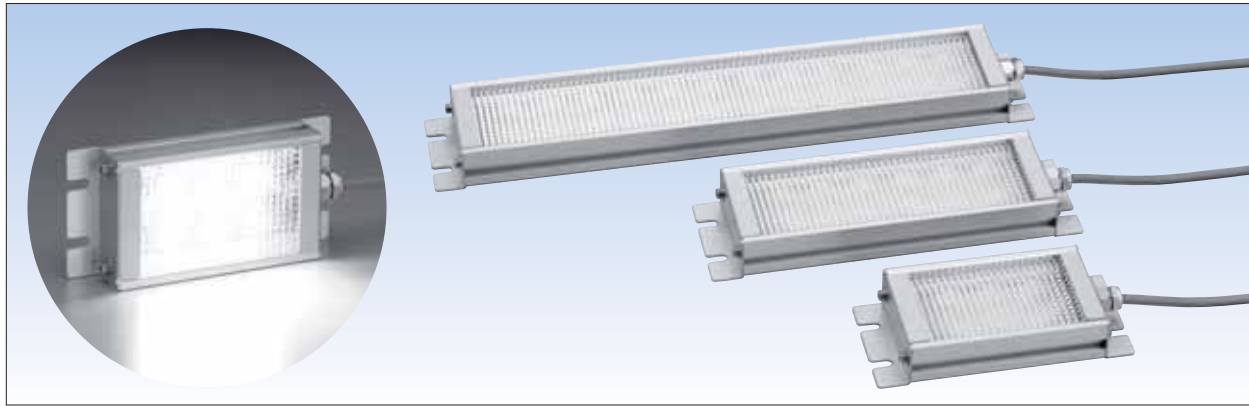


# LF1A (IP40) Series LED Illumination Units

LED module and high heat-radiation technology allow for thin LED housing



## Features and Applications by Illumination Color

Illumination Color	Cool White	Warm White	Yellow	Red
Type No.	LF1A-*2THWW6	LF1A-*2TLWW6	LF1A-*2SHY8	LF1A-*2SHR8
Appearance				
Spectrum				
Features	Suppressing glare, the bright, clear white illumination color lights up a target object clearly.	Warm color similar to that of an incandescent light bulb. This illumination color gives off a color temperature of 2800K.	Yellow illumination color gives off an emission spectrum with a dominant wavelength of 590 nm. It does not include 500 nm or shorter wavelengths.	Red illumination color gives off an emission spectrum with a long wavelength (dominant wavelength of 625 nm).
Application Examples	<ul style="list-style-type: none"> <li>• Machine Tools</li> <li>• Control Panel/Plant Equipment</li> <li>• Inspection/Test Equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Food Processing Machines</li> <li>• Cosmetic Plants</li> <li>• Chemical Plants</li> </ul>	<ul style="list-style-type: none"> <li>• Semiconductor Manufacturing Equipment</li> <li>• IC Plants</li> </ul>	<ul style="list-style-type: none"> <li>• Application Equipment for Photosensitive Materials</li> <li>• Semiconductor Manufacturing Equipment</li> <li>• Night-time Experiments</li> </ul>

## Types

LED Arrangement	Illumination Color			
	Cool White	Warm White	Yellow	Red
3 LEDs x 2 rows	LF1A-A1-2THWW6	LF1A-A1-2TLWW6	LF1A-A1-2SHY8	LF1A-A1-2SHR8
6 LEDs x 2 rows	LF1A-B1-2THWW6	LF1A-B1-2TLWW6	LF1A-B1-2SHY8	LF1A-B1-2SHR8
12 LEDs x 2 rows	LF1A-D1-2THWW6	LF1A-D1-2TLWW6	LF1A-D1-2SHY8	LF1A-D1-2SHR8

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

# LF1A Series LED Illumination Units

## Specifications

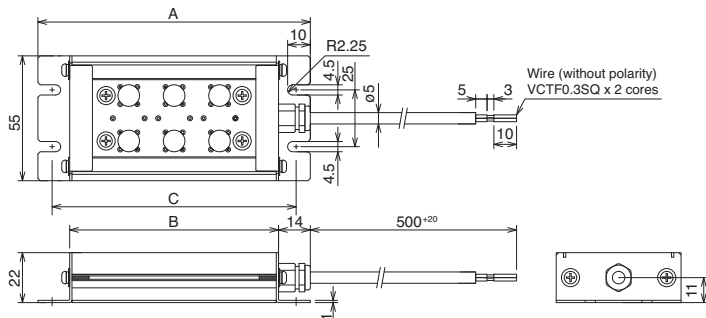
### • General Specifications

Type No.	LF1A-□-2THWW6	LF1A-□-2TLWW6	LF1A-□-2SHY8	LF1A-□-2SHR8
Rated Voltage	24V DC (without polarity)			
Input Current (typ.) (at rated voltage)	3 LEDs x 2 rows	75 mA	90 mA	
	6 LEDs x 2 rows	150 mA	180 mA	
	12 LEDs x 2 rows	300 mA	360 mA	
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: 100 MΩ (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			

### • LED Optical Specifications

Type No.	LF1A-□-2THWW6	LF1A-□-2TLWW6	LF1A-□-2SHY8	LF1A-□-2SHR8
Illumination Color	White	Incandescent Light Color	Yellow	Red
Luminous Intensity (typ.) (Single LED module)	6000 mcd	4000 mcd	4000 mcd	2500 mcd
Color Temperature (typ.) / Dominant Wavelength (typ.)	5500K	2800K	590 nm	625 nm
Reference Illuminance (typ.) at 500 mm	3 LEDs x 2 rows	190 lx	130 lx	85 lx
	6 LEDs x 2 rows	380 lx	260 lx	170 lx
	12 LEDs x 2 rows	760 lx	520 lx	340 lx

## Dimensions

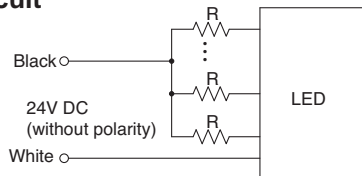


### • Dimension List

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

All dimensions in mm.

## Internal Circuit



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



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