

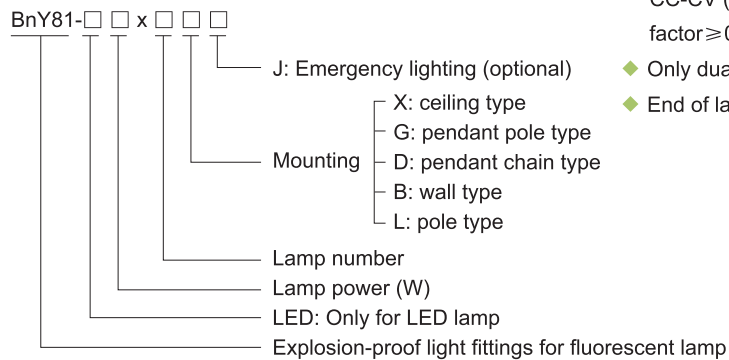
## Light Fittings for Fluorescent Lamp

### BnY81 Series Explosion-proof Light Fittings for Fluorescent Lamp

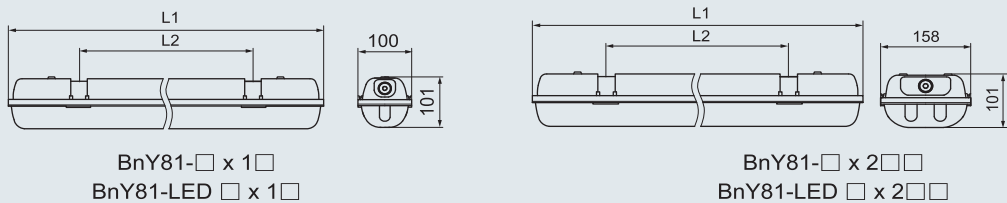


- ◆ Explosion protection to
  - CENELEC
  - IEC
  - NEC
- ◆ Can be used in
  - Zone 2
  - Zone 21 and Zone 22
  - Class I, Zone 2
  - Class I, Division 2, Groups A, B, C, D
- ◆ Six enclosure types:
  - Single tube: three enclosure types
  - Dual tube: three enclosure types
- ◆ Applicable lamp power:
  - Fluorescent lamps: 18W x 1, 36W x 1, 58W x 1  
18W x 2, 36W x 2, 58W x 2
  - LED lamps: 9W (10W) x 1, 18W(19W) x 1, 28W(25W) x 1  
9W(10W) x 2, 18W(19W) x 2, 28W(25W) x 2
- ◆ Built-in electronic ballast, wide voltage input, rapid starting, stable performance, power factor  $\geq 0.95$ .
- ◆ LED light fittings: Built-in LED driver, wide voltage input, CC-CV (constant current - constant voltage) output, power factor  $\geq 0.95$ .
- ◆ Only dual tube light fittings have emergency lighting function.
- ◆ End of lamp life (EOL) rectification effect protection.

#### Catalogue number logic



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



#### Dimensions

Type	Size (mm)		Type	Size (mm)	
	L1	L2		L1	L2
BnY81-18x1□, BnY81-LED 9x1□	658	400	BnY81-18x2□□, BnY81-LED 9x2□□	658	400
BnY81-36x1□, BnY81-LED 18x1□	1268	900	BnY81-36x2□□, BnY81-LED 18x2□□	1268	900
BnY81-58x1□, BnY81-LED 28x1□	1568	900	BnY81-58x2□□, BnY81-LED 28x2□□	1568	900

## Zones 2; 21&22

## Light Fittings for Fluorescent Lamp

### BnY81 Series Explosion-proof Light Fittings for Fluorescent Lamp

#### Technical data

#### Explosion-proof light fittings for fluorescent lamp BnY81-□ × □□□

##### Explosion protection

Gas explosion protection  
Dust explosion protection

⊕ II 3 G Ex nA IIC T4 Gc  
⊕ II 2 D Ex tb IIIC T80°C Db IP66

##### Certificates

LCIE 12 ATEX 1009X (gas); LCIE 12 ATEX 3019X (dust); IECEx CQM 12.0046X CU-TR

##### Conformity to standards

EN 60079-0, EN 60079-15, EN 60079-31  
IEC 60079-0, IEC 60079-15, IEC 60079-31

##### Material

Enclosure  
Diffuser  
Ballast  
Exposed fastener

Polycarbonate, stands 7J impact, corrosion-proof  
Polycarbonate, 90% light transmission, stands 7J impact, corrosion-proof  
Electronic ballast  
Stainless steel

##### Lamp

Lamp specification  
Lamp power (W)

International brand of T8 tube (supplied with the light fittings)

18W × 1	18W × 2
36W × 1	36W × 2
58W × 1	58W × 2

##### Rated voltage

100~300V AC 50/60Hz

##### Degree of protection

IP66, IP67(optional)

##### Ambient temperature

-20°C~+55°C

##### Terminal

3 x 1.5~4mm<sup>2</sup> (L+N+PE)

##### Mounting

Ceiling type, pendant pole type, pendant chain type, wall type, pole type

##### Cable entries

2 x Φ21: 2 x M20 x 1.5 cable glands (DQM-I Ex e, plastic)

##### Available cable outer diameter

Φ6~Φ12 (mm)

##### Emergency data

Emergency unit

Special emergency controller and Ni-MH battery pile, with protection against overcharge and overdischarge

Emergency power (W)

18W x 1, 36W x 1, 58W x 1

Emergency starting time

0.3s

Charging time

24h

Emergency lighting time

120min (180min is optional)

#### Selection table

Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)
BnY81-18 x 1X	18 x 1	1.60	BnY81-36 x 1X	36 x 1	2.70	BnY81-58 x 1X	58 x 1	2.90
BnY81-18 x 1G	18 x 1	1.80	BnY81-36 x 1G	36 x 1	2.90	BnY81-58 x 1G	58 x 1	3.10
BnY81-18 x 1D	18 x 1	1.95	BnY81-36 x 1D	36 x 1	3.05	BnY81-58 x 1D	58 x 1	3.30
BnY81-18 x 1B	18 x 1	1.95	BnY81-36 x 1B	36 x 1	3.05	BnY81-58 x 1B	58 x 1	3.30
BnY81-18 x 1L	18 x 1	1.65	BnY81-36 x 1L	36 x 1	2.75	BnY81-58 x 1L	58 x 1	3.00
BnY81-18 x 2X	18 x 2	2.00	BnY81-36 x 2X	36 x 2	3.20	BnY81-58 x 2X	58 x 2	4.00
BnY81-18 x 2G	18 x 2	2.20	BnY81-36 x 2G	36 x 2	3.40	BnY81-58 x 2G	58 x 2	4.20
BnY81-18 x 2D	18 x 2	2.35	BnY81-36 x 2D	36 x 2	3.55	BnY81-58 x 2D	58 x 2	4.35
BnY81-18 x 2B	18 x 2	2.35	BnY81-36 x 2B	36 x 2	3.55	BnY81-58 x 2B	58 x 2	4.40
BnY81-18 x 2L	18 x 2	2.05	BnY81-36 x 2L	36 x 2	2.25	BnY81-58 x 2L	58 x 2	4.05
BnY81-18 x 2XJ	18 x 2	3.05	BnY81-36 x 2XJ	36 x 2	4.25	BnY81-58 x 2XJ	58 x 2	5.05
BnY81-18 x 2GJ	18 x 2	3.25	BnY81-36 x 2GJ	36 x 2	4.45	BnY81-58 x 2GJ	58 x 2	5.25
BnY81-18 x 2DJ	18 x 2	3.40	BnY81-36 x 2DJ	36 x 2	4.55	BnY81-58 x 2DJ	58 x 2	5.40
BnY81-18 x 2BJ	18 x 2	3.45	BnY81-36 x 2BJ	36 x 2	4.55	BnY81-58 x 2BJ	58 x 2	5.45
BnY81-18 x 2LJ	18 x 2	3.10	BnY81-36 x 2LJ	36 x 2	4.30	BnY81-58 x 2LJ	58 x 2	5.10

**Note:** 1. Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/35).

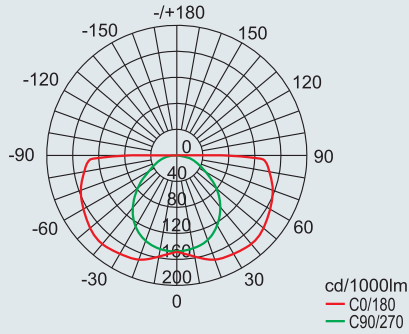


## Light Fittings for Fluorescent Lamp BnY81 Series Explosion-proof Light Fittings for Fluorescent Lamp

### Photometric data

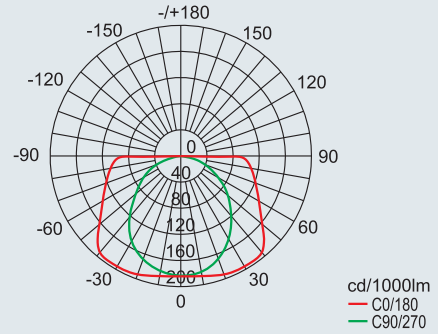
#### BnY81-18x1□

Rated luminous flux  
18Wx1: 1300lm



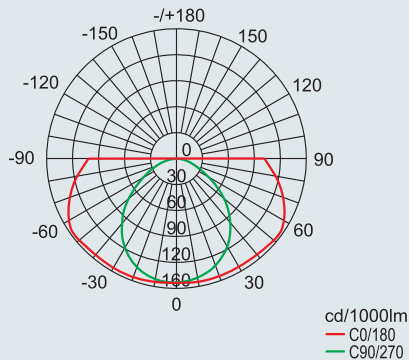
#### BnY81-18x2□□

Rated luminous flux  
18Wx2: 2600lm



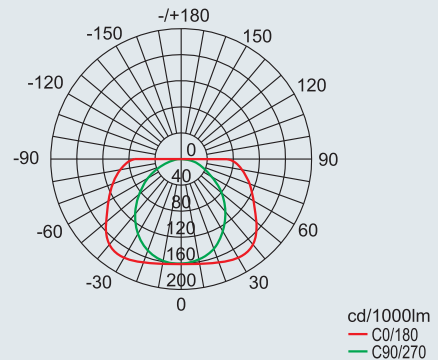
#### BnY81-36x1□

Rated luminous flux  
36Wx1: 3250lm



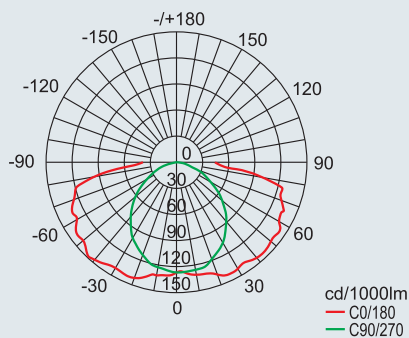
#### BnY81-36x2□□

Rated luminous flux  
36Wx2: 6500lm



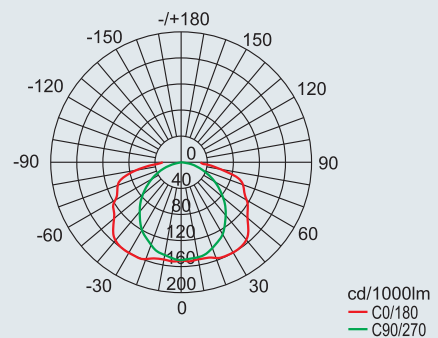
#### BnY81-58x1□

Rated luminous flux  
58Wx1: 5000lm



#### BnY81-58x2□□

Rated luminous flux  
58Wx2: 10000lm



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

## Light Fittings for Fluorescent Lamp

### BnY81 Series Explosion-proof Light Fittings for Fluorescent Lamp

Technical data									
Explosion-proof light fittings for fluorescent lamp BnY81-LED □ × □ □ □									
<b>Explosion protection</b>									
Gas explosion protection			⊕ II 3 G Ex nA IIC T4 Gc						
Dust explosion protection			⊕ II 2 D Ex tb IIIC T80°C Db IP66						
<b>Certificates</b>			LCIE 12 ATEX 1009X (gas); LCIE 12 ATEX 3019X (dust); IECEx CQM 12.0046X CU-TR						
<b>Conformity to standards</b>			EN 60079-0, EN 60079-15, EN 60079-31 IEC 60079-0, IEC 60079-15, IEC 60079-31						
<b>Material</b>									
Enclosure			Polycarbonate, stands 7J impact, corrosion-proof						
Diffuser			Polycarbonate, 90% light transmission, stands 7J impact, corrosion-proof						
Exposed fastener			Stainless steel						
LED driver			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.						
<b>Lamp</b>									
Lamp specification			International brand of LED module (supplied with the light fittings)						
Lamp power (W)			9W(10W)×1, 9W(10W)×2, 18W(19W)×1, 18W(19W)×2, 28W(25W)×1, 28W(25W)×2						
Colour Temperature (CCT)			Cool white: 5400 ~ 6500K Note: cool white is available in general. Warm white (2700~3500K) or nature white (4700~5400K) is optional, please specify when ordering.						
<b>Rated voltage</b>			110~265V AC 50/60Hz						
<b>Degree of protection</b>			IP66, IP67(optional)						
<b>Ambient temperature</b>			-20°C~+55°C						
<b>Terminal</b>			3 x 1.5~4mm <sup>2</sup> (L+N+PE)						
<b>Mounting</b>			Ceiling type, pendant pole type, pendant chain type, wall type, pole type						
<b>Cable entries</b>			2 x Φ21: 2 x M20 x 1.5 cable glands (DQM-I Ex e, plastic)						
<b>Available cable outer diameter</b>			Φ6~Φ12 (mm)						
<b>Emergency data</b>									
Emergency unit			Special emergency controller and Ni-MH battery pile, with protection against overcharge and overdischarge						
Emergency power (W)			9W x 1, 18W x 1, 28W x 1						
Emergency starting time			0.3s						
Charging time			24h						
Emergency lighting time			120min (180min is optional)						
Selection table									
Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)	
BnY81-LED 9 x 1X	9 x 1	1.50	BnY81-LED 18 x 1X	18 x 1	2.70	BnY81-LED 28 x 1X	28 x 1	2.85	
BnY81-LED 9 x 1G	9 x 1	1.70	BnY81-LED 18 x 1G	18 x 1	2.90	BnY81-LED 28 x 1G	28 x 1	3.05	
BnY81-LED 9 x 1D	9 x 1	1.85	BnY81-LED 18 x 1D	18 x 1	3.05	BnY81-LED 28 x 1D	28 x 1	3.25	
BnY81-LED 9 x 1B	9 x 1	1.85	BnY81-LED 18 x 1B	18 x 1	3.05	BnY81-LED 28 x 1B	28 x 1	3.25	
BnY81-LED 9 x 1L	9 x 1	1.55	BnY81-LED 18 x 1L	18 x 1	2.75	BnY81-LED 28 x 1L	28 x 1	2.95	
BnY81-LED 9 x 2X	9 x 2	1.70	BnY81-LED 18 x 2X	18 x 2	3.10	BnY81-LED 28 x 2X	28 x 2	3.90	
BnY81-LED 9 x 2G	9 x 2	1.90	BnY81-LED 18 x 2G	18 x 2	3.30	BnY81-LED 28 x 2G	28 x 2	4.10	
BnY81-LED 9 x 2D	9 x 2	2.05	BnY81-LED 18 x 2D	18 x 2	3.45	BnY81-LED 28 x 2D	28 x 2	4.25	
BnY81-LED 9 x 2B	9 x 2	2.05	BnY81-LED 18 x 2B	18 x 2	3.45	BnY81-LED 28 x 2B	28 x 2	4.30	
BnY81-LED 9 x 2L	9 x 2	1.75	BnY81-LED 18 x 2L	18 x 2	3.15	BnY81-LED 28 x 2L	28 x 2	3.95	
BnY81-LED 9 x 2XJ	9 x 2	2.20	BnY81-LED 18 x 2XJ	18 x 2	3.60	BnY81-LED 28 x 2XJ	28 x 2	4.40	
BnY81-LED 9 x 2GJ	9 x 2	2.40	BnY81-LED 18 x 2GJ	18 x 2	3.80	BnY81-LED 28 x 2GJ	28 x 2	4.60	
BnY81-LED 9 x 2DJ	9 x 2	2.55	BnY81-LED 18 x 2DJ	18 x 2	3.95	BnY81-LED 28 x 2DJ	28 x 2	4.75	
BnY81-LED 9 x 2BJ	9 x 2	2.55	BnY81-LED 18 x 2BJ	18 x 2	3.95	BnY81-LED 28 x 2BJ	28 x 2	4.80	
BnY81-LED 9 x 2LJ	9 x 2	2.25	BnY81-LED 18 x 2LJ	18 x 2	3.55	BnY81-LED 28 x 2LJ	28 x 2	4.45	
<b>Note:</b> 1. Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/35).									

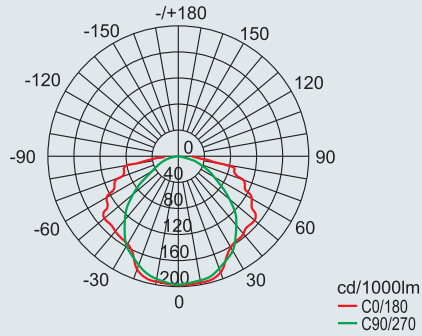


## Light Fittings for Fluorescent Lamp BnY81 Series Explosion-proof Light Fittings for Fluorescent Lamp

**Photometric data** Note: LED luminous flux is from the standard product of which colour temperature is 5400 to 6500K (cool white).

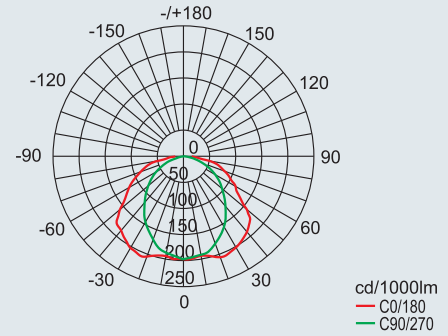
### BnY81-LED 9x1□

Rated luminous flux  
LED 9Wx1: 945lm



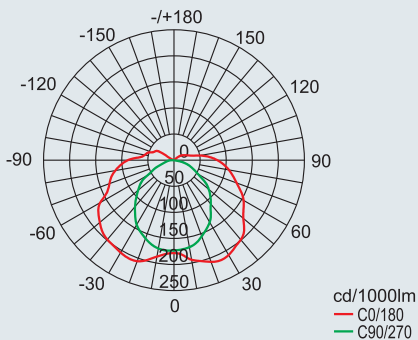
### BnY81-LED 9x2□

Rated luminous flux  
LED 9Wx2: 1890lm



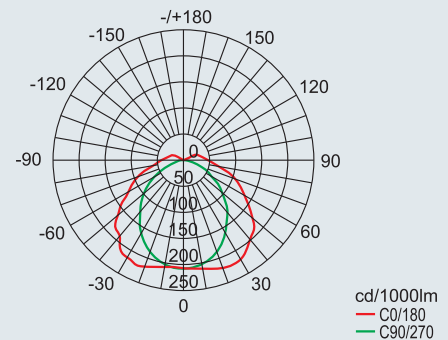
### BnY81-LED 18x1□

Rated luminous flux  
LED 18Wx1: 1890lm



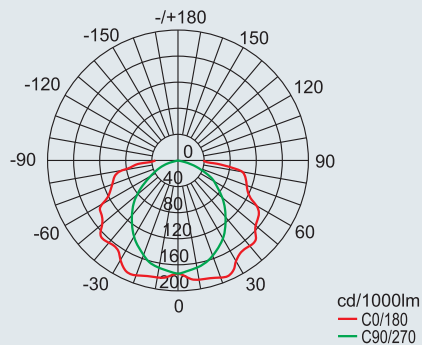
### BnY81-LED 18x2□

Rated luminous flux  
LED 18Wx2: 3780lm



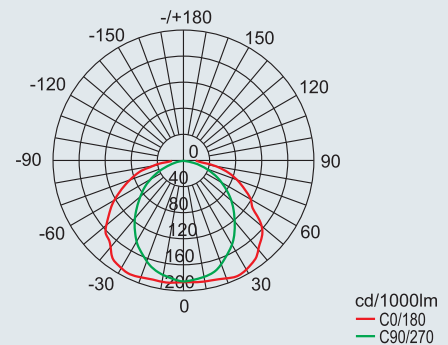
### BnY81-LED 28x1□

Rated luminous flux  
LED 28Wx1: 2940lm



### BnY81-LED 28x2□

Rated luminous flux  
LED 28Wx2: 5880lm



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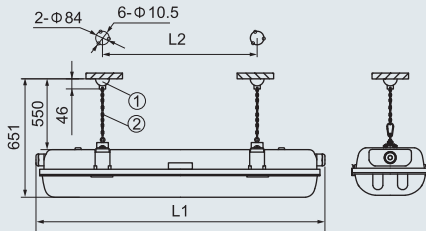
## Light Fittings for Fluorescent Lamp

### BnY81 Series Explosion-proof Light Fittings for Fluorescent Lamp

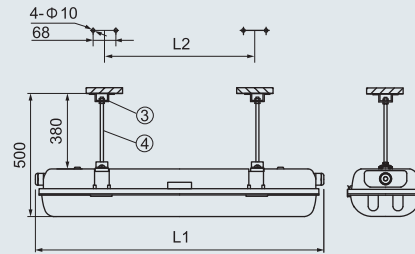
#### Mounting type (all dimensions in mm) - subject to alteration

Installation reference

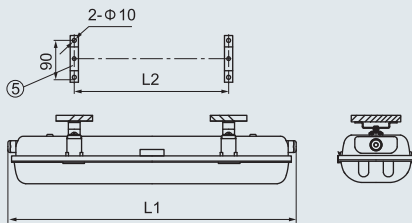
D: pendant chain type



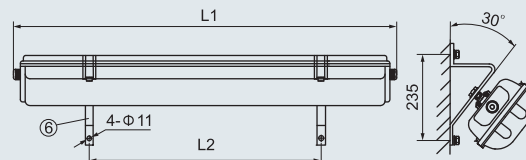
G: pendant pole type



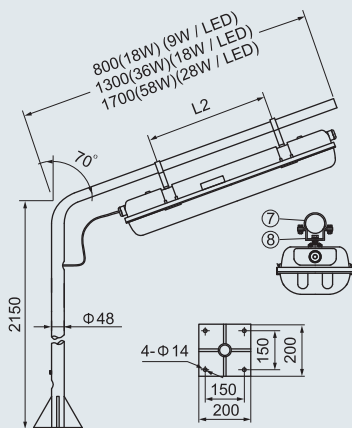
X: ceiling type



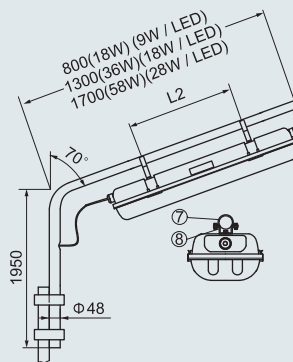
B: wall type



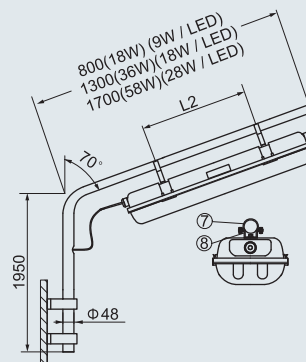
L: pole type (the pole is provided by user)



Suitable for ground pole type



Suitable for fence pole type



Suitable for wall pole type



#### 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	See P2/8	5136017	0.15
	②.Chain	2	Length: 450mm	5136016	0.08
G: pendant pole type	③.Mounting bracket	2	See P2/8	51S01G1	0.04
	④.M8 Screw	2	Length: 350mm	51S01G2	0.12
X: ceiling type	⑤.Mounting bracket	2	See P2/9	5136030	0.07
B: wall type	⑥.Wall bracket	2	Welded sheet steel	5236B02	0.25
L: pole type	⑦.G1 1/2" Pipe clamp	2	See P2/9	5136014	0.04
	⑧.Mounting bracket	2	See P2/9	5136012	0.04

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