

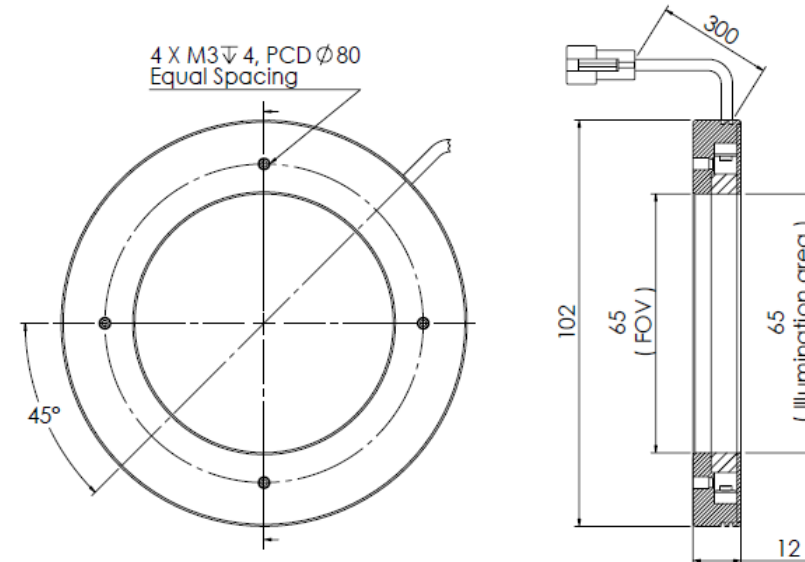
Low Angle Ring Light

FLDR-Si100LA1

Lighting Picture



Lighting Dimension



Unit in mm

| Mechanical Information | |
|------------------------------|---------------------------------|
| Casing Material | Aluminium |
| Weight | 142 g |
| Operating Temperature | Temp 0-35°C, Humidity 20-85% |
| Storage Temperature | -20°C to 60°C, Humidity 20%-85% |
| Lighting Dimension W x L x H | Ø102.0 x 12.0mm |
| IP Rating | IP30 |





| Led Colour | RED(R/R24) | InfraRed (IR) | GREEN(G/G12) | BLUE (B/B12) | WHITE (W/W12) |
|--------------------------------|--------------|---------------|--------------|--------------|----------------|
| Optical Information | | | | | |
| Wavelength / Color temperature | 626nm | 850nm | 525nm | 470nm | xy=(0.31,0.32) |
| Illumination (Number of LED) | 70 | 70 | 70/69 | 70/69 | 70/69 |
| Illumination Area | Ø65mm | | | | |
| Led Package | SMD | | | | |
| Eye Safety (EN 62471:2008) | Exempt Group | | | | |
| Optimal Working Distance | 0-20 mm | | | | |

| Continuous Mode | Voltage Drive (With resistor) | | | | | Current Drive (Without resistor) | | | | | |
|------------------------------|-------------------------------|--------------|--------------|--------------|--------------|----------------------------------|--------------|--------------|--------------|--------------|------------|
| | R | IR | G12/B12/W12 | R24 | G/B/W | R | IR | G12/B12/W12 | R24 | G/B/W | |
| Supply Voltage To Controller | 12VDC ± 2% | | | 24VDC ± 2% | | 12VDC ± 2% | 10VDC ± 2% | | | 23VDC ± 2% | 22VDC ± 2% |
| Lighting Forward Voltage, Vf | 11.0 V | 9.8V | 9.0 V | 22.0 V | 21.0 V | 11.0 V | 9.8V | 9.0 V | 22.0 V | 21.0 V | |
| Max. Current | 0.56 A (MAX) | 0.25 A (MAX) | 0.46 A (MAX) | 0.28 A (MAX) | 0.20 A (MAX) | 0.56 A (MAX) | 0.25 A (MAX) | 0.46 A (MAX) | 0.28 A (MAX) | 0.20 A (MAX) | |
| Max. Power | 6.72 W | 3.00 W | 5.52 W | 6.72 W | 4.80 W | 6.72 W | 2.50 W | 4.60 W | 6.44 W | 4.40 W | |

| Strobe Mode | Voltage Drive | | | | | Current Drive | | | | | |
|------------------------------|---|--------------|--------------|---|--------------|------------------|------------------|--------------|--------------|------------------|------------------|
| | R | IR | G12/B12/W12 | R24 | G/B/W | R | IR | G12/B12/W12 | R24 | G/B/W | |
| Max. Lighting Supply Voltage | Pulsing at 12VDC to 24VDC, Recommended at 18VDC | | | Pulsing at 24VDC to 48VDC, Recommended at 36VDC | | Pulsing at 12VDC | Pulsing at 10VDC | | | Pulsing at 23VDC | Pulsing at 22VDC |
| Max. Current | 1.40 A (MAX) | 0.63 A (MAX) | 1.15 A (MAX) | 0.70 A (MAX) | 0.50 A (MAX) | 1.40 A (MAX) | 0.63 A (MAX) | 1.15 A (MAX) | 0.70 A (MAX) | 0.50 A (MAX) | |
| Max. Trigger Pulse Duration | 10 msec | | | | | | | | | | |
| Duty Cycle | < 10% | | | | | | | | | | |

| Ordering Part Number | Controller Type | Description |
|--|-----------------|---|
| FLDR-Si100LA1-R/R24/IR/G12/B12/W12/G/B/W | Voltage Drive | With Resistor (Use in both constant voltage/ current power supply) |
| FLDR-Si100LA1-R/R24/IR/G12/B12/W12/G/B/W-0 | Current Drive | Without Resistor (0 Ohm) (Only use in constant current power supply) |



| Connection | (Voltage & Current drive) | | | | | |
|---------------------------------|---------------------------|--------|---|-------------|--------|---|
| 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: | 300 mm | | | | | |

| 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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