

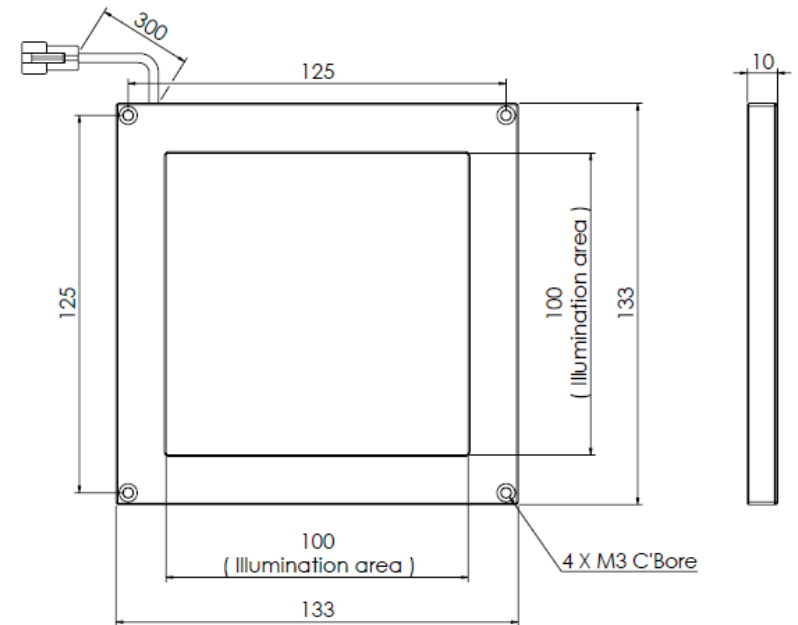
## Diffuse Back Light

### FLFL-Si100

#### Lighting Picture



#### Lighting Dimension



Mechanical Information	
Casing Material	Aluminium + Arcylic
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	290 g
Lighting Dimension, WxLxH	133.0 x 133.0 x 10.0 mm
IP Rating	IP50

All unit in mm



FLFL-Si100

Asia Office: [www.falcon-illumination.com](http://www.falcon-illumination.com), Europe Office: [www.falcon-illumination.de](http://www.falcon-illumination.de)  
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Optical Information					
Led Color	RED (R/R24)	InfraRed (IR/IR24)	GREEN (G)	BLUE (B)	WHITE (W)
Wavelength	626nm	850nm	525nm	470nm	xy=(0.31,0.32)
Illumination (number of LED)	100/120	112	112	112	112
Illumination Area	100 x 100 mm				
Led Package	SMD				
Eye Safety (EN 62471:2008)	Exempt Group				

Electrical Information	R	IR	R24	IR24	G/B/W
Lighting Supply Voltage (constant voltage mode)	12V ± 2%		24V ± 2%		
Supply Ripple Voltage	≤ Vs ± 5%				
Reverse Battery Protection	YES				
Typical Lighting Forward voltage, Vf (for zero internal resistor value)	11.0 V	9.8 V	22.0 V	19.6 V	21.0 V
Continuous Current	0.80A (MAX)	0.40A (MAX)	0.48A (MAX)	0.20A (MAX)	0.48A (MAX)
Power Consumption	9.60 W	4.80 W	11.52 W	4.80 W	11.52 W
Lighting casing temperature, Operating after 60 minutes	60°C	36°C	60°C	36°C	62°C

Strobe Mode Specification	R	IR	R24	IR24	G/B/W
Max. Lighting Supply Voltage (Constant voltage power supply)	Pulsing at 12VDC to 24VDC, 0-10% Duty Cycle Recommended at 15VDC		Pulsing at 24VDC to 48VDC, 0-10% Duty Cycle Recommended at 36VDC		
Pulse Current, (Max. 10msec) (Constant current power supply)	2.00A (MAX)	1.00A (MAX)	1.20A (MAX)	0.50A (MAX)	1.20A (MAX)
Max. Trigger Pulse Duration, msec	10 msec				
Duty Cycle	0 - 10%				

Ordering Option	
FLFL-Si100-R/R24/IR/IR24/G/B/W	With resistor to limit the current (Use in both constant voltage/ current power supply)
FLFL-Si100-R/R24/IR/IR24/G/B/W-0	Internal resistor value= zero ohms (only use in constant current power supply)



Connection		R/IR			R24/IR24/G/B/W			
Connector Type (Default):		JST SMR-02V			JST SMR-03V			
	Pin	Signal	Cable Color		Pin	Signal	Cable Color	
	1	LED +	Black/White		1	LED +	Black/White	
	2	LED -	Black		2	N.C.	---	
					3	LED -	Black	
Cable Length out from lighting:		300 mm						

Additional Information	R/R24/G/B/W/IR/IR24
Additional Cooling Method	Attached to machine part for better heat dissipation
Life span in continuous mode	20,000 hours
Life span in strobe light mode Lighting drop to 50% intensity (at 25°C ambient temperature)	50,000 hours
Intensity Controller Selection	PSA-Series, PSD-Series, LIC-Series
CE Conformity	YES
RoHS Compliance	YES
ISO 9001:2008	SG11/03751

Application	
Optimal Working Distance	10-100 mm



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