

## Diffuse Front Light



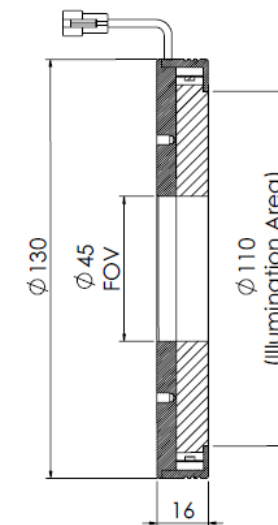
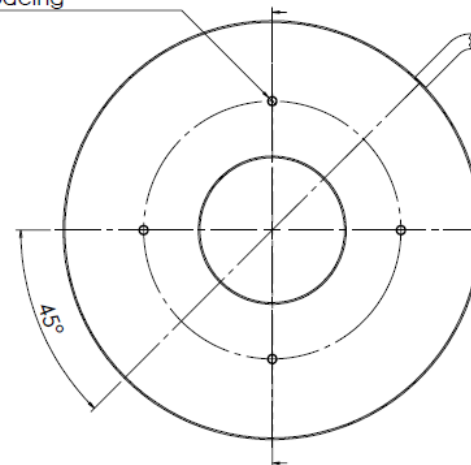
### FLFR-Si110

Lighting Picture



Lighting Dimension

4 x M3  $\nabla$  4, PCD =  $\phi$  80  
Equal Spacing



Unit in mm

#### Mechanical Information

|                             |                                 |
|-----------------------------|---------------------------------|
| Casing Material             | Aluminum + Acrylic              |
| Weight                      | 298g                            |
| Operating Temperature       | 0°C to 40°C, Humidity 20%-85%   |
| Storage Temperature         | -20°C to 60°C, Humidity 20%-85% |
| Lighting Dimension, OØ/IØ/H | OØ=130.0 / IØ=45.0/ H=16 mm     |
| IP Rating                   | IP50                            |



FLFR-Si110

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| Led Colour                     | RED(R24)     |
|--------------------------------|--------------|
| <b>Optical Information</b>     |              |
| Wavelength / Color temperature | 626nm        |
| Illumination (Number of LED)   | 88           |
| Illumination Area              | Ø110mm       |
| Led Package                    | SMD          |
| Eye Safety (EN 62471:2008)     | Exempt Group |
| Optimal Working Distance       | 20-100 mm    |

| Continuous Mode              | Voltage Drive (With resistor) | Current Drive (Without resistor) |
|------------------------------|-------------------------------|----------------------------------|
|                              | R24                           | R24                              |
| Supply Voltage To Controller | 24VDC $\pm$ 2%                | 23VDC $\pm$ 2%                   |
| Lighting Forward Voltage, Vf | 22.0 V                        | 22.0 V                           |
| Max. Current                 | 0.32A (MAX)                   | 0.32A (MAX)                      |
| Max. Power                   | 7.68W                         | 7.36W                            |

| Strobe Mode                  | Voltage Drive (With resistor)                      | Current Drive (Without resistor) |
|------------------------------|----------------------------------------------------|----------------------------------|
|                              | R24                                                | R24                              |
| Max. Lighting Supply Voltage | Pulsing at 24VDC to 48VDC,<br>Recommended at 36VDC | Pulsing at 23VDC                 |
| Max. Current                 | 0.80A (MAX)                                        | 0.80A (MAX)                      |
| Max. Trigger Pulse Duration  | 10 msec                                            |                                  |
| Duty Cycle                   | < 10%                                              |                                  |

| Ordering Part Number | Controller Type | Description                                                             |
|----------------------|-----------------|-------------------------------------------------------------------------|
| FLFR-Si110-R24       | Voltage Drive   | With Resistor<br>(Use in both constant voltage/ current power supply)   |
| FLFR-Si110-R24-0     | Current Drive   | Without Resistor (0 Ohm)<br>(Only use in constant current power supply) |



| Connection                      | (Voltage & Current drive) |        |             |
|---------------------------------|---------------------------|--------|-------------|
| Connector Type (Default):       | Pin                       | Signal | Cable Color |
|                                 | 1                         | LED +  | Black/White |
|                                 | 2                         | N.C.   | ---         |
|                                 | 3                         | LED -  | Black       |
| Cable Length out from lighting: | 300 mm                    |        |             |



| Additional Information                                          | Details                                              |
|-----------------------------------------------------------------|------------------------------------------------------|
| Life span in continuous mode                                    | 20,000 hours                                         |
| Life span in strobe light mode                                  |                                                      |
| Lighting drop to 50% intensity<br>(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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