◆ 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 costs due to long service life, which is up to 100,000 operating hours.

■ Catalogue number logic

HRD99-□ □

Mounting
  X: Ceiling type
  G: Pendant type
  K: Bracket type
  L: Pole type

Lamp power (W)
Explosion-proof LED lightings
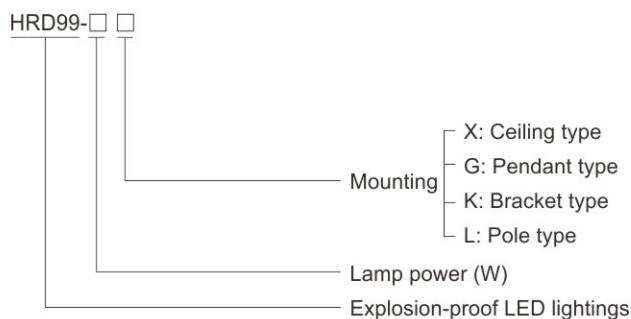
■ Selection table

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 Accessories & Spare Parts Table (see P2/73).
2. The product is supplied according to "Type/Ordering code" in the table with mounting accessories.

Zones 1&2; 21&22

Technical data

Explosion-proof LED lightings   HRD99-☐☐

Explosion protection	
Global (IECEx)	IECEx (applied for)
Gas and dust	Ex db IIB T6/T5 Gb
	Ex db IIC T6/T5 Gb
	Ex tb IIIC T80℃/T95℃ Db
Europe (ATEX)	ATEX (applied for)
Gas and dust	⟨Ex⟩ II 2 G Ex db IIB T6/T5 Gb
	⟨Ex⟩ II 2 G Ex db IIC T6/T5 Gb
	⟨Ex⟩ II 2 D Ex tb IIIC T80℃/T95℃ Db
Certificates	IECEx; ATEX
Conformity to standards	EN 60079-0, EN 60079-1, EN 60079-31
	IEC 60079-0, IEC 60079-1, IEC 60079-31
Material	
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
Lamp	
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.
Rated voltage	220~240V AC 50/60Hz, 24~48V DC
Earthing protection	M5 (internal & external earth bolts)
Degree of protection	IP66
Ambient temperature	IIB T6 / IIIC T80℃ for Tamb: -40℃~+40℃
	IIB T5 / IIIC T95℃ for Tamb: -40℃~+58℃
	IIC T6 for Tamb: -20℃~+40℃
	IIC T5 for Tamb: -20℃~+58℃
Terminal	3 x 1.5~4mm^2 (L+N+PE)
Mounting	Bracket type, Ceiling type, Pendant type, Pole type
Cable entries	M25 x 1.5
Cable gland	See Mounting Accessories & Spare Parts Table
Available cable outer diameter	Φ10~Φ14(mm)

# LED Light Fittings
HRD99 Series Explosion-proof LED Lightings

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

Φ150 — 168	Φ175 — 198	Φ204 — 228
20W, 30W	50W, 70W	80W, 100W
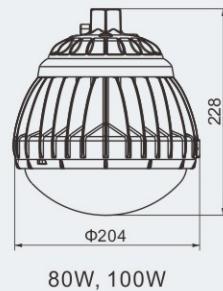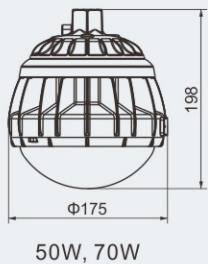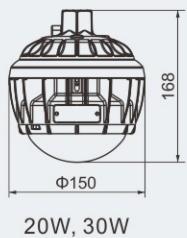
Photometric data Note: LED luminous flux is from the standard product of which colour temperature is 5700K (cool white).

HRD99-20□

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

cd/1000lm
— C0/180
— C90/270
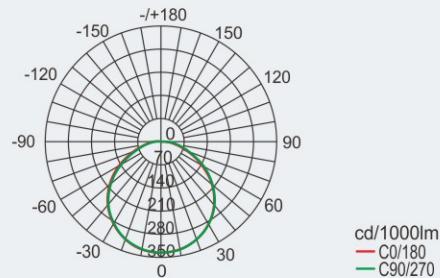
HRD99-30□

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

cd/1000lm
— C0/180
— C90/270
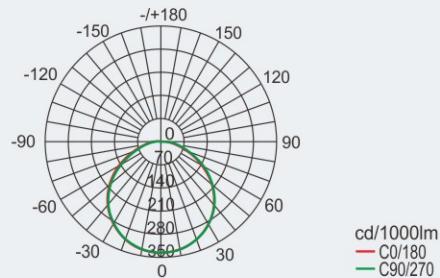
HRD99-50□

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

cd/1000lm
— C0/180
— C90/270
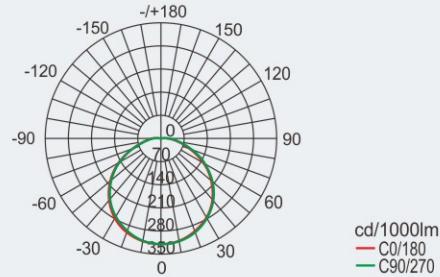
HRD99-70□

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

cd/1000lm
— C0/180
— C90/270
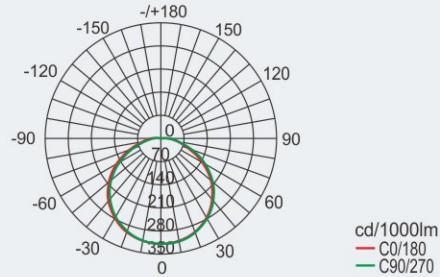
HRD99-80□

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

cd/1000lm
— C0/180
— C90/270
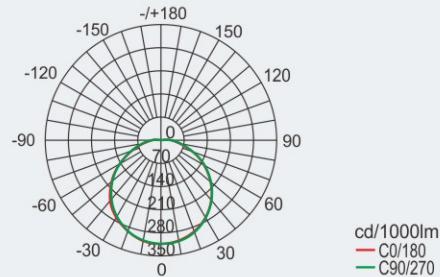
HRD99-100□

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

cd/1000lm
— C0/180
— C90/270
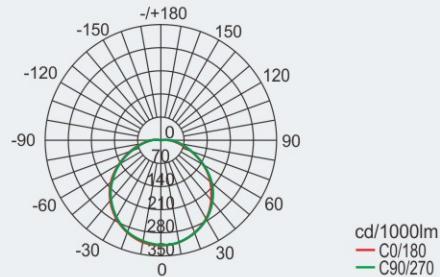
We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

WAROM

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

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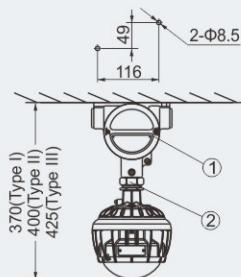
Weight: 2.40kg (20W)(30W)
        3.00kg (50W)(70W)
        3.80kg (80W)(100W)

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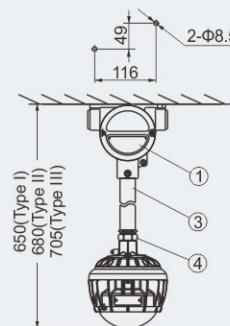
Weight: 2.80kg (20W)(30W)
        3.40kg (50W)(70W)
        4.20kg (80W)(100W)

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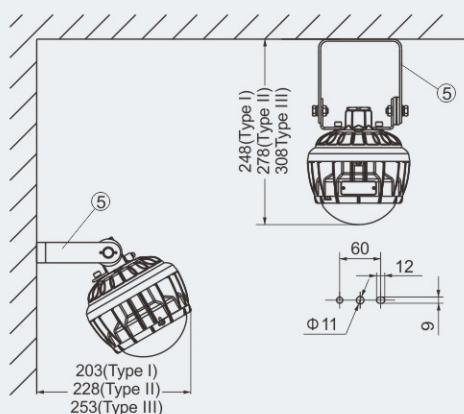
Weight: 1.70kg (20W)(30W)
        2.30kg (50W)(70W)
        3.00kg (80W)(100W)

Accessories supplied with the light fittings:

⑤. Mounting bracket, sheet steel, powder coated.

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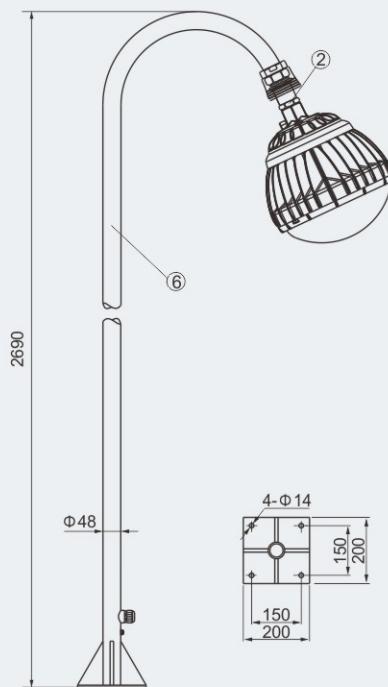
Weight: 1.60kg (20W)(30W)
        2.20kg (50W)(70W)
        2.90kg (80W)(100W)

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)