

Date

Project

Notes

RGB MATRIX 3.0 RIBBONLYTE

Acolyte's Color Changing RGB Matrix 3.0 RibbonLyte bends and conforms to curves! It uses a circuit board that bends and flexes in any direction and the 3-in-1 RGB LEDs can be programmed to mix, in order to create up to 16 million colors. Because it bends up to 90 degrees, it is the perfect choice for rounded coves, sharp angles, or any intricate lighting application.

- Ideal for curves, sharp angles, circular coves, & complex shapes
- RGB 3-in-1 LEDs
- 3.0 W/ft (9.8 W/m)
- All on: 49 lm/W
- All on: 149.79 lm/ft (484.75 lm/m)
- 24 Volt input
- Closet rated in channel applications

Applications:

Commercial Entertainment Healthcare Hospitality Residential Museums Retail Public Spaces

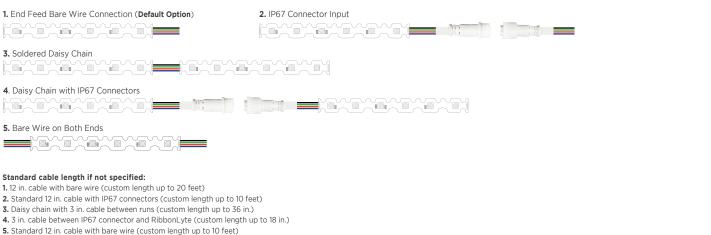




ORDERING GUIDE

Category	CRI	Ribbon Type & IP Rating	Wattage + Color
RB	0	RGBM20	3.0RGB
RB - RIBBONLYTE	0 - Color Changing	RGBM20 - RGB Matrix IP20	3.0RGB - 3.0 RGB

CONNECTION OPTIONS



Note: IP67 connectors are used for both IP20 and IP65/IP68 RibbonLyte

AVAILABLE COLORS









RGB MATRIX 3.0 RIBBONLYTE

SPECIFICATIONS / DIAGRAM / USAGE GUIDELINES

		RGB MATRIX 3.0				
Operating Voltage		24 V				
Colors		Red, Green, Blue 3-in-1 LED				
		Red	Green	Blue	All On	
Power Consumptio	n	1.0 W/ft (3.28 W/m)	1.0 W/ft (3.28 W/m)	1.0 W/ft (3.28 W/m)	3.0 W/ft (9.8 W/m)	
Lumens		38 lm/ft (124.64 lm/m)	93.33 lm/ft (306.12 lm/m)	26.78 lm/ft (87.84 lm/m)	147.79 lm/ft (484.75 lm/m)	
Efficacy		38 lm/W	93 lm/W	27 lm/W	49 lm/W	
Current (mA) - 24	/	125 mA/ft (410 mA/m)				
LED Pitch		15 LEDs/ft (50 LEDs/m)				
Protection Rating	IP20	\checkmark				
Dimming		DMX				
Operating Tempera	ature	-40 F to 158 F (-40 C to 70 C)				
LED Beam Angle		120°				
Lamp Life		50,000 hrs				
Cuttable Length		4.84" (123 mm)				
Cable Length		12 in (30.5 cm)				
Certifications		UL 2108 Issued: 2016/06/17 Ed: 1 Rev: 2021/10/16 Low Voltage Lighting Systems. CSA C22.2 No. 250.0, General Requirements for Luminaires. RoHS compliant. All RibbonLyte models 3.0 W/ft (9.8 W/m) and lower when used in any Acolyte Channel profile except Piccolo are tested by UL and confirmed 'Suitable for Installation in the Storage Area of a Clothes Closet' in accordance with NFPA 70 and NEC 410.16 and 411. CE				
24V DIMENSIONS	Top View			Side View [Dimensions	
IP20	CUTTABLE EVERY: 4	.84 in (123 mm)			Width 0.47 in (12 mm) Max Length* 39 ft 5 in Height 0.09 in (2.3 mm)	

FLAT SILICONE MOUNTING PAD

Screw Hole Distance (center-to-center)



RBMNTSIL
0.27 in (6.9 mm)
0.36 in (9.2 mm)
1.07 in (27.2 mm)
0.24 in (6.1 mm)
0.09 in (2.5 mm)
0.88 in (22.6 mm)

USAGE GUIDELINES

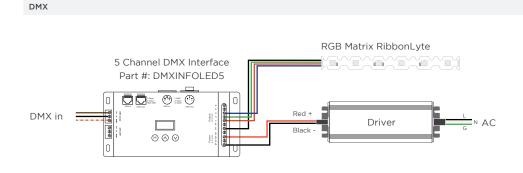
Part Number Screw Head Diameter Screw Head Height Clip Length Clip Width Screw Hole Diameter

- IP65 and IP68 RibbonLyte cannot be cut in the field. All custom cuts and connections for these models must be performed at the factory to ensure waterproofing standards are met. Any modification of the waterproofing will result in a void warranty.
- When installing this product, consider the surface temperature of the material where it will be mounted. Many building surfaces which are exposed to direct sunlight exceed the 70° C / 158° F maximum for which our product is rated. High-risk locations like this should be avoided.
- IP20 RibbonLyte products are for indoor use in dry areas. IP65 RibbonLyte products can be used in indoor dry/damp locations such as bathrooms and kitchens. IP68 RibbonLyte products can be used in wet, outdoor locations around pools and spa tubs, but our products are not intended to be submerged in pools and fountains and do not carry UL676 certification to do so.
- Please refer to the RibbonLyte Proper Usage Guide in our Application Guide for more information. Available for download at AcolyteLED.com.
- This product is compatible with a wide variety of control products including the entire line of Lutron dimming systems.
- For use with Acolyte drivers, 0-10V dimming modules and interface controllers (DMXINF models).
- Use with non-Acolyte supplied drivers is not supported or warrantied.
- Due to the nature of RibbonLyte products, cuttable lengths are generally longer or shorter than the customer requested length. Unless specified, RibbonLyte is factory cut at the shorter cuttable point.
- We reserve the right to make changes to product lineup, specifications, design and finishes at any time without notice.

Acolyte does not warrant or represent that the information is free from errors or omission. The information may change without notice and Acolyte is not in any way liable for the accuracy of any information printed and stored or in any way interpreted or used.



WIRING DIAGRAMS



WIRE COLORS PER RIBBONLYTE COLOR

RGB

Black Wire (+) Positive Green Wire (-) goes to Green Channel Red Wire (-) goes to Red Channel Blue Wire (-) goes to Blue Channel

ACTUAL POWER CONSUMPTION

Length (ft)	Length (m)	Actual Power Consumed (W)	Average Wattage (W/ft)	Average Wattage (W/m)	Actual Current Drawn (A)
5	1.52	15.56	3.11	10.21	0.648
10	3.05	28.86	2.89	9.47	1.203
15	4.57	40.13	2.68	8.78	1.672
20	6.10	48.54	2.43	7.96	2.023
25	7.62	53.45	2.14	7.01	2.227
30	9.15	55.63	1.85	6.08	2.318
35	10.67	57.17	1.63	5.36	2.382
39.4	12.01	58.39	1.48	4.86	2.433

NOTE: Quotes use nominal values. We highly recommend using nominal wattages for all customer calculations. Allow for a 15% buffer (10% driver, 5% fixture) in these calculations as performance may vary. Acolyte is not liable for product performance if these tables are used instead of nominal values when orders are placed.