

Light Fittings for Fluorescent Lamp

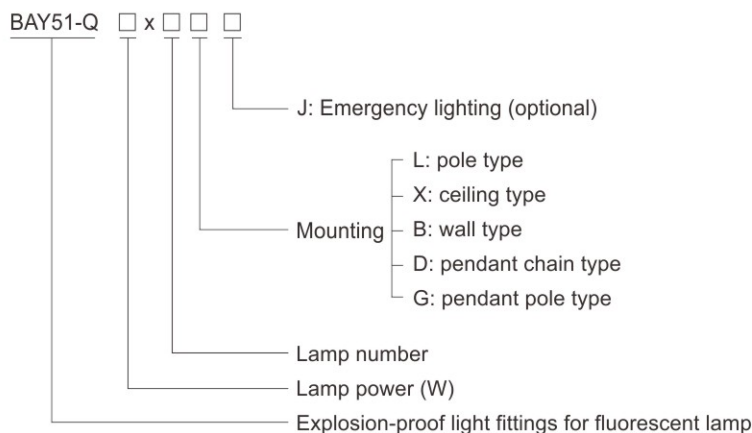
BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp



- ◆ 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
- ◆ 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 ≥ 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

Global (IECEx)

IECEx CQM 07.0007

Gas and dust

Ex d e q IIC T4 Gb

Ex t IIIC T80°C Db IP66

Europe (ATEX)

LCIE 12 ATEX 3045X

Gas and dust

Ex II 2 G Ex d e q IIC T4 Gb

Ex II 2 D Ex t IIIC T80°C Db IP66

Certificates

IECEx; ATEX; CU-TR

Conformity to standards

EN 60079-0, EN 60079-1, EN 60079-5, EN 60079-7, EN 60079-31

IEC 60079-0, IEC 60079-1, IEC 60079-5, IEC 60079-7, IEC 60079-31

Material

Enclosure

GRP, stands 7J impact, corrosion-proof

Diffuser

Polycarbonate, high 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

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

T8 tube (supplied with the light fittings)

Lamp power (W)

36W x 2 18W x 2

36W x 1 18W x 1

Rated voltage

96~254V AC 50/60Hz

Degree of protection

IP66

Ambient temperature

-20°C~+55°C

Terminal

3 x 1.5~4mm² (L+N+PE)

Cable entries

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

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 P2/6~7).

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

Global (IECEx)

Gas and dust

IECEx CQM 12.0002X

Ex d e q IIC T4 Gb

Ex tb IIIC T80°C Db IP66

Europe (ATEX)

Gas and dust

TÜV CY 18 ATEX 0206027X

Ex II 2 G Ex db e q IIC T4 Gb

Ex II 2 D Ex tb IIIC T80°C Db IP66

Certificates

Conformity to standards

IECEx; ATEX; CU-TR

EN 60079-0, EN 60079-1, EN 60079-5, EN 60079-7, EN 60079-31

IEC 60079-0, IEC 60079-1, IEC 60079-5, IEC 60079-7, IEC 60079-31

Material

Enclosure

Diffuser

Ballast

GRP, stands 7J impact, corrosion-proof

Polycarbonate, high light transmission, stands 7J impact

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

Emergency controller

BY-2 emergency controller

Exposed fastener

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

Stainless steel

Lamp

Lamp specification

Lamp power (W)

T8 tube (supplied with the light fittings)

36W x 2 18W x 2

36W x 1 18W x 1

Emergency power (W)

36W x 30%, 18W x 30%

Emergency starting time

0.3s

Charging time

24h

Emergency lighting time

120min (180min is optional)

Rated voltage

96~254V AC 50/60Hz

Degree of protection

IP66

Ambient temperature

-20°C~+55°C

Terminal

3 x 1.5~4mm² (L+N+PE)

Cable entries

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

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 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 P2/6~7).



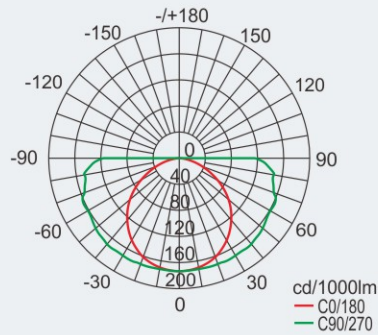
Light Fittings for Fluorescent Lamp

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

Photometric data

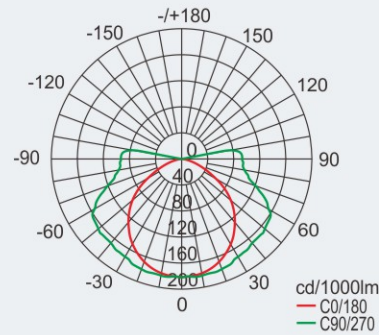
BAY51-Q18x1□□

Lamp power (W)	Rated luminous flux (Lamp tube)	Luminaire efficiency
18 x 1	1300lm	72%



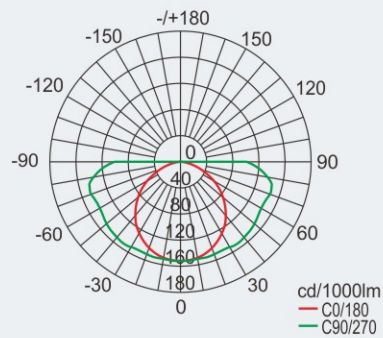
BAY51-Q18x2□□

Lamp power (W)	Rated luminous flux (Lamp tube)	Luminaire efficiency
18 x 2	2600lm	69%



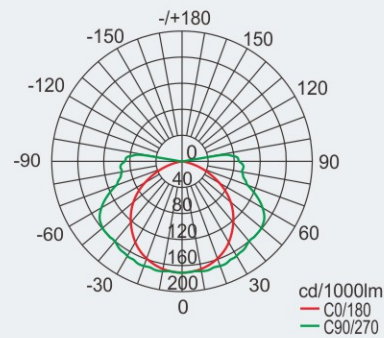
BAY51-Q36x1□□

Lamp power (W)	Rated luminous flux (Lamp tube)	Luminaire efficiency
36 x 1	3250lm	65%



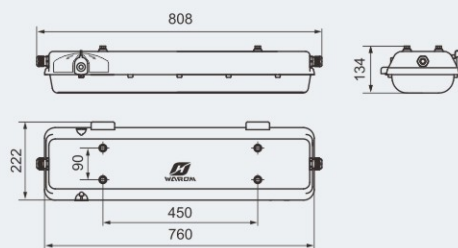
BAY51-Q36x2□□

Lamp power (W)	Rated luminous flux (Lamp tube)	Luminaire efficiency
36 x 2	6500lm	67%

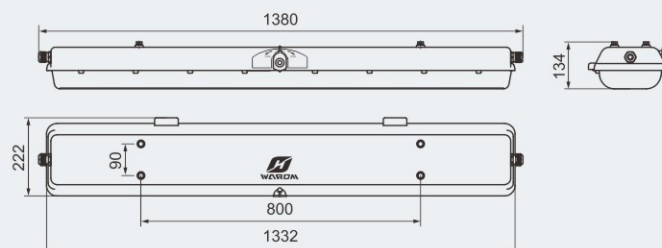


We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

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



BAY51-Q18 x □ □ □



BAY51-Q36 x □ □ □

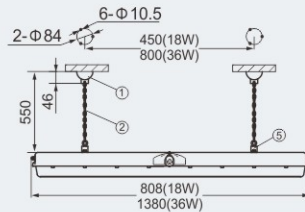
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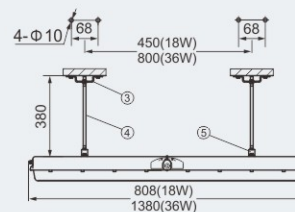
Mounting type (all dimensions in mm) – subject to alteration

Installation reference

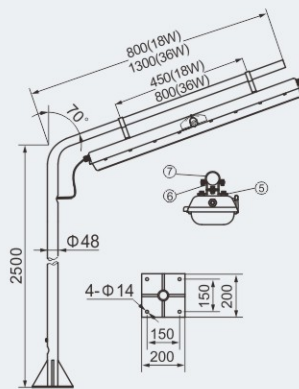
D: pendant chain type



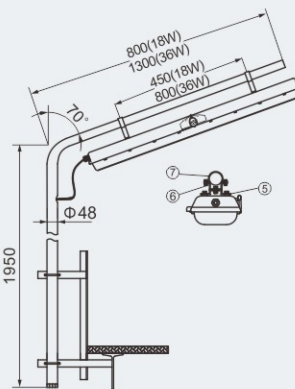
G: pendant pole type



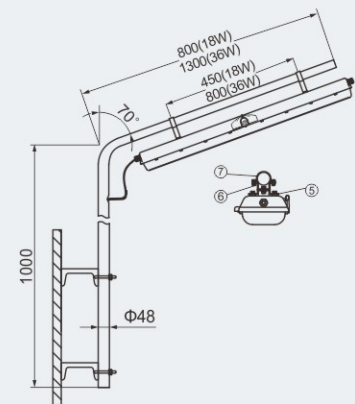
L: pole type (the pole is provided by user)



Suitable for ground pole type

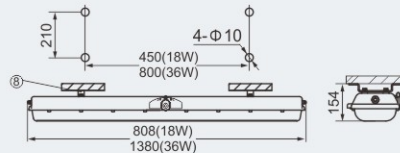


Suitable for fence pole type

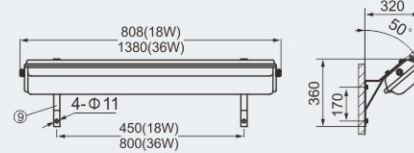


Suitable for wall pole type

X: ceiling type



B: wall type



Mounting Accessories & 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	Stainless steel, same as pendant pole type	5136030	0.07
G: pendant pole type	③.Mounting bracket	2		51S01G1	0.04
	④.M8 Screw	2	Stainless steel, length: 350mm	51S01G2	0.12
	⑤.Mounting bracket	2		5136030	0.07

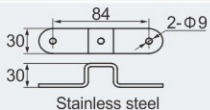
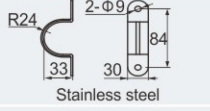
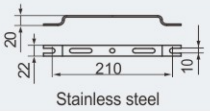
Note: Accessories not in the table shall be supplied by user.

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

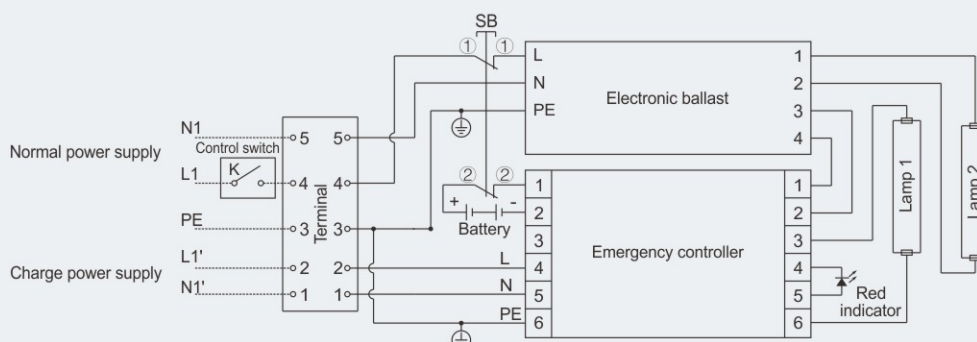
Mounting Accessories & Spare Parts Table

Supplied according to the mounting type

Mounting type	Accessories		Illustration	Ordering code	Weight (kg)
	Name	Qty			
L: pole type	⑥.Mounting bracket	2		5136012	0.04
	⑦.G1 1/2" Pipe clamp	2		5136014	0.04
	⑤.Mounting bracket	2	Stainless steel, 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	Stainless steel, welded sheet steel	5136B02	0.62

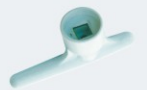
Note: Accessories not in the table shall be supplied by user.

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



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

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 (T8/36W)	5136011	1.30
	YK18DF-2CS electronic ballast (T8/18W)	5118004	1.30
	BY-2 emergency controller (with battery) (T8/36W)	5136019	1.70
	BY-2 emergency controller (with battery) (T8/18W)	5118005	1.70