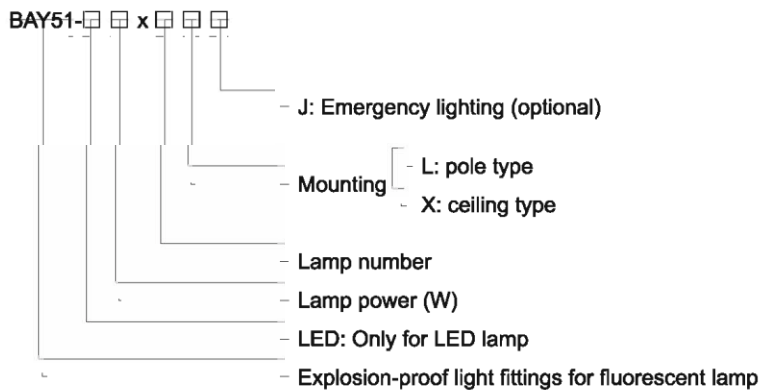




## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

- ◆ Explosion protection to
  - CENELEC
  - IEC
  - NEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
  - Class I, Zone 1 and Zone 2
  - Class I, Division 1, Groups A, B, C, D
- ◆ Single or dual lamp versions
- ◆ Available lamp and power
  - Fluorescent lamps: 18W x 1, 36W x 1, 58W x 1,  
18W x 2, 36W x 2, 58W x 2.
  - LED lamps: 9W x 1, 9W x 2, 18W x 1, 18W x 2.
- ◆ The glass tube stands 4J impact.
- ◆ Enclosure in copper-free aluminium, powder coated surface yellow (RAL1021).
- ◆ Electronic ballast, wide voltage range, rapid starting, stable performance, power factor  $\geq 0.95$ .
- ◆ End of lamp life (EOL) rectification effect protection.

### Catalogue number logic



Zones 1&2; 21&22

# Light Fittings for Fluorescent Lamp

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

# 2

### Technical data

#### Explosion-proof light fittings for fluorescent lamp **BAY51-□x□□**

#### Explosion protection

Gas explosion protection  
Dust explosion protection

⊕ II 2 G Ex d IIC T6 Gb      Ex d IIC T6 Gb  
⊕ II 2 D Ex tb IIIC T80°C Db IP66      Ex t IIIC T80°C Db IP66

#### Certificates

LCIE 09 ATEX 3046; IECEx CQM 12.0042X; FM (USA); POCC CN.ГБ 05.B03637(Russia)

#### Conformity to standards

EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-31: 2009  
IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-31: 2008

#### Material

Enclosure  
Glass tube  
Ballast  
Wire guard (optional)  
Exposed fastener

Copper-free aluminium, powder coated surface, yellow (RAL1021)  
Toughened glass, stands 4J impact  
Electronic ballast  
Powder coated carbon steel (white) or stainless steel  
Stainless steel

#### Lamp

Lamp brand  
Lamp power (W)

PHILIPS T8 (supplied with the light fittings)  
18W x 1    18W x 2  
36W x 1    36W x 2  
58W x 1    58W x 2

#### Rated voltage

100~300V AC 50/60Hz

#### Earthing protection

M5 (internal & external earth bolts)

#### Degree of protection

IP66

#### Ambient temperature

-20°C~+55°C (-60°C~+55°C)

#### Terminal

3 x 1.5~4mm<sup>2</sup> (L+N+PE)

#### Cable entries

Single lamp  
Dual lamp

2 x M25 x 1.5 Plug  
2 x M25 x 1.5 Plug

#### Cable gland (optional)

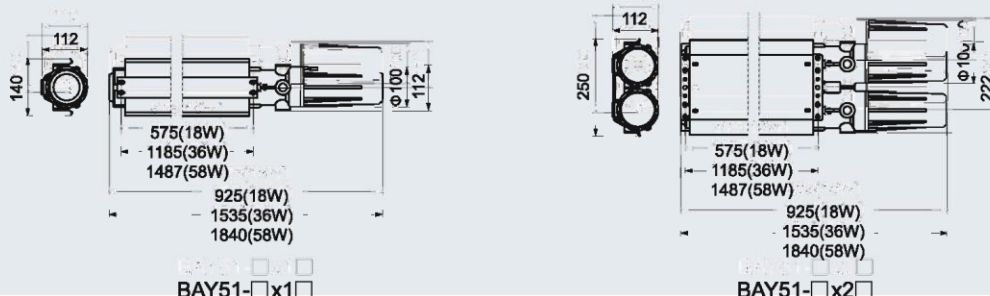
DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~25.

### Selection table

Type/Ordering code	Lamp power(W)	Weight(kg)	Type/Ordering code	Lamp power(W)	Weight(kg)
BAY51-18 x 1X	18 x 1	5.60	BAY51-18 x 2X	18 x 2	10.60
BAY51-18 x 1L	18 x 1	6.50	BAY51-18 x 2L	18 x 2	11.55
BAY51-36 x 1X	36 x 1	8.80	BAY51-36 x 2X	36 x 2	16.30
BAY51-36 x 1L	36 x 1	9.30	BAY51-36 x 2L	36 x 2	16.85
BAY51-58 x 1X	58 x 1	10.40	BAY51-58 x 2X	58 x 2	18.30
BAY51-58 x 1L	58 x 1	10.85	BAY51-58 x 2L	58 x 2	19.20

**Note:** Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/15~16).

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



## Light Fittings for Fluorescent Lamp

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

#### Technical data

#### Explosion-proof emergency light fittings for fluorescent lamp BAY51-□x□□J

<b>Explosion protection</b>	<p>Gas explosion protection Dust explosion protection</p> <p><b>Certificates</b></p> <p><b>Conformity to standards</b></p>	<p>⊕ II 2 G Ex d IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80°C Db IP66</p> <p>LCIE 13 ATEX____; IECEx CQM 13.0004X; FM (USA); GOST.R (Russia)</p> <p>EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-31: 2009 IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-31: 2008</p>
<b>Material</b>	<p>Enclosure Glass tube Emergency unit</p> <p>Ballast Wire guard (optional) Exposed fastener</p> <p><b>Lamp</b></p> <p>Lamp brand Lamp power (W) Emergency power (W)</p> <p><b>Emergency start time</b> <b>Charge time</b> <b>Emergency lighting time</b> <b>Rated voltage</b> <b>Earthing protection</b> <b>Degree of protection</b> <b>Ambient temperature</b> <b>Terminal</b> <b>Cable entries</b> <b>Cable gland (optional)</b></p>	<p>Copper-free aluminium, powder coated surface, yellow (RAL1021)</p> <p>Toughened glass, stands 4J impact</p> <p>Special emergency controller and NI-MH battery pile, with protection against over charge and over discharge</p> <p>Electronic ballast</p> <p>Powder coated carbon steel (white) or stainless steel</p> <p>Stainless steel</p> <p>PHILIPS T8 (supplied with the light fittings)</p> <p>18W x 2, 36W x 2, 58W x 2 18W x 1, 36W x 1, 58W x 1</p> <p>0.3s 24h 120min (180min is optional)</p> <p>100~300V AC 50/60Hz</p> <p>M5 (internal &amp; external earth bolts)</p> <p>IP66</p> <p>-20°C~+55°C</p> <p>3 x 1.5~4mm<sup>2</sup> (L+N+PE) 4 x M25 x 1.5 Plug</p> <p>DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~25.</p>

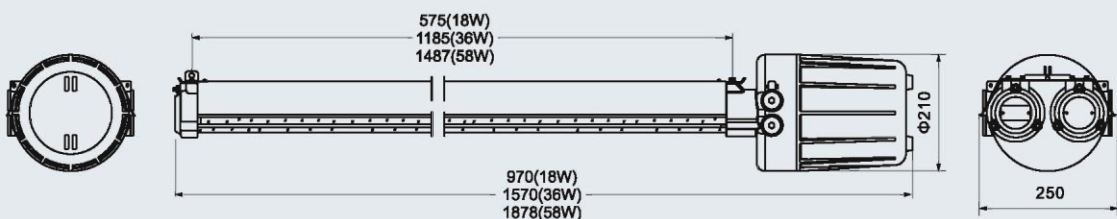


#### Selection table

Type/Ordering code	Lamp power(W)	Weight(kg)	Type/Ordering code	Lamp power(W)	Weight(kg)
BAY51-18 x 2XJ	18 x 2	14.50	BAY51-36 x 2LJ	36 x 2	20.30
BAY51-18 x 2LJ	18 x 2	14.60	BAY51-58 x 2XJ	58 x 2	22.20
BAY51-36 x 2XJ	36 x 2	20.20	BAY51-58 x 2LJ	58 x 2	22.30

**Note:** Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/17).

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



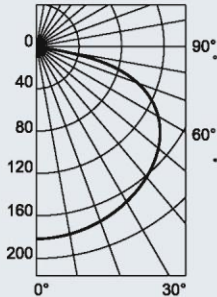
BAY51-□x2□J

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

### Photometric data (BAY51-□x□□, BAY51-□x□□J)

#### 18W x 1 photometric data

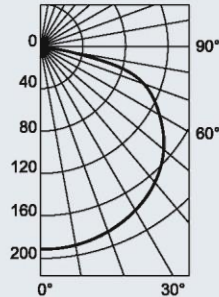
Rated luminous flux:1050lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	192	50	127
5	190	55	115
10	187	60	105
15	186	65	82
20	186	70	32
25	182	75	0
30	174	80	0
35	168	85	0
40	155	90	0
45	140		

#### 18W x 2 photometric data

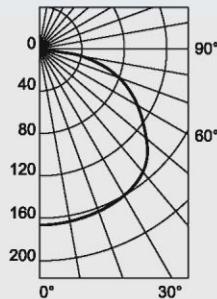
Rated luminous flux:2100lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	402	50	328
5	400	55	302
10	395	60	280
15	397	65	254
20	390	70	212
25	387	75	133
30	380	80	58
35	375	85	0
40	356	90	0
45	345		

#### 36W x 1 photometric data

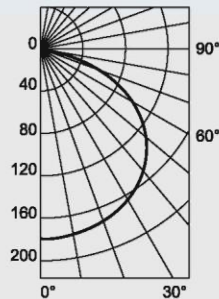
Rated luminous flux:2500lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	417	50	350
5	415	55	312
10	412	60	280
15	410	65	235
20	405	70	205
25	405	75	149
30	405	80	90
35	400	85	0
40	385	90	0
45	370		

#### 36W x 2 photometric data

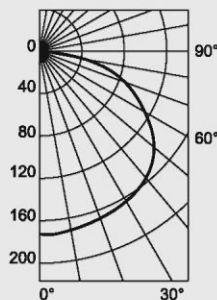
Rated luminous flux:5000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	895	50	740
5	897	55	682
10	889	60	615
15	881	65	550
20	880	70	465
25	875	75	330
30	865	80	176
35	845	85	0
40	805	90	0
45	775		

#### 58W x 1 photometric data

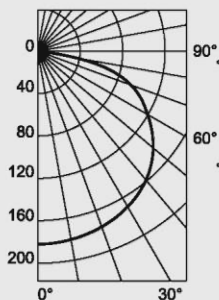
Rated luminous flux:4000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	690	50	555
5	688	55	502
10	680	60	465
15	675	65	420
20	665	70	372
25	660	75	294
30	656	80	190
35	640	85	0
40	620	90	0
45	595		

#### 58W x 2 photometric data

Rated luminous flux:8000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	1447	50	1197
5	1445	55	1085
10	1436	60	985
15	1427	65	880
20	1430	70	725
25	1420	75	525
30	1390	80	365
35	1350	85	0
40	1290	90	0
45	1250		



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



## Light Fittings for Fluorescent Lamp

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

#### Technical data

#### Explosion-proof LED light fittings for fluorescent lamp BAY51-LED □x□□

##### Explosion protection

Gas explosion protection  
Dust explosion protection

Ex II 2 G Ex d IIC T6 Gb  
Ex II 2 D Ex t IIIC T80°C Db IP66

##### Certificates

##### Conformity to standards

LCIE 11 ATEX 3112X; IECEx CQM 12.0005; FM (USA); GOST.R (Russia)  
EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-31: 2009  
IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-31: 2008

##### Material

Enclosure  
Glass tube  
Power controller

Copper-free aluminium, powder coated surface, yellow (RAL1021).  
Toughened glass, stands 4J impact.  
Wide voltage input, CC-CV (constant current - constant voltage) output, power factor  $\geq 0.98$ , with function of distributed current, constant current, surge-proof and anti-electromagnetic interference, and protection against overcurrent, open circuit, and short circuit.

Wire guard (optional)  
Exposed fastener

Powder coated carbon steel (white) or stainless steel  
Stainless steel

##### Lamp

Lamp specification  
Lamp power (W)

CREE plural white LED modules (supplied with the light fittings)  
9W x 1, 9W x 2, 18W x 1, 18W x 2

##### Rated voltage

##### Earthing protection

##### Degree of protection

##### Ambient temperature

##### Terminal

##### Mounting

##### Cable entries

Single lamp  
Dual lamp

3 x 1.5~4mm<sup>2</sup> (L+N+PE)  
Ceiling type, pole type

##### Cable gland

DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~25.

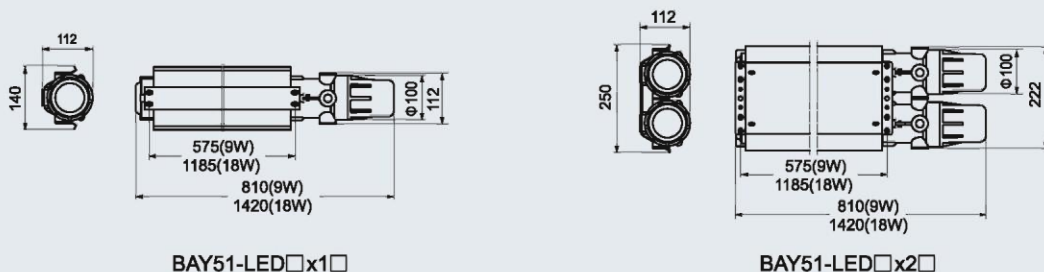


#### Selection table

Type/Ordering code	Lamp power(W)	Weight(kg)	Type/Ordering code	Lamp power(W)	Weight(kg)
BAY51-LED 9 x 1X	9 x 1	5.50	BAY51-LED 18 x 1X	18 x 1	8.30
BAY51-LED 9 x 1L	9 x 1	5.90	BAY51-LED 18 x 1L	18 x 1	8.35
BAY51-LED 9 x 2X	9 x 2	9.80	BAY51-LED 18 x 2X	18 x 2	15.70
BAY51-LED 9 x 2L	9 x 2	10.50	BAY51-LED 18 x 2L	18 x 2	16.40

**Note:** Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/15~16).

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



# Light Fittings for Fluorescent Lamp

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

### Technical data

#### Explosion-proof emergency LED light fittings for fluorescent lamp BAY51-LED □x□□J

##### Explosion protection

- Gas explosion protection
- Dust explosion protection

⊕ II 2 G Ex d IIC T6 Gb  
 ⊕ II 2 D Ex tb IIIC T80°C Db IP66

##### Certificates

LCIE 13 ATEX \_\_\_\_; IECEX; FM (USA); GOST.R (Russia)

##### Conformity to standards

EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-31: 2009  
 IEC 60079-0: 2011, IEC 60079-1: 2007, IEC 60079-31: 2008

##### Material

- Enclosure
- Glass tube
- Power controller

Copper-free aluminium, powder coated surface, yellow (RAL1021).  
 Toughened glass, stands 4J impact.

Wide voltage input, CC-CV (constant current - constant voltage) output, power factor ≥0.98, with function of distributed current, constant current, surge-proof and anti-electromagnetic interference, and protection against overcurrent, open circuit, and short circuit.

##### Emergency unit

Special emergency controller and NI-MH battery pile, with protection against over charge and over discharge

- Wire guard (optional)
- Exposed fastener

Powder coated carbon steel (white) or stainless steel  
 Stainless steel

##### Lamp

- Lamp specification
- Lamp power (W)
- Emergency power (W)

CREE plural white LED modules (supplied with the light fittings)  
 9W x 2, 18W x 2  
 9W x 1, 18W x 1

##### Emergency start time

0.3s

##### Charge time

24h

##### Emergency lighting time

120min (180min is optional)

##### Rated voltage

110~265V AC 50/60Hz

##### Earthing protection

M5 (internal & external earth bolts)

##### Degree of protection

IP66

##### Ambient temperature

-40°C~+55°C

##### Terminal

3 x 1.5~4mm<sup>2</sup> (L+N+PE)

##### Mounting

Ceiling type, pole type

##### Cable entries

4 x M25 x 1.5 Plug

##### Cable gland

DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~25.

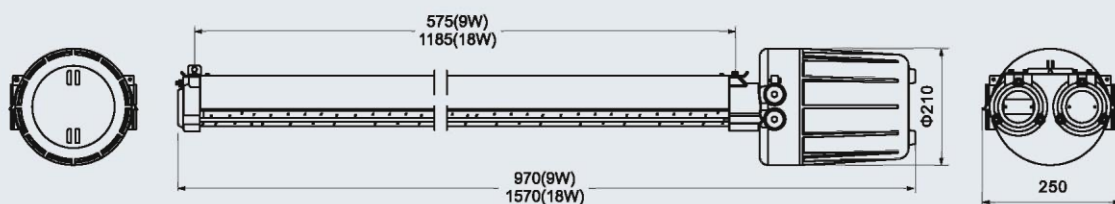


### Selection table

Type/Ordering code	Lamp power(W)	Weight(kg)	Type/Ordering code	Lamp power(W)	Weight(kg)
BAY51-LED 9 x 2XJ	9 x 2	13.70	BAY51-LED 18 x 2XJ	18 x 2	19.40
BAY51-LED 9 x 2LJ	9 x 2	13.80	BAY51-LED 18 x 2LJ	18 x 2	19.50

**Note:** Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/17).

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



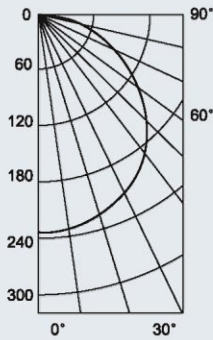
BAY51- LED□x2□J

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

### Photometric data (BAY51-LED□ x □□, BAY51-LED□ x □□J)

#### 9W x 1 photometric data

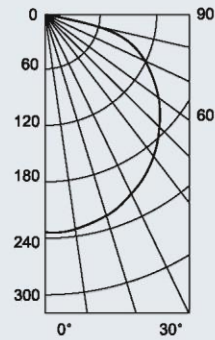
Rated luminous flux:945lm;  
The data from CREE lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	215	50	113
5	210	55	100
10	204	60	85
15	198	65	75
20	187	70	60
25	177	75	48
30	166	80	28
35	154	85	0
40	140	90	0
45	127		

#### 9W x 2 photometric data

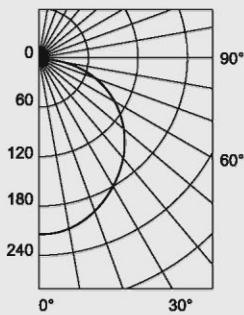
Rated luminous flux:1890lm;  
The data from CREE lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	418	50	270
5	415	55	245
10	410	60	220
15	400	65	190
20	390	70	160
25	375	75	115
30	360	80	45
35	340	85	0
40	320	90	0
45	295		

#### 18W x 1 photometric data

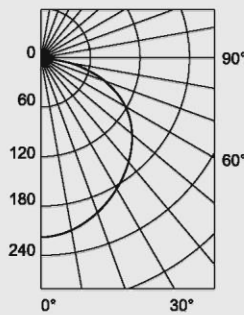
Rated luminous flux:1890lm;  
The data from CREE lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	405	50	282
5	405	55	260
10	400	60	232
15	396	65	202
20	380	70	150
25	376	75	107
30	362	80	63
35	345	85	0
40	326	90	0
45	306		

#### 18W x 2 photometric data

Rated luminous flux:3780lm;  
The data from CREE lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	818	50	500
5	817	55	500
10	810	60	430
15	795	65	365
20	775	70	303
25	750	75	230
30	720	80	131
35	680	85	0
40	640	90	0
45	595		



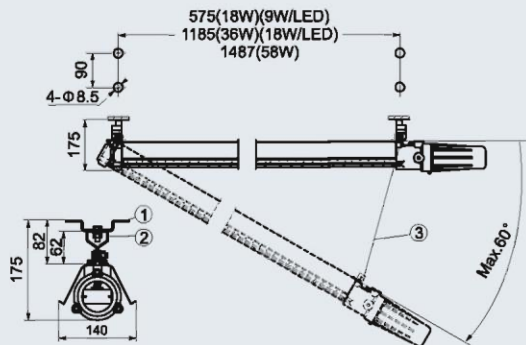
We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

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

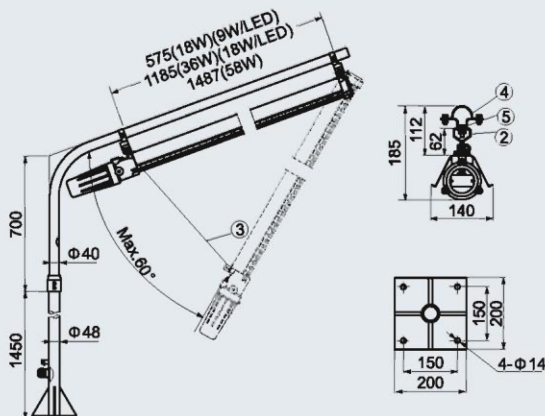
## Mounting type for light fittings with single lamp tube (all dimensions in mm) - subject to alteration

### Installation reference

#### X: ceiling type



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



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

Supplied according to the mounting type

Mounting type	Accessories			Ordering code	Weight (kg)
	Name	Qty	Illustration		
X: ceiling type	①.Mounting bracket	2		5136030	0.07
	②.Connector	2		51S01X1	0.04
	③.Steel wire rope (with hook)	1	Length: 0.7m (18W), 1.3m (36W), 1.6m (58W)	51S01X2	0.30~0.50
L: pole type	④.G1 1/4" Pipe clamp	2		5136014	0.04
	⑤.Mounting bracket	2		5136012	0.04
	②.Connector	2	Same as ceiling type	51S01X1	0.04
	③.Steel wire rope (with hook)	1	Same as ceiling type	51S01X2	0.30~0.50

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

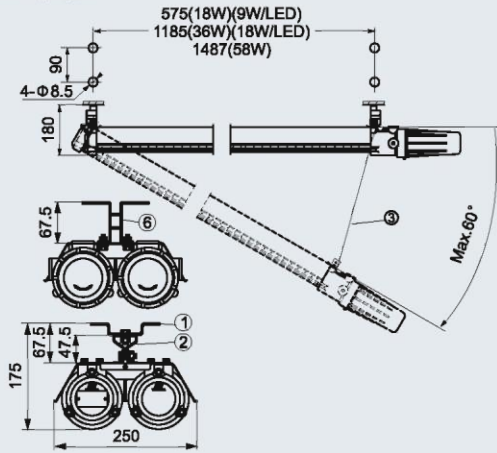


## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

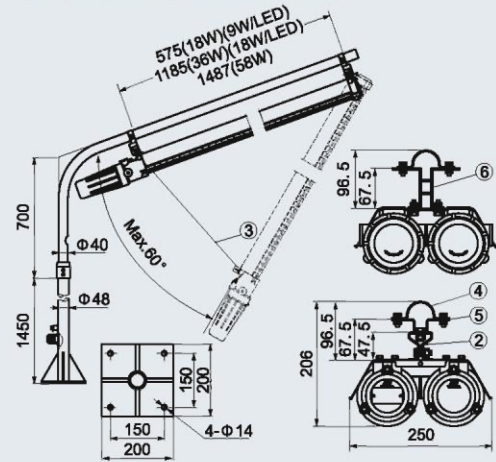
### Mounting type for light fittings with dual lamp tube (all dimensions in mm) - subject to alteration

Installation reference

X: ceiling type



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



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

Supplied according to the mounting type

Mounting type	Accessories			Ordering code	Weight (kg)
	Name	Qty	Illustration		
X: ceiling type	①. Mounting bracket	1		5136030	0.07
	②. Connector	1		51S01X1	0.04
	③. Steel wire rope (with hook)	1	Length: 0.7m (18W), 1.3m (36W), 1.6m (58W)	51S01X2	0.30~0.50
	⑥. Mounting bracket	1		51D01X3	0.13
L: pole type	④. G1 1/4" Pipe clamp	2		5136014	0.04
	⑤. Mounting bracket	1		5136012	0.04
	②. Connector	2	Same as ceiling type	51S01X1	0.04
	③. Steel wire rope (with hook)	1	Same as ceiling type	51S01X2	0.30~0.50
	⑥. Mounting bracket	1	Same as ceiling type	51D01X3	0.13

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

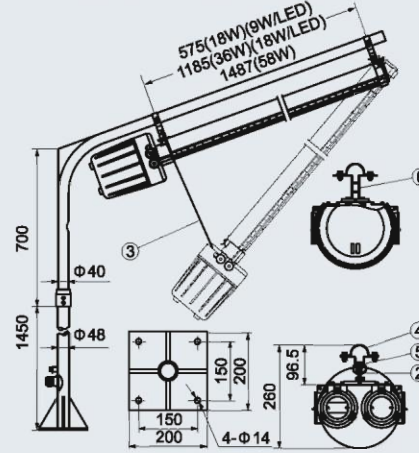
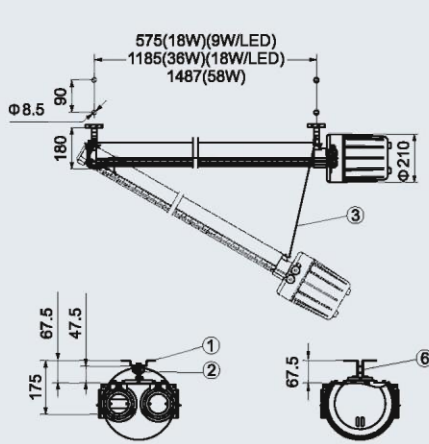
## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

### Mounting type for light fittings with dual lamp tube (all dimensions in mm) - subject to alteration

Installation reference

X: ceiling type (for: BAY51-□ × 2XJ; BAY51-LED□ × 2XJ)

L: pole type (the pole is provided by user)  
(for: BAY51-□ × 2LJ; BAY51-LED□ × 2LJ)



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

Supplied according to the mounting type

Mounting type	Accessories			Ordering code	Weight (kg)
	Name	Qty	Illustration		
X: ceiling type	①.Mounting bracket	1		5136030	0.07
	②.Connector	1		51S01X1	0.04
	③.Steel wire rope (with hook)	1	Length: 0.7m (18W), 1.3m (36W), 1.6m (58W)	51S01X2	0.30~0.50
	⑥.Mounting bracket	1		51D01X3	0.13
L: pole type	④.G1 1/4" Pipe clamp	2		5136014	0.04
	⑤.Mounting bracket	1		5136012	0.04
	②.Connector	2	Same as ceiling type	51S01X1	0.04
	③.Steel wire rope (with hook)	1	Same as ceiling type	51S01X2	0.30~0.50
	⑥.Mounting bracket	1	Same as ceiling type	51D01X3	0.13

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

