

T8 Fluorescent Lamp Replacement

Fluorescent tubes will be banned in 2023.

Get in touch to plan your rolling stock fluorescent lighting replacements with our rail compliant LED tubes.



Product Overview

- Rolling Stock Compliant.
- 600mm, 900mm, 1200mm, 1500mm, 1800mm
- High reliability LED and driver technology.
- Built in drive electronics for direct connection to power source.
- Significant energy savings.
- Zero maintenance costs.
- Flicker free lighting with instant start.
- No mercury content, environmentally friendly.

Safety Specifications

- DC input voltage reversal (non-destructive)
- Input transient protection
- Under voltage protection
- Built in multiple LED circuit redundancy
- Protected against power supply interruptions

Technical Overview

T8 Train Tube	
Input Voltage Range	24VDC - 110VDC - 230VAC
Input Current at Nominal Supply	1184mA ±5% 395mA ±5%
Input Power at Nominal Supply	As per table
Line Regulation (Percentage Illuminance change oversupply range 16.8-34VDC)	±5%
CRI	>80
Beam Angle	180°
Operating Temperature Range	-25 to 55°C
Storage Temperature Range	-25 to 55°C
Operating Humidity Range	10%-80%
Lumen Maintenance (time to 70% of the initial light output)	65,000 hours
MTBF MIL-HDBK-217F (40°C) (hrs)	100,000 hours
Sealing Rating	IP40
Switch Cycles	>100,000 (UIC555)
Connector	G13

Electronic Specifications

24 VDC T8 Train Tube	600 mm 24VDC	900 mm 24VDC	1200 mm 24VDC	1500 mm 24VDC	1800 mm 24VDC
Input Power at Nominal Supply	10W	15W	20W	25W	30W
Input Voltage Range	16.8 - 32VDC ±2%	16.8 - 32VDC ±2%	16.8 - 32VDC ±2%	16.8 - 32VDC ±2%	16.8 - 32VDC ±2%
Input Current at Nominal Supply	395 mA	592 mA	790 mA	988 mA	1184 mA
Line Regulation	±5%				

110 VDC T8 Train Tube	600 mm 110VDC	900 mm 110VDC	1200 mm 110VDC	1500 mm 110VDC	1800mm 110VDC
Input Power at Nominal Supply	10W	15W	20W	25W	30W
Input Voltage Range	67 - 140VDC ±2%	67 - 140VDC ±2%	67 - 140VDC ±2%	67 - 140VDC ±2%	67 - 140VDC ±2%
Input Current at Nominal Supply	91 mA	136 mA	180 mA	210 mA	272 mA
Line Regulation	±5%				

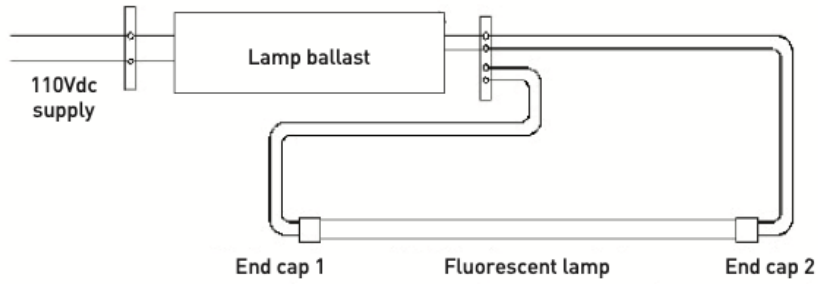
230VAC T8 Train Tube	600 mm 230VAC	900 mm 230VAC	1200 mm 230VAC	1500 mm 230VAC	1800 mm 230VAC
Input Power at Nominal Supply	10W	15W	20W	25W	30W
Input Voltage Range	160 - 265VAC ±2%	160 - 265VAC ±2%	160 - 265VAC ±2%	160 - 265VAC ±2%	160 - 265VAC ±2%
Input Current at Nominal Supply	395 mA	592 mA	790 mA	988 mA	1184 mA
Line Regulation	±5%				

Light Technical Data

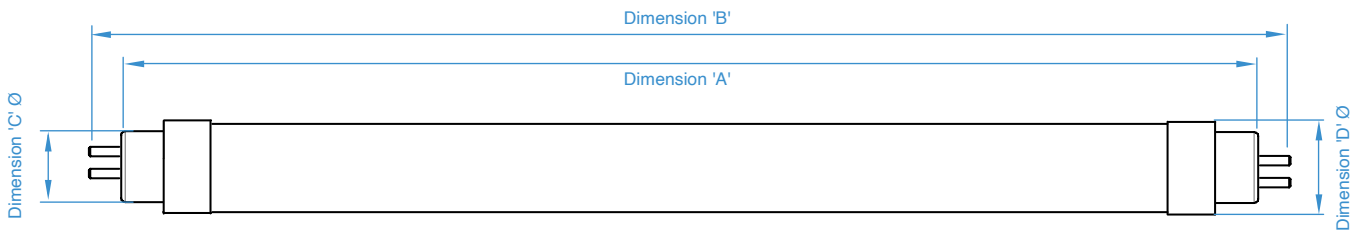
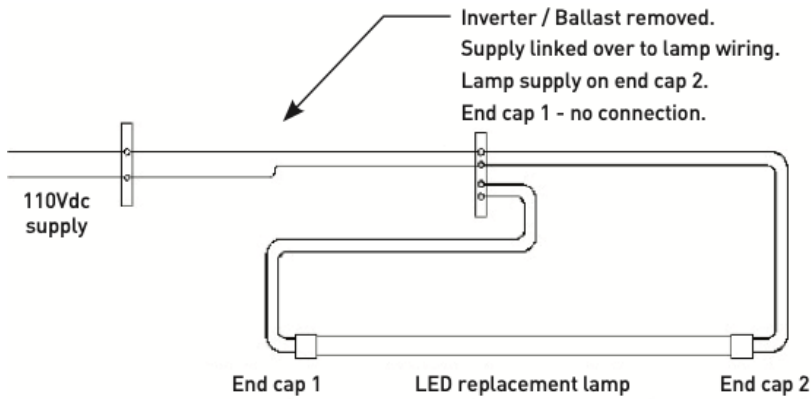
T8 Train Tube	600 mm	900 mm	1200 mm	1500 mm	1800 mm
Nominal luminous Flux	1250 LM	1875 LM	2500 LM	3125 LM	3750 LM
Colour Temperature	3000K ±150K / 4000K ±150K / 5000K ±150K / 6000K ±150K				
CRI	>80				
Beam Angle	180°				
Lumen Maintenance (time to 70% of the initial light output)	65,000 hours				
MTBF MIL-HDBK-217F (40°C) (hrs)	100,000 hours				
Switch Cycles	>100,000 (UIC555)				
Weight	258 g	516 g	516 g	645 g	774 g
Connector	G13 Compliant with EL60081				
Operating Temperature Range	-25 to 55°C				
Storage Temperature Range	-25 to 55°C				
IP rating	IP40				



Original Lamp Connection



LED Replacement Lamp Installation Guide



	Unit Dimensions				
	A	B	C	D	E
600mm	589.8mm	604mm	25.4mm	30mm	12.5mm
900mm	894.6mm	903.8mm	25.4mm	30mm	12.5mm
1200mm	1199.4mm	1213.6mm	25.4mm	30mm	12.5mm
1500mm	1500mm	1514.2mm	25.4mm	30mm	12.5mm
1800mm	1763.8mm	1778mm	25.4mm	30mm	12.5mm

Certificates

- EN61373:2010 Rolling stock equipment. Shock and vibration.
- EN50121-3-2:2015 Rolling stock equipment. Electromagnetic compatibility.
- EN50155:2007 Electronic equipment used on rolling stock.
- BRB/LUL RIA12 Surge and transient requirements.
- EN45545 Fire protection on railway vehicles.
- EN620331 Photobiological Safety of lamps. with EN62471
- ROHS Restriction of Hazardous Substances.