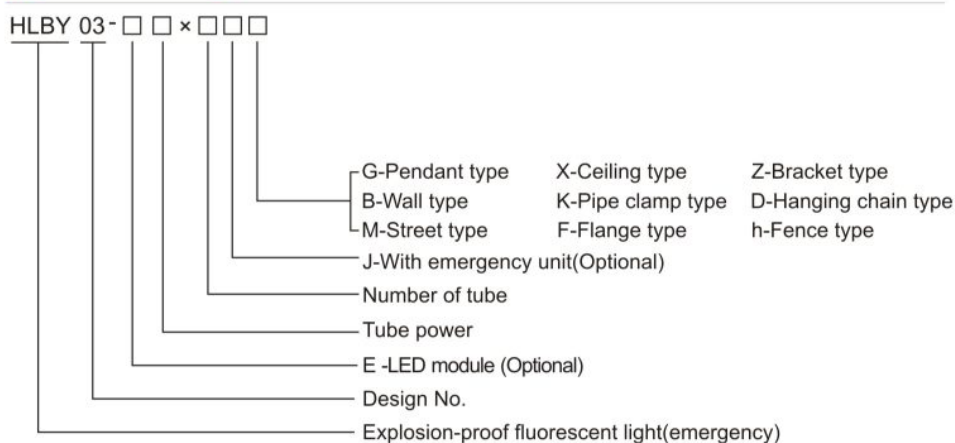


1 Application and Features

- Explosion protection
 - IECEx (IEC)
 - ATEX (CENELEC, EN)
 - China Ex(GB)
- Application in hazardous area
 - Zone 1 and Zone 2
 - Zone 21 and Zone 22
- Light source and power:
 - T8 Fluorescent tube: 18W,36W
 - LED module: 10W,20W,30W,36W
- Two types of enclosures:
 - Enclosure 1: T8 Fluorescent lamp (18WX1,18WX2)
LED module (10WX1,20WX1,30WX1,36WX1)
 - Enclosure 2: T8 Fluorescent lamp (36WX1,36WX2)
LED module(20WX2,30WX2,36WX2)
- LED module is external power supply, LED light source and LED power are in separate structure.
- Fluorescent tube or LED module are equipped when delivery.
- Central lock, built-in explosion-proof interlock switch, and switch of safety interlock will be off automatically while cover is opening.
- Emergency unit can be equipped upon request.

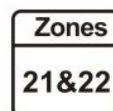
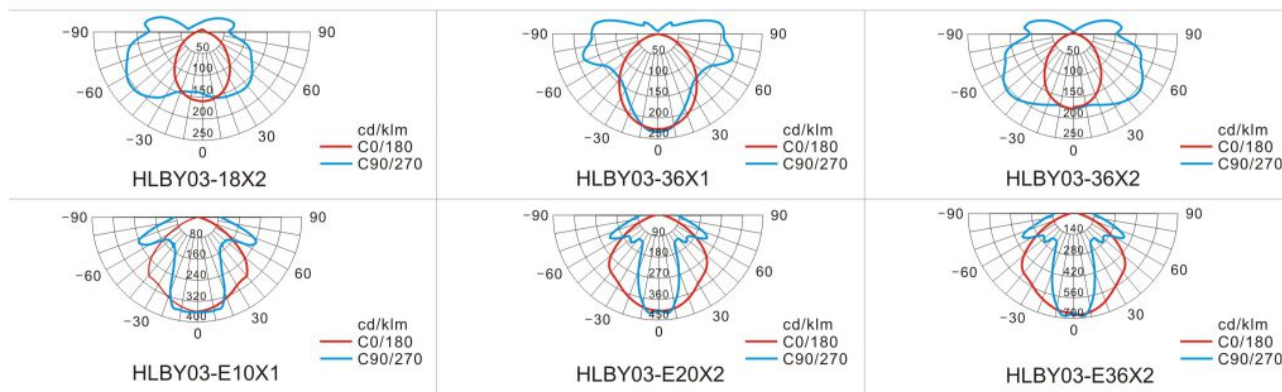


2 Nomenclature



Note: Emergency unit power is only for a single tube, LED module is a single module.

3 Luminous Distribution Curve



HLBY03- Series Explosion-proof Fluorescent Light(Emergency)

4 Technical Parameter

Ex marking	Gas	T8Fluorescent tube	Ex II 2 G Ex db eb IIC T4 Gb	Ex db eb IIC T4 Gb	Ex d e IIC T4 Gb
		LED Module	Ex II 2 D Ex db eb mb IIC T6 Gb	Ex db eb mb IIC T6 Gb	Ex d e mb IIC T6 Gb
		LED Module with emergency	Ex II 2 D Ex db eb mb IIC T4 Gb	Ex db eb mb IIC T4 Gb	Ex d e mb IIC T4 Gb
	T8Fluorescent tube with emergency	Ex II 2 D Ex db eb mb IIC T4 Gb	Ex db eb mb IIC T4 Gb	Ex d e mb IIC T4 Gb	
	Dust		Ex II 2 D Ex tb IIIC T80℃ Db	Ex tb IIIC T80℃ Db	Ex tDA21 IP66 T80℃ Db
Conformity to standards		IEC60079-0,IEC60079-1,IEC60079-7,IEC60079-18,IEC60079-31 EN60079-0, EN60079-1, EN60079-7, EN60079-18, EN60079-31 GB3836.1,GB3836.2,GB3836.3,GB3836.9,GB12476.1,GB12476.5			
Structure, Material	Enclosure	GRP, resistant to 7J impact, corrosion resistance			
	Transparent cover	Polycarbonate, resistant to 4J impact, high light transmittance			
	Ballast	Explosion-proof electronic ballast, wide voltage output (110~240VAC),power factor ≥0.95, with protection function of short circuit,overload,lamp aging,lamp damage,and power asymmetric of the lamp tube.			
	Light source specifications	LED(Cree), multiple arrangement, luminous efficiency ≥140 Lm /W, color rendering ≥70,color temperture 5700K			
	LED Driver	Wide voltage input (100 ~ 250VAC), constant power output, power factor ≥0.95, with protection function of shunt, constant current, anti-surge, over-current, open circuit, short circuit, anti-electromagnetic interference.			
	Emergency unit	Explosion-proof emergency unit, when the power supply is off, the lamp will automatically switch to the emergency lighting state			
	Interlocking mechanism	Explosion-proof interlock switch, safety interlock between enclosure and transparent cover, when opening the transparent cover, the internal power supply will cut off reliably			
	Exposed fastener	Stainless steel			
Light source	Specification	T8 fluorescent tube		LED Module	
	Power (W)	18WX1	18WX2	10WX1	20WX1
		36WX1	36WX2	30WX1	36WX1
				20WX2	30WX2
Rated voltage		T8 fluorescent tube: 150 ~ 250V AC, 50/60Hz LED Module: 100 ~ 250V AC, 50/60Hz			
Degree of protection		IP66			
Ambient temperature		-20℃ ~ +55℃,LED Module: -40℃ ~ +55℃ (Emergency: -20℃ ~ +55℃)			
Terminal block		3×1.5 ~ 4mm ² (L+N+PE)			
Cable entries		4× ϕ 25.2: 4-M25×1.5			
Available cable outer diameter (mm)		ϕ 9 ~ ϕ 14 (mm)			
Emergency unit technical parameters	Emergency unit	Dedicated emergency controller and battery pack, with overcharge and overdischarge protection functions			
	Emergency power (W)	T8 Fluorescent tube: 18WX1,36WX1 LED Module: 10WX1,10WX2			
	Emergency starting time	0.3s			
	Charging time	24h			
	Emergency lighting time	120min (180min Optional)			

5 Selection Table

LED tube				T8 fluorescent tube			
Type	Weight (kg)	Type	Weight (kg)	Type	Weight (kg)	Type	Weight (kg)
HLBY03-E10X1G	7.6	HLBY03-E30X2G	11.3	HLBY03-18X1G	8	HLBY03-36X1G	11.1
HLBY03-E10X1X	7.4	HLBY03-E30X2X	11.1	HLBY03-18X1X	7.8	HLBY03-36X1X	10.9
HLBY03-E10X1B	7.9	HLBY03-E30X2B	11.6	HLBY03-18X1B	8.3	HLBY03-36X1B	11.4
HLBY03-E10X1D	7.6	HLBY03-E30X2D	11.3	HLBY03-18X1D	8	HLBY03-36X1D	11.1
HLBY03-E10X1F	18.9	HLBY03-E30X2F	22.6	HLBY03-18X1F	19.3	HLBY03-36X1F	22.4
HLBY03-E10X1h	14.3	HLBY03-E30X2h	18	HLBY03-18X1h	14.7	HLBY03-36X1h	17.8
HLBY03-E20X2G	11.3	HLBY03-E36X2G	11.3	HLBY03-18X2G	8	HLBY03-36X2G	11.1
HLBY03-E20X2X	11.1	HLBY03-E36X2X	11.1	HLBY03-18X2X	7.8	HLBY03-36X2X	10.9
HLBY03-E20X2B	11.6	HLBY03-E36X2B	11.6	HLBY03-18X2B	8.3	HLBY03-36X2B	11.4
HLBY03-E20X2D	11.3	HLBY03-E36X2D	11.3	HLBY03-18X2D	8	HLBY03-36X2D	11.1
HLBY03-E20X2F	22.6	HLBY03-E36X2F	22.6	HLBY03-18X2F	19.3	HLBY03-36X2F	22.4
HLBY03-E20X2h	18	HLBY03-E36X2h	18	HLBY03-18X2h	14.7	HLBY03-36X2h	17.8

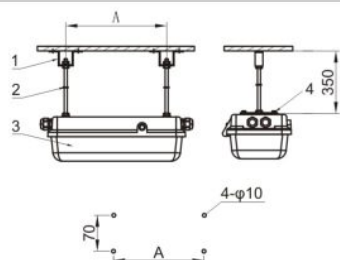
6 Accessories list

Item	Picture	Weight (kg)
HL0112 explosion-proof LED module		0.55
Lock wrench(key)		0.07
HL0141 Explosion-proof electronic ballast(18WX2)		1.3
HL0141 Explosion-proof electronic ballast(36WX2)		1.3
HL0141-E Explosion-proof electronic ballast(10W)		0.85
HL0141-E Explosion-proof electronic ballast(20W)		0.85
HL0141-E Explosion-proof electronic ballast(30W)		0.85
HL0141-E Explosion-proof electronic ballast(36W)		0.85
HL0141-E Explosion-proof electronic ballast(20WX2)		0.85
HL0141-E Explosion-proof electronic ballast(30WX2)		0.85
HL0141-E Explosion-proof electronic ballast(36WX2)		0.85
HL0143 Explosion-proof inverter(18WX2)		1.1
HL0143 Explosion-proof inverter(36WX2)		1.1
HL0143-E Explosion-proof inverter7W		1.1
HL0143-E Explosion-proof inverter10W		1.1
HL0149-T8 Explosion-proof fluorescent tube holder		0.03
HL0122 Explosion-proof switch module		0.06
HL0115 Explosion-proof indicator		0.02
HL0147 Explosion-proof terminals		0.12

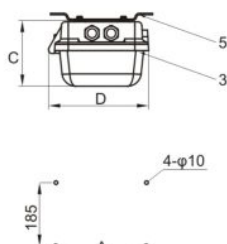
HLBY03- Series Explosion-proof Fluorescent Light(Emergency)

7 Outline and Installation Dimension (Dimensions in mm)

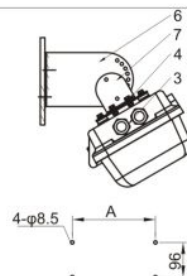
Type	Size(mm)	A	B	C	D
HLBY03-18X(1~2)(J)		642	770	144	220
HLBY03-E10 (20, 30, 36) X1(J)					
HLBY03-36X(1~2)(J)		800	1350	144	220
HLBY03-E20 (30, 36) X2(J)					



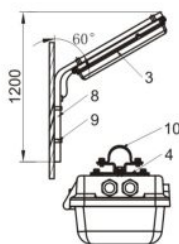
Pendant type(G)



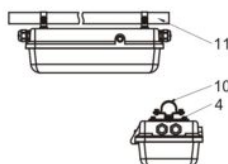
Ceiling type(X)



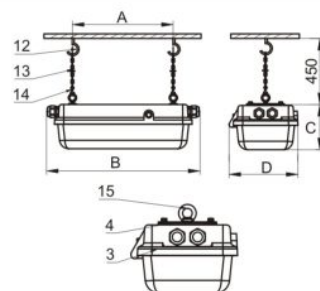
Bracket type(Adjustable angle)(Z)



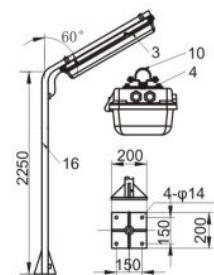
Wall type(B)



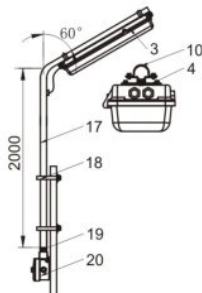
Pipe clamp type(K)



Hanging chain type(D)



Flange type(F)



Fence type(h)

No.	Item	Purchase code	Weight (kg)
1	Mounting bracket		
2	Screw rod (M8)		
3	HLBY03 The explosion-proof fluorescent light(Emergency)		
4	Mounting plate		
5	Ceiling type bracket		
6	Adjustable bracket(down)		
7	Adjustable bracket(up)		
8	Bending pole(G11/4)	Wall type	
9	Fixed clamp(G11/4)	Wall type	
10	Pipe clamp(G11/4)		

No.	Item	Purchase code	Weight (kg)
11	Pipe(G11/4)	Provided by user	
12	Hook	Provided by user	
13	Chain(450mm)		
14	Hook		
15	Ring bolt(M8)		
16	Flange type pole(G11/4)		
17	Fence type pole(G11/4)		
18	U pipe clamp(G11/4)	Fence type	
19	Reducer pipe joint(G3/4)		
20	Explosion-proof terminal boxes	HLBH31-C/G3/4	

8 Accessories list

Installation Method	Item	Remark	Qty	Purchase code
G-Pendent type	Mounting bracket	Provided by user	2	
	Screw rod M8		2	2.19.1208251
	Mounting plate		2	
X-Ceiling type	Ceiling type bracket		2	2.14.0706003
Z-Bracket type	Ceiling type bracket		2	
	Adjustable bracket(up)		2	
	Adjustable bracket(down)		2	
B-Wall type	Mounting plate		2	
	Bending pole G11/4		1	4.02.901.0141(18W) 4.02.901.0141(36W)
	U pipe clamp G11/4	Provided by user	2	
	Pipe clamp G11/4		2	2. 12. 5900010
K-Pipe clamp type	Mounting plate		2	
	Pipe clamp G11/4		2	2. 12. 5900010
	Pipe	Provided by user	1	
D-Hanging chain type	Mounting plate		2	2. 14. 2206003
	Hook	Provided by user	2	
	Chain 450mm		2	2. 14. 1000101
	Hook		2	2. 18. 1604091
	Ring bolt(M8)		2	2. 18. 1100021
M-Street type	Install the retainer plate		2	
	Pipe clamp G11/4		2	2. 12. 5900010
F-Flange type	Explosion-proof flexible pipe or cable		1	
	Pole of Flange type G11 / 4		1	1. 02. 901. 00147(18W) 1. 02. 901. 00148(36W)
	Pipe clamp G11/4		2	2. 12. 5900010
	Mounting plate		2	2. 14. 2206003
h-Fence type	Explosion-proof flexible pipe or cable		1	
	Pole of Fence type G11 / 4		1	1. 02. 901. 00144(18W) 1. 02. 901. 00145(36W)
	U pipe clamp	Provided by user	2	
	Explosion-proof pipe joint (G3/4)		1	1. 03. 209. 00022
	Explosion-proof junction box HLBH31-C3/4F		1	1. 03. 101. 00023
	Ex cable glands HLBM	Optional	2	
	Pipe clamp G11/4		2	2. 12. 5900010
	Mounting plate		2	2. 14. 2206003

The installation accessories required by different installation methods see the table; Manufacturer does not provide when marked "provided by user".