

UniFlex™



Type A + B LED T8 Lamps

T8 Linear Lamps LED

U-Bent Lamps LED



TYPE A+B

UniFlex - Type A+B Solution

UniFlex is a line of Hybrid Type A+B LED linear tubes, with industry-leading performance. The lamps can work with an existing fluorescent ballast, as 'plug-n-play', or directly on line voltage if the old ballast is bypassed. For Type A operation, the lamps work with fluorescent electronic ballasts, both instant start and programmed start. For Type B operation, UniFlex lamps have an internal driver that accepts 120-277 VAC, double-ended input. UniFlex works with existing instant start or rapid start sockets and are compatible with dimming ballasts, controls, and sensors. UniFlex lamps are offered in U-Bent, 2', 3', and 4' configurations.



FEATURES AND BENEFITS

Type-A Application:

- Works on existing compatible Electronic Ballast
- Instant Start and Program Rapid Start Electronic Ballast

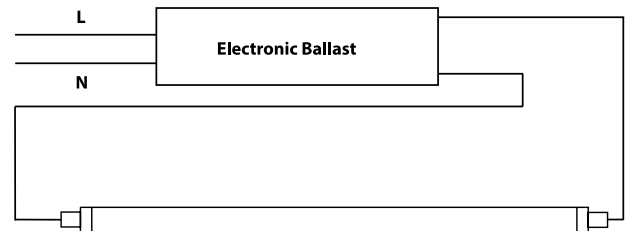
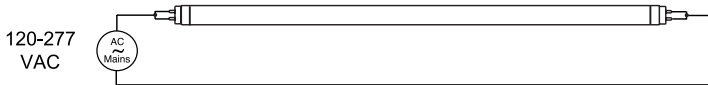
Type-B Application:

- Internal Drive To Be Wired Directly To Sockets
- 120 or 277 Volts Application
- See wiring diagram for Double Ended installation

- Long life | High CRI
- Instant on, No delay
- Convenient and quick installation
- Works with dimming ballast
- Compatible with controls and sensors
- Works in cold temperature applications
- 5 Year Warranty



WIRING DIAGRAM



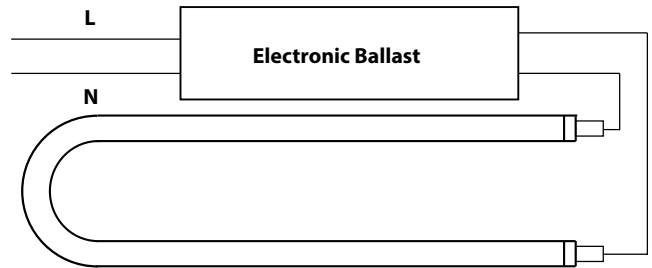
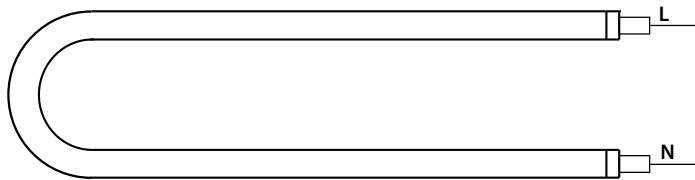
Model No.	Length (in)	Power Direct AC (W)	Power w/Ballast (W)	Input Voltage	CCT	Lumens (lm)	CRI	Beam Angle	Lamp Efficacy Direct AC	Lamp Efficacy w/Ballast	Life (h)
L24T8/830/9G-AB	24	9	12	120-277	3000 ²	1350	83	325	150	112	50000
L24T8/835/9G-AB	24	9	12	120-277	3500	1350	83	325	150	112	50000
L24T8/840/9G-AB	24	9	12	120-277	4000	1350	83	325	150	112	50000
L24T8/850/9G-AB	24	9	12	120-277	5000	1350	83	325	150	112	50000
L36T8/830/11G-AB	36	11	14	120-277	3000 ²	1650	83	325	150	115	50000
L36T8/835/11G-AB	36	11	14	120-277	3500	1650	83	325	150	115	50000
L36T8/840/11G-AB	36	11	14	120-277	4000	1650	83	325	150	115	50000
L36T8/850/11G-AB	36	11	14	120-277	5000	1650	83	325	150	115	50000
L48T8/830/12G-AB	48	12	15	120-277	3000 ²	1800	83	325	150	120	50000
L48T8/835/12G-AB	48	12	15	120-277	3500	1800	83	325	150	120	50000
L48T8/840/12G-AB	48	12	15	120-277	4000	1800	83	325	150	120	50000
L48T8/850/12G-AB	48	12	15	120-277	5000	1800	83	325	150	120	50000

¹ See espentech.com for ballast compatibility list.
² 3000K may be subject to lead times and availability



FEATURES AND BENEFITS

- Type A and B Lamp
- Internal driver for direct 120-277 VAC Input
- Double ended Type-B Input
- Works with fluorescent electronic ballast (Instant Start and Programmed Start)
- Long life | High CRI
- Instant on, No delay
- Convenient and quick installation
- Utilizes existing instant start or rapid start sockets
- Works with dimming ballast
- Compatible with controls and sensors
- Works in cold temperature applications
- 5 Year Warranty



Model No.	Length (in)	Width (in)	Power Direct AC (W)	Power w/Ballast (W)	Input Voltage	CCT	Lumens (lm)	CRI	Beam Angle	Lamp Efficacy Direct AC	Lamp Efficacy w/Ballast	Life (h)
LB31T8U/830/13P-AB	24	1-5/8	13	16	120-277V	3000K ³	1800	83	240°	138 ¹	112.5 ¹	50000
LB31T8U/835/13P-AB	24	1-5/8	13	16	120-277V	3500K	1800	83	240°	138 ¹	112.5 ¹	50000
LB31T8U/840/13P-AB	24	1-5/8	13	16	120-277V	4000K	1800	83	240°	138 ¹	112.5 ¹	50000
LB31T8U/850/13P-AB	24	1-5/8	13	16	120-277V	5000K	1800	83	240°	138 ¹	112.5 ¹	50000
LB48T8U6/830/13P-AB	24	6	13	16	120-277V	3000K ³	1800	83	240°	138 ¹	128 ¹	50000
LB48T8U6/835/13P-AB	24	6	13	16	120-277V	3500K	1800	83	240°	138 ¹	128 ¹	50000
LB48T8U6/840/13P-AB	24	6	13	16	120-277V	4000K	1800	83	240°	138 ¹	128 ¹	50000
LB48T8U6/850/13P-AB	24	6	13	16	120-277V	5000K	1800	83	240°	138 ¹	128 ¹	50000

¹ Calculation based on (lm/W)
² See espentech.com for ballast compatibility list.
³ 3000K CCT may be subject to lead times and availability

Type A + B Emergency Solutions

EMERGENCY BALLAST FEATURES AND BENEFITS

- Internal Driver
- Emergency ballasts for Type A Emergency Applications
- Dual Input Voltage (120/277V)
- May work with Fluorescents and Type A T5 or T8 LED lamps using ballasts*
- Compatible with Espen Retroflex Lamps, Ballasts, and Type A drivers
- High Temperature Ni Cad Battery
- Durable, Heavy Duty Steel Housing
- 4 options with different sizes and lumen output
- Maintenance Free, Long Life
- 5 Year Warranty



Model No.	Type	Lumens	Voltage (V)	Operation Hours	Case
VEM500DV-L	Emergency Ballast ¹	500	120/277	90 mins	Regular
VEM700DV-L	Emergency Ballast ¹	700	120/277	90 mins	Regular
VEM800DV-L	Emergency Ballast ¹	800	120/277	90 mins	Slim
VEM1300DV-L	Emergency Ballast ¹	1300	120/277	90 mins	Slim

¹ When wired as Type A, use Emergency Ballast

1 LAMP EMERGENCY

VEM500DV-L
Regular Case
500 Lumens

VEM800DV-L
Slim Case
800 Lumens

1-2 LAMP EMERGENCY

VEM700DV-L
Regular Case
700 Lumens

VEM1300DV-L
Slim Case
1,300 Lumens

EMERGENCY INVERTER FEATURES AND BENEFITS

VEMB20W

- Espen Type B PL, PLL, Uniflex (when used as Type B¹), and T8 and T5 HE lamps not exceeding 20W
- Illuminates Most LEDs at Full Brightness, up to 20W for a minimum of 90 minutes
- Nickel Cadmium Rechargeable Battery
- UL 924 NFPA 101 Life Safety Code, NEC OSHA Compliant
- Output OCV 320 VDC

¹ When wired as Type B, use Emergency Inverters.

*Note: Espen recommends testing compatibility and performance in the actual jobsite prior to purchasing and before the actual installation lamp, ballasts/drivers, and emergency ballasts combinations performs differently depending on the circuit designs, components used, and other factors that can affect compatibility and performance.