

## Faltec Big Solution – Multicolor/multi-angle Ring Light Solution

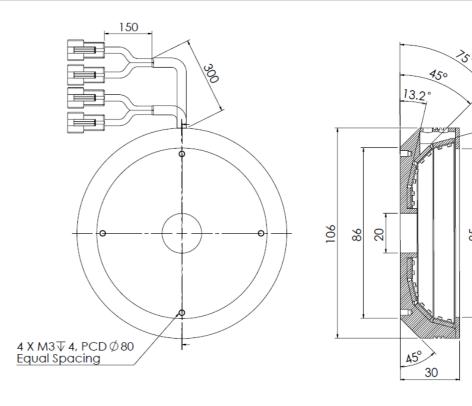
# FIBS-Si90

### **Lighting Picture**



Mechanical Information				
Casing Material	Aluminium			
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%			
Weight	355g			
Lighting Dimension, WxLxH	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 RG3					

<b>Electrical Information</b>	R24	G/B/W	IR24	UV	
Lighting Supply Voltage					
(constant voltage mode)		24V	′ ± 2%		
Supply Ripple Voltage		≤ V\$	s ± 5%		
Reverse Battery Protection		YES			
Lighting Forward voltage,	22.0V	21.0V	21.0V	23.0V	
(for zero internal resistor value)	22.0 V	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,	70°C (If all L1-L4 turn "ON")				
Operating after 60 minutes	7.5 5 (ii. dii. 27 27 tam 517)				

Strobe Mode Specification	R24	G/B/W	IR24	UV
Max. Lighting Supply Voltage		Pulsing at 24	VDC to 48VDC,	
(Constant voltage power supply)			Outy Cycle	
		Recommen	ded 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:		600 mm		
	Pin	Signal	Cable Color	
	1	LED +	Black/White	-
	2	N.C.		
	3	LED -	Black	

Additional Information	SR24/G/B/W/IR24/UV	UV	
Additional Cooling Method	Attached to machine part for better heat dissipation		
Life span in continuous mode,	20,000 hours	1,000 hours	
Life span in strobe light mode Lighting drop to 50% intensity (at 25°C ambient temperature)	50,000 hours	2,500 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	0-20mm

Faltec Big Solution not allowed for using with coordinate measuring instruments in Europe (infringement against European Patent 1373827), China, Japan and USA







# <u>Disclaimer</u>

#### **IMPORTANT NOTICE:**

ALL PRODUCT, PRODUCT DATA SHEET AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE QUALITY, RELIABILITY, FUNCTION, DESIGN OR OTHERWISE.

#### Other disclaimers:

- 1) FALCON ILLUMINATION (M) SDN.BHD (termed as FALCON), its affiliates, agents, distributors and employees, and all persons acting on its or their behalf (FALCON collectively), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.
- 2) FALCON makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, FALCON disclaims:
  - (i) any and all liability arising out of the application or use of any product,
  - (ii) any and all liability, including without limitation special, consequential or incidental damages, and
  - (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- 3) Information and statements regarding the suitability of products for certain types of applications are based on FALCON's knowledge of typical requirements that are often placed on our products datasheet for generic applications. Such statements or information are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to verify and/or validate that a particular product with the properties described in our product data sheet is suitable for use in a particular application.
- 4) Parameters provided in product datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be verified and/or validated for each customer application by the customer's technical experts.
- 5) Except as expressly indicated in writing, FALCON I's products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the product could result in personal injury or death. Customers using or selling our products not expressly indicated for use in such applications do so at their own risk and agree to fully indemnify and hold FALCON and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attorneys fees, even if such claim alleges that FALCON or its distributor was negligent regarding the design or manufacture of the part. Please contact authorized FALCON personnel to obtain written terms and conditions regarding products designed for such applications.

