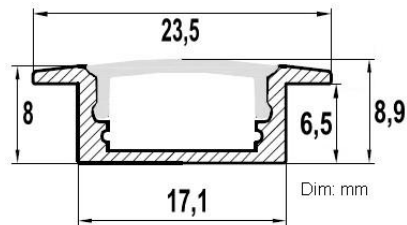
Bright environment suitable for work and storage. Ratio = $12/16 = 0,75$ ft of light per ft of trailer



6 linear ft

Not enough to work comfortably but enough to be able to read. Perfect for delivery trucks and general storage. Ratio = $6/16 = 0,375$ ft of light per ft of trailer

R8 Series

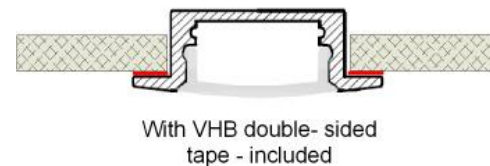


12V Series Vehicle

Technical Data

Series	Length (in)	Lens	Current draw @ 12,6vdc	Power (Watt)	Lumen output	Dim A (in/mm)	Dim B (in/mm)
R8	12	Clear Diffused	0,32 A	4 W	500 lm 375 lm	13,0 / 330	13,2 / 336
	24	Clear Diffused	0,64 A	8 W	1000 lm 750 lm	24,8 / 630	25,0 / 636
	36	Clear Diffused	0,96 A	12 W	1500 lm 1125 lm	36,6 / 930	36,9 / 936

- 1- Recessed installation using included double-sided tape (automotive VHB type).
- 2- Available in two wiring style: side or bottom lead wire
- 3- Great for ceilings and walls



R8 Series

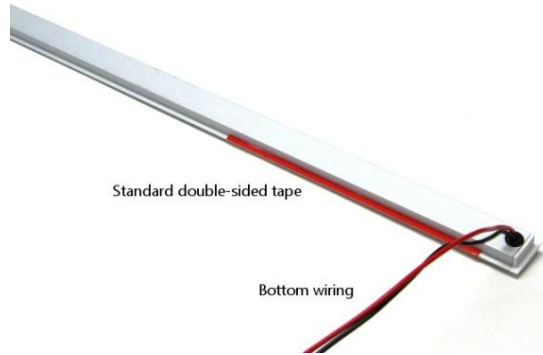
Applications notes

A- How does the lighting output of the R8 Series compare to fluorescent tubes usable light?

1 feet of R8 = 1 feet of a standard T8 fluorescent tube like the F32T8

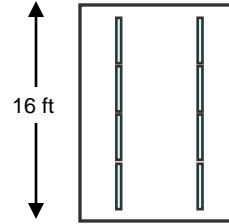
B- How many luminaires do I need to light a trailer?

Next we show 3 typical lighting layouts that will help you evaluate how many luminaires are required to obtain the desired level of lighting.



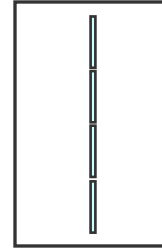
12V Series Vehicle

Typical lighting layouts for trailers



2 x 12 linear ft

Very bright environment suitable for precision work. Ratio = $24/16 = 1,5$ ft of light per ft of trailer



1 x 12 linear ft

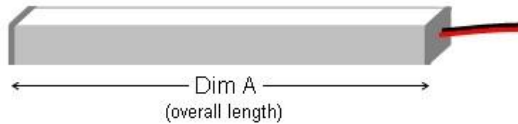
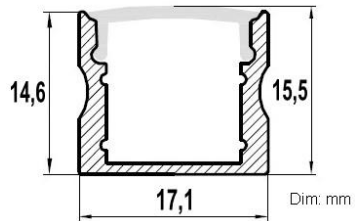
Bright environment suitable for work and storage. Ratio = $12/16 = 0,75$ ft of light per ft of trailer



6 linear ft

Not enough to work comfortably but enough to be able to read. Perfect for delivery trucks and general storage. Ratio = $6/16 = 0,375$ ft of light per ft of trailer

S15 Series

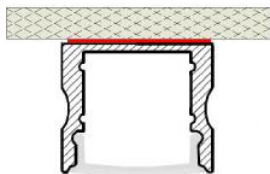


12V Series Vehicle

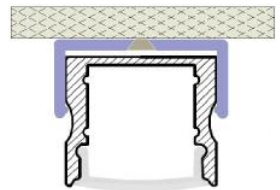
Technical Data

Series	Length (in)	Lens	Current draw @ 12,6vdc	Power (Watt)	Lumen output	Dim A (in/mm)	Dim B (in/mm)
S15	12	Clear Diffused	0,32 A	4 W	500 lm 375 lm	13,0 / 330	n/a
	24	Clear Diffused	0,64 A	8 W	1000 lm 750 lm	24,6 / 630	n/a
	36	Clear Diffused	0,96 A	12 W	1500 lm 1125 lm	36,6 / 930	n/a

Installation options



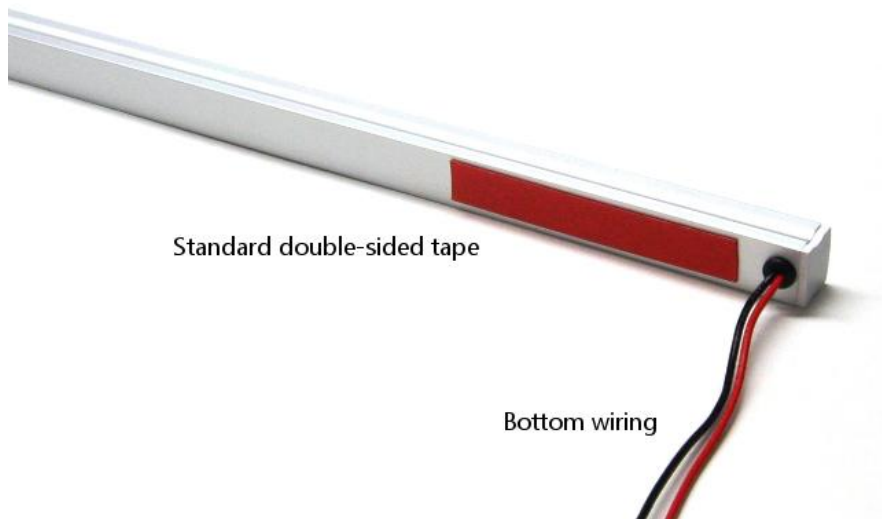
With VHB double-sided tape - included



With mounting clip p/n: MDB12PC - included



S15 Series



12V Series Vehicle

- 1- Surface mount installation using included double-sided tape (automotive VHB type) or included mounting clips.
- 2- Available in two wiring style: side or bottom lead wire
- 3- Great for ceilings, walls or under cabinets

Mounting clips: MDB12PC





S15 Series

Applications notes

A- How does the lighting output of the S15 Series compare to fluorescent tubes usable light?

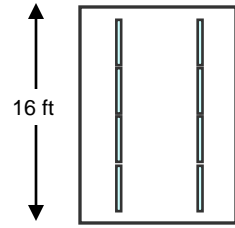
1 feet of S15 = 1 feet of a standard T8 fluorescent tube like the F32T8

B- How many luminaires do I need to light a trailer?

Next we show 3 typical lighting layouts that will help you evaluate how many luminaires are required to obtain the desired level of lighting.



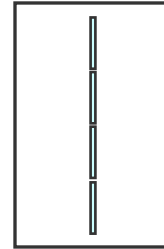
12V Series Vehicle



Typical lighting layouts for trailers

2 x 12 linear ft

Very bright environment suitable for precision work. Ratio = $24/16 = 1,5$ ft of light per ft of trailer



1 x 12 linear ft

Bright environment suitable for work and storage. Ratio = $12/16 = 0,75$ ft of light per ft of trailer



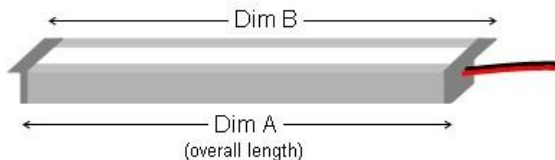
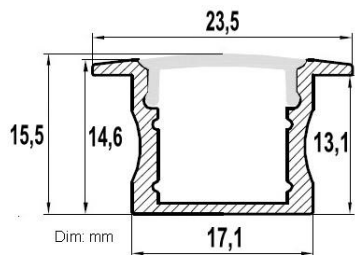
6 linear ft

Not enough to work comfortably but enough to be able to read. Perfect for delivery trucks and general storage. Ratio = $6/16 = 0,375$ ft of light per ft of trailer

R15 Series



Side wiring



12V Series Vehicle

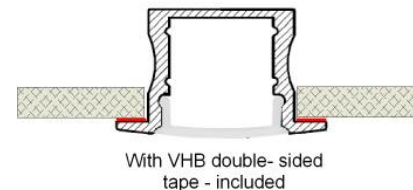
Technical Data

Series	Length (in)	Lens	Current draw @ 12,6vdc	Power (Watt)	Lumen output	Dim A (in/mm)	Dim B (in/mm)
R15	12	Clear Diffused	0,32 A	4 W	500 lm 375 lm	13,0 / 330	13,2 / 336
	24	Clear Diffused	0,64 A	8 W	1000 lm 750 lm	24,8 / 630	25,0 / 636
	36	Clear Diffused	0,96 A	12 W	1500 lm 1125 lm	36,6 / 930	36,9 / 936

1- Recessed installation using included double-sided tape (automotive VHB type).

2- Available in two wiring style: side or bottom lead wire

3- Great for ceilings and walls





R15 Series

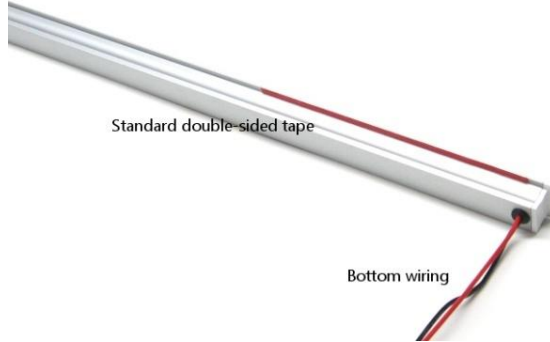
Applications notes

A- How does the lighting output of the R15 Series compare to fluorescent tubes usable light?

1 feet of R15 = 1 feet of a standard T8 fluorescent tube like the F32T8

B- How many luminaires do I need to light a trailer?

Next we show 3 typical lighting layouts that will help you evaluate how many luminaires are required to obtain the desired level of lighting.

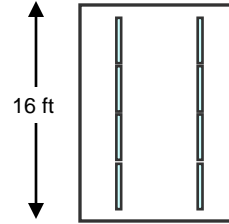


12V Series Vehicle

Typical lighting layouts for trailers

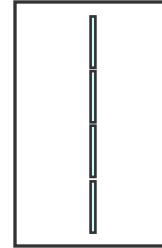
2 x 12 linear ft

Very bright environment suitable for precision work. Ratio = $24/16 = 1,5$ ft of light per ft of trailer



1 x 12 linear ft

Bright environment suitable for work and storage. Ratio = $12/16 = 0,75$ ft of light per ft of trailer

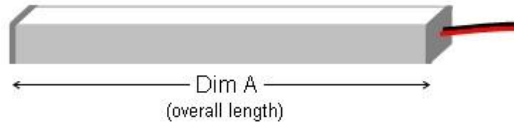
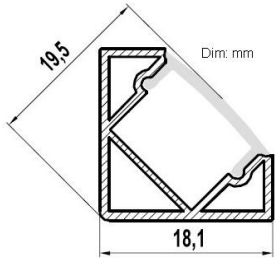


6 linear ft

Not enough to work comfortably but enough to be able to read. Perfect for delivery trucks and general storage. Ratio = $6/16 = 0,375$ ft of light per ft of trailer



C18 Series

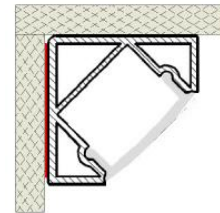


12V Series Vehicle

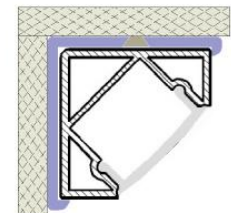
Technical Data

Series	Length (in)	Lens	Current draw @ 12,6vdc	Power (Watt)	Lumen output	Dim A (in/mm)	Dim B (in/mm)
C18	12	Clear Diffused	0,32 A	4 W	500 lm 375 lm	13,0 / 330	n/a
	24	Clear Diffused	0,64 A	8 W	1000 lm 750 lm	24,8 / 630	n/a
	36	Clear Diffused	0,96 A	12 W	1500 lm 1125 lm	36,6 / 930	n/a

Installation options



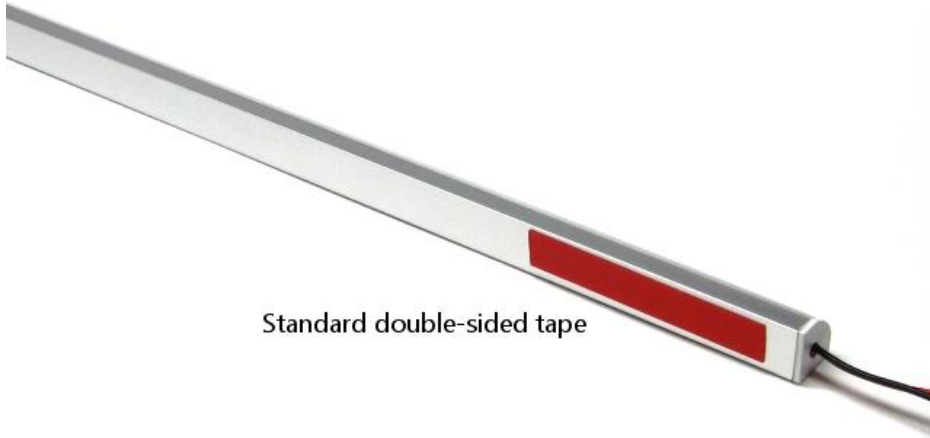
With VHB double- sided
tape - included



With mounting clip p/n:
MDB12PC45C - included



C18 Series



Standard double-sided tape

12V Series Vehicle

- 1- Surface mount or recessed installation using included double-sided tape (automotive VHB type) or included mounting clips.
- 2- Great for ceilings and walls corner or under cabinets





C18 Series

Applications notes

A- How does the lighting output of the C18 Series compare to fluorescent tubes usable light?

1 feet of C18 = 1 feet of a standard T8 fluorescent tube like the F32T8

B- How many luminaires do I need to light a trailer?

Next we show 3 typical lighting layouts that will help you evaluate how many luminaires are required to obtain the desired level of lighting.



12V Series Vehicle

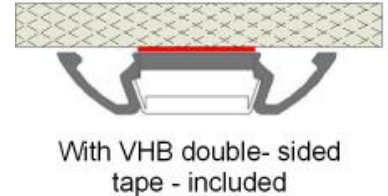
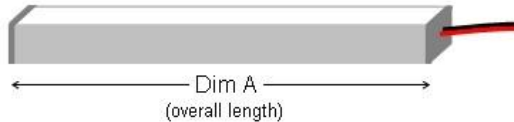
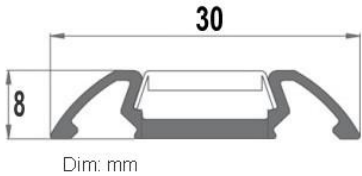
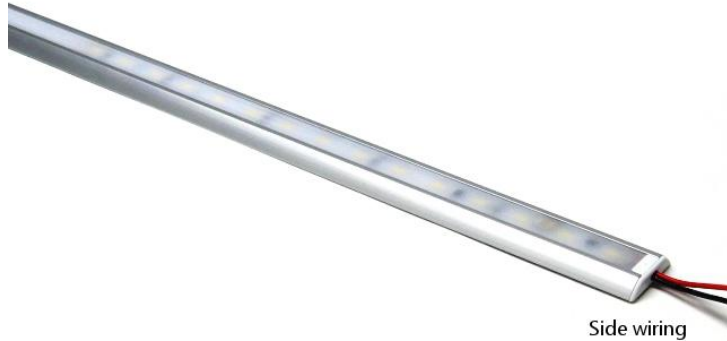
Typical lighting layouts for trailers

2 x 12 linear ft
Very bright environment suitable for precision work. Ratio = $24/16 = 1,5$ ft of light per ft of trailer

1 x 12 linear ft
Bright environment suitable for work and storage. Ratio = $12/16 = 0,75$ ft of light per ft of trailer

6 linear ft
Not enough to work comfortably but enough to be able to read. Perfect for delivery trucks and general storage. Ratio = $6/16 = 0,375$ ft of light per ft of trailer

S7X Series



- 1- Surface mount installation using included double-sided tape (automotive VHB type).
- 2- Available in two wiring style: side or bottom lead wire
- 3- Great for ceilings and walls

12V Series Vehicle

Technical Data

Series	Length (in)	Lens	Current draw @ 12,6vdc	Power (Watt)	Lumen output	Dim A (in/mm)	Dim B (in/mm)
S7X	12	Clear Diffused	0,42 A	5,3 W	640 lm 480 lm	13,0 / 330	n/a
	24	Clear Diffused	0,83 A	10,5 W	1280 lm 960 lm	24,8 / 630	n/a
	36	Clear Diffused	1,25 A	15,8 W	1920 lm 1440 Lm	36,6 / 930	n/a

S7X Series

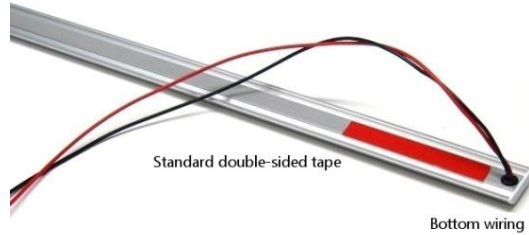
Applications notes

A- How does the lighting output of the S7X Series compare to fluorescent tubes usable light?

1 feet of S8 7X 1 feet of a standard T8 fluorescent tube like the F32T8

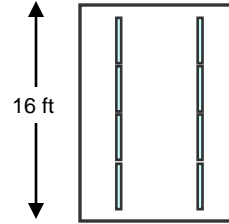
B- How many luminaires do I need to light a trailer?

Next we show 3 typical lighting layouts that will help you evaluate how many luminaires are required to obtain the desired level of lighting.



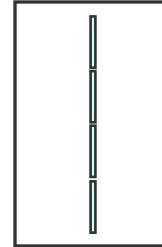
12V Series Vehicle

Typical lighting layouts for trailers



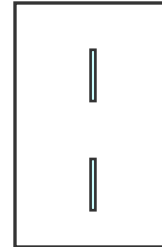
2 x 12 linear ft

Very bright environment suitable for precision work. Ratio = $24/16 = 1,5$ ft of light per ft of trailer



1 x 12 linear ft

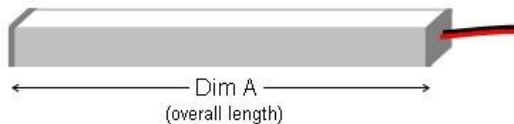
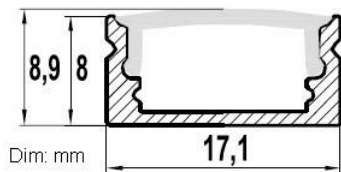
Bright environment suitable for work and storage. Ratio = $12/16 = 0,75$ ft of light per ft of trailer



6 linear ft

Not enough to work comfortably but enough to be able to read. Perfect for delivery trucks and general storage. Ratio = $6/16 = 0,375$ ft of light per ft of trailer

S8B Series



12V Series Vehicle

Technical Data

Series	Length (in)	Lens	Current draw @ 12,6vdc	Power (Watt)	Lumen output	Dim A (in/mm)	Dim B (in/mm)
S8B	12	Clear Diffused	0,32 A	4 W	500 lm 375 lm	13,0 / 330	n/a
	24	Clear Diffused	0,64 A	8 W	1000 lm 750 lm	24,8 / 630	n/a
	36	Clear Diffused	0,96 A	12 W	1500 lm 1125 lm	36,6 / 930	n/a





S8B Series



12V Series Vehicle

1- Installation on various circular or rectangular shape using the rubber belts and a tie-wrap. This is a flexible and robust solution.

2- Great for outdoor shelters, event tents, etc





S8B Series

Applications notes

A- How does the lighting output of the S8B Series compare to fluorescent tubes usable light?

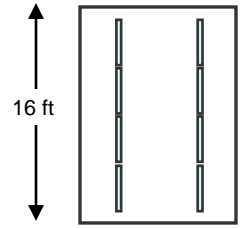
1 feet of S8B = 1 feet of a standard T8 fluorescent tube like the F32T8

B- How many luminaires do I need to light a trailer?

Next we show 3 typical lighting layouts that will help you evaluate how many luminaires are required to obtain the desired level of lighting.

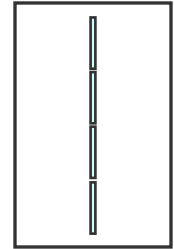


12V Series Vehicle

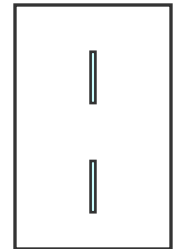


Typical lighting layouts for trailers

2 x 12 linear ft
Very bright environment suitable for precision work. Ratio = $24/16 = 1,5$ ft of light per ft of trailer



1 x 12 linear ft
Bright environment suitable for work and storage. Ratio = $12/16 = 0,75$ ft of light per ft of trailer



6 linear ft
Not enough to work comfortably but enough to be able to read. Perfect for delivery trucks and general storage. Ratio = $6/16 = 0,375$ ft of light per ft of trailer