



EX-A SERIES

EXPLOSION-PROOF LIGHT

Class I Division 2, Class II Division 1 & 2, Zone 1 and/or 2, Zone 21 and/or 22

INTRODUCTION

The FGE-EX-A / A2 / A3 / A4 Series Explosion-Proof Lighting is designed to deliver safe, reliable, and efficient illumination in hazardous environments where flammable gases, vapors, or dust may be present — such as chemical plants, oil refineries, gas stations, and mining facilities.

Constructed with a heavy-duty die-cast aluminum housing and tempered glass lens, the series ensures exceptional durability, corrosion resistance, and impact protection. Certified for Ex explosion-proof standards, it provides maximum safety in high-risk industrial zones.

Equipped with high-efficacy LED chips and advanced optical design, it offers up to 170 lm/W of bright, uniform light while minimizing glare and energy consumption. The IP66 protection rating and excellent thermal management guarantee stable performance under harsh conditions.



A2



A



A3



A4

COMPLIANCE

ATEX Standard:

Ex II 3G Ex ec IIC T6...T3 Gc

Ex II 2D Ex tb IIIC T85°C...T103°C Db IP66

IECEx Standard

Ex ec IIC T6...T3 Gc

Ex tb IIIC T85°C...T100°C Db

Ex tc IIIC T85°C...T100°C Dc

Zone 2, Zone 21&22

CB

UL 844 Hazardous Locations

Class I Division 2, Group A, B, C, D

Class II Division 1, Group E, F, G

Class II Division 2, Group F, G

Class III

Class I, Zone 2, Group IIC

Class II, Zone 21, Group IIIC

UL 1598 Wet Locations

UL 1598A Marine Outside Type



LM-79

LM-80

TM-21

ISTMT

IEC

FEATURES



170lm/W

High Efficacy & Energy Saving: Up to 170 lm/W, reducing energy consumption by over 60% compared with HID fixtures.



0-10V
DIMMABLE

Smart Control Ready: Compatible with 0-10V/DALI dimming, optional microwave/infrared sensor, and emergency kit.



3 POWER
SELECTABLE

Power Selectable: Multi-wattage options in a single fixture for flexible applications and reduced inventory.



EMERGENCY
BACKUP

90 Minutes EM Back-up Options:

Ensuring safety and visibility during critical moments.(Only for A3 and A4.)



RELIABLE
WARRANTY

Reliable Warranty:
5 Years Warranty.



CCT
SELECTABLE

CCT Tunable: Adjustable color temperature to suit diverse environments.

- 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, hook, trunnion, pole, and stanchion mounting for flexible installation.

- Wide Input Voltage:

AC100-277V / AC120-277V / AC200-480V / AC277-480V, 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

Technical Parameter – Class I Division 2

Product Model	EX-20W(A2YZDA)	EX-40W(A2YZDA)	EX-60W(A2YZDA)	EX-60W(AYZDA)	EX-80W(AYZDA)	EX-100W(AYZDA)
Electrical Performance						
Wattage	20W	40W	60W	60W	80W	100W
Input Voltage	AC100-277V/200-480V	AC100-277V/200-480V	AC100-277V/200-480V	AC100-277V/200-480V	AC100-277V/200-480V	AC100-277V/200-480V
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor (PF)	>0.95	>0.95	>0.95	>0.95	>0.95	>0.95
Surge Protection	10KV	10KV	10KV	10KV	10KV	10KV
THD	<20%	<20%	<20%	<20%	<20%	<20%
Optical Performance						
Luminous Efficacy	140lm/W	140lm/W	140lm/W	140lm/W	140lm/W	140lm/W
Luminous Flux	2800lm	5600lm	8400lm	8400lm	11200lm	14000lm
CCT	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K
CRI	Ra>70	Ra>70	Ra>70	Ra>70	Ra>70	Ra>70
Beam Angle	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°
Unified Glare Rating (UGR)	20	20	20	20	20	20
Reliability						
Lifetime	>100,000h	>100,000h	>100,000h	>100,000h	>100,000h	>100,000h
Operating Temperature	-40 ~ +40°C	-40 ~ +40°C	-40 ~ +40°C	-40 ~ +40°C	-40 ~ +40°C	-40 ~ +40°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C
Ingress Protection	IP66	IP66	IP66	IP66	IP66	IP66
Impact Resistance	IK08	IK08	IK08	IK08	IK08	IK08
Control						
Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming
Sensor	No	No	No	No	No	No
Communication Protocol	-	-	-	-	-	-
Emergency Kit	No	No	No	No	No	No
Mechanical						
Housing Material	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum
Lens Material	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC
Coating	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040
Net Weight	4.15kg	4.15kg	4.15kg	6.95kg	6.95kg	6.95kg
Dimensions	250x160x244mm	250x160x244mm	250x160x244mm	320x240x263mm	320x240x263mm	320x240x263mm
Warranty	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years

Product Model	EX-120W(A3YZDA)	EX-150W(A3YZDA)	EX-180W(A3YZDA)	EX-200W(A3YZDA)	EX-250W(A4YZDA)	EX-300W(A4YZDA)	EX-400W(A4YZDA)
Electrical Performance							
Wattage	120W	150W	180W	200W	250W	300W	400W
Input Voltage	AC100-277V/277-480V	AC100-277V/277-480V	AC100-277V/277-480V	AC100-277V/277-480V	AC100-277V/277-480V	AC100-277V/277-480V	AC100-277V/277-480V
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor (PF)	>0.95	>0.95	>0.95	>0.95	>0.95	>0.95	>0.95
Surge Protection	10KV	10KV	10KV	10KV	10KV	10KV	10KV
THD	<20%	<20%	<20%	<20%	<20%	<20%	<20%
Optical Performance							
Luminous Efficacy	140lm/W	140lm/W	140lm/W	140lm/W	140lm/W	140lm/W	140lm/W
Luminous Flux	16800lm	21000lm	25200lm	28000lm	35000lm	42000lm	56000lm
CCT	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K
CRI	Ra>70	Ra>70	Ra>70	Ra>70	Ra>70	Ra>70	Ra>70
Beam Angle	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°
Unified Glare Rating (UGR)	20	20	20	20	20	20	20
Reliability							
Lifetime	>100,000h	>100,000h	>100,000h	>100,000h	>100,000h	>100,000h	>100,000h
Operating Temperature	-40 ~ +50°C	-40 ~ +50°C	-40 ~ +50°C	-40 ~ +50°C	-40 ~ +50°C	-40 ~ +50°C	-40 ~ +40°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C
Ingress Protection	IP66	IP66	IP66	IP66	IP66	IP66	IP66
Impact Resistance	IK08	IK08	IK08	IK08	IK08	IK08	IK08
Control							
Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming
Sensor	No	No	No	No	No	No	No
Communication Protocol	-	-	-	-	-	-	-
Emergency Kit	Optional	No	No	No	No	No	No
Mechanical							
Housing Material	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum
Lens Material	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC
Coating	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040
Net Weight	8.3kg	8.3kg	8.3kg	8.3kg	15.1kg	15.1kg	15.1kg
Dimensions	250x160x244mm	250x160x244mm	250x160x244mm	320x240x263mm	320x240x263mm	320x240x263mm	320x240x263mm
Warranty							
Warranty	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years

Technical Parameter - for Zone 2/21/22

Product Model	EX-20W(A2N**D**)	EX-40W(A2N**D**)	EX-60W(A2N**D**)	EX-60W(AN**D**)	EX-80W(AN**D**)	EX-100W(AN**D**)
Electrical Performance						
Wattage	20W	40W	60W	60W	80W	100W
Input Voltage	AC100-277V	AC100-277V	AC100-277V	AC100-277V	AC100-277V	AC100-277V
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor (PF)	>0.95	>0.95	>0.95	>0.95	>0.95	>0.95
Surge Protection	10KV	10KV	10KV	10KV	10KV	10KV
THD	<20%	<20%	<20%	<20%	<20%	<20%
Optical Performance						
Luminous Efficacy	140lm/W	140lm/W	140lm/W	140lm/W	140lm/W	140lm/W
Luminous Flux	2800lm	5600lm	8400lm	8400lm	11200lm	14000lm
CCT	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K
CRI	Ra>70	Ra>70	Ra>70	Ra>70	Ra>70	Ra>70
Beam Angle	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°
Unified Glare Rating (UGR)	20	20	20	20	20	20

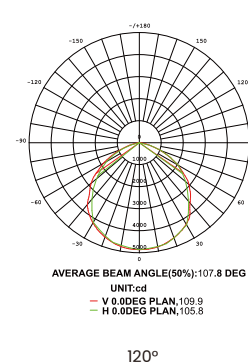
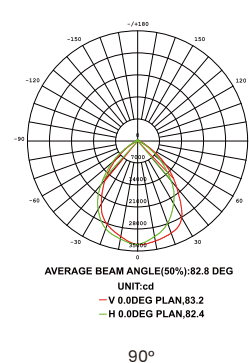
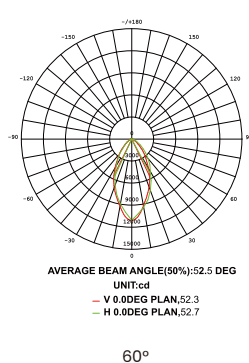
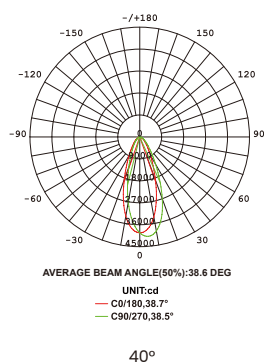
Reliability						
Lifetime	>100,000h	>100,000h	>100,000h	>100,000h	>100,000h	>100,000h
Operating Temperature	-40 ~ +55°C	-40 ~ +55°C	-40 ~ +55°C	-40 ~ +55°C	-40 ~ +55°C	-40 ~ +55°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C
Ingress Protection	IP66	IP66	IP66	IP66	IP66	IP66
Impact Resistance	IK08	IK08	IK08	IK08	IK08	IK08
Control						
Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming
Sensor	No	No	No	No	No	No
Communication Protocol	-	-	-	-	-	-
Emergency Kit	No	No	No	No	No	No
Mechanical						
Housing Material	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum
Lens Material	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC
Coating	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040
Net Weight	4.15kg	4.15kg	4.15kg	6.95kg	6.95kg	6.95kg
Dimensions	250x160x244mm	250x160x244mm	250x160x244mm	320x240x263mm	320x240x263mm	320x240x263mm
Warranty	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years

Product Model	EX-120W(A3N**D**)	EX-150W(A3N**D**)	EX-180W(A3N**D**)	EX-200W(A3N**D**)	EX-250W(A4N**D**)	EX-300W(A4N**D**)
Electrical Performance						
Wattage	120W	150W	180W	200W	250W	300W
Input Voltage	AC100~277V	AC100~277V	AC100~277V	AC100~277V	AC100~277V	AC100~277V
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor (PF)	>0.95	>0.95	>0.95	>0.95	>0.95	>0.95
Surge Protection	10KV	10KV	10KV	10KV	10KV	10KV
THD	<20%	<20%	<20%	<20%	<20%	<20%
Optical Performance						
Luminous Efficacy	140lm/W	140lm/W	140lm/W	140lm/W	140lm/W	140lm/W
Luminous Flux	16800lm	21000lm	25200lm	28000lm	35000lm	42000lm
CCT	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K
CRI	Ra>70	Ra>70	Ra>70	Ra>70	Ra>70	Ra>70
Beam Angle	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°
Unified Glare Rating (UGR)	20	20	20	20	20	20
Reliability						
Lifetime	>100,000h	>100,000h	>100,000h	>100,000h	>100,000h	>100,000h
Operating Temperature	-40 ~ +55°C	-40 ~ +55°C	-40 ~ +55°C	-40 ~ +55°C	-40 ~ +55°C	-40 ~ +55°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C
Ingress Protection	IP66	IP66	IP66	IP66	IP66	IP66
Impact Resistance	IK08	IK08	IK08	IK08	IK08	IK08
Control						
Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming
Sensor	No	No	No	No	No	No
Communication Protocol	-	-	-	-	-	-
Emergency Kit	Optional	Optional	Optional	Optional	No	No
Mechanical						
Housing Material	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum
Lens Material	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC
Coating	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040
Net Weight	4.15kg	4.15kg	4.15kg	6.95kg	6.95kg	6.95kg
Dimensions	250x160x244mm	250x160x244mm	250x160x244mm	320x240x263mm	320x240x263mm	320x240x263mm
Warranty	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years

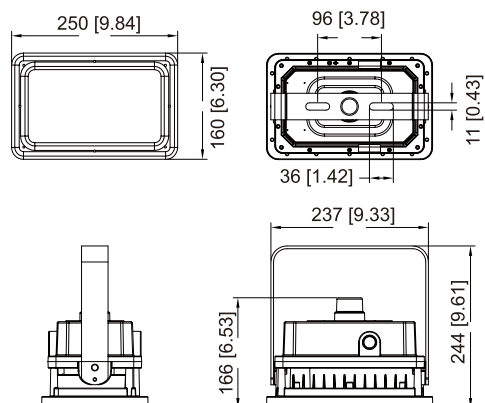
Technical Parameter – Class I Division 2 (Power and CCT Selectable)

Product Model	EX-80W/60W/40W	EX-150W/100W/80W	EX-200W/150W/120W	EX-300W/250W/200W
Electrical Performance				
Wattage	80W/60W/40W	150W/100W/80W	200W/150W/120W	300W/250W/200W
Input Voltage	AC100-277V/200-480V	AC100-277V/200-480V	AC100-277V/200-480V	AC100-277V/200-480V
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor (PF)	>0.95	>0.95	>0.95	>0.95
Surge Protection	10KV	10KV	10KV	10KV
THD	<20%	<20%	<20%	<20%
Optical Performance				
Luminous Efficacy	170lm/W	170lm/W	170lm/W	170lm/W
Luminous Flux	13600lm/10200lm/6800lm	25500lm/17000lm/13600lm	34000lm/25500lm/20400lm	51000lm/42500lm/34000lm
CCT	4000K/5000K/6500K	4000K/5000K/6500K	4000K/5000K/6500K	4000K/5000K/6500K
CRI	Ra>70	Ra>70	Ra>70	Ra>70
Beam Angle	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°	40°/60°/90°/120°
Unified Glare Rating (UGR)	20	20	20	20
Reliability				
Lifetime	>100,000h	>100,000h	>100,000h	>100,000h
Operating Temperature	-40 ~ +40°C	-40 ~ +40°C	-40 ~ +40°C	-40 ~ +40°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +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	No	No	No	No
Mechanical				
Housing Material	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum
Lens Material	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC	Tempered Glass & PC
Coating	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040
Net Weight	6.95kg	8.3kg	8.3kg	15.1kg
Dimensions	320x240x263mm	250x160x244mm	320x240x263mm	320x240x263mm
Warranty	5 Years	5 Years	5 Years	5 Years

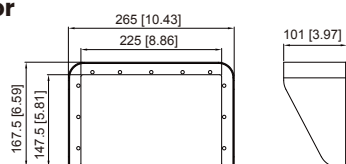
PHOTOMETRICS



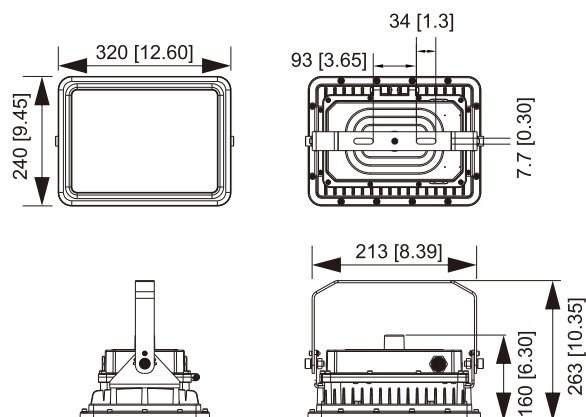
MECHANICAL DIMENSIONS



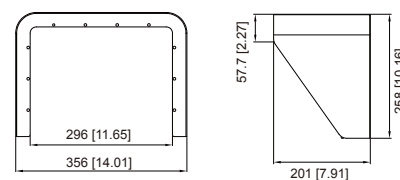
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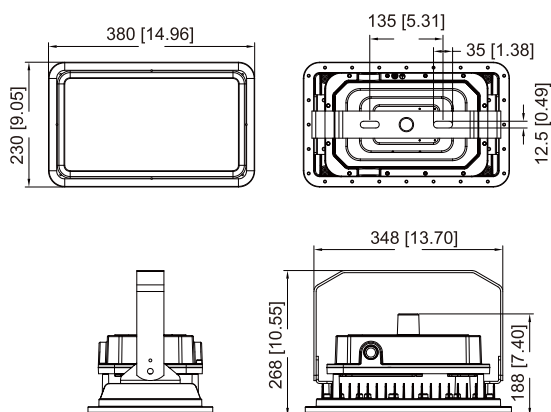
A2



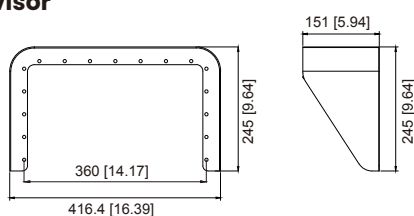
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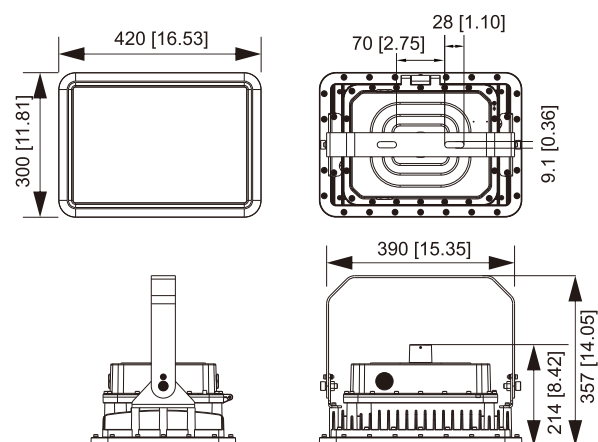
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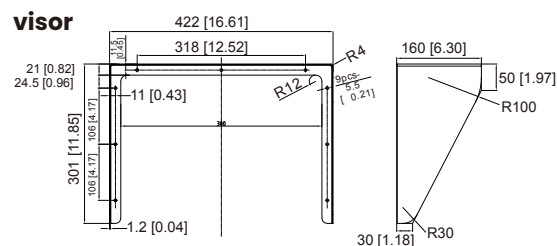
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A3



visor

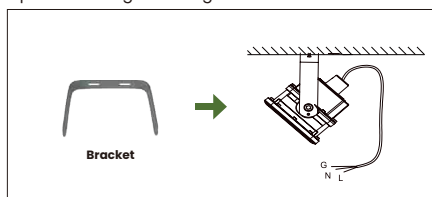


A4

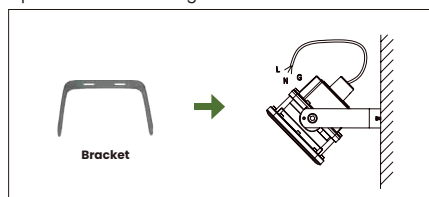
Product Model	A2	A	A3	A4
Wattage	20~60W	80~100W	150~200W	250~400W
Outer box (L*W*H)	365x270x305mm(14.37"x10.63"x12.01")	450x340x370mm(17.72"x13.39"x14.57")	470x370x300mm(18.50"x14.57"x11.81")	520x490x380mm(20.47"x19.29"x14.96")
Qty/Ctn	1pc	1pc	1pc	1pc
N.W./Ctn	4.15kg/9.15lbs	6.95kg/15.32lbs	8.30kg/18.30lbs	15.1kg/33.29lbs
G.W./Ctn	5.30kg/11.68lbs	9.50kg/20.94lbs	11.35kg/25.02lbs	18.55kg/40.90lbs
Remarks	0.7M cable	0.7M cable	0.7M cable	0.7M cable

MOUNTING METHODS AND ACCESSORIES

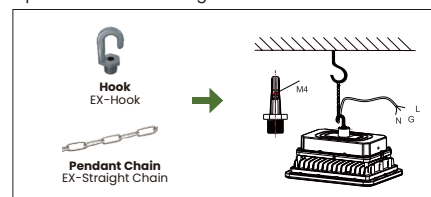
Option 1: Ceiling Mounting



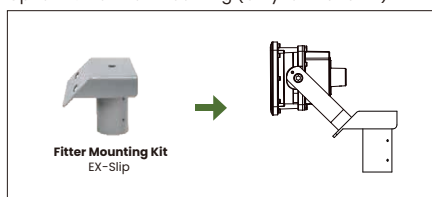
Option 2: Wall Mounting



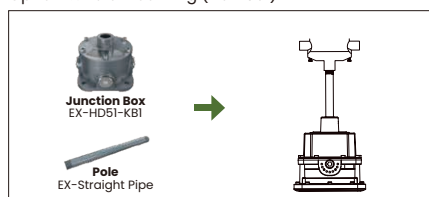
Option 3: Hook Mounting



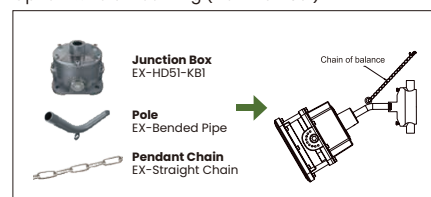
Option 4: Trunnion Mounting (Only for A and A2)



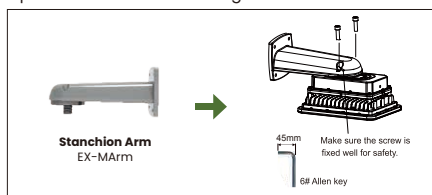
Option 5: Pole Mounting (Vertical)



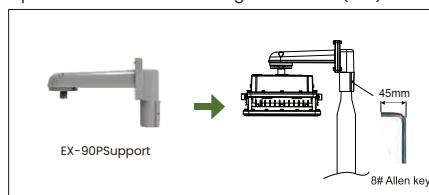
Option 6: Pole Mounting (Non-vertical)



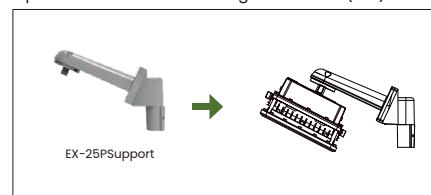
Option 7: Stanchion Mounting on the Wall



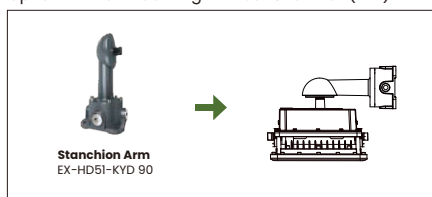
Option 8: Stanchion Mounting on the Pole (90°)



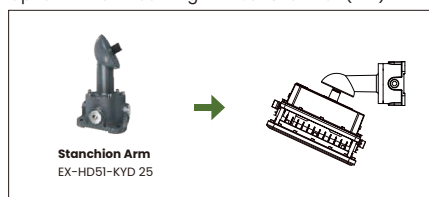
Option 9: Stanchion Mounting on the Pole (25°)



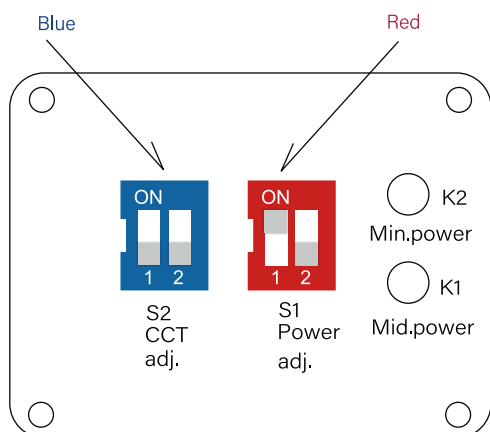
Option 10: Wall Mounting with Junction Box (90°)



Option 11: Wall Mounting with Junction Box (25°)



POWER & CCT SELECTABLE



Power Selectable	CCT Selectable
80W/60W/40W	4000K/5000K/6500K
150W/100W/80W	4000K/5000K/6500K
200W/150W/120W	4000K/5000K/6500K
300W/250W/200W	4000K/5000K/6500K

Operating Instructions

• S1 DIP switch - Red (S1 Power adj.)

The luminaire incorporates a dual-dial power configuration switch enabling three selectable output ratings. Factory default settings and power levels can be customized based on project requirements.

1. Maximum Output (100% nominal power)
Switch configuration: Dial 1 = OFF, Dial 2 = OFF;



2. Medium Output (70%-90% of nominal power, depending on specification) Switch configuration: Dial 1 = ON, Dial 2 = OFF



3. Minimum Output (50%-70% of nominal power, depending on specification) Switch configuration: Dial 1 = OFF, Dial 2 = ON



• S2 DIP switch - Blue (S2 CCT adj.)

The luminaire incorporates a dual-dial power configuration switch enabling three preset color temperature options. The factory default setting can be customized according to order requirements.

1. Cool white, e.g. 6500K
Switch configuration: Dial 1 = OFF, Dial 2 = OFF



2. Neutral white, e.g. 5000K
Switch configuration: Dial 1 = ON, Dial 2 = OFF



3. Warm white, e.g. 4000K
Switch configuration: Dial 1 = ON, Dial 2 = ON



ORDER INFORMATION

EX-YY-YY-YY-Y

1 2 3 4 5 6 7 8

1 EX = Explosion Proof Light

2 Wattage

20W	20W
40W	40W
60W	60W
80W	80W
100W	100W
120W	120W
150W	150W
180W	180W
200W	200W
250W	250W
300W	300W
400W	400W

3 Shell Shape Series

A	A
A2	A2
A3	A3
A4	A4

4 Color Temperature

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

5 Dimmable

D	0-10V Dimming
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6 Optics

40	40°
60	60°
90	90°
120	120°

7 Long Glass Cover Option

(Blank)	No Long Glass Cover
C	Long Glass Cover

8 Options

(Blank)	0.7M Cable
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WARRANTY PERIOD
**5 YEARS
WARRANTY**



WARRANTY COVERAGE
**LED LIGHT SOURCE,
DRIVER**



AFTER-SALES
SERVICE COMMITMENT
24H RESPONSE



AFTER-SALES
SERVICE COMMITMENT
72H RESOLUTION/REPLACEMENT