



## Faltec Big Solution - Single color/ Multi-angle Ring Light Solution

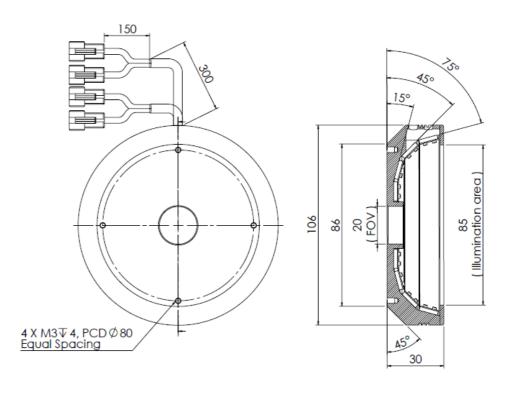
# FIBS-Si90

## **Lighting Picture**



Mechanical Information			
Casing Material	Aluminium		
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%		
Weight	380g		
Lighting Dimension, ØxH	Ø106.0 x 30.0 mm		
IP Rating	N/A		

### **Lighting Dimension**



Unit in mm







Optical Information						
Led Color	RED (R24)	GREEN (G)	BLUE (B)	WHITE (W)	InfraRed (IR24)	Ultra Violet (UV)
Wavelength	626nm	525nm	470nm	xy=(0.31,0.32)	850 nm	375 nm
Number of LED, (L1=Top, L2=Mid 1,	L1=40, L2=50	L1=35, L2=49	L1=35, L2=49	L1=35, L2=49	L1=30, L2=60	L1=35, L2=49
L3=Mid 2, L4=Bottom)	L3=70, L4=90	L3=77, L4=91	L3=77, L4=91	L3=77, L4=91	L3=75, L4=90	L3=77, L4=91
Illumination Area	Ø85mm					
Led Package	SMD					
Eye Safety (EN 62471:2008)	Exempt Group R			RG3		

<b>Electrical Information</b>	R24	G/B/W	IR24	UV	
Lighting Supply Voltage					
(constant voltage mode)		24V	± 2%		
Supply Ripple Voltage		≤Vs	± 5%		
Reverse Battery Protection		YES			
Typical Lighting Forward voltage, Vf	22.0V	21.0V	21.0V	23.0V	
(for zero internal resistor value)	22.0V	21.00	21.00	23.00	
Continuous Current/ Power	L1=0.16A (MAX) / 3.84W	L1=0.10A (MAX) / 2.40W	L1=0.05A (MAX) / 1.20W	L1=0.10A (MAX) / 2.40W	
Consumption	L2=0.20A (MAX) / 4.80W	L2=0.14A (MAX) / 3.36W	L2=0.10A (MAX) / 2.40W	L2=0.14A (MAX) / 3.36W	
L1=Top, L2=Mid 1, L3=Mid 2,	L3=0.28A (MAX) / 6.72W	L3=0.22A (MAX) / 5.28W	L3=0.13A (MAX) / 3.00W	L3=0.22A (MAX) / 5.28W	
L4=Bottom	L4=0.36A (MAX) / 8.64W	L4=0.26A (MAX) / 6.24W	L4=0.15A (MAX) / 3.60W	L4=0.26A (MAX) / 6.24W	
Lighting casing temperature,	67°C (If all L1, L2, L3, L4 turn "ON")				
Operating after 60 minutes			· · ·		

Strobe Mode Specification	R24	G/B/W	IR24	UV
Max. Lighting Supply Voltage		Pulsing at 24V	DC to 48VDC,	
(Constant voltage power supply)		0-10% D	uty Cycle	
	Recommended at 36VDC			
Pulse Current, (Max. 10msec)	L1=0.40A (MAX)	L1=0.25A (MAX)	L1=0.13A (MAX)	L1=0.25A (MAX)
(Constant current power supply)	L2=0.50A (MAX)	L2=0.35A (MAX)	L2=0.25A (MAX)	L2=0.35A (MAX)
	L3=0.70A (MAX)	L3=0.55A (MAX)	L3=0.33A (MAX)	L3=0.55A (MAX)
	L4=0.90A (MAX)	L4=0.65A (MAX)	L4=0.38A (MAX)	L4=0.65A (MAX)
Max. Trigger Pulse Duration, msec	10 msec			
Duty Cycle	0 - 10% ***			





Ordering Option	
FIBS-Si90-L1/L2/L3/L4	With resistor to limit the current
Note: L1/L2/L3/L4 can have selection of	(Use in both constant voltage/ current power supply)
R24/G/B/W/IR24/UV	, , , , , , , , , , , , , , , , , , , ,
FIBS-Si90-L1/L2/L3/L4-0	Internal resistor value= zero ohms
Note: L1/L2/L3/L4 can have selection of	(only use in constant current power supply)
R24/G/B/W/IR24/UV	

Connection	R24/G/B/W/IR24/UV			
Connector Type :		JST SMR-03V (Default)		
Cable Length out from lighting:		450 mm		
	Pin	Signal	Cable Color	
	1	LED +	Black/White	
	2	N.C.		
	3	LED -	Black	

Additional Information	R24/G/B/W/IR24/UV		
Additional Cooling Method	Attached to machine part for better heat dissipation		
Life span in continuous mode	20,000 hours	10,000 hours	
Life span in strobe light mode			
Lighting drop to 50% intensity	50,000 hours	25,000 hours	
(at 25°C ambient temperature)			
Intensity Controller Selection	PSA-Series, PSD-Series, LIC-Series		
CE Conformity	YES		
RoHS Compliance	YES		
ISO 9001:2008	SG11/03751		

Application	
Optimal Working Distance	0-40mm





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