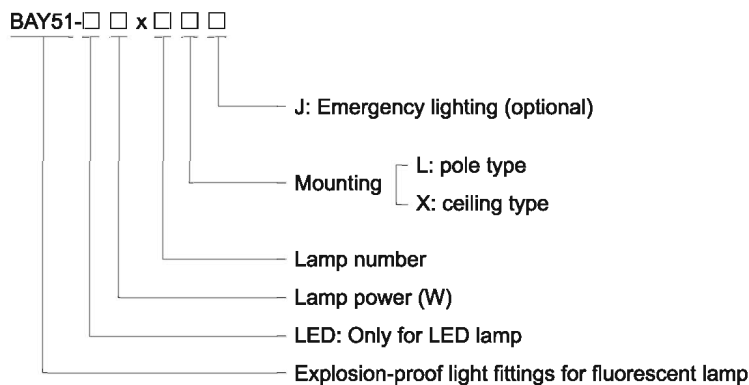




## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

- ◆ 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

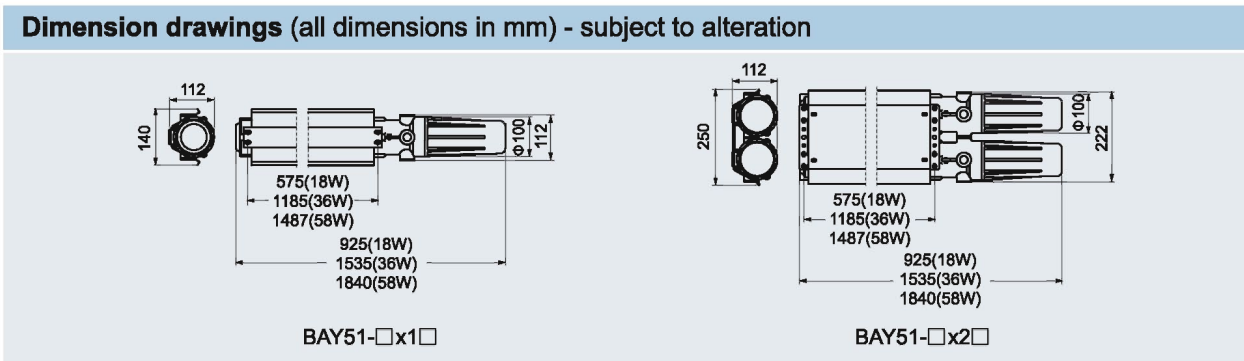
## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

Technical data							
<b>Explosion-proof light fittings for fluorescent lamp</b> <b>BAY51-□x□□</b>							
<b>Explosion protection</b>	⚠ 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						
<b>Gas explosion protection</b>							
<b>Dust explosion protection</b>							
<b>Certificates</b>	LCIE 09 ATEX 3046; IECEx QCM 12.0042X; FM (USA); POCC CN.ГБ 05.B03637(Russia)						
<b>Conformity to standards</b>	EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-31: 2009 IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-31: 2008						
<b>Material</b>							
Enclosure	Copper-free aluminium, powder coated surface, yellow (RAL1021)						
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						
<b>Lamp</b>							
Lamp brand	PHILIPS T8 (supplied with the light fittings)						
Lamp power (W)	<table border="1" style="margin-left: 20px;"> <tr> <td>18W x 1</td> <td>18W x 2</td> </tr> <tr> <td>36W x 1</td> <td>36W x 2</td> </tr> <tr> <td>58W x 1</td> <td>58W x 2</td> </tr> </table>	18W x 1	18W x 2	36W x 1	36W x 2	58W x 1	58W x 2
18W x 1	18W x 2						
36W x 1	36W x 2						
58W x 1	58W x 2						
<b>Rated voltage</b>	100~300V AC 50/60Hz						
<b>Earthing protection</b>	M5 (internal & external earth bolts)						
<b>Degree of protection</b>	IP66						
<b>Ambient temperature</b>	-20°C~+55°C (-60°C~+55°C)						
<b>Terminal</b>	3 x 1.5~4mm <sup>2</sup> (L+N+PE)						
<b>Cable entries</b>							
Single lamp	2 x M25 x 1.5 Plug						
Dual lamp	2 x M25 x 1.5 Plug						
<b>Cable gland (optional)</b>	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).



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

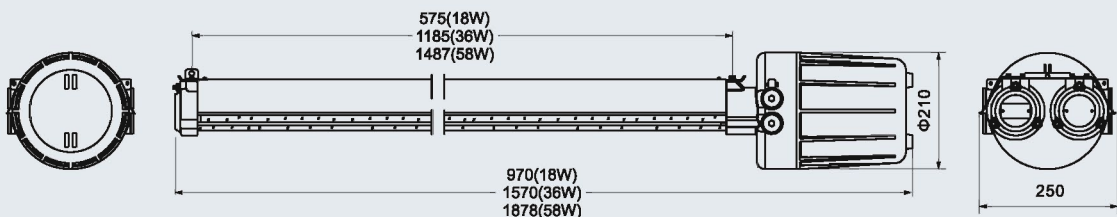


#### Selection table

Type/Ordering code	Lamp power(W)	Weight(kg)	Type/Ordering code	Lamp power(W)	Weight(kg)
BAY51-18 x 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



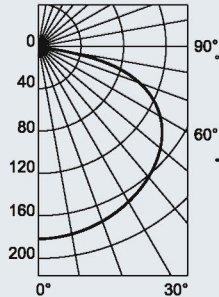
BAY51-□x2□J

## 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

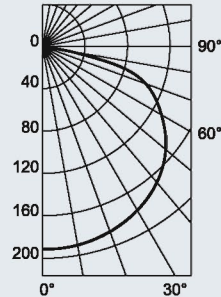
Rated luminous flux:1050lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



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

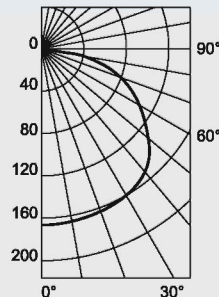
Rated luminous flux:2100lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



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

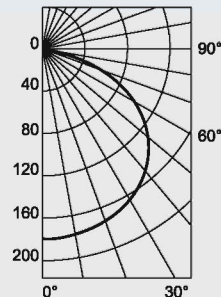
Rated luminous flux:2500lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



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

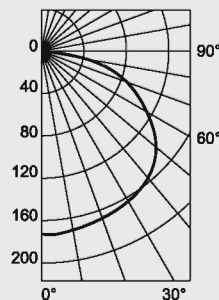
Rated luminous flux:5000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



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

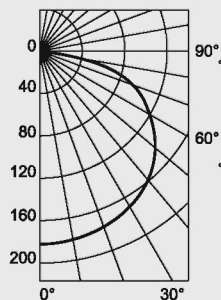
Rated luminous flux:4000lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



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

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.

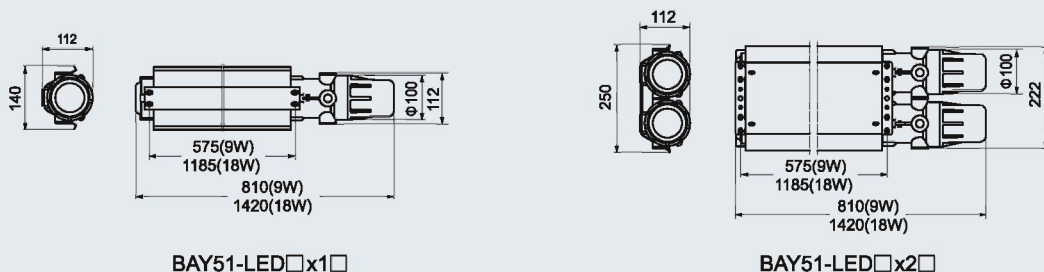


#### Selection table

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



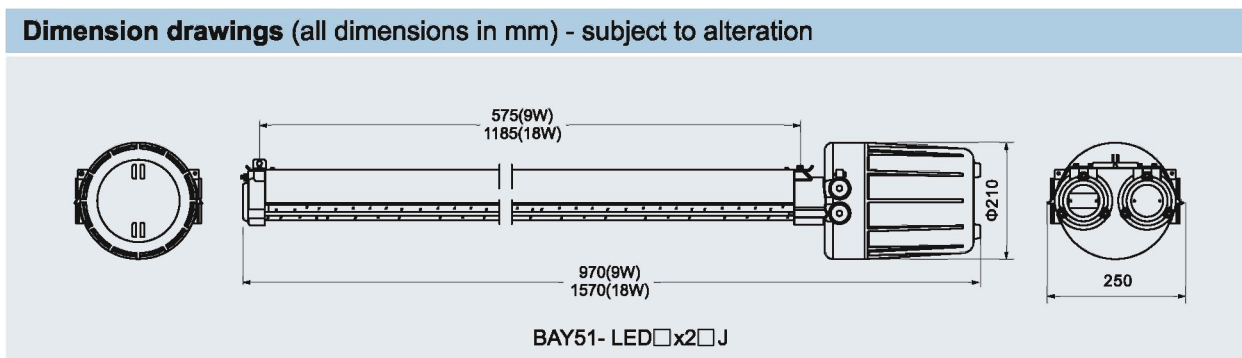
## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

Technical data	
Explosion-proof emergency LED light fittings for fluorescent lamp     BAY51-LED □x□□J	
<b>Explosion protection</b> Gas explosion protection Dust explosion protection <b>Certificates</b> <b>Conformity to standards</b>	⚠ II 2 G Ex d IIC T6 Gb ⚠ II 2 D Ex tb IIIC T80°C Db IP66 LCIE 13 ATEX ____; IECEX; FM (USA); GOST.R (Russia) EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-31: 2009 IEC 60079-0: 2011, IEC 60079-1: 2007, IEC 60079-31: 2008
<b>Material</b> 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
<b>Lamp</b> Lamp specification Lamp power (W) Emergency power (W) <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>Mounting</b> <b>Cable entries</b> <b>Cable gland</b>	CREE plural white LED modules (supplied with the light fittings) 9W x 2, 18W x 2 9W x 1, 18W x 1 0.3s 24h 120min (180min is optional) 110~265V AC 50/60Hz M5 (internal & external earth bolts) IP66 -40°C~+55°C 3 x 1.5~4mm <sup>2</sup> (L+N+PE) Ceiling type, pole type 4 x M25 x 1.5 Plug 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).

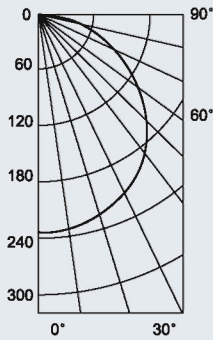


## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

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

#### 9W x 1 photometric data

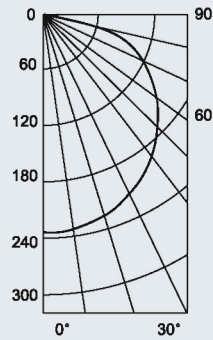
Rated luminous flux:945lm;  
The data from CREE lamp;  
Luminous intensity distribution cd/1000lm



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

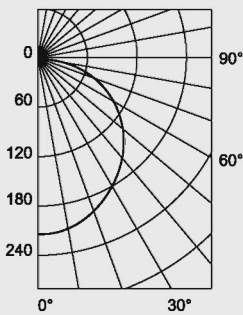
Rated luminous flux:1890lm;  
The data from CREE lamp;  
Luminous intensity distribution cd/1000lm



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

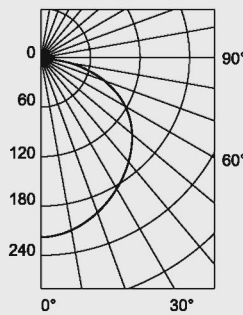
Rated luminous flux:1890lm;  
The data from CREE lamp;  
Luminous intensity distribution cd/1000lm



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		



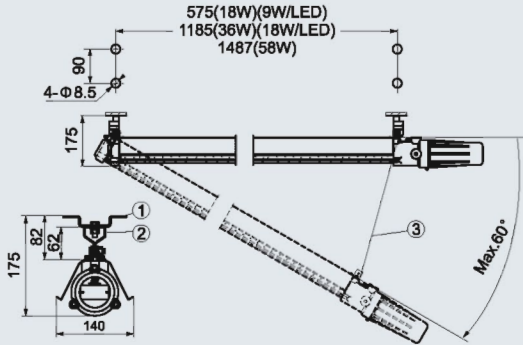
We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

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

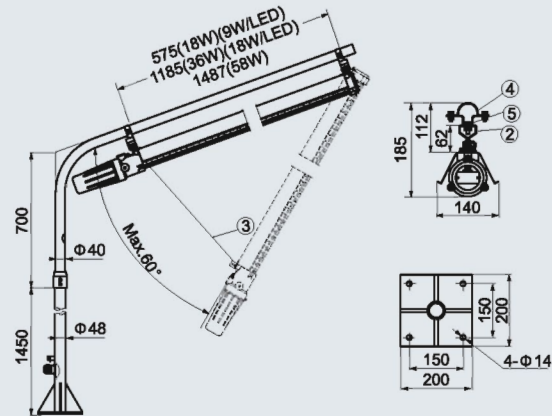
### Mounting type for light fittings with single lamp tube (all dimensions in mm) - subject to alteration

#### 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.

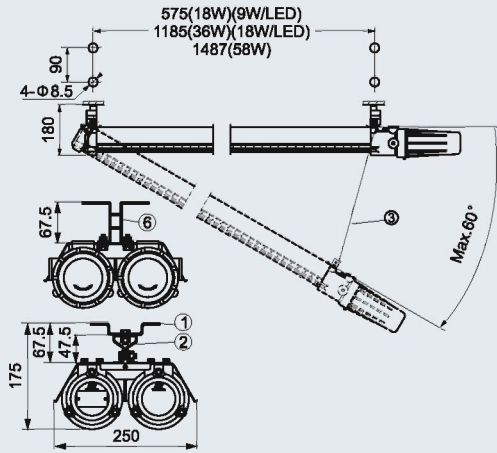


## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

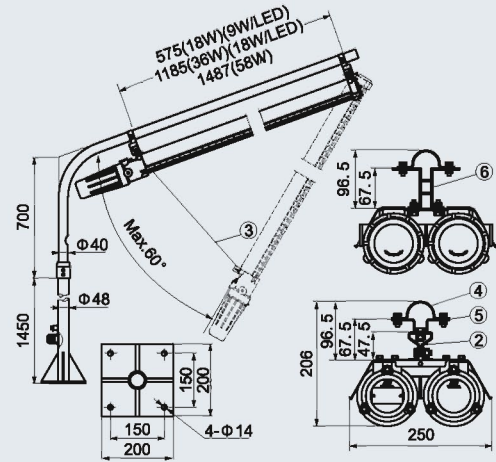
### Mounting type for light fittings with dual lamp tube (all dimensions in mm) - subject to alteration

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.



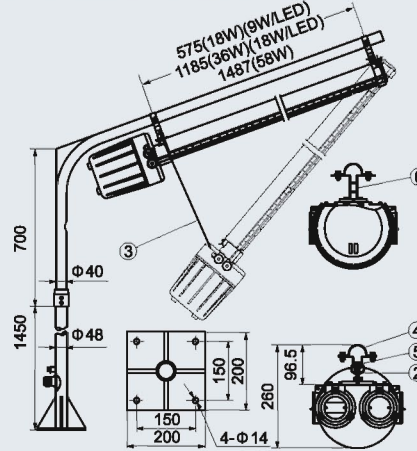
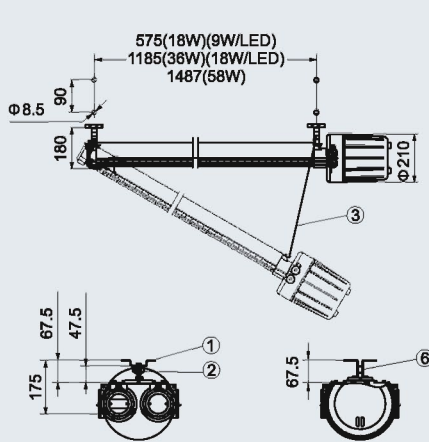
## Light Fittings for Fluorescent Lamp BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

### 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.

