

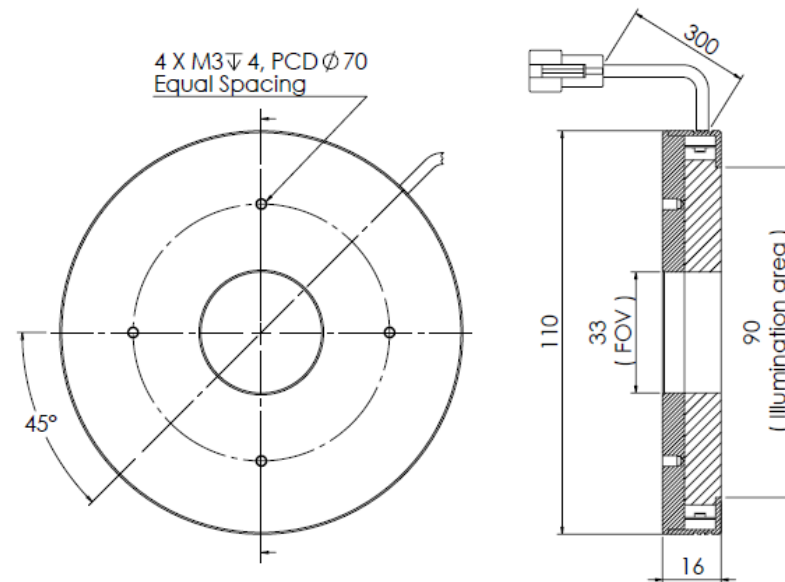
Diffuse Front Light

FLFR-Si100

Lighting Picture



Lighting Dimension



Mechanical Information	
Casing Material	Aluminum + Acrylic
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	260g
Lighting Dimension, OØ/IØ/H	OØ=110.0 / IØ=33.0/ H=16 mm
IP Rating	IP 50

Unit in mm





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)	80	77/75	77	77	77
Illumination Area	Ø90mm				
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	21.0 V	21.0 V
Continuous Current	0.64 (MAX)	0.28A (MAX)	0.32A (MAX)	0.13A (MAX)	0.22A (MAX)
Power Consumption	7.68 W	3.30 W	7.68 W	3.00 W	5.28 W
Lighting casing temperature, Operating after 60 minutes	55°C	35°C	55°C	35°C	48°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)	1.60A (MAX)	0.69A (MAX)	0.80A (MAX)	0.31A (MAX)	0.55A (MAX)
Max. Trigger Pulse Duration, msec	10 msec				
Duty Cycle	0 - 10%				

Ordering Option	
FLFR-Si100-R/R24/IR/IR24/G/B/W	With resistor to limit the current (Use in both constant voltage/ current power supply)
FLFR-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	
	1	LED +		Black/White	1	LED +	
	2	LED -		Black	2	N.C.	
					3	LED -	
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	20-100 mm



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