

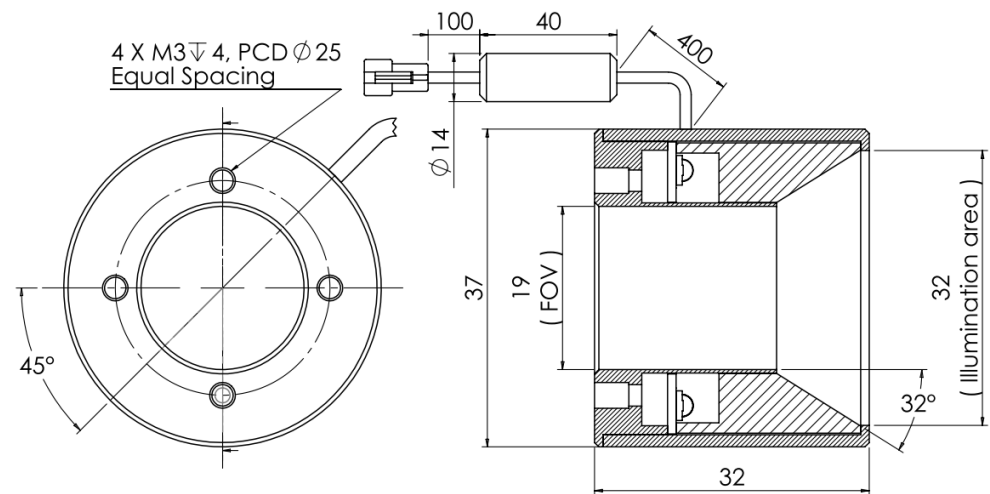
Low Angle Ring Diffused Light

 **FHPR-Si37**

Lighting Picture



Lighting Dimension



| Mechanical Information         |                              |
|--------------------------------|------------------------------|
| Casing Material                | Aluminium + Acrylic          |
| Storage Temperature Range      | Temp 0-35°C, Humidity 20-85% |
| Weight                         | 160g                         |
| Lighting Dimension, OD/ ID / H | 37.0 / 19.0 / 32.0 mm        |
| IP Rating                      | IP 50                        |


Unit in mm

| Optical Information          |   |          |                |
|------------------------------|---|----------|----------------|
| Led Color                    | GREEN (G)   | BLUE (B) | WHITE (W)      |
| Wavelength                   | 525nm   | 470nm    | xy=(0.31,0.32) |
| Illumination (number of LED) | 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   |   | G/B/W |
|--|---|-------|
| Lighting Supply Voltage<br>(constant voltage mode)                         | 24V ± 2%  |       |
| Supply Ripple Voltage  | ≤ Vs ± 5%   |       |
| Reverse Battery Protection   | YES   |       |
| Typical Lighting Forward voltage, Vf<br>(for zero internal resistor value) | 24.0 V  |       |
| Continuous Current   | 0.30A (MAX)   |       |
| Power Consumption  | 7.20 W  |       |
| Lighting casing temperature,<br>Operating after 60 minutes                 | (Without compress air cooling) 75°C<br>(With compress air cooling) 60°C |       |

| Strobe Mode Specification                                       |  | G/B/W |
|---|--|-------|
| Max. Lighting Supply Voltage<br>(Constant voltage power supply) | Pulsing at 24VDC to 48VDC,<br>0-10% Duty Cycle<br>Recommended at 36VDC |       |
| Pulse Current, (Max. 10msec)<br>(Constant current power supply) | 0.75A (MAX) (PULSE ONLY)   |       |
| Constant Current Power Supply Voltage Level                     | 25.0V (1.0V higher than the lighting Vf)                               |       |
| Max. Trigger Pulse Duration, msec                               | 10 msec  |       |
| Duty Cycle  | 0 to 10%   |       |

| Ordering Option   |   |
|-------------------|---|
| FHPR-Si37-G/B/W-0 | Internal resistor value= zero ohms<br>(only use in constant current power supply) |

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

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