BEST
Benson Energy Saving Technology

2024

Product Datasheet

LED Lighting VBDC T5 LED TRAIN Series

VBDC T5 LED TRAIN tubes for
Constant Voltage LED driver/ Battery DC power supply

Contact Us

+886-6-2309930

service@best-engerysaving-tech.com

Product Datasheet

Benson Energy Saving Technology LED lighting VBDC T5 LED-TRAIN Series

Product feature

Benefits:
- Ideal for Trains, Rapid transit, etc.
- Replace old fluorescent tube with simple fixture modification
- Save more electricity and other cost
- Extend battery life or playtime
- Long lifespan for LED tube

Safety:
- Fuse protection. Over current /temperature protection
- Shock voltage protection

Reliability:
- Simple and reliable components design
- Soft start design to protect electronic components and LED chips

Compatibility:
- Function with 24V...110V DC power source from vehicle batter or generator

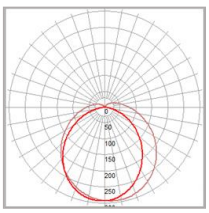
Easy Installation:
- Simple fixture rewiring or ballast bypassing
- Reduce maintenance and installation cost

Certification
- EN61000-6-4 →Electromagnetic compatibility (EMC)
- EN61373 →Rolling stock equipment. Shock and vibration.
- EN45545 R4 →Fire protection on railway vehicles.
- EN50155 →Electronic equipment used on rolling stock.
- EN50121-3-2 →Rolling stock equipment. Electromagnetic compatibility.
- RoHS →Restriction of Hazardous Substances.

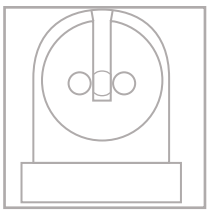
VBDC T5 short LED Tube

Technical Data

Base	G5
Power supply	Double-ended (two sides)
Lumen Maintenance at end of serv	0.7
Rated lamp survival factor at 6,000	>0.9
Lifetime (hrs)	>50,000
Switching Cycle	>25,000
Operating Frequency	Constant Voltage
Nominal voltage	24V...110V DC power supply
Lumen efficacy (options)	100-150lm/W
Power Factor	>0.9
R9	>1
CRI	82
SDCM	<6
Color Temperature	2000K-6500K RGB
Rated beam angle	140.00 degree

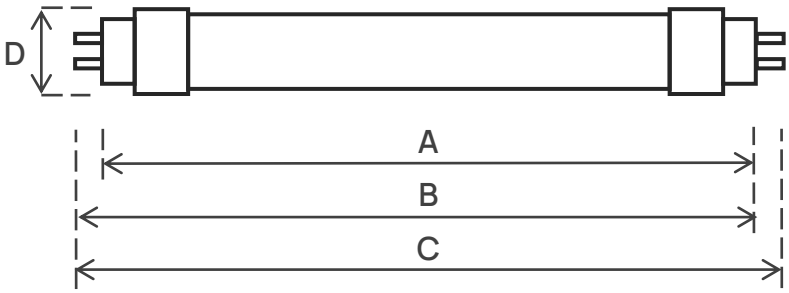


Photometric Curve



T5 Socket

G5 Cap



Length Model No.	A (mm)	B (mm)	C (mm)	D (mm)
VBDC T5 136mm LED Rail Tube	136	136±1.2	150	17/19
VBDC T5 212mm LED Rail Tube	212	218±1.2	226	17/19
VBDC T5 288mm LED Rail Tube	288	294±1.2	302	17/19
VBDC T5 517mm LED Rail Tube	517	523±1.2	531	17/19
VBDC T5 549mm LED Rail Tube	549	555 ±1.2	563	17/19
VBDC T5 849mm LED Rail Tube	849	855 ±1.2	863	17/19
VBDC T5 1149mm LED Rail Tube	1149	1155 ±1.2	1163	17/19
VBDC T5 1449mm LED Rail Tube	1449	1455 ±1.2	1463	17/19

*Geometric parameters (Subject to change without notice)

Standard Wattage

- Higher CRI (such as Ra 95, Ra 90), higher lumen efficacy (such as 150 lm/W), different diffuser cover (such as clear, milky, yellow), special CCT (such as 2000K) and etc. are available upon requests.
- General lighting within ambient temperatures from –20 ˚C to 45 ˚C
- These lamps are ideal for use on trains with modern battery chargers that can raise on board voltages to 110 Volts.
- For 12V...24V or 24V...110V Constant Voltage DC power supply

Model No.	CCT	Lumen efficacy	Lumen	Watt	Driving Voltage
VBDC T5 136mm LED Rail Tube	3000K 4000K-6000K	100 (lm/W) 130 (lm/W)	400 520	4	24V...110V
VBDC T5 212mm LED Rail Tube	3000K 4000K-6000K	100 (lm/W) 130 (lm/W)	400 520	4	24V...110V
VBDC T5 288mm LED Rail Tube	3000K 4000K-6000K	100 (lm/W) 130 (lm/W)	500 650	5	24V...110V
VBDC T5 517mm LED Rail Tube	3000K 4000K-6000K	100 (lm/W) 130 (lm/W)	700 910	7	24V...110V
VBDC T5 549mm LED Rail Tube	3000K 4000K-6000K	100 (lm/W) 120 (lm/W)	1000 1200	10	24V...110V
VBDC T5 849mm LED Rail Tube	3000K 4000K-6000K	100 (lm/W) 120 (lm/W)	1400 1680	14	24V-110V
VBDC T5 1149mm LED Rail Tube	3000K 4000K-6000K	100 (lm/W) 120 (lm/W)	1800 2160	18	24V...110V
VBDC T5 1449mm LED Rail Tube	3000K 4000K-6000K	100 (lm/W) 120 (lm/W)	2100 2520	21	24V...110V

* (Subject to change without notice)