

LF1A (IP67f) Series LED Illumination Units (Water-, Dust- and Oil-proof)

Environmental-proof LED illumination units can be used in environments where water/oil spattering may occur.

Degree of protection (IP67f)

Water-proof, dust-proof, oil-proof type that uses special rubber (fluorinated elastomer) for internal waterproof gasket.

The LF1A series can be used on a food processing line to be washed as a whole, or in a machine tool where the unit may be splashed with oil.

Easy installation

Equipped with a standard accessory 5-m cable (metal protection tube can be mounted)

Compact body

Low-profile design unique to LED illumination
Allows for installation in a machine where space is limited.

Safe

The front transparent panel uses reinforced glass with a thickness of 4 mm, ensuring safety against any spray of shavings or filings.

Environmental-proof housing

The front housing panel is made of SUS304, ensuring high strength and corrosion resistance.

Other features

- Energy-saving: Power consumption is approx. one third that of fluorescent lamps.
- Long life: Maintenance unneeded for approx. 40000 hours.
- Clean: Compliant with RoHS directive, mercury-free.
- Vibration/Impact resistance: Unlike fluorescent lamps, an LED unit with no electric contact is resistant to vibration.
- Low heat value: The LED unit gives off a lower heat value than that of a fluorescent lamp.
- Noiseless: The LED unit can be used in a location near electronic equipment.

Bright

With the highly bright multi-chip LED modules, the LF1A series provides illumination equivalent to a 20W fluorescent lamp.

Easy to see

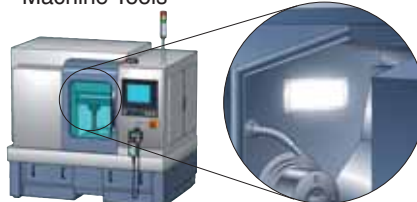
The white LED has a clear color that gives off a color temperature of 5500K, allowing for clear lighting conditions in the workplace.

Types

LED Arrangement	Illumination Color	White
	Color	
8 LEDs x 3 rows		LF1A-D2F-2THWW6

Application Examples

• Machine Tools



• Semiconductor Manufacturing Equipment



- Food Processing Lines
- Automotive/Outdoor Equipment, etc.

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Specifications

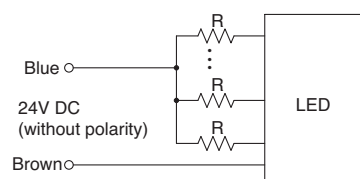
• General Specifications

Rated Voltage	24V DC (without polarity)
Input Current (typ.)	300 mA (at rated voltage)
Rated Power (typ.)	7.2W (at rated voltage)
Operating Temperature	-20 to +50°C
Storage Temperature	-25 to +70°C
Operating/Storage Humidity	45 to 85% RH (no condensation)
Life (half luminance)	40,000 hours
Insulation Resistance	100 MΩ minimum (500V DC megger)
Dielectric Strength	1000V AC, 1 minute (between live and dead parts)
Vibration Resistance (damage limits)	5 to 55 Hz, amplitude 0.5 mm, 20 m/s ²
Shock Resistance (damage limits)	980 m/s ²
Material	Housing: SUS Glass: Reinforced glass Rear panel: Aluminum Electric wire: US20276T 0.2 mm ² x 2c
Weight (approx.)	850g
Degree of Protection	IP67f

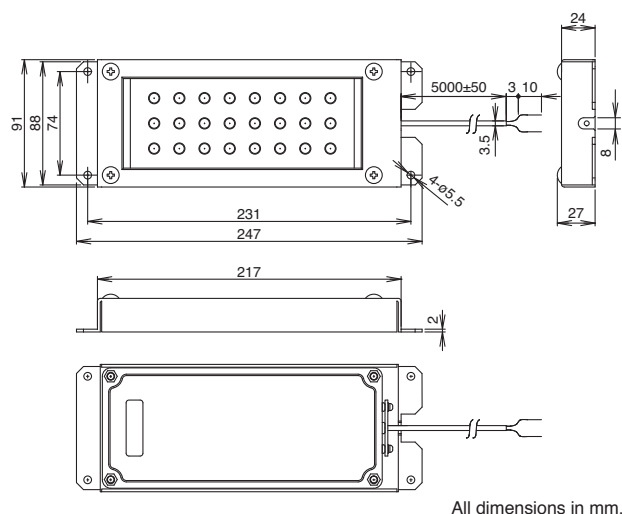
• LED Optical Specifications

Illumination Color	White
Chromaticity Coordinate Value (typ.)	X: 0.33, Y: 0.33
Luminous Intensity (typ.) (Single LED module)	6000 mcd
Color Temperature (typ.)	5500K
Reference Illuminance (typ.) at 500 mm	600 lx

Internal Circuit



Dimensions



Specifications and other descriptions in this leaflet are subject to change without notice.



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