

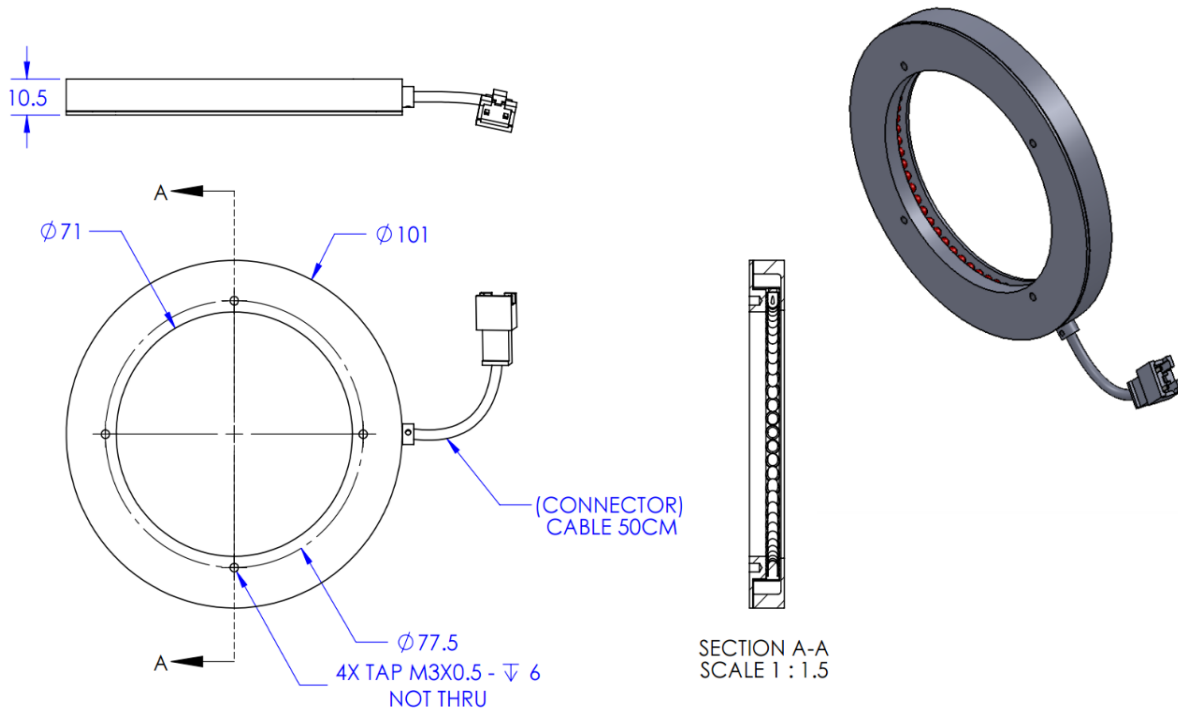


OPTO ENGINEERING

# ILLUMINATOR DATA

## LTZZ0100-90-1-W-24V

### Lighting Dimension



### Mechanical Information

|                           |           |
|---------------------------|-----------|
| Casing Material           | Aluminium |
| Storage Temperature Range | 0 - 45°C  |
| Storage Humidity Range    | 20 - 85%  |
| Weight                    | 100g      |
| Length / Outer Diameter   | 101mm     |
| Width / Inner Diameter    | 71mm      |
| Thickness / Height        | 10.5mm    |



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| Lighting Information                        |   |           |           |       |   |       |       |       |       |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
|---|---|-----------|-----------|-------|---|-------|-------|-------|-------|---|-------|-------|------|------|---|-------|-------|-------|-------|---|-------|-------|-------|-------|
| Part Number                                 | LTZZO100-90-1-W-24V   |           |           |       |   |       |       |       |       |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
| LED Color                                   | WHITE   |           |           |       |   |       |       |       |       |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
| Wavelength                                  | REFER TO CHROMACITY TABLE   |           |           |       |   |       |       |       |       |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
| Working Distance                            | 20 mm   | 25 mm     | 30 mm     |       |   |       |       |       |       |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
| Intensity (±15%)                            | 2527.6 lx   | 1959.6 lx | 1462.6 lx |       |   |       |       |       |       |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
| Illumination (number of row)                | 1   |           |           |       |   |       |       |       |       |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
| Illumination Active Area                    | Active Length / Outer Dia.  |           | 72 mm     |       |   |       |       |       |       |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
|   | Active Width / Inner Dia.   |           | 71 mm     |       |   |       |       |       |       |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
| Emission angle                              | 0   |           |           |       |   |       |       |       |       |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
| Eye Safety Class ( IEC62471 )               | EXEMPT  |           |           |       |   |       |       |       |       |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
| Chromaticity Table<br>For White colour only | <table border="1"><tbody><tr><td>X</td><td>0.296</td><td>0.287</td><td>0.307</td><td>0.311</td><td>X</td><td>0.311</td><td>0.307</td><td>0.33</td><td>0.33</td></tr><tr><td>Y</td><td>0.276</td><td>0.295</td><td>0.315</td><td>0.294</td><td>Y</td><td>0.294</td><td>0.315</td><td>0.339</td><td>0.318</td></tr></tbody></table> |           |           |       | X | 0.296 | 0.287 | 0.307 | 0.311 | X | 0.311 | 0.307 | 0.33 | 0.33 | Y | 0.276 | 0.295 | 0.315 | 0.294 | Y | 0.294 | 0.315 | 0.339 | 0.318 |
| X   | 0.296   | 0.287     | 0.307     | 0.311 | X | 0.311 | 0.307 | 0.33  | 0.33  |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |
| Y   | 0.276   | 0.295     | 0.315     | 0.294 | Y | 0.294 | 0.315 | 0.339 | 0.318 |   |       |       |      |      |   |       |       |       |       |   |       |       |       |       |

| Electrical Information                            |         |
|---|---------|
| Rated Constant Voltage                            | 24V±2%  |
| Rated Constant Current                            | 135 mA  |
| Power Consumption                                 | 3.24 W  |
| Casing temperature,<br>After 60 minutes operation | 42.9 °C |


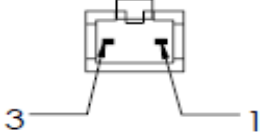
| Strobe Mode Specification     |                            |
|-------------------------------|----------------------------|
| *Normal Strobe Voltage        | 24 V                       |
| *Normal Strobe Current        | 105 mA                     |
| Overdrive Voltage Range       | Min: 36V      Max: 48V     |
| Overdrive Current Range       | Min: 0.9 A      Max: 0.9 A |
| Recommended Overdrive Voltage | 36V                        |
| **Max. Trigger Pulse Duration | 10 msec                    |
| **Max. Duty Cycle             | 10%                        |

\*Normal strobe means the lighting is operated using the rated power. Overdrive means the power supplied to the lighting exceeded the rated power.

\*\*Overdrive condition must not exceed the max. trigger pulse duration and max. duty cycle.

# ILLUMINATOR DATA

## LTZZ0100-90-1-W-24V

| Connection Information   |             |        |              |
|--|-------------|--------|--------------|
| Connector Type (Default)   | JST SMR-03V |        |              |
| Cable Length   | 50 cm       |        |              |
| Pin Configuration<br><br> | Pin         | Signal | Cable Colour |
|  | 1           | LED +  | Red          |
|  | 2           | N.C    | -            |
|  | 3           | LED -  | White        |
|                          |             |        |              |

| Additional Information         |  |
|--------------------------------|--|
| Additional Cooling Method      | Attached to machine part for better heat dissipation |
| Intensity Controller Selection | SD, ST, ANG, LC, SDA, SDP series                     |
| CE Conformity                  | YES  |
| RoHS Compliance                | YES  |

| Application       |  |
|-------------------|--|
| Illumination Type | Direct Illumination                                  |
| Application Use   | Edge Detection, Scratched On Metal or Glossy Surface |



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## LTZZ0100-90-1-W-24V

| Lighting Pattern  |              |           |          |           |
|-------------------|--------------|-----------|----------|-----------|
| Working Distance  | 25mm         |           |          |           |
| Display and Image |              |           |          |           |
| Data Results      | Horizontal   | Meas.(mm) | Vertical | Meas.(mm) |
|                   | 90%          | 35        | 90%      | 34        |
|                   | 80%          | 45        | 80%      | 45        |
|                   | 70%          | 55        | 70%      | 54        |
|                   | 60%          | 64        | 60%      | 64        |
|                   | 50%          | 74        | 50%      | 73        |
|                   | 40%          | 87        | 40%      | 87        |
|                   | 30%          | 101       | 30%      | 101       |
|                   | 20%          | 121       | 20%      | 122       |
|                   | 10%          | 164       | 10%      | 165       |
| Max               | Meas.(cd/m2) |           |          |           |
|                   | 1506.091     |           |          |           |