

Distributor for:

**GRINSAFE®**



# ARROW™ GHVL

## Hazardous Location Lighting

ARROW GHVL LED linear lighting with emergency battery backup is specifically engineered for harsh and hazardous environments. Equipped with a durable, long-lasting LiFePO4 battery, it ensures a reliable 90-minute runtime for emergency applications.

### Compliance

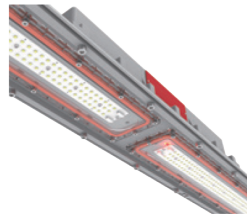
#### NEC/CEC Standard

- UL 844 Hazardous Locations
  - Class I Division 2, Groups A, B, C, D
  - Class II Division 1, Groups E, F, G
  - Class II Division 2, Groups F, G
  - Class III
  - Class I, Zone 2, Group IIC

- CSA C22.2 No.137
- CSA C22.2 No.141
- CSA C22.2 No.250.0:21
- UL 924
- UL 1598 Wet Locations
- UL 1598A Marine Outside Type (Salt Water)
- UL 8750 LED Safety
- ABS
- FCC
- IP66/67 | IK10 | 5G | NEMA 4X

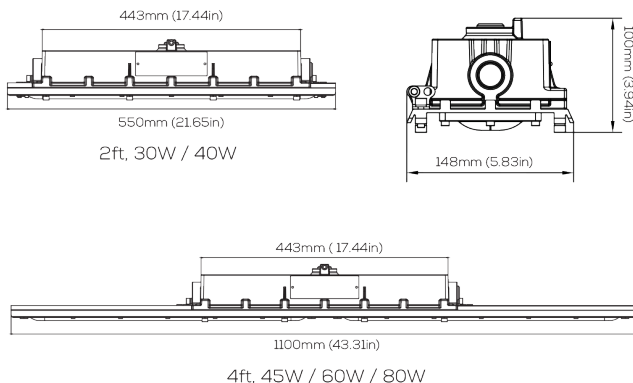
### Emergency

90-minute minimum run time in emergency mode.



### Dimensions

unit: mm(in)



### Technical Data

Electrical	
Rated Power	30W / 40W / 45W / 60W / 80W
Input Voltage	120-277V/AC
Input Frequency	50/60Hz
Power Factor	> 0.95
Driver Efficiency	≥ 90%
DC output Ripple & Noise	<200mVP-P

Emergency Back-up	
Emergency Output	15W, ≥2,400lm 9W, ≥1,400lm (cold weather)
Recharging time	24 hours
Battery Backup Runtime	≥90 mins

Optical	
Lumen Output	5100lm ~ 13,600lm
Luminous Efficacy (Lumens per Watt)	170 lm/W
Beam Angle	30° / 60° / 90° / 110° / T2 / T3 / T4
Color Temperature	Amber 2700K 3000K 4000K 5000K
CRI	Ra>70

Environmental	
Ambient Operating Temperature	0°C ~ +50°C (15W) ① -20°C ~ +50°C (9W)
Ambient Operating Humidity	10%~90% RH
Atmospheric pressure	86~106KPa

Technical	
Lens Material	Polycarbonate
Mounting Options	Pendant / Ceiling / Wall mount / Stanchion / U-Bracket
Cable Entries	3/4" NPT, 1-1/4" NPT, 1-1/2" NPT
Net Weight	2ft: 4.6kg (10.14 lbs) 4ft: 7.2kg (15.87 lbs)

① The maximum temperature ambient of GHVL-05, GHVL-10, GHVL-14 9W or 15W is 45°C

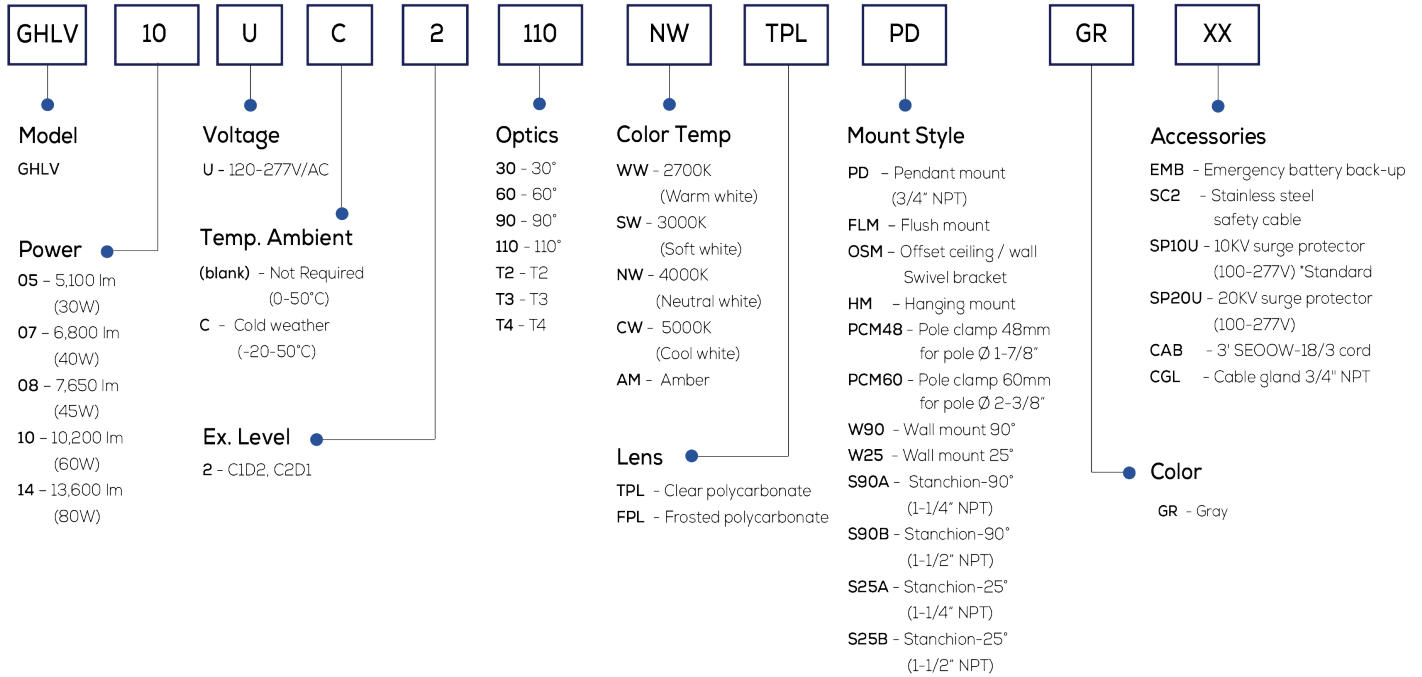
### Warranty

5-year limited system warranty  
Lumen Maintenance: L70 > 150,000 hours @ 25°C

### Downloadable IES Files



## Ordering Information and Mounting Accessories



## Mounting Options



**PD**  
Pendant mount  
3/4" NPT



**FLM**  
Flush mount



**OSM**  
Offset ceiling / wall  
Swivel Bracket



**W90**  
Wall mount 90°  
3/4" NPT



**W25**  
Wall mount 25°  
3/4" NPT



**HM**  
Hanging Mount



**PCM48**  
Pole clamp 48mm  
for pole Ø 1-7/8"



**PCM60**  
Pole clamp 60mm  
for pole Ø 2-3/8"



**S90A**  
Stanchion mount 90°  
1-1/4" NPT



**S90B**  
Stanchion mount 90°  
1-1/2" NPT



**S25A**  
Stanchion mount 25°  
1-1/4" NPT



**S25B**  
Stanchion mount 25°  
1-1/2" NPT

## Accessories



**FLM**  
Flush ceiling mount kit  
1 pair



**OSM**  
Offset ceiling /  
wall swivel bracket  
1 pair



**HM**  
Hanging chain  
Stainless steel  
1 pair



**PCM48**  
Pole clamp 48mm 1 pair  
for pole Ø 1-7/8"



**SC2**  
Stainless steel  
safety cable  
Ø6 (3mm)



**CGL**  
Cable Gland  
3/4" NPT  
Suitable for C1D2



**SP10U**  
10KV Surge Protector  
(100-277V) \*Standard



**SP20U**  
20KV Surge Protector  
(100-277V)



**CAB**  
3' SEOOW-18/3 Cord  
(Factory installed)



# Arrow™ GHLV Hazardous Location Lighting

## Important Information

This manual contains safety information, please read carefully and follow the instruction strictly.

## WARNING: INSTALLATION & SECONDARY RETENTION

Improper installation and handling, including secondary safety retention/securing/netting, may cause severe injury or death. We recommend that all installations should use secondary retention and/or safety netting (appropriate to the installation environment) where applicable. It is the exclusive responsibility of the contractor, installer and/or end customer to: (a) determine the suitability of the product for its intended application; and, (b) ensure that the product is installed safely (with secondary retention and/or safety netting where appropriate) and in compliance with all applicable laws and regulations. To the extent permissible under the relevant law, we disclaims all responsibility for personal injury and/or other damage resulting from any dislodgement or other dislocation of this product.

## WARNING

To avoid the risks of fire, explosion, or electric shock, this product should be installed, inspected, and maintained by a qualified electrician in accordance with all applicable electrical rules and regulations.

### Safety Instructions:

- Be certain, the electrical power is OFF before and during installation and maintenance.
- Make sure the supply voltage is the same as the rated luminaire voltage.
- The technical data indicated on the LED luminaires are to be observed.
- Any change on the design and modifications to the LED luminaire are not permitted.
- Observe the national/regional electrical safety rules and regulations during installation.
- LED beads are NOT replaceable. Replacement of whole set of light fixture is strongly recommended.
- All wiring connections should be capped with UL approved wire connectors.
- Luminaire MUST be well grounded.
- Any combustible materials MUST be kept away from the luminaire.
- Min 90°C supply conductors.
- Do not open the cover after installing the luminaire.

### Maintenance:

1. To avoid personal injury, before maintaining, disconnect the light first, and then wait for the luminaire temperature dropping into the safe range.
2. All parts must be checked by mechanical means to ensure they are properly assembled.
3. The external glass should be cleaned regularly to ensure continued luminaire performance. Wipe the glass with a clean, wet, non-abrasive, and lint-free cloth. If this is not sufficient, use mild soap or liquid cleaner. Do NOT use an abrasive, strong alkaline or acid detergent which might damage the luminaire.
4. Check the cooling fins of the luminaire and remove the dust or other sorts of things which accumulated on the luminaire.
5. Visual, electrical and mechanical inspections on the luminaire should be on a regular basis. We highly suggest that this routine inspection should be done at least once a year. The environment condition, where the luminaire installed, determines the frequency of inspection.
6. All electric connections MUST be checked and ensured that they are clean and firm.



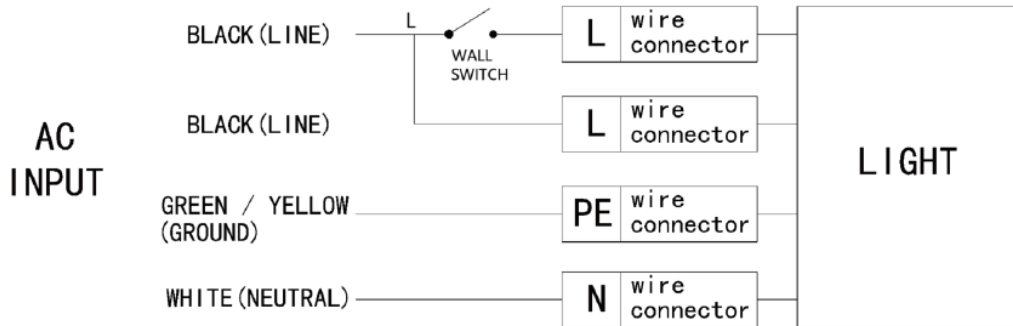
### Electrical Connections:

**WARNING:**

Cut off the electric power supply from the circuit breaker or the fuse before wiring luminaire to the circuit.

NEVER connect the dimming wires to the Live or Neutral terminals.

The connections are marked on the wire connector or on a label and are presented figure below.



### Installation & Operations:

1. Loosen the M6 Socket head cap screws on the Tank Cover.
2. Attach the Tank to the 3/4" NPT conduit.
3. Thread the wire through conduit, and connect to wire connector.
4. Re-attach the Tank cover and tight it by M6 Socket head cap screws with torque value 10 N-m.
5. Check the tightness of conduit and Tank.

### Installing the Remote Test Switch in Ordinary or Non-hazardous Location:

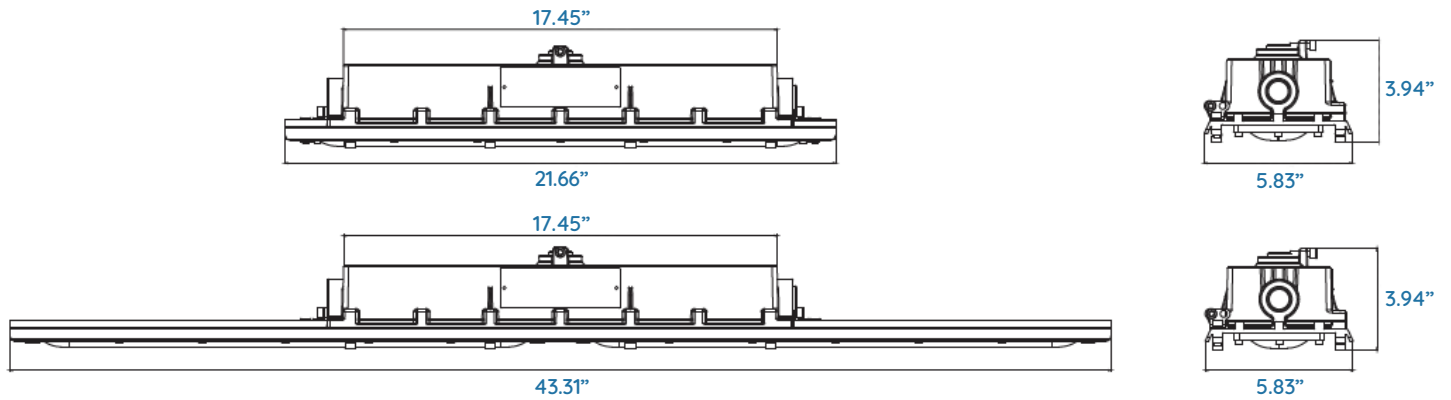
This luminaire has provision to install a remote mounted test switch for the battery.

The remote test switch shall comply with the following:

1. The remote test switch shall be certified for the area where it is to be installed (ordinary or non hazardous locations).
2. The remote test switch shall be a manually operated type.
3. The remote test switch shall be of :
  - a. Operated type and of momentary-contact type ,or
  - b. Maintained-break type that opens all ungrounded conductors and be accessible to authorized person.
4. The remote test switch shall be installed using acceptable wiring methods for the areas involved in accordance with the NEC.
5. The remote test switch shall be identified as to its function (i.e. - marked "Emergency Luminaire Test Switch").
6. When the remote test switch is installed, it has be connected such that when it is depressed it provides a transfer function, disconnects and isolates the normal input from the emergency input.

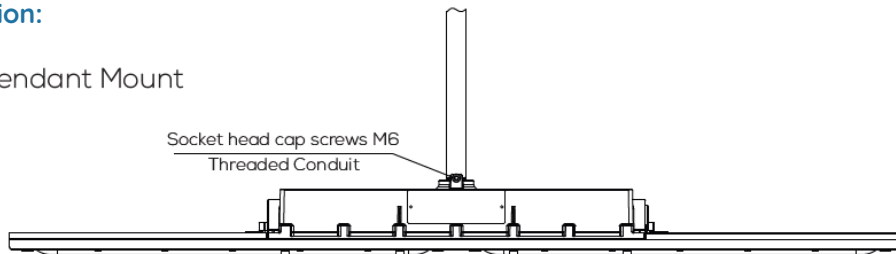


Technical Diagrams:

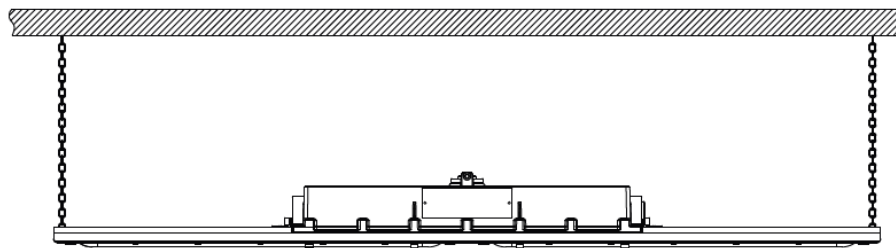


Installation:

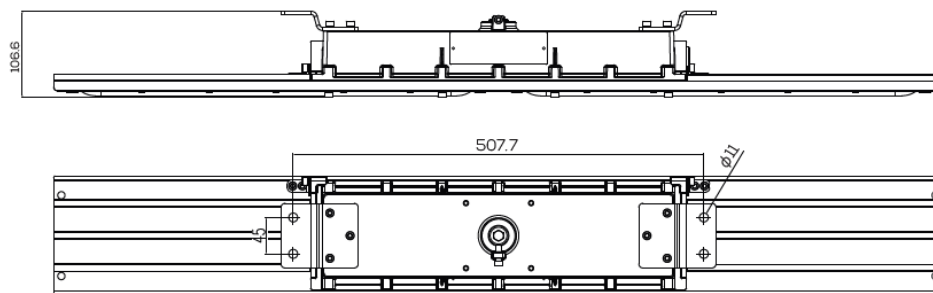
Pendant Mount



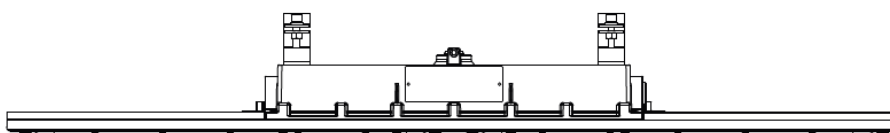
Chain Mount



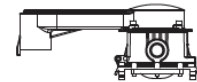
Flush mount by Ceiling-Bracket



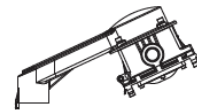
Pole Mount



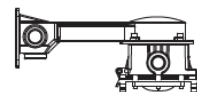
Stanchion mount 90°



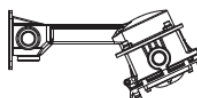
Stanchion mount 25°



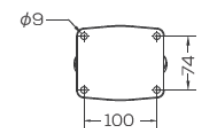
Wall mount 90°



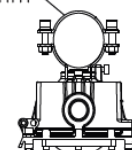
Wall mount 25°



Slip Fitter (Wall)

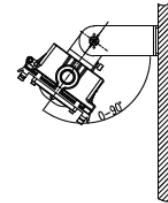
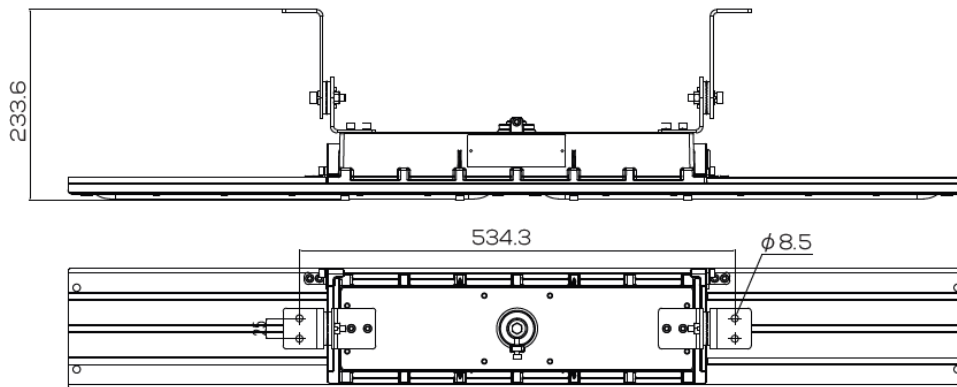


$\phi 40-51\text{mm}$   
 $\phi 40-51\text{mm}$



**Installation:**

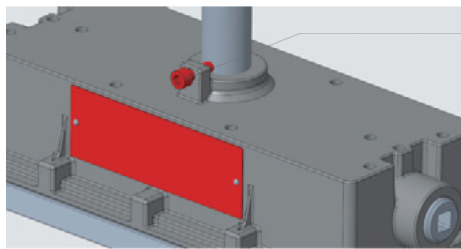
Ceiling / Wall Swivel mount



The statement for Class II only:  
"Mounting Orientation – Lens  
Facing Down 0°~90° From  
Vertical Only".

**Pendant:**

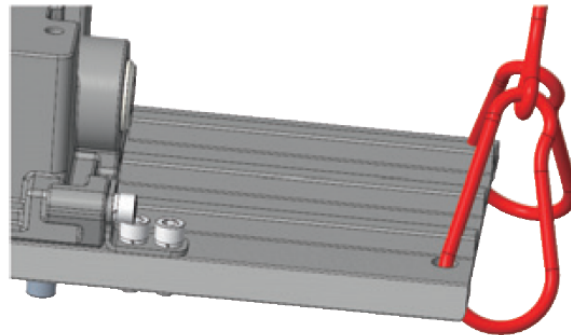
Fix the light with screws after installation and wiring. Torque: 7 N-m



M6 socket head cap screw

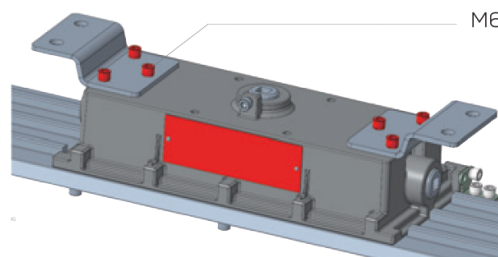
**Chain Mount:**

1. Fix the the chain to the lamp.
2. Mount the luminaire.
3. Connect wires to the wire connector.



**Flush mount by Ceiling-Bracket:**

1. Fix the bracket on the lamp with M6 screws, Torque: 7 N-m.
2. Mount the luminaire.
3. Connect wires to the wire connector

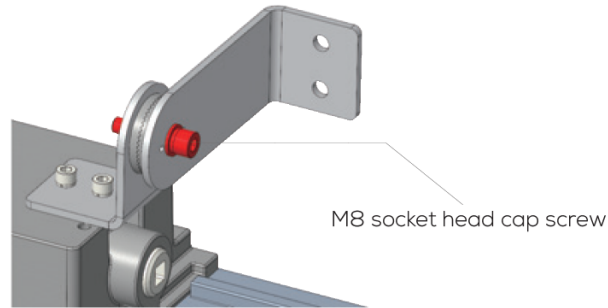


M6 socket head cap screw



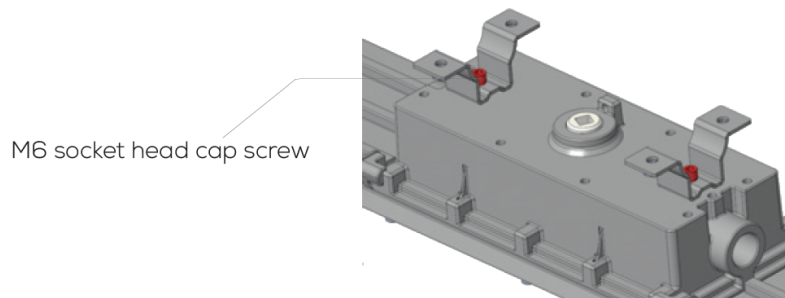
**Ceiling / Wall Swivel mount:**

Once mounted, the angle of the luminaire can be adjusted by loosening the M8 socket head cap screw on each side of the bracket. When loosening, do not back bolt out more than 5 full rotations. When the desired angle has been achieved, the bolts can be tightened to lock in the angle. Torque: 10 N-m.

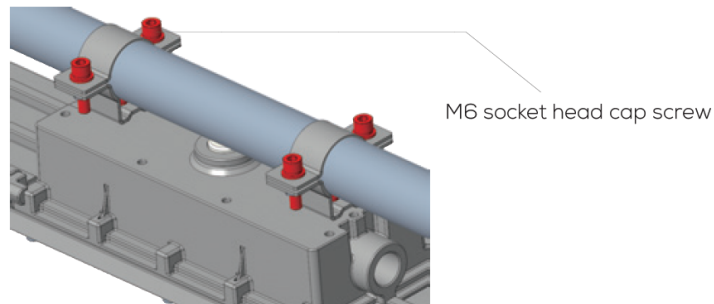


**Pole Mount:**

Install the lower collar on the lamp body and lock it with M6 hexagon socket screws. Torque: 7 N-m

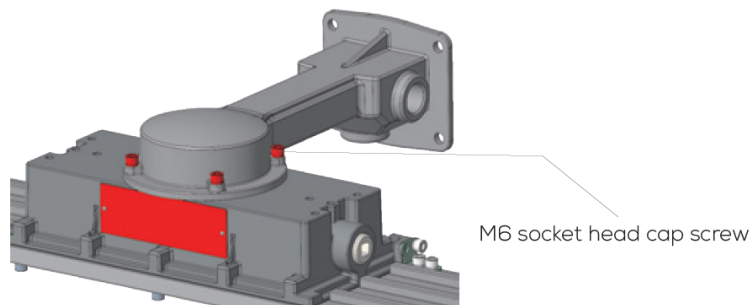


After it is installed on the pipe fitting, the upper collar is fixed and locked with M6 inner hexagon screws; Torque: 7 N-m



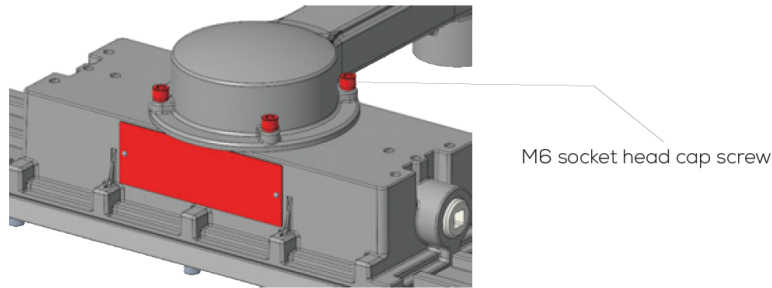
**Slip Fitter (Wall):**

1. Fix Slip Fitter to wall.
2. Mount the luminaire; Torque: 7 N-m.
3. Connect wires to the wire connector.



**Slip Fitter (Stanchion):**

- 1 Fix Slip Fitter to pole.
- 2 Mount the luminaire; Torque: 7 N-m.
- 3 Connect wires to the wire connector.



**Models:**

Models GH; followed by LV; followed by -14, -10, -08, -07, -05

Models	Power	Rated Voltage	Ambient Temp(Emergency)
GHLV-14-U	80W	U:120-277V	0°C (32 °F) ~ +45 °C(113 °F)
GHLV-10-U	60W	U:120-277V	0°C (32 °F) ~ +50 °C(122 °F)
GHLV-08-U	45W	U:120-277V	
GHLV-07-U	40W	U:120-277V	0°C (32 °F) ~ +45 °C(113 °F)
GHLV-05-U	30W	U:120-277V	

