

HLBD56-Series Explosion-proof LED Lightings

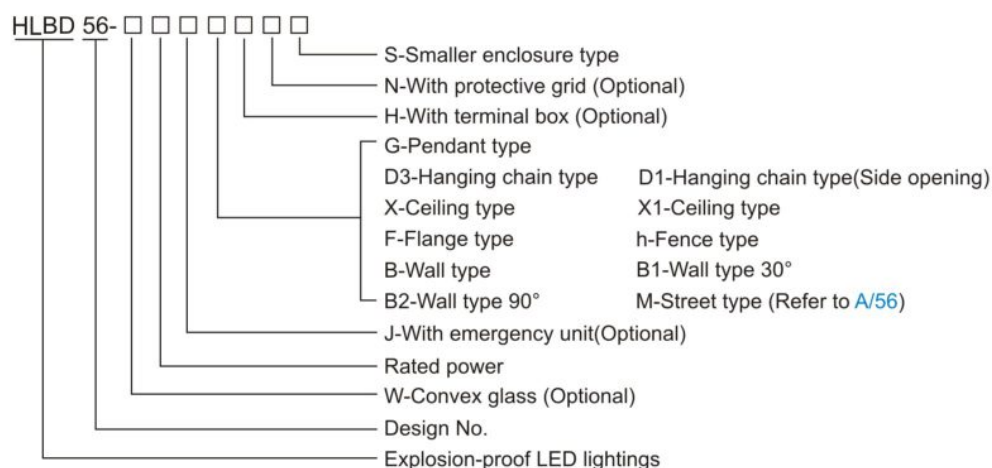
1 Application and Features

- Explosion protection
 - China Ex(GB)
- Application in hazardous area
 - Zone 1 and Zone 2,
 - Zone 21 and Zone 22
- Light source and power:
 - LED: 10W, 20W, 30W, 40W, 50W, 60W, 70W, 80W, 100W, 120W
- Five enclosure types: 20,40,60,70,120
- Light source cavity, electrical cavity and wiring 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.

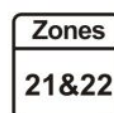
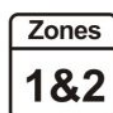
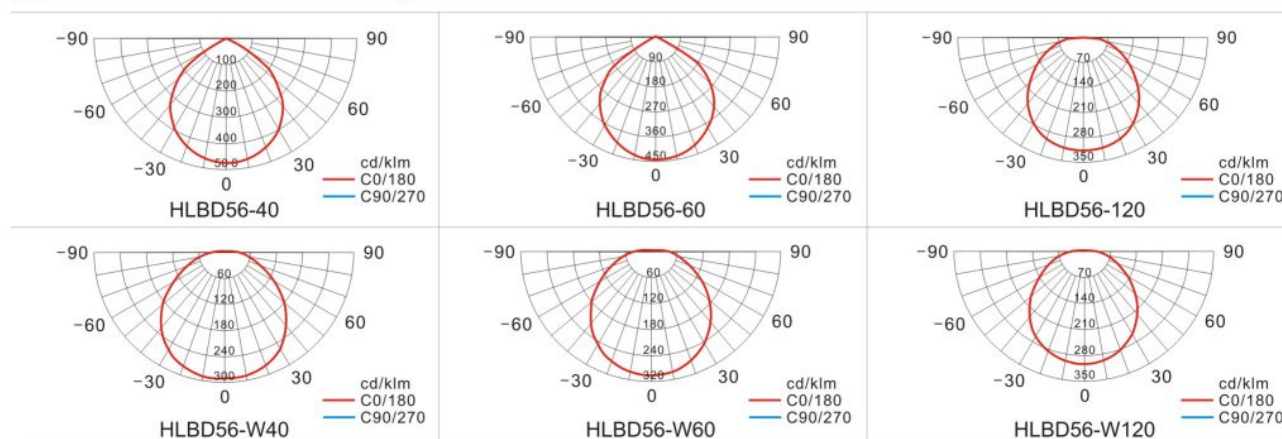


(W type)

2 Nomenclature



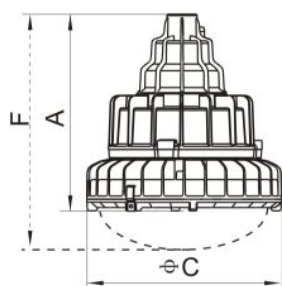
3 Luminous distribution curve



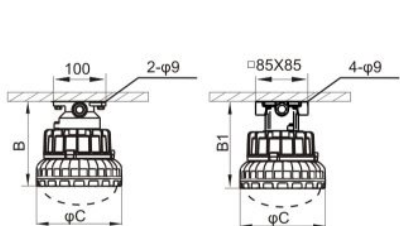
4 Technical Parameter

Ex marking	Gas	Ex d IIC T6 Gb
	Dust	Ex tD A21 IP66 T80°C
Conformity to standards		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, W-type glass undergoes a special process, with a larger irradiation angle, and better anti-glare effect
	Protective grid	Steel wire powder coating (white) or stainless steel, please note when needed
	LED power	Wide voltage input (90~305VAC), (10W type is 170~250VAC, can be customized to AC/DC24V, AC/DC36V, 20WS type is 90~250VAC), constant power output, power factor ≥ 0.95 . With protection functions of constant current, over current, open circuit short circuit, surge prevention, etc.
	Reflector	Secondary optical design, significantly improve the efficiency of the lamp, uniform illumination, no glare
	Emergency unit	Explosion-proof emergency unit, when the power supply is off, the lamp will automatically switch to the emergency lighting state
	Exposed fastener	Stainless steel
Light source	Specification	LED (Cree), multiple arrangement, luminous efficiency ≥ 140 lm/W, color rendering ≥ 70
	Power (W)	LED: 10W, 20W, 30W, 40W, 50W, 60W, 70W, 80W, 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		220,230,240V AC (10W type: customizable to 24/36VAC, 24/36VDC)
Frequency		50/60Hz
Degree of protection		IP66
Ambient temperature		-20°C~+40°C
Terminal block		3X1.5~4mm ² (L+N+PE)
Cable entries		1-G3/4(Pendant type) 2-G3/4(Wall type, pendant type with terminal box, hanging chain type, ceiling type) 4-G3/4(Ceiling type, optional)
Available cable outer diameter (mm)		$\phi 10 \sim \phi 14$ (mm)
Emergency unit technical parameters	Emergency unit	Dedicated emergency controller and battery pack, with overcharge and overdischarge protection functions
	Emergency power(W)	10W,20W,30W,40W,50W,60W,70W,80W,100W,120W
	Emergency starting time	0.3s
	Charging time	24h
	Emergency lighting time	10W~20W: 90min, 30W~100W: 60/90min

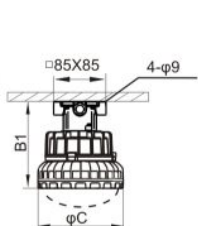
5 Outline and Installation Dimension (Dimensions in mm)



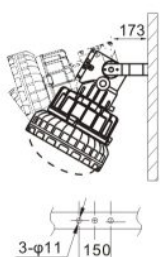
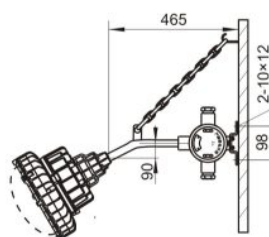
Size(mm) Power(W)	A	B	B1	ΦC	D	E	F
10, 20S	181	152	170	135	265	189	285
20, 30, 40, 50S	213	184	202	196(W:218)	297	221	270
50, 60	221	192	210	240	305	229	270
70	226	197	215	240	310	234	275
80, 100, 120	236	207	225	292	317	241	288



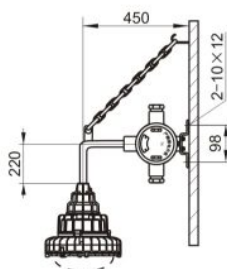
Ceiling type (X)



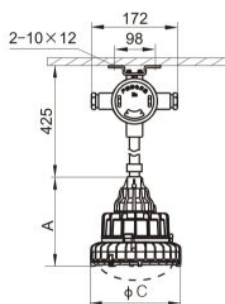
Ceiling type (X1)

Wall type (B)
(30~90°adjustable)

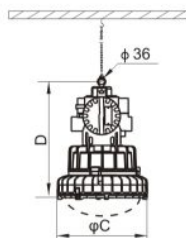
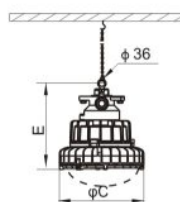
Wall type (B1)30°



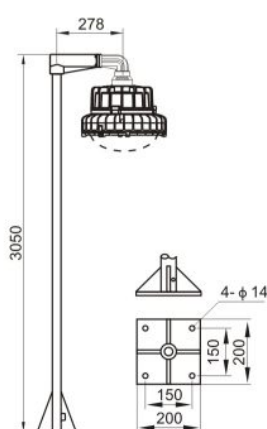
Wall type (B2)90°



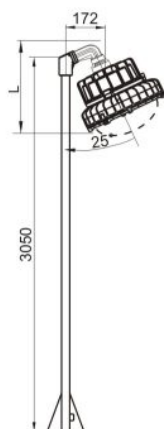
Pendant type (G)

Hanging chain type(D1)
(side opening)

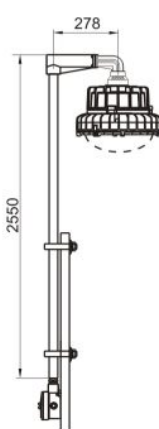
Hanging chain type(D3)



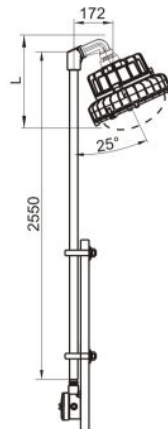
Flange type (F1)



Flange type (F2)



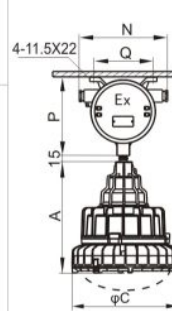
Fence type(h1)



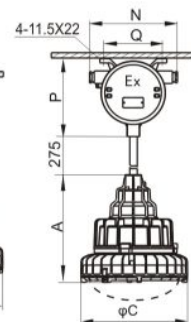
Fence type(h2)

With emergency unit

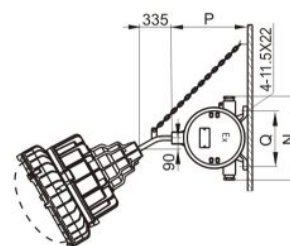
Power Size(mm)	10~50 (W)	60~100 (W)
N	225	228
P	187	214
Q	156X40	156X40



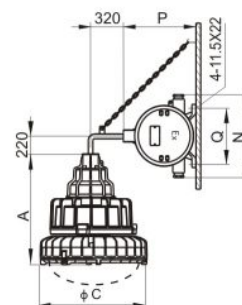
Ceiling type(X)



Pendant type(G)



Wall type(B1)30°

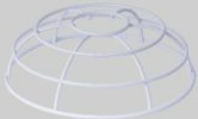


Wall type(B2)90°

6 Selection Table

Flat glass type		Convex glass type	
Type	Weight (kg)	Type	Weight (kg)
HLBD56-20S	1.15	HLBD56-W20S	1.73
HLBD56-20GS	1.53	HLBD56-W20GS	2.11
HLBD56-20XS	1.65	HLBD56-W20XS	2.23
HLBD56-20BS	2.25	HLBD56-W20BS	2.83
HLBD56-40	2.6	HLBD56-W40	3.64
HLBD56-40G	2.98	HLBD56-W40G	4.02
HLBD56-40X	3.1	HLBD56-W40X	4.15
HLBD56-40B	3.7	HLBD56-W40B	4.75
HLBD56-60	3.52	HLBD56-W60	4.1
HLBD56-60G	3.9	HLBD56-W60G	4.47
HLBD56-60X	4.05	HLBD56-W60X	4.97
HLBD56-60B	4.62	HLBD56-W60B	4.21
HLBD56-70	3.87	HLBD56-W70	4.95
HLBD56-70G	4.25	HLBD56-W70G	5.32
HLBD56-70X	4.37	HLBD56-W70X	5.45
HLBD56-70B	4.97	HLBD56-W70B	6.05
HLBD56-120	6.07	HLBD56-W120	6
HLBD56-120G	6.45	HLBD56-W120G	6.37
HLBD56-120X	6.57	HLBD56-W120X	6.5
HLBD56-120B	7.18	HLBD56-W120B	7.1

7 Accessories list

Item	Picture	Purchase code	Weight (kg)
HLBD56-20S Glass cover ring		4.02.211.0002	0.5
HLBD56-50 Glass cover ring		4.02.205.0002	1.2
HLBD56-60 Glass cover ring		4.02.211.0022	1.2
HLBD56-70 Glass cover ring		4.02.211.0022	1.2
HLBD56-120 Glass cover ring		4.02.211.0042	2.0
HLBD56-W20S Glass cover ring		4.02.211.0002	1.0
HLBD56-W50 Glass cover ring		4.02.205.0002	1.3
HLBD56-W60 Glass cover ring		4.02.211.0022	1.3
HLBD56-W70 Glass cover ring		4.02.211.0022	1.3
HLBD56-W120 Glass cover ring		4.02.211.0042	2.1
HLBD56-20S Protective grid		2.03.0100002	0.1
HLBD56-50 Protective grid		2.03.0100012	0.2
HLBD56-60 Protective grid		2.03.0100022	0.2
HLBD56-70 Protective grid		2.03.0100022	0.2
HLBD56-120 Protective grid		2.03.0100032	0.3
HLBD56-W20S Protective grid		2.03.5200041	0.2
HLBD56-W50 Protective grid		2.03.0100232	0.2
HLBD56-W60 Protective grid		2.03.0100052	0.3
HLBD56-W70 Protective grid		2.03.0100052	0.3
HLBD56-W120 Protective grid		2.03.0100062	0.5

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 M25X1.5)	1	2.12.1100014 (G3/4) 2.12.1100114 (M25X1.5)	0.06
	Straight pipe, both ends M25X1.5, length 300mm	1	4.02.901.0113	0.34
	Explosion-proof terminal box	1	1.03.101.00001	0.66
	Mounting bracket	1	2.14.0711001	0.04
X-Ceiling type	Outlet box	1	1.52.901.00082	0.9
X1-Ceiling type	Outlet box	1	1.52.901.00062	1.2
B-Wall type	Outlet box	1	1.52.901.00071	1.3
	Mounting bracket	1	2.14.0707051	0.68
B1/B2-Wall type	Explosion-proof terminal box	1	1.03.101.00001	0.66
	Mounting bracket	1	2.14.0711001	0.04
	30°/90° bending pipe	1	1.02.901.00120(30°) 1.02.901.00121(90°)	30°:0.4,90°: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
D1-Hanging chain type(side opening)	Outlet box	1	1.52.901.00081	1.3
	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 bracket	1	2.14.0707053	0.04
	M8 Eyebolt	1	2.18.1100021	0.04
D3-Hanging chain type	Outlet box	1	1.02.901.00083	0.92
	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 bracket	1	2.14.0707053	0.06
	M8 Eyebolt	1	2.18.1100021	0.04
F1/F2-Flange type	Flange pole(G11/4)	1	1.02.901.00097	10.7
	90°/25°Outlet box	1	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	1.03.101.00001	0.66

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