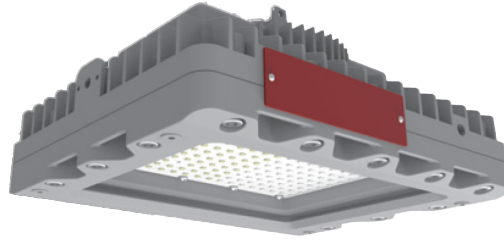


Distributor for:

GRINSAFE®



FLINT™ GHSM

LED Explosion Proof Lighting

Flint™ GHSM Series LED explosion-proof lighting is specifically engineered for installation in environments where flammable gases, vapors, or dust are present in quantities that pose a risk of explosion or fire. Built to endure shock and vibration, it delivers reliable performance even in the most hazardous conditions.

Compliance

NEC/CEC Standard

- UL 844 Hazardous Locations
 - Class I Division 1, Groups B, C, D
 - 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 1, Group IIB+H2
 - Class I, Zone 2, Group IIC

CSA C22.2 No.137

CSA C22.2 No.250.0:21

UL 1598 Wet Locations

UL 1598A Marine Outside Type (Salt Water)

UL 8750 LED Safety

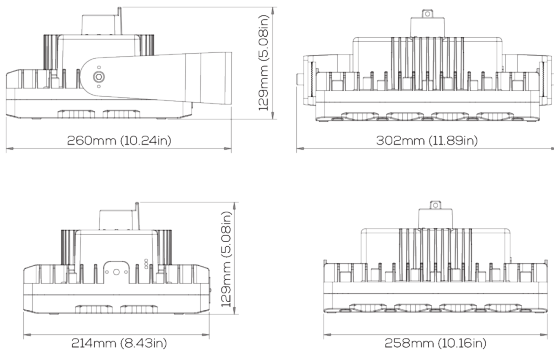
ABS

FCC

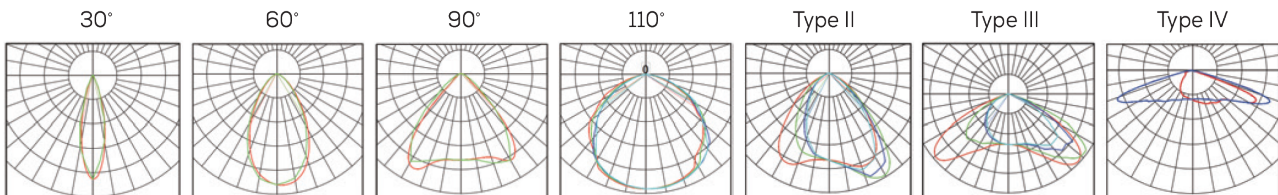
IP66/67 | IK09 | 5G | NEMA 4X

Dimensions

unit: mm(in)



Beam Distribution



Technical Data

Electrical		
Rated Power	20W / 40W / 60W	
Input Voltage	100-277, 347-480V/AC	
Input Frequency	50/60Hz	
Power Factor	> 0.95	
Driver Efficiency	≥ 90%	
DC output Ripple & Noise	< 200mVP-P	

Optical		
Lumen Output	3200lm ~ 9600lm	
Luminous Efficacy (Lumens per Watt)	160 lm/W	
Beam Angle	30° / 60° / 90° / 110° / T2 / T3 / T4	
Correlated Color Temperature (CCT)	Amber 2700K 3000K 4000K 5000K	
CRI	Ra>70	

Environmental		
Ambient Operating Temperature	-40°C~+65°C	
Ambient Operating Humidity	10%~90% RH	
Atmospheric pressure	86~106KPa	

Technical		
Lens Material	Tempered glass	
Mounting Options	Pendant / Ceiling / Wall mount / Stanchion / U-Bracket	
Cabling	1m leads standard (L/N/G, Dim+, Dim-), Special request for various length	
Cable Entries	3/4" NPT, 1-1/4" NPT, 1-1/2" NPT	
Net Weight	5.2kg (11.5 lbs)	

Warranty

5-year limited system warranty

Lumen Maintenance: L70 > 150,000 hours @ 25°C

Downloadable IES Files



Ordering Information and Mounting Accessories

<p>GHSM</p> <p>Model GHSM</p> <p>Power</p> <p>03 - 3,200 lm (20W) 06 - 6,400 lm (40W) 10 - 9,600 lm (60W)</p>	<p>03</p>	<p>U</p> <p>Voltage U -100-277V/AC N -347-480V/AC *</p> <p>Ex. Level</p> <p>1 - C1D1, C2D1 2 - C1D2, C2D1</p> <p>Optics</p> <p>30 - 30° 60 - 60° 90 - 90° 110 - 110° T2 - T2 T3 - T3 T4 - T4</p>	<p>1</p>	<p>110</p>	<p>NW</p> <p>Color Temp WW - 2700K (Warm white) SW - 3000K (Soft white) NW - 4000K (Neutral white) CW - 5000K (Cool white) AM - Amber</p> <p>Lens</p> <p>TG - Clear glass FG - Frosted glass</p>	<p>TG</p>	<p>PD1</p> <p>Mount Style PD - Pendant mount (3/4" NPT) TB2 - Trunnion bracket (3/4" NPT) W90 - Wall mount 90° W25 - Wall mount 25° S90A - Stanchion-90° (1-1/4" NPT) S90B - Stanchion-90° (1-1/2" NPT) S25A - Stanchion-25° (1-1/4" NPT) S25B - Stanchion-25° (1-1/2" NPT) CJB - Ceiling Junction Box PS - Pole Stanchion</p> <p>Color</p> <p>GR - Gray</p>	<p>GR</p>	<p>XX</p> <p>Accessories WGS2 - Wire guard SC2 - Safety cable VS2 - Dark sky visor SP10U - 10KV surge protector (100-277V) *Standard SP10N - 10KV surge protector (347-480V) *Standard SP20U - 20KV surge protector (100-277V) SP20N - 20KV surge protector (347-480V) PBC48 - Pipe Clamp (M8*48mm) for pole Ø 1-7/8" (48mm) PBC60 - Pipe Clamp (M8*60mm) for pole Ø 2-3/8" (60mm) PS - Pole Stanchion 2" (60mm)</p>
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* Only available for 60W

Mounting Options

<p>PD Pendant Mount 3/4" NPT</p>	<p>TB2 Trunnion Bracket 3/4" NPT</p>	<p>W90 Wall mount 90° 3/4" NPT</p>	<p>W25 Wall mount 25° 3/4" NPT</p>
<p>S90A Stanchion mount 90° 1-1/4"NPT</p>	<p>S25A Stanchion mount 25° 1-1/4"NPT</p>	<p>CJB Junction Box 3/4"NPT</p>	
<p>S90B Stanchion mount 90°, 1-1/2"NPT</p>	<p>S25B Stanchion mount 25° 1-1/2"NPT</p>		

Accessories

<p>TB2 Trunnion Bracket 3/4" NPT</p>	<p>WGS2 Stainless steel wire guard</p>	<p>SC2 Stainless steel safety cable Ø 6 (3mm)</p>	<p>VS2 Stainless steel dark sky visor</p>
<p>PBC48 Pipe Clamp (M8*48mm) for pole Ø 1-7/8"</p>	<p>PBC60 Pipe Clamp (M8*60mm) for pole Ø 2-3/8"</p>	<p>10KV Surge Protector *Standard SP10U 10KV (100-277V) SP10N 10KV (347-480V)</p>	<p>20KV Surge Protector SP20U 20KV (100-277V) SP20N 20KV (347-480V)</p>
<p>PS Pole Stanchion 2-3/8" (60mm)</p>			



Flint™ GHSM LED Explosion Proof Lighting

Important Information

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

WARNING: INSTALLATION & SECONDARY RETENTION

Improper installation and handle, 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:

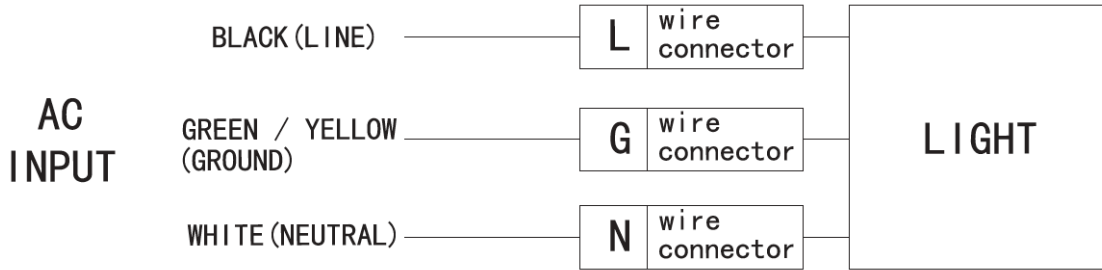
1. To avoid personal injury, before maintaining, disconnect the light first, and then wait for the luminaire temperature dropping into the safe range.
2. All parts must be checked by mechanical means to ensure they are properly assembled.
3. The external glass should be cleaned regularly to ensure continued 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:

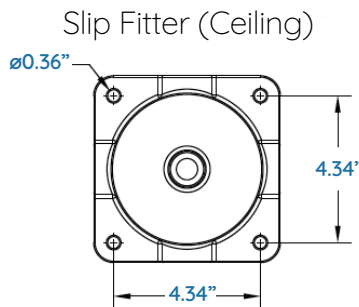
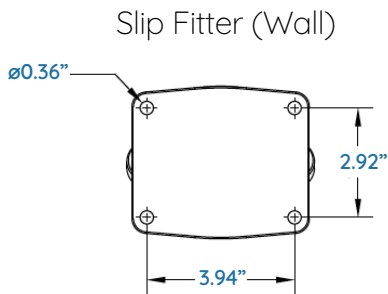
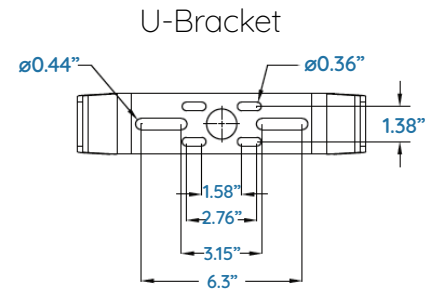
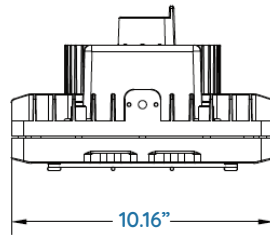
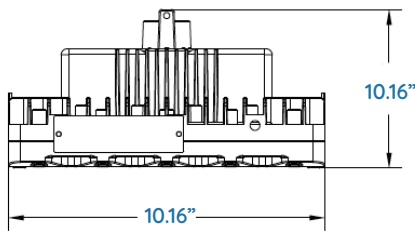
Cut off the electric power supply from the circuit breaker or the fuse before wiring luminaire to the circuit. The connections are marked on the terminal block or on a label and are presented figure below.



Installation & Operations:

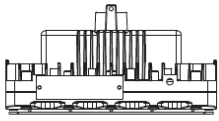
1. Connect the wires to the branch circuit.
2. Thread the wire through conduit, and connect to the terminal.
3. Check the tightness of conduit and Driver Cover.

Technical Diagrams:

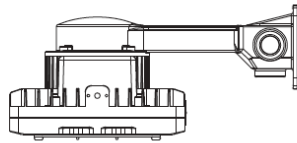


Installation:

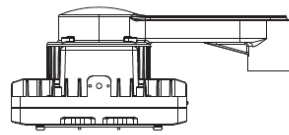
Pendant



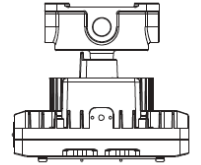
Wall 90°



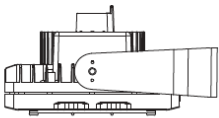
stanchion 90°



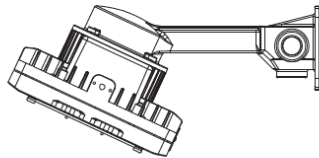
Ceiling



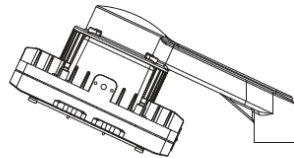
U-bracket



Wall 25°

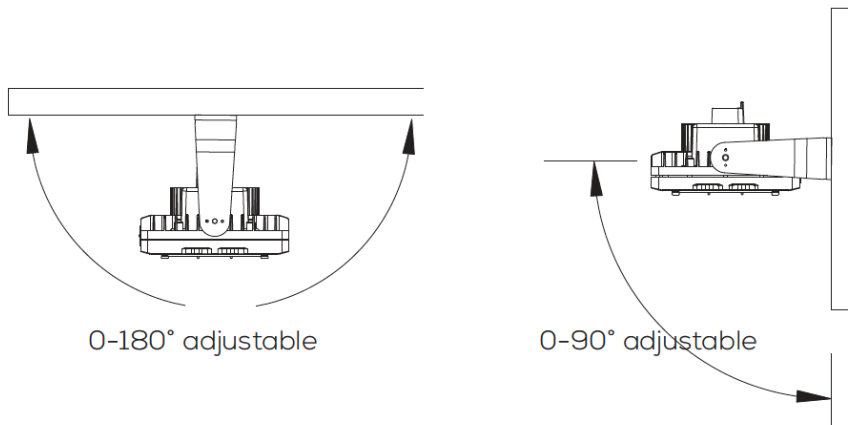


stanchion 25°



*Slip Fitter (Wall/Stanchion/Ceiling) Is not suitable for Class 1 Div1

Installation Diagram:



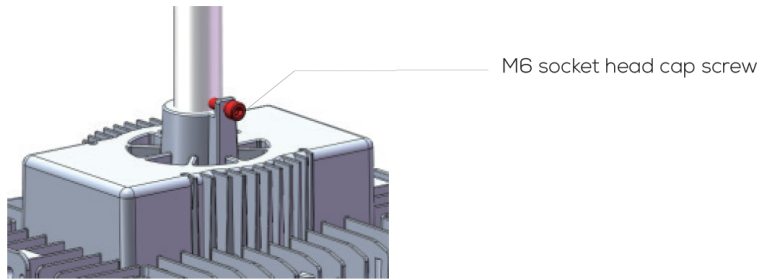
The statement for Class II only:
"Mounting Orientation – Lens Facing Down 0°~90° From Vertical Only"



Installation:

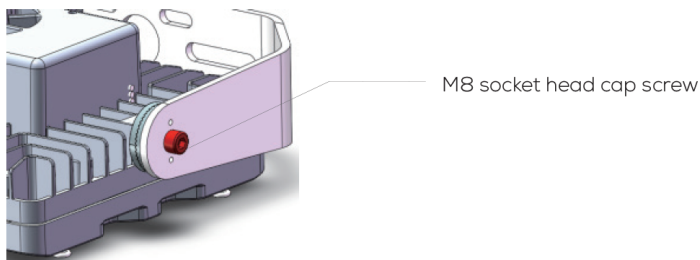
Pendant:

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



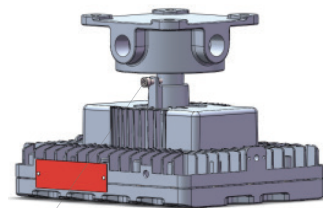
U-bracket:

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: 20 N-m.



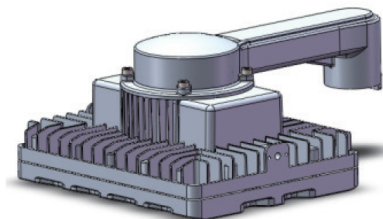
Slip Fitter (Ceiling):

1. Fix Slip Fitter (Ceiling) to Driver Cover.
2. Then tighten the screw; Torque: 7 N-m.
3. Mount the luminaire;
4. Connect wires to the terminal block;
5. Re-attach the Driver cover and tight it by M6 Socket head cap screws with torque value 7 N-m.



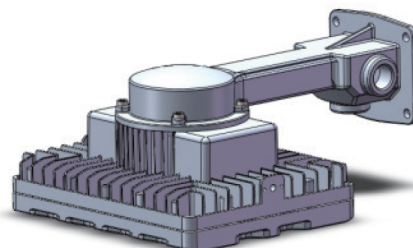
Slip Fitter (Ceiling):

1. Fix Slip Fitter to pole or wall.
2. Mount the luminaire.
3. Connect wires to the wire connector.



Slip Fitter (Wall):

1. Fix Slip Fitter to wall.
2. Mount the luminaire.
3. Connect wires to the wire connector.



Models:

Models GHSM; followed by -10,-06, or -03;followed by U or N

Models	Power	Rated voltage	Ambient Temp
			Class I,Division2
GHSM-10-U	60W	100-277V	-40°(-40°F)~+65°C(149°F)
GHSM-10-N		347-480V	
GHSM-06-U	40W	100-277V	
GHSM-03-U	20W	100-277V	

