



# Bridgelux® Vero Wire Harness

Product Data Sheet DS499

# Introduction



Bridgelux Vero Wire Harness Assemblies provide ultimate convenience for simple and reliable solderless connections to Bridgelux's Vero LED Arrays

Bridgelux Vero wire harness provides the low profile connectivity solution to mate with Bridgelux Vero LED arrays. The harness system utilizes proven Molex pico-Ezmate connector technology to provide fast, reliable, and low-profile connection.

The harness system provides fast and solderless connections to Vero LED arrays which greatly improves production throughput and minimizes possible connection related defect and damage. Harness assemblies offer three wire gauge configurations and 3 lengths to provide greater design flexibility.

## Features and Benefits

- Solderless connection design
- Vertical snap-to-mate connection
- Low-profile 1.40mm connector height
- Positive-lock latching feature
- Gold-plated contacts
- Halogen-free UL94V-0
- Multiple wire gauges (28 to 18 AWG, including fused combinations) and length options (152.50, 305.00 and 458.00 mm) available
- Minimizes handling of arrays during installation, greatly reducing the possibility of damage. Eliminates specialized operator training and solder-joint inspection
- Enables a fast, easy and reliable connection to the LED array holder
- Provides a slim design for space-limited applications. Minimizes risk of affecting light output
- Provides an audible click to confirm a connection
- Highly reliable, low contact resistance
- Meets RoHS requirements and is UL-flammability rated
- Provides design flexibility



# Contents

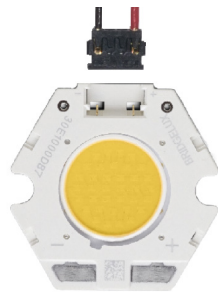
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# Product Feature Map



Vertical snap-to-mate connection feature

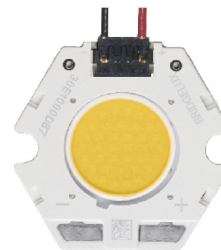
## Easy Two-Step Mating Process



Step 1. Align



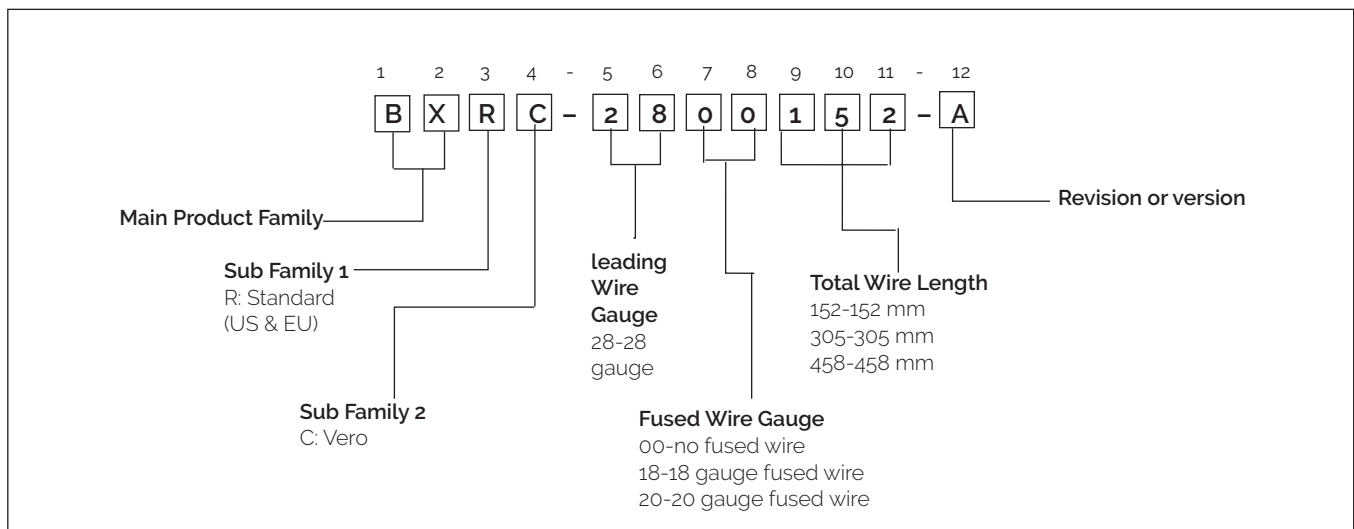
Step 2. Push straight down to connect



Completed Array and Harness Assembly (shown without LED)

## Product Nomenclature

The part number designation for Bridgelux Vero Wire Harness Assemblies is explained as follows.



# Product Selection Guide

The following product configurations are available:

**Table 1:** Selection Guide.

BLX Part Number	Bridgelux Vero Arrays	harness length (mm)	AWG <sup>1</sup>
BXRC-2800152-A		152.5	28 AWG pigtails, strip and retain
BXRC-2800305-A		305.0	
BXRC-2800458-A		458.0	
BXRC-2820152-A	Vero 10	152.5	28 AWG fused to 20 AWG pigtails
BXRC-2820305-A	Vero 13	305.0	
BXRC-2820458-A	Vero 18	458.0	
BXRC-2818152-A	Vero 29	152.5	28 AWG fused to 18 AWG pigtails
BXRC-2818305-A		305.0	
BXRC-2818458-A		458.0	

Notes for Table 1:

1. Additional harness designs can be requested. sales representative for more information

# Product Specifications

## Specifications

### Reference Information

Packaging: Bags inside box

UL File No.: E29179

UL1977, UL Wiring Harness Program Mates With: Molex pico-EZmate™

Integral header on Bridgelux Vero LED Array

RoHS: Yes

### Electrical

Voltage (max.): 130V

Current (max.): 2.8A

Contact Resistance: 20 milli ohms

Dielectric Withstand Voltage: 500V AC

Insulation Resistance: 100 Mega ohms

### Mechanical

Contact Retention to Housing: 4N Mating Force (max.): 18N initial Unmating Force (min.): 4N initial Durability: 10 unmating cycles

Not designed for horizontal mating/ unmating

### Physical

Housing: High-temperature white Nylon Contact: High performance copper alloy plating:

Contact Area-Gold

Underplating-Nickel

Operating Temperature: -25 to +105°C

# Design Resources

## **Application Notes**

Bridgelux has developed a comprehensive set of application notes and design resources to assist customers in successfully designing with the Vero product family of LED array products. For all available application notes visit [www.bridgelux.com](http://www.bridgelux.com).

## Disclaimers

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### **MINOR PRODUCT CHANGE POLICY**

The rigorous qualification testing on products offered by Bridgelux provides performance assurance. Slight cosmetic changes that do not affect form, fit, or function may occur as Bridgelux continues product optimization.

# About Bridgelux: Bridging Light and Life™

At Bridgelux, we help companies, industries and people experience the power and possibility of light. Since 2002, we've designed LED solutions that are high performing, energy efficient, cost effective and easy to integrate. Our focus is on light's impact on human behavior, delivering products that create better environments, experiences and returns—both experiential and financial. And our patented technology drives new platforms for commercial and industrial luminaires.

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46410 Fremont Boulevard  
Fremont, CA 94538 U.S.A.  
Tel (925) 583-8400  
**[www.bridgelux.com](http://www.bridgelux.com)**