

BAY51-Q Series Explosion-proof Corrosion Proof Plastic Fluorescent Lighting



BAY51-Q series explosion-proof corrosion proof plastic fluorescent lighting is our latest updated, entitled with exclusive property right and related patents. It conforms to IEC, EN standard and 94/9/EC instruction.

BAY51-Q series lighting has passed type test by PTB, LCIE and has gained PTB, LCIE certificate of conformity.

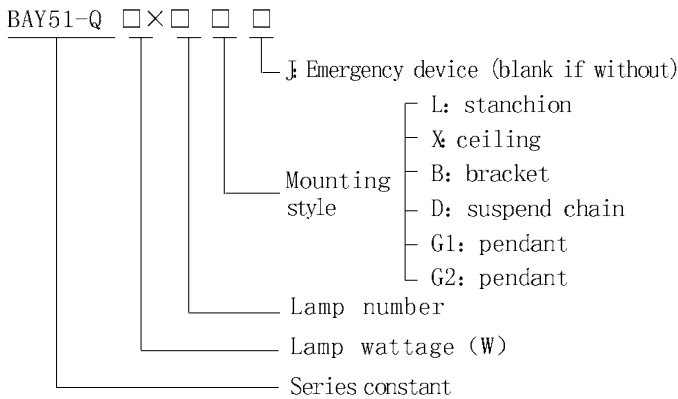
For use in hazardous area Zone 1, Zone 2 and Zone 20, Zone 21, Zone 22; IIA, IIB and IIC explosive gas atmospheres.

Applied for lighting in the circuit of AC 50Hz/60Hz, 220V.



LIGHTING

◇ Catalog number logic



◇ Compliances

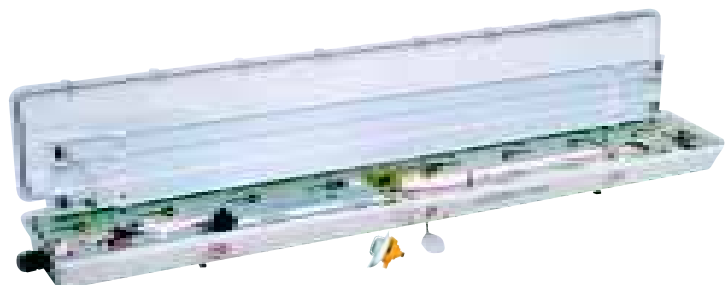
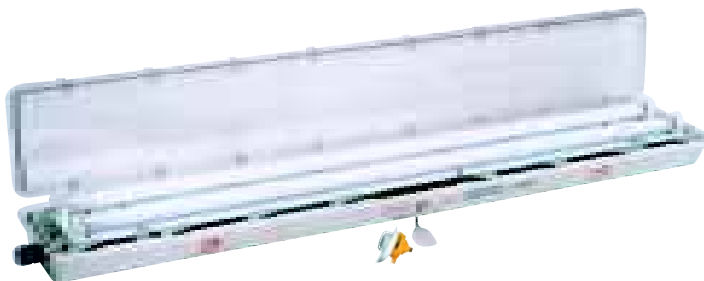
94/9/EC instruction,
 IEC 60079-0、IEC 60079-1
 IEC 60079-5、IEC 60079-7
 EN 50014、EN 50017、EN 50018、EN 50019
 GB 3836.1-2000、GB 3836.2-2000
 GB 3836.3-2000、GB 3836.7-2000

◇ Certificates of conformity No:

S-XPL/04547 LCIE 06 ATEX0003U
 LCIE 06 ATEX0002U LCIE 06 ATEX6035X

◇ Features

1. Compound flameproof structure, safety increase housings and built-in explosion-proof components.
2. Housings molded of SMC, transparent cover injected of PC, over 95% light transmittance, for strength and resistance to impact and corrosion.
3. Labyrinth seal for transparent cover and housings, adopting EPDM foamed rubber seal.
4. Specially designed interlock device for housings and cover. Discover the lighting with exclusive key.
5. Powder filled type "p" for electronic ballast, aluminum alloy stretched into form of housings, safety increase type for terminal block, with protections of short circuit, lamp aging and leakage.
6. Emergency device included inside housings if required by user.
7. PHILIPS T8 standard lamp. Parallel connection of pole to realize the single pole lamp quick action.
8. Internal flameproof isolating switch, interlocked with housings and cover. Disconnect the power when the lighting discovered.
9. Internal terminal blocks reliably contact with 2.5mm² lead, exclusive grounding. Electricity clearance of internal electrical connector $\geq 8\text{mm}$, creepage distance $\geq 12.5\text{mm}$.
10. Cable gland at dual entries, cable O.D available $\phi 10 \sim \phi 14$
11. Complete selection for mounting styles.



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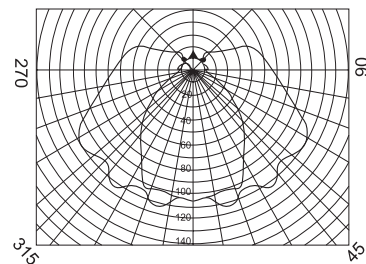


◇ Technical data

Description	Rated voltage	Rated wattage (W)	Power factor COSφ	Cable entry	Cable O. Dφ (mm)	Marking	Protection	Corrosion protection	Weight (kg)
BAY51-Q18 × 1	AC220V 50Hz/60Hz	18 × 1	≥0.95	M25 × 1.5	10~14	Ex II 2G EExedq II CT4	IP66	WF 1	8.0
BAY51-Q18 × 2		18 × 2							8.2
BAY51-Q36 × 1		36 × 1							12.50
BAY51-Q36 × 2		36 × 2							12.75

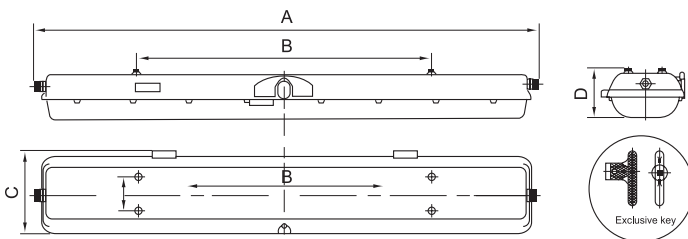
◇ Emergency lighting data

Emergency action duration	Battery charging duration	Emergency lighting duration
0.3S	24h	≥ 90min



Luminous intensity distribution

◇ Dimension versions



Description	size (mm)			
	A	B	C	D
BAY51-Q18 × 1	780	450	196	150
BAY51-Q18 × 2				
BAY51-Q36 × 1	1380	800	222	134
BAY51-Q36 × 2				

◇ Dimension versions

	Srl. No.	Description	Qty	Specification
Stanchion 	①	Stanchion fittings	1	Equipped by user, 2300mm high is preferred.
	②	Cable entry DQM-I M25 × 1.5	2	Included with lightings when ex-work.
	③	Explosion-proof fluorescent lighting	1	BAY51-Q □ × □ L.
	④	Mounting bracket 1	2	Included with lightings when ex-work.
	⑤	Pipe clamp G1/4"	2	
	⑥	Mounting bracket 2	2	
Remarks: All mounting fasteners are equipped by user.				
Ceiling 	Srl. No.	Description	Qty	Specification
	①	Explosion-proof fluorescent lighting	1	BAY51-Q □ × □ X.
	②	Cable entry DQM-I M25 × 1.5	2	Included with lightings when ex-work.
③	Mounting bracket 3	2		
Remarks: All mounting fasteners are equipped by user.				

◇ Dimension versions

Bracket 	Srl. No.	Description	Qty	Specification
	①	Explosion-proof fluorescent lighting	1	BAY51-Q □ × □ B.
	②	Cable entry DQM-I M25 × 1.5	2	Included with lightings when ex-work.
	③	Mounting bracket	1	Equipped by user.
Remarks: All mounting fasteners are equipped by user.				
Suspend chain 	Srl. No.	Description	Qty	Specification
	①	Explosion-proof fluorescent lighting	1	BAY51-Q □ × □ D.
	②	Chain fittings	2	Included with lightings when ex-work.
	③	Sucker G3/4"	2	
④	Cable entry DQM-I M25 × 1.5	2		
Remarks: All mounting fasteners are equipped by user.				
Pendant 	Srl. No.	Description	Qty	Specification
	①	Explosion-proof fluorescent lighting	1	BAY51-Q □ × □ G1.
	②	Cable entry G3/4"	2	Included with lightings when ex-work.
	③	Explosion-proof conduit elbows and tees BGJ-I CG3/4"	2	
	④	Sucker G3/4"	2	
	⑤	Pipe G3/4"	2	
⑥	Cable entry DQM-I M25 × 1.5	2		
Remarks: 1. ②③ for connection to pipe. 2. All mounting fasteners are equipped by user.				
Pendant 	Srl. No.	Description	Qty	Specification
	①	Explosion-proof fluorescent lighting	1	BAY51-Q □ × □ G2.
	②	Cable entry G3/4"	2	Included with lightings when ex-work.
	③	Explosion-proof conduit elbows and tees BGJ-I CG3/4"	2	
	④	Sucker G3/4"	1	
	⑤	Pipe G3/4"	2	
⑥	Explosion-proof terminal box BHD-FG3/4"	1	Explosion-proof terminal box is recommended in our catalogue, please check it for details.	
Remarks: 1. From ⑥ cable through ②③ into lighting. 2. All mounting fasteners are equipped by user.				

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◇ Power connection



1. Discover

Open the lighting cover with exclusive key, discover the protection jacket, insert key in (clamp spring inside), move the key to make the interlock sliding, discover when the interlock tag moves to the OPEN. (Hinged connection of cover and housings).

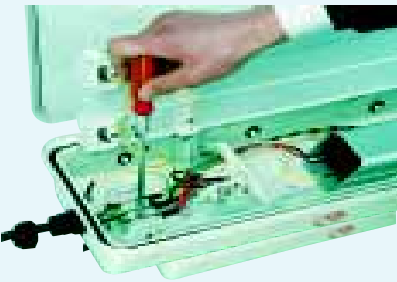
Note: lighting interlock damaged with other than exclusive key.



2. Screw the lamp fittings open

Push clamps at the side the fluorescent lamp fittings, (flexible connection of lamp fittings and clamp on one side, shaft coupling on the other side). Fluorescent lamp fittings separated.

Note: Clamp in PC, for flexibility.



3. Power connection

Cable entry and terminal block at both ends of lightings. Contact one of ends, power is on. Power lead L, N and PE contact terminal block 1, 2, 3 reliably, ensuring internal electricity clearance. And then interlock the entry.

Note: Internal power of lighting is connected reliably when ex-work and interlocked. Don't disconnect unless by professionals. Reliable grounding!



4. Cover

After power connection well, return the lamp fittings, clamped, clip on the transparent cover, lock with exclusive key. Light is on when the tag moves to LIGHT ON; Protection is IP65 when tag to IP65; Protection becomes IP66 and lighting locked firmly when tag to IP66. Cover the protection jacket.

Note: Protection is lowered if not locked firmly.

◇ Lamp installation



1. Take out lamp

Fluorescent lamp fixture in engineering plastic, designed with interlock device, relative tag and conductive film, handle applied for operation. When one of the handles moves to ON, the lamp can be drawn out.

Note: It is not allowed to stretch the lamp out directly.



2. Mount the lamp

Handles on both ends move to ON, push contactors of the lamp end onto groove of lamp holder ensuring reliable contact on conductive film. Return OFF.

◇ Maintenance

Maintenance at interval is necessary. Check sealing between housing and cable entry. Remove the dust on surface. Lighting should be removed from mounting position and repaired by professionals in assigned place, when trouble shooting.

Note: Wet nonfibre clothing and spoon used to remove the dust on surface, avoiding electrostatic.



Check the sealing between housings and cable entry after discover the transparent cover by exclusive key, it is adopting EPDM foamed rubber seal, generally speaking, the seal lasts 8 years.

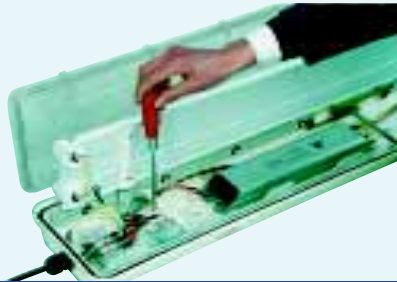
Defective seal must be replaced with Warom seal through local exclusive agency, ensuring explosion-proof protection.

Note: The seal other than Warom is not allowed.

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◇ Maintenance

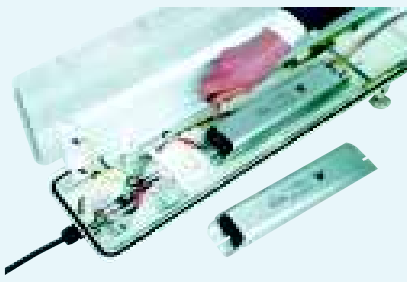


Check connection lead loosen or not after screw open the lamp fittings; check isolating switch and interlock device flexible or not during operation of interlock device with exclusive key.

If abnormal, please check following components:

- a. Drive (gear wheel, rack, etc.) of interlock device.
- b. Drive spring of isolating switch.
- c. Isolating switch.

Defective component must be replaced with Warom components through local exclusive agency. The component other than Warom is not allowed.



Check ballast. If trouble shooting, the ballast will cut off the power, only if the problem solved, the ballast receives the power on signal and works.




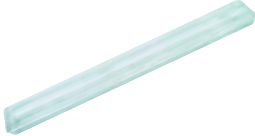







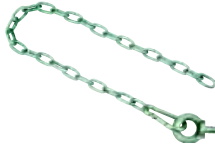
- a. Quick-action fuser provides short circuit protection.
- b. Lamp aging protection, if aging or lamp doesn't work, ballast cut off power. Abnormal protection provided for T8 lamp, when asymmetry lamp power $\leq 10W$.
- c. Lamp air leakage protection, if lamp are not equipped or damaged, ballast cut off the power. If relamping, please select T8 PHILIPS lamp. If defective ballast, it must be replaced with Warom ballast through local exclusive agency. The ballast other than Warom is not allowed.

◇ Ordering information

1. Select the product according to catalog number logic such as lamp number, wattage and mounting style, etc.
2. Components ordering code below as a reference for related components selection.
3. Ordering example:
Enquiry: dual lamp 36W, stanchion mounting style, with emergency device.
Ordering code: BAY51Q-36 × 2LJ.
4. We reserve the power of final interpretation and to make alterations to the technical data, weights, dimensions, designs and products available without notice.

All lighting designs and lighting data come from DIALUX software of Germany upon stimulated situation and working condition.

◇ Accessories (36W) (Following codes also available with 18W, please indicate 18W before selection)

Picture	Description	Ordering code	Picture	Description	Ordering code
	Seal	5136001		Single lamp reflector	5136009
				Dual lamp reflector	5136010
	Transparent cover	5136002		Ballast	5136011
	Isolating switch	5136003		Mounting bracket 1 (stanchion mounting style)	51360012
	Exclusive key	5136004		Mounting bracket 2 (stanchion mounting style)	51360013
	Device	5136005		Pipe clamp G 1 1/4" (stanchion mounting style)	51360014
	Drive	5136006		Mounting bracket 3 (ceiling mounting style)	51360015
	Lamp holder	5136007		Chain fittings (suspend chain mounting style)	51360016
	Terminal block	5136008		Sucker (G3/4") (suspend chain & pendant mounting style)	51360017