

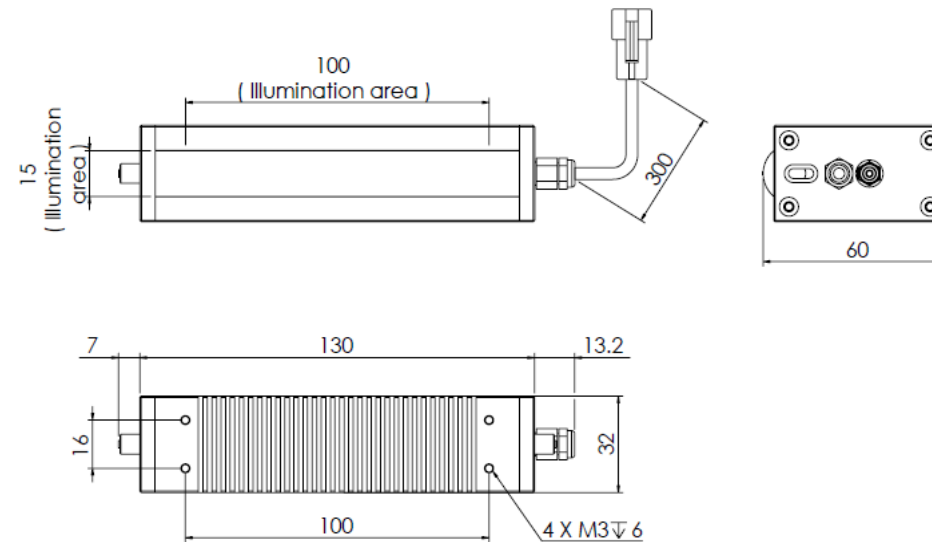
High Brightness Line Light

 **FHLN-Si100**

Lighting Picture



Lighting Dimension



Mechanical Information	
Casing Material	Aluminium + Acrylic
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	460g
Lighting Dimension, WxLxH	32.0 x 130.0 x 60.0mm
IP Rating	IP 50

Unit in mm



FHLN-Si100

Asia Office: www.falcon-illumination.com, Europe Office: www.falcon-illumination.de
Form No: SOP-7.3.3 / Rev 1.6 / Date: 2020-09-01


Optical Information			
Led Color	RED (R24)	WHITE (W)	InfraRed (IR24)
Wavelength	626nm	xy=(0.31,0.32)	850nm
Illumination (number of LED)	20	14	14
Illumination Area	100 x 15 mm		
Led Package	SMD		
Eye Safety (EN 62471:2008)	RG-2 (Moderate Risk): Caution. Do not stare at exposed lamp in operation. May be harmful to eyes.		

Electrical Information	R24	W	IR24
Lighting Supply Voltage (constant voltage mode)	24V ± 2%		
Supply Ripple Voltage	≤ Vs ± 5%		
Reverse Battery Protection	YES		
Typical Lighting Forward voltage, Vf (for zero internal resistor value)	21.0 V	21.0 V	20.3V
Continuous Current	0.70A (MAX)		
Power Consumption	16.80 W		
Lighting casing temperature, Operating after 60 minutes	(Without compress air cooling) 75°C (With compress air cooling) 60°C		

Strobe Mode Specification	R24	W	IR24
Max. Lighting Supply Voltage (Constant voltage power supply)	Pulsing at 24VDC to 48VDC, 0-10% Duty Cycle Recommended at 36VDC		
Pulse Current, (Max. 10msec) (Constant current power supply)	1.75A (MAX) (PULSE ONLY)		
Constant Current Power Supply Voltage Level	22.0V (1.0V higher than the lighting Vf)		
Max. Trigger Pulse Duration, msec	10 msec		
Duty Cycle	0 to 10%		
Over Driving Mode			
Constraints	Major constraint in over current mode is tremendous heat generated on the lighting and results the led in permanent damage.		
Maximum Current, (Constant current power supply)	1.40A (MAX) Ordering Option (FHLN-Si100-R24/W/IR24-0)		
Constant Current Power Supply Voltage Level	22.0V (1.0V higher than the lighting Vf)		
Max. Turn On Duration, sec	10 Sec		
Duty Cycle	50%		
Over driving in Constant voltage Mode	Ordering Option (FHLN-Si100-R24/W/IR24-2)		



Ordering Option	
FHLN-Si100-R24/W/IR24	With resistor to limit the current (Use in both constant voltage/ current power supply)
FHLN-Si100-R24/W/IR24-0	Internal resistor value= zero ohms (only use in constant current power supply)
FHLN-Si100-R24/W/IR24-2	Driving in 2x current with build in internal resistor (Use in both constant voltage/ current power supply)

Connection		R24/W/IR24		
Connector Type (Default):	JST SMR-03V			
	Pin	Signal	Cable Color	
	1	LED +	Black/White	
	2	N.C.	---	
	3	LED -	Black	
Cable Length out from lighting:	300 mm			

Additional Information		R24/W/IR24		
Additional Cooling Method	1. Apply compress air onto the lighting 2. Attached to machine part for better heat dissipation			
Life span in continuous mode	20,000 hours (drop to 50% intensity) at 25°C			
Life span in strobe light mode Lighting drop to 50% intensity (at 25°C ambient temperature)	Est. >50,000 hours (drop to 50% intensity) at 25°C			
Intensity Controller Selection	PSA-Series, PSD-Series, LIC-Series			
CE Conformity	YES			
RoHS Compliance	YES			
ISO 9001:2008	SG11/03751			

Application	
Optimal Working Distance	20-100 mm
Optimize the lighting Life Span	1. It is recommended to turn ON the lighting only during image capturing or conjunction with camera exposure time. This will enable the lighting to work with longer life span and prevent overheating and resulting damage to the led.



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