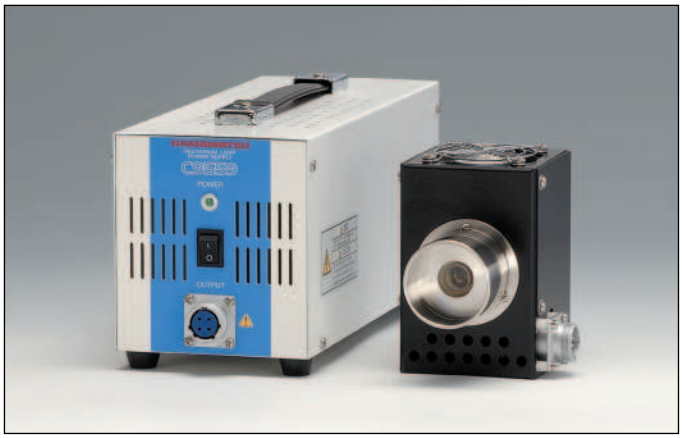
VUV LIGHT SOURCE

HIGH BRIGHTNESS VUV LIGHT SOURCE UNIT

L10366 SERIES

OVERVIEW

The L10366 series are newly developed VUV (vacuum UV) light source units.
This product uses a "high-brightness deuterium lamp with MgF_2 window" that produces a high radiant intensity 4 times higher than conventional model.
This product is now a lot easier to handle due to use of an air-cooled structure and vacuum flange mount.



Left: Power supply, Right: Light source TLSZF0004

FEATURES

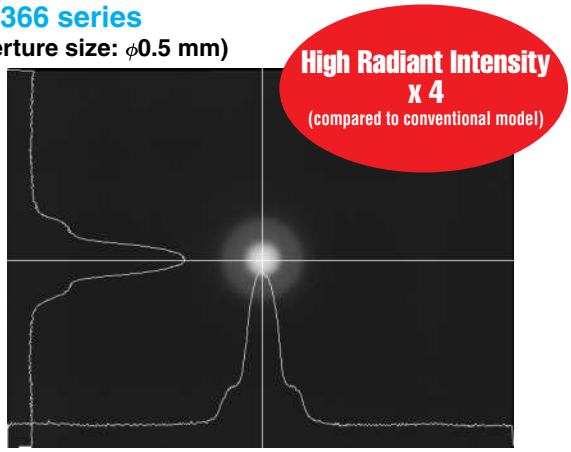
- **High Radiant Intensity: 4 Times**
  (compared to conventional model)
- **High VUV Intensity Down to 115 nm**
- **Air Cooling (needs no cooling water)**
- **External Control**
  (lamp ON/OFF, lamp ON status signal)
- **No Optical Axis Alignment Required**

APPLICATIONS

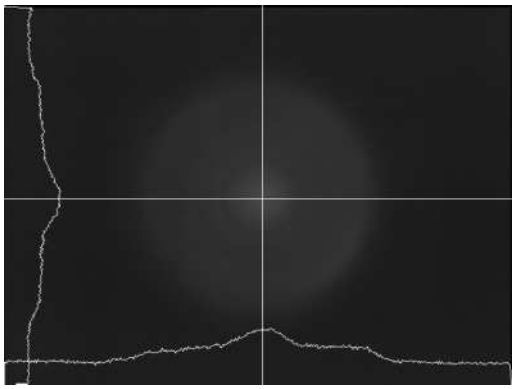
- **Spectrophotometer, Fluorophotometer**
- **Electrostatic Removal of Semiconductor* Wafer, LCD Panel, etc.**
- **Photoionization Detector (PID)**
- **UV Resistance Testing of Various Material**
- **Optical Chemical Vapor Deposition (optical CVD)**
- **Excitation Light Source**

ARC DISTRIBUTION (at 230 nm)

L10366 series
(Aperture size: ϕ0.5 mm)



Conventional type
(Aperture size: ϕ1 mm)



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PACKAGE CONTENTS

Type No.	Light Source	Vacuum Flange ①	Power Supply	Light Source to Power Supply Cable	AC Cable
L10366	○	—	○	○	○
L10366-10	○	○(E3444)	○	○	○
L10366-11	○	○(E3444-01)	○	○	○
L10366-12	○	○(E3444-02)	○	○	○

① The vacuum flange E3444 series can be sold separately from the unit L10366 series.

SPECIFICATIONS

●GENERAL RATINGS

Parameter	Description/Value	Unit
Spectral Distribution	115 to 400	nm
Window Material	MgF_2	—
Aperture Size (Arc Point)	ϕ0.5	mm
Cooling Method	Air-cooled	—
Operating Temperature Range	+10 to +35	°C
Operating Humidity Range	Below 80 % (No Condensation)	—

●RECOMMENDED OPERATING CONDITIONS AND CHARACTERISTICS (at 25 °C)

Parameter		Description/Value	Unit
Warm-up Time		25 ± 5	s
Output Stability	Fluctuation (p-p)	0.05	%
	Drift (Max.)	±0.3	%/h
Light Source Life ②	at 230 nm	2000 (Guaranteed)	h
	at 160 nm	500 (Expected)	
Input Voltage (AC)		100 V to 240 V (100 V / 200 V Auto Switching), Single Phase 50 Hz to 60 Hz	—
Power Consumption		140	VA

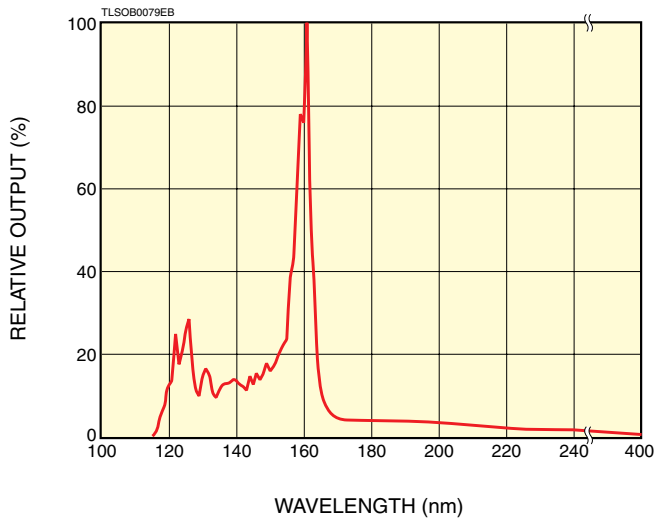
② The life end is defined as the time when the radiant output falls to 50 % of its initial value. Operating life depends on environmental conditions (vacuum atmosphere).

●VACUUM FLANGE

Parameter	E3444	E3444-01	E3444-02
Seeling Method	O-Ring		
Flange	Regular	JIS VF50	ICF114
Mount Flange	—	JIS VG50	ICF114
Seeling Force Retention	1.33×10^{-4} Pa L/s or Less (1×10^{-6} Torr L/s)		

SPECTRAL DISTRIBUTION

(VUV region; for reference only)

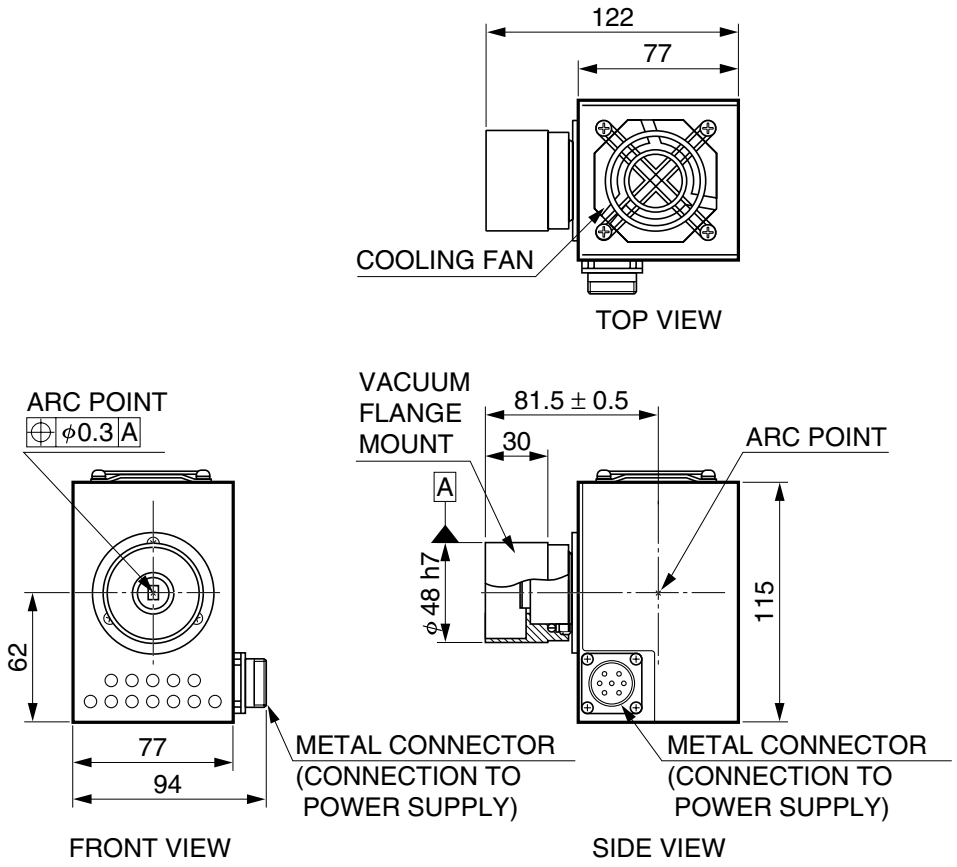


REPLACE LAMP SOURCE

Type No.	Light Source	Vacuum Flange
L10388	○	—
L10388-10	○	○(E3444)
L10388-11	○	○(E3444-01)
L10388-12	○	○(E3444-02)

DIMENSIONAL OUTLINES (Unit: mm)

LIGHT SOURCE (Weight: Approx. 1 kg)



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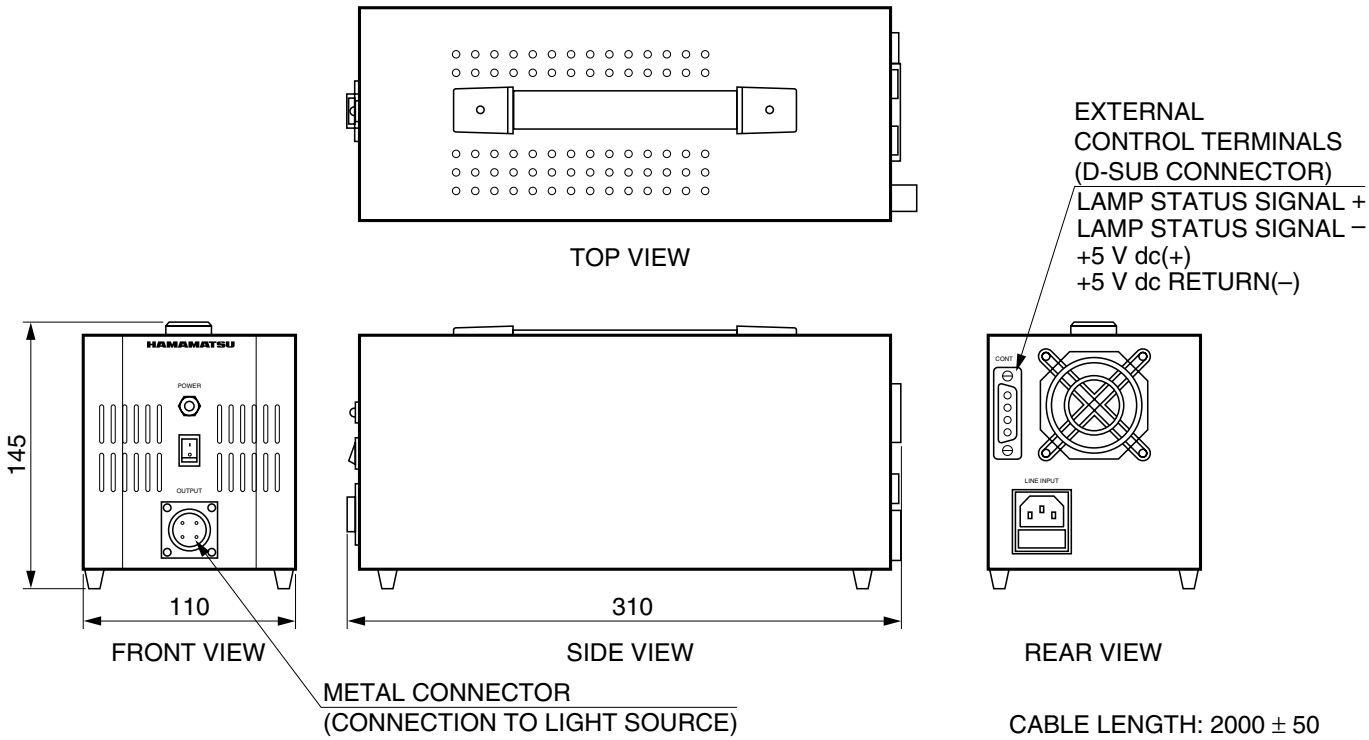
POWER SUPPLY (Weight: Approx. 2.8 kg)



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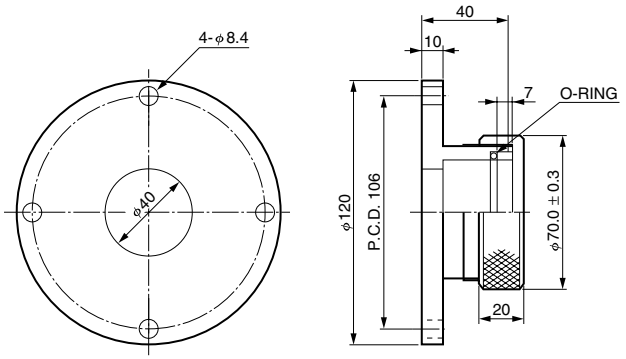
DIMENSIONAL OUTLINES (Unit: mm)

VACUUM FLANGE

E3444



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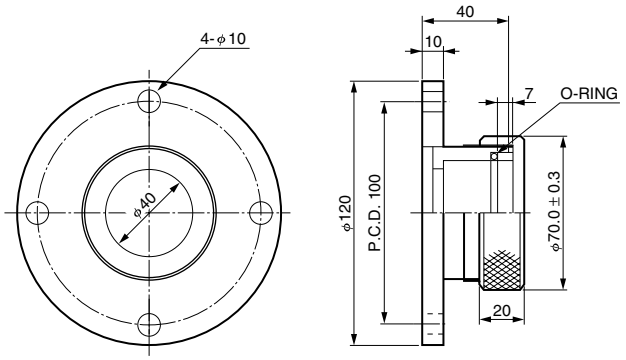
E3444-01



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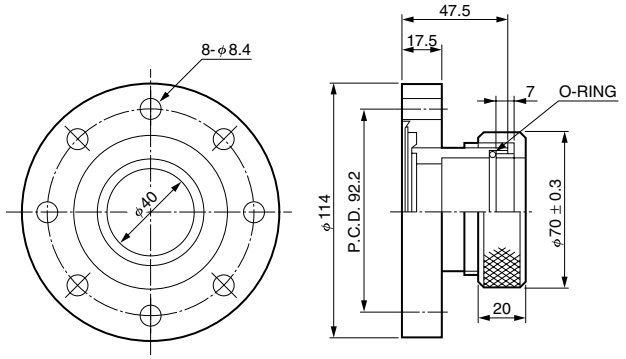
E3444-02



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* Patents: US PAT. No. 5596478, EP PAT. No. 0597103
Takasago Thermal Engineering CO, Ltd. holds above patents.

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