

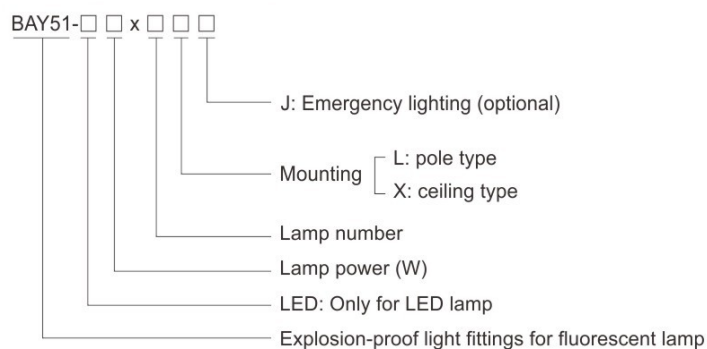
Light Fittings for Fluorescent Lamp

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, 28W x 1, 28W x 2.
- ◆ The glass tube stands 4J impact.
- ◆ Enclosure in Copper-free Aluminium Alloy, powder coated surface, yellow (RAL1021).
- ◆ Built-in electronic ballast, wide voltage input, rapid starting, stable performance, power factor $\geq$ 0.95.
- ◆ Built-in LED driver, wide voltage input, CC-CV (constant current - constant voltage) output, 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 light fittings for fluorescent lamp BAY51-□ × □□	
Explosion protection	
Global (IECEx)	IECEx CQM 12.0042X
Gas and dust	Ex d IIC T6 Gb
Europe (ATEX)	Ex t IIIC T80°C Db IP66
Gas	LCIE 09 ATEX 3046
	Ex II 2 G Ex d IIC T6 Gb
	Ex II 2 G Ex tb IIIC T80°C Gb IP66
Certificates	IECEx; ATEX; CU-TR
Conformity to standards	EN 60079-0, EN 60079-1, EN 60079-31
	IEC 60079-0, IEC 60079-1, IEC 60079-31
Material	
Enclosure	Copper-free Aluminium Alloy, 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
External reflector	Powder coated pure aluminium
Exposed fastener	Stainless steel
Lamp	
Lamp specification	T8 tube (supplied with the light fittings)
Lamp power (W)	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, IP67 (optional)
Ambient temperature	-20°C~+55°C
Terminal	3 x 1.5~4mm ² (L+N+PE)
Cable entries	
Single lamp	2 x M25 x 1.5 plugs
Dual lamp	2 x M25 x 1.5 plugs
Cable gland (optional)	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~31



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 P2/21~22).

Dimension drawings (all dimensions in mm) - subject to alteration	
BAY51-□x1□	BAY51-□x2□

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-□ × □□J

Explosion protection

Global (IECEX)

Gas and dust

IECEX CQM 13.0004X

Ex d IIC T6 Gb

Ex tb IIIC T80°C Db IP66

Europe (ATEX)

LCIE 13 ATEX 3003X

Gas and dust

Ex II 2 G Ex d IIC T6 Gb

Ex II 2 D Ex tb IIIC T80°C Db IP66

Certificates

IECEX; ATEX; CU-TR

Conformity to standards

EN 60079-0, EN 60079-1, EN 60079-31

IEC 60079-0, IEC 60079-1, IEC 60079-31

Material

Enclosure

Copper-free Aluminium Alloy, powder coated surface, yellow (RAL1021)

Glass tube

Toughened glass, stands 4J impact

Emergency unit

Special emergency controller and battery pack, with protection against over-charge and overdischarge

Ballast

Electronic ballast

Wire guard (optional)

Powder coated carbon steel (white) or stainless steel

External reflector

Powder coated pure aluminium

Exposed fastener

Stainless steel

Lamp

Lamp specification

T8 tube (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

Emergency starting time

0.3s

Charging time

24h

Emergency lighting time

120min (180min is optional)

Rated voltage

100~300V AC 50/60Hz

Earthing protection

M5 (internal & external earth bolts)

Degree of protection

IP66, IP67(optional)

Ambient temperature

-20°C~+55°C

Terminal

3 x 1.5~4mm² (L+N+PE)

Cable entries

4 x M25 x 1.5 plugs

Cable gland (optional)

DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~31

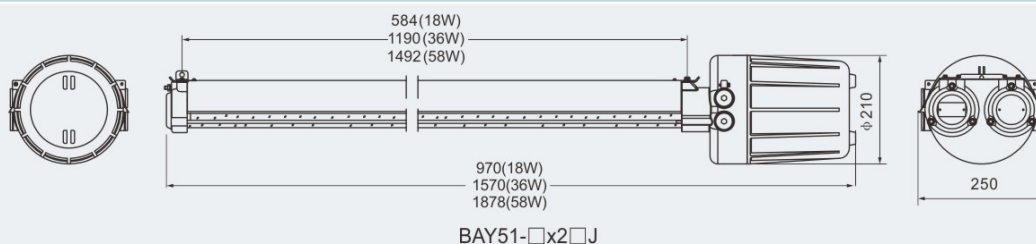


Selection table

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 P2/23).

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



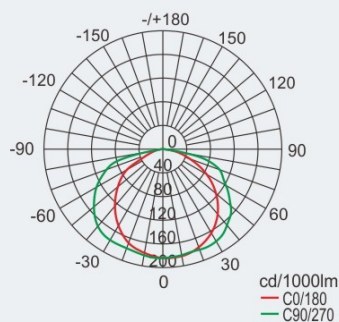
Light Fittings for Fluorescent Lamp

BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

Photometric data

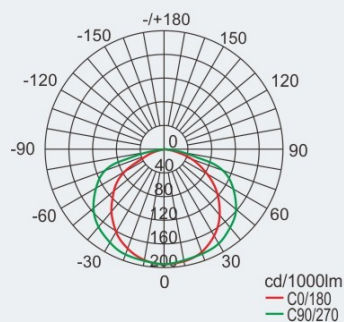
BAY51-18x1□□

Lamp power (W)	Rated luminous flux (Lamp tube)	Luminaire efficiency
18 x 1	1300lm	70%



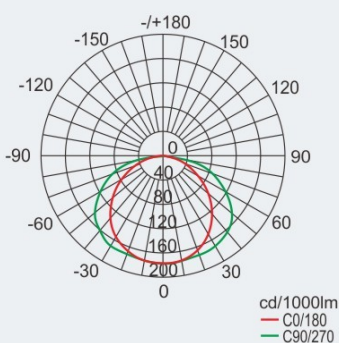
BAY51-18x2□□

Lamp power (W)	Rated luminous flux (Lamp tube)	Luminaire efficiency
18 x 2	2600lm	67%



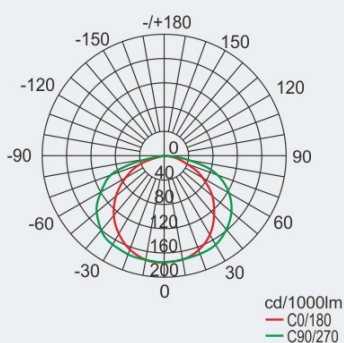
BAY51-36x1□□

Lamp power (W)	Rated luminous flux (Lamp tube)	Luminaire efficiency
36 x 1	3250lm	67%



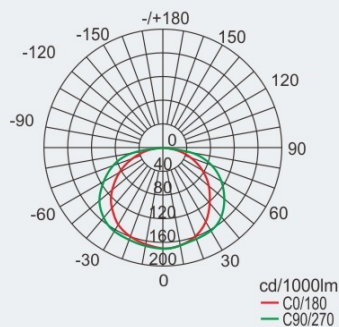
BAY51-36x2□□

Lamp power (W)	Rated luminous flux (Lamp tube)	Luminaire efficiency
36 x 2	6500lm	66%



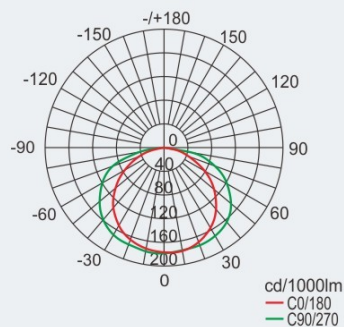
BAY51-58x1□□

Lamp power (W)	Rated luminous flux (Lamp tube)	Luminaire efficiency
58 x 1	5000lm	66%



BAY51-58x2□□

Lamp power (W)	Rated luminous flux (Lamp tube)	Luminaire efficiency
58 x 2	10000lm	65%



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 light fittings with LED tubes BAY51-LED □ × □ □

Explosion protection

Global (IECEX)
Gas and dust

IECEX CQM 12.0005X

Ex d IIC T6 Gb

Ex tb IIIC T80°C Db IP66

EPT 15 ATEX 2287X

LCIE 11 ATEX 3112X

Europe (ATEX)

Gas and dust

Ex II 2 G Ex db IIC T6 Gb

Ex II 2 G Ex d IIC T6 Gb

Ex II 2 D Ex tb IIIC T80°C Db IP66

Ex II 2 D Ex t IIIC T80°C Db IP66

Certificates

Conformity to standards

IECEX; ATEX; CU-TR

EN 60079-0, EN 60079-1, EN 60079-31

IEC 60079-0, IEC 60079-1, IEC 60079-31

Material

Enclosure

Glass tube

LED driver

Copper-free Aluminium Alloy, powder coated surface, yellow (RAL1021)

Toughened glass, stands 4J impact

Wide voltage input, CC-CV (constant current - constant voltage) output, power factor ≥ 0.95, with function of distributed current, constant current, surge-proof and anti-electromagnetic interference, and protection against overcurrent, open circuit, and short circuit.

Powder coated carbon steel (white) or stainless steel

Powder coated pure aluminium

Stainless steel

Wire guard (optional)

External reflector

Exposed fastener

Lamp

Lamp specification

Lamp power (W)

Colour rendering index (Ra)

Colour temperature (CCT)

LED module (supplied with the light fittings)

9W x 1, 9W x 2, 18W x 1, 18W x 2, 28W x 1, 28W x 2

≥ 80

5000K

Note: nature white is available in general. Warm white or cool white is optional, please specify when ordering.

110~265V AC 50/60Hz

M5 (internal & external earth bolts)

IP66, IP67(optional)

Rated voltage

Earthing protection

Degree of protection

Ambient temperature

Certificates	Lamp power (W)	Ambient temperature
EPT 15 ATEX 2287X	9W x 1, 9W x 2, 18W x 1, 18W x 2, 28W x 1, 28W x 2	-20°C~+55°C
LCIE 11 ATEX 3112X	9W x 1, 9W x 2, 18W x 1, 18W x 2	-40°C~+55°C
IECEX CQM 12.0005X	9W x 1, 9W x 2, 18W x 1, 18W x 2, 28W x 1, 28W x 2	-40°C~+55°C
		-20°C~+55°C

Terminal

Mounting

Cable entries

Single lamp

Dual lamp

Cable gland

3 x 1.5~4mm² (L+N+PE)

Ceiling type, pole type

2 x M25 x 1.5 plugs

2 x M25 x 1.5 plugs

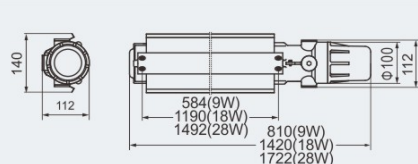
DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~31

Selection table

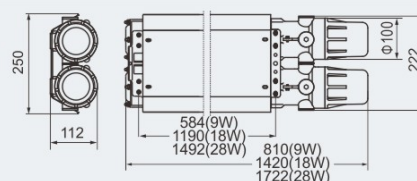
Type / Ordering code	Lamp power(W)	Weight(kg)	Type / Ordering code	Lamp power(W)	Weight(kg)
BAY51-LED 9 x 1X	9 x 1	5.50	BAY51-LED 9 x 2X	9 x 2	9.80
BAY51-LED 9 x 1L	9 x 1	5.90	BAY51-LED 9 x 2L	9 x 2	10.50
BAY51-LED 18 x 1X	18 x 1	8.30	BAY51-LED 18 x 2X	18 x 2	15.70
BAY51-LED 18 x 1L	18 x 1	8.35	BAY51-LED 18 x 2L	18 x 2	16.40
BAY51-LED 28 x 1X	28 x 1	10.00	BAY51-LED 28 x 2X	28 x 2	17.30
BAY51-LED 28 x 1L	28 x 1	10.30	BAY51-LED 28 x 2L	28 x 2	18.30

Note: Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/21~22).

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



BAY51-LED □x1□



BAY51-LED □x2□

Light Fittings for Fluorescent Lamp

BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

Technical data	
Explosion-proof light fittings with LED tubes BAY51-LED□ × □□J	
Explosion protection	
Global (IECEX)	IECEX CQM 14.0051X
Gas and dust	Ex d IIC T6 Gb
Europe (ATEX)	Ex tb IIIC T80°C Db IP66
Gas and dust	EUT 14 ATEX 1885
	Ex II 2 G Ex d IIC T6 Gb
	Ex II 2 D Ex tb IIIC T80°C Db IP66
Certificates	IECEX; ATEX; CU-TR
Conformity to standards	EN 60079-0, EN 60079-1, EN 60079-31
	IEC 60079-0, IEC 60079-1, IEC 60079-31
Material	
Enclosure	Copper-free Aluminium Alloy, powder coated surface, yellow (RAL1021)
Glass tube	Toughened glass, stands 4J impact
LED driver	Wide voltage input, CC-CV (constant current - constant voltage) output, 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 battery pack, with protection against over-charge and overdischarge
Wire guard (optional)	Powder coated carbon steel (white) or stainless steel
External reflector	Powder coated pure aluminium
Exposed fastener	Stainless steel
Lamp	
Lamp specification	LED module (supplied with the light fittings)
Lamp power (W)	9W x 2, 18W x 2, 28W x 2
Colour rendering index (Ra)	≥ 80
Colour temperature (CCT)	5000K
	Note: nature white is available in general. Warm white or cool white is optional, please specify when ordering.
Emergency power (W)	9W x 1, 18W x 1, 28W x 1
Emergency starting time	0.3s
Charging 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, IP67 (optional)
Ambient temperature	-20°C~+55°C
Terminal	3 x 1.5~4mm ² (L+N+PE)
Cable entries	4 x M25 x 1.5 plugs
Cable gland(optional)	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~31



Selection table								
Type / Ordering code	Lamp power(W)	Weight (kg)	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 28 x 2XJ	28 x 2	21.40
BAY51-LED 9 x 2LJ	9 x 2	13.80	BAY51-LED 18 x 2LJ	18 x 2	19.50	BAY51-LED 28 x 2LJ	28 x 2	21.50

Note: Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/23).

Dimension drawings (all dimensions in mm) - subject to alteration	
BAY51- LED□x2□J	

Light Fittings for Fluorescent Lamp

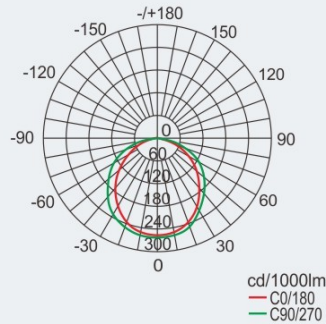
BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

Photometric data Note: LED luminous flux is from the standard product of which colour temperature is 5000K

BAY51-LED 9x1□

Lamp power (W)	Luminous flux	Wattage	Luminous efficacy
9 x 1	960lm	9.5W	101lm/W

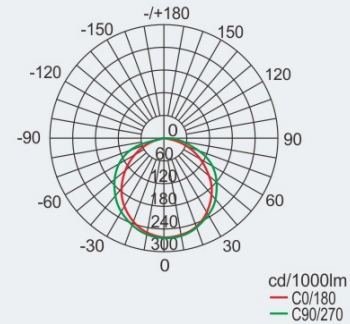
Rated luminous flux (Lamp tube) 9Wx1: 1080lm



BAY51-LED 9x2□□

Lamp power (W)	Luminous flux	Wattage	Luminous efficacy
9 x 2	1835lm	18W	102lm/W

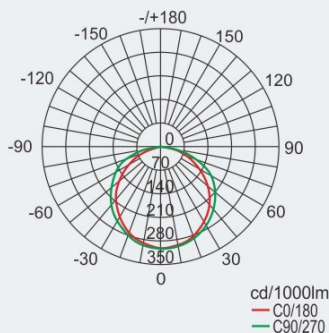
Rated luminous flux (Lamp tube) 9Wx2: 2160lm



BAY51-LED 18x1□

Lamp power (W)	Luminous flux	Wattage	Luminous efficacy
18 x 1	1960lm	18.5W	106lm/W

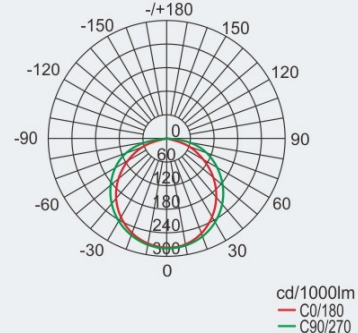
Rated luminous flux (Lamp tube) 18Wx1: 2160lm



BAY51-LED 18x2□□

Lamp power (W)	Luminous flux	Wattage	Luminous efficacy
18 x 2	3920lm	37W	105lm/W

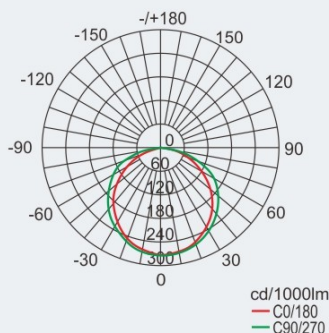
Rated luminous flux (Lamp tube) 18Wx2: 4320lm



BAY51-LED 28x1□

Lamp power (W)	Luminous flux	Wattage	Luminous efficacy
28 x 1	2985lm	29W	103lm/W

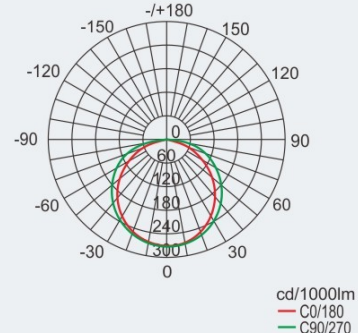
Rated luminous flux (Lamp tube) 28Wx1: 3360lm



BAY51-LED 28x2□□

Lamp power (W)	Luminous flux	Wattage	Luminous efficacy
28 x 2	5606lm	56W	100lm/W

Rated luminous flux (Lamp tube) 28Wx2: 6720lm



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



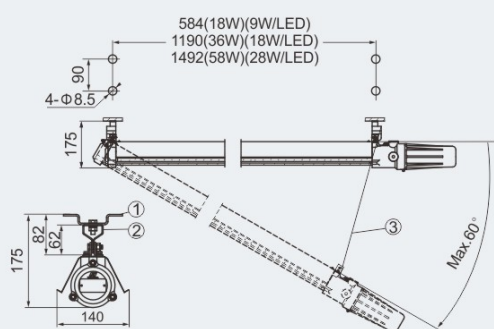
Light Fittings for Fluorescent Lamp

BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

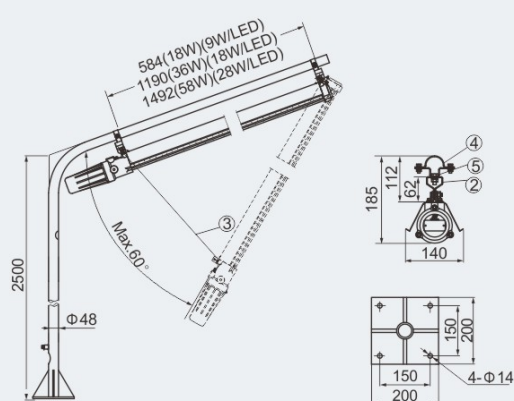
Mounting type for light fittings with single lamp tube (all dimensions in mm) - subject to alteration

Installation reference

X: ceiling type

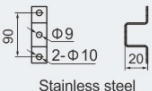
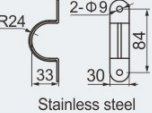
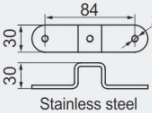


L: pole type (the pole is provided by user)



Mounting Accessories & 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	Stainless steel, Length: 0.7m (18W), 1.3m (36W), 1.6m (58W)	51S01X2	0.30~0.50
L: pole type	④. G1 1/2" Pipe clamp	2		5136014	0.04
	⑤. Mounting bracket	2		5136012	0.04
	②. Connector	2	Stainless steel, same as ceiling type	51S01X1	0.04
	③. Steel wire rope (with hook)	1	Stainless steel, same as ceiling type	51S01X2	0.30~0.50

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



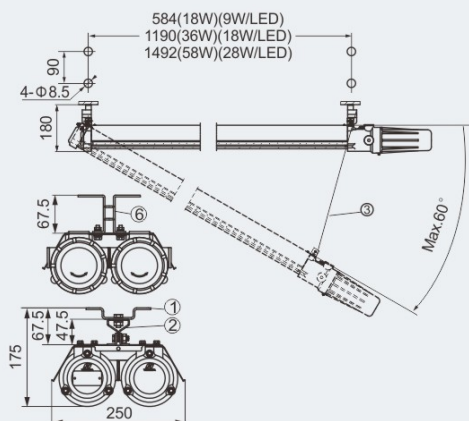
Light Fittings for Fluorescent Lamp

BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

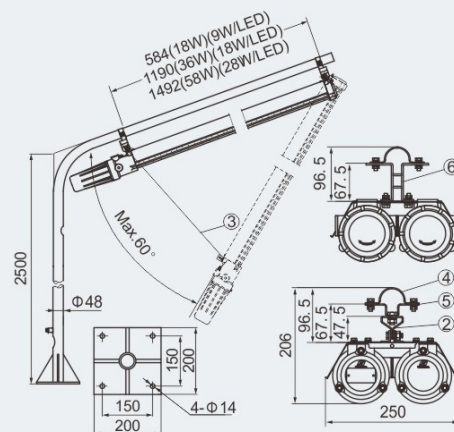
Mounting type for light fittings with dual lamp tube (all dimensions in mm) - subject to alteration

Installation reference

X: ceiling type

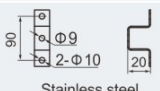
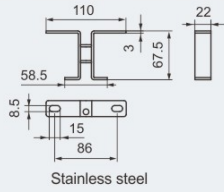
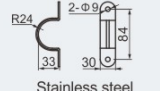
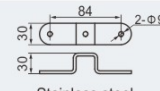


L: pole type (the pole is provided by user)



Mounting Accessories & 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	 Stainless steel	5136030	0.07
	②.Connector	1	 Stainless steel	51S01X1	0.04
	③.Steel wire rope (with hook)	1	Stainless steel, length: 0.7m (18W), 1.3m (36W), 1.6m (58W)	51S01X2	0.30~0.50
	⑥.Mounting bracket	1	 Stainless steel	51D01X3	0.13
L: pole type	④.G1 1/2" Pipe clamp	2	 Stainless steel	5136014	0.04
	⑤.Mounting bracket	1	 Stainless steel	5136012	0.04
	②.Connector	2	Stainless steel, same as ceiling type	51S01X1	0.04
	③.Steel wire rope (with hook)	1	Stainless steel, same as ceiling type	51S01X2	0.30~0.50
	⑥.Mounting bracket	1	Stainless steel, same as ceiling type	51D01X3	0.13

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

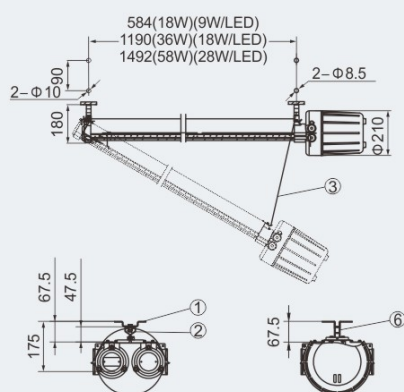
Light Fittings for Fluorescent Lamp

BAY51 Series Explosion-proof Light Fittings for Fluorescent Lamp

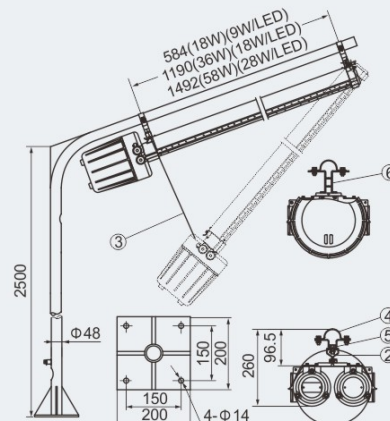
Mounting type for light fittings with dual lamp tube (all dimensions in mm) - subject to alteration

Installation reference

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

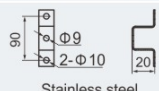
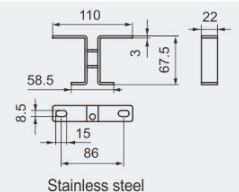
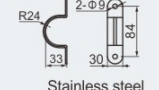
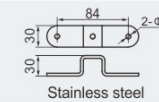


L: pole type (the pole is provided by user)
(for: BAY51-□ × 2LJ; BAY51-LED□ × 2LJ)



Mounting Accessories & 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	Stainless steel, 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 1/2" Pipe clamp	2		5136014	0.04
	⑤. Mounting bracket	1		5136012	0.04
	②. Connector	2	Stainless steel, same as ceiling type	51S01X1	0.04
	③. Steel wire rope (with hook)	1	Stainless steel, same as ceiling type	51S01X2	0.30~0.50
	⑥. Mounting bracket	1	Stainless steel, same as ceiling type	51D01X3	0.13

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

