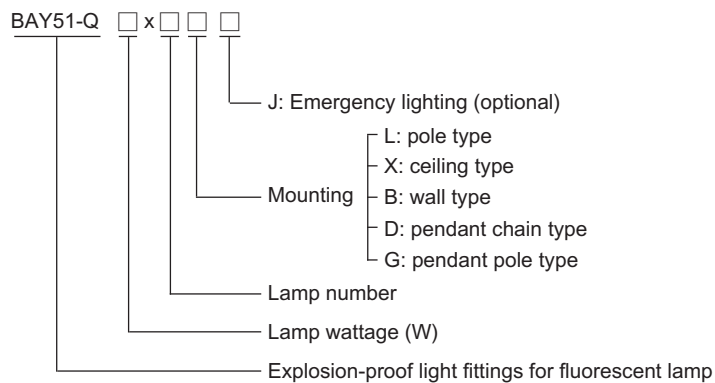




## Light Fittings for Fluorescent Lamp BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp

- ◆ Explosion protection to
  - CENELEC
  - IEC
  - NEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
- ◆ Two enclosure types: 18W, 36W.
- ◆ Enclosure in glass fiber 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  $\geq 0.95$ .
- ◆ 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					
<b>Explosion-proof light fittings for fluorescent lamp</b> <b>BAY51-Q</b> □ x □ □					
<b>Explosion protection</b>	⊕ II 2 G Ex deq IIC T4				
Gas explosion protection	Ex tD A21 T80°C IP66				
Dust explosion protection					
<b>Certificates</b>					
For gas explosion protection	LCIE 06 ATEX 6035X; IECEx CQM 07.0007; BR229577 (Brazil) S-XPL/04547 (South Africa); FM (USA); GOST.R (Russia)				
For dust explosion protection	PCEC (China)				
<b>Conformity to standards</b>	EN 60079-0:2004, EN 60079-1:2004, EN 60079-5:2007, EN 60079-7:2003 IEC 60079-0: 2004, IEC 60079-1:2003, IEC 60079-5:2007, IEC 60079-7:2001 IEC 61241-0:2004, IEC 61241-1:2004				
<b>Material</b>					
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				
<b>Interlock</b>	BZX-6 explosion-proof distance switch, switching off on opening. Certificate No.: LCIE 06 ATEX 0002U, IECEx CQM 07.0006U				
<b>Lamp</b>					
Lamp brand	PHILIPS T8 (supplied with the light fittings)				
Lamp wattage (W)	<table style="border-collapse: collapse; margin: 0;"> <tr> <td style="border: 1px solid black; padding: 2px;">36W x 2</td> <td style="border: 1px solid black; padding: 2px;">18W x 2</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">36W x 1</td> <td style="border: 1px solid black; padding: 2px;">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				
<b>Rated voltage</b>	96~254V AC 50/60Hz				
<b>Protection class</b>	II (Protection against electric shock)				
<b>Degree of protection</b>	IP66				
<b>Ambient temperature</b>	-20°C ~ +55°C				
<b>Terminal</b>	3 x 1.5~4mm <sup>2</sup> (L+N+PE)				
<b>Cable entries</b>	4 x Ø26: 2 x M25 x 1.5 cable gland (DQM-I Ex e, plastic), 2 x M25 x 1.5 plug.				
<b>Available cable outer diameter</b>	Ø9~Ø16 (mm)				

Selection table					
Type/Ordering code	Lamp wattage(W)	Weight(kg)	Type/Ordering code	Lamp wattage(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 P2/10~11).



Technical data	
<b>Explosion-proof emergency light fittings for fluorescent lamp</b> <b>BAY51-Q</b> □ x □□ <b>J</b>	
<b>Explosion protection</b>	
Gas explosion protection	⊕ II 2 G Ex deq IIC T4
Dust explosion protection	Ex tD A21 T80°C IP66
<b>Certificates</b>	
For gas explosion protection	LCIE 10 ATEX 3009; BVC 10.0203 (Brazil); FM (USA); GOST.R (Russia); IECEx
For dust explosion protection	PCEC (China)
<b>Conformity to standards</b>	EN 60079-0:2006, EN 60079-1:2004, EN 60079-5:2007, EN 60079-7:2007 IEC 60079-0: 2004, IEC 60079-1:2003, IEC 60079-5:2007, IEC 60079-7:2006 IEC 61241-0: 2004, IEC 61241-1: 2004
<b>Material</b>	
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
Exposed fastener	Stainless steel
<b>Lamp</b>	
Lamp brand	PHILIPS T8 (supplied with the light fittings)
Lamp wattage (W)	36W x 2    18W x 2 36W x 1    18W x 1
Emergency wattage (W)	36W x 1, 18W x 1
<b>Emergency start time</b>	0.3s
<b>Charge time</b>	24h
<b>Emergency lighting time</b>	120min (180min is optional)
<b>Rated voltage</b>	96~254V AC 50/60Hz
<b>Protection class</b>	II (Protection against electric shock)
<b>Degree of protection</b>	IP66
<b>Ambient temperature</b>	-20°C ~ +55°C
<b>Terminal</b>	3 x 1.5~4mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	4 x Ø26: 2 x M25 x 1.5 cable gland (DQM-I Ex e, plastic), 2 x M25 x 1.5 plug.
<b>Available cable outer diameter</b>	Ø9~Ø16 (mm)



Selection table					
Type/Ordering code	Lamp wattage(W)	Weight(kg)	Type/Ordering code	Lamp wattage(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

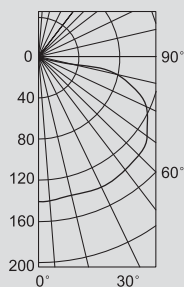
**Note:** Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/10 ~ 11).

## 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

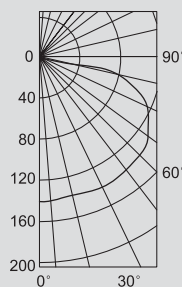


Angle	CP	Angle	CP
0	333	50	184
5	332	55	155
10	328	60	124
15	320	65	93
20	310	70	63
25	295	75	37
30	278	80	17
35	259	85	0
40	236	90	0
45	211		

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

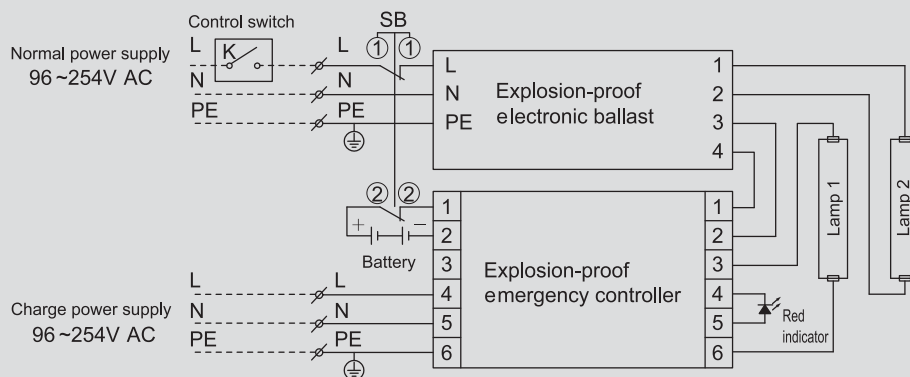


Angle	CP	Angle	CP
0	705	50	682
5	703	55	658
10	702	60	433
15	699	65	594
20	697	70	549
25	697	75	469
30	700	80	328
35	699	85	0
40	695	90	0
45	688		

36W x 1 fluorescent lamp\*0.5

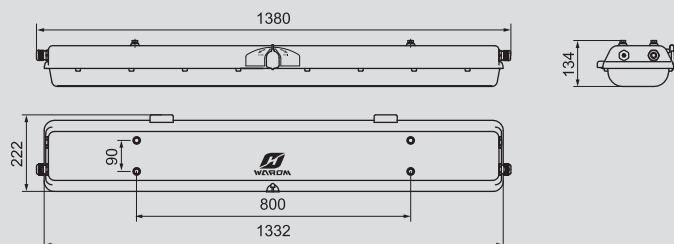
We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

### Schematic diagram (BAY51-Q □ x □ □ J)

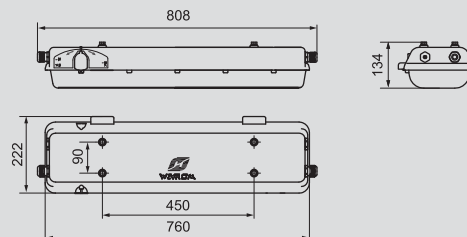


**Note:** Tube for lamp 2 shall be default for single tube fittings.

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



BAY51-Q36 x □ □ □



BAY51-Q18 x □ □ □

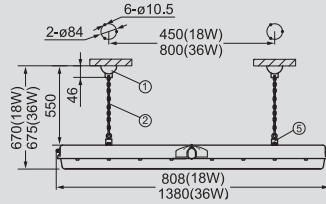


## Light Fittings for Fluorescent Lamp BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp

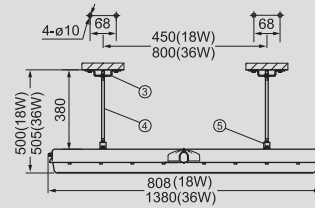
### Mounting type (all dimensions in mm) - subject to alteration

Installation reference

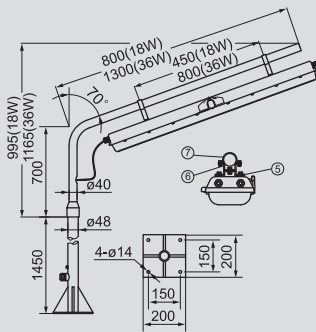
D: pendant chain type



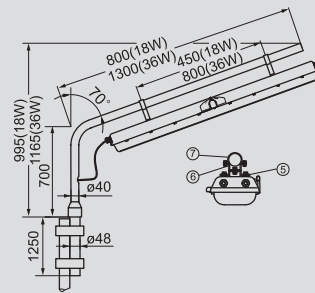
G: pendant pole type



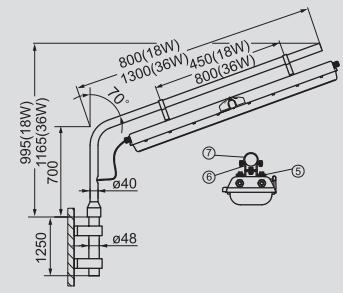
L: pole type (the pole is provided by user)



Suitable for ground pole type

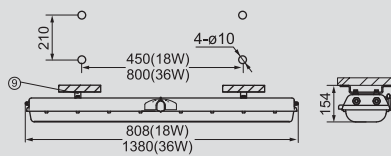


Suitable for fence pole type

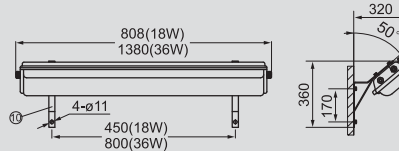


Suitable for wall pole type

X: ceiling type



B: wall type



### Mounting accessories and spare parts table

Supplied according to the mounting type

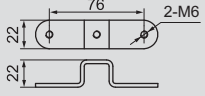
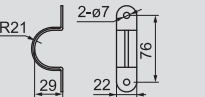
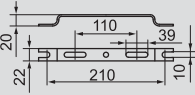
Mounting type	Accessories			Ordering code	Weight (kg)
	Name	Qty	Illustration		
D: pendant chain type	①.Sucker	2		5136017	0.15
	②.Chain	2	Length: 450mm	5136016	0.08
	⑤.Mounting bracket	2	Same as pendant pole type	5136030	0.07
G: pendant pole type	③.Mounting bracket	2		51S01G1	0.04
	④.M8 Screw	2	Length: 350mm	51S01G2	0.12
	⑤.Mounting bracket	2		5136030	0.05

**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





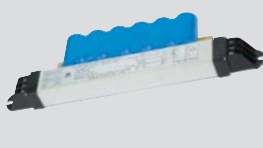
## Mounting accessories and spare parts table

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

