

■ Features

- Delivers a uniform beam pattern when mounted onto a Direct Diode Laser (DDL) L11585 series
- Beam pattern ideal for laser quenching and thermal treatment
- Varying beam aspect ratio

■ Applications

- Metal processing (quenching, cladding)
- Thermal treatment

■ Outline

When mounted onto a Hamamatsu Direct Diode Laser (DDL) L11585 series, the A14132 delivers a uniform beam pattern ideal for laser quenching and thermal treatment. The A14132 includes an aspect ratio conversion unit and laser focusing unit which can be selected to change the different aspect ratios to adjust the laser irradiation area. A thermometer can be attached by installing an optional coaxial unit, allowing coaxial measurement of the processing point temperature. A coaxial camera and visible pointer can also be added.



■ Specifications

| Parameter | Specifications | |
|------------------------------------|---|-----------|
| | L11585-02 | L11585-04 |
| Maximum light radiant output power | 1.8 kW | 2.5 kW |
| Radiant light output power (Typ.) | 1.6 kW | 2.0 kW |
| Dimensions (W × H × D) | Approx. 116 mm × 116 mm × 292 mm (excluding protuberance) | |
| Beam spot size | 5 mm × 10 mm | |
| Weight | Approx. 3 kg | |
| Oscillation mode | CW | |

Note: Please refer to the technical note for other combinations of an aspect ratio conversion unit and laser focusing unit.

■ Cooling water conditions

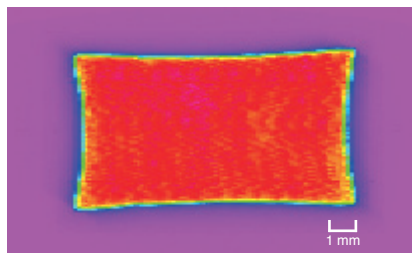
| Parameter | Specifications |
|--------------------------|------------------------------|
| Conductivity | 1.0 μS/cm * |
| Temperature | +15 °C to +30 °C |
| Flow rate | 1.0 L/min. |
| Adapt cooling water hose | Outer diameter approx. φ6 mm |
| | Inner diameter approx. φ4 mm |

* Besides deionized water and pure water, tap water can be used.

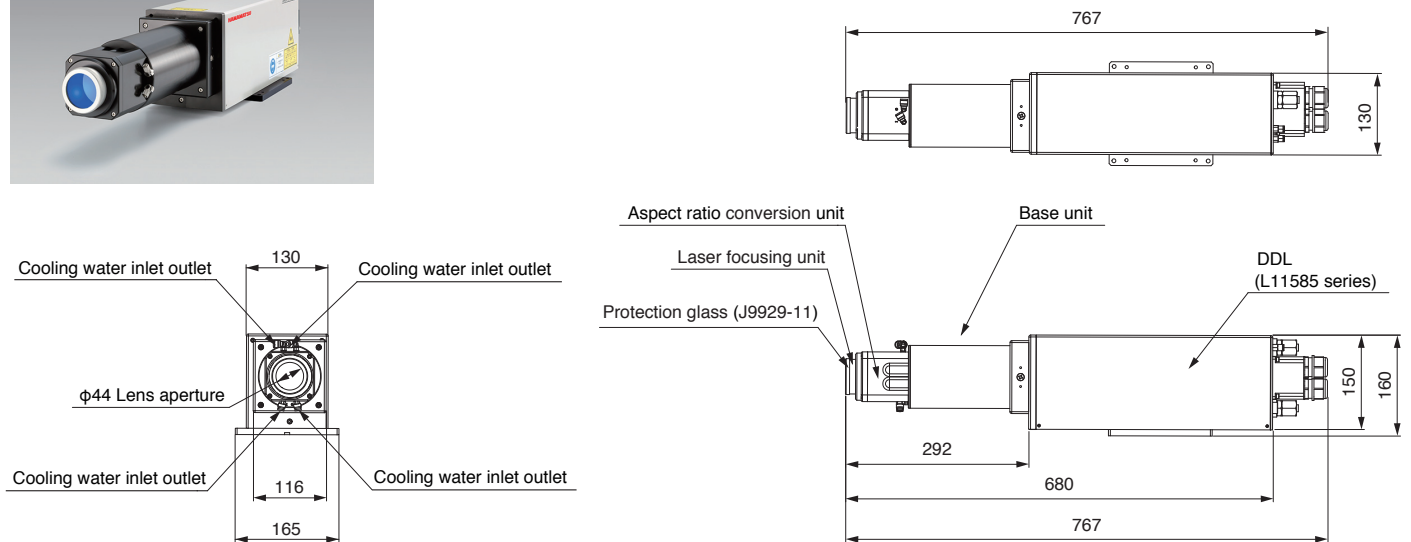
■ Rating

| Parameter | Specifications |
|-----------------------------|--|
| Operating temperature | +5 °C to +40 °C |
| Operating relative humidity | Less than 60% (no condensation) |
| Storage temperature | -0 °C to +50 °C |
| Location for use | Indoor use at a height less than 2000 meters above sea level |

■ Example of beam spot 2D image



■ Dimensional outline (unit: mm)



Cat. No.LDDL3001E02
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