

Think Automation and beyond...



LF1D

LUMIFA™

LED Illumination Units (water, dust, and oil-proof)

Also available with
or without cable
gland, mounting
bracket, &
cable.

Shown with cable gland,
mounting bracket, &
cable.

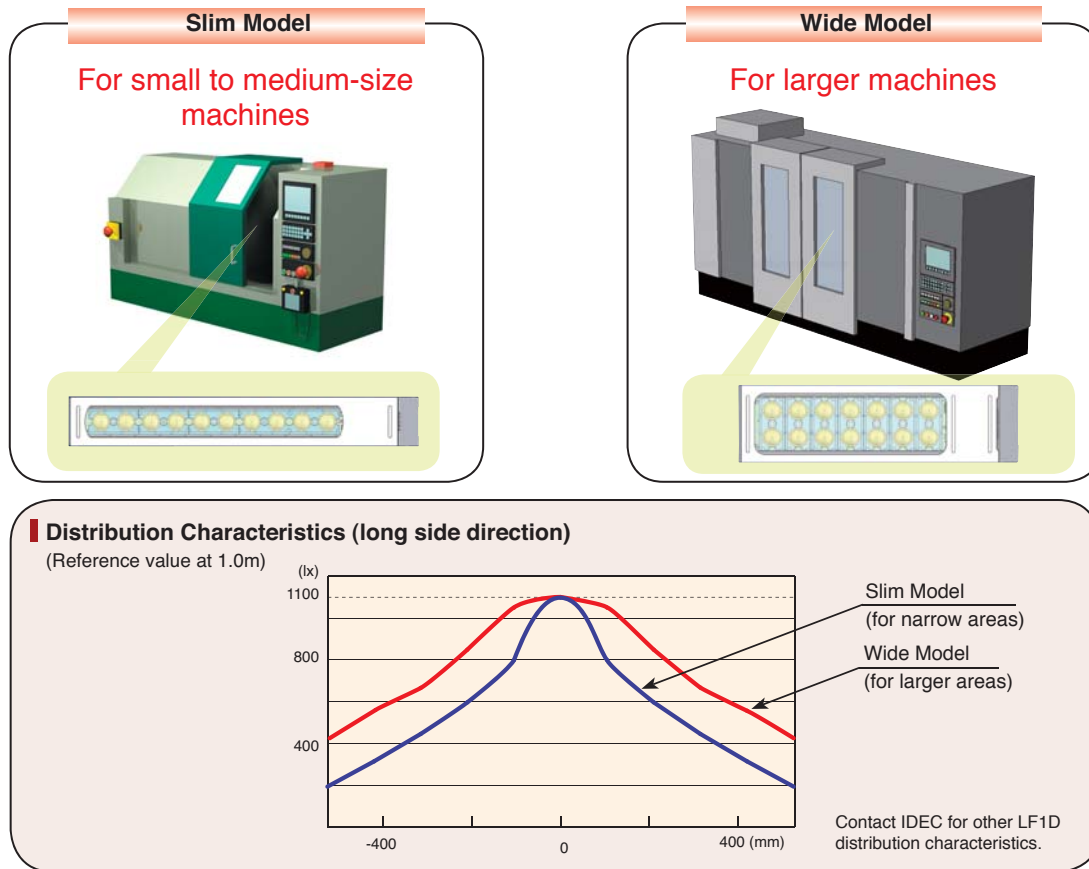
Slim Model

Wide Model

- Brightness:
 - Slim: 66.6 Lumens/Watt
 - Wide: 67.2 Lumens/Watt
- Life: 70% of initial luminance at 50,000 Hrs
- IP67 (polycarbonate lens) or IP67f (reinforced glass lens)
- UL Pending
- RoHS Compliant

IDEC CORPORATION

Excellent light distribution by combining different light-dispersing lenses



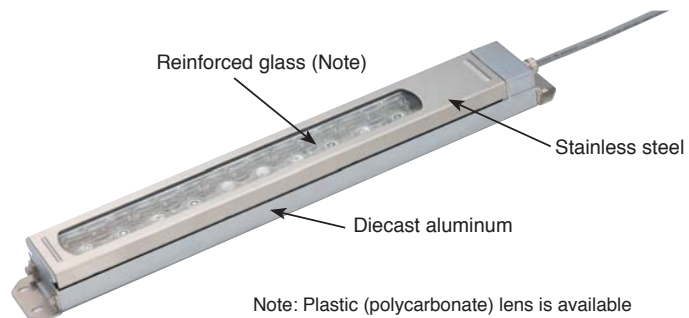
Durable and resistant to harsh environments

High durability

Constructed of diecast aluminum (base), stainless steel (front), and reinforced glass. Unit is resistant to flying debris.

Degree of protection IP67f

Waterproof, dust-proof, oil-proof.
Can be used in environments subject to water, dust, and oil.



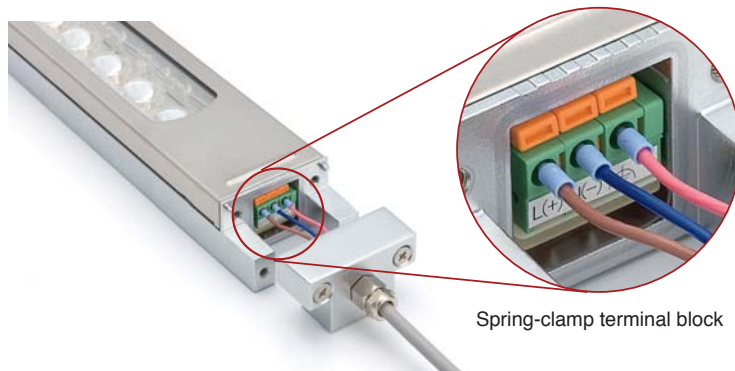
Easy maintenance

Spring-clamp terminal blocks

Removable direct plug-in terminal block and spring clamp connector ensures a high quality connection, making it easy to install or replace the LED illumination unit.

Flexible mounting

The LED illumination unit can be mounted using mounting holes on the back or ends of its housing.



Part Numbers

Style	Cable Connection	Pre-installed Cable gland, Mounting Bracket, 5m Cable	Rating	Part Number
Slim LED array: 10 x 1 	Side 	No	IP67f	LF1D-E2F-2W
		Yes	IP67	LF1D-E3G-2W
	Back 	No	IP67f	LF1D-E2F-2W-A
		Yes	IP67	LF1D-E3G-2W-A
	Wide LED array: 7 x 2 	No	IP67f	LF1D-F2F-2W
		Yes	IP67	LF1D-F3G-2W
	Side 	No	IP67f	LF1D-F2F-2W-A
		Yes	IP67	LF1D-F3G-2W-A
	Back 	No	IP67f	LF1D-F2F-2W-200
		Yes	IP67	LF1D-F3G-2W-200
		No	IP67f	LF1D-F2F-2W-451
		Yes	IP67	LF1D-F3G-2W-451

Accessories

Type	Material	Part No.	Remarks	Package Qty
Cable Gland	Brass	LF9Z-A11	M8, applicable wire size: $\phi 3.5$ to 5.5 mm (10 to 12AWG)	1
Mounting Bracket	Stainless steel	LF9Z-B11	With mounting screws	2
		LF9Z-B12	With mounting screws	2
Cable	PVC	LF9Z-C05	Length: 5m	1

Specifications

• General Specifications

Type	Slim	Wide
Rated Voltage	24V DC	
Voltage Range	21.6 to 26.4V DC	
Rated Power (typ.)	9W	12.5W
Insulation Resistance	1M Ω minimum (500V DC megger)	
Dielectric Strength	1000V AC, 50/60 Hz, 1 minute	
Vibration Resistance (damage limits)	Frequency 5 to 55 Hz, amplitude 0.5 mm	
Shock Resistance (damage limits)	1000 m/s ²	
Operating Temperature	-30 to +55°C (no freezing)	
Operating Humidity	45 to 85% RH (no condensation)	
Storage Temperature	-35 to +70°C (no freezing)	
Operating Atmosphere	No corrosive gas	
Life (Note 1)	50,000 hours (The illumination duration in which the illuminance maintains a minimum of 70% of the initial value at 25°C.)	
Degree of Protection (Note 2)	Reinforced glass lens: IP67f Polycarbonate lens: IP67	
Material	Housing: Diecast aluminum Front cover: Stainless steel Lens: Reinforced glass or polycarbonate (Note 3)	
Weight (approx.)	LF1D-E**-2W: 750g LF1D-E**-2W-A: 950g	LF1D-F**-2W: 800g LF1D-F**-2W-A: 1000g

Note 1: LED life depends on the operating environment.

Note 2: Waterproof and oil-proof characteristics guaranteed for conditions specified by IEC 60529 and JEM1030. For illumination units without accessories, use a cable gland and cable that satisfy IP67f or IP67 degrees of protection.

Note 3: The reinforced glass and polycarbonate lenses have the same appearance, but have different degrees of protection (IP67f or IP67).

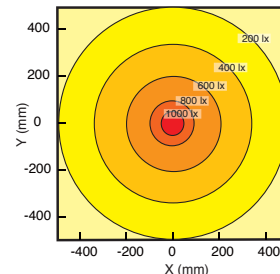
• LED Optical Specifications

Type	Slim	Wide
Illumination Color	White	
Total Luminous Flux (typ.)	600 lm	840 lm
Color Temperature (typ.)	5700K	
Reference Illuminance (typ.) at 1.0m	1100 lx	

LED modules and illumination units may vary in illumination colors and illuminance. Luminous flux, color temperature, and illuminance shown above are typical values.

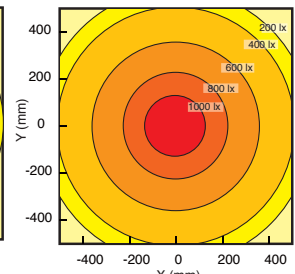
Illuminance Distribution (at 1.0m)

• Slim Type



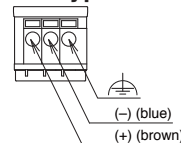
X: Long side Y: Short side

• Wide Type

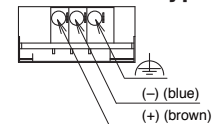


Terminal Block Wiring

• Slim Type



• Wide Type

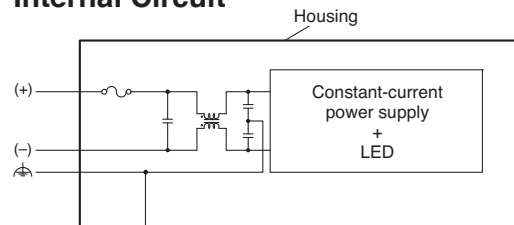


Applicable ferrules: 0.25 to 0.75 mm²

Recommended source:

Phoenix Contact: AI 0,25-12 BU, AI 0,34-12 TQ,
AI 0,5-12 WH, AI 0,75-12 GY

Internal Circuit



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