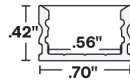




ESSENTIALS LALO- ENCAPSULATED (03) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed



- Shallow, low-profile fixture for surface or recessed installations
- Features high quality LED strips encapsulated in polyurethane in a rigid extrusion providing a robust fixture
- Encapsulation available in clear or translucent
- Suitable for indoor and outdoor locations (IK10)
- Three mounting options
- Features painted end caps to match extrusion finish or clear end caps to achieve seamless appearance of long runs
- Suitable for installation in the storage area of a clothes closet when specified with LEDs at 4.0 watts or less per foot per NEC regulations
- Used in applications where CCT and brightness need to be controlled separately
- When using DALI and DMX power supplies, LED wattage must be doubled
- Optional plastic louver accessory available in white or black for added glare control



INFORMATION REQUIRED FOR LIGHTING SCHEDULE

| 1 | 2 | 3 | 4 | 5 | 6 |
|---------|-----------|-----|-------|------------|------|
| PRODUCT | WATTS/ FT | CCT | RATED | EFFICIENCY | LENS |
| | | | ENC | STD | |

ADDITIONAL INFORMATION REQUIRED TO ORDER

| 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|-----------------------|------------------------|-------------------------|------------------|-------------------|------------|-----------|----------|--------|-------------|-------------------|
| WIRE INPUT/ OUTPUT | CONNECTOR / WIRE IN | CONNECTOR / WIRE OUT | INPUT END CAP | OUTPUT END CAP | WIRE COLOR | WIRE TYPE | MOUNTING | FINISH | LENGTH (IN) | EXACT/ OPTIMAL |
| | | | | | | | | | | |

Sample Part Number: LL3DW-6.0-24/30-ENC-STD-TL-P1-BW-BW-STD-STD-BK-CL2-SST-ST-48"-E

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|--|--|-----------------|---------------------|--|
| PRODUCT | WATTS/FT | CCT | RATED | EFFICIENCY | LENS |
| LL3DW LL3DW-USA Select USA option for BAA and BABA projects. LED engine is built with 3 wires requiring 0-10V, DMX or DALI control. Using DALI, DMX, or non QTL power supplies may double watts/ft. See following pages for compatible power supplies. | 1.5HE 1.5W/ft HE 2.5HE 2.5W/ft HE | 24/30 2400K/3000K 27/40 2700K/4000K | ENC IP67 | STD Standard | CL Clear TL Translucent For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages. For optional snap-on louver ordering, see External Louver Accessory section on following pages |

| 7 | 8 | 9 |
|--|--|---|
| WIRE INPUT/OUTPUT | CONNECTOR/WIRE IN | CONNECTOR/WIRE OUT |
| SINGLE (Input only) S1 End Feed S2 Bottom Feed PASS THROUGH (Input/output) P1 End Feed P2 Bottom Feed | BW Bare Wire (Standard 24") CON6 Connector 6" CON24 Connector 24" BW Bare Wire (Standard 24") CON6 Connector 6" CON24 Connector 24" | CLS Closed End (No feed) BW Bare Wire (Standard 24") CON6 Connector 6" CON24 Connector 24" |

For continuous mounting, consider bottom feed

BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

| 10 | 11 | 12 | 13 |
|--|--|------------------------------------|---|
| INPUT END CAP | OUTPUT END CAP | WIRE COLOR | WIRE TYPE |
| STD Standard CL Clear STD - End cap matches fixture finish chosen Select CL for continuous runs | STD Standard CL Clear STD - End cap matches fixture finish chosen Select CL for continuous runs | WH White BK Black | CL2 Class 2 CL2P Plenum Rated CL2P only available with bare wire leads (BW) |

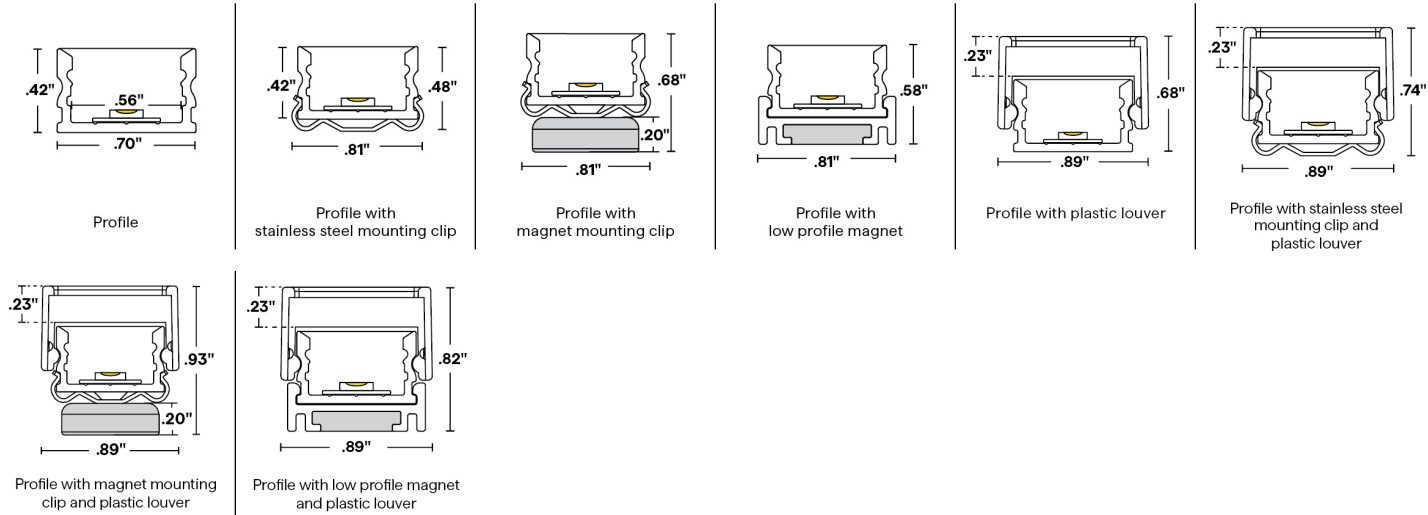
| 14 | 15 | 16 | 17 |
|--|---|--|--|
| MOUNTING | FINISH | LENGTH (IN) | EXACT/OPTIMAL |
| SST Stainless Steel M4 Low Profile Magnet MG Magnet | ST Satin BK Black CU Custom Custom finishes require a longer lead time, consult factory | Minimum length is 12", maximum length is 98" not including end caps. Contact us for lengths under 12". | O Optimal Illumination E Exact Specified Length Exact fixtures match the exact length you specify, but they may have dim spots at the ends. Optimal fixtures are slightly shorter than the length specified, but provide full illumination from end to end. See Exact/Optimal Fixture Length charts. |



ESSENTIALS LALO-ENCAPSULATED (03) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

1 PRODUCT - DIMENSIONS

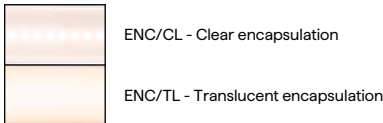


2 DELIVERED LUMENS

[Calculated L70 = 40000 hrs]
Tested with LL3DW-**-30-ENC-STD

| | 1.5HE W/FT | | 2.5HE W/FT | |
|----|------------|-----|------------|-----|
| | LM/FT | CRI | LM/FT | CRI |
| CL | 105 | 98 | 166 | 98 |
| TL | 60 | 98 | 94 | 98 |

6 DIODE VISIBILITY



TEMPERATURE RATINGS

| | DW 1.5 HE W/FT | | DW 3.0 HE W/FT | | DW 2.5 HE W/FT | | DW 5.0 HE W/FT | |
|----------------------------------|---------------------------------------|-------|------------------------------------|-------|---------------------------------------|-------|------------------------------------|-------|
| | QTL power supply other than DALI, DMX | | DALI, DMX, or non-QTL power supply | | QTL power supply other than DALI, DMX | | DALI, DMX, or non-QTL power supply | |
| | Min | Max | Min | Max | Min | Max | Min | Max |
| Ambient Operating Temp - Surface | -4°F | 135°F | -4°F | 120°F | -4°F | 125°F | -4°F | 105°F |

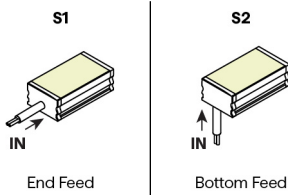


ESSENTIALS LALO-ENCAPSULATED (03) FOR TUNABLE APPLICATIONS

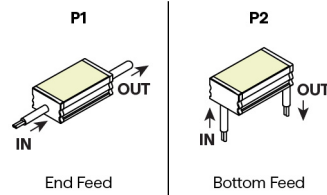
24VDC Linear Fixtures - Surface & Recessed

7 WIRE INPUT/OUTPUT

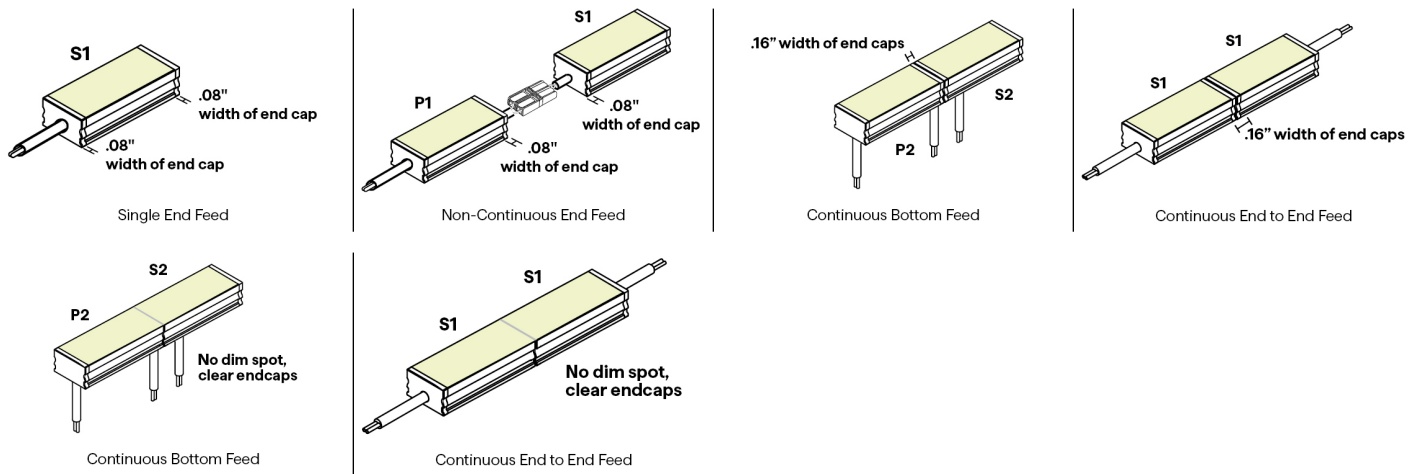
SINGLE (Input only)



PASS THROUGH (Input/Output)

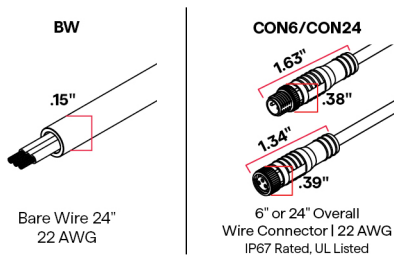


CONFIGURATION OPTIONS

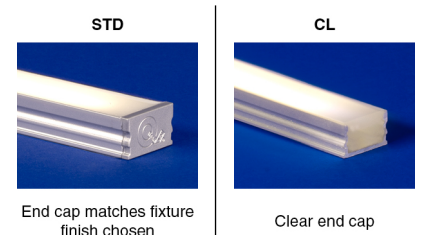


8 / 9 CONNECTOR/WIRE - IN/OUT

Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out



10 / 11 END CAP - IN/OUT





ESSENTIALS LALO-ENCAPSULATED (03) FOR TUNABLE APPLICATIONS

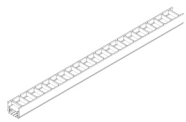
24VDC Linear Fixtures - Surface & Recessed

EXTERNAL LOUVER ACCESSORY

PLASTIC



L1-XX



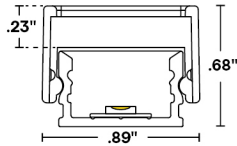
Lumen Multiplier

WH

BK

0.71

0.48



Profile with plastic louver

To order separately use
LALO-L1-FLAT-KIT-WH or
LALO-L1-FLAT-KIT-BK

12 WIRE COLOR

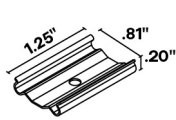


White

Black

14 MOUNTING

SST



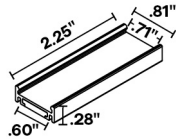
Stainless Steel Clip

2 clips provided for 4' or less; 4 clips provided for greater than 4'

To order separately use SST-01

Each clip comes with a #4 x 5/8" Flat Head screw

M4

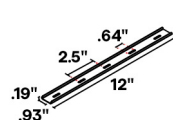


Low Profile Magnet

One M4 provided per foot.

To order separately use
MG-04

MMA-04



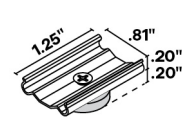
Magnet Mount
Accessory for M4

Sold separately, to order use
MMA-04

Each bracket comes with 2 #6 x 5/8" Flat Head SS

Required when mounting to a non-magnetic surface

MG

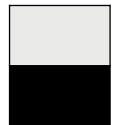


Magnet Clip

One MG provided per foot

To order separately use MG-01

15 FINISH

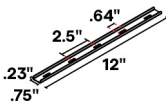


Satin

Black

Custom finishes
require a longer lead
time, consult factory

MMA-01



Magnet Mount
Accessory of MG-01

Sold separately, to order use
MMA-01

Each bracket comes with 2 #6 x 5/8" Flat Head SS

Required when mounting to a non-magnetic surface



ESSENTIALS LALO-ENCAPSULATED (03) FOR TUNABLE APPLICATIONS

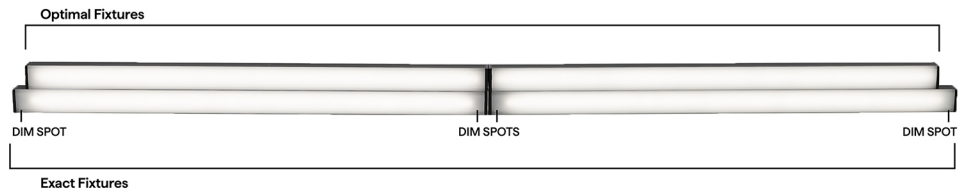
24VDC Linear Fixtures - Surface & Recessed

17 EXACT/OPTIMAL FIXTURE LENGTH

[E/O Length Calculator →](#)

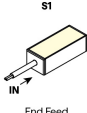
[E/O Explained →](#)

Exact fixtures are the exact length specified. Optimal fixtures' length is rounded down based on LED cut points to allow the fixture to be illuminated end to end. For runs with multiple fixtures that need to fill a specific length, it's recommended to order all optimal fixtures with an exact fixture at the end of the run.

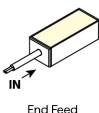
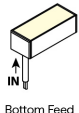
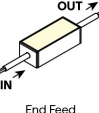
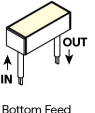


DW-HE ENC LENGTHS BY INCH

EXACT LENGTH

| Requested Length | Potential dim spot on either end of a S1 fixture  |
|------------------|---|
| 12" | 1" |
| 13" | 0.5" |
| 14" | 1" |
| 15" | 0.5" |
| 16" | 1" |
| 17" | 0.5" |
| 18" | 1" |
| 19" | 0.5" |
| 20" | 1" |
| 21" | 0.5" |
| 22" | 1" |
| 23" | 0.5" |
| 24" | 1" |
| 36" | 1" |
| 48" | 1" |
| 60" | 1" |
| 72" | 1" |
| 84" | 1" |
| 96" | 1" |

OPTIMAL LENGTH

| Requested Nominal Length | S1 & S2 | | P1 & P2 | |
|--------------------------|---|---|---|--|
| |  |  |  |  |
| 12" | 10.51" | | 10.86" | |
| 13" | 12.51" | | 12.86" | |
| 14" | 12.51" | | 12.86" | |
| 15" | 14.51" | | 14.86" | |
| 16" | 14.51" | | 14.86" | |
| 17" | 16.51" | | 16.86" | |
| 18" | 16.51" | | 16.86" | |
| 19" | 18.51" | | 18.86" | |
| 20" | 18.51" | | 18.86" | |
| 21" | 20.51" | | 20.86" | |
| 22" | 20.51" | | 20.86" | |
| 23" | 22.51" | | 22.86" | |
| 24" | 22.51" | | 22.86" | |
| 36" | 34.51" | | 34.86" | |
| 48" | 46.51" | | 46.86" | |
| 60" | 58.51" | | 58.86" | |
| 72" | 70.51" | | 70.86" | |
| 84" | 82.51" | | 82.86" | |
| 96" | 94.51" | | 94.86" | |



ESSENTIALS LALO-ENCAPSULATED (03) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

COMPATIBLE POWER SUPPLIES


See power supplies cut sheets for more information. Data subject to change, all data has +/- 5% tolerance.

| DIM TO LEVEL | INDOOR | OUTDOOR |
|--------------|---|---|
| | DW-HE Tunable Applications | DW-HE Tunable Applications |
| 0.1% | QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QTM-eLED+TW QTM-eLED+TW-AWN QZ-DMX | Q-SET-QZ-DMX QOM-eLED+DALI-DT6 QOM-eLED+DALI-DT8 QOM-eLED+PS-DALI-DT6 QOM-eLED+PS-DALI-DT8 QOM-eLED+TW QZ-DMX |
| 1% | QZ-DALI-DT8 | Q-SET+QZ-DALI-DT8 QZ-DALI-DT8 |
| 10% | Non-Dim Power Supply with TW App Dongle | |

| DIMMING PROTOCOL | INDOOR | OUTDOOR |
|--|---|---|
| | DW-HE Tunable Applications | DW-HE Tunable Applications |
| 0-10V | QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+TW QTM-eLED+TW-AWN | QOM-eLED+TW |
| Lutron Athena | QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW-AWN QTM-eLED+DALI-DT8-AWN QTM-eLED+TW-AWN | |
| DMX LED wattage must be doubled for DW-HE products | QZ-DMX | Q-SET-QZ-DMX QZ-DMX |
| DALI-2: DT6 LED wattage must be doubled for DW-HE products except for AWN | QT-CAB-eLED+DALI-DT6 QTM-eLED+DALI-DT6 | QOM-eLED+DALI-DT6 |
| DALI-2: DT8 LED wattage must be doubled for DW-HE products except for AWN | QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QZ-DALI-DT8 | Q-SET+QZ-DALI-DT8 QOM-eLED+DALI-DT8 QZ-DALI-DT8 |
| SCENE App Dimmed | Non-Dim Power Supply with TW App Dongle | |

COMPATIBLE MOUNTING ACCESSORIES


HINGE - HMB-M



1.41" .71"

Adjustable mounting bracket - Medium


HINGE - HMB-L



1.46" 1.29"

Adjustable mounting bracket - Large


HINGE - HMB-XL



1.46" 4"

Adjustable mounting bracket - XLarge


Q-PIVOT



.75" 1.03"

Small mounting accessory


Q-ANGLE



2.23" 1.38"

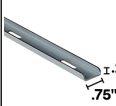
Adjustable mounting accessory

NJ-MEDIUM



J Mounting Bracket

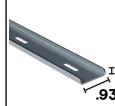
MMA-01



1.23" .75"

Magnet Mount Accessory of MG-01


MMA-04



1.19" .93"

Magnet Mount Accessory of MG-04

SD-L-MEDIUM



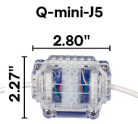
L Mounting Bracket



ESSENTIALS LALO-ENCAPSULATED (03) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface & Recessed

COMPATIBLE WIRING ACCESSORIES



UL Listed, miniature
junction box, DRY/DMP
(WET rated with silicone)

COMPATIBLE CONTROL ACCESSORIES

SCENE APP DONGLE



Wi-Fi or Bluetooth
Connectivity

COMPATIBLE APPS

NFC APP



Read and write
DMX addresses and
adjust voltage