

- 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

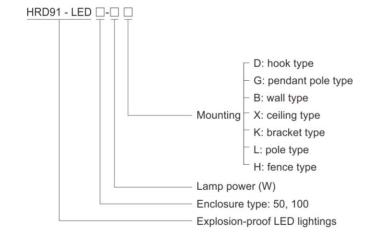
Class I, Division 1, Groups A, B, C, D

- ◆ Two enclosure types: 50, 100
- Applicable lamp and power (max.100W)

LED: 30W, 50W, 70W, 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





Type / Ordering code	Lamp power(W)
HRD91-LED50-□ □	30, 50
HRD91-LED100-□ □	70, 100

Note: 1. Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/61).

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 HRD91-LED --

Explosion protection

Global (IECEx) IECEx NEP 18.0022X
Gas and dust Ex db IIC T6/T5/T4 Gb

Ex tb IIIC T80℃/T85℃/T95℃/T100℃ Db

Europe (ATEX)

TÜV CY 19 ATEX 0206175X

Gas and dust

TÜV CY 19 ATEX 0206175X

Certificates IECEx; ATEX; CU-TR

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 Toughened glass, 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 LED

Lamp power (W) 30W, 50W, 70W, 100W

Colour rendering index (Ra) \geqslant 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 100~277V AC 50/60Hz, 220~240V AC 50/60Hz

100~250V DC

Earthing protection M5 (internal & external earth bolts)

Degree of protection IP66

Ambient temperature 30W, 50W: T6/T80℃ for Tamb: -20℃~+43℃; T5/T95℃ for Tamb: -20℃~+58℃

70W, 100W: T5/T85℃ for Tamb: -20℃~+43℃; T4/T100℃ for Tamb: -20℃~+58℃

Terminal $3 \times 1.5 \sim 4 \text{mm}^2 \text{ (L+N+PE)}$

Mounting Ceiling type, pole type, pendant pole type, wall type, bracket type, hook type, fence type

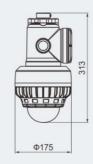
Cable entries M25 x 1.5

Cable gland See Mounting Accessories & Spare Parts Table

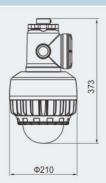
Available cable outer diameter

Ф 10~ Ф 14(mm)

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



HRD91-LED50



HRD91-LED100



General Catalogue 01.01.2025 http://www.waromgroup.com 2/57

Photometric data Note: LED luminous flux is from the standard product of which colour temperature is 5700K HRD91-LED50-30-□ HRD91-LED100-70-□ Lamp power Lamp power Luminous flux Wattage Luminous flux Wattage (W) (W) 30W 70W 30 3600lm 70 8400lm -/+180 -/+180 -150 -120 120 -120 120 -90 -90 90 90 -60 cd/1000lm — C0/180 — C90/270 cd/1000lm 0 C0/180 C90/270 HRD91-LED50-50-□ HRD91-LED100-100-□ Lamp power Lamp power Wattage Wattage Luminous flux Luminous flux (W) (W) 11200lm 50 6100lm 50W 100 100W -/+180 -/+180 -120 -120 120 120 -90 90 -90 90 60 -60 cd/1000lm — C0/180 — C90/270 cd/1000lm — C0/180 — C90/270 30 0 0

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



