

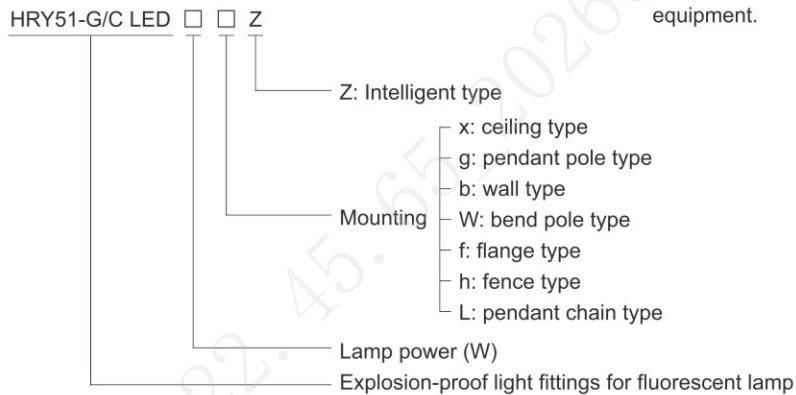
SCS-ZM Intelligent Lighting Management and Control System

HRY51-G/C LED □ Z Series Explosion-proof Light Fittings (Intelligent Type)



- ◆ 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 2, Groups A, B, C, D
- ◆ Two enclosure types: Type I and Type II
- ◆ Clear polycarbonate transparent cover, high light transmittance, resistance to high energy impact and thermal fusion.
- ◆ Enclosure is formed of stainless steel.
- ◆ Built-in electronic ballast, power factor ≥ 0.95 .
- ◆ LED driver, wide voltage input, CC-CV (constant current - constant voltage) output, power factor ≥ 0.95 .
- ◆ Luminaires feature adjustable brightness for efficient energy-saving lighting;
- ◆ When used with an intelligent lighting system, they enable centralized intelligent management and control of lighting equipment.

■ Catalogue number logic



■ Product features



Intelligent Control

Equipped with an intelligent control chip, it supports individual lamp control, enabling remote on/off operation and brightness adjustment. It can also integrate with smart functions such as light sensing and human presence detection.



Intelligent Monitoring

Built-in intelligent sensor chip continuously monitors lamp parameters including power, current, voltage, brightness, on/off status, and fault conditions.



Wireless Communication

Features an embedded Zigbee industrial wireless communication module, offering flexible connectivity without the need for communication cabling—greatly simplifying on-site installation.



Human Presence Detection

The lamp housing can be equipped with a human presence detection module that senses movement and activates nearby lights accordingly, achieving automatic lighting when people enter the area and turning off when they leave.

Zones 1&2; 21&22

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Technical data

Explosion-proof light fittings (Intelligent type) HR Y51-G/C LED □ □ Z

Explosion protection

Global (IECEX)	IECEX (applied for)
Gas and dust	Ex db eb mb IIC T6/T5/T4 Gb ¹⁾ Ex tb IIIC T80°C Db
Europe (ATEX)	ATEX (applied for)
Gas and dust	⊕ II 2 G Ex db eb mb IIC T6/T5/T4 Gb ¹⁾ ⊕ II 2 G Ex tb IIIC T80°C Db

¹⁾ See Selection Table for P2/46

Certificates

IECEX; ATEX

Conformity to standards

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-18, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-18, IEC 60079-31

Material

Enclosure	Stainless steel
Diffuser	Polycarbonate, stands 4J impact
Ballast	Electronic ballast, power factor ≥0.95
LED driver	Wide voltage input, CC-CV (constant current - constant voltage) output, power factor ≥0.95
Exposed fastener	Stainless steel

Lamp

Lamp specification	SMD LED (supplied with the light fittings)
Lamp power (W)	20W, 40W, 60W, 80W
Colour rendering index (Ra)	≥80
LED Colour temperature (CCT)	5000K

Note: nature white is available in general. Warm white or cool white is optional, please specify when ordering.

Rated voltage

100-277V AC 50/60Hz

Degree of protection

IP66/IP67

Ambient temperature

-40°C~+58°C(+40°C)

Terminal

3×1.5~4mm² (L+N+PE)

Cable entries

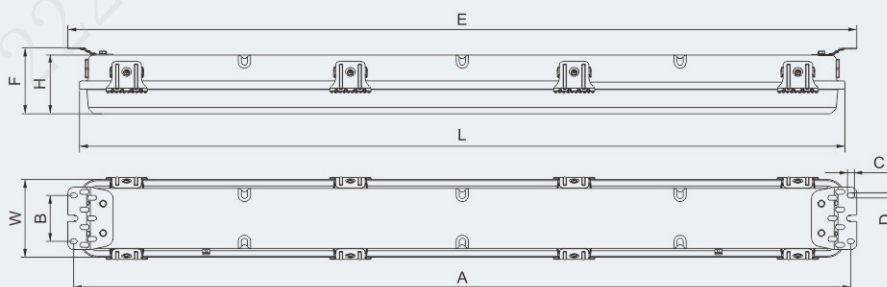
4×Φ25.5: 4×M25×1.5 Plugs (Stainless steel)

Available cable outer diameter

Φ9~Φ16 (mm)



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



Enclosure type	Rated power (W)	L	W	H	A	B	C	D	E	F
Type I	20	692	150	100	705	78	12	8.5	732	113
Type II	40, 60, 80	1300	132	100	1320	78	12	8.5	1340	113

Detailed Parameters

Luminaire photometric curve diagram, external dimensions, installation schematic, mounting accessories, mounting components, and spare parts list are detailed on page P2/48~49.