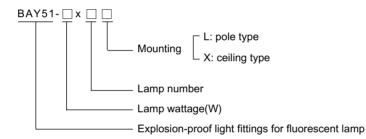
Lighting Technology



BAY51- x C Series Explosion-proof Light Fittings for Fluorescent Lamp

- Explosion protection to
 - -CENELEC
 - -IEC
- Can be used
 - in Zone 1 and Zone 2
- One or two lamp version; Available lamp wattage: 18W x 1, 36W x 1, 58W x 1, 18W x 2, 36W x 2, 58W x 2.
- The glass tube stands 4J impact.
- Enclosure in copper-free aluminium, powder coated external surface, yellow.
- ◆ Electronic ballast, wide voltage range, rapid starting, stable performance, power factor ≥ 0.95.
- End of lamp life (EOL) rectification effect protection.

Catalogue number logic





Selection table

Type/Ordering code	Lamp wattage(W)	Weight(kg)	Type/Ordering code	Lamp wattage(W)	Weight(kg)
BAY51-18 x 1X	18 x 1	4.90	BAY51-18 x 2X	18 x 2	9.50
BAY51-18 x 1L	18 x 1	5.80	BAY51-18 x 2L	18 x 2	9.60
BAY51-36 x 1X	36 x 1	7.90	BAY51-36 x 2X	36 x 2	15.50
BAY51-36 x 1L	36 x 1	8.00	BAY51-36 x 2L	36 x 2	15.60
BAY51-58 x 1X	58 x 1	9.60	BAY51-58 x 2X	58 x 2	17.50
BAY51-58 x 1L	58 x 1	10.00	BAY51-58 x 2L	58 x 2	17.70

Note: Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/9-10).

Zones 1&2

Technical data

Explosion-proof light fittings for fluorescent lamp BAY51- | x | | |

Explosion protection

Gas explosion protection

Certificates

For gas explosion protection

Conformity to standards

LCIE 09 ATEX 3046

(II 2G Ex d IIC T6 Gb

EN 60079-0:2007; EN 60079-1:2007

IEC 60079-0:2007; IEC 60079-1:2007

Material

Enclosure

Copper-free aluminium, powder coated external surface, yellow.

Glass tube Toughened glass, stands 4J impact

Ballast Electronic ballast

Wire guard(optional) Powder-coated carbon steel (white) or stainless steel

Exposed fastener Stainless steel

Lamp

Lamp Wattage(W) PHILIPS T8 (supplied with the light fittings)

18 x 1 18 x 2

36 x 1 36 x 2

58 x 1 58 x 2

Rated voltage 220~240V AC 50/60Hz

Earthing protection M5 (internal & external earth bolt)

Degree of protection IP66

Ambient temperature -20°C ~+55°C

Terminal $3 \times 1.5 \sim 4 \text{mm}^2 (L+N+PE)$

Cable entries

Single lamp 3 x M25 x 1.5 Plug **Dual lamp** 4 x M25 x 1.5 Plug

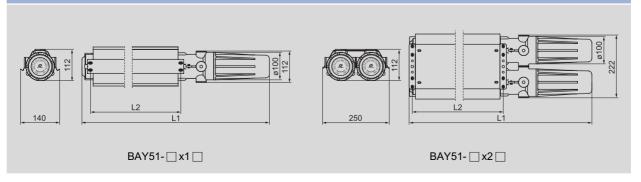
Cable gland(optional) DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20 \sim 25.

Dimensions

Type	Size (mm)		
туре	L1	L2	
BAY51-18x1 🗌	925	575	
BAY51-36x1 🗌	1535	1185	
BAY51-58x1 🗌	1840	1487	

Type	Size (mm)		
Турс	L1	L2	
BAY51-18x2 🗌	925	575	
BAY51-36x2 🗌	1535	1185	
BAY51-58x2 🗌	1840	1487	

Dimension drawings (all dimensions in mm) - subject to alteration



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Photometric data

18W x 1 photometric data

Rated luminous flux:1050lm;

The data from PHILIPS lamp;

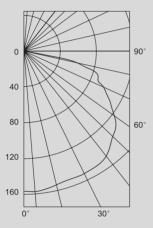
Luminous intensity distribution cd/1000lm

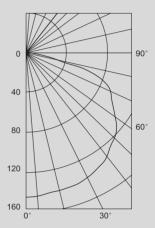


Rated luminous flux:2100lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm







Angle	СР
0	164
5	163
10	161
15	160
20	160
25	160
30	160
35	159
40	149
45	144

Angle	СР
50	133
55	120
60	110
65	99
70	90
75	70
80	28
85	0
90	0

Angle	CP
0	335
5	334
10	330
15	327
20	325
25	323
30	317
35	310
40	297
45	286

CP
274
252
232
211
177
110
48
0
0

We can provide lighting design and data by professional lighting software DIALUX based upon stimulated site situation on request.

Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

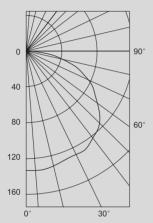
Photometric data

36W x 1 photometric data

Rated luminous flux:2500lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm



Angle	СР	
0	333	
5	331	
10	330	
15	328	
20	324	
25	324	
30	324	
35	318	
40	306	
45	297	

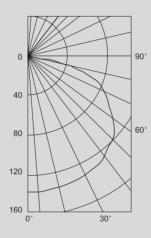
Angle	СР
50	280
55	249
60	223
65	188
70	163
75	119
80	72
85	0
90	0

36W x 2 photometric data

Rated luminous flux:5000lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm



Angle	CP
0	698
5	699
10	694
15	687
20	686
25	683
30	675
35	657
40	628
45	604

Angle	СР
50	577
55	532
60	480
65	428
70	362
75	258
80	137
85	0
90	0

We can provide lighting design and data by professional lighting software DIALUX based upon stimulated site situation on request.

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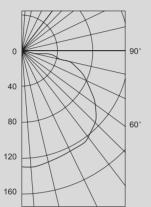
Photometric data

58W x 1 photometric data

Rated luminous flux:4000lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm



Angle	СР	
0	518	
5	516	
10	510	
15	505	
20	498	
25	495	
30	492	
35	481	
40	462	

447

45

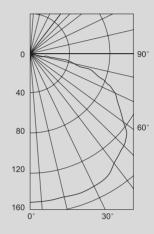
Angle	CP
50	416
55	377
60	349
65	315
70	279
75	220
80	143
85	0
90	0

58W x 2 photometric data

Rated luminous flux:8000lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm



Angle	CP
0	1103
5	1101
10	1095
15	1088
20	1088
25	1082
30	1062
35	1027
40	984
45	951
	0 5 10 15 20 25 30 35 40

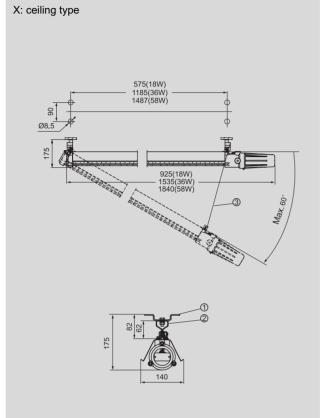
CP
913
827
748
668
552
400
249
0
0

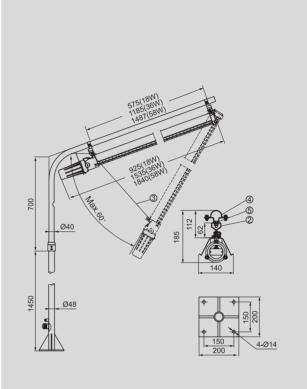
We can provide lighting design and data by professional lighting software DIALUX based upon stimulated site situation on request.

L: pole type (the pole is provided by user)

Mounting types for light fittings with single lamp tube

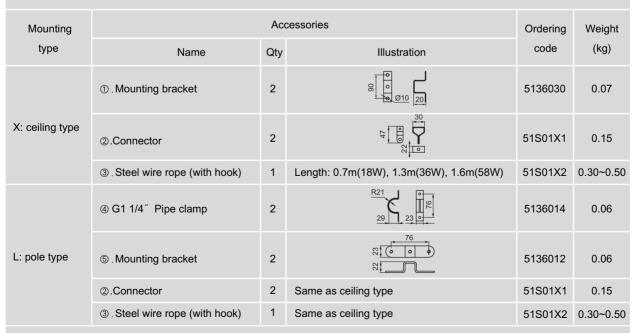
As reference to the installation of site





Mounting accessories and spare parts table (light fittings with single lamp tube)

Supplied according to the mounting type



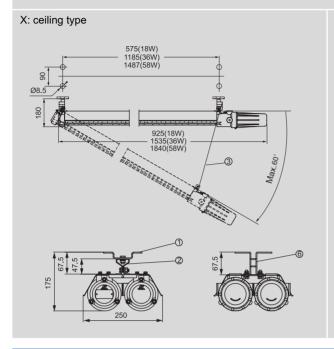
Note: Accessories not in the table shall be supplied by user.

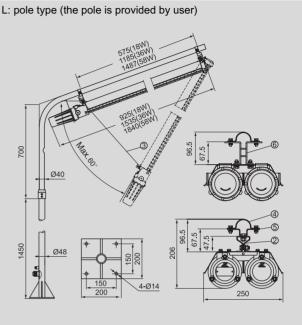


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Mounting types for light fittings with dual lamp tube

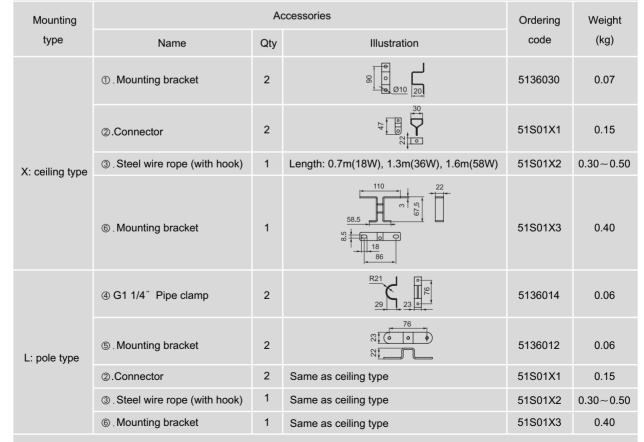
As reference to the installation of site





Mounting accessories and spare parts table (light fittings with dual lamp tube)

Supplied according to the mounting type



Note: Accessories not in the table shall be supplied by user.



Power connection and precautions (take 36W x 2 as an example)



Open the cover

♦ Loosen the tightening bolts on enclosure, screw out cover. (the two lamp tubes inside light fittings have been reliably connected; all lamp tubes are equippd with connecting terminals; correct connection for any terminal enables lamp tube power on).



Power connection

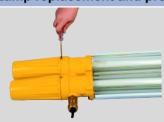
♦ Screw out the seal plug at all inlet entries; pass cables through proper explosion-proof cable gland; connect the external wires L, N and PE to connecting bolts of internal connecting terminals reliably and ensure the inner electric clearance. After connection, lock the cable entry.



Close the cover

Check if the power connection is correct, then screw in the cover and screw down the tightening bolts.

Lamp replacement and precautions (take 36W x 2 as an example)



Open the cover

♦ Loosen the tightening bolts on enclosure, screw out cover.



Take out the lampwick

- Unscrew the M5 blots connecting lampwick support and enclosure, draw out the whole lampwick.
 - Loosen connector of internal wires, draw out the whole lampwick.



Replace the lamp tube

- ♦ Take out lamp tube: rotate the lamp tube at 90°, then take out the lamp tube from the groove of lamp holder.
- ♦ Install the lamp tube: align the pins of lamp tube with groove and press them into the groove, ensuring good contact between lamp tube and lamp holder, then rotate the lamp tube at 90° to lock the lamp tube tightly.



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