

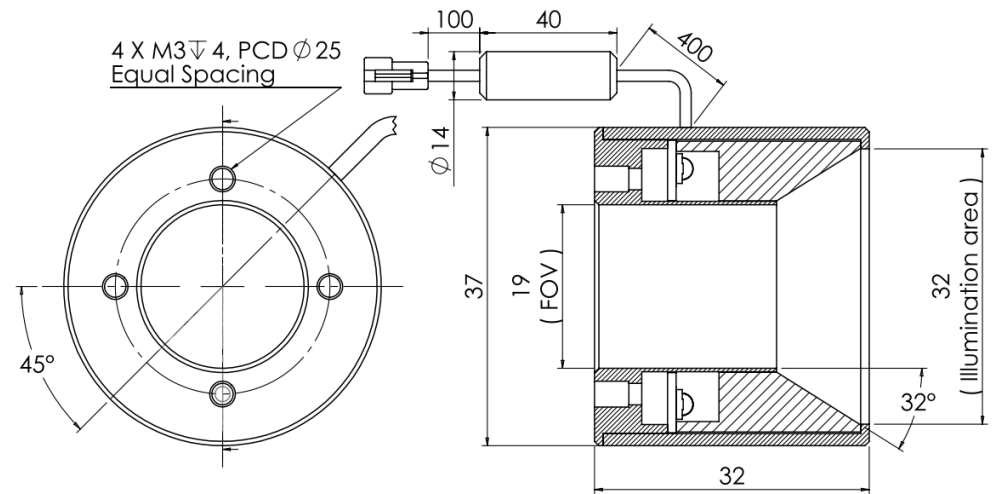
High Brightness Low Angle Ring Diffuse Light

FHPR-Si37

Lighting Picture



Lighting Dimension



Mechanical Information	
Casing Material	Aluminium + Acrylic
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	59g
Lighting Dimension, OD/ ID / H	37.0 / 19.0 / 32.0 mm
IP Rating	IP50

Unit in mm

Optical Information				
Led Color	RED (R24)	GREEN (G)	BLUE (B)	WHITE (W)
Wavelength	626nm	525nm	470nm	xy=(0.31,0.32)
Illumination (number of LED)	12	16	16	16
Illumination Area	Ø32mm			
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.			

Electrical Information		R24	G/B/W
Lighting Supply Voltage (constant voltage mode)		24V ± 2%	
Supply Ripple Voltage		≤ Vs ± 5%	
Reverse Battery Protection		YES	
Typical Lighting Forward voltage, Vf (for zero internal resistor value)		22.8 V	23.2 V
Continuous Current		0.35A (MAX)	0.30A (MAX)
Power Consumption		8.40 W	7.20 W
Lighting casing temperature, Operating after 60 minutes		(Without compress air cooling) 75°C	
		(With compress air cooling) 60°C	

Strobe Mode Specification		R24	G/B/W
Max. Lighting Supply Voltage (Constant voltage power supply)		Pulsing at 24VDC to 48VDC, 0-10% Duty Cycle Recommended at 36VDC	
Pulse Current, (Max. 10msec) (Constant current power supply)		0.88A (MAX) (PULSE ONLY)	0.75A (MAX) (PULSE ONLY)
Constant Current Power Supply Voltage Level		23.8V (1.0V higher than the lighting Vf)	24.2V (1.0V higher than the lighting Vf)
Max. Trigger Pulse Duration, msec		10 msec	
Duty Cycle		0 to 10%	

Ordering Option	
FHPR-Si37-R24/G/B/W	With resistor to limit the current (Use in both constant voltage/ current power supply)
FHPR-Si37-R24/G/B/W-0	Internal resistor value= zero ohms (only use in constant current power supply)



Connection		R24/G/B/W		
Connector Type (Default):	JST SMR-03V			
	Pin	Signal	Cable Color	
	1	LED +	Black/White	
	2	N.C.	---	
	3	LED -	Black	
Cable Length out from lighting:	540 mm			

Additional Information		R24/G/B/W
Additional Cooling Method	<ol style="list-style-type: none"> 1. Apply compress air onto the lighting 2. Attached to machine part for better heat dissipation 	
Life span in continuous mode	20,000 hours (drop to 50% intensity) at 25°C	
Life span in strobe light mode Lighting drop to 50% intensity (at 25°C ambient temperature)	Est. >50,000 hours (drop to 50% intensity) at 25°C	
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
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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