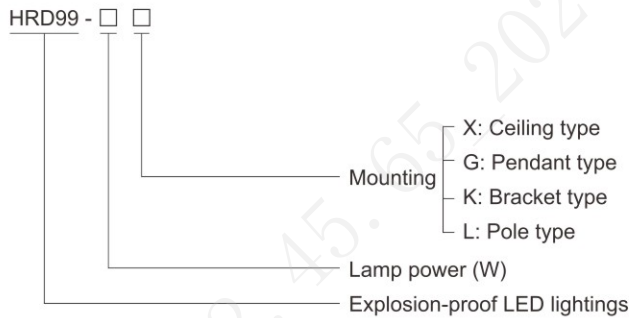


## LED Light Fittings HRD99 Series Explosion-proof LED Lightings



- ◆ 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 1, Groups A, B, C, D
- ◆ Applicable lamp and power (max.100W)  
LED : 20W, 30W, 50W, 70W, 80W, 100W,
- ◆ Isolated LED lamp compartment, CC-CV (constant current - constant voltage) power controller compartment and terminal compartment; Wind-convection heat dissipation structure.
- ◆ Low-maintenance due to long service life, which is up to 100,000 operating hours.

### Catalogue number logic



### Selection table

Type / Ordering code	Lamp power(W)
HRD99-20 □	20
HRD99-30 □	30
HRD99-50 □	50
HRD99-70 □	70
HRD99-80 □	80
HRD99-100 □	100

**Note:** 1. Products above include all the mounting accessories listed in Mounting type (see P2/67).  
2. The product is supplied according to "Type/Ordering code" in the table with mounting accessories.

# Zones 1&2; 21&22

## LED Light Fittings

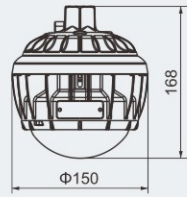
### HRD99 Series Explosion-proof LED Lightings

Technical data	
Explosion-proof LED lightings HRD99-□□	
<b>Explosion protection</b>	
Global (IECEX)	IECEX CQM 25.0019X
Gas and dust	Ex db IIB T6/T5 Gb Ex db IIC T6/T5 Gb Ex tb IIIC T80°C/T95°C Db
Europe (ATEX)	TÜV CY 25 ATEX 0207323X
Gas and dust	⊕ II 2 G Ex db IIB T6/T5 Gb ⊕ II 2 G Ex db IIC T6/T5 Gb ⊕ II 2 D Ex tb IIIC T80°C/T95°C Db
<b>Certificates</b>	IECEX; ATEX
<b>Conformity to standards</b>	EN 60079-0, EN 60079-1, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-31
<b>Material</b>	
Enclosure	Copper-free aluminium alloy, powder coated surface, yellow (RAL1021)
Transparent cover	Polycarbonate, stands 4J impact
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	Integrated LED, Multiple LED
Lamp power (W)	20W, 30W, 50W, 70W, 80W, 100W
Colour rendering index (Ra)	≥80
Colour temperature (CCT)	5700K Note: cool white is available in general. Warm white or nature white is optional, please specify when ordering.
<b>Rated voltage</b>	220~240V AC 50/60Hz
<b>Earthing protection</b>	M5 (internal & external earth bolts)
<b>Degree of protection</b>	IP66
<b>Ambient temperature</b>	IIB T6 / IIIC T80°C for Tamb: -40°C~+40°C, only for 20W, 30W, 50W, 70W IIB T5 / IIIC T95°C for Tamb: -40°C~+58°C, only for 20W, 30W, 50W, 70W IIC T6 for Tamb: -20°C~+40°C, for 20W, 30W, 50W, 70W, 80W, 100W IIC T5 for Tamb: -20°C~+58°C, for 20W, 30W, 50W, 70W, 80W, 100W
<b>Terminal</b>	3×1.5~4mm <sup>2</sup> (L+N+PE)
<b>Mounting</b>	Bracket type, Ceiling type, Pendant type, Pole type
<b>Cable entries</b>	M25×1.5
<b>Cable gland</b>	See Mounting type (see P2/67)

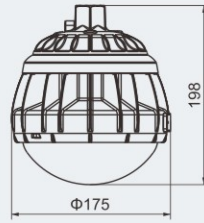


## LED Light Fittings HRD99 Series Explosion-proof LED Lightings

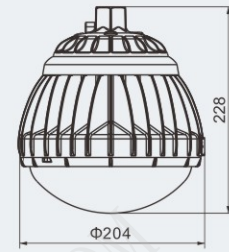
**Dimension drawings** (all dimensions in mm) - subject to alteration



20W, 30W



50W, 70W

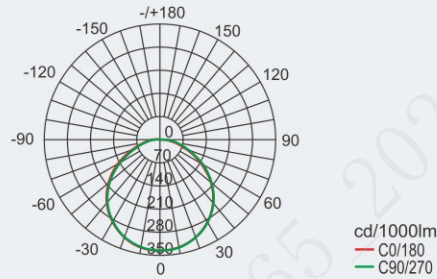


80W, 100W

**Photometric data** Note: LED luminous flux is from the standard product of which colour temperature is 5700K (cool white).

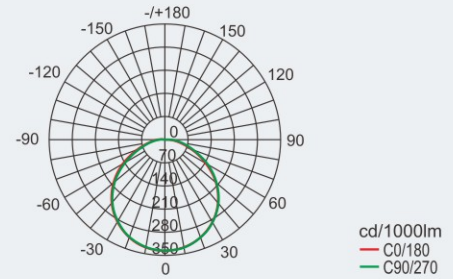
### HRD99-20□

Lamp power (W)	Luminous flux	Wattage
20	2500lm	23W



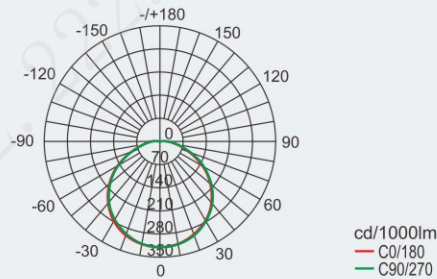
### HRD99-30□

Lamp power (W)	Luminous flux	Wattage
30	3300lm	31W



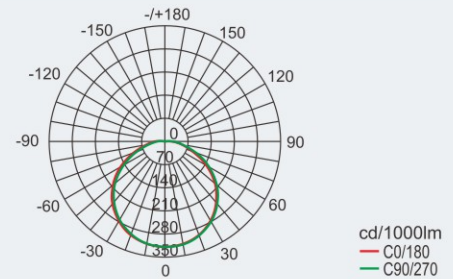
### HRD99-50□

Lamp power (W)	Luminous flux	Wattage
50	6500lm	55W



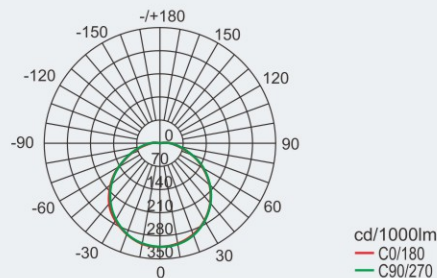
### HRD99-70□

Lamp power (W)	Luminous flux	Wattage
70	8300lm	74W



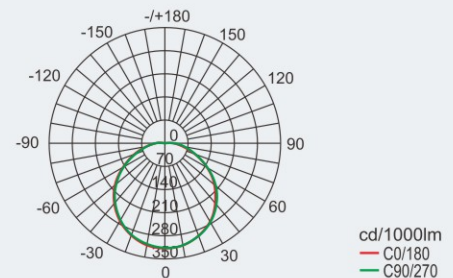
### HRD99-80□

Lamp power (W)	Luminous flux	Wattage
80	9400lm	78W



### HRD99-100□

Lamp power (W)	Luminous flux	Wattage
100	11700lm	104W



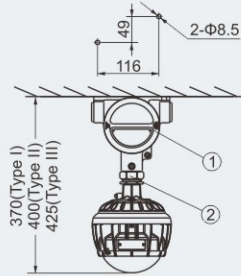
We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.



## LED Light Fittings HRD99 Series Explosion-proof LED Lightings

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

### X: Ceiling type

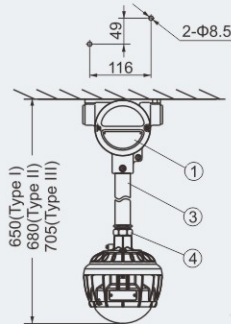


Weight: 2.40kg (20W)(30W)  
3.00kg (50W)(70W)  
3.80kg (80W)(100W)

Accessories supplied with the light fittings:

- ①. BHD51-F(Ex d IIC, copper-free aluminium alloy)
- ②. BGJ-III Explosion-proof connector  
M25×1.5(M)/M25×1.5 (M), Stainless steel.

### G: Pendant type

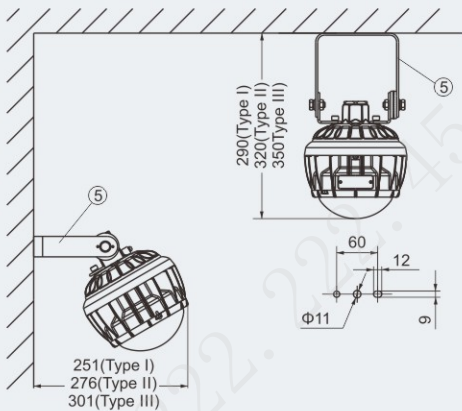


Weight: 2.80kg (20W)(30W)  
3.40kg (50W)(70W)  
4.20kg (80W)(100W)

Accessories supplied with the light fittings:

- ①. BHD51-F(Ex d IIC, copper-free aluminium alloy).
- ③. Straight pipe(M25×1.5), length: 300mm.
- ④. BGJ-III Explosion-proof connector  
M25×1.5(M)/M25×1.5(F), Stainless steel.

### K: Bracket type

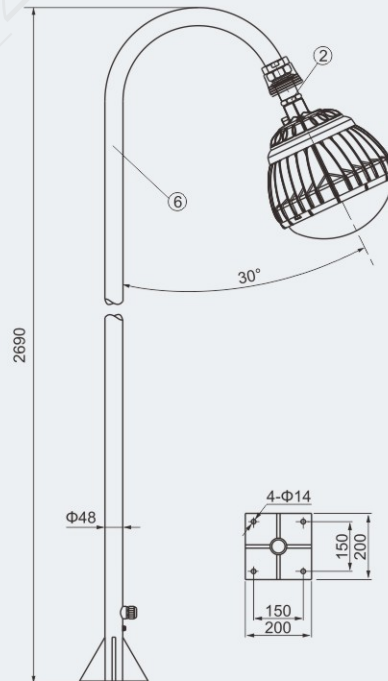


Weight: 1.70kg (20W)(30W)  
2.30kg (50W)(70W)  
3.00kg (80W)(100W)

Accessories supplied with the light fittings:

- ⑤. Mounting bracket, sheet steel, powder coated.

### L: Pole type



Weight: 1.60kg (20W)(30W)  
2.20kg (50W)(70W)  
2.90kg (80W)(100W)

Accessories supplied with the light fittings:

- ②. BGJ-III Explosion-proof connector  
M25×1.5(M)/M25×1.5(M), Stainless steel.
- ⑥. Pole (shall be provided by user)

