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11_18_22

Pennsylvania Convention Center
Broad Street Façade Lighting Renovation
Issued For Bid

Option 1
Cut Sheets

Accent Compact

Date: 11/18/22
Type: L1
Firm Name: Synapse Audio Visual Designs
Project: Pennsylvania Convention Center

RGBW, 1228.5 mm (48.4 in), Translucent Lens

High-resolution exterior linear direct view luminaire with intelligent RGBW light

Accent Compact, RGBW is a direct view linear LED luminaire ideally suited for displaying large-scale video and graphics in a host of architectural settings. Accent Compact, RGBW adds a separate white LED, creating better-quality whites compared to RGB. Accent Compact, RGBW accepts Ethernet input from the PDS-400 48V EO to support long control runs not subject to DMX data and addressing limitations. Two lens choices are available for Accent Compact, RGBW: a clear lens which delivers the brightest output and a translucent lens which provides the widest viewing angle.

- Precise resolution control—Luminaires can be addressed and controlled in increments down to 19 mm (0.75 in), or up to 1220 mm (4 ft).
- Native, onboard Ethernet—Luminaires accept Ethernet input from PDS-400 48V EO to support long control runs not subject to DMX data and addressing limitations.
- Four luminaire lengths—315 mm (12.4 in), 467 mm (18.4 in), 619.5 mm (24.4), and 1228.5 mm (48.4 in) lengths are easily connected to create long, continuous columns or rows of intense, dynamic color. The 315 mm (12.4 in) luminaires in particular allow for extra flexibility when space is at a premium.
- Rugged, durable construction—This IP66-rated luminaire is designed to meet the taxing requirements of outdoor applications. The aluminium housing resists shock, vibration, and other forms of rough handling.
- Flexible positioning—Over-molded end-to-end locking connectors supply both power and data. Connectors can make 180° turns for easy layout. Jumper cables can add extra space between luminaires.
- Industry-leading controls—Works seamlessly with the complete Color Kinetics line of controllers, including Video System Manager Pro, Light System Manager, and iPlayer 3, and any third-party controllers.
- Universal power input range—Accepts a universal power input range of 100 to 277 VAC for consistent installation anywhere in the world. Each 400 W, outdoor-rated PDS-400 48V EO can support multiple luminaires for creating long lines of video or ribbons of intricately changing color.
- ActiveSite integration—ActiveSite is the first ever cloud-hosted connected lighting system for architectural LED lighting installations. ActiveSite allows you to remotely monitor, manage, and maintain an installation site from anywhere in the world, using a secure web connection.

For detailed product information, please refer to the Accent Product Guide at www.colorkinetics.com/global/products/rgb/icolor-accent-compact-rgbw/

COLORKINETICS

Specifications

Due to continuous improvements and innovations, specifications may change without notice.

Output

Viewing Angle	210°
Lumens †	993
On-Axis Candela	228
On-Axis Candela per node	3.5
Efficacy (lm/W) §§	34.8
LED Channels	Red/Green/Blue/4000 K

Electrical

Input Voltage	48 VDC via PDS-400 48V EO or CM-400 48V EO
Power Consumption (Maximum at full output, steady state)	28.5 W

For additional Surge Protection Requirements for LED Lighting Systems, please refer to www.colorkinetics.com/KB/surge-protection.

Control

Interface	PDS-400 48V EO (Ethernet) CM-400 48V EO (Ethernet)

Control System

Color Kinetics full range of controllers, including Light System Manager, Video System Manager Pro, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro, or third-party controllers

Remote Monitoring & Management Works with Interact Landmark

Lumen Maintenance

Threshold§	Ambient Temperature	Reported ¶¶	Calculated ¶¶
L_{80}	25 °C	> 50,000	
	50 °C		
L_{70}	25 °C	> 60,000	
	50 °C	> 60,000	
L_{50}	25 °C	> 60,000	
	50 °C	> 60,000	

Physical

Dimensions (Height x Width x Depth)	86.6 x 1228.5 x 38 mm (3.4 x 48.4 x 1.5 in)
Weight	1.64 kg (3.6 lb)
Housing Material	Extruded aluminium and polycarbonate
Lens	Translucent UV-protected polycarbonate
Luminaire Connections	Over-molded, integral male/female connectors

Temperature Ranges

-40 to 50 °C (-40 to 122 °F) Operating
-20 to 50 °C (-4 to 122 °F) Startup
-40 to 80 °C (-40 to 176 °F) Storage

Vibration Resistance

Complies with ANSI C136.31, 3G

Mechanical Impact	IK10

Corrosion Resistance

Complies with ASTM B117 standard for > 1,500 hours

Humidity	0 to 95%, non-condensing

Maximum Luminaires Per Power/Data Supply

12 maximum per PDS-400 48V EO using a 15 m (50 ft) leader cable

Certification and Safety

Approbation	UL/cUL, FCC Class A, CE, CQC, RCM
Environment	Dry/Damp/Wet Location, IP66

For additional Energy Efficiency Class Information, please refer to https://colorkinetics.helpdocs.io/article/cviis2p8qq.

† 315 mm (12.4 in) lumen output measurements comply with IES LM-79-08 testing procedures. 610 mm (2 ft), and 1220 mm (4 ft) measurements are estimated based on the 305 mm (1 ft) measurements.

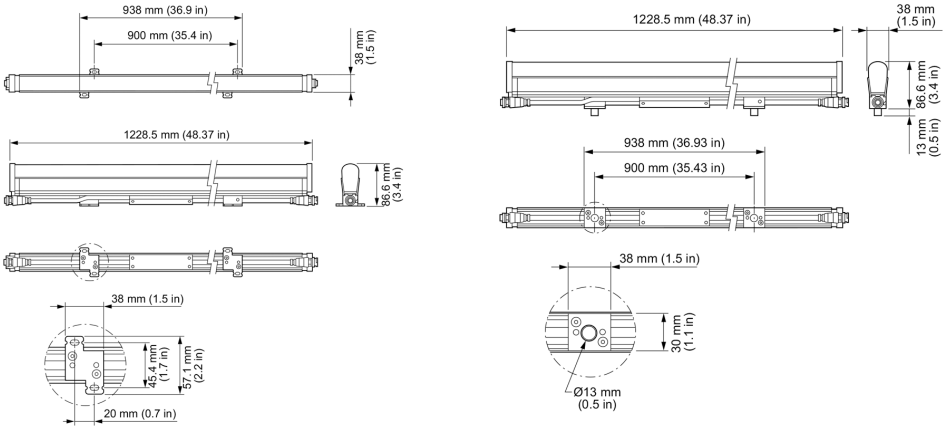
§ Lxx = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% of the LED population is better than the reported or calculated lumen maintenance measurement.

¶ Minimum surge limits per IEC 61547, tested in accordance with IEC 61000-4-5.

§§ Efficacy measurements are estimated based on the 305 mm (1 ft) measurements.

¶¶ Lumen maintenance figures are based on lifetime prediction graphs supplied by LED source manufacturers. Whenever possible, figures use measurements that comply with IES LM-80-08 testing procedures. In accordance with TM-21-11, Reported values represent the interpolated value based on six times the LM-80-08 total test duration (in hours). Calculated values represent time durations that exceed six times the total test duration.

Dimensions

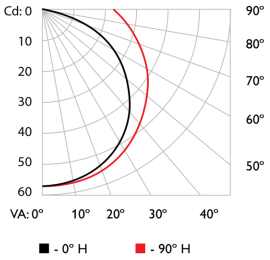


Photometrics translucent lens, 315 mm (12.4 in)

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.colorkinetics.com/global/support/ies.

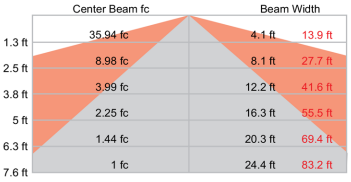
Viewing Angle	210°
LED	All channels full on
Lumens	248.0
Efficacy (lm/W)	24.8

Polar Candela Distribution



	0	25	45	65	90
0	57	57	57	57	57
5	57	57	57	57	57
15	55	55	56	56	56
25	52	52	53	54	54
35	47	48	49	50	51
45	40	41	44	46	46
55	31	34	37	40	41
65	22	26	31	35	36
75	12	18	25	29	31
85	4	11	19	23	26
90	2	9	16	21	23

Illuminance at Distance



7.6 ft (2.3 m)
1 fc maximum distance

Vert. Spread: 116.5°
Horiz. Spread: 159.4°

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	45.6	18.40%
0-40	76.2	30.70%
0-60	142.6	57.40%
60-90	72.9	29.40%
70-100	56.8	22.90%
90-120	29.4	11.80%
0-90	215.5	86.80%
90-180	32.8	13.20%
0-180	248.2	100%

For lux multiply fc by 10.7

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				50			30			10		0
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RCR:																		
0	1.16	1.16	1.16	1.16	1.12	1.12	1.12	0.87	1.04	1.04	1.04	0.97	0.97	0.97	0.9	0.9	0.9	0.87
1	1.03	0.97	0.91	0.86	0.98	0.93	0.88	0.67	0.86	0.82	0.79	0.8	0.77	0.74	0.74	0.72	0.69	0.66
2	0.92	0.83	0.75	0.68	0.88	0.8	0.72	0.54	0.74	0.68	0.63	0.68	0.64	0.59	0.63	0.59	0.56	0.53
3	0.83	0.72	0.63	0.55	0.8	0.69	0.61	0.45	0.64	0.57	0.51	0.59	0.54	0.49	0.55	0.5	0.46	0.43
4	0.76	0.63	0.53	0.46	0.73	0.61	0.52	0.38	0.56	0.49	0.43	0.52	0.46	0.41	0.49	0.43	0.39	0.36
5	0.7	0.56	0.46	0.39	0.66	0.54	0.45	0.33	0.5	0.43	0.37	0.47	0.4	0.35	0.44	0.38	0.33	0.31
6	0.64	0.5	0.41	0.34	0.61	0.48	0.4	0.28	0.45	0.37	0.32	0.42	0.35	0.3	0.39	0.34	0.29	0.27
7	0.59	0.45	0.36	0.3	0.57	0.44	0.35	0.25	0.41	0.33	0.28	0.38	0.32	0.27	0.36	0.3	0.26	0.23
8	0.55	0.41	0.32	0.26	0.53	0.4	0.31	0.22	0.37	0.3	0.25	0.35	0.28	0.24	0.33	0.27	0.23	0.21
9	0.51	0.37	0.29	0.23	0.49	0.36	0.28	0.2	0.34	0.27	0.22	0.32	0.26	0.21	0.3	0.25	0.2	0.18
10	0.48	0.34	0.26	0.21	0.46	0.33	0.26	0.18	0.32	0.25	0.2	0.3	0.24	0.19	0.28	0.23	0.19	0.17

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
Accent Compact, RGBW, 1228.5 mm (48.4 in), Translucent Lens	101-000200-09	912400136258
Accessories		
Horizontal Louver, 1220 mm (4 ft)	120-000200-02	912400133794
Vertical Louver, 1220 mm (4 ft)	120-000200-05	912400133797
Rear Mounting Studs, 2 pieces	120-000200-06	912400133798
Leader Cable, 15 m (50 ft)	108-000200-00	912400133789
Leader Cable, 30 m (100 ft)	108-000200-01	912400133790
Jumper Cable, 305 mm (1 ft)	108-000200-03	912400134184
Jumper Cable, 1.5 m (5 ft)	108-000200-02	912400133791
Power Supplies		
PDS-400 48V, EO Power/Data Supply, Ethernet, UL	109-000200-00	912400133799
PDS-400 48V, EO Power/Data Supply, Ethernet, CE	109-000200-01	912400134110
CM-400 48V EO, Control Module, Ethernet	109-000210-01	912400133802
PS-600 48V, Power Supply, IP66	109-000220-00	912400133803
PS-480 48V, Power Supply, IP20, DIN rail	109-000220-01	912400133804

COLORKINETICS

07/01/2022

Date: 11/18/22
Type: L1 Driver
Firm Name: Synapse Audio Visual Designs
Project: Pennsylvania Convention Center

PDS-400 48 V EO

Ethernet, UL

POWER/DATA SUPPLY

High-wattage and outdoor rated power and data supply for large scale architectural and media applications

PDS-400 48 V EO delivers integrated data and power to intelligent color and tunable white LED lighting luminaires. PDS-400 48 V EO is the single solution for all large scale outdoor Ethernet intelligent installations whether color or white.

- Easy installation—Accessible, clearly labeled terminal block connectors for Ethernet, line voltage, and luminaires make installation easy. Tethered cover with captive screws ensures convenient removal and replacement.
- Supports Ethernet intelligent luminaires—PDS-400 48 V EO merges line voltage and control data and delivers them to the luminaires over a single cable, dramatically simplifying installation and lowering total system cost.
- On-board diagnostics—On-board indicator LEDs provide visual feedback for normal operation, Ethernet connection detection, and Ethernet data transmission.
- Replaceable power supply—PS-600 48 V can be easily installed to replace the power supply of any existing PDS-400 48 V EO device without the need to remove the entire PDS-400 48 V EO device.
- Outdoor-rated for use in damp and wet environments—PDS-400 48 V EO offers superior leakage protection in a cast aluminium, IP66-rated enclosure.
- Multiple conduit entries—PDS-400 48 V EO conduit entries accommodate NPT conduit in US trade sizes of 1/2 in and 3/4 in, or metric sizes of PG13.5 and PG16.
- Universal power input range—PDS-400 48 V EO automatically senses line voltages ranging from 100 to 277 VAC, and passes line voltages through AC daisy chain to all connected PDS-400 48 V EO devices.
- ActiveSite integration—ActiveSite is the first ever cloud-hosted connected lighting system for architectural LED lighting installations. ActiveSite allows you to remotely monitor, manage, and maintain an installation site from anywhere in the world, using a secure web connection.

For more information, please refer to www.colorkinetics.com/ls/pds/pds400/

COLORKINETICS

Specifications

Due to continuous improvements and innovations, specifications may change without notice.

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Maximum Input Current	16 A maximum
Load Current	8.5 A

Connections

Threaded Openings	3/4 in NPT for power, 1/2 in NPT for data
Data Input Source	Color Kinetics full range of controllers, including Light System Manager, Video System Manager Pro, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro, or third-party controllers
Power Input	3-wire terminal block connector†
Power/Data Output	2-wire terminal block connector† Double-pair, double-entry IDC connectors†
Ethernet Input/Output	Double-pair, double-entry IDC connectors‡

Compatible Luminaires

iColor Accent Compact

† Terminal block connectors accept recommended wire sizes from 0.2 to 6 mm2 (10 to 24 AWG) for 3-wire and 0.5 to 3.3 mm2 (12 to 20 AWG) for 2-wire.

‡ IDC connectors accept wire sizes from 0.326 to 0.129 mm2 (22 to 26 AWG)

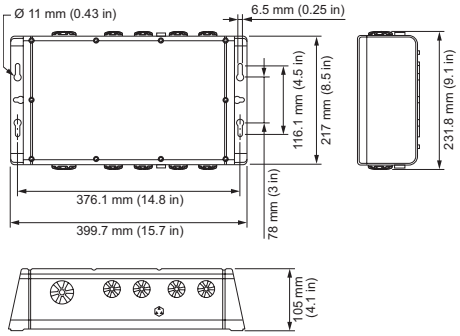
Physical

Dimensions *(Height x Width x Depth)*	105 x 232 x 400 mm (4 x 9 x 15 in)
Weight	9 kg (19.8 lb)
Housing	Cast aluminium enclosure
Mounting	Slots for surface mounting
Finish	Powder-coated industrial gray matte
Operating Temperature	-40 to 50 °C (-40 to 122 °F)
Startup Temperature	-20 to 50 °C (-20 to 122 °F)
Storage Temperature	-40 to 80 °C (-40 to 176 °F)
Humidity	0 to 95%, non-condensing
Cooling	Convection

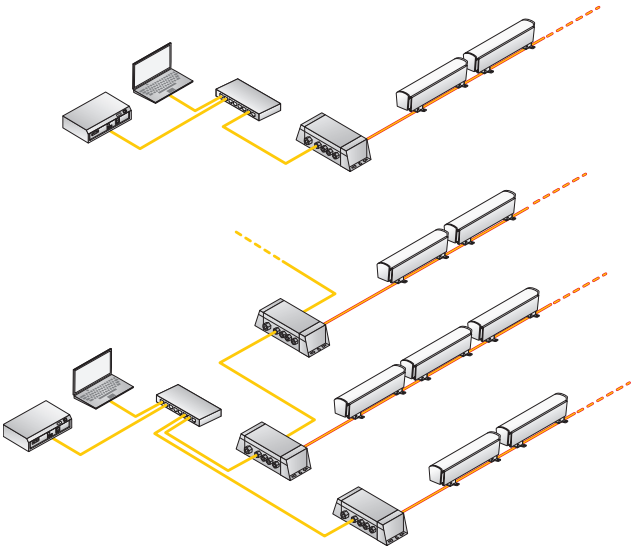
Certification and Safety

Certification	UL/cUL, FCC Class A, RCM
Environment	Dry/Damp/Wet Location, IP66

Dimensions



Ethernet Configuration



Part Numbers

Use Item Number when ordering in North America.

Power/Data Supply	Item Number	Item 12NC
PDS-400 48 V EO Ethernet, UL	109-000200-00	912400133799
Replacement Part		
PS-600 48V Replacement Power Supply	109-000220-00	912400133803

COLORKINETICS

Color Kinetics
www.colorkinetics.com

DAS-000157-01 R02 1/28/2019

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11_4_22

Pennsylvania Convention Center
Broad Street Façade Lighting Renovation

Alternate Cut Sheets

Preliminary

Project: Broad Street Facade Lighting Renovation

Type: L2

Media Tube® Plus RGBW

Media Tube® Plus is a slim, direct view luminaire designed to integrate into any wall, facade or media lighting application with tight installation requirements. Available with a Direct View or Diffused View lens and 9 pixels per 300mm / 1', Media Tube® Plus provides smooth effects to add life and motion to the installation. Featuring auto-addressing and simple quick-lock connections, Media Tube® Plus is perfect for building façades, media applications, and more.

Product Specifications

	Direct View					Diffused View				
	296mm/12"	596mm/23"	896mm/35"	1196mm/47"	1496mm/59"	296mm/12"	596mm/23"	896mm/35"	1196mm/47"	1496mm/59"
Pixels	9 pixels	18 pixels	27 pixels	36 pixels	45 pixels	9 pixels	18 pixels	27 pixels	36 pixels	45 pixels
Light Source	18 RGB + 9 White	36 RGB + 18 White	54 RGB + 27 White	72 RGB + 36 White	90 RGB + 45 White	18 RGB + 18 White	36 RGB + 36 White	54 RGB + 54 White	72 RGB + 72 White	90 RGB + 90 White
Color Range	16.7 Million additive RGB colors; White 6500K									
Beam Angle	110°					120° x 180°				
Luminous Flux	232 lm	435 lm	655 lm	877 lm	1100 lm	185 lm	349 lm	529 lm	714 lm	903 lm
Efficacy	51 lm/W	52 lm/W	52 lm/W	52 lm/W	52 lm/W	41 lm/W	42 lm/W	42 lm/W	43 lm/W	43 lm/W
Pixel Pitch	33mm / 1.30"					33mm / 1.30"				
LED Pitch	33mm / 1.30"					16.7mm / 0.66"				
Pixel Configuration	1 Pixel = RGB | W | RGB					1 Pixel = RGB | W | RGB | W				
Housing	Extruded Aluminum									
Cover Lens	Direct View Glass					UV resistant polycarbonate				
Mounting	Fixed, non-adjustable mounting bracket									
Dimensions (W x H)	24.5 x 35mm / 0.96" x 1.38" (Mounting bracket excluded)					24.5 x 50mm / 0.96" x 1.97" (Mounting bracket excluded)				
Dimensions (L)	296mm / 12"	596mm / 23"	896mm / 35"	1196mm / 47"	1496mm / 59"	296mm / 12"	596mm / 23"	896mm / 35"	1196mm / 47"	1496mm / 59"
Weight	0.37kg / 0.82lb	0.66kg / 1.46lb	0.95kg / 2.09lb	1.15kg / 2.54lb	1.53kg / 3.37lb	0.35kg / 0.77lb	0.62kg / 1.37lb	0.9kg / 1.98lb	1.08kg / 2.38lb	1.45kg / 3.2lb
Regulatory Listing & Safety Approval	UKCA, CE, cETLus, FCC, ANSI C136.31 - 3G									
Operating Temperature	–40°C to +60°C / –40°F to +140°F									
Storage Temperature	–40°C to +80°C / –40°F to +176°F									
Environment	Outdoor, IP66, IK09 (Diffused View), Suitable for Coastal Environment									
Humidity	10-90%, non-condensing									

Electrical Specifications

Operating Voltage	48V DC									
Power Consumption	4.5W	8.4W	12.6W	16.8W	21W	4.5W	8.4W	12.6W	16.8W	21W
Lumen Maintenance	L70B50 80,000 hours@ 25°C									

System Specifications

Control	DMX512, e:pix
Power Supply	LED Engine 48V Outdoor
Addressing Options	Auto-addressing per daisy-chain (by default); Manual-addressing by TX tool
Fixture Interconnection	See System Diagram

LED CHARACTERISTICS Because LEDs are semiconductor devices, their performances are subject to inherent variability commonly found in semiconductor industry. To improve consistency in performance across the same product, LED manufacturers "sort" LEDs into bins according to different preset parameters, such as forward driving voltage, illumination, etc. Whereas binning is a sorting function, it is not a correction process. Inherent variability in the manufacturing process results always in different binning distributions according to different production lots. Traxon uses automatically binned LEDs on its products, thereby minimizing output variations within the model range.

As with all electronic devices, LED output degrades over time – a term called lumen depreciation. This also explains why it is nearly impossible to expect photometric performances of two LED products with different service life spans to be the same. The rate of LED degrade is a complicate function of many factors such as operating efficiency, duration of continuous operation, and more significantly, environmental conditions (ambient temperature for example). If allowed working under optimal operating temperature range and with good ventilation, LED devices enjoy long service lives over conventional light sources. When using/installing LED devices, care should be taken to ensure that the devices will operate within the operating conditions specified in respective product literature.

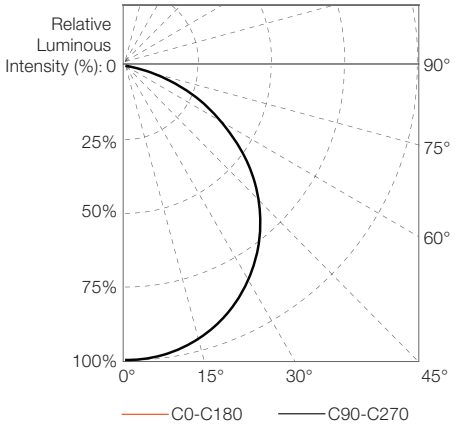
Lumen measurement compiles with LM-79-08 standard.
Lumen maintenance is calculated based on LM-80 compliant measurement.

www.traxontechnologies.com | www.osram.us/traxon

Source Specifications

	296mm / 12”	596mm / 23”	896mm / 35”	1196mm / 47”	1496mm / 59”
Source	18 RGB + 9 White	36 RGB + 18 White	54 RGB + 27 White	72 RGB + 36 White	90 RGB + 45 White
Optics	110°				
Cover Lens	Direct View Glass				

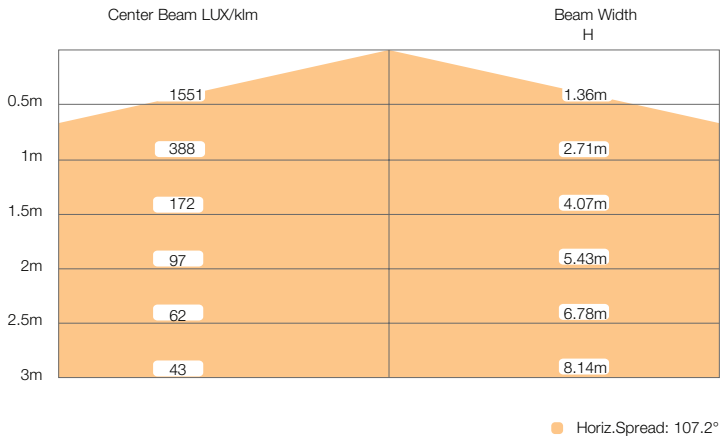
Candela Distribution (Direct View)



Light Output

Color	Luminous Flux (lm)	Efficacy (lm/W)
296mm / 12”		
RGBW (RGB+W full-on)	231.75	51.5
RGB	121.72	35.8
Red	37.6	18.8
Green	82.32	58.8
Blue	10.56	8.8
White	122.06	71.8
596mm / 23”		
RGBW (RGB+W full-on)	435.12	51.8
RGB	234	36
Red	68.4	19
Green	156	60
Blue	18	9
White	223.2	72
896mm / 35”		
RGBW (RGB+W full-on)	655.2	52
RGB	347.52	36.2
Red	102.29	19.3
Green	229.14	60.3
Blue	26.97	9.3
White	332.12	72.2
1196mm / 47”		
RGBW (RGB+W full-on)	876.96	52.2
RGB	455	36.4
Red	132.6	19.5
Green	290.4	60.5
Blue	35.15	9.5
White	419.92	72.4
1496mm / 59”		
RGBW (RGB+W full-on)	1100.4	52.4
RGB	585.6	36.6
Red	167.45	19.7
Green	376.34	60.7
Blue	44.62	9.7
White	515.46	72.6

Illuminance at a Distance

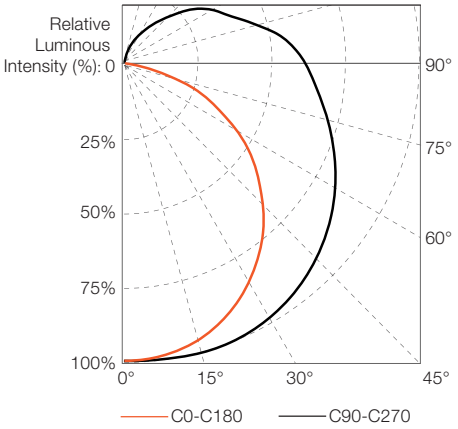


www.traxontechnologies.com | www.osram.us/traxon

Source Specifications

	296mm / 12”	596mm / 23”	896mm / 35”	1196mm / 47”	1496mm / 59”
Source	18 RGB + 18 White	36 RGB + 36 White	54 RGB + 54 White	72 RGB + 72 White	90 RGB + 90 White
Optics	120° x 180°				
Cover Lens	UV resistant polycarbonate				

Candela Distribution (Diffused View)

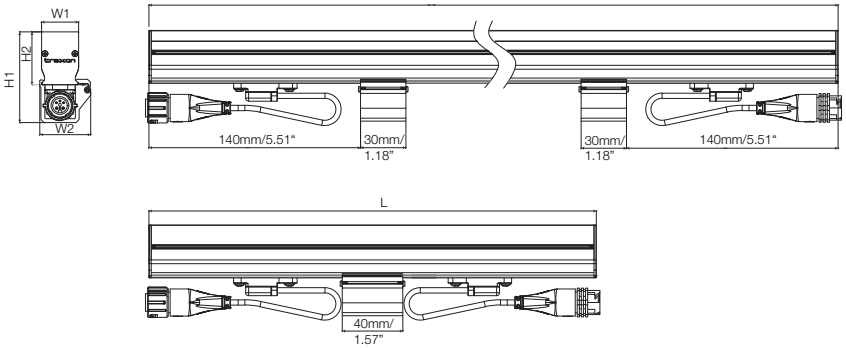


Light Output

Color	Luminous Flux (lm)	Efficacy (lm/W)
296mm / 12”		
RGBW (RGB+W full-on)	184.5	41
RGB	92.48	27.2
Red	28	14
Green	67.5	45
Blue	6.36	5.3
White	100.3	59
596mm / 23”		
RGBW (RGB+W full-on)	348.6	41.5
RGB	180.05	27.7
Red	52.2	14.5
Green	122.85	45.5
Blue	11.6	5.8
White	184.45	59.5
896mm / 35”		
RGBW (RGB+W full-on)	529.2	42
RGB	270.72	28.2
Red	79.5	15
Green	179.4	46
Blue	18.27	6.3
White	276	60
1196mm / 47”		
RGBW (RGB+W full-on)	714	42.5
RGB	358.75	28.7
Red	105.4	15.5
Green	232.5	46.5
Blue	25.16	6.8
White	350.9	60.5
1496mm / 59”		
RGBW (RGB+W full-on)	903	43
RGB	467.2	29.2
Red	136	16
Green	291.4	47
Blue	33.12	7.2
White	445.3	61

Fixture Dimensions (Direct View)

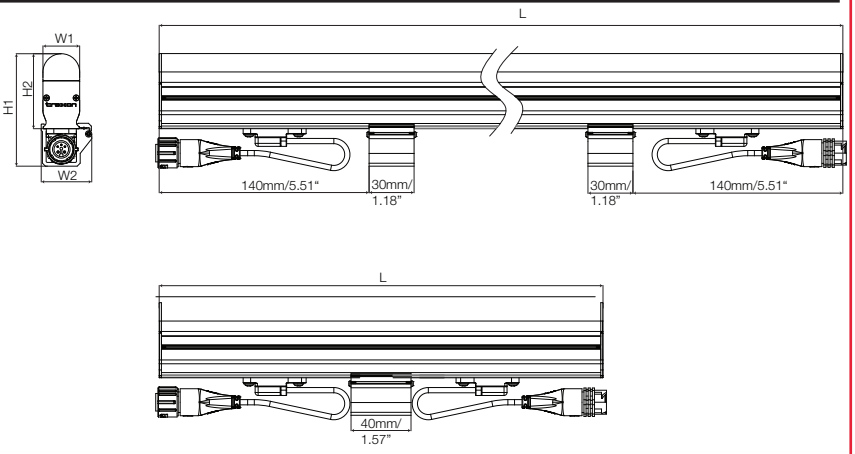
	W1	W2	H1	H2	L
1496mm 59”	24.5mm 0.96”	33.7mm 1.33”	63mm 2.48”	35mm 1.38”	1496mm 58.90”
1196mm 47”	24.5mm 0.96”	33.7mm 1.33”	63mm 2.48”	35mm 1.38”	1196mm 47.09”
896mm / 35”	24.5mm 0.96”	33.7mm 1.33”	63mm 2.48”	35mm 1.38”	896mm / 35.28”
596mm / 23”	24.5mm 0.96”	33.7mm 1.33”	63mm 2.48”	35mm 1.38”	596mm / 23.46”
296mm 12”	24.5mm 0.96”	33.7mm 1.33”	63mm 2.48”	35mm 1.38”	296mm 11.65”



NOTE: Please see CAD files for additional dimensional data.

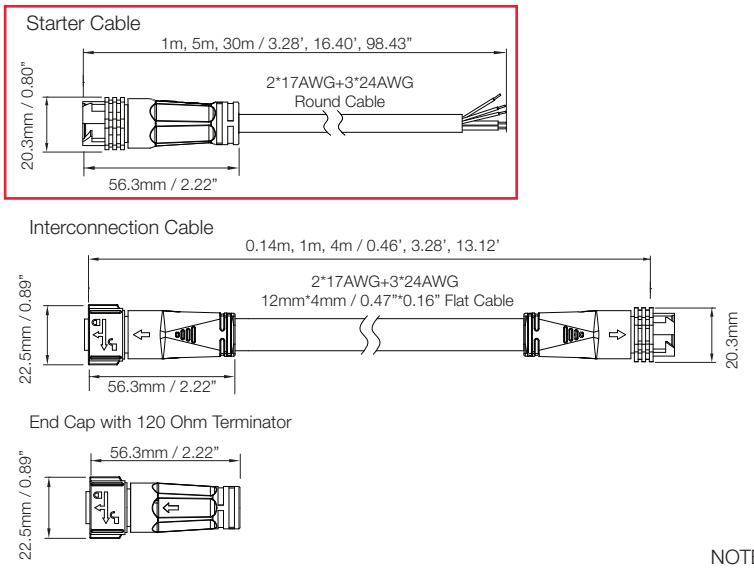
Fixture Dimensions (Diffused View)

	W1	W2	H1	H2	L
1496mm 59”	24.5mm 0.96”	33.7mm 1.33”	78mm 3.07”	50mm 1.97”	1496mm 58.90”
1196mm 47”	24.5mm 0.96”	33.7mm 1.33”	78mm 3.07”	50mm 1.97”	1196mm 47.09”
896mm / 35”	24.5mm 0.96”	33.7mm 1.33”	78mm 3.07”	50mm 1.97”	896mm / 35.28”
596mm / 23”	24.5mm 0.96”	33.7mm 1.33”	78mm 3.07”	50mm 1.97”	596mm / 23.46”
296mm 12”	24.5mm 0.96”	33.7mm 1.33”	78mm 3.07”	50mm 1.97”	296mm 11.65”

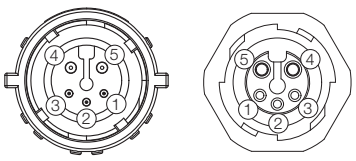


NOTE: Please see CAD files for additional dimensional data.

Connection Accessories



Connector Pin Assignment

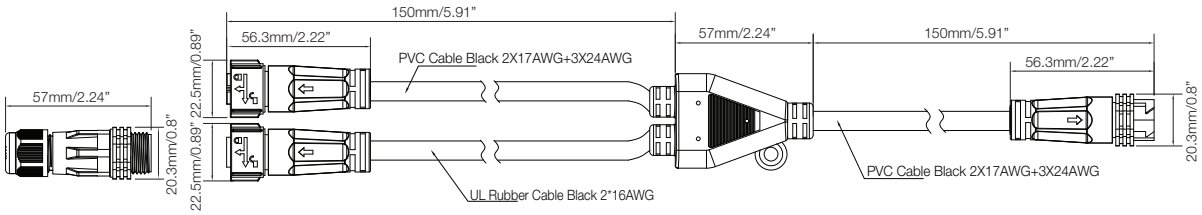


Wire#	Description	Color
1	Data+	Green
2	Address	Yellow
3	Data–	Blue
4	DC48V–	Black
5	DC48V+	Red

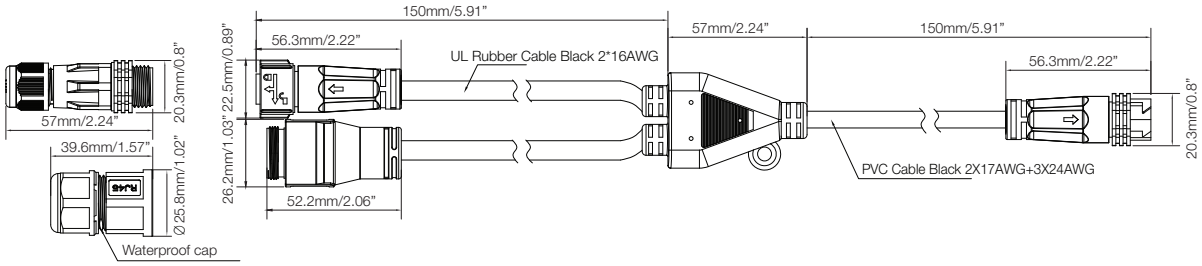
NOTE: Please see CAD files for additional dimensional data.

Connection Accessories

Power Injector Cable Kit

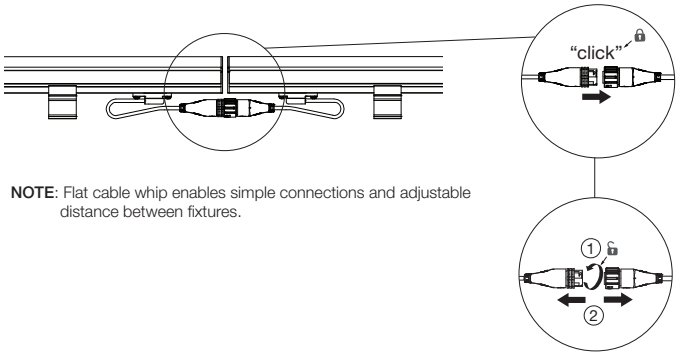


RJ45 Power Injector Cable Kit



NOTE: Please see CAD files for additional dimensional data.

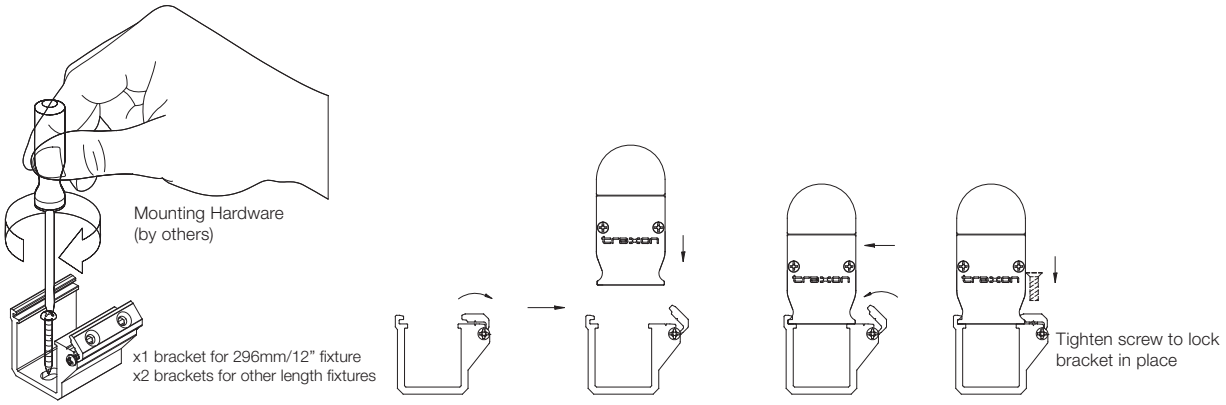
Cable Connection



NOTE: Flat cable whip enables simple connections and adjustable distance between fixtures.

If you do not hear "click", rotate the spring loaded lock nut manually to lock the connectors and ensure that they are properly mated to protect from water ingress.

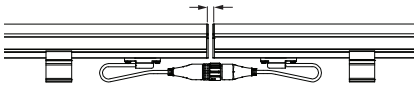
Bracket Mounting

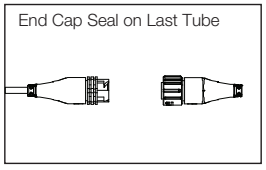


Tube-to-Tube Direct Clearance

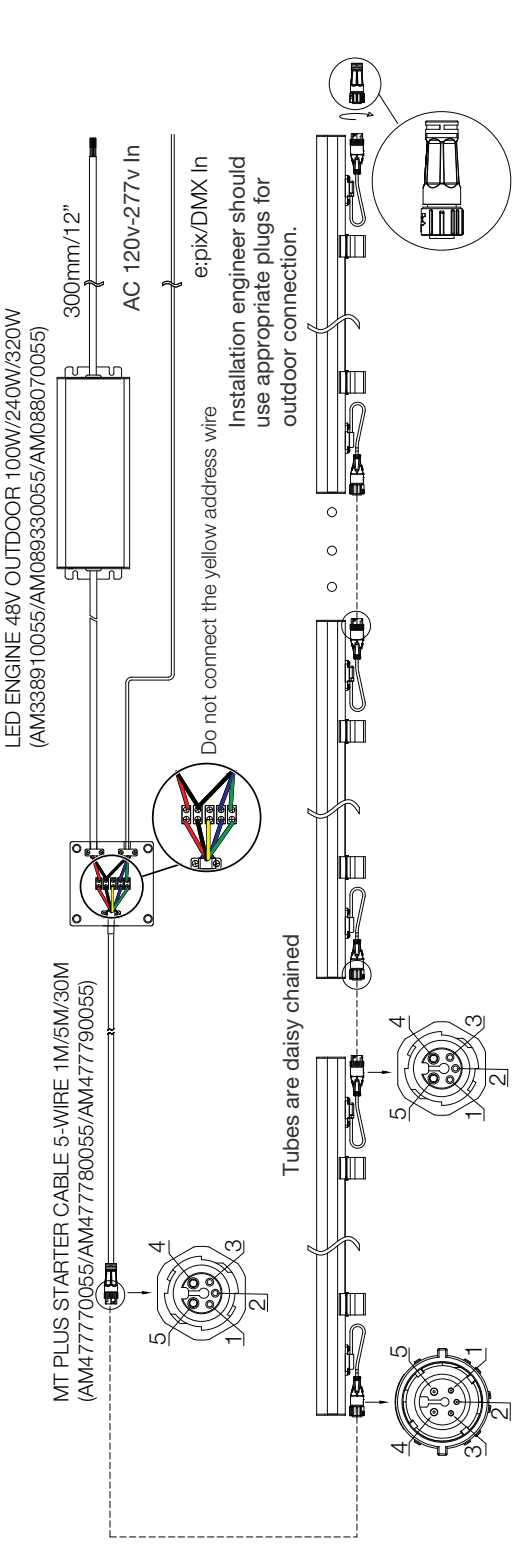
To maintain consistent LED pitch and to allow for thermal expansion for Tubes.

The minimum distance depends on the temperature difference.
Normally, it is 4mm/0.16". When the temperature difference is greater than 35˚C/95˚F, 5mm/0.2" is needed.
Max. distance: 100mm/3.94"





System Diagram

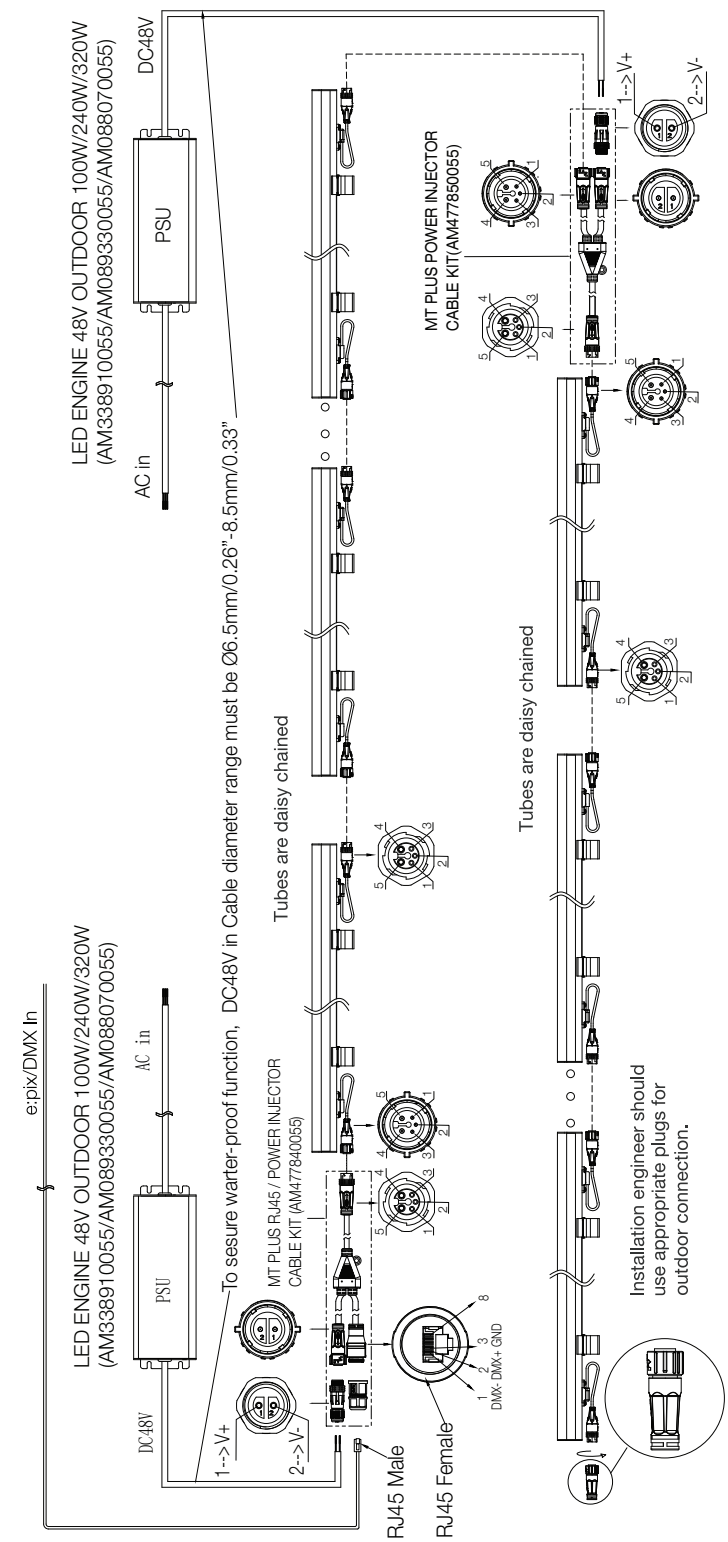


Color Type	Max. Daisy Chain	PSU Power
RGBW	6m	100W
	12m	240W
	17m	320W

Pin#	Signal	Wire Size	Color	Connection
5	DC48V+	17AWG	Red	DC48V+
4	DC48V–	17AWG	Black	DC48V– and GND
1	Data+	24AWG	Green	e:pix+/DMX+
3	Data–	24AWG	Blue	e:pix–/DMX–
2	Address	24AWG	Yellow	Do not connect

The Address wire is not needed between the controller and the first fixteure.
This wiring diagram shows only typical connections. Actual wiring depends on LED Tube configuration and installation. Actual no. varies according to cable lengths and signal source. Please consult your local Traxon office for aid.

System Diagram



Color Type	Max. Daisy Chain	PSU Power
RGBW	6m	100W
	12m	240W
	17m	320W

MT PLUS END CAP WITH 120Ω TERMINATOR
(AM477800055)

Pin#	Signal	Wire Size	Color	Connection
5	DC48V+	17AWG	Red	DC48V+
4	DC48V–	17AWG	Black	DC48V– and GND
1	Data+	24AWG	Green	e:pix+/DMX+
3	Data–	24AWG	Blue	e:pix–/DMX–
2	Address	24AWG	Yellow	Do not connect

This wiring diagram shows only typical connections. Actual wiring depends on LED Tube configuration and installation. Actual no. varies according to cable lengths and signal source. Please consult your local Traxon office for aid.

Model Number

TU .	MP .	N	N	NN	N	0	0
		Length	Color	Pixels	Optics		
		1: 296mm/11.65”	1: RGB+W (6500K)	09: 9Pixels with 296mm/11.65”	0: Flat clear cover		
		2: 596mm/23.46”		18: 18Pixels with 596mm/23.46”	2: Round diffused cover		
		3: 896mm/35.28”		27: 27Pixels with 896mm/35.28”			
		4: 1196mm/47.09”		36: 36Pixels with 1196mm/47.09”			
		5: 1496mm/58.90”		45: 45Pixels with 1496mm/58.90”			

Fixtures

Model No.	Description	Item Code
TU.MP.5145200	MEDIA TUBE PLUS RGBW 1496 45P DIFFUSED	AM477570055
TU.MP.4136200	MEDIA TUBE PLUS RGBW 1196 36P DIFFUSED	AM477580055
TU.MP.3127200	MEDIA TUBE PLUS RGBW 896 27P DIFFUSED	AM477590055
TU.MP.2118200	MEDIA TUBE PLUS RGBW 596 18P DIFFUSED	AM477600055
TU.MP.1109200	MEDIA TUBE PLUS RGBW 296 9P DIFFUSED	AM477610055
TU.MP.5145000	MEDIA TUBE PLUS RGBW 1496 45P CLEAR	AM477620055
TU.MP.4136000	MEDIA TUBE PLUS RGBW 1196 36P CLEAR	AM477630055
TU.MP.3127000	MEDIA TUBE PLUS RGBW 896 27P CLEAR	AM477640055
TU.MP.2118000	MEDIA TUBE PLUS RGBW 596 18P CLEAR	AM477650055
TU.MP.1109000	MEDIA TUBE PLUS RGBW 296 9P CLEAR	AM477660055

TX Connect

Model No.	Description	Item Code
TU.AC.1500100	MT PLUS STARTER CABLE 5-WIRE 1M ROUND	AM477770055
TU.AC.1500200	MT PLUS STARTER CABLE 5-WIRE 5M ROUND	AM477780055
TU.AC.1500300	MT PLUS STARTER CABLE 5-WIRE 30M ROUND	AM477790055
TU.AC.1500400	MT PLUS END CAP WITH 120Ω TERMINATOR	AM477800055
TU.AC.1500500	MT PLUS INTER CABLE 5-WIRE 0.14M FLAT	AM477810055
TU.AC.1500600	MT PLUS INTER CABLE 5-WIRE 1M FLAT	AM477820055
TU.AC.1500700	MT PLUS INTER CABLE 5-WIRE 4M FLAT	AM477830055
TU.AC.1500800	MT PLUS RJ45 / POWER INJECTOR CABLE KIT	AM477840055
TU.AC.1500900	MT PLUS POWER INJECTOR CABLE KIT	AM477850055
TU.AC.1501000	MT PLUS INTER CABLE 2-WIRE 30M ROUND	AM477860055

TX Control

Model No.	Description	Item Code
N/A	LED ENGINE 100W 48V OUTDOOR	AM338910055
N/A	LED ENGINE 240W 48V OUTDOOR	AM089330055
N/A	LED ENGINE 320W 48V OUTDOOR	AM088070055
N/A	e:cue SYMPL e:pix Node	AB443930035
N/A	e:cue SYMPL pro Node e:pix	AM305690031
EN.BP.0000200	Butler Pro e:pix	AA628610035
N/A	e:cue SYMPL pro Node DMX	AM255360031
EN.BP.0000100	BUTLER PRO DMX/RDM	AA628600035
EN.BX.0000001	BUTLER XT2	AA557270131
160174	BUTLER XT2 GARAGE (OPTIONAL)	AA556660031
EN.BU.0000001	BUTLER S2	AB436200031
AC.BG.0000001	BUTLER S2 GARAGE (OPTIONAL)	AA611800031
N/A	LCE3FX E:CUE	AM368100135
N/A	LCE3 E:CUE	AM368100035
N/A	SYMPL Core S	AB447060035
N/A	SYMPL Core SP	AM430280035
N/A	LIGHTING CONTROL ENGINE 2 MX WITH ETL	AM34934003I
N/A	E:CUE SYMPL DMX NODE	AB444180035

Our Brands

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HEZ breakaway and non-breakaway in-line rejection fuse holders for UL Class CC fuses

Catalog Symbol: HEZ

Description:

Bussmann® series HEZ submersible, single-pole in-line rejection fuse holders are for UL Class CC fuses. They are available in non-breakaway and breakaway versions with an array of terminal options to meet application needs. Breakaway versions come with insulating boots to provide submersibility per UL IP67. Non-breakaway versions require ordering optional insulating boots for submersibility.

Recommended fuses:

Catalog symbol	Operation	Data sheet No.
LP-CC	Time-delay	1023
FNQ-R		1014
KTK-R	Fast-acting	1015

Ratings:

Volts: 600V

Amps: up to 30A limited by conductor size

Withstand: 200kA RMS Sym.

Agency information:

UL® Listed, Guide IZLT, File E14853

CSA® Certified, Class 6225-01, File 47235

CE, RoHS compliant

Coupling nut torque:

10-20 Lb-In (1.1-2.2 N•m)

Operating and storage temperature:

-40°F (-40°C) to 221°F (105°C)

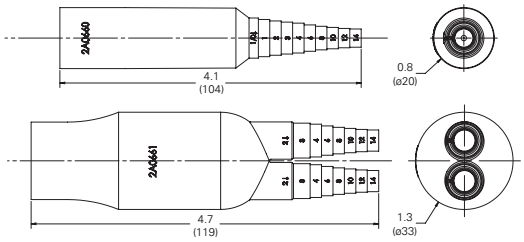
Insulating boots:

Two insulating boots come standard with the breakaway holder configurations. Insulating boots are not included as standard with non-breakaway holders. Two insulating boots must be ordered separately, if required, for each non-breakaway holder ordered. When insulating boots are utilized, extra heat retention requires that fuses are sized at a minimum of 200% of the RMS load current.

Use these part numbers to order insulating boots for a non-breakaway HEZ holder:

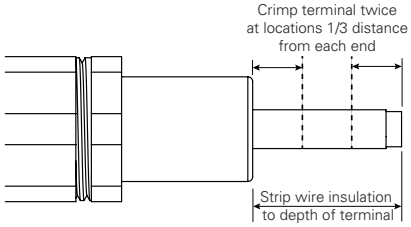
Description	Part no.
Single conductor	2A0660
Dual conductor	2A0661

Boot reference:



Installation instructions:

Strip wire insulation equal to the depth of the crimp or screw terminal. Torque screw terminal to 35 Lb-In (3.9 N•m) or crimp terminal twice, spacing crimps a distance of one-third from each end (as shown below) using an appropriate crimp tool and die. See page 3 for recommended crimping tools.



Related products:

Catalog no.	Description	Data sheet no.
HEX	Two-pole supplemental in-line fuse holder	2126
HEB	One-pole supplemental in-line fuse holder	2127
HEY	Two-pole Class CC in-line fuse holder	2126
HET	One-pole in-line, permanently installed neutral	2125
NNB-R	Class CC neutral dummy link (not a fuse)	—

Bussmann series HEZ breakaway and non-breakaway in-line rejection fuse holders for UL Class CC fuses

Non-breakaway catalog number system

HEZ - A A

To order:

Specify catalog symbol HEZ and the loadside terminal code. Then select a lineside terminal code that is available with the loadside terminal. Example: HEZ-AA defines a non-breakaway holder with both loadside and lineside copper crimp terminals for a single 8-16 AWG or two 12-16 AWG wires.

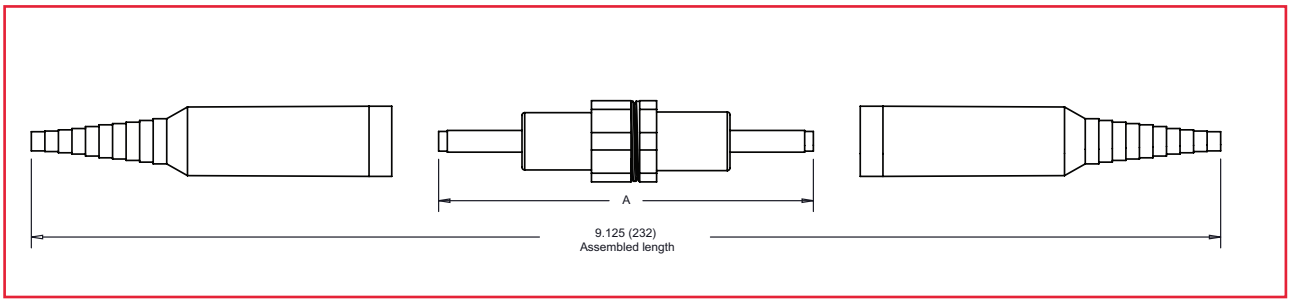
Catalog symbol	Loadside terminal	Lineside terminal	Agency Information		Loadside terminal			Lineside terminal			Reference length A	Breakaway equivalent
			UL	CSA	Terminal type		Wire range*	Terminal type		Wire range*		
HEZ	A	A	X	X	Cu crimp		#8-16; (2) #12-16	Cu crimp		#8-16; (2) #12-16	4.4 (112)	HEZ-AW-RLC-A

* Solid/stranded conductors unless otherwise noted.

Non-breakaway terminal data

Terminal type	Conductor data: Size	No. per terminal	Solid	Stranded	Catalog symbol [Load /Line]
Cu crimp					
	#8-16	1	•	•	A
	#10-16	2	•	•	

Non-breakaway dimensions - in (mm):



Breakaway catalog number system

HEZ - A W - RYC

To order:

Specify catalog symbol HEZ and the loadside terminal code plus the letter "W." Then select a lineside terminal code that is available with the loadside terminal. Example: HEZ-AW-RCL-A defines a breakaway holder with both lineside and loadside copper crimp terminals for a single 8-16 AWG or two 12-16- AWG wires.

Catalog symbol	Loadside terminal	Lineside terminal	Agency Information		Loadside terminal		Lineside terminal		Length A (reference)	Non-breakaway equivalent
			UL	CSA	Terminal type	Wire range*	Terminal type	Wire range*		
HEZ	A	RLC-A	X	X	Cu crimp 	#8-16; (2) #12-16	Cu crimp 	#8-16; (2) #12-16	5.8 (147)	HEZ-AA
		RYC	X	—	Cu crimp 	#8-16; (2) #12-16	Cu dual setscrew 	#2-12†	6.3 (159)	—

* Solid/stranded conductors unless otherwise noted.

Breakaway loadside terminal data

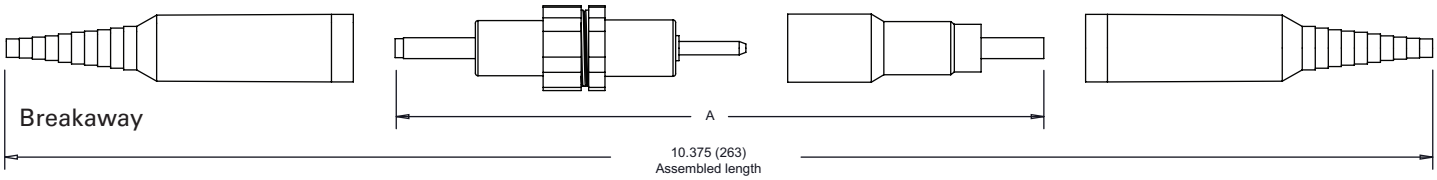
Terminal type	Conductor data: Size	No. per terminal	Solid	Stranded	Catalog symbol [Load /Line (2) & (3)]
Cu crimp 	#8-16	1	•	•	A
	#10-16	2	•	•	

Breakaway lineside terminal data

Terminal type	Conductor data: Size	No. per terminal	Solid	Stranded	Catalog symbol
Cu crimp 	#8-16	1	•	•	-RLC-A
	#12-16	2	•	•	
Cu dual setscrew 	#2-12	2†	•	•	-RYC

† Not dual wire rated. One wire per opening.

Dimensions - in (mm):



Recommended crimping tools:

Some of the commercially available crimping tools that can be used with the HEZ fuse holders are listed in the table below. This list is not intended to exclude the use of other crimping tools that can provide similar crimps or indents.

HEZ terminal	T and B P/N (Die)
A	WT-111M (Die C)
	Sta-Kon ERG4002 (Die C)

Bussmann series HEZ breakaway and non-breakaway in-line rejection fuse holders for UL Class CC fuses

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Powering Business Worldwide

Low-Peak™ LP-CC Class CC 600 Vac/300 Vdc, 1/2-30 A time-delay fuses

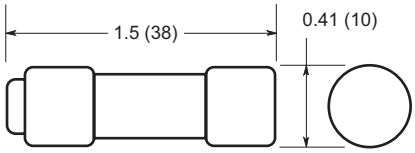
RoHS

Catalog numbers (amps)				
LP-CC-1/2	LP-CC-1-1/2	LP-CC-3	LP-CC-6	LP-CC-12
LP-CC-6/10	LP-CC-1-6/10	LP-CC-3-2/10	LP-CC-6-1/4	LP-CC-15
LP-CC-8/10	LP-CC-1-8/10	LP-CC-3-1/2	LP-CC-7	LP-CC-20
LP-CC-1	LP-CC-2	LP-CC-4	LP-CC-7-1/2	LP-CC-25
LP-CC-1-1/8	LP-CC-2-1/4	LP-CC-4-1/2	LP-CC-8	LP-CC-30
LP-CC-1-1/4	LP-CC-2-1/2	LP-CC-5	LP-CC-9	
LP-CC-1-4/10	LP-CC-2-8/10	LP-CC-5-6/10	LP-CC-10	

Carton quantity:

Amp rating	Carton qty.
1/2-30	10

Dimensions - in (mm)



Catalog symbol:

- LP-CC-(amp)

Description:

Bussmann™ series Ultimate protection Low-Peak Class CC current-limiting, time-delay fuses. Time-delay – 12 seconds (minimum) at 200% of rated current.

Specifications:

Ratings

- Volts
  - 600 Vac
  - 300 Vdc (1/2 to 2-8/10 A, 20-30 A)
  - 150 Vdc (3-15 A)
- Amps 1/2-30 A
- IR
  - 200 kA Vac RMS Sym.
  - 20 kA Vdc

Agency information

- UL® Listed Class CC, Std. 248-4, Guide JDDZ, File E4273
- CSA® Certified; Class 1422-02, File 53787
- CE
- RoHS compliant (20-30A)

Features:

- 200kA interrupting rating complies with NEC® Section 110.9 for today's large capacity systems.
- Fast short-circuit protection and dual-element, time-delay performance provide ultimate protection.
- Reduces existing fuse inventory by up to 33% when upgrading to Low-Peak fuses.
- Consistent 2:1 amp rating ratios for all Low-Peak fuses make selective coordination easy.
- Time-delay characteristic avoids unwanted fuse openings from surge currents while fast response speed under fault conditions provides a high degree of current limitation.
- Current-limitation protects downstream components against damaging thermal and magnetic effects of fault currents.
- A superior, all-purpose, space-saving branch circuit fuse that meets most protection requirements up to 30 A.
- Very compact physical size that's only 13/32" x 1-1/2" (10 x 38mm) with rejction tip.
- Proper sizing can provide "No Damage" Type 2 coordinated protection for NEMA and IEC motor controllers.
- Can be used where either a time-delay or a fast-acting fuse is needed, making selection easier and reducing spare fuse inventories for substantial cost reduction.
- Superior protection for small horsepower motor circuits.

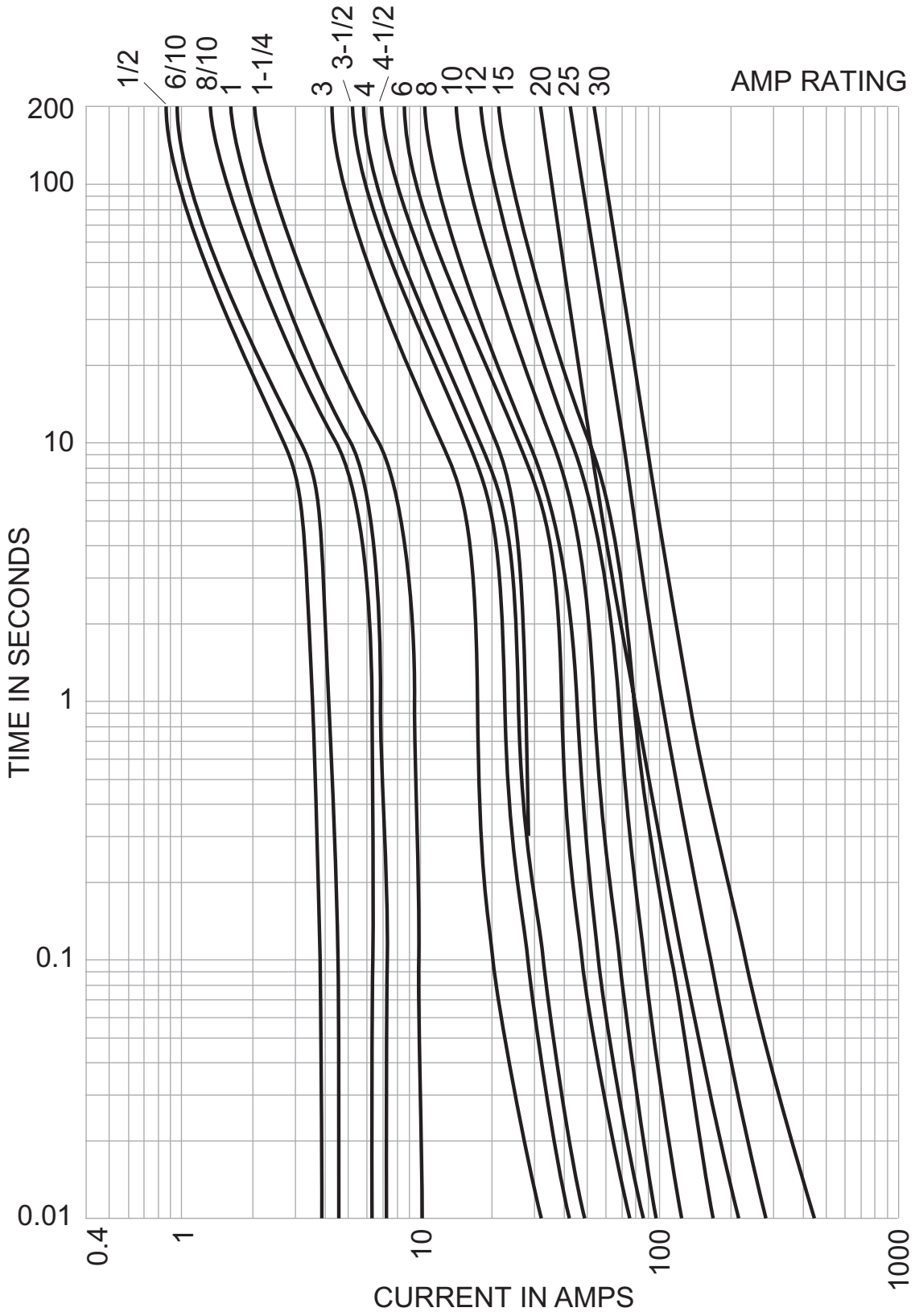
Recommended fuse blocks and holders:

Fuse amps	1-pole	2-pole	3-pole
Modular open blocks			
up to 30	BCM603-1_	BCM603-2_	BCM603-3_
DIN-Rail holders			
Up to 30	CHCC1D_	CHCC2D_	CHCC3D_
	—	—	OPM-NG-_
	—	—	OPM-1038_
	—	—	OPM-1038_SW
Panel mount holders			
Up to 30	HPS-RR	—	—
	HPF-RR	—	—
In-line holders			
Up to 30	—	HEY	—
	HEZ	—	—

For additional information on Class CC fuse blocks and holders, see data sheets:

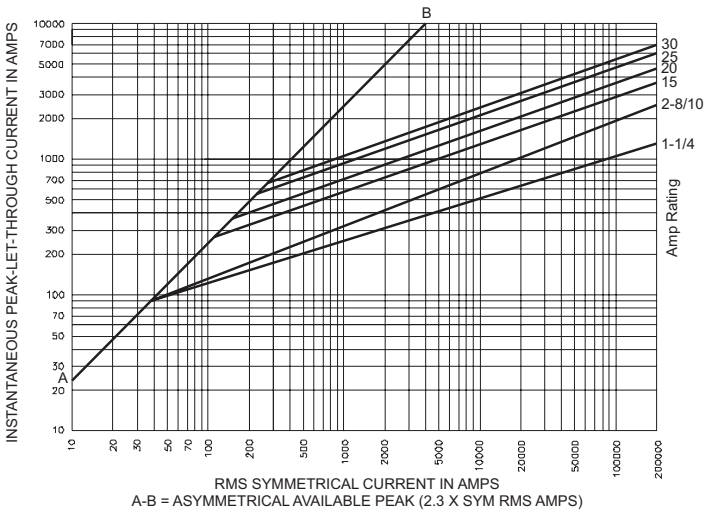
- Modular open blocks no. 10241 (BCM)
- DIN-Rail holders No. 10430 (CHCC), No. 1109 (OPM-NG), No. 1102 (OPM-1038), No. 1103 (OPM-1038_SW)
- Panel mount holders No. 2113 (HPS), No. 2114 (HPF)
- In-line holders No. 2126 (HEY), No. 2130 (HEZ)

Time-current curves - average melt:



Low-Peak™ LP-CC Class CC 600 Vac/300 Vdc, 1/2-30 A time-delay fuses

Current-limitation curves:



Current-limiting effects:

Prospective S.C.C.	Let-through current (apparent RMS symmetrical vs. fuse rating)					
	1-1/4 A	2-8/10 A	15 A	20 A	25 A	30 A
1000	100	135	240	305	380	435
3000	140	210	350	440	575	580
5000	165	255	420	570	690	710
10,000	210	340	540	700	870	1000
20,000	260	435	680	870	1090	1305
30,000	290	525	800	1030	1300	1520
40,000	315	610	870	1150	1390	1700
50,000	340	650	915	1215	1520	1820
60,000	350	735	1050	1300	1650	1980
80,000	390	785	1130	1500	1780	2180
100,000	420	830	1210	1600	2000	2400
200,000	525	1100	1600	2000	2520	3050

NOTE: To calculate I_p (I_{peak}) multiply I_{RMS} value by 2.3.

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Eaton.com

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Eaton.com/bussmannseries

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For Eaton's Bussmann series product information, call **1-855-287-7626** or visit: **Eaton.com/bussmannseries**

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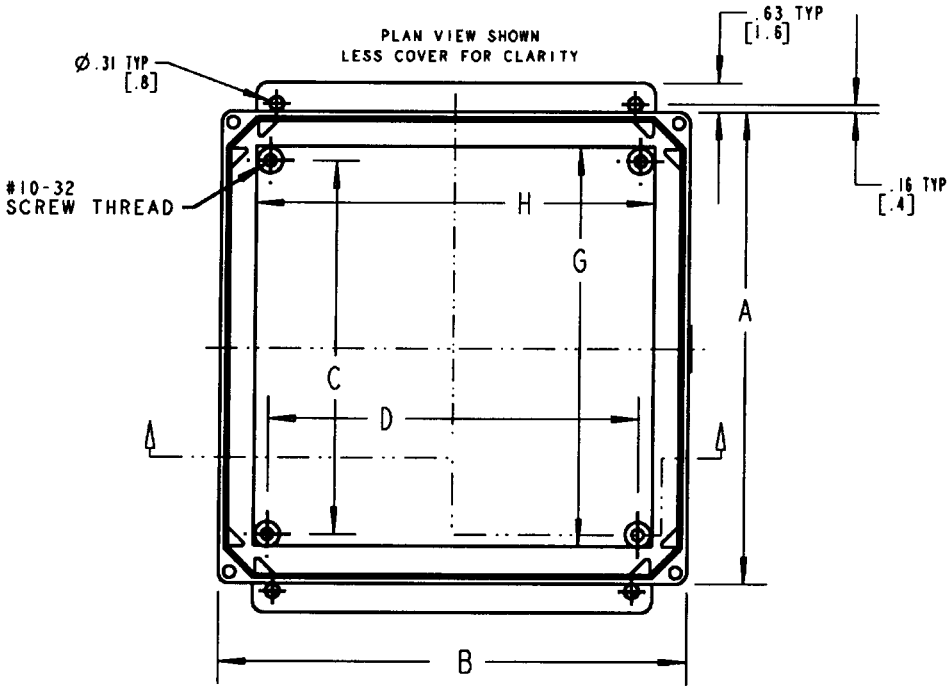
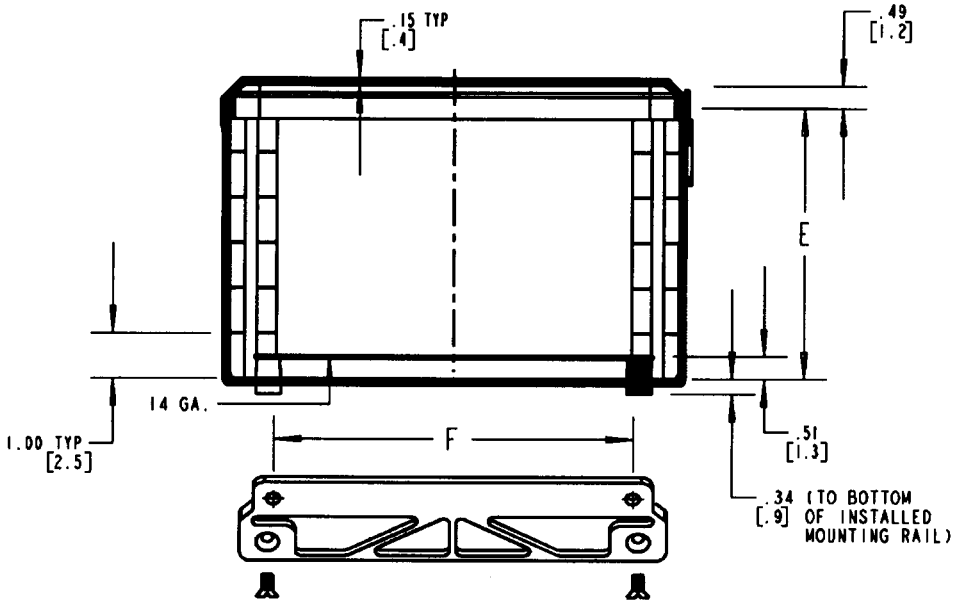
Carlon





NOTE:
SEE SHT.2 FOR
DIMENSIONS.

LEGEND EXAMPLE

N V 644
- 644 — ENCLOSURE SIZE
- V — COVER TYPE V=CLEAR COVER S=OPAQUE COVER
- N — NEMA TYPE 1-3-3S-12-4/4X

GENERAL NOTES	PROJECT #	ERN #	
1. ALL DIMENSIONS ARE FOR REFERENCE ONLY. 2. DIMENSIONS IN BRACKETS [ ] ARE IN METRIC UNITS.	5AM91009	(2010997)	Thomas&Betts www.tnb.com
REVISIONS	DESCRIPTION:	SCREW COVER ENCLOSURES (NS/NV SERIES)	
** SEE ERN (****) FOR APPROVAL SIGNATURES & RELEASE DATE. PROJECT NO: ****	ORIGINAL PROJECT NO / (ERN NO)	SHEET NO:	REV. NO: / DRAWING NO:
	/ ( )	1 OF 2	D / WSD-AC02090

Carlon

SIZE	BACK PANEL	
	G	H
JP64	4.88 (124.0)	2.88 (73.2)
JP66	4.88 (124.0)	4.88 (124.0)
JP86	6.75 (171.5)	4.88 (124.0)
JP88	6.75 (171.5)	6.88 (174.8)
JP108	8.75 (222.3)	6.88 (174.8)
JP1010	8.75 (222.3)	8.88 (225.6)
JP1210	10.75 (273.1)	8.88 (225.6)
JP1212	10.75 (273.1)	10.88 (276.4)
JP1412	12.75 (323.9)	10.88 (276.4)
JP1614	14.75 (374.6)	12.88 (327.2)

LEGEND EXAMPLE

N V 644

- 644 — ENCLOSURE SIZE
- V — COVER TYPE: V=CLEAR COVER, S=OPAQUE COVER
- N — NEMA TYPE 1-3-3S-12-4/4X

SIZE	A	B	C	D	E	F
__644	6.42 (163.1)	4.41 (112.0)	4.29 (109.0)	2.28 (57.9)	4.00 (101.6)	2.00 (50.8)
__664	6.42 (163.1)	6.42 (163.1)	4.28 (108.7)	4.28 (108.7)	4.00 (101.6)	4.00 (101.6)
__864	8.42 (213.9)	6.42 (163.1)	6.27 (159.2)	4.26 (108.2)	4.00 (101.6)	4.00 (101.6)
__884	8.42 (213.9)	8.42 (213.9)	8.30 (160.0)	6.30 (160.0)	4.00 (101.6)	6.00 (152.4)
__1084	10.42 (264.7)	8.42 (213.9)	8.34 (211.8)	6.30 (160.0)	4.00 (101.6)	6.00 (152.4)

SIZE	A	B	C	D	E	F
__1086	10.42 (264.7)	8.42 (213.9)	8.34 (211.8)	6.30 (160.0)	6.00 (212.4)	6.00 (152.4)
__10106	10.42 (264.7)	10.42 (264.7)	8.29 (210.6)	8.29 (210.6)	6.00 (212.4)	8.00 (203.2)
__12106	12.42 (315.5)	10.42 (264.7)	10.30 (261.6)	8.28 (210.3)	6.00 (212.4)	8.00 (203.2)
__12126	12.42 (315.5)	12.42 (315.5)	10.24 (260.1)	10.24 (260.1)	6.00 (212.4)	10.00 (254.0)
__14126	14.42 (366.3)	12.42 (315.5)	12.26 (311.4)	10.24 (260.1)	6.00 (212.4)	10.00 (254.0)
__16146	16.42 (417.1)	14.42 (366.3)	14.26 (362.2)	12.26 (311.4)	6.00 (212.4)	12.00 (304.8)

Thomas&Betts
www.tnb.com

DESCRIPTION: SCREW COVER ENCLOSURES (NS/NV SERIES)

SHEET NO:	REV. NO:	DRAWING NO:
2 OF 2	D	WSD-AC02090

Synapse
audio visual designs, llc
411 Sette Dr. | Suite N3 | Paramus, NJ 07652
p: 201.576.9200

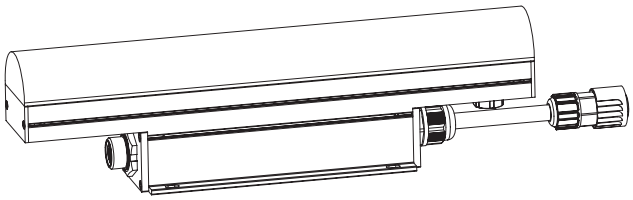
12_26_22

Pennsylvania Convention Center
Broad Street Façade Lighting Renovation

Alternate 2
Cut Sheets

PIXEL BAR™

ACCLAIM LIGHTING



Spectrum™ TECHNOLOGY

Client: Pennsylvania Convention Center

Project: Broad Street Facade Lighting Renovation

Type: L3

Order Code: PBA-242-DTLN

Quantity:

Pixel Bar is a outdoor rated, pixel controllable, direct view LED fixture. It is available with a rounded or flat diffused lens, is IP66 rated, and has an internal 90-277VAC auto switching power supply. Available in RGBW, RGBA, dynamic white or single color white, it is ideal for any interior or exterior application requiring seamless strips of light and AC power.

SPECIFICATIONS

Colors	Spectrum RGBW (W=3000K), RGBA, Dynamic White (2700K-6000K)
Beam Angle	168º
Photometrics	100 lumens per foot (estimated), testing in progress
Pixel Distance & Quantity	3" (75mm) - 4 pixels per 1', 16 pixels per 4'
Control	DMX/RDM (RDM addressing)
Max Fixtures in Series	100' interconnected
Mounting	Bolt or screw directly to surface, M4 mounting holes on each side of the fixture
Power Consumption	8W (1'), 32W (4')
Operating Voltage	100-277VAC, 50/60Hz
Lumen Maintenance	L70 @ 100,000 hours (25º C)
Finish	Silver / finished aluminum, optional marine coating available
Housing Material	Aluminum
Ambient Operating Temp.	-40º F to 122º F (-40º C to 50º C)
IP Rating	IP66, Wet location
Fixture Connectors	Linkable multi-pin AC + signal cable, bare wire feed cable (wire in an enclosure - by others)
Warranty	5 Years, limited
Weight	**1'** 2.65 lbs (1.2 kg) / **4'** 10.6 lbs (4.8 kg)
Dimensions	**L** 12"/48" x **W** 2.36" x **H** 3.3" (**L** 305/1220 x **W** 60 x **H** 82.5 mm)
Certifications	

PIXEL BAR™

ACCLAIM LIGHTING

ORDER CODES

* Indicates Special Order

PBA - 24# - ##T#N

- **PBA** — Version: Pixel Bar
- **2** — Control: **2** = DMX/RDM
- **4** — Housing Color: **4** = Silver / Aluminum
- **#** — Lens Cover: **2** = Diffused Round, **3** = Diffused Flat
- **#** — Size: **A** = 1', **D** = 4'
- **T** — Beam: **T** = Standard (168°)
- **#** — Color: **F** = RGBA, **L** = RGBW (W=3000K), **M** = Dynamic White (2700K-6000K)
- **N** — Input Voltage: **N** = Normal (100-277vAC)

RELATED COMPONENTS

Connection Cables

H6FC10
10' Feed Cable For Pixel Bar + End Cap
Powers up to 100' (30.5m)

H6FC50
50' Feed Cable For Pixel Bar + End Cap
Powers up to 100' (30.5m)

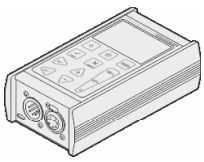
H6EC
End Cap for Pixel Bar

H6LC1
1' Link Cable For Pixel Bar
Connects up to 100' (30.5m)

H6LC5
5' Link Cable For Pixel Bar
Connects up to 100' (30.5m)

H6LC10
10' Link Cable For Pixel Bar
Connects up to 100' (30.5m)

Fixture Setup Accessories



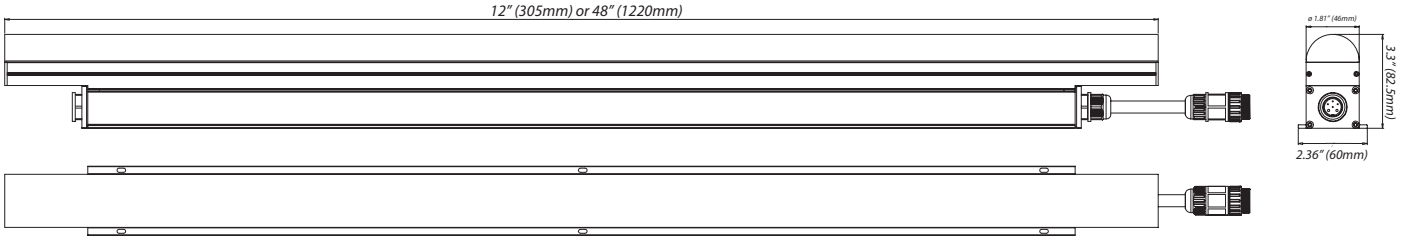
XMT350
DMX + RDM Addressing and Testing Tool

PIXEL BAR™

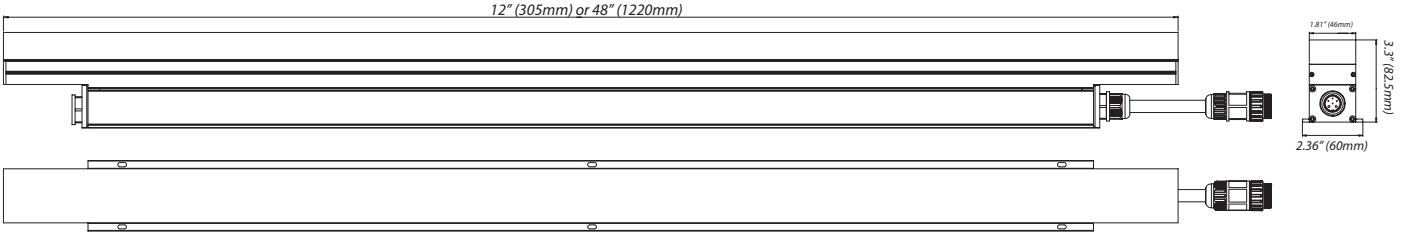
ACCLAIM LIGHTING

DIMENSIONS

Diffused Round



Diffused Flat



Cable Detail