

# LF1A Series (IP40)

## LED Module & High Heat-radiation Technology Create a Thin LED Housing

LF1A LED strips use super-bright multi-chip LEDs providing illumination equivalent of a 20W fluorescent lamp, while consuming only one third the power. They come in a thin housing, available in three sizes, with

four color configurations (warm white, cool white, yellow and red). **LF1A light strips have a rated voltage of 24V DC.**

- Brightness: 66.6 Lumens/Watt
- Energy saving: One-third of fluorescent lamps
- Long life: 40,000 Hrs (Half-life)
- UL Listed
- RoHS Compliant



### Features

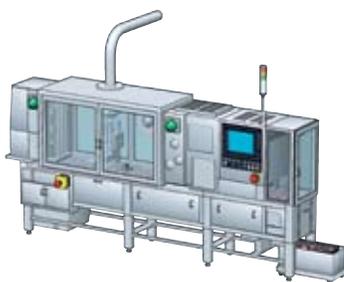
Illumination Color	White	Warm White	Yellow	Red
Part No.	LF1A-*-2THWW6	LF1A-*-2TLWW6	LF1A-*-2SHY8	LF1A-*-2SHR8
Appearance				
Spectrum				
Features	Suppressing glare, the bright, white color lights up a target object very clearly.	Warm white is similar to that of an incandescent light bulb. This illumination color is 2800K.	Yellow gives off an emission spectrum with a dominant wavelength of 590nm.	Red gives off an emission spectrum with a long wavelength (dominant wavelength of 625nm).

\*A1 = 3 LEDs, B1 = 6 LEDs, D1 = 12 LEDs

### Application Examples



- Machine Tools
- Control Panel/Plant Equipment
- Inspection/Test Equipment



- Food Processing Machines
- Cosmetic Plants
- Chemical Plants



- Semiconductor Manufacturing Equipment
- IC Plants



- Application Equipment for Photosensitive Materials
- Semiconductor Manufacturing Equipment

## Specifications

### General Specifications

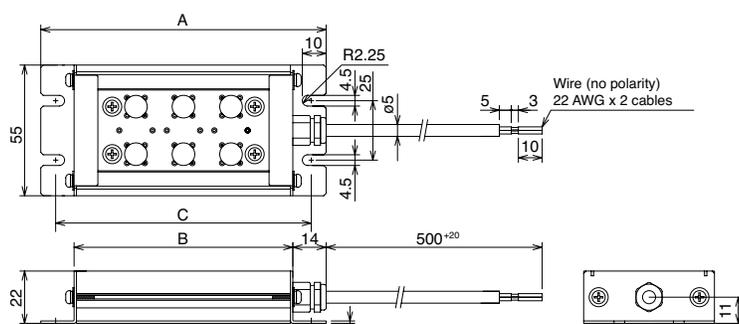
Part No.	LF1A-*-2THWW6	LF1A-*-2TLWW6	LF1A-*-2SHY8	LF1A-*-2SHR8
Rated Voltage	24V DC (non-polarized)			
Input Current (typ.) (at rated voltage)	3 LEDs x 2 rows	75mA		90mA
	6 LEDs x 2 rows	150mA		180mA
	12 LEDs x 2 rows	300mA		360mA
Rated Power (typ.) (at rated voltage)	3 LEDs x 2 rows	1.8W		2.2W
	6 LEDs x 2 rows	3.6W		4.4W
	12 LEDs x 2 rows	7.2W		8.7W
Dielectric Strength	Between live and dead parts: 1000V AC, 1 minute			
Insulation Resistance	Between live and dead parts: 100MΩ (500V DC megger)			
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			
Weight (approx.)	LF1A-A1: 190g, LF1A-B1: 270g, LF1A-D1: 470g			
Degree of Protection	IP40			

\*A1 = 3 LEDs, B1 - 6 LEDs, D1 = 12 LEDs

### LED Optical Specifications

Part No.	LF1A-*-2THWW6	LF1A-*-2TLWW6	LF1A-*-2SHY8	LF1A-*-2SHR8
Illumination Color	Cool White	Warm White	Yellow	Red
Luminous Intensity (typ.) (Single LED module)	6000mcd	4000mcd	4000mcd	2500mcd
Color Temperature (typ.) / Dominant Wavelength (typ.)	5500K	2800K	590nm	625nm
Reference	3 LEDs x 2 rows	130lx	130lx	85lx
Illuminance (typ.) at 500 mm	6 LEDs x 2 rows	380lx	260lx	170lx
	12 LEDs x 2 rows	760lx	520lx	340lx

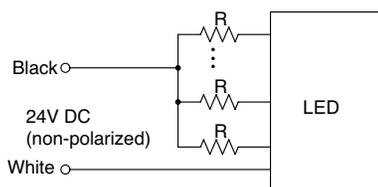
### Dimensions (mm)



### Dimensions

Part No.	A	B	C
LF1A-A1-*	120	92	108
LF1A-B1-*	180	152	168
LF1A-D1-*	300	272	288

### Internal Circuit



### Part Numbers

Length (mm)	LEDs	Color	Part Number
120	3 x 2 rows	Cool White	LF1A-A1-2THWW6
		Warm White	LF1A-A1-2TLWW6
		Yellow	LF1A-A1-2SHY8
		Red	LF1A-A1-2SHR8
180	6 x 2 rows	Cool White	LF1A-B1-2THWW6
		Warm White	LF1A-B1-2TLWW6
		Yellow	LF1A-B1-2SHY8
		Red	LF1A-B1-2SHR8
300	12 x 2 rows	Cool White	LF1A-D1-2THWW6
		Warm White	LF1A-D1-2TLWW6
		Yellow	LF1A-D1-2SHY8
		Red	LF1A-D1-2SHR8