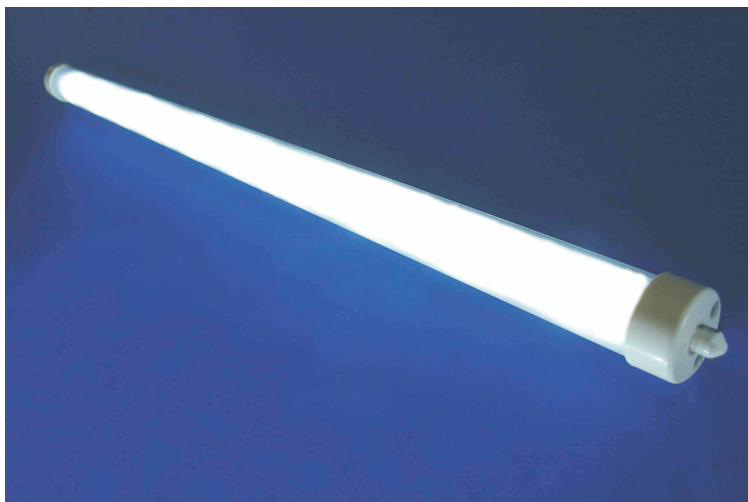




for use in light fixture for Transit Interior Lighting

PATENTED

**TLM SERIES - PREMIUM SAVER
T12 SIZE**



TL Series Premium Saver LED Lamp

DESCRIPTION

The LED Lighting tube has been designed to work with conventional fluorescent fixtures. To replace the short lived fluorescent lamps that are typically used in Interior Transportation lighting. The LED Lighting tube can be used to retrofit existing fluorescent installations, or for new install.

These products are superior in appearance allowing the use of LEDs but creating the appearance of fluorescent. The Premium lighting system offers customers the best in new technology.

The Premium lamps are design to have an equal appearance and higher performance in any transportation application.

FEATURES

The special features of the LED Light Tube are:

- Solid state lighting device, works well in harsh environments of hot or cold temperatures
- Instant on, no warm up time required
- Lasts 10 times longer than fluorescent
- NO EMI emissions, to eliminate radio interference
- Designed to replace conventional fluorescent lamps
- Vibration proof features
- Lead Free Compliant, Mercury Free

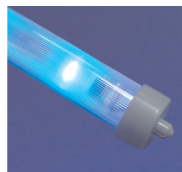


STANDARD FEATURES

- 60" and 72" lengths
- Cool White LEDs
- 24V Operating Voltage
- Double Frosted lens
- Single Pin, Instant start connection type



END CAP OPTIONS



FA8



RDCB



G13 Bi-Pin

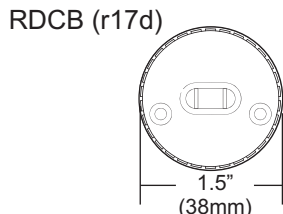
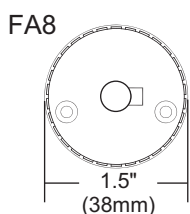
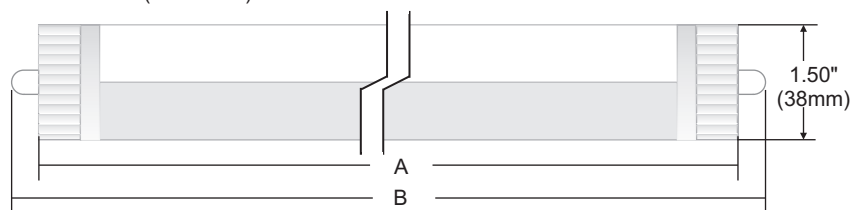
OPTIONAL FEATURES

- Lengths of 24", 36", 48"*
- Colors: Warm White, Blue, other colors upon request*
- Operational voltages for special applications
- Bi-Pin types*
- Dual dimming capability or extinguishing



DIMENSIONS

T12 Diameter (Side View)



Standard Length	A		B		Finished Weight T12	
	Inch	cm	Inch	cm	g	lbs
24	21.18	69.04	21.825	55.44	380	0.84
36	33.18	99.52	33.825	85.92	540	1.19
48	45.18	130.00	45.825	116.40	732	1.61
60	57.18	135.08	57.825	146.88	923	2.03
72	69.18	190.96	69.825	177.36	1115	2.46

Tolerance +/- 1.00mm

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**TLM SERIES - PREMIUM SAVER
T12 SIZE**

ELECTRICAL STATS & OPERATING FUNCTIONS

Type	Nominal Length (inch)	Input Voltage (DC Volts)	Lens Type	High Intensity (100% Brightness)			Low Intensity (20% Brightness)		
				Input Current (DC Amps)	Intensity (Estimated Lumens)	Power Consumption (Watts)	Input Current (DC Amps)	Intensity (Estimated Lumens)	Power Consumption (Watts)
				TYP	TYP	TYP	TYP	TYP	TYP
COOL WHITE									
TLM	24	24	Double Frosted	0.46	510	11	0.09	102	2.2
	36			0.71	742	17	0.14	148	3.4
	48			0.94	1021	23	0.19	204	4.5
	60			1.18	1299	28	0.24	260	5.7
	72			1.42	1578	34	0.28	316	6.8

Voltage Range = 20V ~ 32VDC
Operating Temperature: -30°C (-22°F) to 50°C (122°F)

Cool White = 5700K (5310K - 6020K)
Neutral White = 4100K (3710K - 4254K)
Blue = 470nm

ORDERING INFORMATION

SERIES TYPE DIAMETER PIN TYPE LENGTH VOLTAGE COLOR LENS TYPE FUNCTION

TL M - T12 - XXX - XX - 24 - X - X - X

FA8 24* ○ C = Cool White (5700K)
RDCB (R17D) 36* ○ D = Neutral White* (4100K)
G13 48* ● A = Amber*
60 ● R = Red*
72 ● G = Green*
● B = Blue

D = Double Side Frosted, white
S = Single side frosted, White*

S = Single Intensity
D = Dual Intensity (100% - 20%)
E = Extinguishable (100% - 0%)

Example:
TLM-T12-FA8-72-24-C-D-D = LED Transit Light, Premium Saver, T12 Size, FA8 - Single Pin, 72" Long, 24V, Cool White, Double Frosted Lens, Dual Intensity

NOTES & PATENT INFORMATION

US Patent # 7,307,391
China Patent # ZL200780001427.1
International Patents Pending
Designed and Manufactured in North America

* Custom order item, contact LED Smart Inc. for more details.

WARNINGS & SAFETY

High power LEDs have a high intensity of light in a single point. Avoid looking directly at the source of light for any prolonged time as it could cause retinal damage. This light source should be shielded with the lens as provided by LED Smart Inc. The removal of the lens would void all warranties and liability from the manufacturer and distributor of this product.