

VALENT® X 100/200/300/500/800 Tight-Pitch LED Tape Light

Precision-engineered, high density tape light for demanding applications. Up to 900+ lumens per foot with 95+ CRI / 90+ R9. 12 year warranty.

Date _____

Project Notes _____

FEATURES

- Dense LED placement for uninterrupted linear light
- 100/200/300/500/800 lumen outputs
- 95+ CRI
- Field cuttable every 1.32"
- Precision color rendering with 90+ R9 value
- Channel (extrusion) not required for heat sink
- 12 Year limited warranty



ORDERING CODES

Order spools, and components for field assembly

OPTIONAL ORDERING CODES

Mounting, drivers, and assembly preference

Diode LED	Voltage	Model	CCT		Length	Channels			Finish	Mounting			Drivers	Delivery
DI														
	24V	VLX1 VLX2 VLX3 VLX5 VLX8	24 (2400K)	40 (4000K)	016 (16.4 foot spool)	SL (Slim)	SQ20 (20mm Square)	REF (Reflector)	AL (Aluminum)	3M (3M Adhesive)	VC (Vertical Clip)	ELV (Electronic)	O/O (On / Off)	FIELD HYBRID FACTORY
			27 (2700K)	42 (4200K)	100 (100 foot spool)	CA (Canal)	SQ (Square)	M11 (1-inch Mud-In)	WH (White)	MC (Mounting Clip)	HNG (Hanging Hardware)	O10 (0-10V)	LUT (Lutron)	*See Delivery Options
			30 (3000K)	50 (5000K)		S1 (S1)	45 (45°)	M12 (2-inch Mud-In)	BL (Black)	UC (U-Clip)	RC (Rotating Clip)	MAG (Magnetic)	PoE (Power over Ethernet)	
			35 (3500K)			16 (16mm)	45DCO (45° Deco)	REC (Recessed)				SWX (Switchex)		
						RC20 (20mm Round)	REF (Reflector)	WF (Waveform)						

Model	24V-VLX1	24V-VLX2	24V-VLX3	24V-VLX5	24V-VLX8
Voltage	24V	24V	24V	24V	24V
Wattage	1.0 W/ft.	1.9 W/ft.	2.8 W/ft.	4.6 W/ft.	7.2 W/ft.
Lumens	2400K: 104/ft. 2700K: 101/ft. 3000K: 106/ft. 3500K: 108/ft. 4000K: 112/ft. 5000K: 116/ft. 6300K: 112/ft.	194/ft. 207/ft. 218/ft. 218/ft. 228/ft. 242/ft. 244/ft.	299/ft. 311/ft. 323/ft. 328/ft. 342/ft. 365/ft. 363/ft.	469/ft. 495/ft. 557/ft. 586/ft. 534/ft. 592/ft. 578/ft.	730/ft. 782/ft. 853/ft. 906/ft. 806/ft. 840/ft. 924/ft.
Cut Points	1.32 in.	1.32 in.	1.32 in.	1.32 in.	1.32 in.
Max Run	80 ft.	53 ft.	41 ft.	30 ft.	19 ft.
Max Run (Class 2)	96 ft.	50 ft.	34 ft.	20 ft.	13 ft.
LED Chips	72/ft.	72/ft.	72/ft.	72/ft.	72/ft.
CRI	95+ CRI	95+ CRI	95+ CRI	95+ CRI	95+ CRI
Dimensions	0.47 × 0.1 in (W x H)	0.47 × 0.1 in (W x H)	0.47 × 0.1 in (W x H)	0.47 × 0.1 in (W x H)	0.47 × 0.1 in (W x H)
Environment	Indoor / Damp Location (IP20)	Indoor / Damp Location (IP20)	Indoor / Damp Location (IP20)	Indoor / Damp Location (IP20)	Indoor / Damp Location (IP20)
Ambient Temperature	-4 ~ 122°F (-20 ~ 50°C)	-4 ~ 122°F (-20 ~ 50°C)	-4 ~ 122°F (-20 ~ 50°C)	-4 ~ 122°F (-20 ~ 50°C)	-4 ~ 122°F (-20 ~ 50°C)
Operating Temperature	-4 ~ 176°F (-20 ~ 80°C)	-4 ~ 176°F (-20 ~ 80°C)	-4 ~ 176°F (-20 ~ 80°C)	-4 ~ 176°F (-20 ~ 80°C)	-4 ~ 176°F (-20 ~ 80°C)
Certification	UL Listed 2108	UL Listed 2108	UL Listed 2108	UL Listed 2108	UL Listed 2108
Warranty	12 Year	12 Year	12 Year	12 Year	12 Year

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RECOMMENDED DRIVERS

SKU	WATTAGE	LENGTH	WIDTH	HEIGHT
OMNIDRIVE® X Compact electronic dimmable (ELV) driver for everyday projects.				
DI-ODX-24V30W-J	30W	6.5 in.	3.7 in.	1.36 in.
DI-ODX-24V60W-J	60W	7.4 in.	3.7 in.	1.36 in.
DI-ODX-24V96W-J	96W	8.66 in.	3.7 in.	1.36 in.
DI-ODX-24V120W-J	120W	8.66 in.	3.7 in.	1.36 in.
DI-ODX-24V200W-J	200W	10.24 in.	4.92 in.	1.95 in.
SWITCHEX® Driver and Dimmer Switch LED driver and dimmer switch combined in a single gang box.				
DI-24V-SE-60W	60W	1.4 in.	2.1 in.	4.1 in.
DI-24V-SE-100W	100W	1.4 in.	2.1 in.	4.1 in.
VLM Series Constant Voltage LED Drivers Compact constant-voltage LED driver				
VLM60W-24-LPM	60W	8.19 in.	2.94 in.	1.31 in.
VLM100W-24-LPM	100W	8.19 in.	2.94 in.	1.31 in.
Lutron® Hi-lume™ 1% Dimmable LED Drivers				
DI-DM-24V40W-L3D	40W	4.89 in.	4 in.	2.62 in.
DI-DM-24V40W-LTE	40W	4.89 in.	4 in.	2.62 in.
Lutron® Hi-lume Premier 0.1% LED driver				
DI-DM-24V96W-L3D	96W	5.5 in.	2.2 in.	10.5 in.
PoE 24V constant voltage platform, ready for Power over Ethernet (Inquire)				

RECOMMENDED CHANNELS

NAME	SKU	DIFFUSION	
Slim (SL) 48", 72", 96" Aluminum, White, Black	DI-CPCHA-SL	dotless	
Canal (CA) 48", 72", 96" Aluminum, White, Black	DI-CPCHB-CAN	dotless	
S1 (S1) 48", 72", 96" Aluminum	DI-CPCHB-S1	dotless	
16mm (16) 48", 72", 96" Aluminum	DI-CPCHB-16MM	dotless	
20mm Round (RC20) 48", 72", 96" Aluminum, White, Black	DI-CPCHB-RC20	dotless	
20mm Square (SQ20) 48", 72", 96" Aluminum, White, Black	DI-CPCHB-SQC20	dotless	
Square (SQ) 48", 72", 96" Aluminum, White, Black	DI-CPCHA-SQ	dotless	
45° (45) 48", 72", 96" Aluminum, White, Black	DI-CPCHA-45	dotless	
45° Deco (45DCO) 48", 72", 96" Aluminum	DI-CPCHB-45DCO	dotless	
90° Sideview (90) 48", 72", 96" Aluminum	DI-CPCHB-90SD	dotless	
Reflector (REF) 48", 72", 96" Aluminum	DI-CPCHB-REFCTR	dotless	
1-inch Mud-In (M1) 48", 72", 96" Aluminum	DI-CPCHB-MUD1	dotless	
2-inch Mud-In (M2) 48", 72", 96" Aluminum	DI-CPCHB-MUD2	dotless	
Recessed (REC) 48", 72", 96" Aluminum	DI-CPCHB-REC	dotless	
Waveform (WF) 48", 72" Aluminum	DI-CPCHB-WF	dotless	



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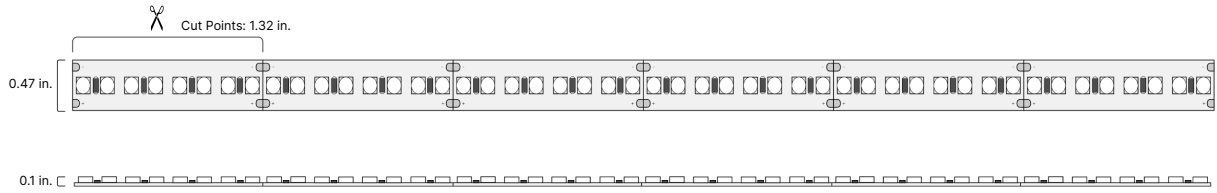
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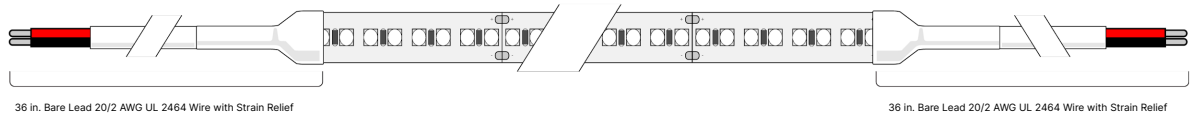
Project Notes _____

MECHANICAL DIAGRAMS

- 24V-VLX1
- 24V-VLX2
- 24V-VLX3
- 24V-VLX5
- 24V-VLX8



CONNECTIONS



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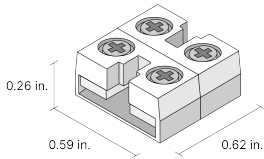
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TERMINAL BLOCK CONNECTORS

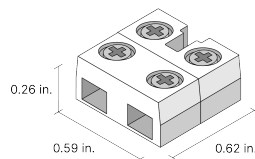
DI-TB12-CONN-TTT (Tape-to-Tape)

12mm Tape-to-Tape Connector



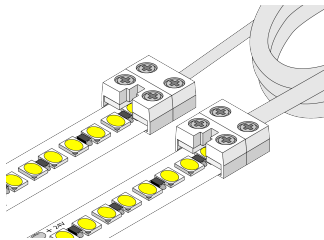
DI-TB12-CONN-TTW (Tape-to-Wire)

12mm Tape-to-Wire Connector



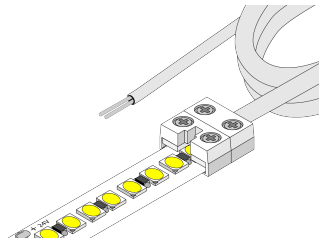
DI-TB12-6JPR (6 in.) DI-TB12-60JPR (60 in.)

Jumper Cable (Tape-to-Tape)



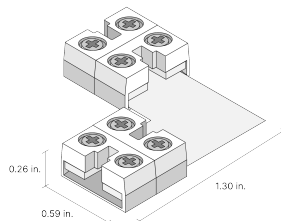
DI-TB12-60SPL (60 in.) (Tape-to-Wire)

Splice Wire (Tape-to-Wire)



DI-TB12-90-TTT (Tape-to-Tape)

12mm 90° Tape-to-Tape Connector



DELIVERY OPTIONS

- Field Assembly

Stock items for in-field assembly. Fastest order fulfillment.

- Factory + Field

Finished lengths of light with leads. Channels either bulk or factory finished. Some field assembly required.

- Factory Assembly

Fastest installation: fixtures fully assembled in the factory.

- Lumen value measured in accordance to IES LM-80-08. LED chips have a luminous flux range with a tolerance of +/- 5%.
- Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length. Max run may exceed Class 2 limit. Actual wattage may differ from calculated wattage due to voltage drop across run.
- Do not install product in an environment outside the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, lumen output, and/or adversely impact color consistency.
- Actual efficacy value is dependent to specified LED driver (power supply). An estimated efficacy value can be calculated as follows: Lumen value divided by average power consumption per foot.
- Operating temperature is measured according to the minimum and maximum ambient temperature environment.

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CERTIFICATIONS

Safety

- UL Listed 2108 Low Voltage Lighting System / Low Voltage Luminaire. UL 1598 / CSA 250.0-08, UL 8750. UL 879 / CAN/CSA-C22.2 no. 207-M89. Certified for United States and Canada. File # E469769.
- UL Listed Field Cuttable.
- UL Recognized Component - Sign Accessories. Available in UL Sign Components Manual (SAM Manual). File # E469770.
- CE & EMC Compliant: Verification No. GZEM141200683705V
- Approved for storage areas of clothes closets per NEC 410.16.A.3 and 410.16.C.5

Environmental

- RoHS Compliant: Verification No. CANEC1610091501

Performance

- Can be used to comply with TITLE 24 Part 6 High efficacy LED requirements - JA8-2016-E
- LED chip data measured in accordance to IES LM-80-08.
- Photometric & Colorimetry data measured in accordance to IES LM-79-08, in Elemental LED's Innovation Lab.

Safety / Warnings / Disclosures

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.
4. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
5. Tape light, attached wire leads, and additional extension cables, connectors, etc., are not rated for in-wall installation unless otherwise noted. Tape light and attached wire leads are field-cuttable.
6. Ensure applicable wire is installed between driver, fixture, and any controls in-between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause fire.
7. Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
8. Do not install in environment where excessive heat may exist (ex. close proximity to fireplace, etc.) See Ambient Temperature ratings
9. Do not install indoor LED tape light products in outdoor / wet location environments. Only wet location tape light models are rated for outdoor / wet locations.
10. Do not modify product beyond instructions or warranty will be void.
11. Tape light must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.
12. Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.
13. We reserve the right to modify and improve the design of our fixtures without prior notice. We cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

WARRANTY

Limited Warranty

- 12 Years

This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at www.diodeled.com/limited-warranty/ within the Policies section. For warranty related questions please contact product support.

Consumer's Acknowledgment

Elemental LED, Inc. stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Elemental LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Elemental LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Elemental LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchase agrees and acknowledges that it is the customer's responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Elemental LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Elemental LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Elemental LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.