

BYS51/52-Series Explosion-proof Fluorescent Light

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:
 - Fluorescent tube: 18W, 36W
 - LED tube: 9W, 18W
- Two types of enclosures:
 - T8/T5 fluorescent tube: 18WX1, 18WX2, 18WX3
 - T8 LED tube: 9WX1, 9WX2, 9WX3
 - T8/T5 fluorescent tube: 36WX1, 36WX2, 36WX3, 28WX1, 28WX2, 28WX3
 - T8 LED tube: 18WX1, 18WX2, 18WX3
- The enclosure is made of GRP, and the transparent cover is made of polycarbonate, with good anti-corrosion performance.
- Increased safety enclosure with explosion-proof components inside.
- Central lock: built-in explosion-proof interlock switch, and power source will be cut off automatically while cover is opening.
- T8/T5 type come with electronic ballast, power factor ≥ 0.95 , with "EOL" protection function of constant current, open circuit, short circuit etc.
- Emergency unit can be equipped upon request, emergency unit has protection of over discharge and over charge, explosion-proof LED tube is integrated structure of light source and power supply.

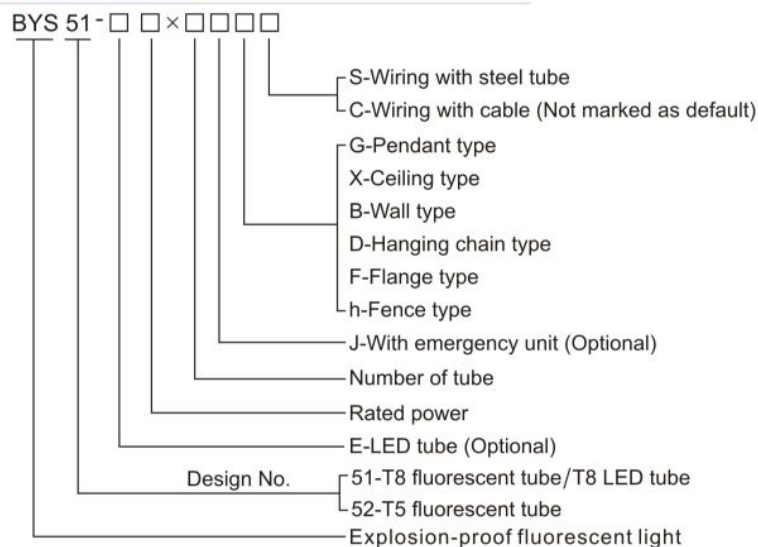


T8 fluorescent lamp / LED



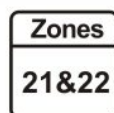
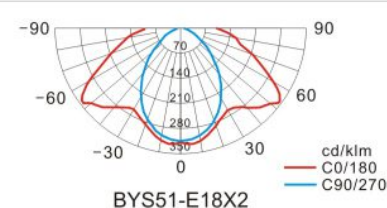
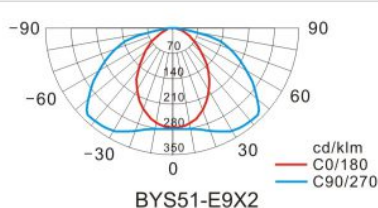
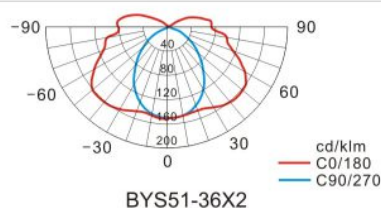
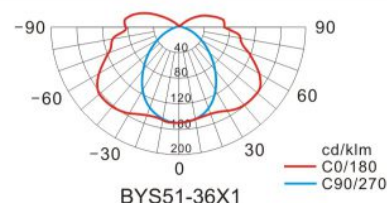
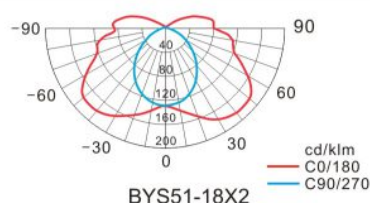
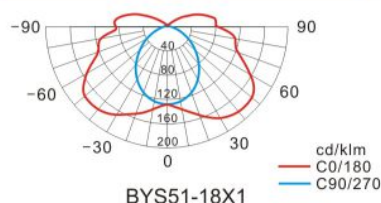
T5 fluorescent lamp

2 Nomenclature



Note: Emergency unit power is for single tube

3 Luminous distribution curve



4 Technical Parameter

Ex marking	Gas	T8/T5 fluorescent lamp: Ex d e mb IIC T4 Gb								
	Dust	T8 LED lamp: Ex d e IIC T6 Gb, with emergency unit: Ex d e mb IIC T6 Gb								
		Ex tD A21 IP66 T80℃								
Conformity to standards		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 transmission								
	Ballast	Explosion-proof electronic ballast, wide voltage output, power factor ≥ 0.98 ,with protection function of short circuit,overload,lamp aging,lamp damage,and power asymmetric of the lamp tube.								
	LED tube	Wide voltage input, constant power output, power factor ≥ 0.95 ,with protection function of shunt, constant current, over current, open circuit, short circuit.								
	Emergency unit	Explosion-proof emergency unit, when the power supply is off, the lamp will automatically switch to the emergency lighting state								
	Interlock	Ex interlock switch, when opening the transparent cover, power supply will be cut off automatically.								
	Exposed fastener	Stainless steel								
Light source	Specification	T8 tube			T8 LED tube			T5 tube		
	Power(W)	18WX1	18WX2	18WX3	9WX1	9WX2	9WX3	28WX1	28WX2	28WX3
		36WX1	36WX2	36WX3	18WX1	18WX2	18WX3			
Rated voltage / frequency		T8 fluorescent tube: 150~250V AC, 50/60Hz								
		T5 fluorescent tube: 150~250V AC, 50/60Hz								
		LED tube: 180~265V AC, 50/60Hz								
Degree of protection		IP66								
Ambient temperature		-20℃~+40℃								
Terminal		3×1.5~4mm ² (L+N+PE)								
Cable entries		2X ϕ 26: 2-M25X1.5, 2-G3/4								
Available cable outer diameter		ϕ 10~ 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, T5 fluorescent tube: 28WX1, T8 LED tube: 9WX1,18WX1								
	Unit start time	0.3s								
	Charging time	24h								
	Unit lighting time	90min								

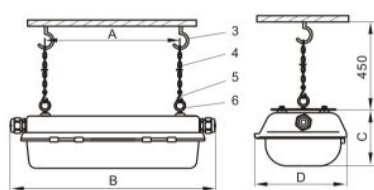
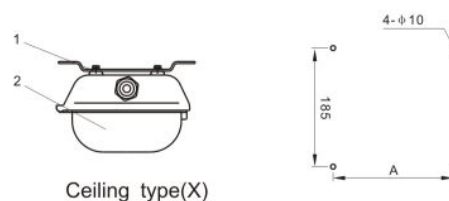
5 Selection Table

T8 LED lamp				T8 fluorescent lamp				T5 fluorescent lamp	
Type	Weight (kg)	Type	Weight (kg)	Type	Weight (kg)	Type	Weight (kg)	Type	Weight (kg)
BYS51-9X1EG	4.7	BYS51-18X1EG	7.2	BYS51-18X1G	5.1	BYS51-36X1G	7.8	BYS52-28X1G	8.0
BYS51-9X1EX	4.5	BYS51-18X1EX	7.0	BYS51-18X1X	4.9	BYS51-36X1X	7.6	BYS52-28X1X	7.8
BYS51-9X1EB	5.0	BYS51-18X1EB	7.5	BYS51-18X1B	5.4	BYS51-36X1B	8.1	BYS52-28X1B	8.3
BYS51-9X1ED	4.7	BYS51-18X1ED	7.2	BYS51-18X1D	5.1	BYS51-36X1D	7.8	BYS52-28X1D	8.0
BYS51-9X1EF	15.7	BYS51-18X1EF	18.5	BYS51-18X1F	16.3	BYS51-36X1F	19.1	BYS52-28X1F	19.2
BYS51-9X1Eh	11.1	BYS51-18X1Eh	13.9	BYS51-18X1h	11.7	BYS51-36X1h	14.5	BYS52-28X1h	14.6
BYS51-9X2EG	4.9	BYS51-18X2EG	7.7	BYS51-18X2G	5.2	BYS51-36X2G	8.0	BYS52-28X2G	8.1
BYS51-9X2EX	4.7	BYS51-18X2EX	7.4	BYS51-18X2X	5.0	BYS51-36X2X	7.7	BYS52-28X2X	7.9
BYS51-9X2EB	5.2	BYS51-18X2EB	8.0	BYS51-18X2B	5.5	BYS51-36X2B	8.3	BYS52-28X2B	8.5
BYS51-9X2ED	4.9	BYS51-18X2ED	7.7	BYS51-18X2D	5.2	BYS51-36X2D	8.0	BYS52-28X2D	8.1
BYS51-9X2EF	16.2	BYS51-18X2EF	19.0	BYS51-18X2F	16.5	BYS51-36X2F	19.2	BYS52-28X2F	19.4
BYS51-9X2Eh	11.7	BYS51-18X2Eh	14.3	BYS51-18X2h	11.9	BYS51-36X2h	14.6	BYS52-28X2h	14.8

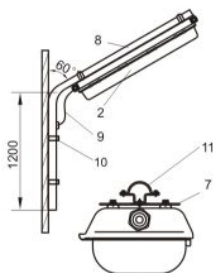
BYS51/52-Series Explosion-proof Fluorescent Light

6 Outline and Installation Dimension of T8 fluorescent lamp / LED lamp (Dimensions in mm)

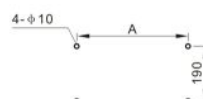
Type \ Size(mm)	A	B	C	D
BYS51-18X(1~3)(J)	642	798	120	208
BYS51-9X(1~3)E(J)				
BYS51-36X(1~3)(J)	800	1380	120	208
BYS51-18X(1~3)E(J)				



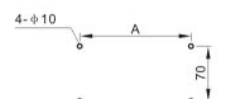
Hanging chain type(D)



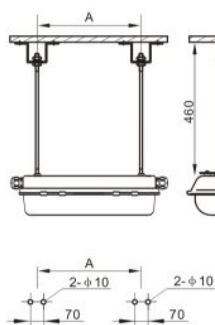
Wall type(B1)



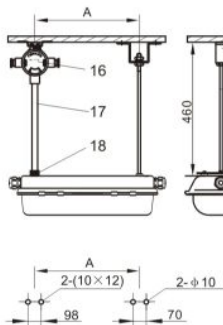
Wall type(B2)



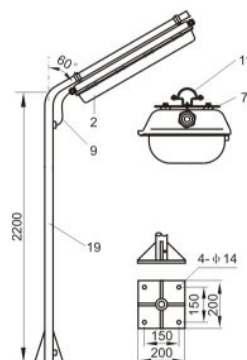
Wall type(B3)



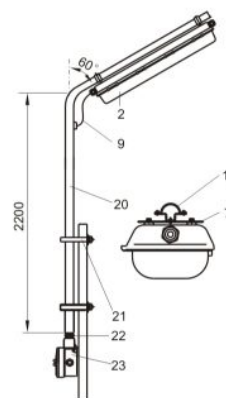
Pendant type (side inlet) (G1)



Pendant type (up inlet) (G2)



Flange type(F)

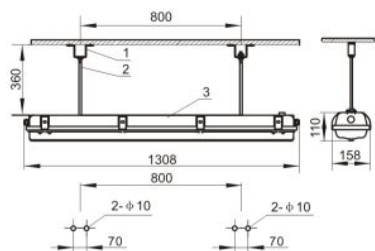


Fence type(h)

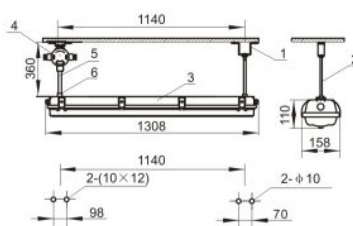
No.	Item	Remark
1	Mounting bracket	
2	Explosion-proof fluorescent light	
3	Hook	Provided by user
4	Chain	
5	Hook	Provided by user
6	Ring bolt	
7	Installation parts	
8	Bending pole	G11/4
9	Explosion-proof flexible conduit	Provided by user
10	Fixed clamp	Provided by user
11	Clamp	
12	Mounting bracket (30°)	

No.	Item	Remark
13	Mounting bracket(90°)	
14	Mounting bracket	
15	Screw rod	M8
16	Explosion-proof terminal boxes(IIC)	AH-G3/4dC
17	Steel tube	G3/4
18	Connecting parts	
19	Flange type pole	G11/4
20	Fence type pole	G11/4
21	U pipe clamp	Provided by user
22	Explosion-proof pipe joint	G3/4
23	Explosion-proof terminal boxes(IIC)	AH-C/G3/4C
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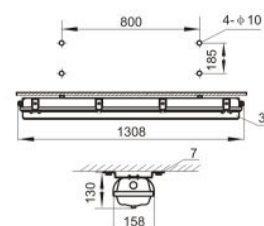
7 Outline and Installation Dimension of T5 fluorescent lamp (Dimensions in mm)



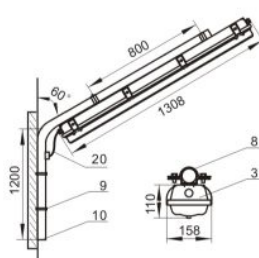
Pendant type (side inlet) (G1)



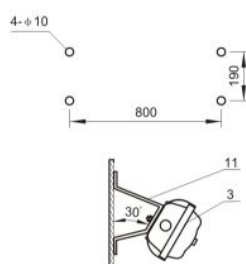
Pendant type (up inlet) (G2)



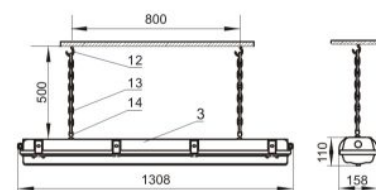
Ceiling type (X)



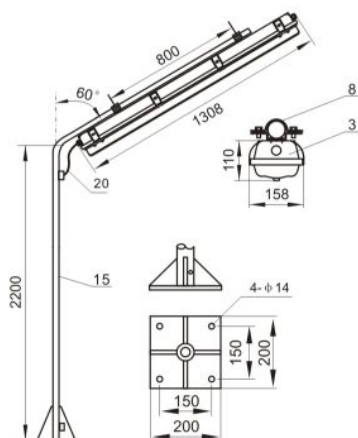
Wall type (B1)



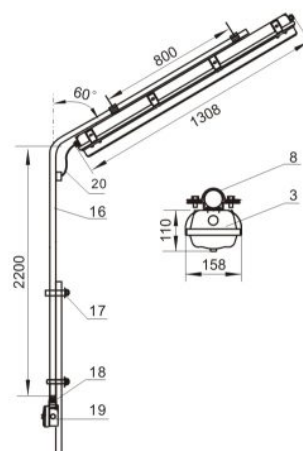
Wall type (B2)



Hanging chain type (D)



Flange type (F)



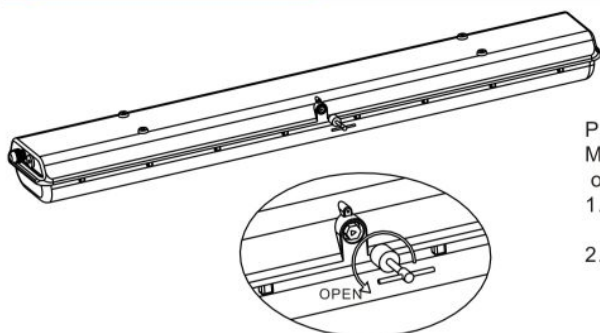
Fence type (h)

No.	Item	Remark
1	Mounting bracket	
2	Screw rod	M8
3	Explosion-proof fluorescent light	
4	Explosion-proof terminal boxes(IIC)	AH-G3/4dC
5	Steel tube	G3/4
6	Connect part	
7	Mounting bracket	
8	Pipe clamp	
9	Fixed pipe clamp	Provided by user
10	Bending pole	G11/4

No.	Item	Remark
11	Mounting bracket	
12	Hook(Expansion)	Provided by user
13	Chain	450mm
14	Eyebolt	M8
15	Flange type pole	G11/4
16	Fence type pole	G11/4
17	U pipe clamp	Provided by user
18	Explosion-proof pipe joint	G3/4
19	Explosion-proof terminal boxes(IIC)	AH-C/G3/4C
20	Explosion-proof flexible conduit	Provided by user

BYS51/52-Series Explosion-proof Fluorescent Light

8 Schematic Diagram



Product features of BYS51:

Mechanical interlocking pressing device and automatic power off function:

1. Power supply and emergency power will cut off automatically, when cover was opened with dedicated wrench;
2. The cover will be locked tightly and power supply will restore automatically, when cover was closed.

9 Accessories list

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

Installation Method	Item	Remark	Qty	Purchase code	Weight (kg)
X-Ceiling type	Mounting bracket		2	2. 14. 0706003	0. 1
D-Hanging chain type	Hook	Provided by user	2		/
	Chain		2	2. 14. 1000101	0. 1
	Spring buckle		2	2. 18. 1604091	0. 006
	Eyebolt		2	2. 18. 1100021	0. 04
	Connecting plate		2	2. 14. 2206003	0. 04
B1-Wall type	Bending pole G11/4		1	4.02.901.0141(18W) 4.02.901.0141(36W)	4. 5
	Explosion proof flexible pipe or cable	Provided by user	1		/
	Fixed pipe clamp	Provided by user	2		/
	Pipe clamp		2	2. 12. 5900010	0. 12
	Connecting plate		2	2. 14. 2206003	0. 04
B2-Wall type	Mounting bracket (30 °)		2	2. 14. 0706001	0. 34
B3-Wall type	Mounting bracket(90 °)		2	2. 14. 0706005	0. 9
G1-Pendant type (side inlet)	Mounting bracket		2	2. 14. 0706051	0. 06
	M8 screw rod		2	2. 19. 1208236	0. 1
	Connecting plate		2	2. 14. 2206003	0. 04
G2-Pendant type (up inlet)	Mounting frame		1	2. 14. 0706051	0. 06
	M8 screw rod		1	2. 19. 1208901	0. 1
	Connecting plate		1	2. 14. 2206003	0. 04
	Explosion proof junction box		1	1. 03. 101. 00001	0. 24
	Steel pipe G3/4		1	4. 02. 901. 0113	0. 28
	Connector in G3/4 out M25X1.5		1	2.12.6021004	0. 08
F-Flange type	Explosion proof flexible pipe or cable	Provided by user	1		/
	Pole of Flange type G11/4		1	1. 02. 901. 00147(18W) 1. 02. 901. 00148(36W)	11
	Pipe clamp		2	2. 12. 5900010	0. 12
	Connecting plate		2	2. 14. 2206003	0. 04
	Explosion proof flexible pipe or cable	Provided by user	1		/
h-Fence type	Pole of Fence type G11/4		1	1. 02. 901. 00144(18W) 1. 02. 901. 00145(36W)	6. 4
	U-clamp	Provided by user	2		/
	Explosion proof pipe joint G3/4	Provided by user	1	1. 03. 209. 00022	0. 06
	Explosion proof junction box	Provided by user	1	1. 03. 101. 00023	0. 24
	Pipe clamp		2	2. 12. 5900010	0. 12
	Connecting plate		2	2. 14. 2206003	0. 04
	Explosion proof flexible pipe or cable	Provided by user	1		/

10 Accessories list

Item	Picture	Purchase code	Weight (kg)
HL0211-9 Explosion-proof LED tube		2. 35. 3100001	0.25
HL0211-18 Explosion-proof LED tube		2. 35. 3100011	0.45
lock wrench(key)		2. 14. 4200001	0.07
Explosion-proof electronic ballast(18WX1)		2. 10. 1300001	0.88
Explosion-proof electronic ballast(18WX2)		2. 10. 1300002	0.96
Explosion-proof electronic ballast(36WX1)		2. 10. 1300021	0.9
Explosion-proof electronic ballast(36WX2)		2. 10. 1300022	0.98
Explosion proof electronic ballast with emergency unit(18WX1)		2. 10. 1400001	1.5
Explosion proof electronic ballast with emergency unit(18WX2)			2.0
Explosion proof electronic ballast with emergency unit(36WX1)		2. 10. 1400007	2.5
Explosion proof electronic ballast with emergency unit(36WX2)			2.8
T8 lamp tube holder(with wire)		2. 10. 0405202	0.02
Explosion-proof control button (T8 fluorescent tube)		2. 35. 0600001	0.08
Explosion-proof electronic ballast(28WX1)		2. 10. 1300011	0.91
Explosion-proof electronic ballast(28WX2)		2. 10. 1300012	0.97
Explosion proof electronic ballast with emergency unit(28WX1)		2. 10. 1400004	2.1
Explosion proof electronic ballast with emergency unit(28WX2)		2. 10. 1400013	2.3
T5 lamp tube holder(with wire)		2.10.0405204	0.01
Explosion-proof control button (T5 fluorescent tube)		2.35.0100022 (HL0201-V) 2.35.0100021 (HL0201-IV)	0.05