

EX-O SERIES

EXPLOSION-PROOF LIGHT

Class I Division 2

INTRODUCTION

The FGE-EX-O Series Explosion-Proof Lighting is a compact and efficient floodlight designed for outdoor hazardous zones. With its lightweight aluminum housing, high-transmittance glass lens, and integrated driver design, it provides stable, safe, and bright illumination even in explosive environments.

Rated for Class I Division 2, the Series O achieves up to 100 lm/W, offering reliable lighting for oil depots, chemical plants, and maintenance areas.

Its IP66 waterproof structure and corrosion-resistant coating make it ideal for outdoor or coastal applications, delivering long-term, maintenance-free operation.

COMPLIANCE

UL844 Hazardous Locations
Class I Division 2, Group A, B, C, D
UL1598 Wet Locations
UL1598A Marine Outside Type
UL8750 LED Safety

IP66 IK08

LM-79 | LM-80 | TM-21 | ISTMT | IEC



FEATURES

100 lm/W

High Efficacy & Energy Saving: Up to 100 lm/W, reducing energy consumption by over 60% compared with HID fixtures.

0-10V DIMMABLE

Smart Control Ready: Supports 0-10V/DALI dimming.

EMERGENCY BACKUP

90-Minute Emergency Backup Option: Ensuring safety and visibility during critical moments.

RELIABLE WARRANTY

Reliable Warranty: 5 Years Warranty.

- **Robust Protection:**
  IP66 waterproof & dustproof, IK08 impact resistance for harsh industrial environments.
- **Superior Thermal Management:**
  Die-cast aluminum housing with optimized heat sink for reliable performance.
- **Versatile Mounting Options:**
  Ceiling, wall, and pole mounting for flexible installation.
- **Wide Input Voltage:**
  AC120–277V, suitable for global power grids.

APPLICATIONS



Paper Mills: Providing safe and stable illumination in dust-rich environments to reduce ignition risks and support continuous operation.



Loading Dock Platforms: Delivering durable explosion-proof lighting to withstand vibration and fuel vapors for safer loading and unloading operations.



Chemical Processing Facilities: Ensuring reliable lighting in areas with volatile chemicals to maintain safety and compliance under hazardous conditions.



Coal Mine: Offering explosion-proof illumination for methane- and dust-prone mining zones to protect workers during underground operations.



Power Plants: Providing robust lighting around high-risk equipment to support safe inspection and maintenance in demanding conditions.

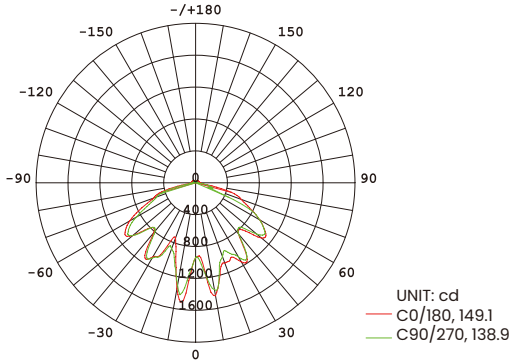


Heavy Industrial Facilities: Delivering long-lasting explosion-proof lighting for harsh industrial sites exposed to dust, oil mist, and mechanical impact.

TECHNICAL PARAMETERS

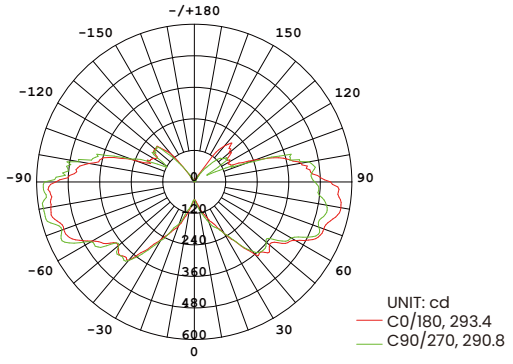
Product Model	EX-10W	EX-20W	EX-30W	EX-40W
Electrical Performance				
Wattage	10W	20W	30W	40W
Input Voltage	AC120–277V	AC120–277V	AC120–277V	AC120–277V
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor (PF)	>0.95	>0.95	>0.95	>0.95
Surge Protection	6 kV	6 kV	6 kV	6 kV
THD	20	20	20	20
Optical Performance				
Luminous Efficacy	100 lm/W	100 lm/W	100 lm/W	100 lm/W
Luminous Flux	1000lm	2000lm	3000lm	4000lm
CCT	2700K-6500K	2700K-6500K	2700K-6500K	2700K-6500K
CRI	Ra>70	Ra>70	Ra>70	Ra>70
Beam Angle	150°	150°	300°	300°
Unified Glare Rating (UGR)	-	-	-	-
Reliability				
Lifetime	>100,000 h	>100,000 h	>100,000 h	>100,000 h
Operating Temperature	-40°C to 65°C	-40°C to 65°C	-40°C to 65°C	-40°C to 65°C
Storage Temperature	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C
Ingress Protection	IP66	IP66	IP66	IP66
Impact Resistance	IK08	IK08	IK08	IK08
Control				
Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming
Sensor	No	No	No	No
Communication Protocol	-	-	-	-
Emergency Kit	Optional	Optional	Optional	Optional
Mechanical				
Housing Material	Copper-free Aluminum	Copper-free Aluminum	Copper-free Aluminum	Copper-free Aluminum
Lens Material	Tempered Glass	Tempered Glass	Tempered Glass	Tempered Glass
Coating	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040
Net Weight	2.6kg	2.8kg	2.9kg	-
Dimensions	Φ165x328mm	Φ165x328mm	Φ165x328mm	Φ165x328mm
Warranty	5 Years	5 Years	5 Years	5 Years

PHOTOMETRICS



AVERAGE BEAM ANGLE (50%) : 150 DEG

10W / 20W



AVERAGE BEAM ANGLE (50%) : 300 DEG

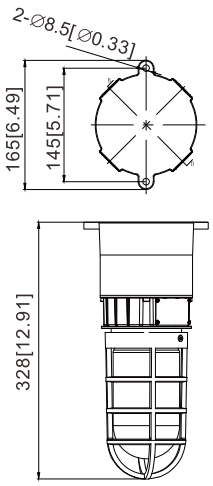
30W / 40W

MECHANICAL DIMENSIONS

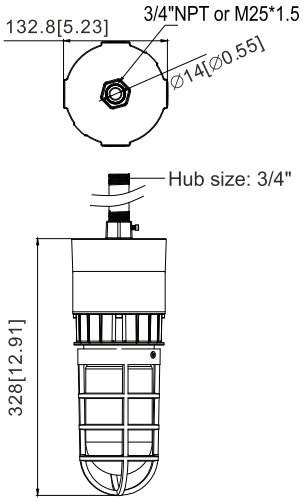
Product Model	O(with Globe Guard; Top Suction Installation)	O(with Globe Guard; 90° Wall Mounting)	O(with flat guard)
Wattage	10W/20W/30W/40W	10W/20W/30W/40W	10W/20W/30W/40W
Outer box (L*W*H)	369.8x270.0x240.0mm(14.56"x10.63"x9.45")	420.1x340.1x240.0mm(16.54"x13.39"x9.45")	264.9x380.0x255.0mm(10.43"x14.96"x10.04")
Q'ty/Ctn	1pc	1pc	1pc
N.W./Ctn	2.70kg/5.95lbs	3.70kg/8.16lbs	2.00kg/4.41lbs
G.W./Ctn	3.20kg/7.06lbs	4.20kg/9.26lbs	2.50kg/5.51lbs
Remarks	0.7M cable	0.7M cable	0.7M cable

With Emergency (unit: mm[inch])

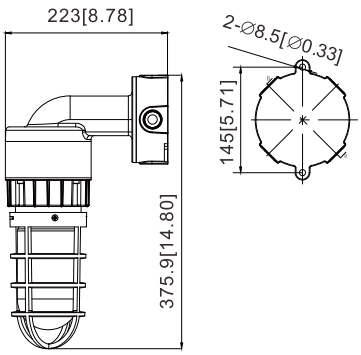
Ceiling Mount - Long



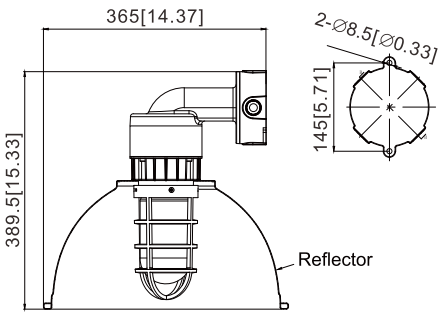
Pole Mount - Long



90° Wall Mount - Long

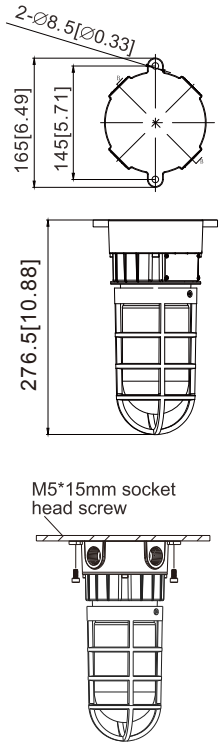


90° Wall Mount Wall Mount with Reflector - Long

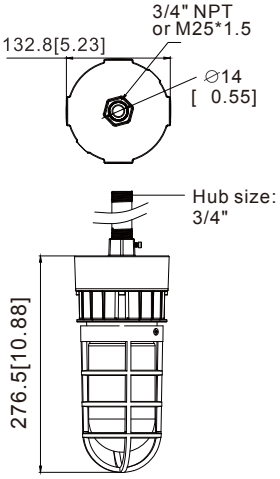


Without Emergency (unit: mm[inch])

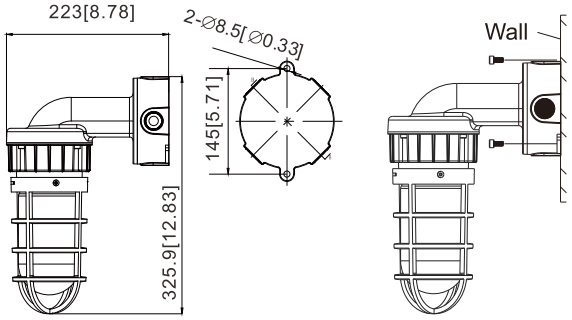
Ceiling Mount - Long



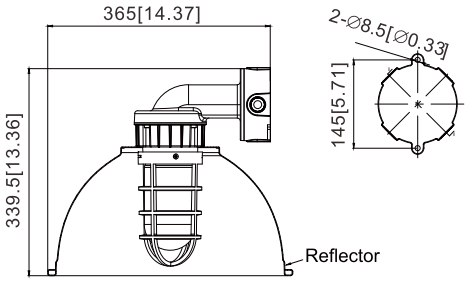
Pole Mount - Long



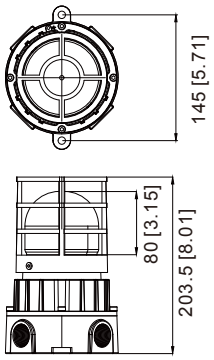
90° Wall Mount - Long



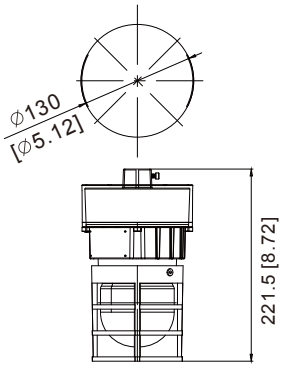
90° Wall Mount with Reflector - Long



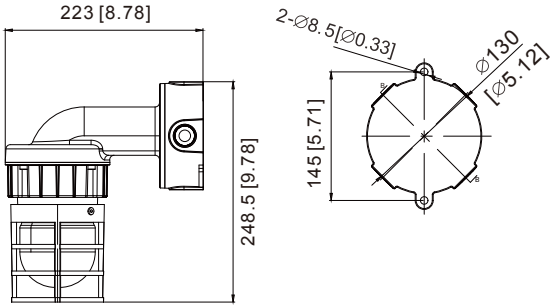
Ceiling Mount - Medium



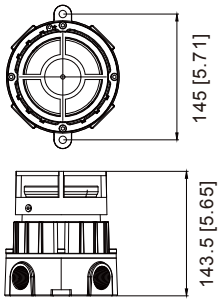
Pole Mount - Medium



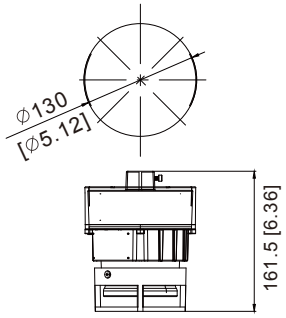
90° Wall Mount - Medium



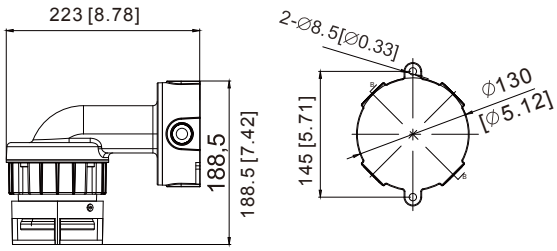
Ceiling Mount - Short



Pole Mount - Short



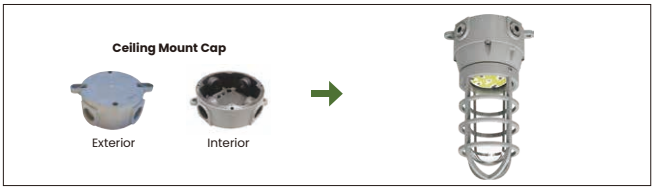
90° Wall Mount - Short



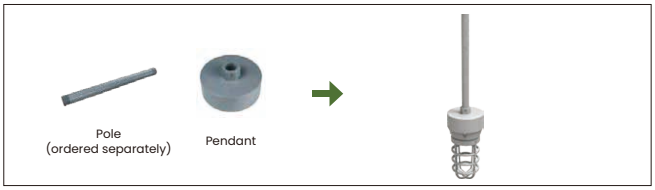
Note: Thickness of diffuser is 4.5mm [0.18inch].

MOUNTING METHODS AND ACCESSORIES

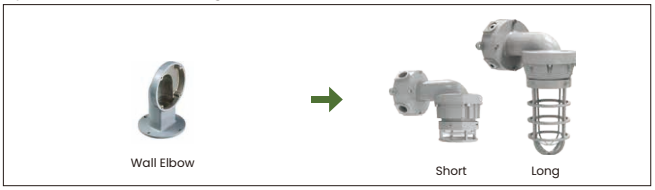
Option 1: Ceiling Mounting



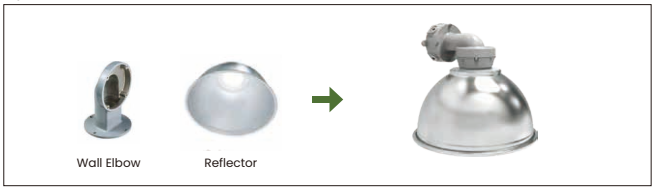
Option 2: Pole Mounting



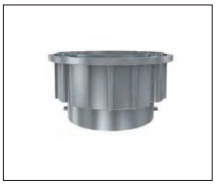
Option 3: 90° Wall Mounting



Option 4: Reflector Available



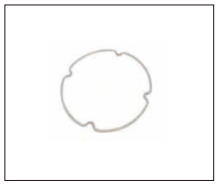
SPARE PARTS


Heat Sink


Extension


Main Part

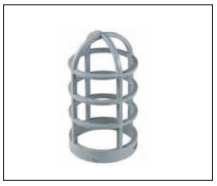

Reflector


Clear


Long Globe Glass


Midium Globe Glass


Short Glass


Long Globe Guard


Medium Flat Guard


Short Flat Guard

ORDER INFORMATION

EX - YY - YY - YY - YY

1 2 3 4 5 6 7 8 9

1 EX = Explosion Proof Light

2 Wattage

10W	10W
20W	20W
30W	30W
40W	40W

3 Shell Shape Series

O	O

4 Color Temperature

27	2700K
30	3000K
35	3500K
40	4000K
50	5000K
57	5700K
65	6500K

5 Dimmable

D	0-10V Dimming

6 Optics

150	150°
300	300°

7 Glass Type

C	Long Globe Glass
S	Short Glass
M	Middle Long Globe Glass

8 Mounting Type

M1	Ceiling mounting
M2	Pole mounting
M3	90° wall mounting

9 Options

(Blank)	0.7M cord

WARRANTY PERIOD
5 YEARS WARRANTY

WARRANTY COVERAGE
LED LIGHT SOURCE, DRIVER

24h
AFTER-SALES SERVICE COMMITMENT
24H RESPONSE

72h
AFTER-SALES SERVICE COMMITMENT
72H RESOLUTION/REPLACEMENT