

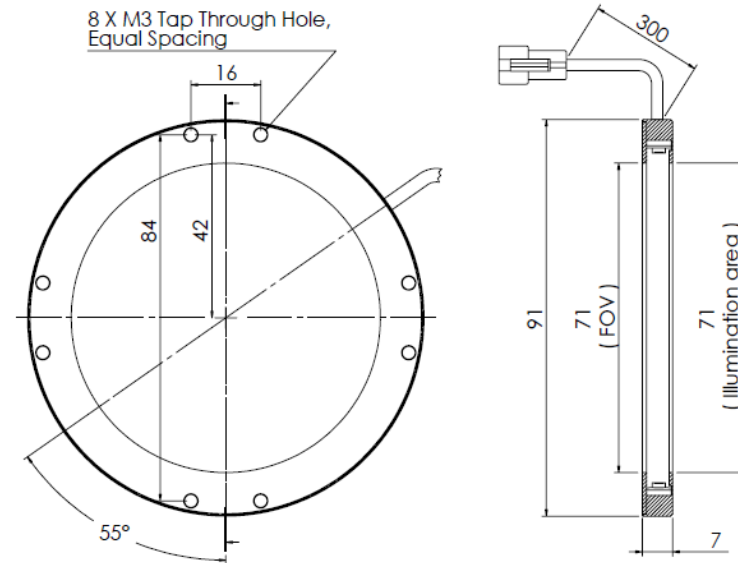
Low Angle Ring Light

[Falcon Logo] FLDR-Si91LA1

Lighting Picture



Lighting Dimension



Mechanical Information	
Casing Material	Aluminium
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	35 g
Lighting Dimension ØxH	Ø91 x 7.0mm
IP Rating	IP30

NOTE : FLDR-Si91LA1 come without diffuser

Unit in mm



FLDR-Si91LA1

Optical Information				
Led Color	InfraRed (IR)	GREEN(G)	BLUE (B)	WHITE (W)
Wavelength	850nm	525nm	470nm	xy=(0.31,0.32)
Illumination (number of LED)	63	63	63	63
Illumination Area	Ø71mm			
Led Package	SMD			
Eye Safety (EN 62471:2008)	Exempt Group			

Electrical Information	IR	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)	9.8V	21.0 V
Continuous Current	0.23A (MAX)	0.18A (MAX)
Power Consumption	2.70 W	4.32 W
Lighting casing temperature, Operating after 60 minutes	45°C	50°C

Strobe Mode Specification	IR	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)	0.56A (MAX)	0.45A (MAX)
Max. Trigger Pulse Duration, msec	10 msec	
Duty Cycle	0 - 10%	

Ordering Option	
FLDR-Si91LA1-IR/G/B/W	With resistor to limit the current (Use in both constant voltage/ current power supply)
FLDR-Si91LA1-IR/G/B/W-0	Internal resistor value= zero ohms (only use in constant current power supply)



Connection		IR			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		G/B/W/IR	
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	0-20 mm



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