

Explosion-Proof Light B Series (Zone 2 & Class I Division 2)



B2



B



B3



B4



Hazardous Location LED Luminaire

B Series (Zone 2 & Class I Division 2)

Explosion-Proof Light B Series (Zone 2 & Class I Division 2)



B2



B



B3



B4



Globe Glass with Wire Guard
(Optional)



Product Description

The B Series LED luminaire is the ideal choice for marine and hazardous applications. They can be used in locations where moisture, dirt, dust, corrosion and vibration may be present, or areas where wind, water, snow or high ambient can be expected.

Features

- 0-10V dimming
- High luminous efficacy - Up to 140 lumens per watt
- Battery backup function available
- Compact and robust structure, excellent reliability
- Various installation ways for different applications
- Great impact resistance with IK08/IK10 certified



Durable Lighting Made For Industrial Safety

Explosion-Proof Light B Series (Zone 2 & Class I Division 2)

Compliance

ATEX Standard:

⊕ II 3G Ex ec IIC T6...T3 Gc

⊕ II 2D Ex tb IIIC T85°C...T103°C Db

IECEX Standard:

Certificate No.: IECEX PCET 22.0008X

Ex ec IIC T6...T3 Gc

Ex tb IIIC T85°C...T100°C Db

Ex tc IIIC T85°C...T100°C Dc

Zone 2, 21, 22

CB (Ref. Certif. No.: DE 2-038462-M1)

NSF

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

UL 924 Emergency Lighting

UL(ATM for Report E509202)

ABS

NSF

DLC*

IP66

IK08 (glass cover)

IK10 (with wire guard)

1000 hours salt spray

** Not all product variations listed on this spec sheet are DLC qualified.
Visit www.designlights.org/search to confirm qualification.*

Application

- Power Plants
- Heavy Industrials Storage Facility
- Paper mills
- Wastewater Treatment Plants
- Loading Docks Platforms
- Offshore Environments
- Chemical Processing Facility
- Petrochemical Processing Facility
- Metallurgical Industry
- Food and Alcohol industry

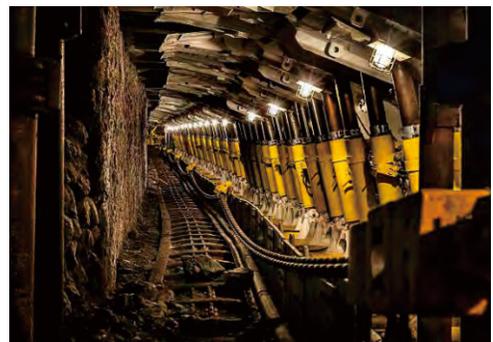
Warranty

5-Year Standard Warranty

LED lumen Maintenance: L70> 150,000 Operation Hours@55°C

Specifications are typical values and may change without notification

efficiency. illuminated.





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Technical Parameter (For Class I Division 2)

● Electrical

JLS No	B enclosure	B3 enclosure	B2 enclosure	B4 enclosure
Rate Power	60/80/100W	100/120/150/200W	20/40/60W	250/300/350/400W
Input Voltage- Normal	100-277/200-480VAC		120-277/120-347/277-480VAC	
Input Voltage- Emergency	120-277VAC		/	120-277VAC
Input Frequency	50/60Hz		50/60Hz	
Power Factor	> 0.95		> 0.9	
Emergency	No Emergency Function		No Emergency Function	Optional (Only for 150W/180W/200W)

● Optical

JLS No	B enclosure	B3 enclosure	B2 enclosure	B4 enclosure
Lumen Output	7800-13000lm	13000-26000lm	2600-7800lm	32500-52000lm
Lumens Per Watt	130lm/W (for regular + clear glass) / 110lm/W (for frosted glass)			
CCT	3000K/4000K/5000K/5700K/6500K		2700K/4000K/5000K/5700K/6500K	
CRI	> 70			
Beam Angle	40°/60°/90°/120°			
Dimming	0-10V dimming optional			

● Environmental

JLS No	B enclosure	B3 enclosure	B2 enclosure	B4 enclosure
Ambient Temperature	-40°C to +40°C; -40°C to +50°C; -40°C to +65°C		-40°C to +40°C; -40°C to +55°C; -40°C to +65°C	-40°C to +40°C; -40°C to +50°C; -40°C to +60°C

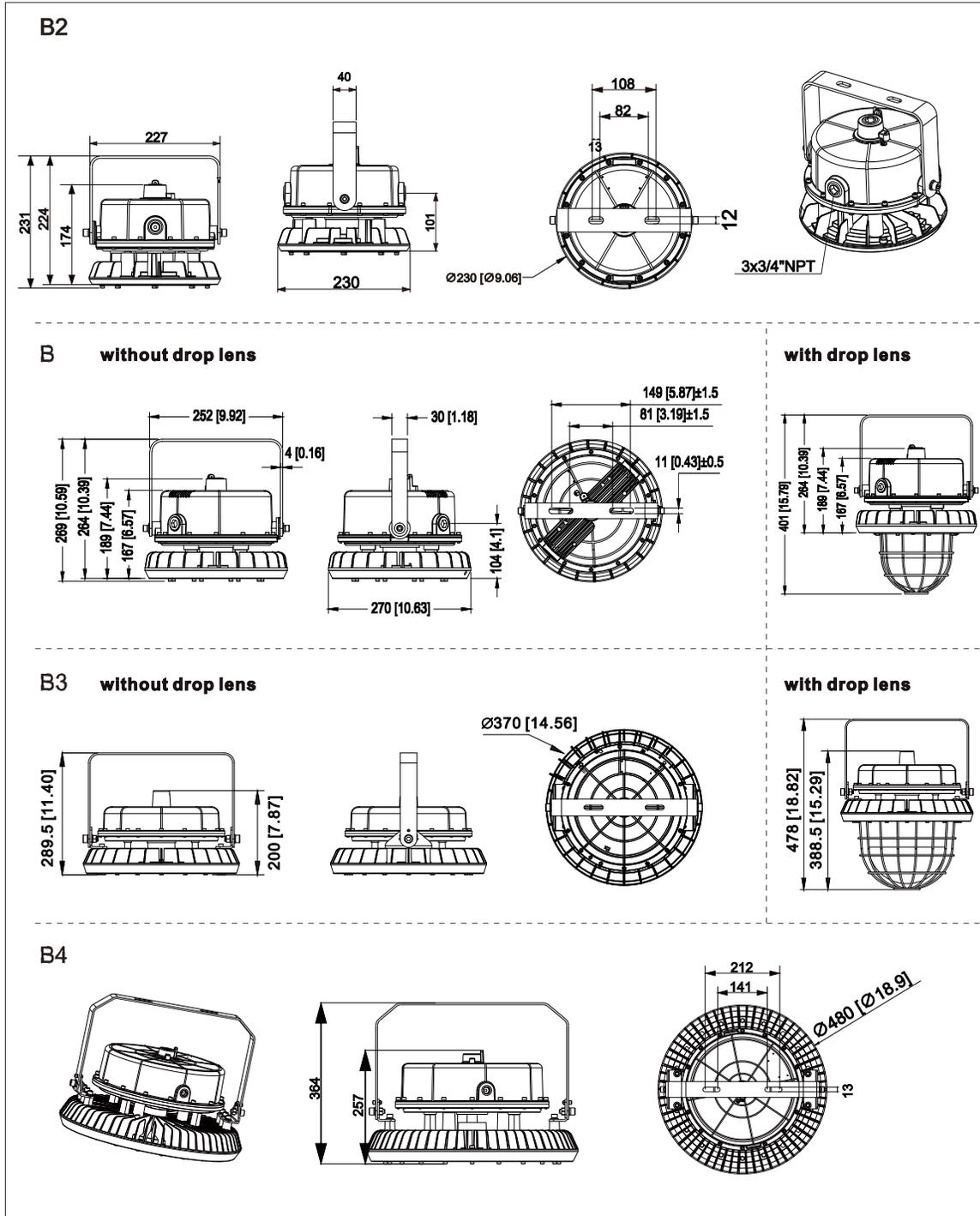
● Mechanical

JLS No	B enclosure	B3 enclosure	B2 enclosure	B4 enclosure
Housing Material	Copper-free aluminum			
Diffuser (Optional)	Flat glass/Flat polycarbonate/Convex glass/Convex polycarbonate		Flat PC/Flat Glass/Convex PC/Convex Glass/Spherical Glass	Flat PC/Flat Glass/Convex PC/Convex Glass
Hardware	Stainless steel			
Protection	IP66/IK08 (without wire guard)/IK10 (with wire guard)		IP66/IK08	
Surge Protection	5Kv (standard)/10Kv (optional)			
Mounting	Ceiling, Wall, Stanchion 25°, Pendant, Surface		Surface, Pendant	Ceiling, Wall, Pendant, Stanchion 25°, Surface
Cable Entries	3/4" NPT (standard); 1/2" NPT, M20 or M25 (optional) *		Side: 3/4" NPT; Top: 3/4" NPT	

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Explosion-Proof Light B Series (Zone 2 & Class I Division 2)

Product Dimension





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Ordering Guide

MODEL	VOLTAGE	WATTAGE	ENCLOSER HEATSINK
JLS-G2EP-HB	277 = 120-277V 480 = 277-480V	B: 60/80/100W* B3: 100/120/150/200W B2: 20/40/60W** B4: 250/300/350/400W	B = B type enclosure B3 = B3 type enclosure B2 = B2 type enclosure B4 = B4 type enclosure

DIMMING	CCT	BEAM ANGLE	DIFFUSER	DRIVER BOX
N = Non-dimmable D = Dimmable	727 = 2700K 730 = 3000K 740 = 4000K 750 = 5000K 757 = 5700K	D40 = 40 degree D60 = 60 degree D90 = 90 degree D120 = 120 degree	CFG = Clear Flat Glass CCG = Clear Convex Glass CFP = Clear Flat PC FFG = Frosted Flat Glass FCG = Frosted Convex Glass	E = E type driver box F = F type driver box

EM OPTION	ENCLOSER COVER	LED TYPE
Blank = No EM EM = with EM	A = Alternative Encloser Cover 1 (Normal Cover)	1 = 2835 LED Chips 2 = 5050 LED Chips

* 480V option only 60W/80W available

** 480V option only 40W available

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Ordering Guide (Zone 2& Class I Division 2)

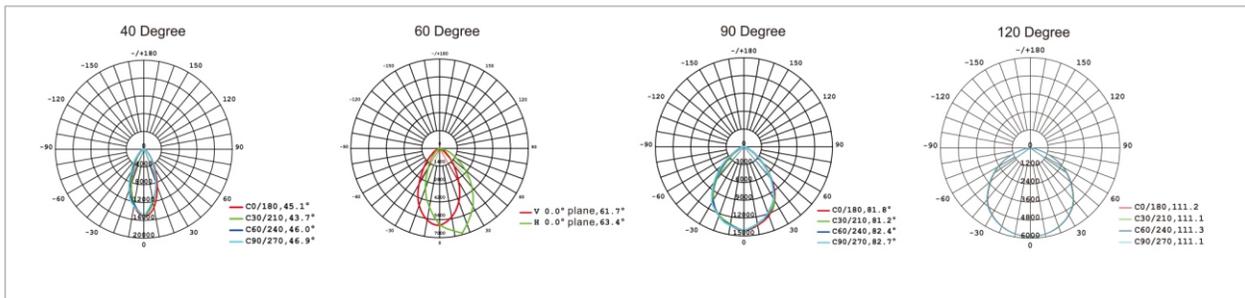


driver box E



driver box F

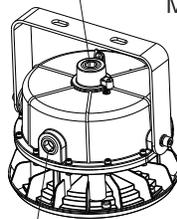
Photometric



Cable Entries

Compatible with NPT1 thread with an adapter

Top: 3/4 NPT (standard),
M25



Wire outlet

Side: 3/4 NPT (standard),

M20, M25, 1/2NPT(available from stock or in bulk. Small orders can add adapters.)

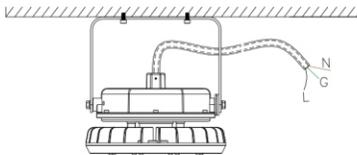
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Mounting Methods

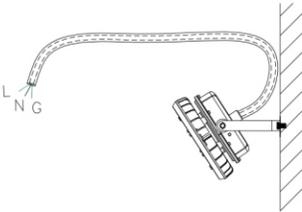
- Option 1: Ceiling Mounting



- Accessory



- Option 2: Wall Mounting

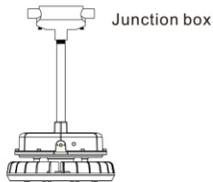


- Accessory

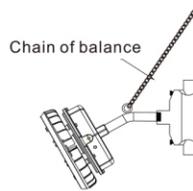


- Option 3: Pole Pendant Mounting

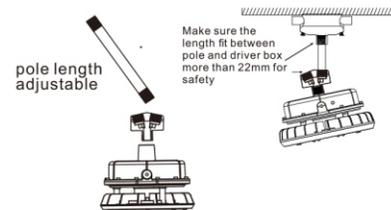
Vertical



Non-vertical



Adjustable Pole Installation



Junction Box
EX-HD51-KB1



Junction Box
EX-HD51-KB1



Junction Box
EX-HD51-KB1



Pole
Ex-Straight Pipe



Pole
Ex-Bended Pipe



Pole
Ex-Straight Pipe



Pendant Chain
Ex-Straight Chain



Pendant Direction Adapter
Ex-D01

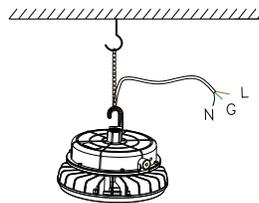
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Mounting Methods

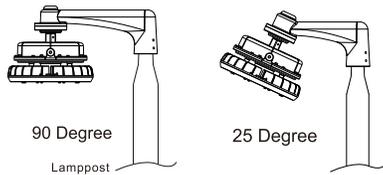
- Option 4: Hook Pendant Mounting



- Accessories



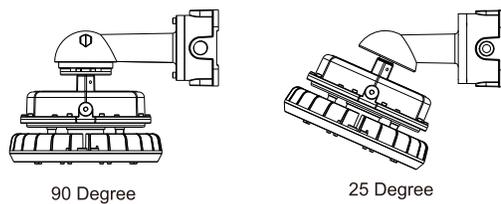
- Option 5: Stanchion Mounting



- Accessories



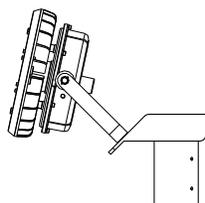
- Option 6: Wall Mounting to Junction Box



- Accessories



- Option 7: Trunnion Mounting (Only for B and B2)



- Accessory

