

## Light Fittings for Fluorescent Lamp

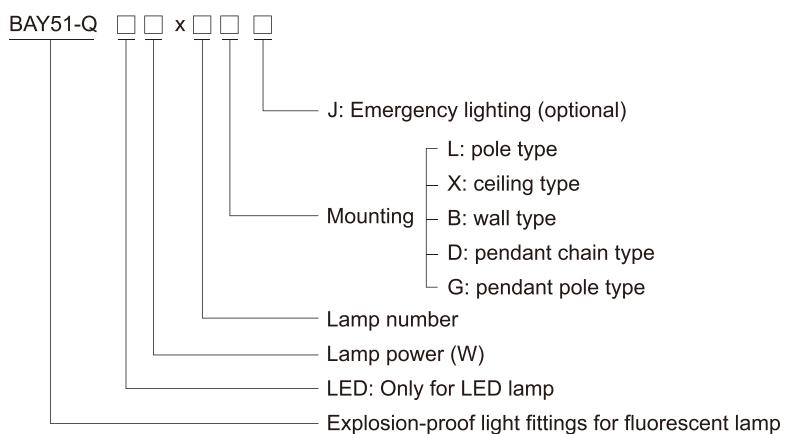
### BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp



- ◆ 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 2, Groups A, B, C, D
- ◆ Two enclosure types: Type I and Type II
  - Available lamp and power
    - T8 Fluorescent Lamps: 18W x 1, 36W x 1, 18W x 2, 36W x 2
    - LED lamps: 14W x 2, 28W x 2
  - Enclosure in glass fiber reinforced polyester(GRP), diffuser in polycarbonate, corrosion-proof.
  - Ex e enclosure with explosion-proof components inside.
  - Safety interlock between enclosure and diffuser switches off on opening.
  - Built-in electronic ballast, power factor $\geq 0.95$ .
  - Built-in LED driver, wide voltage input, CC-CV (constant current-constant voltage) output, power factor $\geq 0.95$ .
  - Emergency unit with protections against overcharge and over-discharge.
  - End of lamp life (EOL) rectification effect protection.



#### Catalogue number logic



Zones 1&2; 21&22

# Light Fittings for Fluorescent Lamp

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

### Technical data

#### Explosion-proof light fittings for fluorescent lamp BAY51-Q□ × □□

##### Explosion protection

- Gas explosion protection
- Dust explosion protection

##### Certificates

LCIE 12 ATEX 3045X; IECEx CQM 07.0007  
BR232313 (Brazil); S-XPL/04547 (South Africa); RU C-CN.ГБ05.В.00344 (CU-TR)

##### Conformity to standards

EN 60079-0:2009, EN 60079-1:2007, EN 60079-5:2007, EN 60079-7:2007  
EN 60079-31:2009

IEC 60079-0:2007, IEC 60079-1:2007, IEC 60079-5:2007, IEC 60079-7:2006  
IEC 60079-31:2008

##### Material

- Enclosure GRP, stands 7J impact, corrosion-proof
- Diffuser Polycarbonate, 90% light transmission, stands 7J impact
- Ballast Electronic ballast, power factor ≥ 0.95, with protection against short circuit, overload, lamp aging, lamp damage and dissymmetry power of lamp tube. Certificate No.: LCIE 06 ATEX 0003U; IECEx CQM 07.0005U; BR229576-U (Brazil).

Exposed fastener Stainless steel

##### Interlock

BZX-6 explosion-proof distance switch, switching off on opening

Certificate No.: LCIE 06 ATEX 0002U, IECEx CQM 07.0006U

##### Lamp

Lamp specification International brand of T8 tube (supplied with the light fittings)

36W x 2	18W x 2
36W x 1	18W x 1

##### Rated voltage

96~254V AC 50/60Hz

##### Protection class

II (Protection against electric shock)

##### Degree of protection

IP66, IP67(optional)

##### Ambient temperature

-20°C~+55°C

##### Terminal

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

##### Cable entries

4 x Φ26: 2 x M25 x 1.5 cable glands (DQM-I Ex e, plastic), 2 x M25 x 1.5 plugs.

##### Available cable outer diameter

Φ9~Φ16 (mm)



### Selection table

Type / Ordering code	Lamp power(W)	Weight(kg)	Type / Ordering code	Lamp power(W)	Weight(kg)
BAY51-Q18 x 1L	18 x 1	6.80	BAY51-Q18 x 2L	18 x 2	7.00
BAY51-Q18 x 1X	18 x 1	6.70	BAY51-Q18 x 2X	18 x 2	6.90
BAY51-Q18 x 1B	18 x 1	7.80	BAY51-Q18 x 2B	18 x 2	7.90
BAY51-Q18 x 1D	18 x 1	8.10	BAY51-Q18 x 2D	18 x 2	8.20
BAY51-Q18 x 1G	18 x 1	7.70	BAY51-Q18 x 2G	18 x 2	7.85
BAY51-Q36 x 1L	36 x 1	11.40	BAY51-Q36 x 2L	36 x 2	11.60
BAY51-Q36 x 1X	36 x 1	11.30	BAY51-Q36 x 2X	36 x 2	11.40
BAY51-Q36 x 1B	36 x 1	12.30	BAY51-Q36 x 2B	36 x 2	12.50
BAY51-Q36 x 1D	36 x 1	12.60	BAY51-Q36 x 2D	36 x 2	12.75
BAY51-Q36 x 1G	36 x 1	12.20	BAY51-Q36 x 2G	36 x 2	12.40

**Note:** Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/8~9).

## Light Fittings for Fluorescent Lamp

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

#### Technical data

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

###### Explosion protection

Gas explosion protection

Ex II 2 G Ex d e q IIC T4 Gb

Dust explosion protection

Ex II 2 D Ex tb IIIC T80°C Db IP66

###### Certificates

LCIE 10 ATEX 3009; IECEx CQM 12.0002X; BR232314 (Brazil)

CU-TR

###### Conformity to standards

EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-5: 2007, EN 60079-7: 2007

EN 60079-31: 2009

IEC 60079-0: 2011, IEC 60079-1: 2007, IEC 60079-5: 2007, IEC 60079-7: 2006

IEC 60079-31: 2008

###### Material

Enclosure

GRP, stands 7J impact, corrosion-proof

Diffuser

Polycarbonate, 90% light transmission, stands 7J impact

Ballast

Electronic ballast, power factor ≥ 0.95, with protection against short circuit, overload, lamp aging, lamp damage and dissymmetry power of lamp tube.

Emergency controller

BY-2 emergency controller

Certificate No.: LCIE 10 ATEX 3010U, IECEx CQM 11.0041U

Exposed fastener

Stainless steel

###### Lamp

Lamp specification

International brand of T8 tube (supplied with the light fittings)

Lamp power (W)

36W x 2	18W x 2
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36W x 1	18W x 1
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###### Emergency power (W)

36W x 1, 18W x 1

###### Emergency starting time

0.3s

###### Charging time

24h

###### Emergency lighting time

120min (180min is optional)

###### Rated voltage

96~254V AC 50/60Hz

###### Protection class

II (Protection against electric shock)

###### Degree of protection

IP66, IP67(optional)

###### Ambient temperature

-20°C~+55°C

###### Terminal

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

###### Cable entries

4 x Φ 26: 2 x M25 x 1.5 cable glands (DQM-I Ex e, plastic), 2 x M25 x 1.5 plugs.

###### Available cable outer diameter

Φ 9~Φ 16 (mm)

#### Selection table

Type / Ordering code	Lamp power(W)	Weight(kg)	Type / Ordering code	Lamp power(W)	Weight(kg)
BAY51-Q18 x 1LJ	18 x 1	8.65	BAY51-Q18 x 2LJ	18 x 2	8.80
BAY51-Q18 x 1XJ	18 x 1	8.50	BAY51-Q18 x 2XJ	18 x 2	8.70
BAY51-Q18 x 1BJ	18 x 1	9.60	BAY51-Q18 x 2BJ	18 x 2	9.75
BAY51-Q18 x 1DJ	18 x 1	9.90	BAY51-Q18 x 2DJ	18 x 2	10.00
BAY51-Q18 x 1GJ	18 x 1	9.50	BAY51-Q18 x 2GJ	18 x 2	9.65
BAY51-Q36 x 1LJ	36 x 1	13.00	BAY51-Q36 x 2LJ	36 x 2	13.05
BAY51-Q36 x 1XJ	36 x 1	12.95	BAY51-Q36 x 2XJ	36 x 2	13.10
BAY51-Q36 x 1BJ	36 x 1	14.00	BAY51-Q36 x 2BJ	36 x 2	14.10
BAY51-Q36 x 1DJ	36 x 1	14.30	BAY51-Q36 x 2DJ	36 x 2	14.45
BAY51-Q36 x 1GJ	36 x 1	13.90	BAY51-Q36 x 2GJ	36 x 2	14.05

**Note:** Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/8~9).



# Light Fittings for Fluorescent Lamp

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

### Technical data

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

##### Explosion protection

Gas explosion protection

Dust explosion protection

##### Certificates

##### Conformity to standards

Ex II 2 G Ex d e mb IIC T4 Gb

Ex II 2 D Ex tb IIIC T80°C Db IP66

LCIE 15 ATEX\_\_\_\_; IECEx

EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-7: 2007, EN 60079-18: 2009

EN 60079-31: 2009

IEC 60079-0: 2011, IEC 60079-1: 2007, IEC 60079-7: 2006, IEC 60079-18: 2009

IEC 60079-31: 2008

##### Material

Enclosure

GRP, stands 7J impact, corrosion-proof

Diffuser

Polycarbonate, 90% light transmission, stands 7J impact

LED driver

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.

Stainless steel

##### Exposed fastener

##### Lamp

Lamp specification

International brand of LED module (supplied with the light fittings)

Lamp power (W)

14W x 2, 28W x 2

Colour Temperature (CCT)

Cool white : 5400 ~ 6500K

Note: cool white is available in general. Warm white (2700~3500K) or nature white (4700~5400K) is optional, please specify when ordering.

96~254V AC 50/60Hz

II (Protection against electric shock)

IP66, IP67(optional)

-20°C~+55°C

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

4 x Φ26: 2 x M25 x 1.5 cable glands (DQM-I Ex e, plastic), 2 x M25 x 1.5 plugs.

Φ9~Φ16 (mm)

##### Rated voltage

##### Protection class

##### Degree of protection

##### Ambient temperature

##### Terminal

##### Cable entries

##### Available cable outer diameter

##### Emergency data

Emergency controller

Special emergency controller and battery pack, with protection against overcharge and overdischarge.

Emergency power (W)

14W x 1, 28W x 1

Emergency starting time

0.3s

Charging time

24h

Emergency lighting time

120min (180min is optional)



### Selection table

Type / Ordering code	Lamp power(W)	Weight(kg)	Type / Ordering code	Lamp power(W)	Weight(kg)
BAY51-Q LED14 x 2L	14 x 2	7.30	BAY51-Q LED14 x 2LJ	14 x 2	8.80
BAY51-Q LED14 x 2X	14 x 2	7.20	BAY51-Q LED14 x 2XJ	14 x 2	8.70
BAY51-Q LED14 x 2B	14 x 2	8.20	BAY51-Q LED14 x 2BJ	14 x 2	9.70
BAY51-Q LED14 x 2D	14 x 2	8.50	BAY51-Q LED14 x 2DJ	14 x 2	10.00
BAY51-Q LED14 x 2G	14 x 2	8.15	BAY51-Q LED14 x 2GJ	14 x 2	9.65
BAY51-Q LED28 x 2L	28 x 2	12.10	BAY51-Q LED28 x 2LJ	28 x 2	13.60
BAY51-Q LED28 x 2X	28 x 2	11.90	BAY51-Q LED28 x 2XJ	28 x 2	14.40
BAY51-Q LED28 x 2B	28 x 2	13.00	BAY51-Q LED28 x 2BJ	28 x 2	14.50
BAY51-Q LED28 x 2D	28 x 2	13.25	BAY51-Q LED28 x 2DJ	28 x 2	14.75
BAY51-Q LED28 x 2G	28 x 2	12.90	BAY51-Q LED28 x 2GJ	28 x 2	14.40

**Note:** Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/8~9).

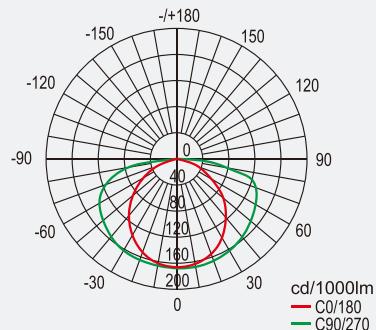
## Light Fittings for Fluorescent Lamp

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

**Photometric data** Note: LED luminous flux is from the standard product of which colour temperature is 5400 to 6500K (cool white).

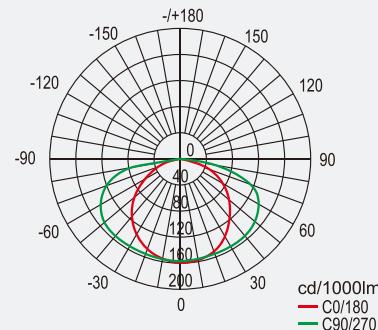
#### BAY51-Q18x1□□

Rated luminous flux  
18Wx1: 1300lm



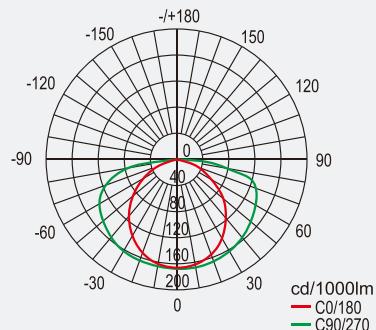
#### BAY51-Q36x1□□

Rated luminous flux  
36Wx1: 3250lm



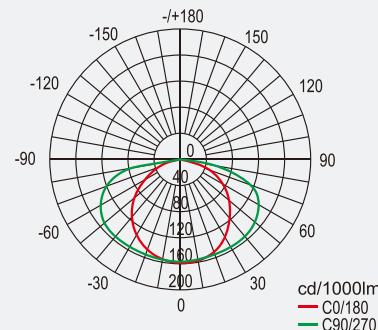
#### BAY51-Q18x2□□

Rated luminous flux  
18Wx2: 2600lm



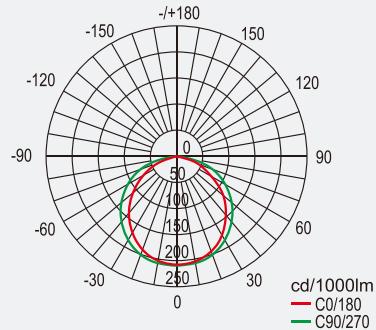
#### BAY51-Q36x2□□

Rated luminous flux  
36Wx2: 6500lm



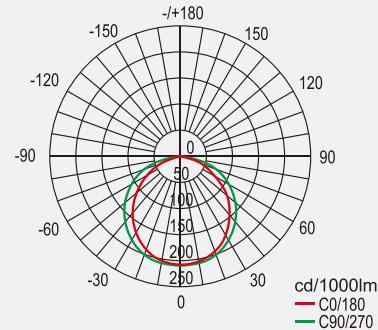
#### BAY51-Q LED 14x2 □□

Rated luminous flux  
LED 14Wx2: 2800lm



#### BAY51-Q LED 28x2 □□

Rated luminous flux  
LED 28Wx2: 5600lm

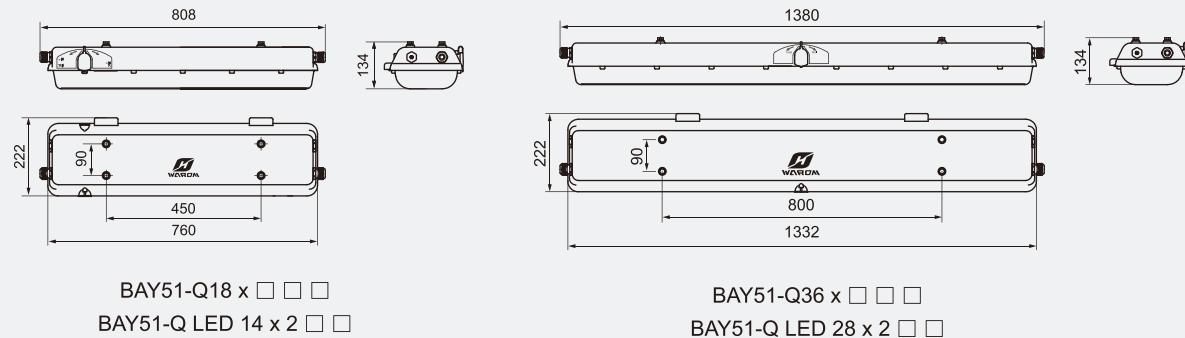


We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

# Light Fittings for Fluorescent Lamp

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

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



### Accessories

Picture	Name	Ordering code	Weight (kg)
	Explosion-proof distance switch	5136003	0.04
	Spanner	5136004	0.02
	Lamp holder (with wires)	5136005	0.02
	YK36DF-2CS electronic ballast (36W)	5136011	1.30
	YK18DF-2CS electronic ballast (18W)	5118004	1.30
	BY-2 emergency controller (with battery) (36W)	5136019	1.70
	BY-2 emergency controller (with battery) (18W)	5118005	1.70

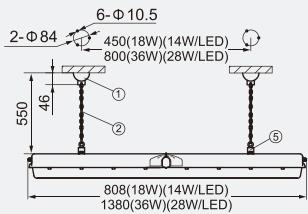
## Light Fittings for Fluorescent Lamp

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

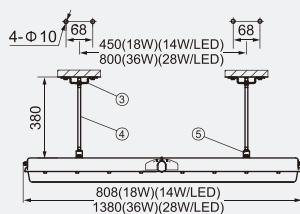
#### Mounting type (all dimensions in mm) – subject to alteration

Installation reference

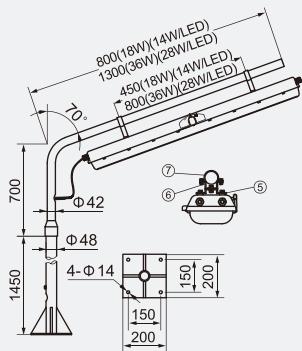
D: pendant chain type



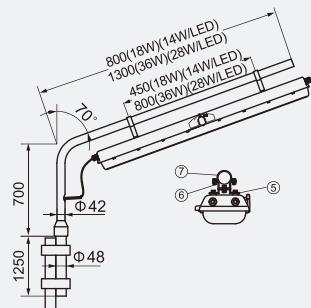
G: pendant pole type



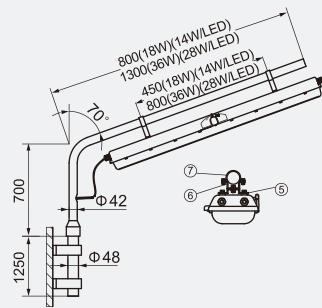
L: pole type (the pole is provided by user)



Suitable for ground pole type

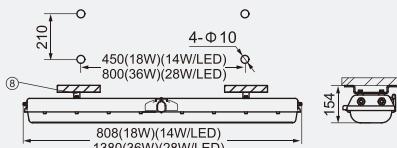


Suitable for fence pole type

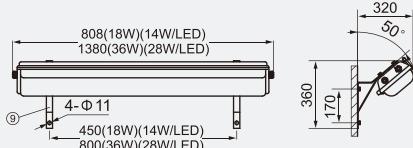


Suitable for wall pole type

X: ceiling type



B: wall type



#### Mounting accessories and spare parts table

Supplied according to the mounting type

Mounting type	Accessories			Ordering code	Weight (kg)
	Name	Qty	Illustration		
D: pendant chain type	①.Sucker	2		5136017	0.15
	②.Chain	2	Length: 450mm	5136016	0.08
	⑤.Mounting bracket	2	Same as pendant pole type	5136030	0.07
G: pendant pole type	③.Mounting bracket	2		51S01G1	0.04
	④.M8 Screw	2	Length: 350mm	51S01G2	0.12
	⑤.Mounting bracket	2		5136030	0.07

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

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

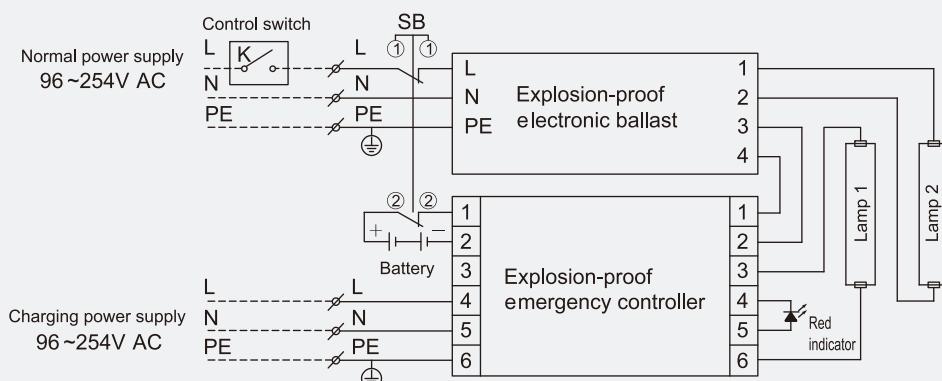
### Mounting accessories and spare parts table

Supplied according to the mounting type

Mounting type	Accessories			Ordering code	Weight (kg)
	Name	Qty	Illustration		
L: pole type	⑥.Mounting bracket	2		5136012	0.04
	⑦.G1 1/4" Pipe clamp	2		5136014	0.04
	⑤.Mounting bracket	2	Same as pendant pole type	5136030	0.07
X: ceiling type	⑧.Mounting bracket	2		5136015	0.20
B: wall type	⑨.Wall bracket	2	Welded sheet steel	5136B02	0.62

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

### Schematic diagram (BAY51-Q□x□□J, T8 fluorescent lamp)



**Note:** Tube for lamp 2 shall be default for single tube fittings.