

LUMIFA LF1B-N

Industrial Machines • Semiconductor Equipment • Control Panels



PRODUCT DESCRIPTION

The LF1B-N series is available in six lengths, two covers (transparent or white) and six distinct colors—cool white, warm white, yellow, red, blue and green—making it a flexible lighting solution for control panels, industrial machines, manufacturing lines, work stations and more. These compact, energy-efficient units are low-maintenance and last for years, contributing to overall cost savings.

KEY FEATURES

- Compact size: 27.5 mm wide x 16 mm high
- Six lengths: 134, 210, 330, 580, 830 and 1,080 mm
- Vibration- and shock-resistant
- Yellow light ideal for photosensitive materials
- IP65-rated for use in wet environments

GENERAL SPECIFICATIONS

Model		LF1B-NA (134mm)	LF1B-NB (210mm)	LF1B-NC (330mm)	LF1B-ND (580mm)	LF1B-NE (830mm)	LF1B-NF (1,080mm)
Rated Voltage		24V DC (operating voltage range: 21.6 to 26.4V)					
Input Current (typ.) (at the rated current), mA	cool white/warm white/blue	60	120	180	360	540	720
	red/yellow/green	40	80	120	240	360	480
Power Consumption (typ.) (at the rated current), W	cool white/warm white/blue	1.5	2.9	4.4	8.7	13.0	17.3
	red/yellow/green	1.0	2.0	2.9	5.8	8.7	11.6
Insulation Resistance		100MΩ minimum (500V DC megger)					
Dielectric Strength		1,000V AC, 1 minute (between live and dead parts)					
Vibration Resistance (damage limits)		Frequency: 5 to 55Hz, Amplitude 0.5mm Acceleration 60m/s ² (6G), 2 hours each in 3 axes				Frequency: 5 to 55Hz, Amplitude 0.17mm Acceleration 20m/s ² (2G), 2 hours each in 3 axes	
Shock Resistance (damage limits)		1,000m/s ² (100G), 5 shocks each in 6 axes				300m/s ² (30G), 5 shocks each in 6 axes	
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 gases					
Life¹		40,000 hours (Ta = 25°C) (The total illumination life in which the brightness maintains a minimum of 70% of the initial value.)					
Degree of Protection		IP65 (IEC 60529)					
Material		Cover: Polycarbonate, End Cover/Cable Gland: Polyamide, Wire: PVC (24AWG)					
Weight (approx.), g		95	125	165	255	430	740

1. LED life depends on the operating environment.



LED OPTICAL SPECIFICATIONS

Illumination Color		Cool White		Warm White		Yellow		Red		Blue		Green	
Cover		Clear	White	Clear	White	Clear	White	Clear	White	Clear	White	Clear	White
Color Temperature/Dominant Wavelength (typ.)		6500K		3000K		590nm		620nm		455nm		525nm	
Reference Brightness (typ.) at 0.5m, lx	LF1B-NA	95	85	90	80	20	18	20	18	10	9	30	27
	LF1B-NB	240	215	230	2100	40	36	40	36	20	18	60	55
	LF1B-NC	455	410	440	395	75	65	75	65	30	27	110	100
	LF1B-ND	840	750	815	725	125	110	125	110	50	45	190	170
	LF1B-NE	1100	995	1065	960	160	145	160	145	60	55	260	235
	LF1B-NF	1350	1210	1300	1170	180	160	180	160	80	70	300	270

LED modules and illumination units may vary in illumination colors and brightness.

PART NUMBERS

Illumination Color	Cool White	Warm White	Yellow	Red	Blue	Green
Appearance						
LF1B-NA (134mm)	LF1B-NA⊙P-2THWW2-3M	LF1B-NA⊙P-2TLWW2-3M	LF1B-NA⊙P-2SHY2-3M	LF1B-NA⊙P-2SHR2-3M	LF1B-NA⊙P-2THS2-3M	LF1B-NA⊙P-2SHG2-3M
LF1B-NB (210mm)	LF1B-NB⊙P-2THWW2-3M	LF1B-NB⊙P-2TLWW2-3M	LF1B-NB⊙P-2SHY2-3M	LF1B-NB⊙P-2SHR2-3M	LF1B-NB⊙P-2THS2-3M	LF1B-NB⊙P-2SHG2-3M
LF1B-NC (330mm)	LF1B-NC⊙P-2THWW2-3M	LF1B-NC⊙P-2TLWW2-3M	LF1B-NC⊙P-2SHY2-3M	LF1B-NC⊙P-2SHR2-3M	LF1B-NC⊙P-2THS2-3M	LF1B-NC⊙P-2SHG2-3M
LF1B-ND (580mm)	LF1B-ND⊙P-2THWW2-3M	LF1B-ND⊙P-2TLWW2-3M	LF1B-ND⊙P-2SHY2-3M	LF1B-ND⊙P-2SHR2-3M	LF1B-ND⊙P-2THS2-3M	LF1B-ND⊙P-2SHG2-3M
LF1B-NE (830mm)	LF1B-NE⊙P-2THWW2-3M	LF1B-NE⊙P-2TLWW2-3M	LF1B-NE⊙P-2SHY2-3M	LF1B-NE⊙P-2SHR2-3M	LF1B-NE⊙P-2THS2-3M	LF1B-NE⊙P-2SHG2-3M
LF1B-NF (1,080mm)	LF1B-NF⊙P-2THWW2-3M	LF1B-NF⊙P-2TLWW2-3M	LF1B-NF⊙P-2SHY2-3M	LF1B-NF⊙P-2SHR2-3M	LF1B-NF⊙P-2THS2-3M	LF1B-NF⊙P-2SHG2-3M

In place of ⊙ insert 3 for clear cover and 4 for white cover.

PART NUMBER STRUCTURE (USE FOR INTERPRETING PART NUMBERS ONLY)

LF1B - NC3P - 2THWW2 - 3M

Length

A: 134mm (5.28")
B: 210mm (8.27")
C: 330mm (12.99")
D: 580mm (22.83")
E: 830mm (32.68")
F: 1,080mm (42.52")

Cover

3: Clear
4: White

Illumination Color

THWW2: Cool White
TLWW2: Warm White
SHY2: Yellow
SHR2: Red
THS2: Blue
SHG2: Green

Cable Length

3M: 3m