

Light Fittings for Fluorescent Lamp

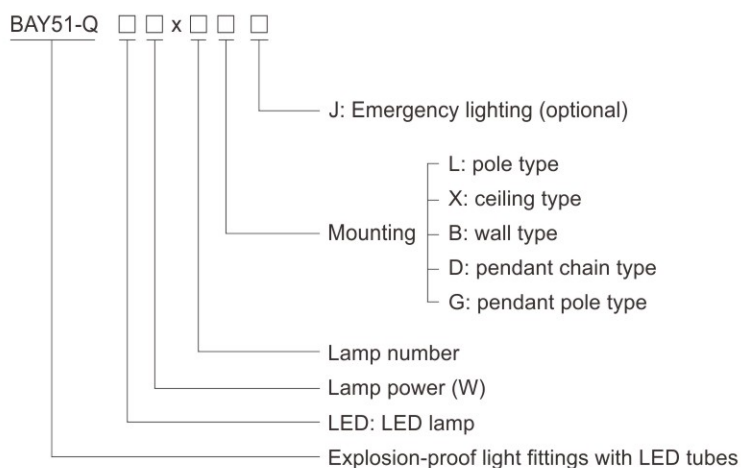
BAY51-Q LED Series Explosion-proof Light Fittings with LED tubes



- ◆ 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
 - Built-in power supply, LED lamp and driving power are integrated type: 9W×1, 18W×1, 9W×2, 18W×2;
 - External power supply, LED lamp and driving power are split type: 14W x 1, 14W x 2, 28W x 1, 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 LED driver, wide voltage input, CC-CV (constant current-constant voltage) output, power factor ≥ 0.95.
- ◆ Emergency unit with protections against overcharge and over-discharge.



Catalogue number logic



Zones 1&2; 21&22

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BAY51-Q LED Series Explosion-proof Light Fittings with LED tubes

Technical data

Explosion-proof light fittings with LED tubes BAY51-Q LED □ × □ □ □

Explosion protection

Global (IECEX)

Gas and dust

IECEX CQM 19.0013X

Ex db eb IIC T6 Gb¹⁾

Ex db eb q IIC T5 or T6 Gb¹⁾

Ex tb IIIC T80°C Db IP66¹⁾

Europe (ATEX)

Gas and dust

CML19 ATEX 1288X

Ex II 2 G Ex db eb IIC T6 Gb¹⁾

Ex II 2 G Ex db eb q IIC T5 or T6 Gb¹⁾

Ex II 2 D Ex tb IIIC T80°C Db IP66¹⁾

¹⁾ See Selection Table

Certificates

Conformity to standards

IECEX; ATEX; CU-TR

EN 60079-0, EN 60079-1, EN 60079-5, EN 60079-7, EN 60079-28, EN 60079-31

IEC 60079-0, IEC 60079-1, IEC 60079-5, IEC 60079-7, IEC 60079-28, IEC 60079-31

Material

Enclosure

Diffuser

LED driver

GRP, stands 7J impact, corrosion-proof

Polycarbonate, high light transmission, stands 7J 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. Certificate No.: CML 19 ATEX 5115U, CML 19 ATEX 5201U, IECEX CQM 19.0002U

Exposed fastener

Stainless steel

Lamp

Lamp specification

Lamp power (W)

LED module (supplied with the light fittings)

9W×1, 18W×1, 9W×2, 18W×2 (LED lamp and driving power are integrated type)

14W x 1, 28W x 1, 14W x 2, 28W x 2 (LED lamp and driving power are split type)

Certificate No.: CML 19 ATEX 1288X, IECEX CQM 19.0012U

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.

Rated voltage

Built-in power supply, LED lamp and driving power are integrated type:

170~264V AC 50/60Hz

External power supply, LED lamp and driving power are split type:

100~277V AC 50/60Hz; 200~250V DC

Degree of protection

Ambient temperature

IP66

Ex db eb IIC T6 Gb for Tamb: -40°C~+45°C

Ex db eb q IIC T5 or T6 Gb for Tamb: -40°C~+55°C

Ex tb IIIC T80°C Db IP66 for Tamb: -40°C~+55°C

Ex II 2 G Ex db eb IIC T6 Gb for Tamb: -40°C~+45°C

Ex II 2 G Ex db eb q IIC T5 or T6 Gb for Tamb: -40°C~+55°C

Ex II 2 D Ex tb IIIC T80°C Db IP66 for Tamb: -40°C~+55°C

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 30%, 28W x 30%

Emergency starting time

0.3s

Charging time

24h

Emergency lighting time

120min (180min is optional)

Selection table

Lamp tube type	LED lamp and driving power are integrated type	LED lamp and driving power are split type
Explosion protection	Ex II 2 G Ex db eb IIC T5 or T6 Gb Ex II 2 D Ex tb IIIC T80°C Db IP66	Ex II 2 G Ex db eb q IIC T5 or T6 Gb Ex II 2 D Ex tb IIIC T80°C Db IP66
Lamp power (W)	9W×1, 18W×1, 9W×2, 18W×2	14W x 1, 28W x 1, 14W x 2, 28W x 2



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BAY51-Q LED Series Explosion-proof Light Fittings with LED tubes

Selection table for external power supply, LED lamp and driving power are split type

Type / Ordering code	Lamp power(W)	Weight (kg)	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-Q LED14 x 1L	14 x 1	8.00	BAY51-Q LED14 x 1LJ	14 x 1	8.30	BAY51-Q LED14 x 2L	14 x 2	8.45	BAY51-Q LED14 x 2LJ	14 x 2	8.80
BAY51-Q LED14 x 1X	14 x 1	7.90	BAY51-Q LED14 x 1XJ	14 x 1	8.20	BAY51-Q LED14 x 2X	14 x 2	8.35	BAY51-Q LED14 x 2XJ	14 x 2	8.70
BAY51-Q LED14 x 1B	14 x 1	8.90	BAY51-Q LED14 x 1BJ	14 x 1	9.20	BAY51-Q LED14 x 2B	14 x 2	9.35	BAY51-Q LED14 x 2BJ	14 x 2	9.70
BAY51-Q LED14 x 1D	14 x 1	9.20	BAY51-Q LED14 x 1DJ	14 x 1	9.50	BAY51-Q LED14 x 2D	14 x 2	9.65	BAY51-Q LED14 x 2DJ	14 x 2	10.00
BAY51-Q LED14 x 1G	14 x 1	8.85	BAY51-Q LED14 x 1GJ	14 x 1	9.15	BAY51-Q LED14 x 2G	14 x 2	9.30	BAY51-Q LED14 x 2GJ	14 x 2	9.65
BAY51-Q LED28 x 1L	28 x 1	12.50	BAY51-Q LED28 x 1LJ	28 x 1	13.65	BAY51-Q LED28 x 2L	28 x 2	12.90	BAY51-Q LED28 x 2LJ	28 x 2	14.15
BAY51-Q LED28 x 1X	28 x 1	13.20	BAY51-Q LED28 x 1XJ	28 x 1	14.45	BAY51-Q LED28 x 2X	28 x 2	13.70	BAY51-Q LED28 x 2XJ	28 x 2	14.95
BAY51-Q LED28 x 1B	28 x 1	13.30	BAY51-Q LED28 x 1BJ	28 x 1	14.55	BAY51-Q LED28 x 2B	28 x 2	13.80	BAY51-Q LED28 x 2BJ	28 x 2	15.05
BAY51-Q LED28 x 1D	28 x 1	13.55	BAY51-Q LED28 x 1DJ	28 x 1	14.80	BAY51-Q LED28 x 2D	28 x 2	14.00	BAY51-Q LED28 x 2DJ	28 x 2	15.30
BAY51-Q LED28 x 1G	28 x 1	13.20	BAY51-Q LED28 x 1GJ	28 x 1	14.45	BAY51-Q LED28 x 2G	28 x 2	13.70	BAY51-Q LED28 x 2GJ	28 x 2	14.95

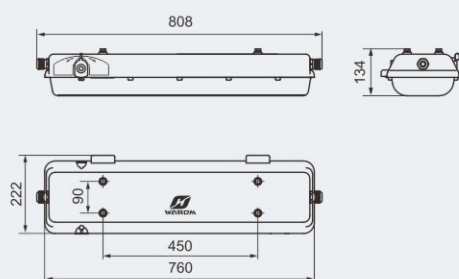
Note: Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/12~13).

Selection table for built-in power supply, LED lamp and driving power are integrated type

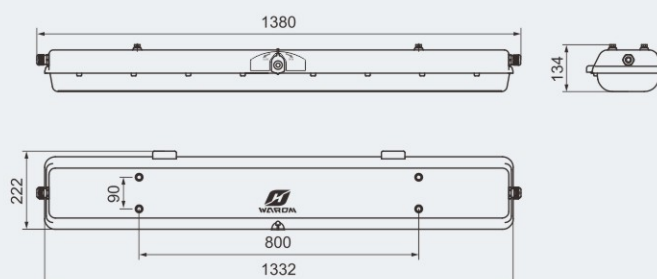
Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)
BAY51-Q LED9 x 1L	9 x 1	7.50	BAY51-Q LED9 x 2L	9 x 2	8.50
BAY51-Q LED9 x 1X	9 x 1	7.40	BAY51-Q LED9 x 2X	9 x 2	8.00
BAY51-Q LED9 x 1B	9 x 1	8.40	BAY51-Q LED9 x 2B	9 x 2	9.00
BAY51-Q LED9 x 1D	9 x 1	8.60	BAY51-Q LED9 x 2D	9 x 2	9.00
BAY51-Q LED9 x 1G	9 x 1	8.40	BAY51-Q LED9 x 2G	9 x 2	9.00
BAY51-Q LED18 x 1L	18 x 1	12.00	BAY51-Q LED18 x 2L	18 x 2	12.40
BAY51-Q LED18 x 1X	18 x 1	12.70	BAY51-Q LED18 x 2X	18 x 2	13.30
BAY51-Q LED18 x 1B	18 x 1	12.80	BAY51-Q LED18 x 2B	18 x 2	13.30
BAY51-Q LED18 x 1D	18 x 1	13.00	BAY51-Q LED18 x 2D	18 x 2	13.60
BAY51-Q LED18 x 1G	18 x 1	12.70	BAY51-Q LED18 x 2G	18 x 2	13.20

Note: Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/12~13).

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



BAY51-Q LED 14 x ☐ ☐ ☐
BAY51-Q LED 9 x ☐ ☐



BAY51-Q LED 28 x ☐ ☐ ☐
BAY51-Q LED 18 x ☐ ☐

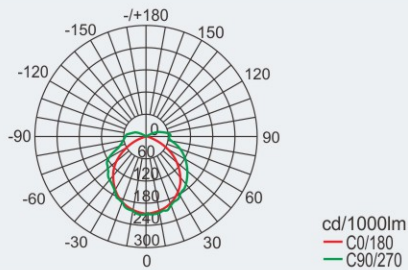
Light Fittings for Fluorescent Lamp

BAY51-Q LED Series Explosion-proof Light Fittings with LED tubes

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

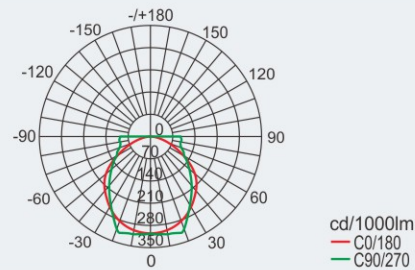
BAY51-Q LED 14x1 □□

Lamp power (W)	Luminous flux	Wattage
14 x 1	1515lm	15W



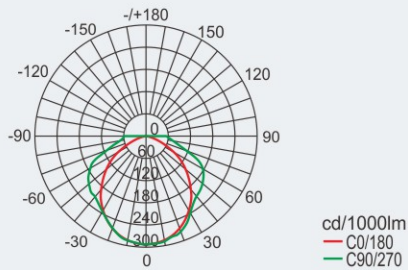
BAY51-Q LED 28x1 □□

Lamp power (W)	Luminous flux	Wattage
28 x 1	2855lm	28W



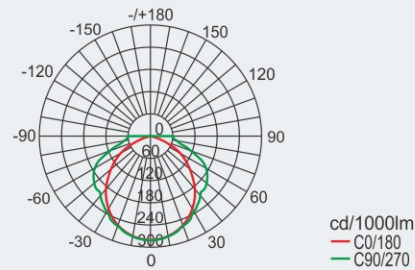
BAY51-Q LED 14x2 □□

Lamp power (W)	Luminous flux	Wattage
14 x 2	2905lm	29W



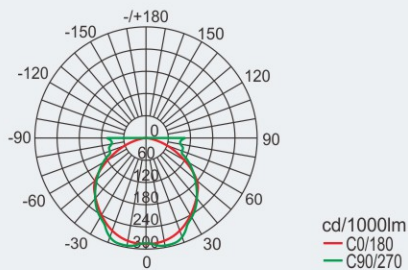
BAY51-Q LED 28x2 □□

Lamp power (W)	Luminous flux	Wattage
28 x 2	5770lm	56W



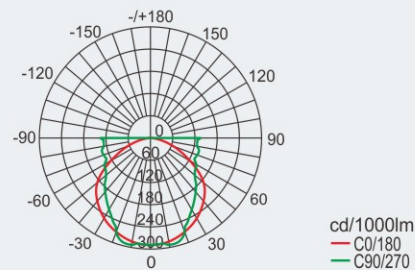
BAY51-Q LED 9x1 □

Lamp power (W)	Luminous flux	Wattage
9 x 1	910lm	9W



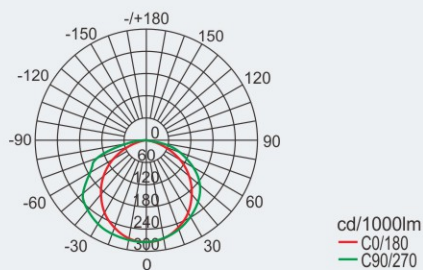
BAY51-Q LED 18x1 □

Lamp power (W)	Luminous flux	Wattage
18 x 1	1950lm	18.5W



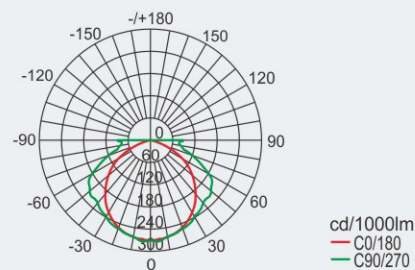
BAY51-Q LED 9x2 □

Lamp power (W)	Luminous flux	Wattage
9 x 2	1870lm	18.5W



BAY51-Q LED 18x2 □

Lamp power (W)	Luminous flux	Wattage
18 x 2	3900lm	37W



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

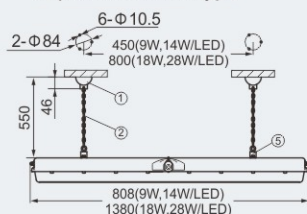
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BAY51-Q LED Series Explosion-proof Light Fittings with LED tubes

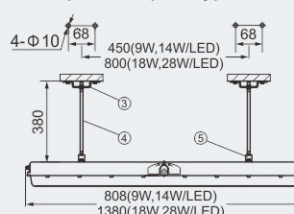
Mounting type (all dimensions in mm) – subject to alteration

Installation reference

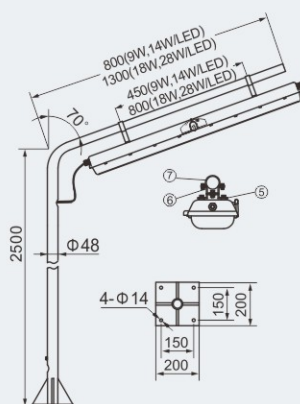
D: pendant chain type



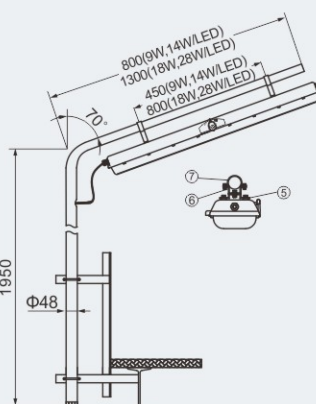
G: pendant pole type



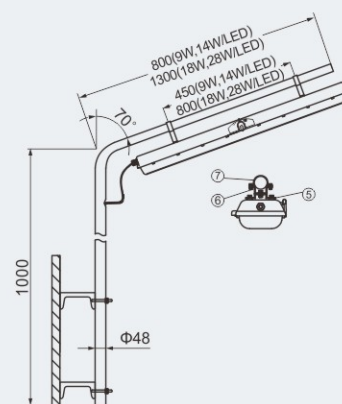
L: pole type (the pole is provided by user)



Suitable for ground pole type

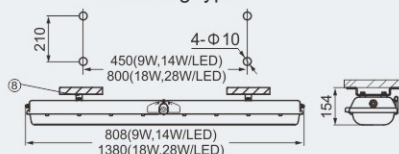


Suitable for fence pole type

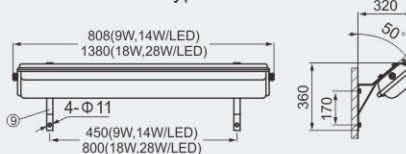


Suitable for wall pole type

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

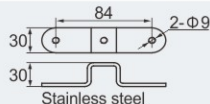
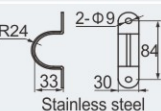
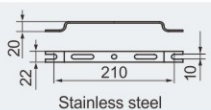
Note: Accessories not in the table shall be supplied by user.

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BAY51-Q LED Series Explosion-proof Light Fittings with LED tubes

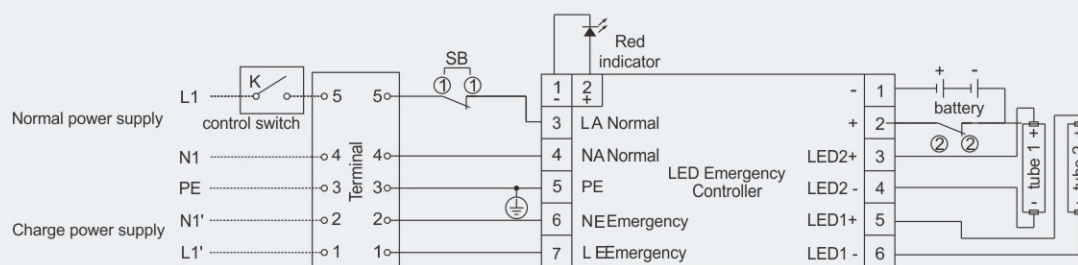
Mounting Accessories & Spare Parts Table

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 LED□x□□J, LED lamp)



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

Accessories

Picture	Name	Ordering code	Weight (kg)
	Explosion-proof distance switch	5136008	0.04
	HRB14-2C Explosion-proof LED driver (LED/14W)	5114001	1.30
	HRB28-2C Explosion-proof LED driver (LED/28W)	5128001	1.30
	HRE14-2C Explosion-proof LED emergency controller (LED/14W)	5114002	1.75
	HRE28-2C Explosion-proof LED emergency controller (LED/28W)	5128002	2.30
	BT8-9 Explosion-proof LED lamp tube (LED/9W)	51E0901	0.25
	BT8-18 Explosion-proof LED lamp tube (LED/18W)	51E1801	0.52
	BT8-14 Explosion-proof LED lamp tube (LED/14W)	5114003	0.18
	BT8-28 Explosion-proof LED lamp tube (LED/28W)	5128003	0.34