

# Champ Pro PLLA LED luminaires

UL Listed  
CSA Certified  
Marine & Wet Locations  
Type 4X; IP66/IP67

2L

The Champ® Pro PLLA linear LED is specifically designed to replace fluorescent T12, T8 and T5HO lighting in heavy and harsh industrial applications. The rugged and durable design features the industry's most versatile and flexible mounting options. The PLLA is the ideal solution for high vibration, impact and hose down applications.

| Model | Typical lumens | Watts | Lumens per watt | Equivalent HID luminaire | Typical energy savings / lifetime |
|-------|----------------|-------|-----------------|--------------------------|-----------------------------------|
| PLLA2 | 4,000          | 30.3  | 132             | T12HO                    | Up to 67%                         |
|       |                |       |                 | T8HO                     | Up to 63%                         |
|       |                |       |                 | T5HO                     | Up to 52%                         |
|       |                |       |                 | T12                      | Up to 42%                         |
|       |                |       |                 | T8                       | Up to 32%                         |
|       |                |       |                 | T5                       | Up to 17%                         |
| PLLA4 | 8,000          | 58.9  | 135             | T12HO                    | Up to 64%                         |
|       |                |       |                 | T8HO                     | Up to 60%                         |
|       |                |       |                 | T5HO                     | Up to 50%                         |
|       |                |       |                 | T12                      | Up to 46%                         |
|       |                |       |                 | T8                       | Up to 32%                         |
|       |                |       |                 | T5                       | Up to 22%                         |

**Note:** All luminaires in the comparison are 2-lamp, UNV1.

## Applications:

- Ideal for a variety of non-hazardous applications, such as mining, food processing, marine, wastewater treatment, heavy manufacturing and general wash down areas

## Features:

- High efficacy: up to 134 LPW (PLLA2 with UNV1 driver)
- Dimmable driver, 0-10V
- Ambient operating temperature: -40°C to +65°C (standard model); 0°C to +40°C (emergency battery back-up model)
- Low profile (~4" height)
- Versatile ceiling/swivel, wall, flush, pole and pendant mounting options
- Wide and narrow optics for uniform illumination
- Four points of secondary retention
- 2,000 PSI high pressure hose rated
- High vibration resistance
- Integral emergency battery back-up: 90 minute run-time and ≥1,000 lumens (all models)
- Surge protection (standard): 4kV line to line, 6kV line to earth
- Surge protection (with SRG1 or SRG3 suffix): >10kV line to line, >10kV line to earth
- 5 year fixture warranty

## Certifications and compliances:

### NEC/CEC:

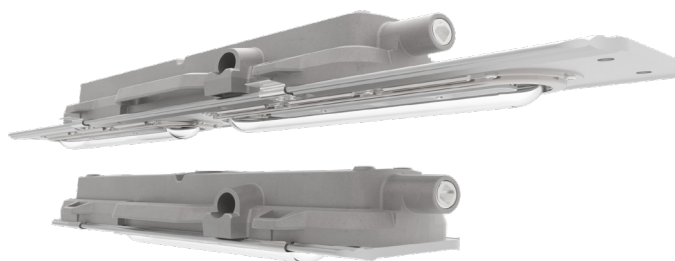
- Type 4X, IP66/IP67
- Marine and wet locations

### UL standards:

- UL924 – Emergency Lighting Equipment (emergency battery back-up model)
- UL1598 – Luminaire
- UL1598A – Luminaire for Installation on Marine Vessels
- UL8750 – Standard for Light Emitting Diode (LED) Equipment for use in Lighting Products

### CSA standard:

- C22.2 Nos. 141, 250



## Standard materials:

- Housing – copper-free aluminum; Corro-free epoxy powder coat (optional)
- Lens – glass; polycarbonate, diffused glass, diffused polycarbonate (optional)

## Mounting:

Versatile mounting options:

- Flush back mount
- Swivel/ceiling back mount
- Offset ceiling/wall mount
- Pole mount
- Pendant mount

## Photometrics:

- Refer to [www.eaton.com](http://www.eaton.com) (under the Resources tab of each product family) for specific photometric IES files

## Electrical ratings:

| UNV1  | Input power (watts) | Input amps at 120-277 VAC |
|-------|---------------------|---------------------------|
| PLLA2 | 30.3                | 0.25                      |
| PLLA4 | 58.9                | 0.49                      |

| UNV1               |                      |
|--------------------|----------------------|
| Voltage range, VAC | 120-277V at 50/60 Hz |
| Voltage range, VDC | 127/250V             |

| UNV34 | Input power (watts) | Input amps at 347-480 VAC |
|-------|---------------------|---------------------------|
| PLLA2 | 31.1                | 0.09                      |
| PLLA4 | 54.6                | 0.16                      |

| UNV34              |                      |
|--------------------|----------------------|
| Voltage range, VAC | 347-480V at 50/60 Hz |

| UNV1  | Power factor | THD   |
|-------|--------------|-------|
| PLLA2 | >0.92        | <6.5% |
| PLLA4 | >0.94        | <6.2% |

| UNV34 | Power factor | THD  |
|-------|--------------|------|
| PLLA2 | >0.95        | <18% |
| PLLA4 | >0.98        | <10% |

## Weights:

| Model | Lbs. | Kg. |
|-------|------|-----|
| PLLA2 | 15.1 | 6.8 |
| PLLA4 | 19.5 | 8.9 |

## Temperature ratings:

| Ambient temp. °C | Min. temp. supply wire °C |
|------------------|---------------------------|
| 40               | 75                        |
| 55               | 75                        |
| 65               | 90                        |

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## Design features:

### High efficacy:

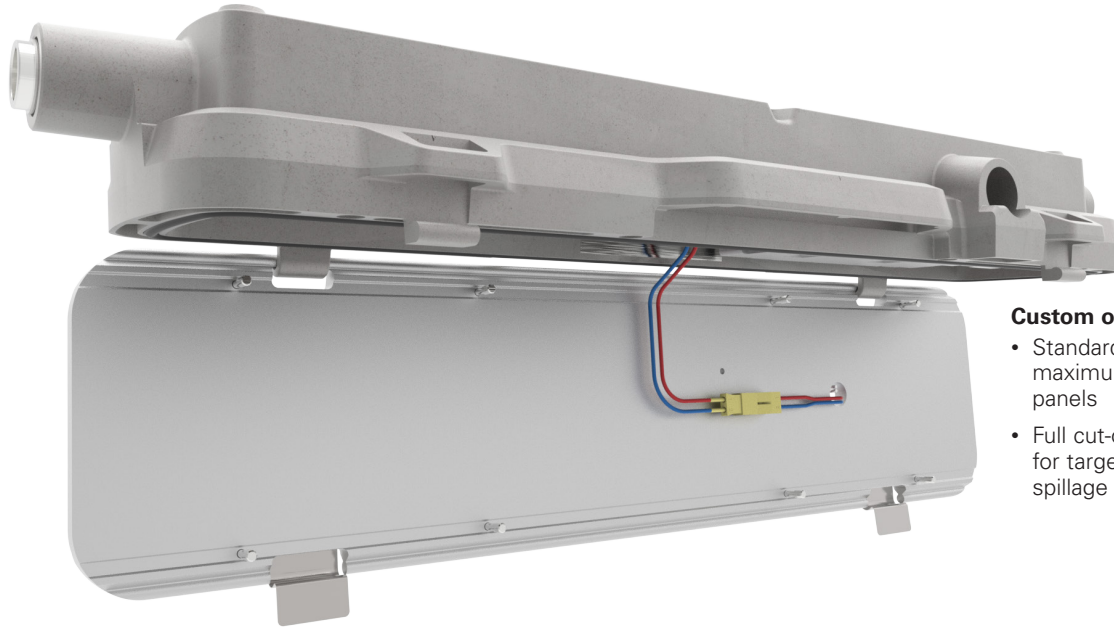
- Up to 134 lumens per watt (PLLA2 with UNV1 driver)

### Quick & easy installation:

- Easy access to drivers and wiring
- No custom brackets or hardware needed

### Comprehensive certification:

- Single model certified for use in harsh industrial or marine applications



### Custom optics:

- Standard wide beam spread for maximum illumination on wall panels
- Full cut-off beam spread option for targeted illumination; avoids spillage and light loss

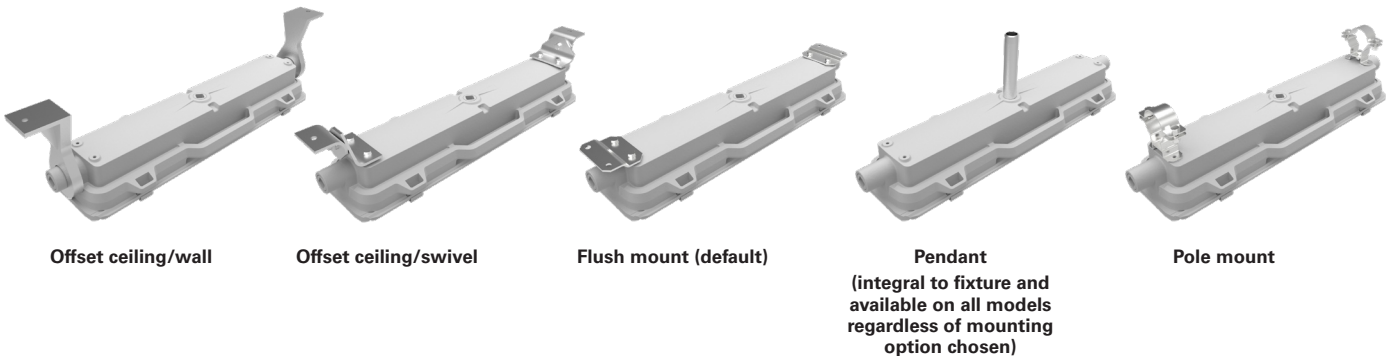
### Slim profile:

- 4.4" fixture height (excluding mounting brackets)
- Perfect for mounting in confined or low height areas

### Built to last:

- Ingress protection from hose down water or diesel fuel in harsh operational conditions – passed 2,000 PSI high pressure test
- Vibration-, impact- and shock-resistant – passed 5G, 3-axis vibration test
- 60,000 hour lifetime at 55°C ambient

## Versatile mounting options:



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## Ordering information:

Part number example

PLLAW4NCS-UNV1-S903-1R-SRG1-EM1-P-M2

| PLLA                                   | W | 4 | N                                     | CS | -UNV1 | -S903                                                             | -1R | -SRG1 | -EM1                                          | -P | -M2 |
|----------------------------------------|---|---|---------------------------------------|----|-------|-------------------------------------------------------------------|-----|-------|-----------------------------------------------|----|-----|
| <b>Color temperature</b>               |   |   | <b>Voltage</b>                        |    |       | <b>Entries</b>                                                    |     |       | <b>Emergency battery back-up</b>              |    |     |
| <b>BLANK</b> Cool white, 5000K, 80 CRI |   |   | <b>UNV1</b> 120-277 VAC; 127/250 VDC  |    |       | <b>BLANK</b> ¾" NPT entries                                       |     |       | <b>EM1</b> Integral emergency battery back-up |    |     |
| <b>N</b> Neutral white, 4000K, 80 CRI  |   |   | <b>UNV34</b> 347-480 VAC              |    |       | <b>1R</b> ¾" NPT entries with ½" reducers                         |     |       |                                               |    |     |
| <b>W</b> Warm white, 3000K, 80 CRI     |   |   |                                       |    |       |                                                                   |     |       |                                               |    |     |
| <b>Length / lumens</b>                 |   |   | <b>Mounting style<sup>B</sup></b>     |    |       | <b>Lens</b>                                                       |     |       | <b>Finish</b>                                 |    |     |
| <b>4</b> 4 ft. length, 8,000 lumens    |   |   | <b>BLANK</b> Flush ceiling/wall mount |    |       | <b>BLANK</b> Clear glass                                          |     |       | <b>BLANK</b> Natural aluminum                 |    |     |
| <b>2</b> 2 ft. length, 4,000 lumens    |   |   | <b>CS</b> Ceiling/swivel mount        |    |       | <b>S891</b> Diffused glass                                        |     |       | <b>P</b> Painted (gray, epoxy)                |    |     |
|                                        |   |   | <b>CW</b> Ceiling/wall mount offset   |    |       | <b>S903</b> Clear polycarbonate                                   |     |       | <b>WH</b> Painted (white, epoxy)              |    |     |
|                                        |   |   | <b>P12</b> Pole mount, 1.25" diameter |    |       | <b>S903D</b> Diffused polycarbonate                               |     |       |                                               |    |     |
|                                        |   |   | <b>P15</b> Pole mount, 1.50" diameter |    |       |                                                                   |     |       |                                               |    |     |
|                                        |   |   | <b>P20</b> Pole mount, 2.00" diameter |    |       |                                                                   |     |       |                                               |    |     |
| <b>Optics<sup>A</sup></b>              |   |   |                                       |    |       | <b>Enhanced surge</b>                                             |     |       |                                               |    |     |
| <b>BLANK</b> Standard                  |   |   |                                       |    |       | <b>SRG1</b> 120-277 VAC integrated ≥ 10kV surge protection module |     |       |                                               |    |     |
| <b>N</b> Full cut-off                  |   |   |                                       |    |       | <b>SRG3</b> 347-480 VAC integrated ≥ 10kV surge protection module |     |       |                                               |    |     |

## Options:

| Description                         | Suffix       | Description                     | Suffix    |
|-------------------------------------|--------------|---------------------------------|-----------|
| • Diffused glass lens .....         | <b>S891</b>  | • Gray epoxy powder coat .....  | <b>P</b>  |
| • Clear polycarbonate lens .....    | <b>S903</b>  | • White epoxy powder coat ..... | <b>WH</b> |
| • Diffused polycarbonate lens ..... | <b>S903D</b> |                                 |           |

## Accessories (ordered separately):

|                              |                                |
|------------------------------|--------------------------------|
| <b>M2-FLUSH-MT-KIT</b>       | Flush ceiling/wall mount       |
| <b>M2-CEILING-SWIVEL-KIT</b> | Ceiling/swivel mount           |
| <b>M2-CEILING-WALL-KIT</b>   | Ceiling/wall mount offset      |
| <b>SS KIT</b>                | Safety chain kit               |
| <b>M2-PM-KIT-1.25</b>        | Pole mount kit, 1.25" diameter |
| <b>M2-PM-KIT-1.5</b>         | Pole mount kit, 1.50" diameter |
| <b>M2-PM-KIT-2.0</b>         | Pole mount kit, 2.00" diameter |

**Note:** Conduit entry plugs and mounting kits are shipped with the fixture based on the mounting type selected within the catalog structure. Individual mounting kits are also available, should you wish to change the mounting style in the field.

### Replacement driver kits (ordered separately)

|                                  |                                                 |
|----------------------------------|-------------------------------------------------|
| <b>M2-MLLA2-UNV1-DRIVER-KIT</b>  | 120-277 VAC driver replacement for 2 ft. linear |
| <b>M2-MLLA2-UNV34-DRIVER-KIT</b> | 347-480 VAC driver replacement for 2 ft. linear |
| <b>M2-MLLA4-UNV1-DRIVER-KIT</b>  | 120-277 VAC driver replacement for 4 ft. linear |
| <b>M2-MLLA4-UNV34-DRIVER-KIT</b> | 347-480 VAC driver replacement for 4 ft. linear |

### Battery module replacement kit (ordered separately)

|                        |                                                                          |
|------------------------|--------------------------------------------------------------------------|
| <b>MLLA-EM1-M2-KIT</b> | Kit includes the battery, emergency driver, gasket and mounting hardware |
|------------------------|--------------------------------------------------------------------------|

### Surge module replacement kits (ordered separately)

|                         |                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------|
| <b>M2-MLLA-SRG1-KIT</b> | Kit includes the UNV1 surge module, bracket, wiring terminals and mounting hardware  |
| <b>M2-MLLA-SRG3-KIT</b> | Kit includes the UNV34 surge module, bracket, wiring terminals and mounting hardware |

<sup>A</sup> Full cutoff option available with clear window options. Diffused window options may have illumination outside of the cutoff threshold specified.

<sup>B</sup> Pendant mount is integral to fixture and available on all models regardless of mounting option chosen.

<sup>C</sup> EM1 option available only with UNV1 input power option.

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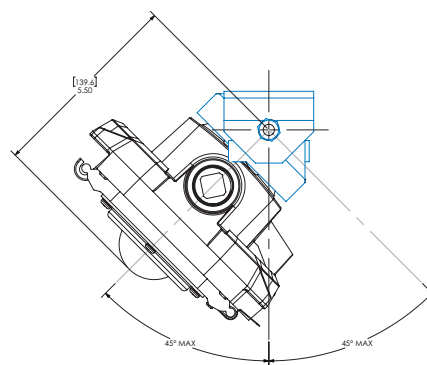
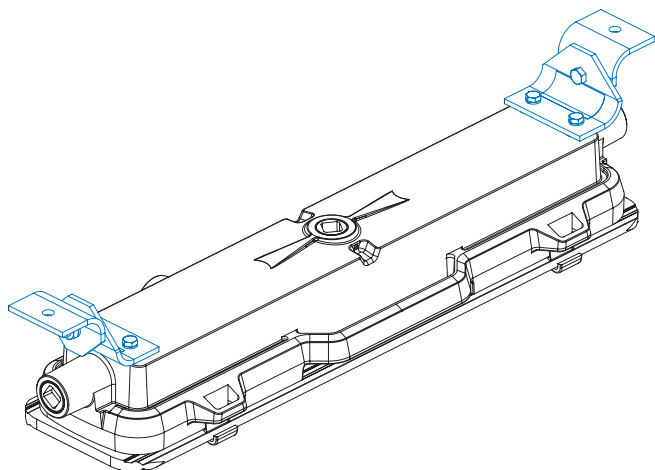
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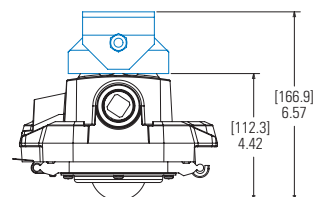
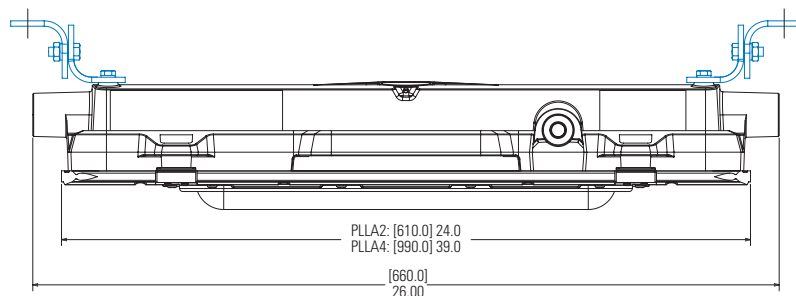
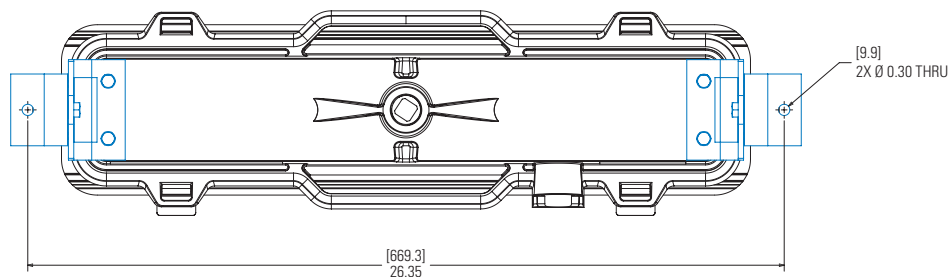
## Mounting options:

Ceiling mount swivel kit  
M2-CEILING-SWIVEL-KIT

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MAXIMUM ROTATION, CEILING SWIVEL MOUNT



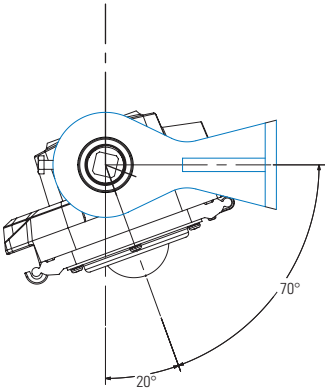
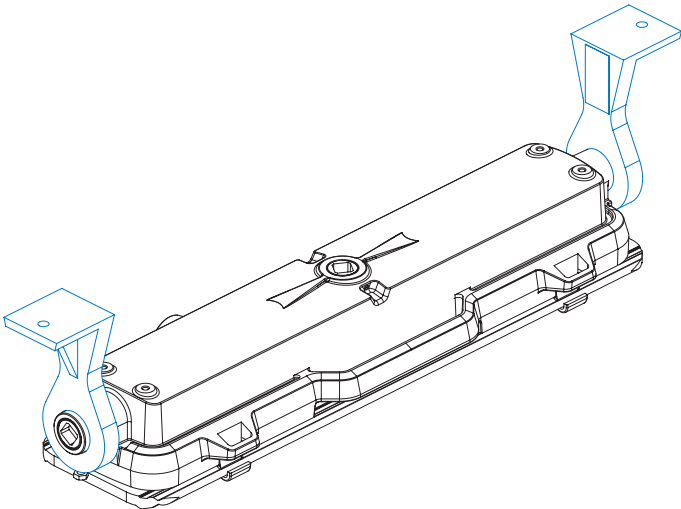
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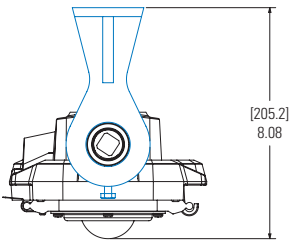
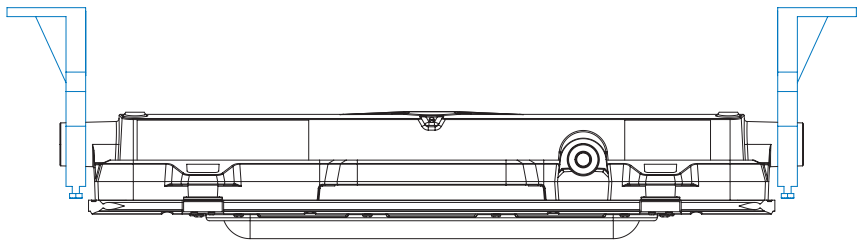
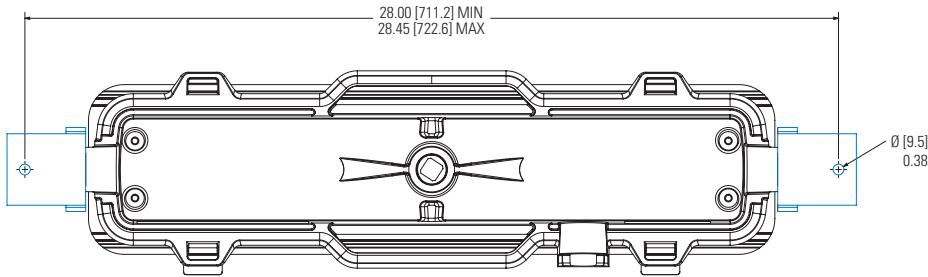
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## 2L Mounting options (continued):

Ceiling/wall mount kit  
M2-CEILING-WALL-KIT



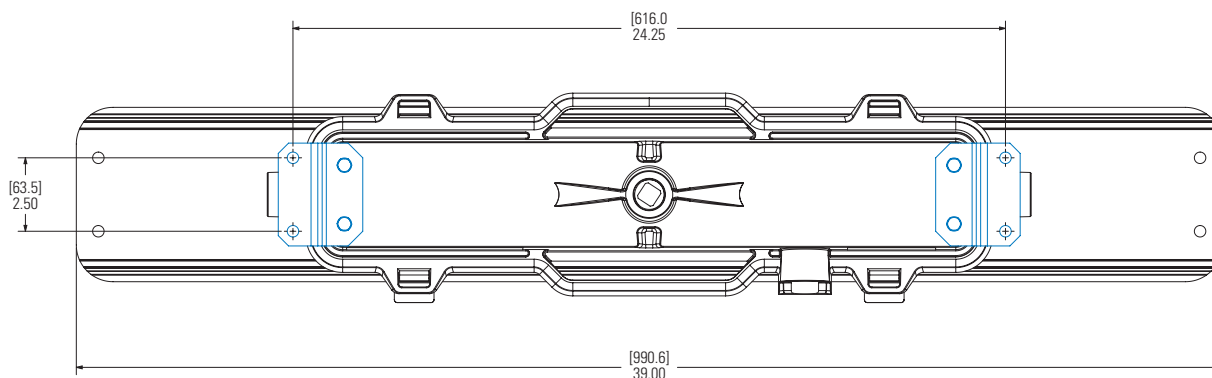
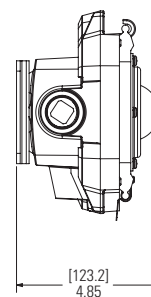
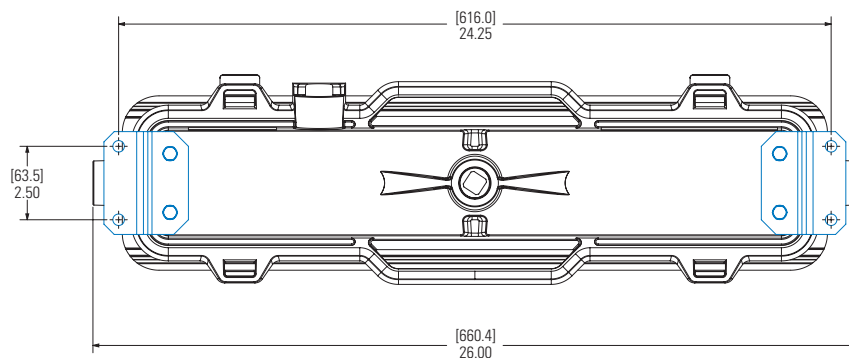
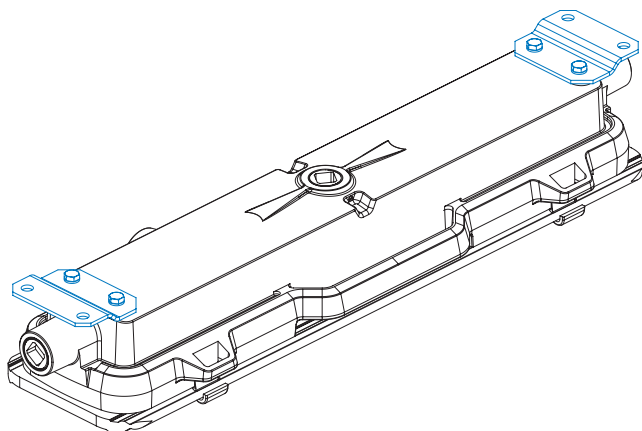
MAXIMUM ROTATION, WALL MOUNTING



## Mounting options (continued):

Flush mount kit  
M2-FLUSH-MT-KIT

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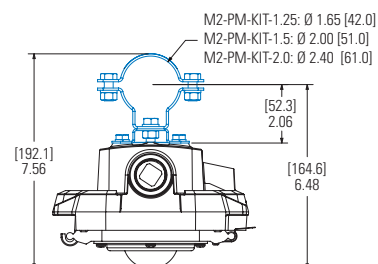
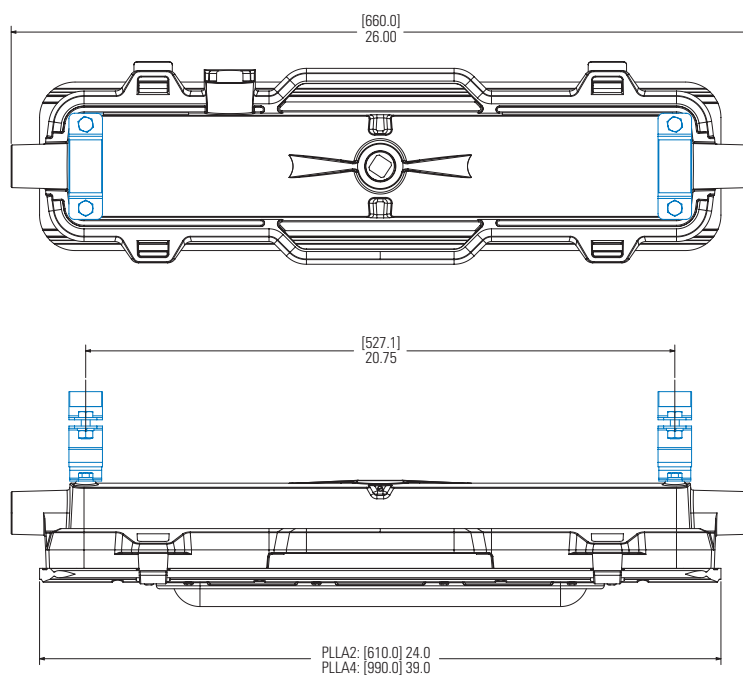
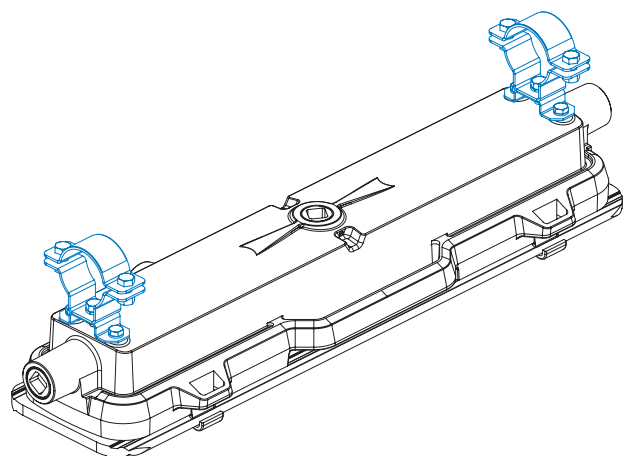
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## 2L Mounting options (continued):

**Pole mount kit**  
**M2-PM-KIT1.25/1.5/2.0**





## Mounting options (continued):

### Pendant mount

