



Low Angle Ring Diffused Light

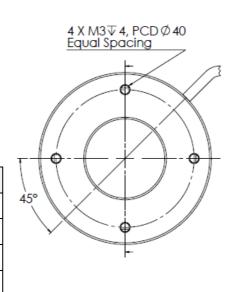
FFPR-i50

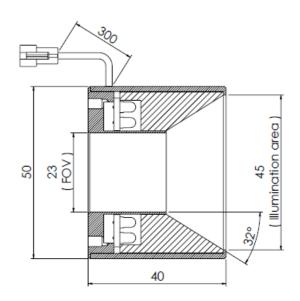
Lighting Picture



Mechanical Information	
Casing Material	Aluminum + Arcylic
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	90 g
Lighting Dimension, OD / ID/ H	50.0 / 23.0 / 40.0 mm
IP Rating	IP 50

Lighting Dimension





Unit in mm







Optical Information					
Led Color	RED (SR/SR24)	InfraRed (IR/IR24)	GREEN (G)	BLUE (B)	WHITE (W)
Wavelength	626nm	875nm	525nm	470nm	xy=(0.31,0.32)
Illumination (number of LED)	48/44	42	42	42	42
Illumination Area			Ø45mm		
Led Package			T1 3mm		
Eye Safety (EN 62471:2008)			Exempt Group		

Electrical Information	SR	IR	SR24	IR24	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)	11.8 V	9.8 V	23.1 V	19.6 V	21.0 V	
Continuous Current	0.16A (MAX)	0.15A (MAX)	0.12A (MAX)	0.08A (MAX)	0.12A (MAX)	
Power Consumption	1.92 W	1.80 W	2.88 W	1.80 W	2.88 W	
Lighting casing temperature, Operating after 60 minutes	45°C	42°C	45°C	42°C	48°C	

Strobe Mode Specification	SR	IR	SR24	IR24	G/B/W	
Max. Lighting Supply Voltage	Pulsing at 12VDC to 24VDC,		Pulsing at 24VDC to 48VDC,			
(Constant voltage power supply)	0-10% Duty Cycle		0-10% Duty Cycle			
	Recommend	led at 15VDC	Recommended at 36VDC			
Pulse Current, (Max. 10msec)	0.40A (MAX)	0.38A (MAX)	0.30A (MAX)	0.20A (MAX)	0.30A (MAX)	
(Constant current power supply)	0.40A (IVIAX)	U.SOA (IVIAX)	0.30A (MAX)	0.20A (IVIAX)	0.30A (IVIAX)	
Max. Trigger Pulse Duration, msec			10 msec			
Duty Cycle			0 - 10%			

Ordering Option	
FFPR-i50-SR/SR24/IR/IR24/G/B/W	With resistor to limit the current
FFR-130-3R/3R24/1R/1R24/G/D/W	(Use in both constant voltage/ current power supply)
FFPR-i50-SR/SR24/IR/IR24/G/B/W-0	Internal resistor value= zero ohms
FFR-150-5R/5R24/1R/1R24/G/B/W-0	(only use in constant current power supply)







Connection	SR/IR			SR24/IR24/G/B/W				
Connector Type (Default):	JST SMR-02V			JST SMR-03V				
	Pin	Signal	Cable Color		Pin	Signal	Cable Color	
	1	LED +	Black/White		1	LED +	Black/White	
	2	LED -	Black		2	N.C.		
					3	LED -	Black	
Cable Length out from lighting:	300mm							

Additional Information	SR/SR24/G/B/W/IR/IR24
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	50,000 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	0-30 mm







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