



# MINILINE system

## MINILINE

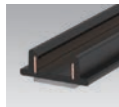
An unique mini track connecting system designed to perform multiple tasks in professional shelf display. Allowing mini spot, linear, undercabinet fixtures to be freely and easily combined in any location to get your ideal light distribute effect. Plug and play modules are designed for easy installation and maintenance, a great method to save labor cost. Slim and light weight design fixtures showing elegant temperament.




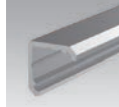
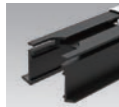
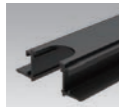
ETL Approved

# MINILINE

## MINILINE TRACK

	ML-RW-6-1000	Track
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## MINILINE PROFILE

	ML U Extrusion	Aluminum profile
	ML L Extrusion	Aluminum profile
	ML LIF	Trim recessed profile
	ML LIR	Trimless recessed profile

## MINILINE MODULES

	Series name	LED Consumption	Lumen
	Miniline-L	1.1W 4.2W 8W	110 (lm) 330 (lm) 660 (lm)
	Miniline-L-D	1.1W 4.2W 8W	110 (lm) 330 (lm) 660 (lm)
	Miniline-S	1.2W 2.7W	50-70 (lm) 50-70 (lm)
	Miniline-S-F	2.7W	210 (lm)
	Miniline-B	4W	200 (lm)
	Miniline-N	2.7W	50-70 (lm)

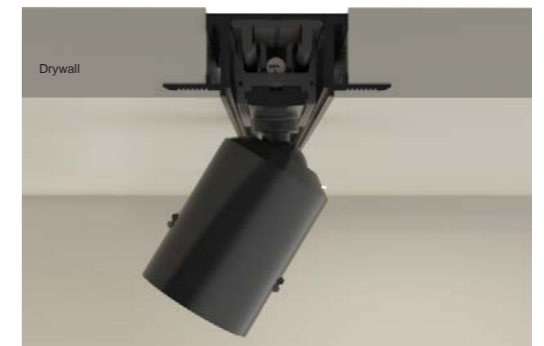


Strip lights



Other than panel module, strip light is also another method to create seamless lighting, use the aluminum profile as housing, strip light as light source as well as the creamy white cover to spread the light evenly.

Multiple modules



Multiple or different modules can be use for different lighting application spot module lights up individual object, panel module spreads the light evenly.

# MINILINE

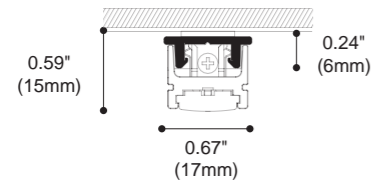


Colour Black ■

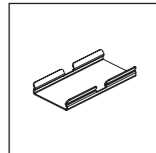


## INSTALLATION TRACK

Article number	L (mm)
ML-RW-6-1000	39.37"(1000mm)
ML-RW-6-2000	78.74"(2000mm)

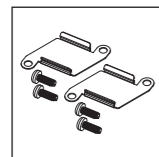


## Connection Clip

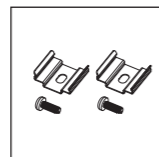
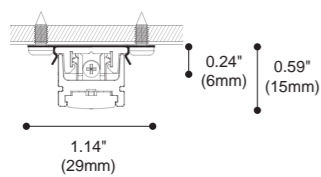


ML-NS-0590

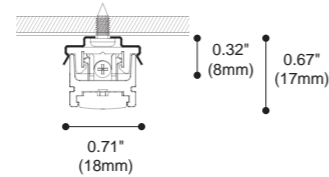
## Clips



ML-NS-0588  
Fixing clips for tracks (standard)



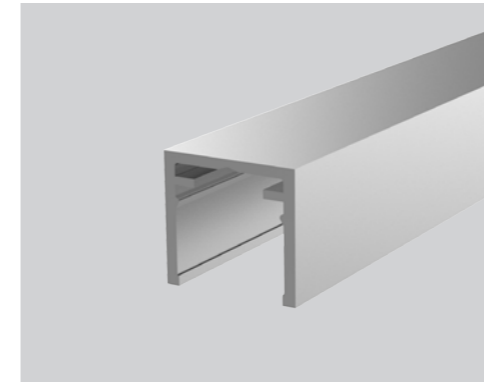
ML-NS-0589  
Fixing clips for tracks (optional)



# MINILINE

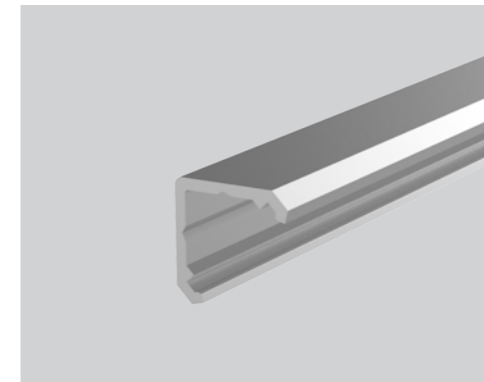
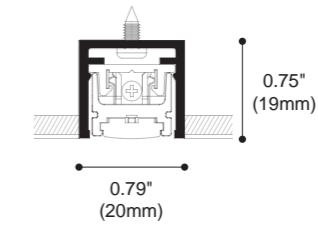
Alum. profile

Colour Black ■ Anodized Alum. □



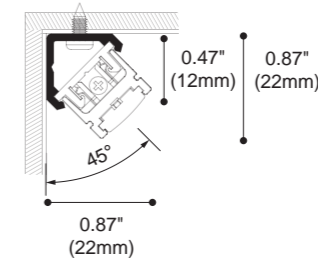
U Extrusion

Article number	L (mm)
ML-SHT-02-1000	39.37"(1000mm)



L Extrusion

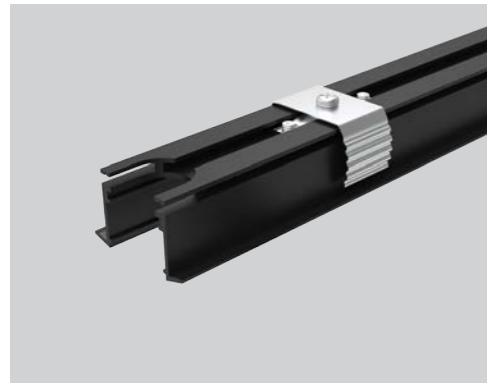
Article number	L (mm)
ML-SHT-03-1000	39.37"(1000mm)





# MINILINE

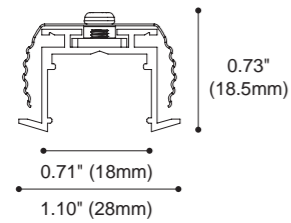
Colour Black ■



## INSTALLATION TRACK

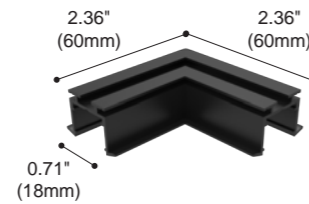
Article number	L (mm)
ML-LIF-01	39.37"(1000mm)
ML-LIF-02	78.74"(2000mm)
ML-LIF-04	7.21x7.21" (183x183mm)
ML-LIF-05	7.21x7.21" (183x183mm)

Trim recessed profile



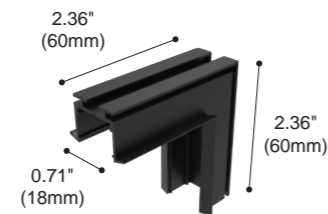
### ML-LIF-04

Horizontal corner  
For LIF profile



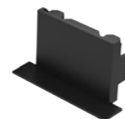
### ML-LIF-05

Vertical corner  
For LIF profile



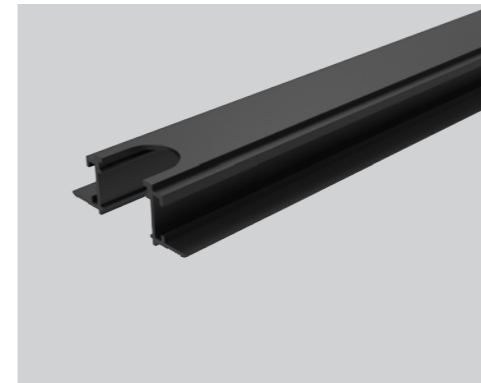
### ML-LIC-01

Trim end cap



# MINILINE

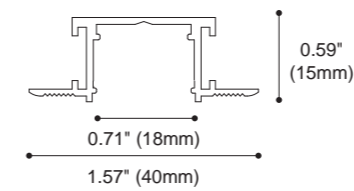
Colour Black ■



## INSTALLATION TRACK

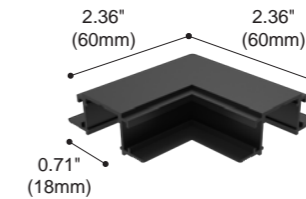
Article number	L (mm)
ML-LIR-01	39.37"(1000mm)
ML-LIR-02	78.74"(2000mm)
ML-LIR-04	7.21x7.21" (183x183mm)
ML-LIR-05	7.21x7.21" (183x183mm)

Trimless recessed profile



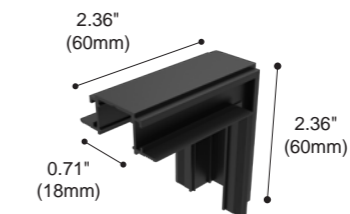
### ML-LIR-04

Trimless recessed  
Horizontal corner  
For LIR profile



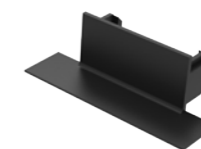
### ML-LIR-05

Trimless recessed  
Vertical corner  
For LIR profile



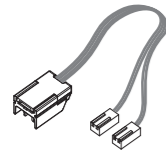
### ML-LIC-02

Trimless end cap

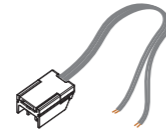


# MINILINE

Accessories specifications  
Power cord

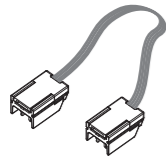


**ML-CP-MOL-27-200**  
Power cord with molex male plug  
Length: 78.74"(200cm)



**ML-CP-27-200**  
Power Cord Bare End  
Length: 78.74"(200cm)

## Connection cord



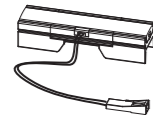
**ML-CS-27-15**  
Connection cord Length:5.91"(15cm)  
**ML-CS-27-30**  
Connection cord Length:11.81"(30cm)  
**ML-CS-27-60**  
Connection cord Length:23.62"(60cm)

## Circuit connector

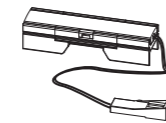


**ML-CSC-27**  
Circuit connector

## Power feed

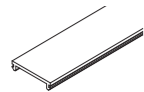


**ML-CSP-27-60 (Sidefeed)**  
I/P: 24VDC, O/P: 24VDC  
Connection cord with top female plug  
Length: 23.62"(60cm)  
  
50W Max. Connection



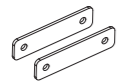
**ML-CSP-A-27-60 (Endfeed)**  
I/P: 24VDC, O/P: 24VDC  
Connection cord with top female plug  
Length: 23.62"(60cm)  
  
50W Max. Connection

## Cover



**ML-LIE-01**  
Cover (Milky / Black )  
Length : 78.74"(200cm)

## Reinforced joint



**ML-LIC-03**  
Reinforced Joint  
for LIF & LIR extrusion







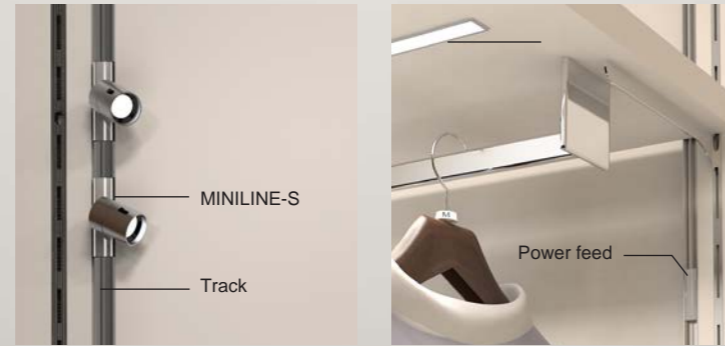






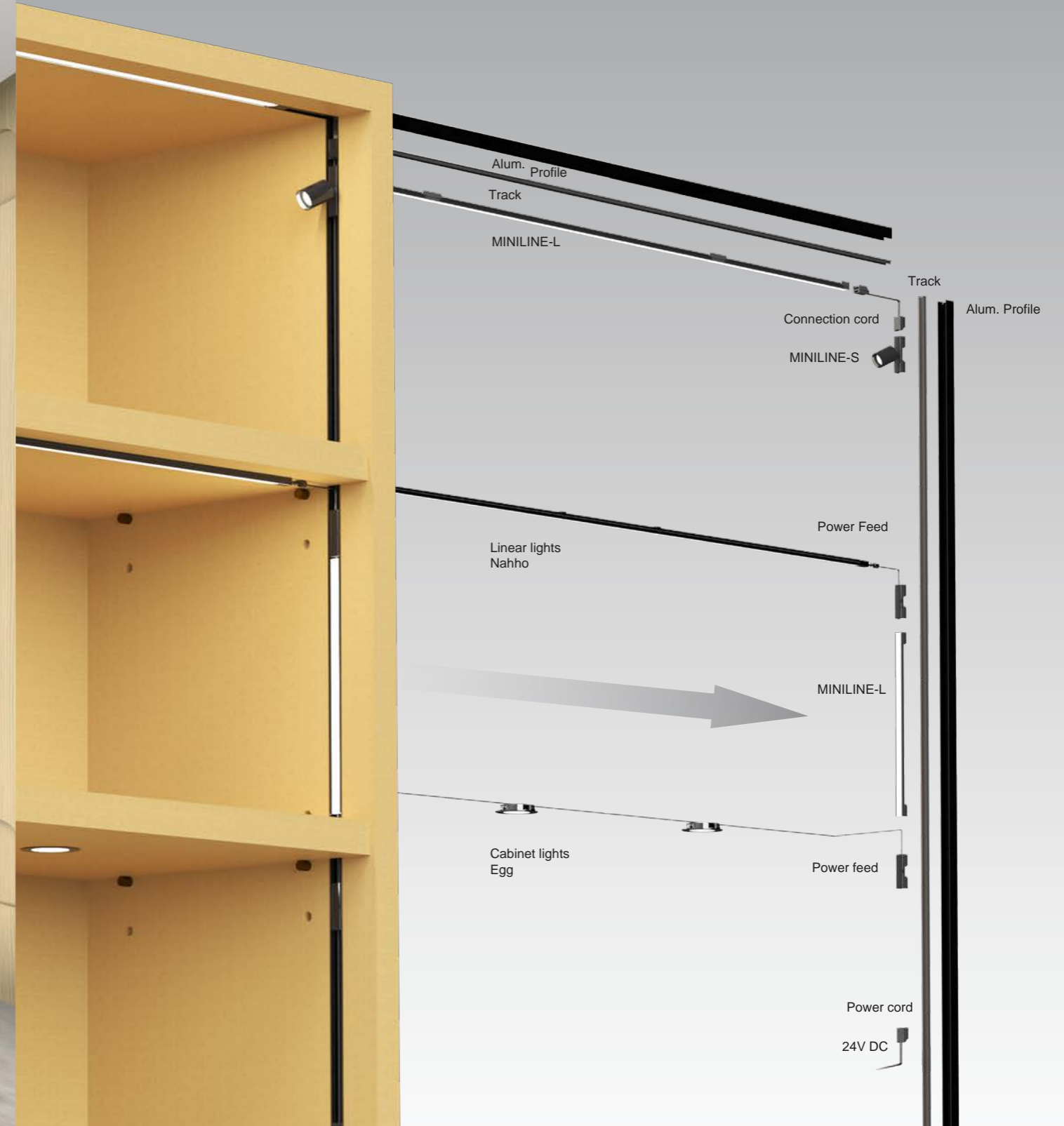
## MINILINE

Suitable for display shelves, and / or with movable laminates, or small area lighting. Tracks can be installed inside the extruded profile, making installation easy. Power feed can be added for other 24V DC fixtures not installed on the track.



## MINILINE

Exploded illustration below to demonstrate the tracks can be connected via connection cord. Power feed can also be used for fixtures installed away from the track.



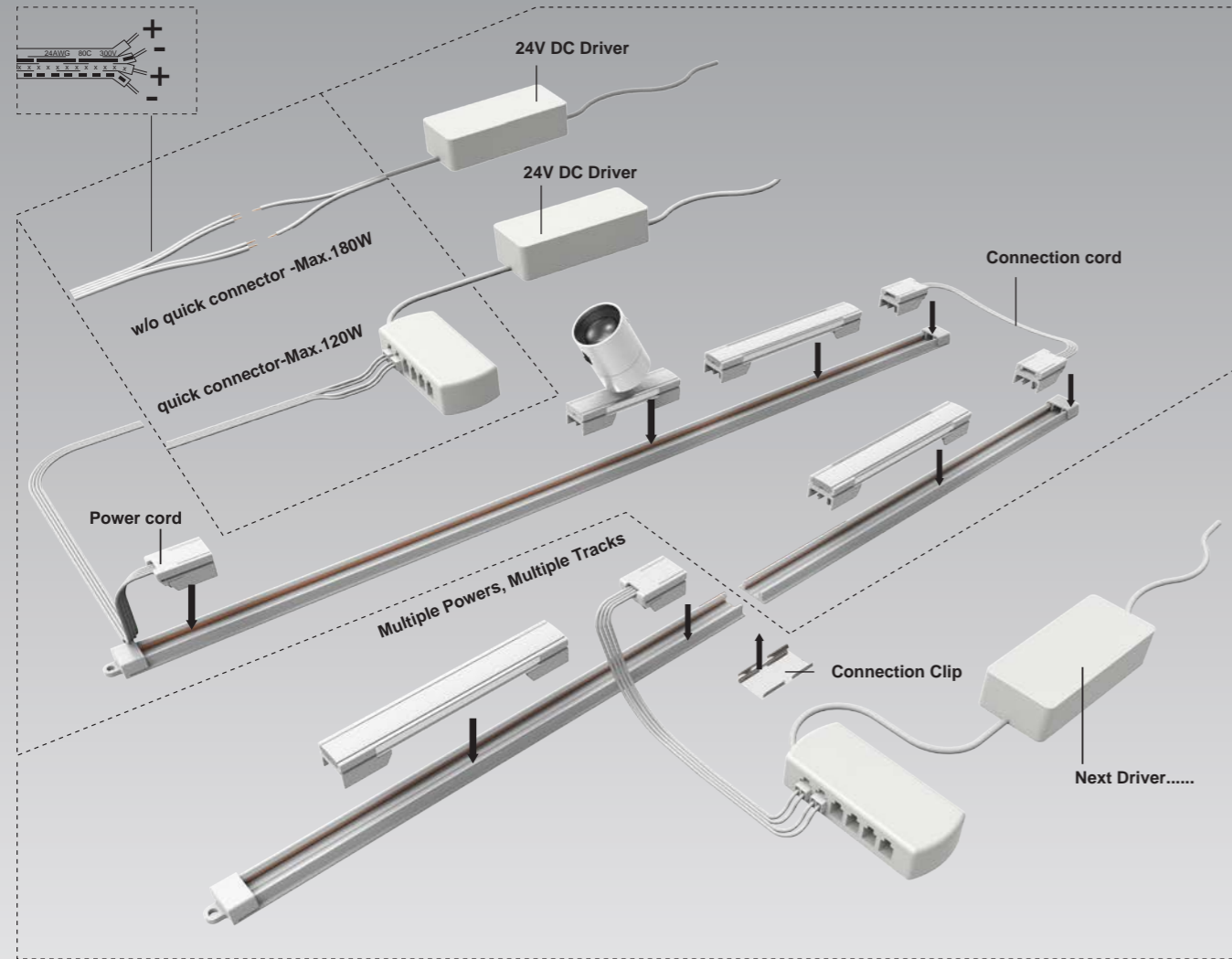
## MINILINE - INSTALLATION FOR CE APPLICATION

Max wattage connection is suggested to be 80% of the driver's max. output wattage

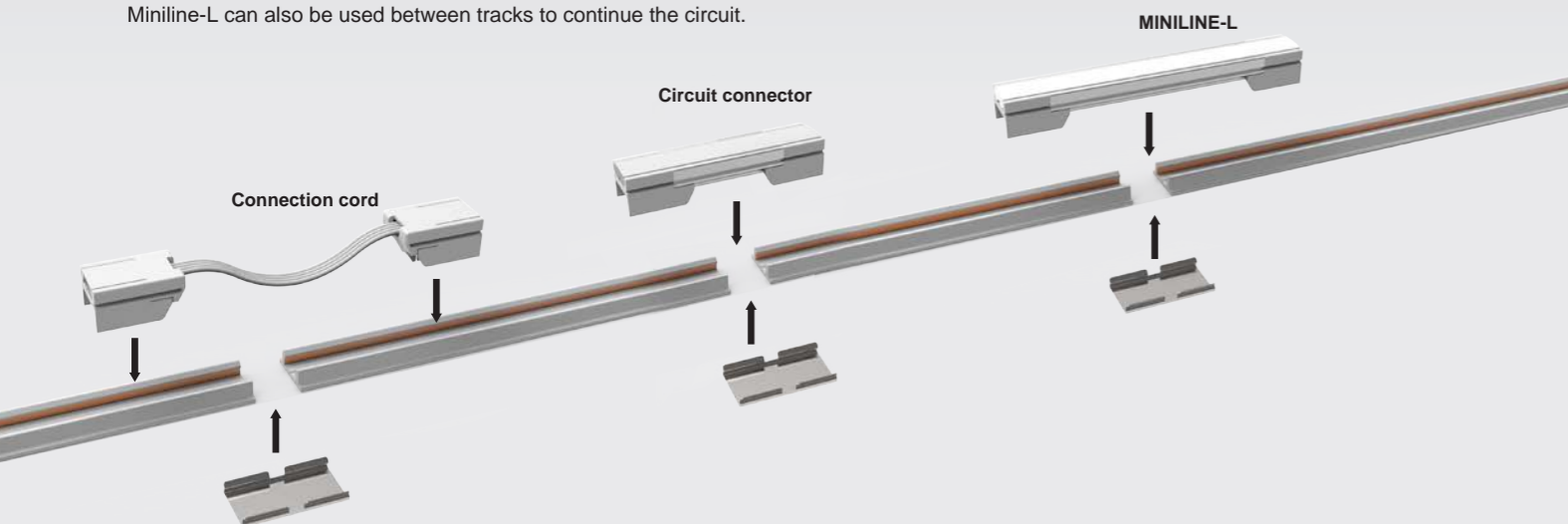
When the max. wattage exceeds the driver's output wattage, new driver and track is needed.

without quick connector - Max. 180W

quick connector - Max. 120W




Miniline-L can also be used between tracks to continue the circuit.

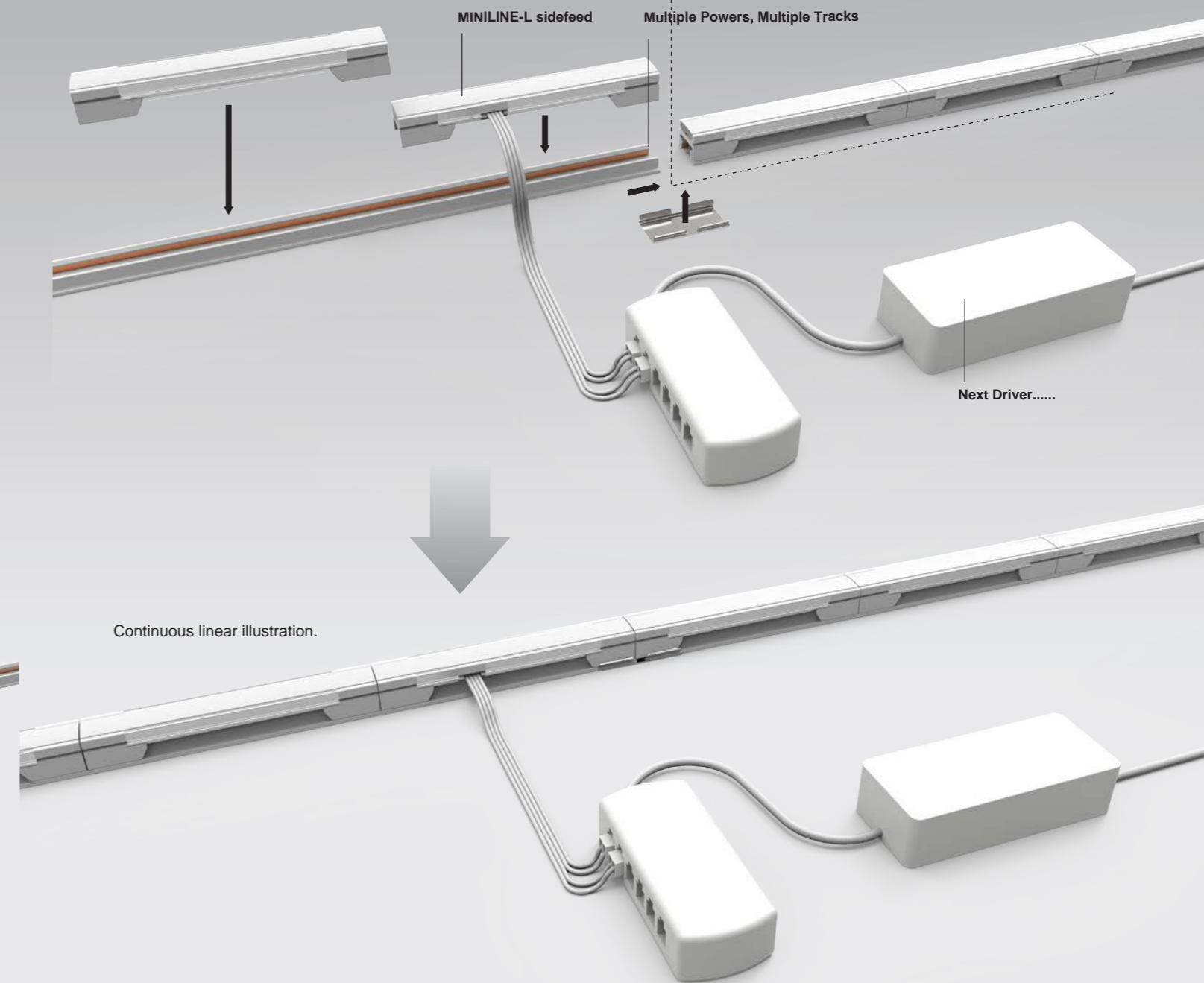


## MINILINE - INSTALLATION FOR UL/ETL APPLICATION

When maximum wattage has been reached, a sidefeed, new track and driver is needed to supply more power for continuous connection. Miniline-L sidefeed can be used on one end of the new track for continuous linear light.

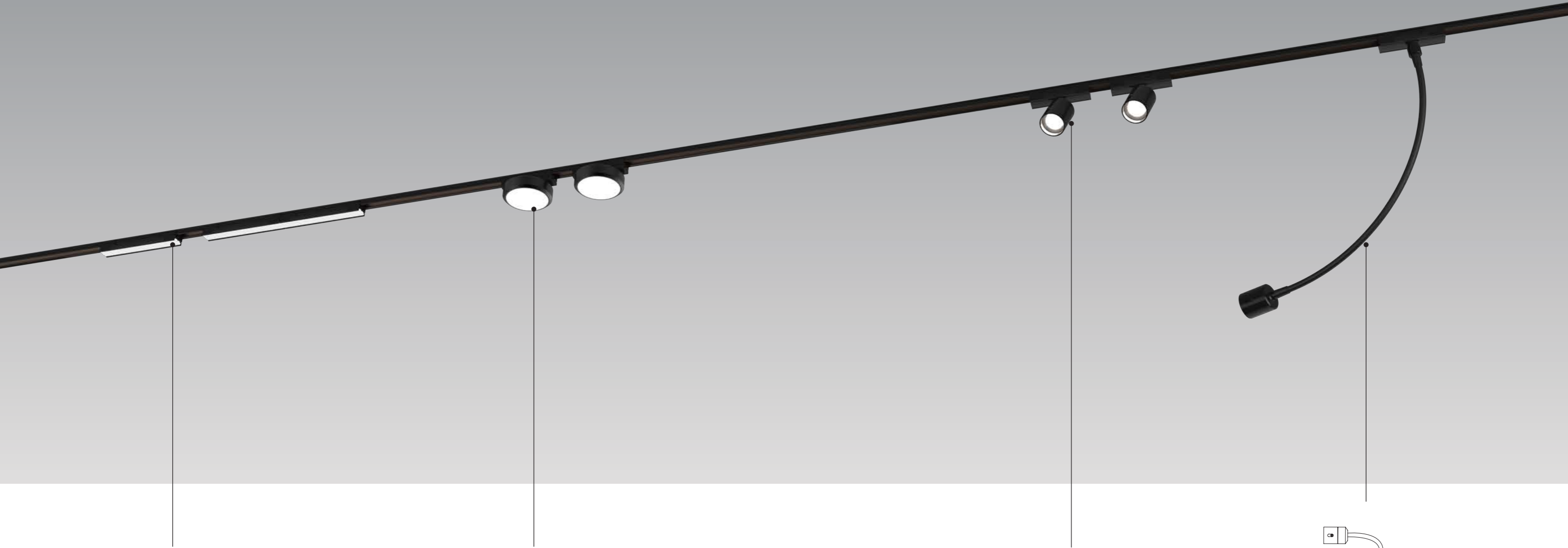
 Electric Circuit Installation:

1. Max length of track linkable per loop is 3M , and the max cable length between driver and power in is 2M.
2. Dimming modules are compatible to PWM output dimming driver only, PWM frequency  $\leq .47\text{KHz}$ .
3. To use drivers not on recommended list , it require compatibility test before installation.
4. Voitage drop cannot below 22VDC (measure at the end of the loop), under 22VDC per loop might cause abnormal.
5. Calculating max wattage connection, save 20% buffer for Miniline-L(-S)(-D)(-B) and 25% buffer for other modules.
6. Use driver not in the recommended list might cause module flickering, unstable dimming and/or noise, even causing module failure.
7. When installation tracks, to see if the voltage is below 22VDC, also check the cleanliness of the copper track, copper track can be cleaned using alcohol.



## MINILINE

Miniline modules are designed to be clipped onto the track, tool-free, convenient for installation & maintenance.



### Miniline-L

Seamless design to make continuous lighting. Plug and play feature to repositioning the fixtures anywhere along the track.



### Miniline-L-D

Seamless design to make continuous lighting. Plug and play feature to repositioning the fixtures anywhere along the track.



### Miniline-B

Round module with dots-free effect

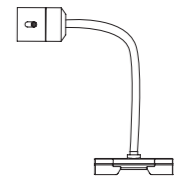


### Miniline-S

Available in 1.2W and 2.7W, changing beam angle by adjusting the lever.

### Miniline-S-F

2.7W spot light with higher output.



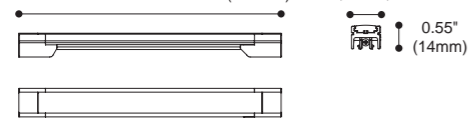
### Miniline-N

Bendable tube provides more precision spot location. changing beam angle by adjusting the lever.

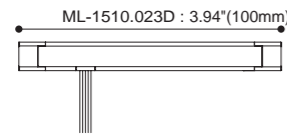


# MINILINE-L

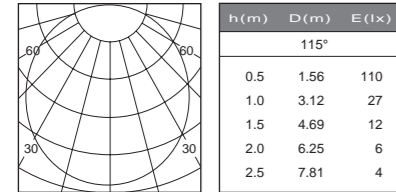
ML-1510.023A : 3.94"(100mm)  
 ML-1510.023B : 11.81"(300mm)  
 ML-1510.023C : 23.62"(600mm)



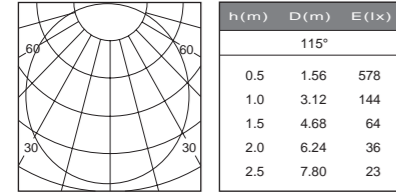
Sidefeed



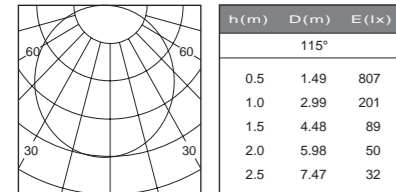
ML-1510.023A.3BTA



ML-1510.023B.3BTA



ML-1510.023C.3BTA



Colours   
 Black Anodized Alum.

Product performance

Article number	LED Consumption	Voltage	System Lumen	Beam Angle	LED Type	LED q'ty	CCT/CRI
ML-1510.023A	1.1 W	24V DC	110 (lm)	115°	SMD	14	30/80+
ML-1510.023B	4.2 W	24V DC	330 (lm)	115°	SMD	42	30/80+
ML-1510.023C	8.0 W	24V DC	660 (lm)	115°	SMD	84	30/80+

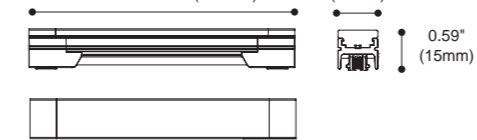
Sidefeed

ML-1510.023D	1.1 W	24V DC	110 (lm)	115°	SMD	14	30/80+
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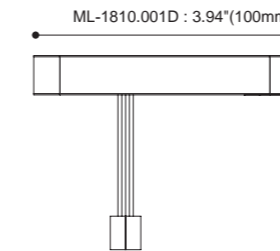


# MINILINE-L-D

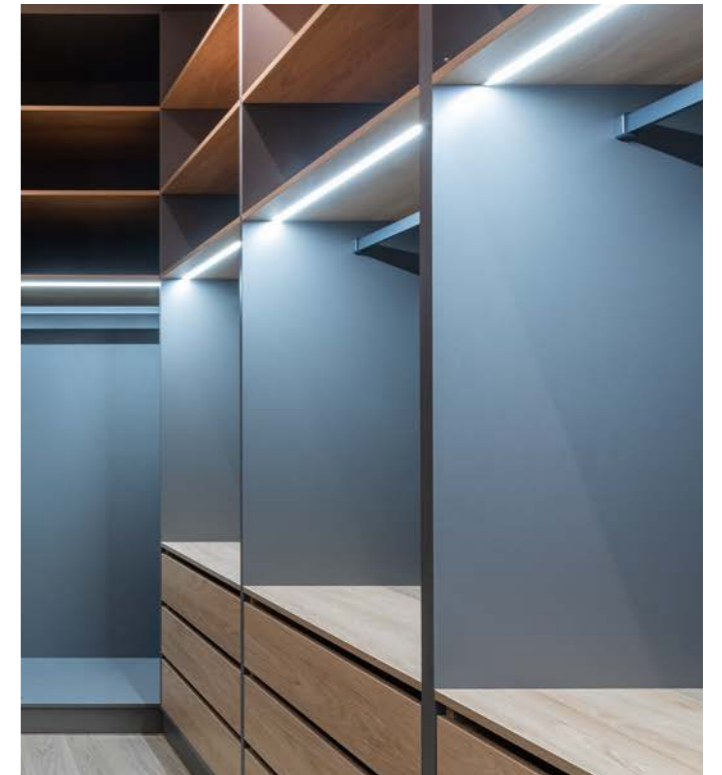
ML-1810.001A : 3.94"(100mm)  
 ML-1810.001B : 11.81"(300mm)  
 ML-1810.001C : 23.62"(600mm)



Sidefeed



dot-free, seamless design



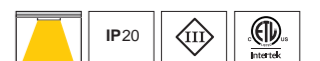
Colours   
 Black Anodized Alum.

Product performance

Article number	LED Consumption	Voltage	System Lumen	Beam Angle	LED Type	LED q'ty	CCT/CRI
ML-1810.001A	1.1 W	24V DC	110 (lm)	130°	SMD	21	30/80+
ML-1810.001B	4.2 W	24V DC	330 (lm)	130°	SMD	63	30/80+
ML-1810.001C	8.0 W	24V DC	660 (lm)	130°	SMD	126	30/80+

Sidefeed

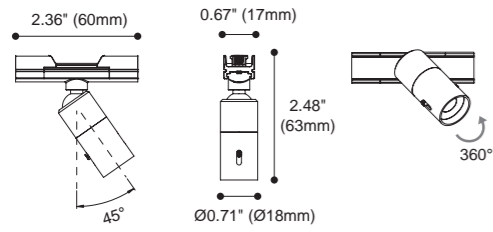
ML-1810.001D	1.1 W	24V DC	110 (lm)	130°	SMD	21	30/80+
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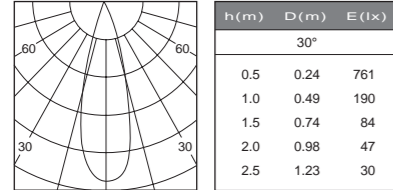


# MINILINE-S

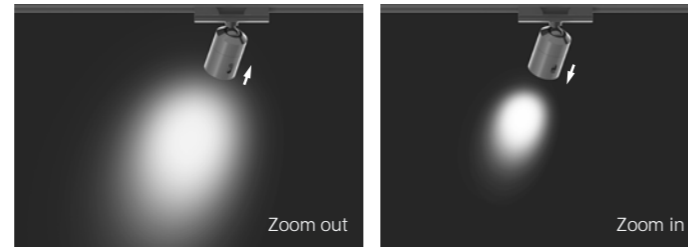
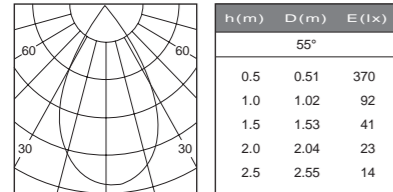
ML-1619.200



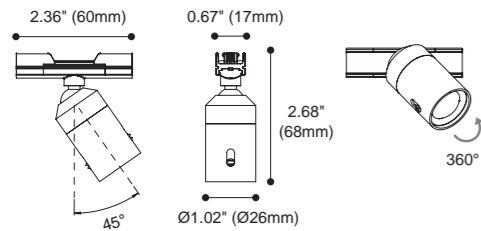
Zoom in 30°



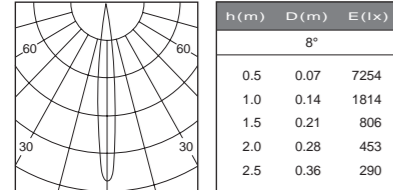
Zoom out 55°



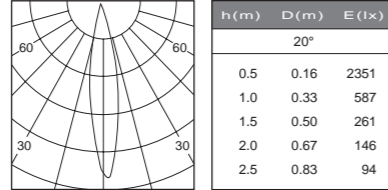
ML-1619.205



Zoom in 8°



Zoom out 20°



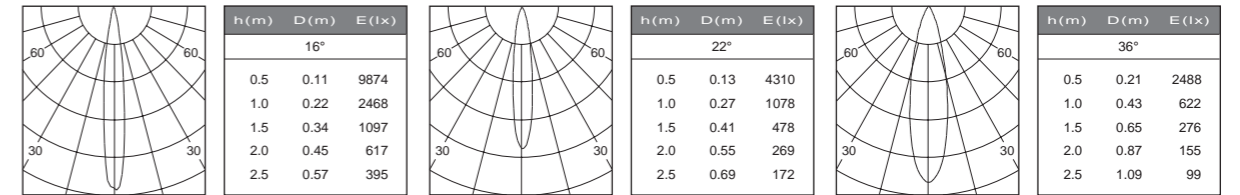
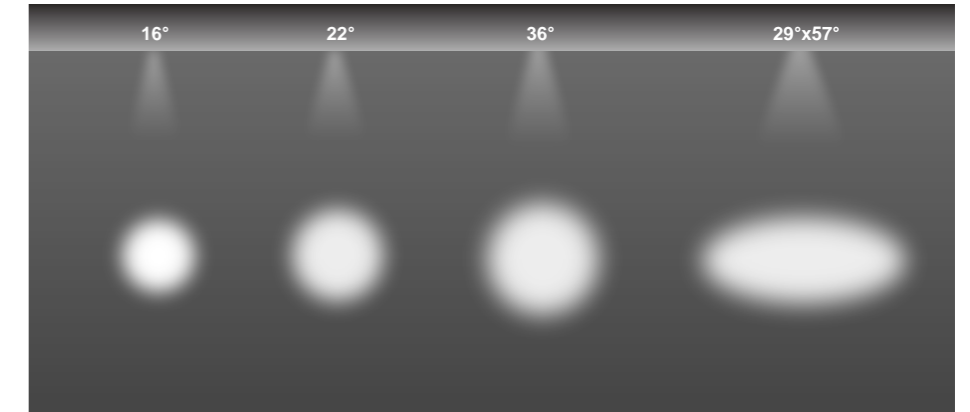
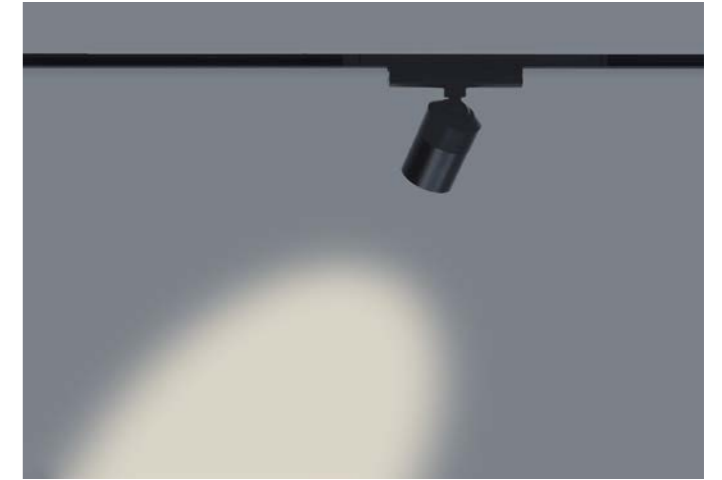
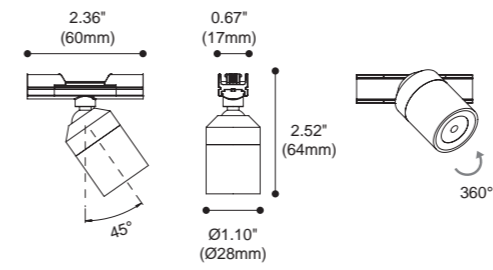
Colours   
Black Anodized Alum.

Product performance

Article Number	LED Consumption	Voltage	System Lumen	Beam Angle	LED Type	LED q'ty	CCT/CRI
ML-1619.200	1.2 W	24V DC	50~70 (lm)	30°-55°	High Power	1	30/80+
ML-1619.205	2.7 W	24V DC	50~70 (lm)	8°-20°	High Power	1	30/80+



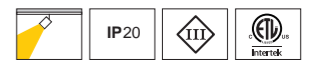
# MINILINE-S-F



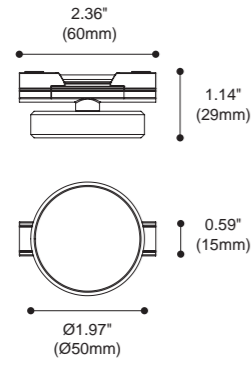
Colours   
Black Anodized Alum.

Product performance

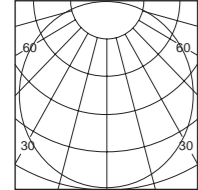
Article Number	LED Consumption	Voltage	System Lumen	Beam Angle	LED Type	LED q'ty	CCT/CRI
ML-1719.209	2.7 W	24V DC	210 (lm)	16°/ 22°/ 36°/ 29°x57°	High Power	1	30/80+



# MINILINE-B



ML-1768.100.3BTA



h (m)	D (m)	E (lx)
		113°
0.5	1.53	259
1.0	3.07	64
1.5	4.61	28
2.0	6.15	16
2.5	7.69	10

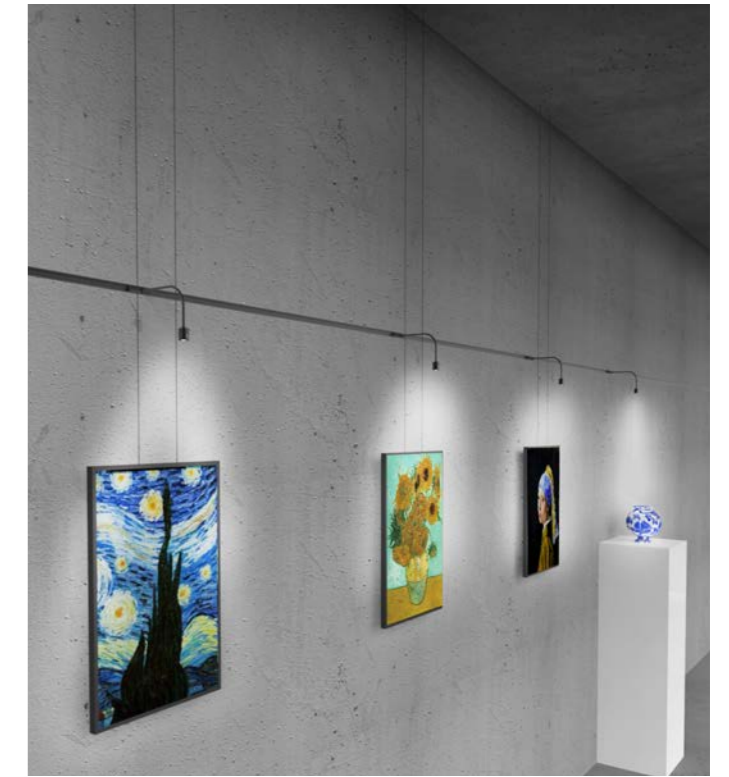
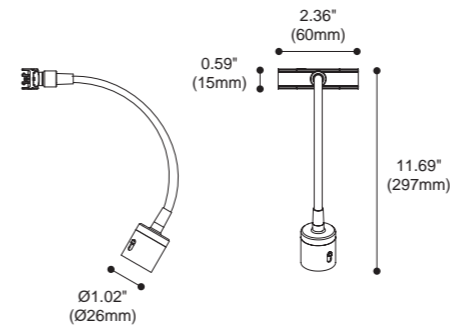
Colours  Black  Anodized Alum.

Product performance

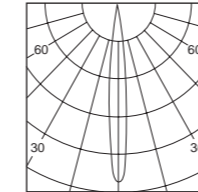
Article Number	LED Consumption	Voltage	System Lumen	Beam Angle	LED Type	LED q'ty	CCT/CRI
ML-1768.100	4 W	24V DC	200 (lm)	113°	SMD	48	30/80+



# MINILINE-N

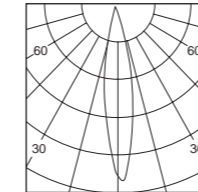


Zoom in 8°



h (m)	D (m)	E (lx)
		8°
0.5	0.07	7254
1.0	0.14	1814
1.5	0.21	806
2.0	0.28	453
2.5	0.36	290

Zoom out 20°



h (m)	D (m)	E (lx)
		20°
0.5	0.16	2351
1.0	0.33	587
1.5	0.50	261
2.0	0.67	146
2.5	0.83	94

Colours  Black

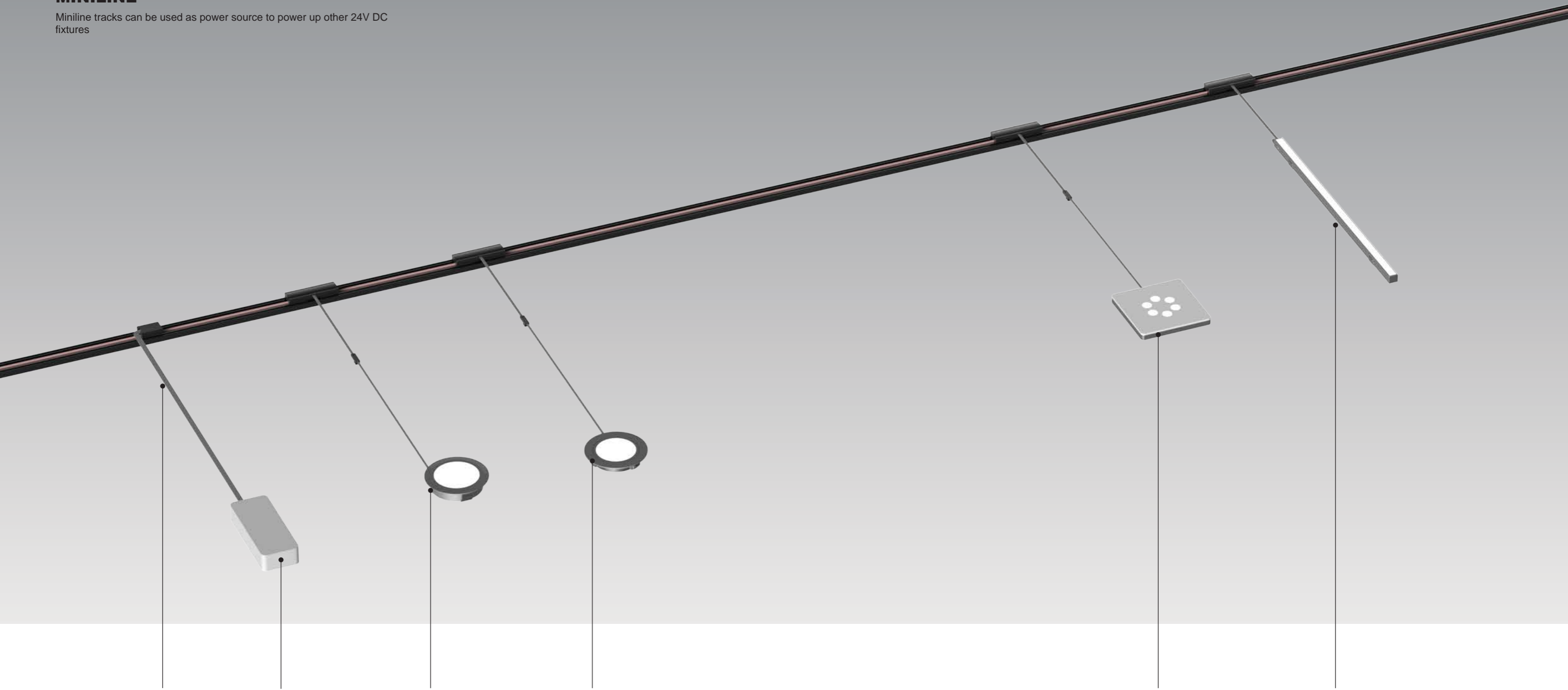
Product performance

Article Number	LED Consumption	Voltage	System Lumen	Beam Angle	LED Type	LED q'ty	CCT/CRI
ML-1617.502	2.7 W	24V DC	50-70 (lm)	8°-20°	High Power	1	30/80+



# MINILINE

Miniline tracks can be used as power source to power up other 24V DC fixtures



Power Cord connects to 24V DC driver



Driver 24V DC



Egg 4W  
ALU housing helps heat dissipation



Akis 1.7W  
Plastic housing for economical solution



Tobey  
Smooth plastic with black or white finish.



Nahho  
Multiple length available, also come with different diffusers.