

HLBD05-Series Explosion-proof LED Lightings

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:
 - LED: 20W, 25W, 30W, 45W, 50W, 60W, 70W, 85W, 100W, 120W
- Four enclosure types : 30,60,70,120
- Outline: Type I and Type II, with bigger beam angle
- Light source cavity, electrical cavity and wiring cavity are separately. Only need to open the wiring cavity when wiring, convenient and safe for installation and maintenance
- Wireless connection between lamp body and installation accessories, and installation accessories of various installation methods can be interchangeable and universal. Installation and maintenance are convenient, fast and safe.
- Emergency unit can be equipped upon request.
- Protective grid can be equipped upon request.

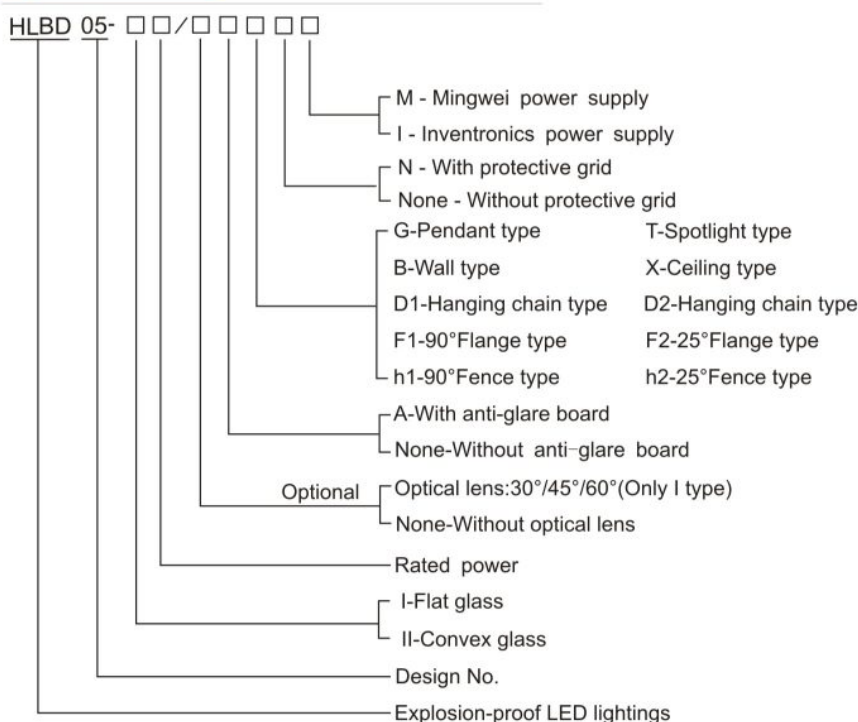


I Type
T-Spotlight type

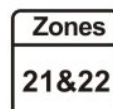
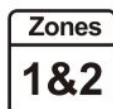


II Type

2 Nomenclature



Note: T-Spotlight type is optional, and LED exposure angle: 30°, 45°, 60°



3 Technical Parameter

Ex marking	Gas	Ex II 2 G Ex db op is IIC T6/T5 Gb	Ex db op is IIC T6/T5 Gb	Ex d IIC T6/T5 Gb	
	Dust	Ex II 2 D Ex tb op is IIIC T80/T95℃Db	Ex tb op is IIIC T80/T95℃Db	Ex tD A21 IP66 T80/T95℃	
Conformity to standards		IEC60079-0, IEC60079-1, IEC60079-28, IEC60079-31 EN60079-0, EN60079-1, EN60079-28, EN60079-31 GB3836.1, GB3836.2, GB12476.1, GB12476.5			
Structure, Material	Enclosure	Aluminum alloy enclosure, powder coated, industrial grey with dark lines texture (RAL7035)			
	Transparent cover	Tempered glass, resistant to 4J impact, type II has a larger irradiation angle			
	Protective grid	Steel wire powder coating (white) or stainless steel, please note when needed			
	LED power	Wide voltage input (90~305VAC), constant power output, power factor ≥ 0.95. With protection functions of constant current, over current, open circuit, short circuit, surge prevention, etc.			
	Emergency unit	Explosion-proof emergency unit, when the power supply is off, the lamp will automatically switch to the emergency lighting state			
	Irradiation angle	30°, 45°, 60°, adjustable angle of the mounting bracket			
	Exposed fastener	Stainless steel			
Light source	Specification	LED (Cree), multiple arrangement, luminous efficiency ≥ 140 lm/W, color rendering ≥ 70			
	Power (W)	LED: 20W,25W,30W,45W,50W,60W,70W,85W,100W,120W			
	LED (CCT) color temperature	Cool white: 5700K (default) Note: Warm white (3000K) and natural white (4000K) can be customized, please note it when ordering.			
Rated voltage		Mingwei: 90~264V AC, Inventronics: 90~305V AC			
Frequency		50/60Hz			
Degree of protection		IP66			
Ambient temperature	Mingwei power supply	HLBD05- I		HLBD05- II	
		20W~60W	70W~120W	20W~70W	85W~120W
		-40℃~+55℃:T6	-40℃~+40℃:T6 -40℃~+55℃:T5	-40℃~+55℃:T6	-40℃~+40℃:T6 -40℃~+55℃:T5
	Inventronics power supply	HLBD05- I (II)			
		20W~60W	70W~120W		
		-40℃~+55℃:T6	-40℃~+40℃:T6 -40℃~+55℃:T5		
Terminal block		3X1.5~4mm ² (L+N+PE)			
Cable entries		1-G3/4 or M25X1.5 or NPT3/4 (Pendant type, Spotlight type) 2-G3/4 or M25X1.5 or NPT3/4 (Wall type, pendant type with junction box, hanging chain type, ceiling type) 4-G3/4 or M25X1.5 or NPT3/4 (Ceiling type) Note: The thread hole with stop plug is M25X1.5 or NPT3/4, and the thread hole with cable gland is M25X1.5, NPT 3/4, or G3/4 (with rubber sealing ring).			
Available cable outer diameter (mm)		φ 9~φ 14(mm)			

4 The view of wireless connection structure

Wireless connection structure:
convenient and safe for installation and maintenance.

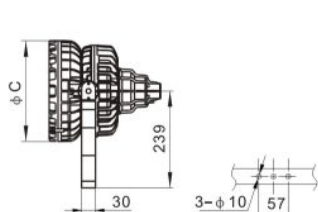
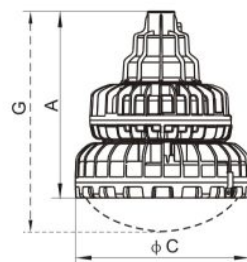
- Easy for installation: Only need to fix installation base and connect to the power line, then assemble the lamp. This construction not only improves the efficiency, shorten the lead time, but also upgrades the construction safety"
- Easy for maintenance: Can be quickly removed for repairs and replacement. Significantly simplifying the installation, the maintenance process of the light fixtures, with the addition benefit of being more safe for the maintenance.



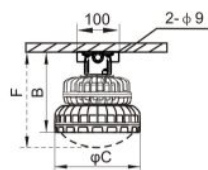
5 Outline and Installation Dimension (Dimensions in mm)

Size(mm) Power(W)	A	B	ϕC	D	E	F	G	H	I
20, 25, 30	250	235	238	291	275	283	298	383	323
45, 50, 60	260	245	248	345	285	293	308	393	333
70	282	264	248	367	304	312	330	415	352
85, 100, 120	288	270	300	373	310	318	336	421	358

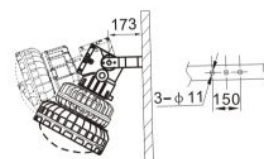
Note: If with protective net, size A plus 15mm more



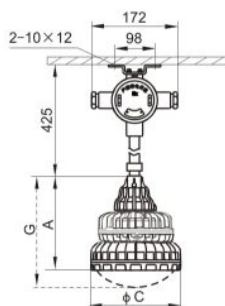
Spotlight type(T)



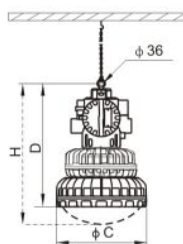
Ceiling type(X)



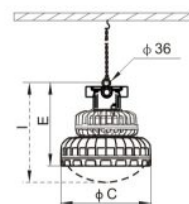
Wall type(B)(30 ~ 90° adjustable)



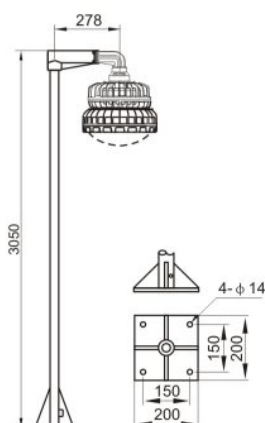
Pendant type(G)



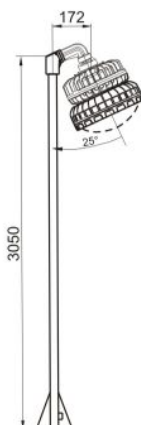
Hanging chain type (D1)(side opening)



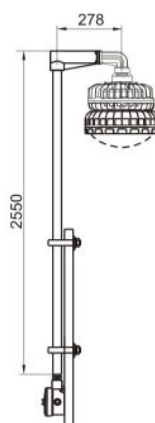
Hanging chain type(D2)



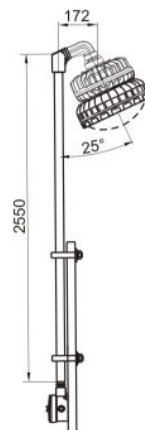
Flange type (F1)



Flange type (F2)



Fence type(h1)

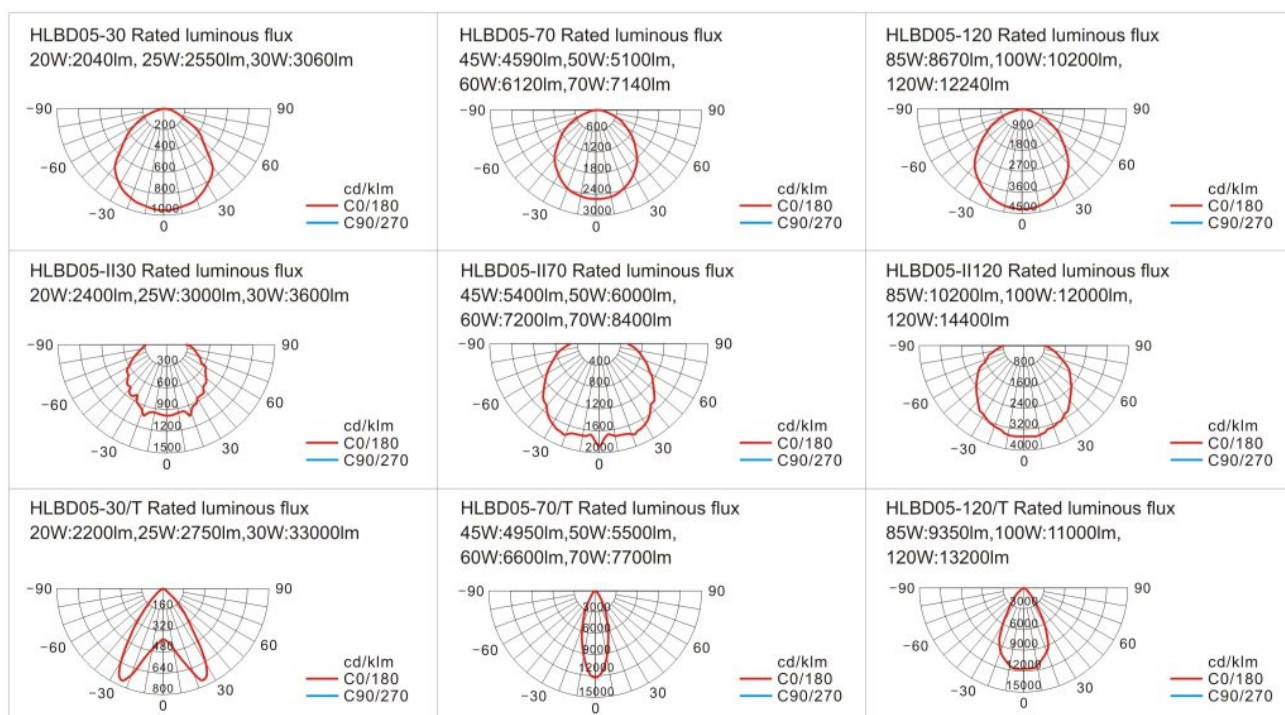


Fence type(h2)

6 Selection Table

Type I (flat glass)				Type II (convex glass)			
Type	Weight (kg)	Type	Weight (kg)	Type	Weight (kg)	Type	Weight (kg)
HLBD05-I30	4.90	HLBD05-I70	5.80	HLBD05-II30	5.20	HLBD05-II70	6.00
HLBD05-I30G	5.30	HLBD05-I70G	6.18	HLBD05-II30G	5.58	HLBD05-II70G	6.38
HLBD05-I30B	6.00	HLBD05-I70B	6.90	HLBD05-II30B	6.30	HLBD05-II70B	7.10
HLBD05-I30B1	6.60	HLBD05-I70B1	7.10	HLBD05-II30B1	6.50	HLBD05-II70B1	7.30
HLBD05-I30B2	6.75	HLBD05-I70B2	7.25	HLBD05-II30B2	6.65	HLBD05-II70B2	7.45
HLBD05-I30T	5.70	HLBD05-I70T	7.90	HLBD05-II30T	5.90	HLBD05-II70T	8.50
HLBD05-I30X	5.70	HLBD05-I70X	7.90	HLBD05-II30X	5.90	HLBD05-II70X	8.50
HLBD05-I30D1	5.70	HLBD05-I70D1	8.00	HLBD05-II30D1	6.30	HLBD05-II70D1	8.50
HLBD05-I30D3	5.40	HLBD05-I70D3	7.80	HLBD05-II30D3	6.00	HLBD05-II70D3	8.30
HLBD05-I30F1(no pole)	7.20	HLBD05-I70F1(no pole)	9.50	HLBD05-II30F1(no pole)	7.50	HLBD05-II70F1(no pole)	9.50
HLBD05-I30F2(no pole)	6.70	HLBD05-I70F2(no pole)	9.00	HLBD05-II30F2(no pole)	7.00	HLBD05-II70F2(no pole)	9.00
HLBD05-I30h1(no pole)	7.20	HLBD05-I70h1(no pole)	9.50	HLBD05-II30h1(no pole)	7.50	HLBD05-II70h1(no pole)	9.50
HLBD05-I30h2(no pole)	6.70	HLBD05-I70h2(no pole)	9.00	HLBD05-II30h2(no pole)	7.00	HLBD05-II70h2(no pole)	9.00
HLBD05-I60	5.5	HLBD05-I120	8	HLBD05-II60	5.80	HLBD05-II120	8.5
HLBD05-I60G	5.88	HLBD05-I120G	8.38	HLBD05-II60G	6.18	HLBD05-II120G	8.88
HLBD05-I60B	6.60	HLBD05-I120B	9.10	HLBD05-II60B	6.90	HLBD05-II120B	9.6
HLBD05-I60B1	7.20	HLBD05-I120B1	9.30	HLBD05-II60B1	7.10	HLBD05-II120B1	9.8
HLBD05-I60B2	7.35	HLBD05-I120B2	9.45	HLBD05-II60B2	7.25	HLBD05-II120B2	9.95
HLBD05-I60T	6.30	HLBD05-I120T	8.70	HLBD05-II60T	6.60	HLBD05-II120T	9.30
HLBD05-I60X	6.30	HLBD05-I120X	8.70	HLBD05-II60X	6.60	HLBD05-II120X	9.30
HLBD05-I60D1	6.20	HLBD05-I120D1	8.60	HLBD05-II60D1	6.70	HLBD05-II120D1	9.50
HLBD05-I60D3	6.00	HLBD05-I120D3	8.40	HLBD05-II60D3	6.50	HLBD05-II120D3	9.30
HLBD05-I60F1(no pole)	7.80	HLBD05-I120F1(no pole)	10.50	HLBD05-II60F1(no pole)	8.10	HLBD05-II120F1(no pole)	11.50
HLBD05-I60F2(no pole)	7.30	HLBD05-I120F2(no pole)	10.00	HLBD05-II60F2(no pole)	7.60	HLBD05-II120F2(no pole)	10.00
HLBD05-I60h1(no pole)	7.80	HLBD05-I120h1(no pole)	10.50	HLBD05-II60h1(no pole)	8.10	HLBD05-II120h1(no pole)	10.50
HLBD05-I60h2(no pole)	7.30	HLBD05-I120h2(no pole)	10.00	HLBD05-II60h2(no pole)	7.60	HLBD05-II120h2(no pole)	10.00

7 Luminous distribution curve



HLBD05-Series Explosion-proof LED Lightings

8 Accessories list

The installation accessories required by different installation methods see the table below;

Installation method	Item	Qty	Purchase code	Weight (kg)
G-Pendant type	Explosion-proof pipe joint (G3/4 or M25×1.5)	1	2.12.1100014 (G3/4) 2.12.1100114 (M25X1.5)	0.06
	Straight pipe, both ends M25×1.5, length 300mm	1	4.02.901.0113	0.34
	Explosion-proof terminal box	1	1.03.101.00001	0.66
	Mounting brackets	1	2.14.0711001	0.08
T-Spotlight type	Mounting brackets	1	2.14.0707055	0.72
X-Ceiling type	Outlet box	1	1.52.901.00062	0.9
B-Wall type(adjustable)	Outlet box	1	1. 52. 901. 00071	1.3
	Mounting brackets	1	2. 14. 0707051	0.68
B1/B2-Wall type	Explosion-proof terminal box	1	1. 03. 101. 00001	0.66
	Mounting brackets	1	2. 14. 0711001	0.04
	30°/90° bending pipe	1	1.02.901.00120(30°) 1.02.901.00121(90°)	0.4/0.55
	Chain (length 300mm)	1	2. 15. 1000101	0.1
	Expansion hook	1	2. 18. 2000011	0.02
	Flower basket hook (galvanized)	1	2. 18. 2000001	0.04
	Outlet box	1	4. 02. 901. 0037	1.3
D1-Hanging chain type(side opening)	Chain (length 300mm)	1	2. 15. 1000101	0.1
	Expansion hook	1	2. 18. 2000011	0.02
	Spring clasp	1	2. 18. 1604091	0.003
	Mounting brackets	1	2. 14. 0707053	0.04
	M8 Eyebolt	1	2. 18. 1100021	0.04
	Outlet box	1	4. 02. 901. 0021	0.92
D3-Hanging chain type	Chain (length 300mm)	1	2. 15. 1000101	0.1
	Expansion hook	1	2. 18. 2000011	0.02
	Spring clasp	1	2. 18. 1604091	0.003
	Mounting brackets	1	2. 14. 0707001	0.06
	M8 Eyebolt	1	2. 18. 1100021	0.04
	Outlet box	1	4. 02. 901. 0021	0.92
F1/F2-Flange type	Flange pole(G11/4)	1	1.02.901.00097	10.7
	90°/25°Outlet box	1	1.02.901.00091 1.02.901.00092	25. ° " 1. 08 90. ° " 1. 35
h1/h2-Fence type	Fence pole	1	1. 02. 901. 00095	5. 9
	Explosion-proof pipe joint (G3/4 or M25X1.5)	1	2.12.1100014 (G3/4) 2.12.1100114 (M25X1.5)	0. 06
	Explosion-proof terminal box	1	1. 03. 101. 00028	0. 66

Note: The accessories that are not mentioned in the table, user need provide it by themself.