

xLED

xLED-SEO-8030 Pin Fin Heat Sink  $\Phi$ 80mm for Seoul

Features VS Benefits

- \* The xLED-SEO-8030 Seoul Pin Fin LED Heat Sinks are specifically designed for luminaires using the Seoul LED engines.
- \* Mechanical compatibility with direct mounting of the LED engines to the LED cooler and thermal performance matching the lumen packages.
- \* For spotlight and downlight designs from 1,000 to 2,600 lumen.
- \* Thermal resistance range Rth 3.13°C/W.
- \* Modular design with mounting holes foreseen for direct mounting of Seoul COB series and AC Modules.
- \* Diameter 80.0mm - standard height 30.0mm, Other heights on request.
- \* Forged from highly conductive aluminum.



Zhaga LED engine and radiator assembly is a unified future international standardization

- \* Below you find an overview of Seoul COB's and LED modules which standard fit on the Pin Fin LED Heat Sinks.
- \* In this way mechanical after work and related costs can be avoided, and lighting designers can standardize their designs on a limited number of LED Pin Fin LED Heat Sink.



**Seoul LED Modules directly Mounting Options**

**Seoul COB Series, Size 28x28mm.**

SDW04F1C;	SDW84F1C;
SDW05F1C;	SDW85F1C;
SDW06F1C;	SDW86F1C;
SAW822xxx;	SDW94F1C;
SAW922xxx;	

With the Zhaga Book 3 holders for the green indicator marks.  
 BJB holder: 47.319.2030.50; AAG.STUCCHI: 8102-G2  
 Without the holders for the blue indicator marks.  
 Direct mounting with machine screws M3x6.5mm.

**Seoul COB Series, Size 19x19mm.**

SDW02F1C;	SDW82F1C;
SDW03F1C;	SDW83F1C;
SDW92F1C;	

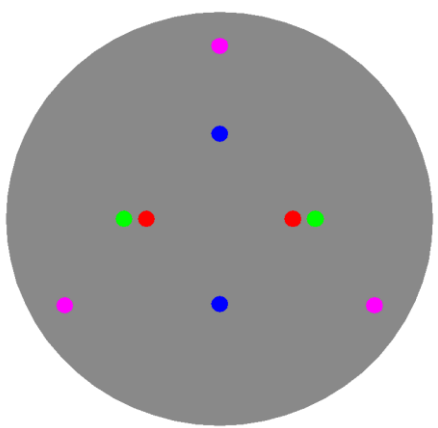
With the Zhaga Book 3 holders for the green indicator marks.  
 BJB holder: 47.319.2021.50; AAG.STUCCHI: 8101-G2  
 Without the holders for the red indicator marks.  
 Direct mounting with machine screws M3x6.5mm.

With the LEDiL products:  
 Olivia series: FN14637-S; FN14828-M;  
 Ronda series: FN15xxx-xx;

**AC LED Modules, Size  $\Phi$ 70mm.**

SMJD-2C16W4PD;	SMJD-2D16W4PD;
SMJD-2C16W4PE;	SMJD-2D16W4PE;
SMJD-2D12W4PD;	SMJD-3D12W4xx;
SMJD-2D12W4PE;	SMJD-3D16W4xx;

Direct mounting with 3 screws M2.5x6.5mm.  
 Pink indicator marks.



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**Mounting Options and Drawings & Dimensions**

Example: xLED-SEO-8030-B-1,2

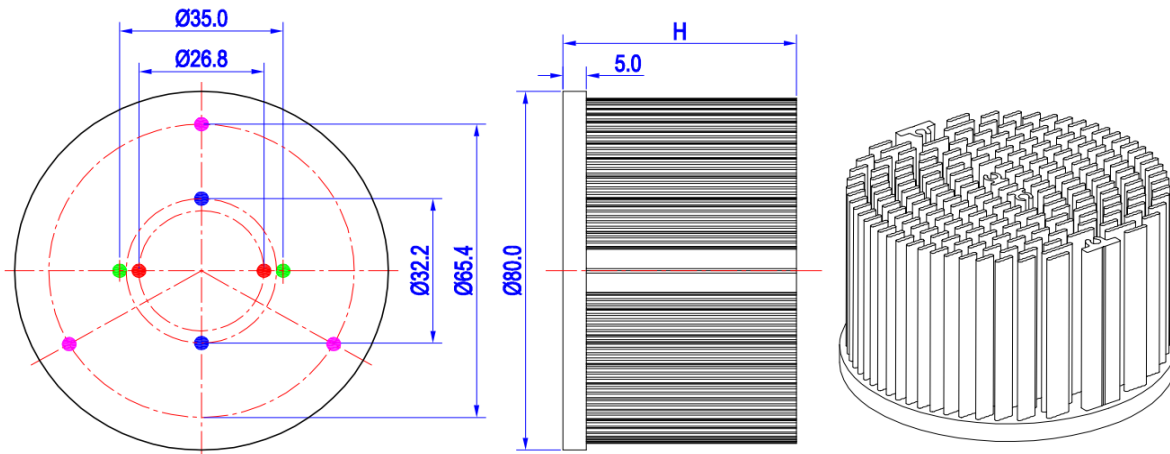
Example: xLED-SEO-80 **1** - **2** - **3**

- 1** Height (mm)
- 2** Anodising Color
  - B-Black
  - C-Clear
  - Z-Custom
- 3** Mounting Options - see graphics for details Combinations available  
 Ex.order code - 12  
 means option 1 and 2 combined

**Notes:**

- Mentioned models are an extraction of full product range.
- For specific mechanical adaptations please contact MingfaTech.
- MingfaTech reserves the right to change products or specifications without prior notice.

MOUNTING OPTION	Module type	Holder NO.	LEDiL products		THREAD	THREAD DEPTH	THREAD HOLE DISTANCE
			Olivia series	Ronda series			
1	COB Size 19x19mm	/	FN14637-S; FN14828-M;	FN15xxx-xx;	M3	6.5mm	26.8mm/ 2-@180°
2	COB Size 28x28mm	/	/	/	M3	6.5mm	32.2mm/ 2-@180°
3		BJB Holder 47.319.2030.50 AAG.STUCCHI 8102-G2		/	/	M3	6.5mm
	COB Size 19x19mm	BJB Holder 47.319.2021.50 AAG.STUCCHI 8101-G2	FN14637-S; FN14828-M;	FN15xxx-xx;			
4	AC Module	/	/	/	M3	6.5mm	65.4mm/ 3-@120°



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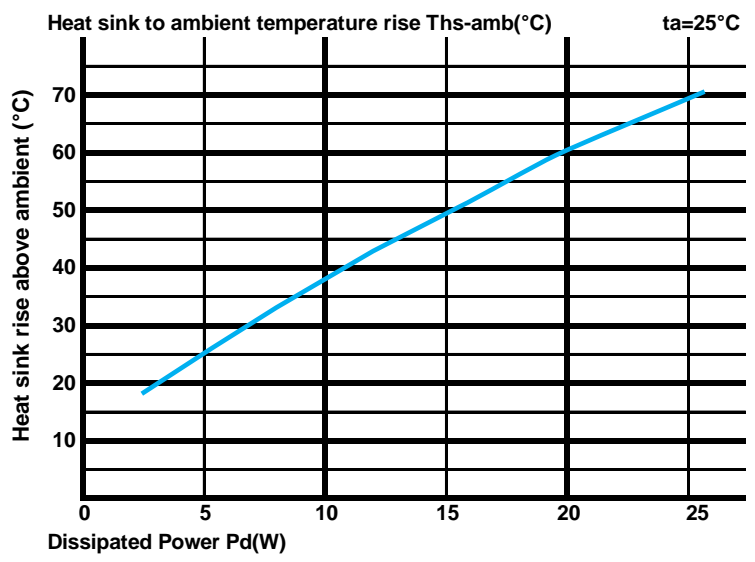
The product data table

	Model No.	xLED-SEO-8030
	Heatsink Size	$\Phi$ 80xH30mm
	Heatsink Material	AL1070
	Finish	Black Anodized
	Weight (g)	140.0
	Dissipated power (T <sub>hs-amb</sub> ,50°C)	16.0 (W)
	Cooling surface area (mm <sup>2</sup> )	72123
	Thermal Resistance (R <sub>hs-amb</sub> )	3.13 (°C/W)

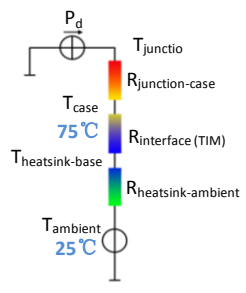
The thermal data table

\* Please be aware the dissipated power Pd is not the same as the electrical power Pe of a LED module.  
 \*To calculate the dissipated power please use the following formula: Pd = Pe x (1-ηL).  
 Pd - Dissipated power ; Pe - Electrical power ; ηL = Light efficiency of the LED module;

Dissipated Power Pd(W)	Heat sink to ambient thermal resistance R <sub>hs-amb</sub> (°C/W)	
	xLED-SEO-8030	
5.0	5.00	25.0
10.0	3.80	38.0
15.0	3.27	49.0
20.0	3.00	60.0
25.0	2.76	69.0



\*The aluminum substrate side of the package outer shell is thermally connected to the heat sink via TIM (Thermal interface material).  
 MingFa recommends the use of a high thermal conductive interface between the LED module and the LED cooler.  
 Either thermal grease, A thermal pad or a phase change thermal pad thickness 0.1-0.15mm is recommended.



\*Thermal resistance is a heat property and a measurement of a temperature difference by which an object or material resists a heat flow.  
 Geometric shapes are different, the thermal resistance is different. Formula:  $\theta = (T_{hs} - T_a) / P_d$   
 $\theta$  - Thermal Resistance [°C/W] ; T<sub>hs</sub> - Heatsink temperature ; T<sub>a</sub> - Ambient temperature ;  
 \*The thermal resistance between the junction section of the light-emitting diode and the aluminum substrate side of the package outer shell is R<sub>junction-case</sub>, the thermal resistance of the TIM outside the package is R<sub>interface (TIM)</sub> [°C/W], the thermal resistance with the heat sink is R<sub>heatsink-ambient</sub> [°C/W], and the ambient temperature is T<sub>ambient</sub> [°C].  
 \*Thermal resistances outside the package R<sub>interface (TIM)</sub> and R<sub>heatsink-ambient</sub> can be integrated into the thermal resistance R<sub>case-ambient</sub> at this point. Thus, the following formula is also used:  
 $T_{junction} = (R_{junction-case} + R_{case-ambient}) \cdot P_d + T_{ambient}$