

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.

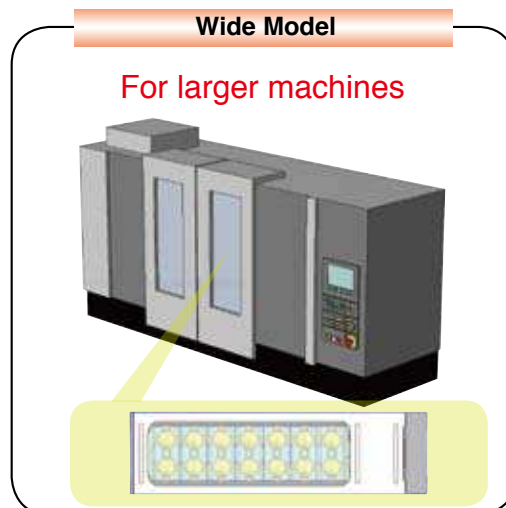
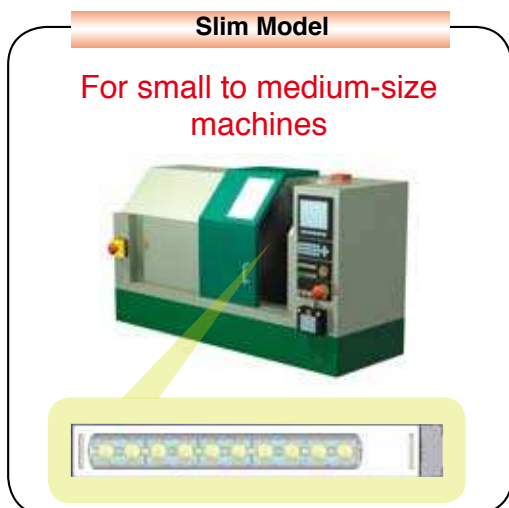
Slim Model

Wide Model

- Brightness:
 - Slim: 66.6 Lumens/Watt
 - Wide: 67.2 Lumens/Watt
- Life: 70% of initial luminance at 50,000 Hrs
- IP69K (high pressure and high temperature washdown)
- Available in clear or diffused Lens
- Surface mounting
- RoHS Compliant

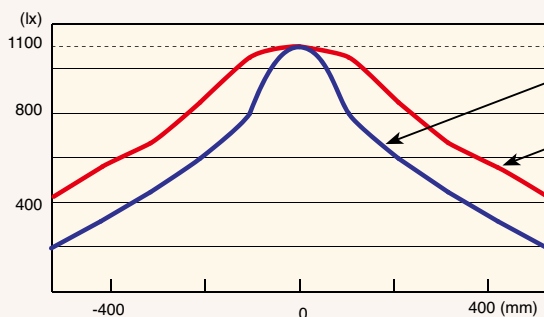
IDEC CORPORATION

Excellent light distribution by combining different light-dispersing lenses



Distribution Characteristics (long side direction)

(Reference value at 1.0m)



Slim Model
(for narrow areas)

Wide Model
(for larger areas)

Contact IDEC for other LF1D distribution characteristics.

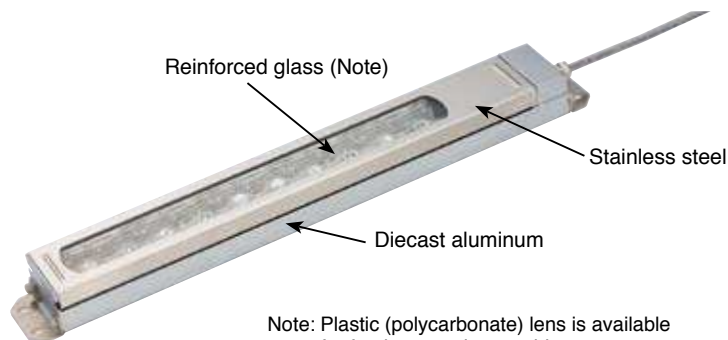
Durable and resistant to harsh environments

High durability

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

Degree of protection IP69K

High pressure and high temperature washdown
Can be used in environments with high-pressure water and that require steam cleaning.



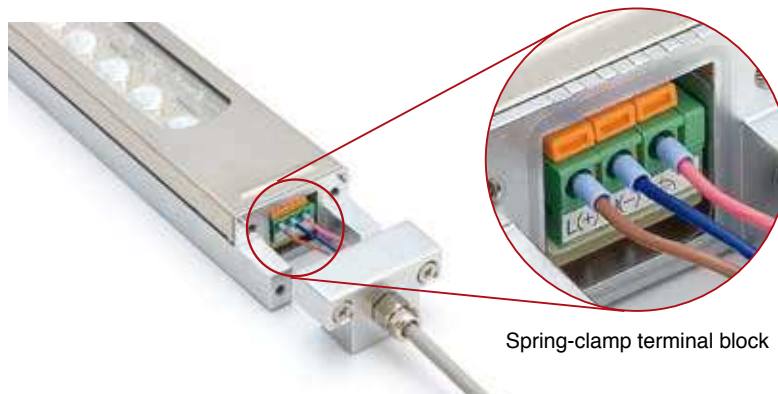
Easy maintenance

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

Model			Slim Model LF1D-E (10 LEDs × 1 row)		Wide Model LF1D-F (7 LEDs × 2 rows)	
Cable Gland	Cable	Mounting Bracket	Clear Reinforced Glass	Clear Polycarbonate	Clear Reinforced Glass	Clear Polycarbonate
Appearance						
Without (Cable gland hole on the side)	—	— ✓	LF1D-E2F-2W LF1D-E2F-2W-101	LF1D-E3G-2W LF1D-E3G-2W-101	LF1D-F2F-2W LF1D-F2F-2W-101	LF1D-F3G-2W LF1D-F3G-2W-101
Without (Cable gland hole on the back)	—	— ✓	LF1D-E2F-2W-200 LF1D-E2F-2W-201	LF1D-E3G-2W-200 LF1D-E3G-2W-201	LF1D-F2F-2W-200 LF1D-F2F-2W-201	LF1D-F3G-2W-200 LF1D-F3G-2W-201
With (Side)	—	— ✓	LF1D-E2F-2W-300 LF1D-E2F-2W-301	LF1D-E3G-2W-300 LF1D-E3G-2W-301	LF1D-F2F-2W-300 LF1D-F2F-2W-301	LF1D-F3G-2W-300 LF1D-F3G-2W-301
	✓	— ✓	LF1D-E2F-2W-350 LF1D-E2F-2W-A	LF1D-E3G-2W-350 LF1D-E3G-2W-A	LF1D-F2F-2W-350 LF1D-F2F-2W-A	LF1D-F3G-2W-350 LF1D-F3G-2W-A
With (Back)	—	— ✓	LF1D-E2F-2W-400 LF1D-E2F-2W-401	LF1D-E3G-2W-400 LF1D-E3G-2W-401	LF1D-F2F-2W-400 LF1D-F2F-2W-401	LF1D-F3G-2W-400 LF1D-F3G-2W-401
	✓	— ✓	LF1D-E2F-2W-450 LF1D-E2F-2W-451	LF1D-E3G-2W-450 LF1D-E3G-2W-451	LF1D-F2F-2W-450 LF1D-F2F-2W-451	LF1D-F3G-2W-450 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)	IP69K High pressure and high temperature washdown	
Material	Housing: Diecast aluminum Front cover: Stainless steel Lens: Reinforced glass or polycarbonate	
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.

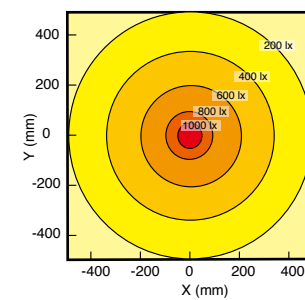
• LED Optical Specifications

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	

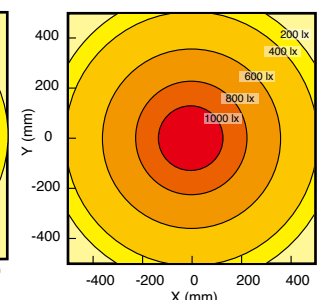
LED modules and illumination units may vary in illumination colors and illuminance. Luminous flux, color temperature, and illuminance shown above are typical values.

Illuminance Distribution (at 1.0m)

• Slim Type

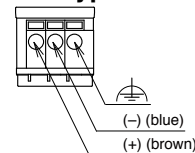


• Wide Type

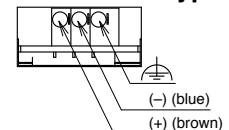


Terminal Block Wiring

• Slim Type



• Wide Type



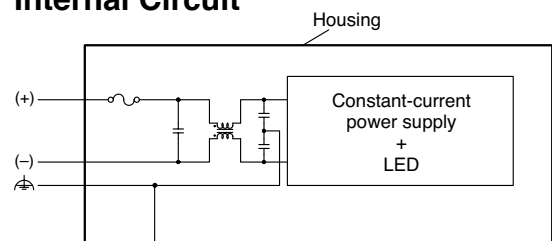
Applicable ferrules: 0.25 to 0.75 mm²

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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