

Specification Sheet

NEON BLAZE™ NBL1/NBL2/NBL4 Diffused LED Lighting

Diffused, neon-like LED lighting with top-bending and side-bending

Available in static white and colors, and suitable for wet locations (IP65).

Date			
Project Notes			

FEATURES

- Fully diffused, dotless light
- Top-bending and side-bending options with multiple output levels
- IP65 for wet locations and UV stabilized for outdoor use
- Ideal for coves and other architectural details
- 5 Year limited warranty

ORDERING CODES



Order spools, and components for field assembly					Mounting, drivers, and assembly preference							
	Diode LED	Voltage	Form	Model	CCT Length		Mounting Drivers		Delivery			
	DI											
		24V	SE (Side Bending) TE (Top Bending)	NBL1 NBL2 NBL4	27 (2700K) 30 (3000K) 35 (3500K) 42 (4200K) 63 (6300K)	BL (Blue) GL (Gold) GN (Green) PK (Pink) RD (Red)	65 (65.6 foot spool) 32 (32.8 foot spool) 016 (16.4 foot spool) Custom Length	CHN (Mounting Channel) SPN (Flexible Mounting Channel)	ELV (Electronic) 010 (0-10V) MAG (Magnetic) SWX (Switchex)	O/O (On / Off) LUT (Lutron) PoE (Power over Ethernet)	FIELD HYBRID FACTORY *See Delivery Options	

Model	24V-SE-NBL1	24V-SE-NBL2	24V-SE-NBL4	24V-TE-NBL1	24V-TE-NBL2	24V-TE-NBL4
Voltage	24V	24V	24V	24V	24V	24V
Wattage	1.22 W/ft.	2.44 W/ft.	4.4 W/ft.	1.22 W/ft.	2.44 W/ft.	4.4 W/ft.
2700K	62/ft.	134/ft.	208/ft.	86/ft.	173/ft.	248/ft.
3000K	65/ft.	146/ft.	198/ft.	102/ft.	219/ft.	317/ft.
3500K	60/ft.	120/ft.	195/ft.	89/ft.	273/ft.	273/ft.
4200K	N/A	N/A	N/A	N/A	N/A	N/A
Lumens 6300K	59/ft.	116/ft.	173/ft.	88/ft.	266/ft.	266/ft.
Blue	6/ft.	12/ft.	18/ft.	18/ft.	30/ft.	37/ft.
Gold	31/ft.	61/ft.	84/ft.	70/ft.	157/ft.	184/ft.
Green	30/ft.	48/ft.	78/ft.	88/ft.	148/ft.	151/ft.
Pink	17/ft.	37/ft.	53/ft.	39/ft.	93/ft.	110/ft.
Red	11/ft.	21/ft.	34/ft.	31/ft.	61/ft.	64/ft.
Cut Points	2 in.					
Max Run	65 ft.	32 ft.	16 ft.	65 ft.	32 ft.	16 ft.
CRI	80+ CRI	80+ CRI	80+ CRI	80+ CRI	80+ CRI	80+ CRI
Dimensions	0.37 × 0.75 in (W x H)	0.37 × 0.75 in (W x H)	0.37 × 0.75 in (W x H)	0.65 × 0.59 in (W x H)	0.65 × 0.59 in (W x H)	0.65 × 0.59 in (W x H)
Environment	Outdoor / Wet Location (IP65)					
Ambient Temperature	-4 ~ 122°F (-20 ~ 50°C)					
Operating Temperature	-4 ~ 176°F (-20 ~ 80°C)					
Certification	UL Listed 2108					
Warranty	5 Year					



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RECOMMENDED DRIVERS

SKU	WATTAGE	LENGTH	WIDTH	HEIGHT
OMNIDRIVE® X Compact electronic	dimmable (ELV) driver	r for everyday project	ts.	
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 a LED driver and dimm	nd Dimmer Switch er switch combined ir	n 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-v	t Voltage LED Drivers oltage 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 Drive	rs		
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 Pre	mier 0.1% LED driver			
DI-DM-24V96W-L3D	96W	5.5 in.	2.2 in.	10.5 in.
PoE 24V constant voltage	e platform, ready for F	Power over Ethernet (Inquire)	1



MOUNTING OPTIONS

DI-SE-NB-MTCH

Side Bending

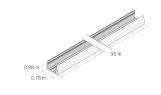
Mounting Channel
Anodized Aluminum Side Bending Mounting Channel



Top Bending

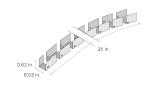
DI-TE-NB-MTCH Mounting Channel

Anodized Aluminum Top Bending Mounting Channel



DI-SE-NB-FLCH-WH Flexible Mounting Channel

Flexible Side Bending Mounting Channel



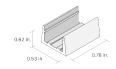
DI-TE-NB-FLCH-WH Flexible Mounting Channel

Flexible Top Bending Mounting Channel



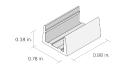
DI-SE-NB-BUC-16 Bottom U-Clip (TBC)

Side Bending Mounting Clip



DI-TE-NB-BUC-16 Bottom U-Clip (TBC)

Top Bending Mounting Clip



DI-SE-NB-TUC-16 Top U-Clip (TTC)

Side Bending Mounting Clip



DI-TE-NB-TUC-16 Top U-Clip (TTC)

Top Bending Mounting Clip





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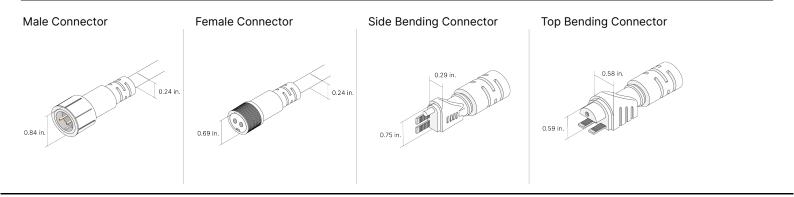
Pate		
roject Notes		

MECHANICAL DIAGRAMS





Connections





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SIDE BENDING Accessories (Not included)

DI-SE-NB-STWC-EC Straight Wire Entry Connector

16 AWG, side bending connector



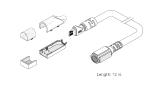
Side Bending Opaque and Frosted Covers

Included with side bending straight wire entry connector



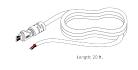
DI-SE-NB-SDWC-EC-FDC DC Barrel Plug

16 AWG, Side Bending Straight Wire Entry Frosted DC Connector



DI-SE-NB-STBW-20 Straight wire entry Connector

16 AWG, 20 foot, Bare Lead Side Bending Connector



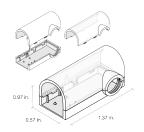
DI-SE-NB-SDWC-EC Side Wire Entry Connector

16 AWG, side bending connector



Side Bending Opaque and **Frosted Covers**

Included with side bending side wire entry connector



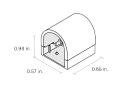
DI-SE-NB-TTT-2 Strip-to-Strip Connector

Frosted Side Bending Strip-to-Strip Connector



DI-SE-NB-EC-5 Side Bending End Cap

Included with all Connectors



DI-SE-NB-BWC-EC **Bottom Wire Entry Connector**

16 AWG, side bending connector



Side Bending Opaque and

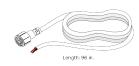
Included with side bending bottom wire entry connector

Frosted Covers



DI-NB-96M-CNCT Male Connector

16 AWG, 96 inch, Bare Lead Connector



DI-SE-NB-JPR Straight Wire Entry Jumper Side bending jumper with various lengths

Jumper Length 3JPR - (3 in.) 6JPR - (6 in.) 12JPR - (12 in.)

Side Bending Frosted Cover and End Cap

Included with straight wire entry Jumper





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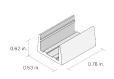
Available in static white and colors, and suitable for wet locations (IP65).

Project Notes

TOP BENDING Accessories (Not included)

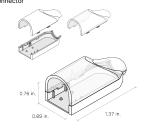
DI-SE-NB-BUC-16 Bottom U-Clip (TBC)

Side Bending Mounting Clip



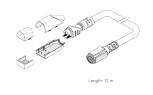
Top Bending Opaque and **Frosted Covers**

Included with Top Bending Straight Wire Entry Connector



DI-TE-NB-SDWC-EC-FDC DC Barrel Plug

16 AWG, Top Bending Straight Wire Entry Frosted DC Connector



DI-TE-NB-STBW-20 Straight Wire Entry Connector

16 AWG, 20 foot, Bare Lead Top Bending Connector



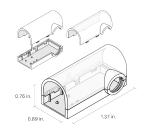
DI-TE-NB-SDWC-EC Side wire Entry Connector

16 AWG, Top Bending Connector



Top Bending Opaque and **Frosted Covers**

Included with Top Bending Top Wire Entry Connector



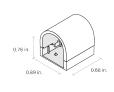
DI-TE-NB-TTT-2 Strip-to-Strip Connector

Frosted Top Bending Strip-to-Strip Connector



DI-TE-NB-EC-5 Top Bending End Cap

Included with all Connectors



DI-TE-NB-BWC-EC **Bottom Wire Entry Connector**

16 AWG, Top Bending Connector



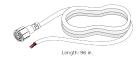
Top Bending Opaque and **Frosted Covers**

Included with Top Bending Bottom Wire Entry Connector



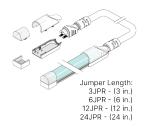
DI-NB-96M-CNCT Male Connector

16 AWG, 96 inch, Bare Lead Connector



DI-TE-NB-JPR Straight Wire Entry Jumper

Top Bending Jumper with various lengths



Top Bending Frosted Cover and End Cap

Included with Straight Wire Entry Jumper



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

· Factory Assembly

Fastest installation: fixtures fully assembled in the factory.



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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
- CE & EMC Compliant
- Approved for storage areas of clothes closets per NEC 410.16.A.3 and 410.16.C.5.

Environmental

RoHS Compliant.

Performance

- 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.

Saftey / 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
- 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.
- Ensure applicable wire is installed between driver, fixture, and any controls in-between. When choosing wire 6. 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
- Do not modify product beyond instructions or warranty will be void.
- 10. Tape light must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.
- 11. Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.
- 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

• 5 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.