

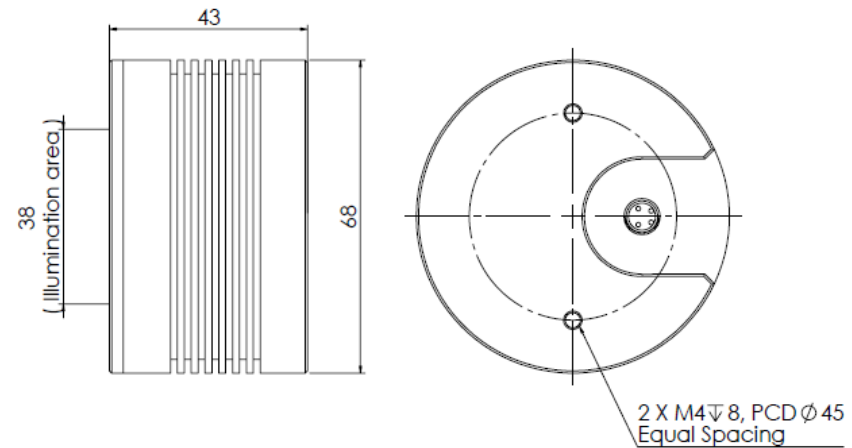
High Brightness Spot Light



FHSP-Si60N

Lighting Picture

Lighting Dimension



Unit in mm

Mechanical Information	
Casing Material	Aluminium + Acrylic lens
Weight	913g
Operating Temperature	0°C to 40°C, Humidity 20%-85%
Storage Temperature	-20°C to 60°C, Humidity 20%-85%
Lighting Dimension W x L x H	Ø68.0 x 43.0mm
IP Rating	IP50



FHSP-Si60N

Asia Office: www.falconmv.com, Europe Office: www.falcon-illumination.de
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Led Colour	RED (R24)	INFRARED (IR24)	GREEN (G)	BLUE (B)	WHITE(W)
Optical Information					
Wavelength / Color temperature	620nm	850nm	525nm	470nm	xy=(0.31,0.32)
Illumination (Number of LED)	10	7	7	7	7
Illumination Area	Ø38mm				
Led Package	SMD				
Eye Safety (EN 62471:2008)	Exempt Group				
Optimal Working Distance	10-1000 mm				

Continuous Mode	Voltage Drive (With resistor)			Current Drive (Without resistor)		
	R24	IR24	G/B/W	R24	IR24	G/B/W
Supply Voltage To Controller	24VDC ± 2%			23VDC	21VDC	22VDC
Lighting Forward Voltage, Vf	22.0 V	20.3 V	21.0 V	22.0 V	20.3 V	21.0 V
Max. Current	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)
Max. Power	8.40 W	8.40 W	8.40 W	8.05 W	7.35 W	7.70 W

Strobe Mode	Voltage Drive			Current Drive		
	R24	IR24	G/B/W	R24	IR24	G/B/W
Max. Lighting Supply Voltage	Pulsing at 24VDC to 48VDC, Recommended at 36VDC			Pulsing at 23 VDC	Pulsing at 21 VDC	Pulsing at 22 VDC
Max. Current	21.00 A (MAX)	21.00 A (MAX)	21.00 A (MAX)	21.00 A (MAX)	21.00 A (MAX)	21.00 A (MAX)
Max. Trigger Pulse Duration	10 msec					
Duty Cycle	< 10%					



Over Driving Mode	R24	IR24	G/B/W
Constraints	Major constraint in over current mode is tremendous heat generated on the lighting and results the led in permanent damage.		
Maximum Current, (Constant current power supply)	0.7A (MAX) Ordering Option (FHSP-Si60N-xxxx-0)		
Constant Current Power Supply Voltage Level	23.0V (1.0V higher than the lighting Vf)	21.3 (1.0V higher than the lighting Vf)	22.0V (1.0V higher than the lighting Vf)
Max. Turn On Duration, sec	10 Sec		
Duty Cycle	50%		
Over driving in Constant voltage Mode	Ordering Option (FHSP-Si60N-xxxx-2)		

Ordering Part Number	Controller Type	Description
FHSP-Si60N-R24/IR/IR24/G/B/W	Voltage Drive	With resistor to limit the current (Use in both constant voltage/ current power supply)
FHSP-Si60N-R24/IR/IR24/G/B/W-0	Current Drive	Internal resistor value= zero ohms (Only use in constant current power supply)
FHSP-Si60N-R24/IR/IR24/G/B/W-2		Driving in 2x current with build in internal resistor (Use in both constant voltage/ current power supply)

Connection	R24/IR24/G/B/W		
Connector Type:	Pico M8 (Male)		
Cable Length out from lighting:	N/A		
Pin Configuration: Pico M8 (Male)	Pin	Pin Name	Börsig /Binder P/N: 79-3382-52-04 Wire Color
	1	LED 1 +	Brown
	2	N.C.	---
	3	LED 1 -	Blue
	4	N.C.	---



Additional Information	Details
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 9001:2015	MY11/00845

Application	
Optimize the lighting Life Span	<ol style="list-style-type: none"> 1. It is recommended to turn ON the lighting only during image capturing or conjunction with camera exposure time. This will enable the lighting to work with longer life span and prevent overheating and resulting damage to the led.



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