

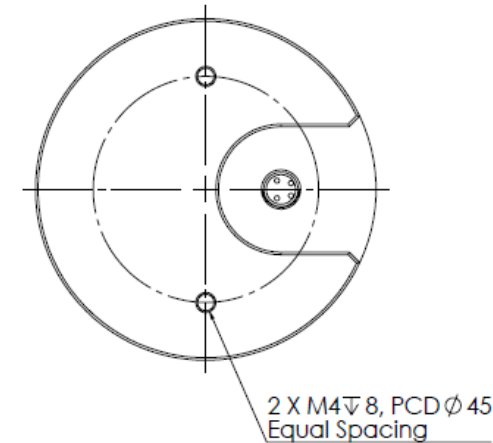
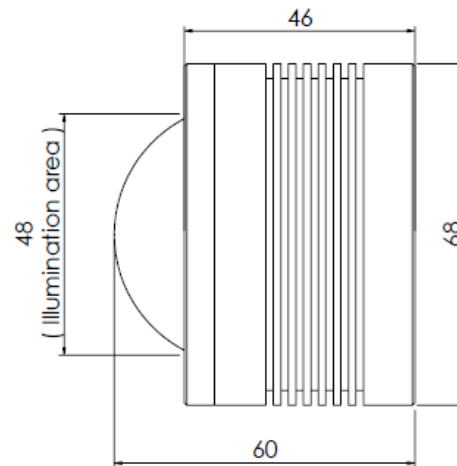
High Brightness Spot Light

 **FHSP-Si60**

Lighting Picture



Lighting Dimension



Unit in mm

Mechanical Information	
Casing Material	Aluminium + Glass lens
Weight	412g
Operating Temperature	0°C to 40°C, Humidity 20%-85%
Storage Temperature	-20°C to 60°C, Humidity 20%-85%
Lighting Dimension, ϕ xH	ϕ 68.0 x 60.0mm
IP Rating	IP40



FHSP-Si60

Asia Office: www.falconmv.com, Europe Office: www.falcon-illumination.de
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Led Colour	RED (R24)	InfraRed (IR/IR24)	GREEN (G)	BLUE (B)	WHITE(W)
Optical Information					
Wavelength / Color temperature	626nm	850nm	525nm	470nm	xy=(0.31,0.32)
Illumination (Number of LED)	10	7 / 7	7	7	7
Illumination Area	Ø48mm				
Led Package	SMD				
Eye Safety (EN 62471:2008)	RG-2 (Moderate Risk): Caution. Do not stare at exposed lamp in operation. May be harmful to eyes.				
Optimal Working Distance	10-3000 mm				

Continuous Mode	Voltage Drive (With resistor)				Current Drive (Without resistor)			
	IR	R24	IR24	G/B/W	IR	R24	IR24	G/B/W
Supply Voltage To Controller	12V ± 2%	24VDC ± 2%			10VDC ± 2%	23VDC ± 2%	10VDC ± 2%	22VDC ± 2%
Lighting Forward Voltage, Vf	9.8 V	22.0 V	9.8 V	21.0 V	9.8 V	22.0 V	9.8 V	21.0 V
Max. Current	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)
Max. Power	4.20 W	8.40 W	8.40 W	8.40 W	3.50 W	8.05 W	3.50 W	7.70 W
Lighting casing temperature, Operating after 60 minutes in continuous mode	38°C	55°C	60°C	55°C	38°C	55°C	60°C	55°C

Strobe Mode	Voltage Drive				Current Drive			
	IR	R24	IR24	G/B/W	IR	R24	IR24	G/B/W
Max. Lighting Supply Voltage	Pulsing at 12VDC to 24VDC, 0-10% Duty Cycle Recommended at 18VDC	Pulsing at 24VDC to 48VDC, Recommended at 36VDC			Pulsing at 10VDC	Pulsing at 23VDC	Pulsing at 10VDC	Pulsing at 22VDC
Max. Current	0.88A (MAX)				0.88A (MAX)			
Max. Trigger Pulse Duration	10 msec							
Duty Cycle	< 10%							



Over Driving Mode				
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)	0.70A (MAX) Ordering Option (FHSP-Si60-xxxx-0)			
Constant Current Power Supply Voltage Level	10.8V (1.0V higher than the lighting Vf)	23.0V (1.0V higher than the lighting Vf)	11.8V (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-Si60-xxxx-2)			

Ordering Part Number	Controller Type	Description
FHSP-Si60-IR/IR24/R24/G/B/W	Voltage Drive	With Resistor (Use in both constant voltage/ current power supply)
FHSP-Si60-IR/IR24/R24/G/B/W-0	Current Drive	Without Resistor (0 Ohm) (Only use in constant current power supply)
FHSP-Si60-IR/IR24/R24/G/B/W-2		Driving in 2x current with build in internal resistor (Use in both constant voltage/ current power supply)

Connection	(Voltage & Current drive)			
	Pico M8 (Male)			
Connector Type (Default):	Pin	Light Segment	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
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
Supply Ripple Voltage	$\leq V_s \pm 5\%$
Reverse Battery Protection	YES
Cooling Method	Natural air-cooling
Additional Cooling Method	Attached to machine part for better heat dissipation
Intensity Controller Selection	PSA-Series, PSD-Series, LIC-Series
CE Conformity	YES
ISO 9001:2015	MY11/00845



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