

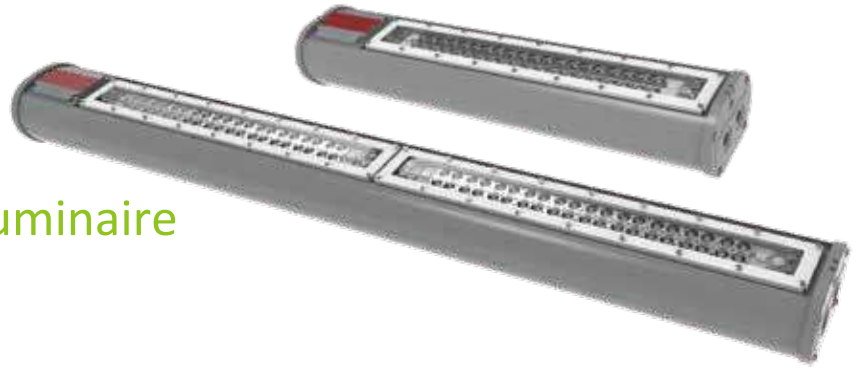
# Lighting for Industrial Safety



INDUSTRALIGHT EXD44000 SERIES  
Hazardous Location LED Luminaire

INDUSTRALIGHT

# INDUSTRALIGHT EXD44000 SERIES Hazardous Location LED Luminaire



## Product description

Industrialight EXD44000 Series LED linear is designed for installations in hazardous area with presence of flammable gases or combustible dusts as defined by ATEX / IECEx for Zone 1/21 applications. New generation is great for replacing of existing fluorescent lighting system and provide an incredible 209,000 (L70) maintenance free hours at 25°C.

## Features

- Low profile design allows installation in work areas with low ceiling heights
- Lens and LED driver field replaceable by qualified personnel on-site
- UV stable and impact resistant clear or diffused PC lens (Standard) to minimize glare
- One wiring access cover with captive screws as standard, two(optional) for end to end feed through wiring
- WAGO screwless terminal block with 5-pole 6mm<sup>2</sup> max conductor for easy wiring
- Single Lens model 20W to 40W; Double Lens model 40W to 100W\*
- High luminous efficacy - Up to 120 lm / W.
- Universal Voltage: AC120-277V (50/60Hz)
- Superior CRI80 compared to HPS, LPS, MH
- Ambient range from - 40°C to + 55 °C ( -20°C to 50°C for Emergency Model )
- Standard 12W 90mins operation time for emergency mode (6W 180mins optional)
- Resistant to shock and vibration

## Compliance

### IEC/ATEX Standard:

IECEX: Ex db eb mb IIC T6 Gb  
Ex tb IIIC T80°C Db

ATEX: II 2 G Ex db eb mb op is IIC T6 Gb  
II 2 D Ex op is tb IIIC T80°C Db

Zone 1, 21

CE EMC / LVD / EMF

EN 62471

IP66 / IK10 / 5G

1000hrs salt spray

\*For 80W / 100W models, Cert pending  
till further notice

## Application

Power Plants / Heavy Industrials

Storage Facility / Paper mills

Wastewater Treatment Plants

Loading Docks / Platforms / Shipyards

Chemical Processing Facility

Petrochemical Processing Facility

## Warranty

Extended Warranty (Battery not included)\* \* In  
conjunction with warranty policy

LED lumen Maintenance:

L70 > 150,000 hours @ 55°C ambient

### Technical Parameter

#### Electrical

Specification	EXD44020	EXD44030	EXD44040
Rated Power	20W	30W	40W
Input Voltage	AC120-277V		
Input Frequency	50/60Hz		
Input Current (AC120V)	182mA	242mA	330mA
Input Current (AC230V)	99mA	128mA	172mA
Power Factor	≥0.95		
Driver Efficiency	≥90%		
THD	<20%		
Surge Protection	6KV Line-to ground		
Battery material	Nickel-cadmium		
Expected Battery*	3 Year		
Battery Duration*	Standard 12W 90mins @ -20~+50°C (6W 180mins Optional)		

\*All values typical (tolerance +/-10%)

#### Optical

Specification			
Lumen Output	2400Lm	3600Lm	4400Lm
Lumens Per Watt	120Lm/W		
Beam Angle	110°		
Correlated Color Temperature (CCT)	2700K/4000K/5000K/5700K		
Color Rendering Index (CRI)	Ra>80		

#### Environmental

Specification			
Ambient Operating Temperature	- 40°C to + 55 °C -20°C to 50°C (Emergency Model)		
Optimal Operating Temperature	25°C (77°F)		
Gas Environment	T6		
Dust Environment	T80°C		

#### Mechanical

Specification			
Housing Material	Marine grade aluminum		
Endcap / Front cover	Copper-free (< 0.4%) die-cast aluminum		
Hardware	Stainless steel 316		
Lens Material	Polycarbonate		
Color	Dark Grey (RAL7037)		
Finish	Polyster powder coating for uniform corrosion resistance		
Protection	IP66 / IK10		
Cable entries	4 x M25 - 2 at each end (Standard,others optional)		
Termination	L1 , L2 , L3 , N , PE; each Terminal 2x6mm <sup>2</sup> max		
Wiring	One access cover standard, two for through wiring		
Mounting	Ceiling (Flush mount ) , Wall, Suspended (Chain /Eyebolt ) , Pole		

### Technical Parameter

#### Electrical

Specification	EXD44050	EXD44060	EXD44080	EXD44100
Rated Power	50W	60W	80W	100W
Input Voltage	AC120-277V			
Input Frequency	50/60Hz			
Input Current (AC120V)	402mA	497mA	651mA	825mA
Input Current (AC230V)	212mA	264mA	340mA	435mA
Power Factor	≥0.95			
Driver Efficiency	≥90%			
THD	<20%			
Surge Protection	6KV Line-to ground			
Battery material	Nickel-cadmium			
Expected battery*	3 Year			
Battery Duration*	Standard 12W 90mins @ -20~+50°C (6W 180mins Optional)			

\*All values typical (tolerance +/-10%)

#### Optical

Specification				
Lumen Output	5500Lm	6800Lm	8700Lm	10000Lm
Lumens Per Watt	120Lm/W			
Beam Angle	110°			
Correlated Color Temperature (CCT)	2700K/4000K/5000K/5700K			
Color Rendering Index (CRI)	Ra>80			

#### Environmental

Specification				
Ambient Operating Temperature	- 40°C to + 55 °C -20°C to 50°C (Emergency Model)			
Optimal Operating Temperature	25°C (77°F)			
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Finish	Polyester powder coating for uniform corrosion resistance			
Protection	IP66 / IK10			
Cable entries	4 x M25 - 2 at each end (Standard,others optional)			
Termination	L1 , L2 , L3 , N , PE; each Terminal 2x6 mm² max			
Wiring	One access cover standard, two for through wiring			
Mounting	Ceiling (Flush mount ) , Wall, Suspended (Chain /Eyebolt ) , Pole			

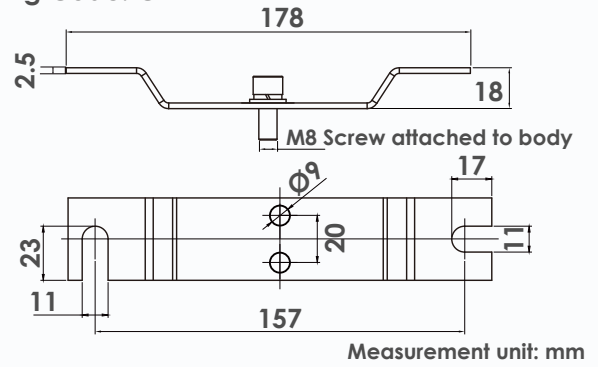


## Mounting Options

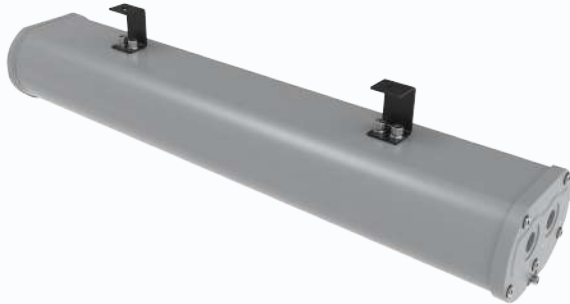
### Low Ceiling Mount Bracket



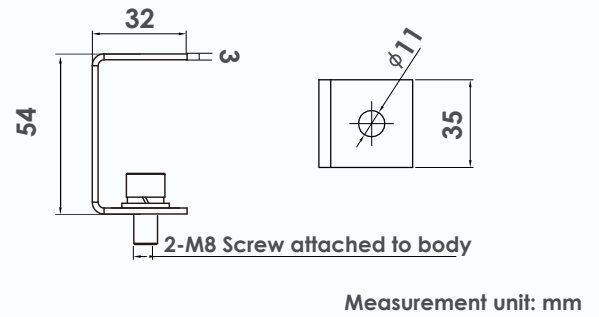
Ordering Code: CB-L1



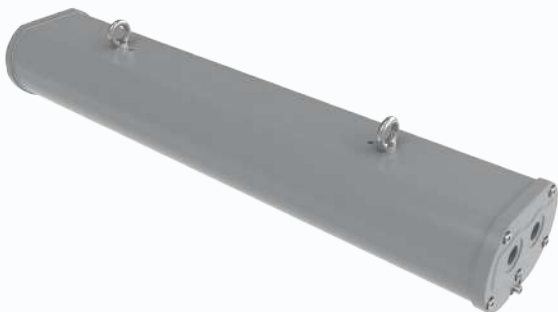
### High Ceiling Mount Bracket



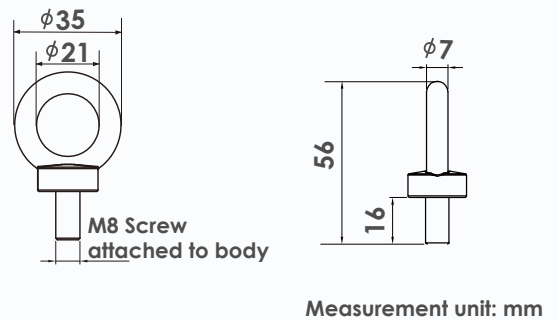
Ordering Code: CB-H1



### Eyebolt Mount



Ordering Code: EB-1

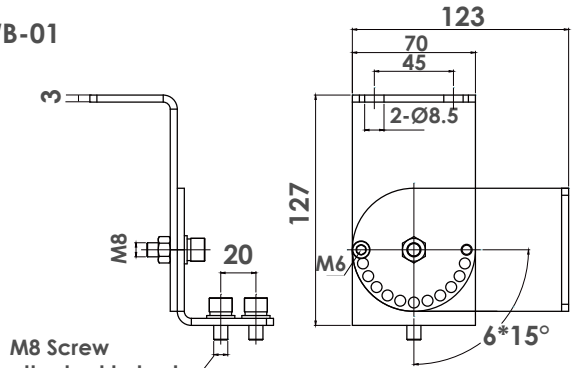
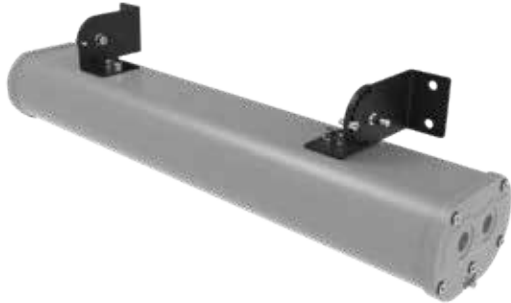


# EXD44000

Hazardous Location LED Luminaire

## Wall Mount Swivel Bracket

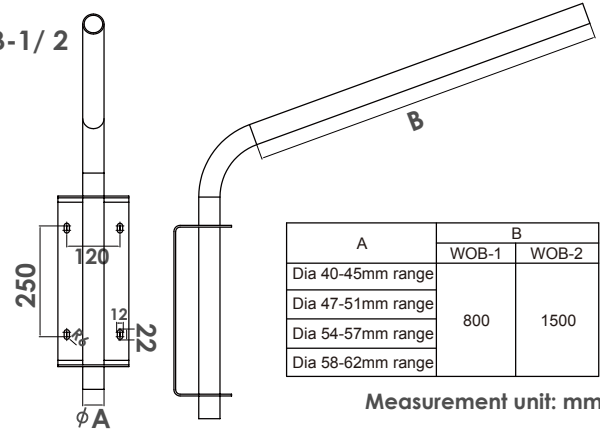
Ordering Code: WB-01



Measurement unit: mm

## Wall mounting outreach bracket

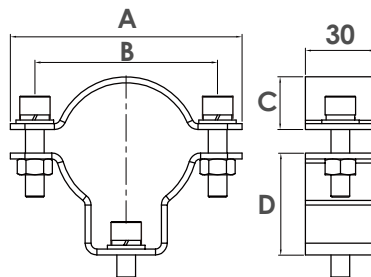
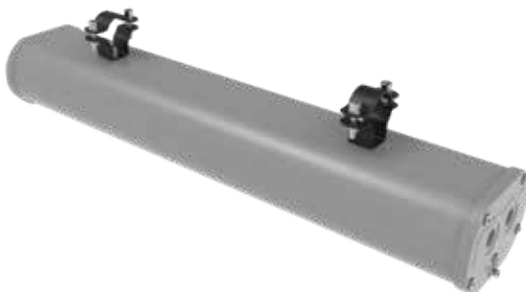
Ordering Code: WOB-1/ 2



Measurement unit: mm

## Pole Mount Clamp

Ordering Code: PC-48/60

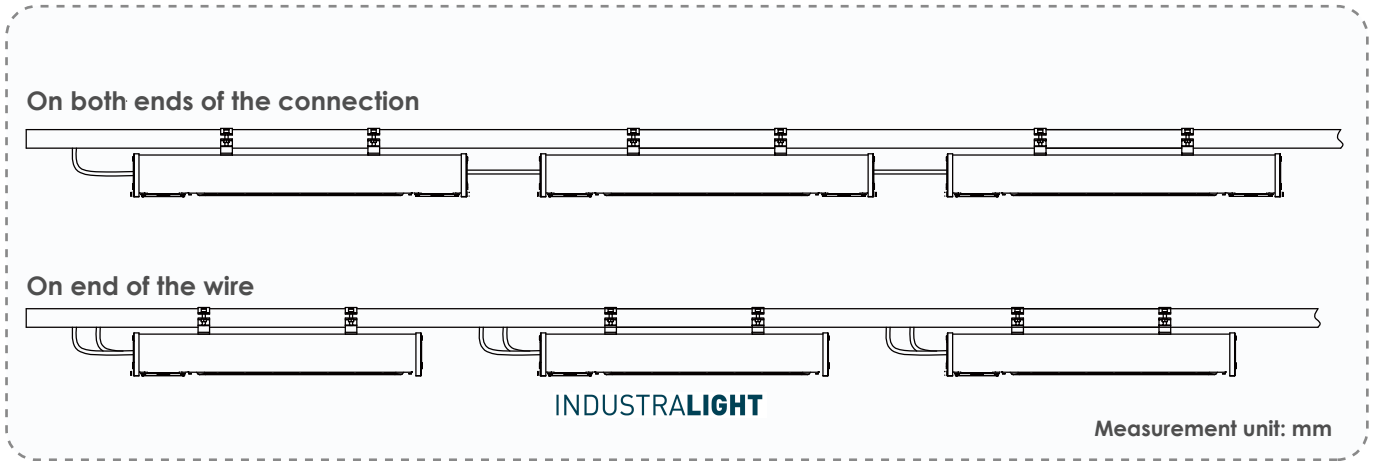


Code	Description	A	B	C	D
PC-48	Dia 40-51mm range	92	72	18	42
PC-60	Dia 54-62mm range	105	84	28	46

Measurement unit: mm

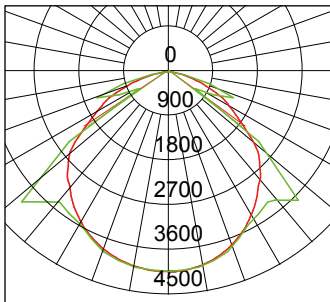
## Through Wiring

In-out connection can be made on one or both sides for quick installation

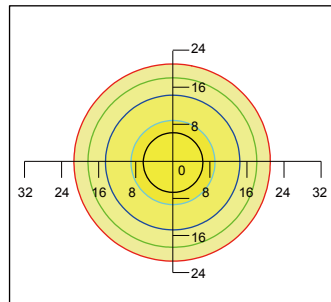


## Photometric

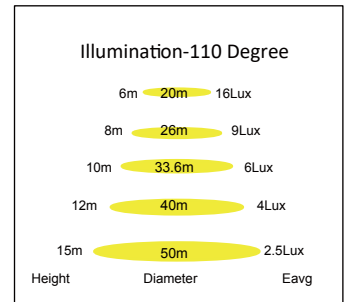
I10 Degree



— V 0.0DEG PLAN, 112.1  
— H 0.0DEG PLAN, 109.1



Mounting Height 33'(10m), 0 Tilt



Flux out: 5253 lm

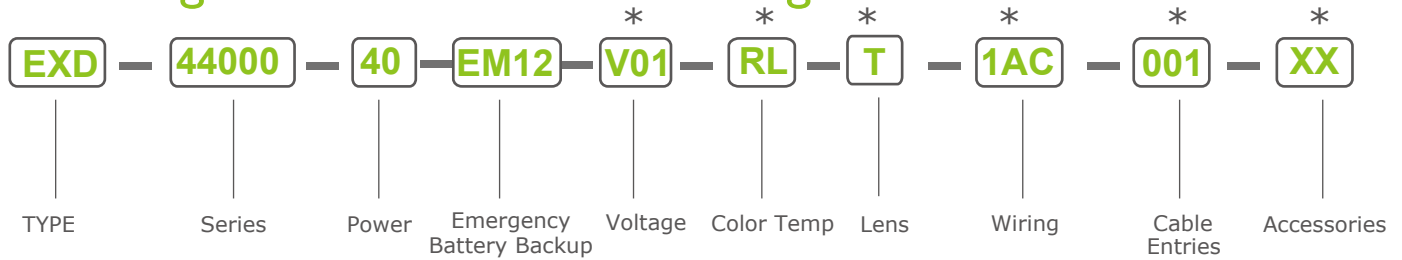
### Illumination-110 Degree

Height	Diameter	Eavg
6m	20m	16Lux
8m	26m	9Lux
10m	33.6m	6Lux
12m	40m	4Lux
15m	50m	2.5Lux

Flux out: 5253 lm



## Ordering Information and Mounting Accessories



\*: Suffix not within nomenclature as per Certification, for marketing purpose only

<u>TYPE</u>	<u>SERIES</u>	<u>POWER</u>	<u>EMERGENCY BATTERY BACKUP</u>	<u>COLOR TEMP</u>
EXD	FEL-G	20=20W 30=30W 40=40W * 50=50W 60=60W 80=80W 100=100W	BLANK=Standard (Non Emergency) EM6=6W 180mins EM12=12W 90mins (Emergency Standard)	RD=2700K RL=4000K RZ=5000K RM=5700K RD= Red GN=Green BU= Blue AM=Amber
			<u>VOLTAGE</u>	
			V01= AC120-277V	

(\*please specify if single or double Lens)

<u>LENS</u>	<u>WIRING</u>	<u>CABLE ENTRIES</u>
T=Transparent PC F=Frosted PC	1AC= Single Access Cover (standard) 2AC= Dual Access Cover	001 = 4 X M20 X 1.5 002 = 4 X M25 X 1.5 (Standard) 003 = 4 X NPT 1/2 004 = 4 X NPT 3/4

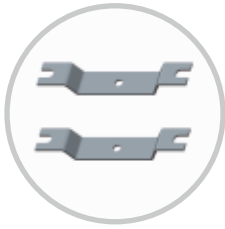
### ACCESSORIES

CB-L1=Low Ceiling Mount Bracket 1 pair  
 CB-H1=High Ceiling Mount Bracket 1 pair  
 EB-1=Eyebolt 1 pair  
 WB-01=Wall Mount Swivel Bracket 1 pair  
 WOB-1=0.6M wall mounting outreach bracket x1  
 WOB-2=1.2M wall mounting outreach bracket x1  
 PC-48=Dia 40-51mm range SS316 pole clamp 1 pair  
 PC-60=Dia 54-62mm range SS316 pole clamp 1 pair  
 SC01=Safety cable x1  
 R-D40=Replacement Driver x1 (20~40W models)  
 R-D60=Replacement Driver x1 (50~60W models)  
 R-D100=Replacement Driver x1 (70~100W models)  
 R-T=Replacement PC Lens, clear x1  
 R-F=Replacement PC Lens, frosted x1  
 R-B=Replacement Battery Pack x1

### INSTALLATION TIPS

- Wago Termination**  
 Conductor range: 0.5 ... 4 (6) mm<sup>2</sup> (20 ... 10 AWG)  
 Rated voltage: 800 V  
 Rated current/(max. current): 32 A (41 A)
- Cable gland & Plug**  
 Standard: Plastic plugs x4 + Plastic Cable gland x1  
 Optional: Contact sales for other selections
- Dimming**  
 Standard: 0-10V Dimming (10-100%)
- Emergency**  
 Auto self-diagnostics function applied  
 minimum 30 seconds test once a week to verify the status as per LED indicator





### CB-L1

Low Ceiling Mount  
Bracket 1 pair



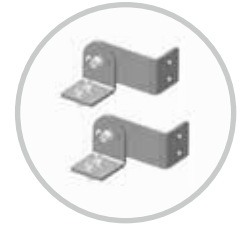
### CB-H1

High Ceiling Mount  
Bracket 1 pair



### EB-1

Eyebolt 1 pair



### WB-01

Wall Mount Swivel  
Bracket 1 pair



### WOB-1/2

wall mounting  
outreach bracket x1



### PC-48/60

SS316 pole clamp 1 pair



### SC01

Stainless Steel  
Safety Cable kit



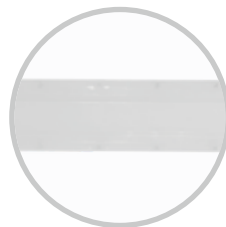
### R-D40/60/100

Replacement Driver x1



### R-T

Replacement PC Lens,  
clear x1



### R-F

Replacement PC Lens,  
frosted x1



### R-B

Replacement Battery Pack x1