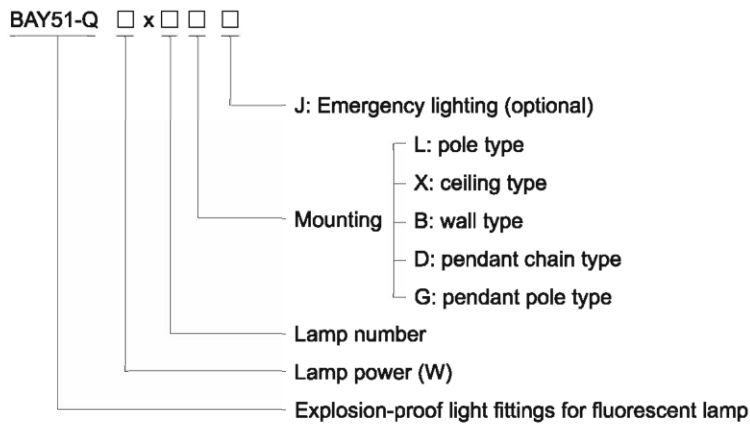




Light Fittings for Fluorescent Lamp BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp

- ◆ 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: 18W, 36W.
- ◆ Enclosure in glass fibre reinforced polyester, diffuser in polycarbonate, corrosion-proof.
- ◆ Ex e enclosure with explosion-proof components inside.
- ◆ Safety interlock between enclosure and diffuser switches off on opening.
- ◆ Electronic ballast, power factor ≥ 0.95 .
- ◆ Emergency unit with protections against over charge 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

2

Technical data

Explosion-proof light fittings for fluorescent lamp **BAY51-Q** □ x □□

Explosion protection

Gas explosion protection

Dust explosion protection

⊕ II 2 G Ex deq IIC T4 Gb

⊕ II 2 D Ex t IIIC T80°C Db IP66

Certificates

LCIE 12 ATEX 3045X; IECEX CQM 07.0007

BR229577 (Brazil); S-XPL/04547 (South Africa); FM (USA); GOST.R (Russia)

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

Explosion-proof 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 brand

PHILIPS T8 (supplied with the light fittings)

Lamp power (W)

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

Rated voltage

96~254V AC 50/60Hz

Protection class

II (Protection against electric shock)

Degree of protection

IP66

Ambient temperature

-20°C~+55°C

Terminal

3 x 1.5~4mm² (L+N+PE)

Cable entries

4 x $\Phi 26$: 2 x M25 x 1.5 cable gland (DQM-I Ex e, plastic), 2 x M25 x 1.5 plug.

Available cable outer diameter

$\Phi 9$ ~ $\Phi 16$ (mm)

Selection table

Type/Ordering code	Lamp power(W)	Weight(kg)	Type/Ordering code	Lamp power(W)	Weight(kg)
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
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

Note: Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/6~7).



Technical data

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

Explosion protection	<p>Gas explosion protection Dust explosion protection</p> <p>⊕ II 2 G Ex deq IIC T4 Gb ⊕ II 2 D Ex tb IIIC T80°C Db IP66</p>				
Certificates	LCIE 10 ATEX 3009; IECEX CQM 12.0002X; BVC 10.0203 (Brazil); FM (USA) GOST.R (Russia)				
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: 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				
Emergency unit	Special emergency controller and NI-MH battery pile, with protection against over charge and over discharge				
Emergency controller	BY-2 explosion-proof emergency controller. Certificate No.: LCIE 10 ATEX 3010U, IECEX CQM 11.0041U				
Exposed fastener	Stainless steel				
Lamp					
Lamp brand	PHILIPS T8 (supplied with the light fittings)				
Lamp power(W)	<table border="1"> <tr> <td>36W x 2</td> <td>18W x 2</td> </tr> <tr> <td>36W x 1</td> <td>18W x 1</td> </tr> </table>	36W x 2	18W x 2	36W x 1	18W x 1
36W x 2	18W x 2				
36W x 1	18W x 1				
Emergency power(W)	36W x 1, 18W x 1				
Emergency start time	0.3s				
Charge 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				
Ambient temperature	-20°C~+55°C				
Terminal	3 x 1.5~4mm ² (L+N+PE)				
Cable entries	4 x Φ26: 2 x M25 x 1.5 cable gland (DQM-I Ex e, plastic), 2 x M25 x 1.5 plug.				
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-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
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

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

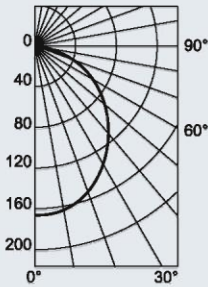
Photometric data

18W x 2 photometric data

Rated luminous flux:2100lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	349	50	193
5	348	55	162
10	345	60	130
15	335	65	98
20	324	70	66
25	309	75	38
30	292	80	18
35	272	85	0
40	248	90	0
45	222		

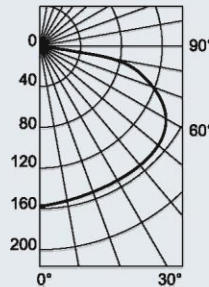
18W x 1 fluorescent lamp*0.5

36W x 2 photometric data

Rated luminous flux:5000lm;

The data from PHILIPS lamp;

Luminous intensity distribution cd/1000lm

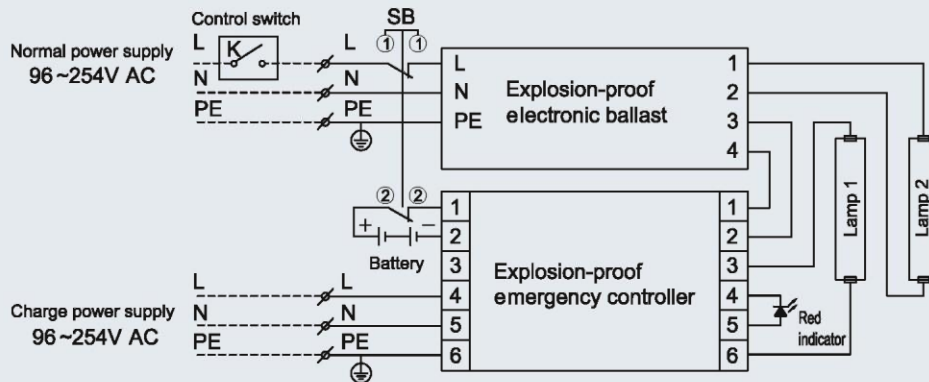


Angle	CP	Angle	CP
0	783	50	758
5	780	55	731
10	779	60	702
15	776	65	660
20	775	70	610
25	775	75	522
30	777	80	365
35	776	85	0
40	772	90	0
45	765		

36W x 1 fluorescent lamp*0.5

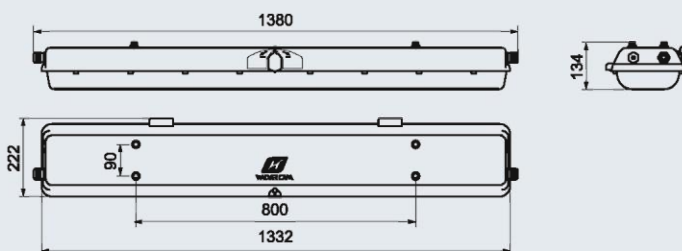
We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

Schematic diagram (BAY51-Q□x□□□J)

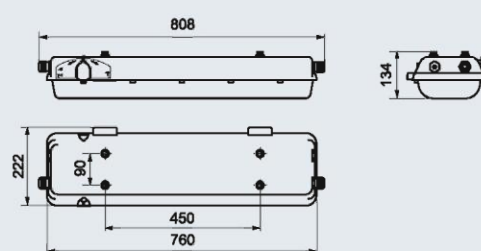


Note: Tube for lamp 2 shall be default for single tube fittings.

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



BAY51-Q36 x □□□

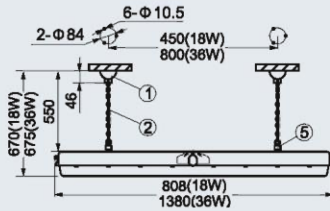


BAY51-Q18 x □□□

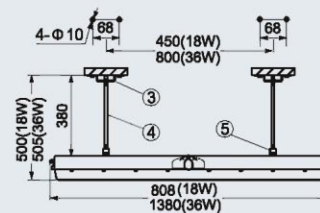
Mounting type (all dimensions in mm) - subject to alteration

Installation reference

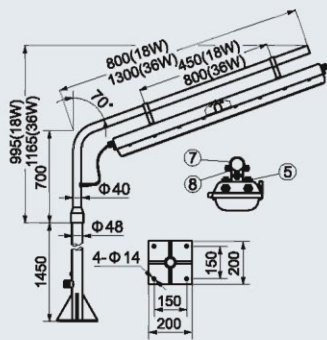
D: pendant chain type



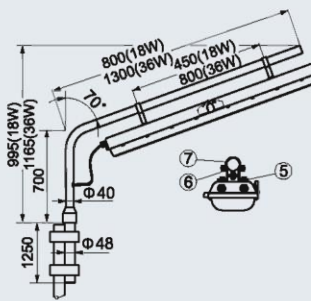
G: pendant pole type



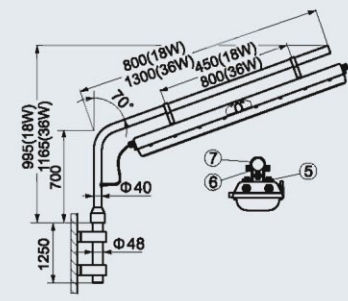
L: pole type (the pole is provided by user)



Suitable for ground pole type

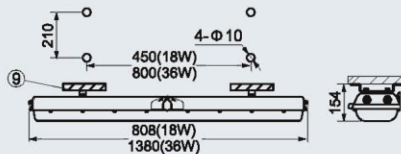


Suitable for fence pole type

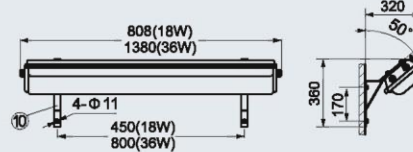


Suitable for wall pole type

X: ceiling type

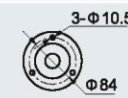
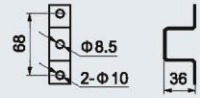
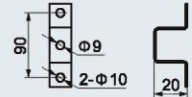


B: wall type



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

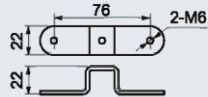
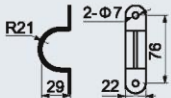
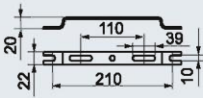
Note: Accessories not in the table shall be supplied by user.

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

2

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	⑨.Mounting bracket	2		5136015	0.20
B: wall type	⑩.Wall bracket	2	Welded sheet steel	5136B02	0.62

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

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
	36W Explosion-proof electronic ballast	5136011	1.30
	18W Explosion-proof electronic ballast	5118004	1.30
	36W Explosion-proof emergency controller (with battery)	5136019	1.70
	18W Explosion-proof emergency controller (with battery)	5118005	1.70

