

Light Fittings for Fluorescent Lamp

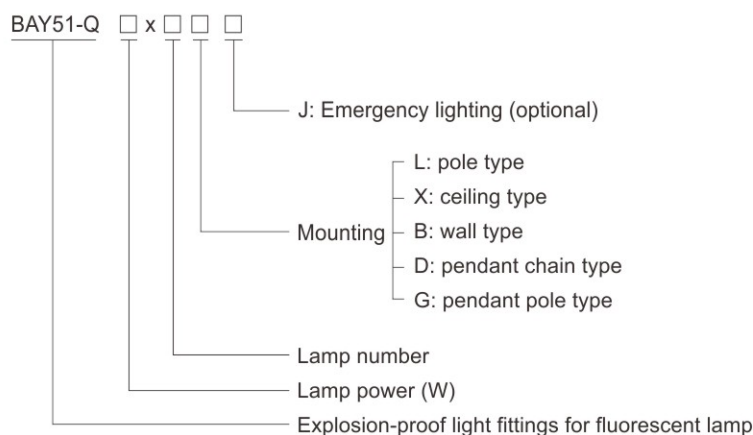
BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp



- ◆ 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
- ◆ Enclosure size: 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: GRP (glass fiber reinforced polyester).
 - Diffuser: PC (polycarbonate).
- ◆ Ex e enclosure with explosion-proof components inside.
- ◆ Interlock function 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)

Gas and dust

IECEX CQM 07.0007X

Ex db eb q IIC T4 Gb

Ex tb IIIC T85°C Db

Europe (ATEX)

LCIE 12 ATEX 3045X

Gas and dust

Ex II 2 G Ex db eb q IIC T4 Gb

Ex II 2 D Ex tb IIIC T85°C Db

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

96~277V AC 50/60Hz, 100~250V DC

Degree of protection

IP66

Ambient temperature

-40°C~+60°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)	IECEX CQM 12.0002X
Gas and dust	Ex d e q IIC T4 Gb
	Ex tb IIIC T80°C Db IP66
Europe (ATEX)	TÜV CY 18 ATEX 0206027X
Gas and dust	Ex II 2 G Ex db e q IIC T4 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 60079-5, 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, with protection against short circuit, overload, lamp aging, lamp damage and dissymmetry power of lamp tube.
Emergency controller	BY-2 emergency controller, with protection against overcharge and overdischarge Certificate No.: LCIE 10 ATEX 3010U, IECEX CQM 11.0041U
Exposed fastener	Stainless steel
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
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	5 x 1.5~4mm ² (L1+N1+L1'+N1'+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).



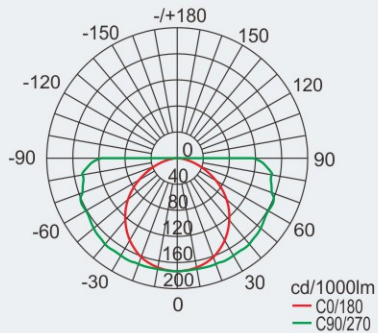
Light Fittings for Fluorescent Lamp

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

Photometric data

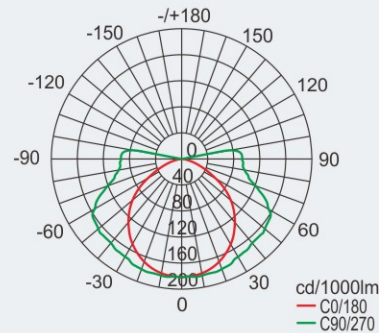
BAY51-Q18x1□□

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



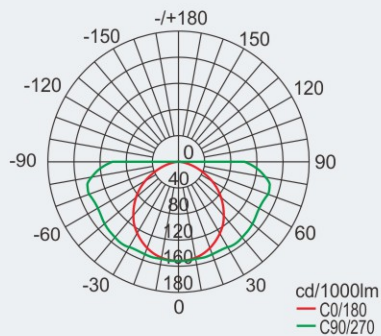
BAY51-Q18x2□□

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



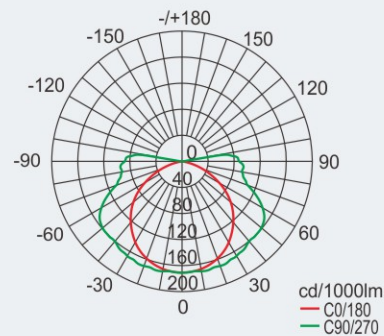
BAY51-Q36x1□□

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



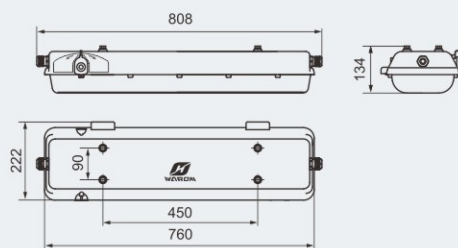
BAY51-Q36x2□□

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

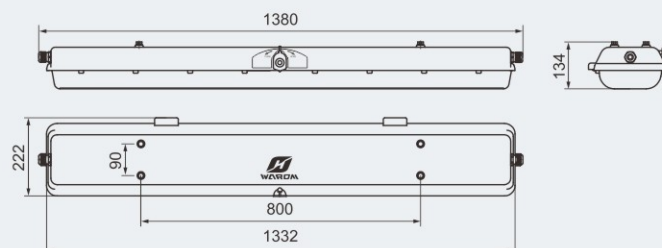


We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

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



BAY51-Q18 x □ □ □



BAY51-Q36 x □ □ □

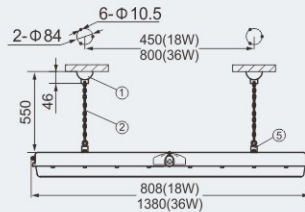
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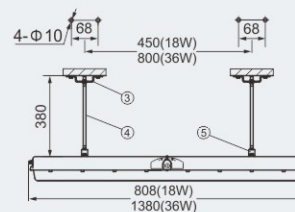
Mounting type (all dimensions in mm) – subject to alteration

Installation reference

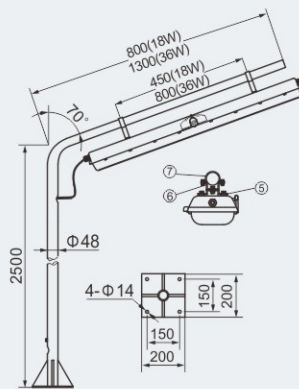
D: pendant chain type



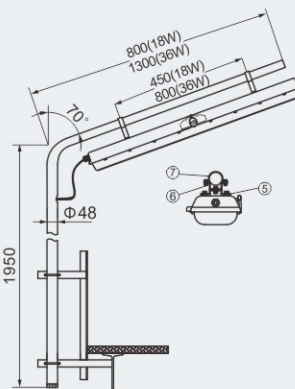
G: pendant pole type



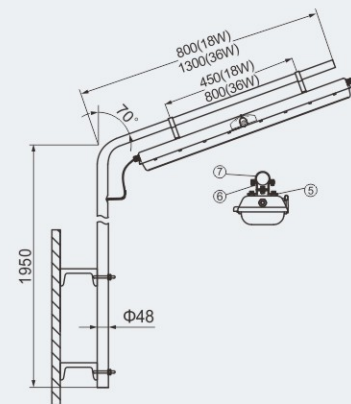
L: pole type (the pole is provided by user)



Suitable for ground pole type

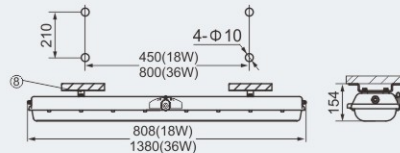


Suitable for fence pole type

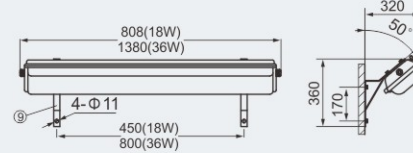


Suitable for wall pole type

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

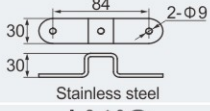
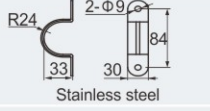
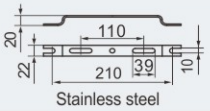
Note: Accessories not in the table shall be supplied by user.

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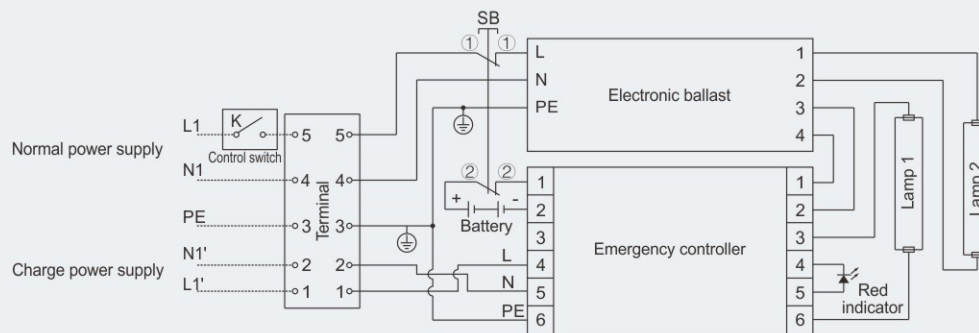
Mounting Accessories & Spare Parts Table

Supplied according to the mounting type

Mounting type	Name	Qty	Illustration	Ordering code	Weight (kg)
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

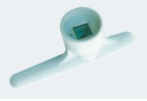
Note: Accessories not in the table shall be supplied by user.

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