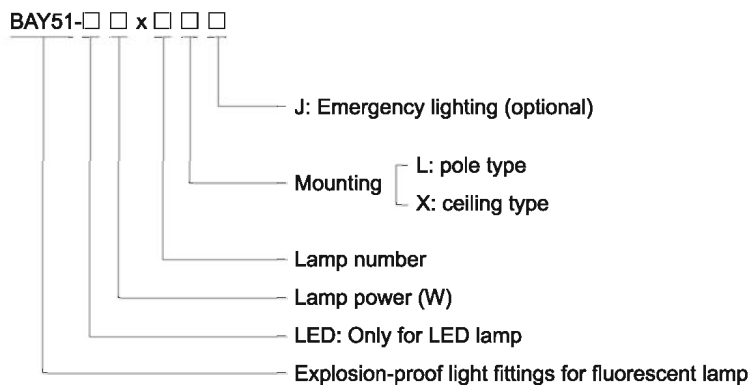




## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

- ◆ 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

#### Technical data

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

##### Explosion protection

Gas explosion protection

⊕ II 2 G Ex d IIC T6 Gb

Dust explosion protection

⊕ II 2 D Ex t IIIC T80°C Db IP66

##### Certificates

LCIE 11 ATEX 3112X; IECEx CQM 12.0005; FM (USA); GOST.R (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

Copper-free aluminium, powder coated surface, yellow (RAL1021).

Glass tube

Toughened glass, stands 4J impact.

Power controller

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)

Powder coated carbon steel (white) or stainless steel

Exposed fastener

Stainless steel

##### Lamp

Lamp specification

CREE plural white LED modules (supplied with the light fittings)

Lamp power (W)

9W x 1, 9W x 2, 18W x 1, 18W x 2

##### 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

Single lamp

2 x M25 x 1.5 Plug

Dual lamp

2 x M25 x 1.5 Plug

##### Cable gland

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

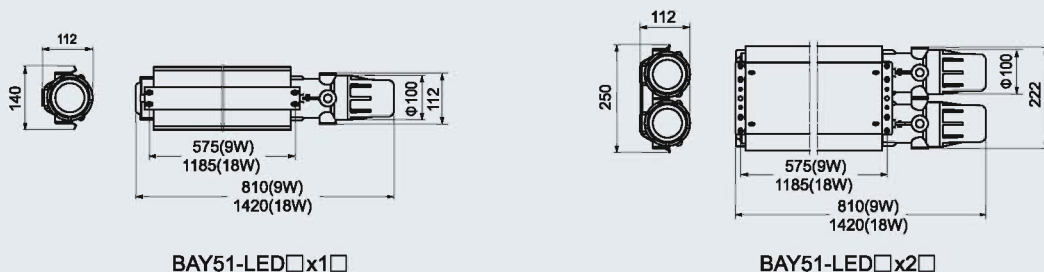


#### Selection table

| Type/Ordering code | Lamp power(W) | Weight(kg) | Type/Ordering code | Lamp power(W) | Weight(kg) |
|--------------------|---------------|------------|--------------------|---------------|------------|
| BAY51-LED 9 x 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

Ex II 2 G Ex d IIC T6 Gb  
Ex 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  $\geq 0.98$ , with function of distributed current, constant current, surge-proof and anti-electromagnetic interference, and protection against overcurrent, open circuit, and short circuit.

##### 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.

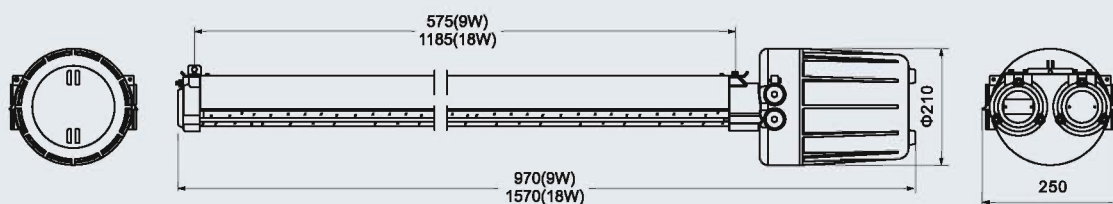


### Selection table

| 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



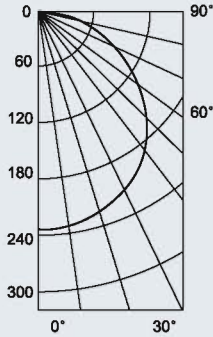
BAY51- LED□x2□J

## 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

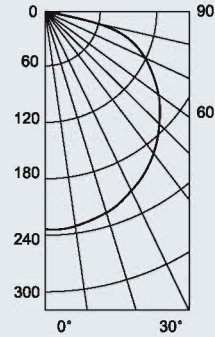
Rated luminous flux:945lm;  
The data from CREE lamp;  
Luminous intensity distribution cd/1000lm



| 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

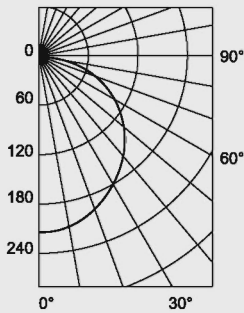
Rated luminous flux:1890lm;  
The data from CREE lamp;  
Luminous intensity distribution cd/1000lm



| 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

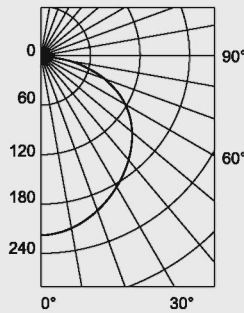
Rated luminous flux:1890lm;  
The data from CREE lamp;  
Luminous intensity distribution cd/1000lm



| 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 |       |     |



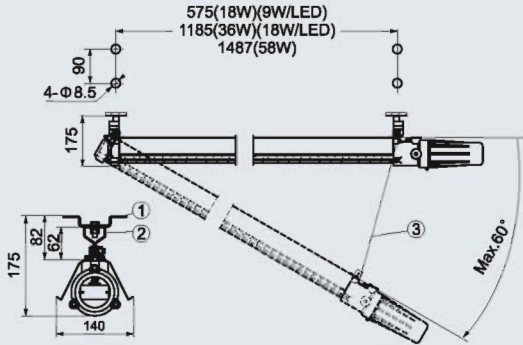
We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

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

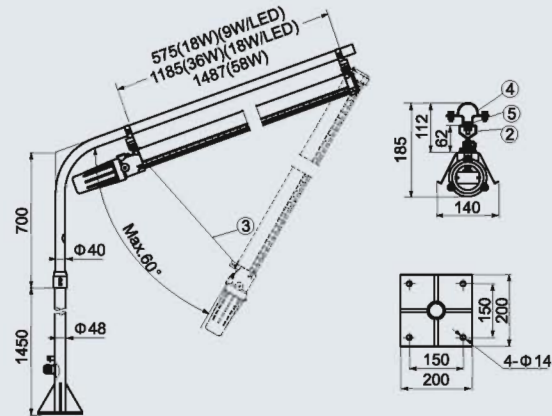
### Mounting type for light fittings with single lamp tube (all dimensions in mm) - subject to alteration

#### 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.

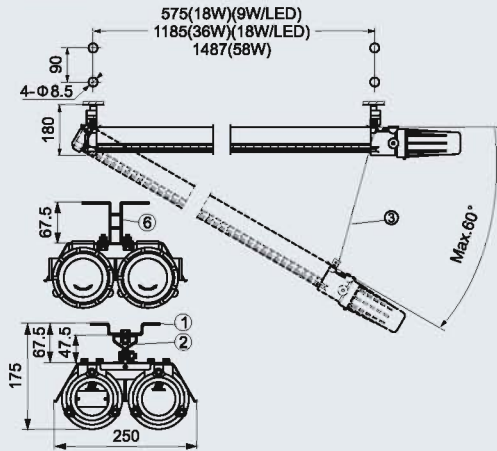


## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

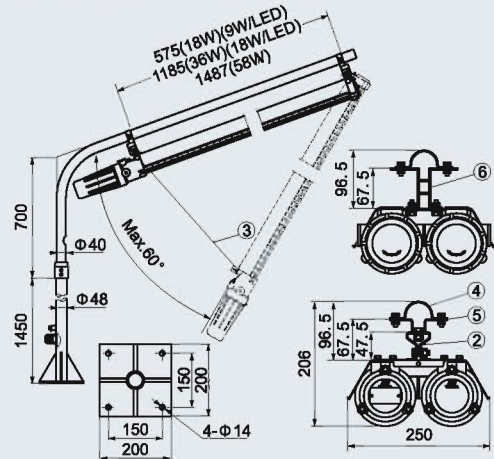
### Mounting type for light fittings with dual lamp tube (all dimensions in mm) - subject to alteration

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.



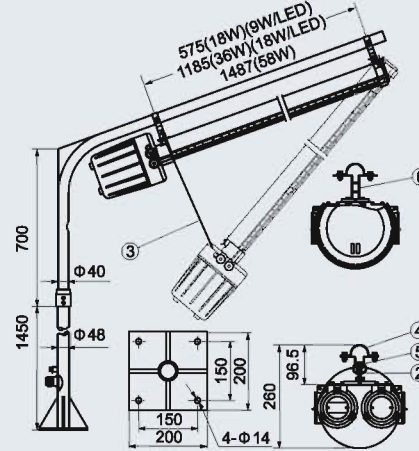
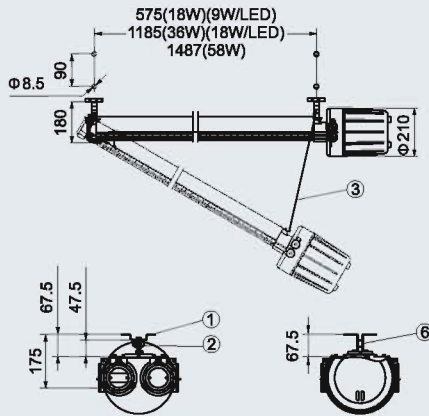
## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

### 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.

