

## Light Fittings for Fluorescent Lamp HRY51-G/C LED Series Explosion-proof Light Fittings



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

Clear polycarbonate transparent cover, high light transmittance, resistance to high energy impact and thermal fusion.

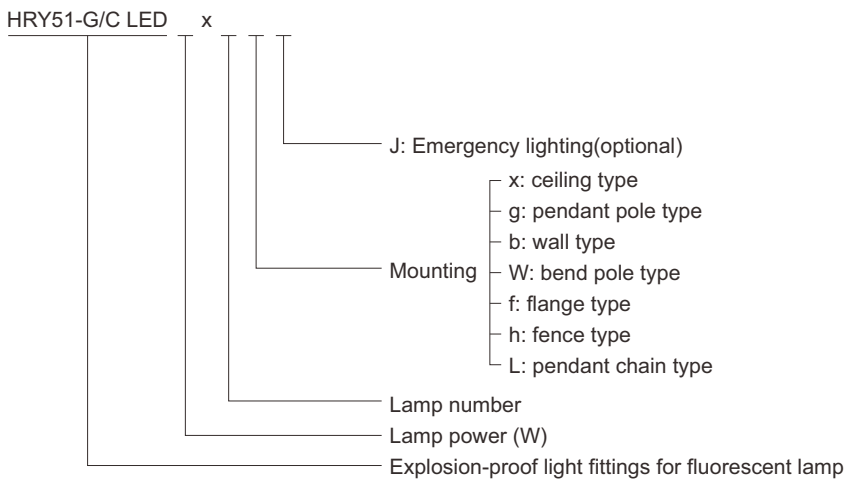
Enclosure is formed of stainless steel.

Built-in electronic ballast, power factor 0.95.

LED driver, wide voltage input, CC-CV (constant current - constant voltage) output, power factor 0.95.

Emergency functions is available on request.

### Catalogue number logic



# Zones 1&2; 21&22

## Light Fittings for Fluorescent Lamp

### HR Y51-G/C LED Series Explosion-proof Light Fittings

Technical data																				
Explosion-proof light fittings with LED tubes      HR Y51-G/C LED      ×																				
<b>Explosion protection</b>																				
Global (IECEX)	IECEX CML 20. 0167X																			
Gas and dust	Ex db eb IIC T   Gb Ex db eb q IIC T   Gb Ex tb IIIC T80   Db IP66/IP67																			
Europe (ATEX)	CML 20 ATEX 1296X																			
Gas and dust	⊕ II 2 G Ex db eb IIC T   Gb ⊕ II 2 G Ex db eb q IIC T   Gb ⊕ II 2 D Ex tb IIIC T80   Db IP66/IP67																			
<b>Certificates</b>	IECEX; ATEX; CU-TR																			
<b>Conformity to standards</b>	EN 60079-0, EN 60079-1, EN 60079-5, EN 60079-7, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-5, IEC 60079-7, IEC 60079-31																			
<b>Material</b>																				
Enclosure	Stainless steel																			
Diffuser	Clear 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																			
<b>Lamp</b>																				
Lamp specification	LED tubes (supplied with the light fittings)																			
Lamp power (W)	9Wx2, 18Wx2, 14Wx2, 28Wx2																			
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.																			
<b>Rated voltage</b>	9Wx2, 18Wx2: 170~264V AC 50/60Hz 14Wx2, 28Wx2: 100~277V AC 50/60Hz, 200~250V DC																			
<b>Degree of protection</b>	IP66/IP67																			
<b>Ambient temperature</b>	<table border="1"> <thead> <tr> <th>Rated Power (W)</th> <th>Ex-mark</th> <th>Ambient temperature</th> </tr> </thead> <tbody> <tr> <td rowspan="2">9×2□ 18×2□</td> <td>⊕ II 2 G Ex db eb IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80   Db</td> <td>-40 ~+57</td> </tr> <tr> <td>⊕ II 2 G Ex db eb IIC T5 Gb ⊕ II 2 D Ex tb IIIC T80   Db</td> <td>-40 ~+58</td> </tr> <tr> <td rowspan="3">14×2□ 28×2□</td> <td>⊕ II 2 G Ex db eb q IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80   Db</td> <td>-40 ~+53</td> </tr> <tr> <td>⊕ II 2 G Ex db eb q IIC T5 Gb ⊕ II 2 D Ex tb IIIC T80   Db</td> <td>-40 ~+58</td> </tr> <tr> <td>⊕ II 2 G Ex db eb q IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80   Db</td> <td>-40 ~+48</td> </tr> <tr> <td rowspan="2">14×2□J 28×2□J</td> <td>⊕ II 2 G Ex db eb q IIC T5 Gb ⊕ II 2 D Ex tb IIIC T80   Db</td> <td>-40 ~+53</td> </tr> </tbody> </table>		Rated Power (W)	Ex-mark	Ambient temperature	9×2□ 18×2□	⊕ II 2 G Ex db eb IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80   Db	-40 ~+57	⊕ II 2 G Ex db eb IIC T5 Gb ⊕ II 2 D Ex tb IIIC T80   Db	-40 ~+58	14×2□ 28×2□	⊕ II 2 G Ex db eb q IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80   Db	-40 ~+53	⊕ II 2 G Ex db eb q IIC T5 Gb ⊕ II 2 D Ex tb IIIC T80   Db	-40 ~+58	⊕ II 2 G Ex db eb q IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80   Db	-40 ~+48	14×2□J 28×2□J	⊕ II 2 G Ex db eb q IIC T5 Gb ⊕ II 2 D Ex tb IIIC T80   Db	-40 ~+53
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	<b>Terminal</b>	3 x 1.5~4mm <sup>2</sup> (L+N+PE)																		
<b>Cable entries</b>	4 x   21: 4 x M20 x 1.5 cable glands (DQM-I Ex e, plastic)																			
<b>Available cable outer diameter</b>	9~ 16 (mm)																			
<b>Emergency data</b>																				
Emergency unit	Special emergency controller and battery pile, with protection against over-charge and overdischarge																			
Emergency power (W)	14W x 30%, 28W x 30%																			
Emergency starting time	0.3s																			
Charging time	24h																			
Emergency lighting time	120min (180min is optional)																			



## Light Fittings for Fluorescent Lamp

### HRY51-G/C LED Series Explosion-proof Light Fittings

#### Technical data

#### Explosion-proof light fittings with SMD LED HRY51-G/C LED

##### Explosion protection

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

##### Certificates

IECEX; ATEX; CU-TR

##### 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	Clear 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
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 130~250V DC

##### Degree of protection

IP66/IP67

##### Ambient temperature

-40 ~+60

##### Terminal

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

##### Cable entries

4 x 21: 4 x M20 x 1.5 cable glands (DQM-I Ex e, plastic)

##### Available cable outer diameter

9~ 16 (mm)

##### Emergency data

Emergency unit	Special emergency controller and battery pile, with protection against over-charge and overdischarge
Emergency power (W)	20W x 60%, 40W x 30%
Emergency starting time	0.3s
Charging time	24h
Emergency lighting time	90min (180min is optional)



## Light Fittings for Fluorescent Lamp HRY51-G/C LED Series Explosion-proof Light Fittings

**Selection table for explosion-proof light fittings with LED tubes**

Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)
HRY51-G/C LED 9 x 2x	9x2	7.20	HRY51-G/C LED 14 x 2x	14x2	8.50	HRY51-G/C LED 14 x 2xJ	14x2	8.80
HRY51-G/C LED 9 x 2g	9x2	7.35	HRY51-G/C LED 14 x 2g	14x2	8.65	HRY51-G/C LED 14 x 2gJ	14x2	8.95
HRY51-G/C LED 9 x 2b	9x2	7.55	HRY51-G/C LED 14 x 2b	14x2	8.85	HRY51-G/C LED 14 x 2bJ	14x2	9.15
HRY51-G/C LED 9 x 2W	9x2	7.20	HRY51-G/C LED 14 x 2W	14x2	8.50	HRY51-G/C LED 14 x 2WJ	14x2	8.80
HRY51-G/C LED 9 x 2h	9x2	7.20	HRY51-G/C LED 14 x 2h	14x2	8.50	HRY51-G/C LED 14 x 2hJ	14x2	8.80
HRY51-G/C LED 9 x 2f	9x2	7.20	HRY51-G/C LED 14 x 2f	14x2	8.50	HRY51-G/C LED 14 x 2fJ	14x2	8.80
HRY51-G/C LED 9 x 2L	9x2	7.50	HRY51-G/C LED 14 x 2L	14x2	8.80	HRY51-G/C LED 14 x 2LJ	14x2	9.10
HRY51-G/C LED 18 x 2x	18x2	11.20	HRY51-G/C LED 28 x 2x	28x2	12.50	HRY51-G/C LED 28 x 2xJ	28x2	12.80
HRY51-G/C LED 18 x 2g	18x2	11.35	HRY51-G/C LED 28 x 2g	28x2	12.65	HRY51-G/C LED 28 x 2gJ	28x2	12.95
HRY51-G/C LED 18x 2b	18x2	11.55	HRY51-G/C LED 28x 2b	28x2	12.85	HRY51-G/C LED 28x 2bJ	28x2	13.15
HRY51-G/C LED 18 x 2W	18x2	11.20	HRY51-G/C LED 28 x 2W	28x2	12.50	HRY51-G/C LED 28 x 2WJ	28x2	12.80
HRY51-G/C LED 18 x 2h	18x2	11.20	HRY51-G/C LED 28 x 2h	28x2	12.50	HRY51-G/C LED 28 x 2hJ	28x2	12.80
HRY51-G/C LED 18 x 2f	18x2	11.20	HRY51-G/C LED 28 x 2f	28x2	12.50	HRY51-G/C LED 28 x 2fJ	28x2	12.80
HRY51-G/C LED 18 x 2L	18x2	11.50	HRY51-G/C LED 28 x 2L	28x2	12.80	HRY51-G/C LED 28 x 2LJ	28x2	13.10

**Note:** 1. Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/55).

**Selection table for explosion-proof light fittings with SMD LED**

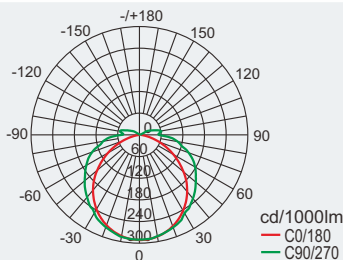
Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)
HRY51-G/C LED 20x	20	5.15	HRY51-G/C LED 40x	40	7.40	HRY51-G/C LED 60x	60	8.40
HRY51-G/C LED 20g	20	5.30	HRY51-G/C LED 40g	40	7.55	HRY51-G/C LED 60g	60	8.55
HRY51-G/C LED 20b	20	5.50	HRY51-G/C LED 40b	40	7.75	HRY51-G/C LED 60b	60	8.75
HRY51-G/C LED 20W	20	5.15	HRY51-G/C LED 40W	40	7.40	HRY51-G/C LED 60W	60	8.40
HRY51-G/C LED 20h	20	5.15	HRY51-G/C LED 40h	40	7.40	HRY51-G/C LED 60h	60	8.40
HRY51-G/C LED 20f	20	5.15	HRY51-G/C LED 40f	40	7.40	HRY51-G/C LED 60f	60	8.40
HRY51-G/C LED 20L	20	5.45	HRY51-G/C LED 40L	40	7.70	HRY51-G/C LED 60L	60	8.70
HRY51-G/C LED 20xJ	20	6.05	HRY51-G/C LED 40xJ	40	8.30			
HRY51-G/C LED 20gJ	20	6.20	HRY51-G/C LED 40gJ	40	8.45			
HRY51-G/C LED 20bJ	20	6.40	HRY51-G/C LED 40bJ	40	8.65			
HRY51-G/C LED 20WJ	20	6.05	HRY51-G/C LED 40WJ	40	8.30			
HRY51-G/C LED 20hJ	20	6.05	HRY51-G/C LED 40hJ	40	8.30			
HRY51-G/C LED 20fJ	20	6.05	HRY51-G/C LED 40fJ	40	8.30			
HRY51-G/C LED 20LJ	20	6.35	HRY51-G/C LED 40LJ	40	8.60			

**Note:** 1. Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/55).

**Photometric data** Note: LED luminous flux is from the standard product of which colour temperature is 5000K

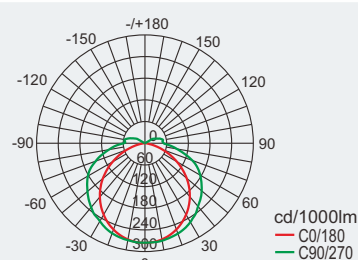
**HRY51-G/C LED x**

Lamp power (W)	Luminous flux	Wattage
9 x 2	1850lm	18.5W
14 x 2	2805lm	28W



**HRY51-G/C LED x**

Lamp power (W)	Luminous flux	Wattage
18 x 2	3835lm	36.5W
28 x 2	5770lm	56W



## Light Fittings for Fluorescent Lamp HRY51-G/C LED Series Explosion-proof Light Fittings

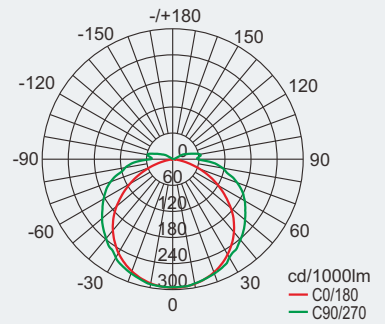
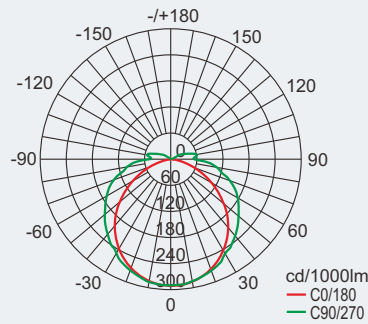
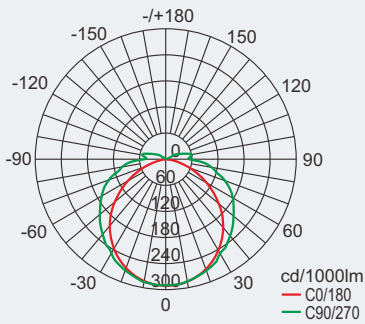
**Photometric data** Note: LED luminous flux is from the standard product of which colour temperature is 5000K

### HRY51-G/C LED

Lamp power	20W
Luminous flux	2500lm
Wattage	20W

Lamp power	40W
Luminous flux	5300lm
Wattage	40W

Lamp power	60W
Luminous flux	7500lm
Wattage	60W



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

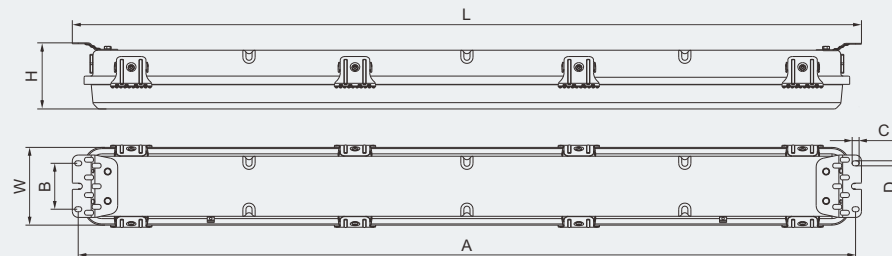
### Dimension drawings (all dimensions in mm) - subject to alteration

Explosion-proof light fittings with LED tube



Type / Ordering code	L	W	H	A	B	C	D
HR51-G/C LED 9x2 , HRY51-G/C LED 14x2	732	176	120	705	78	12	8.5
HR51-G/C LED 18x2 , HRY51-G/C LED 28x2	1340	132	120	1320	78	12	8.5

Explosion-proof light fittings with SMD LED



Type / Ordering code	L	W	H	A	B	C	D
HR51-G/C LED 20	732	150	113	705	78	12	8.5
HR51-G/C LED 40	1340	132	113	1320	78	12	8.5
HR51-G/C LED 60	1340	132	113	1320	78	12	8.5

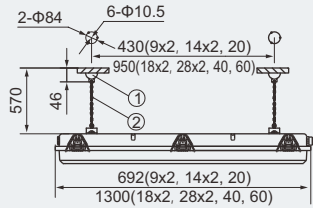


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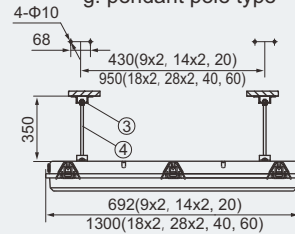
### Mounting type (all dimensions in mm) - subject to alteration

Installation reference

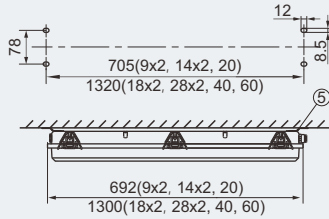
L: pendant chain type



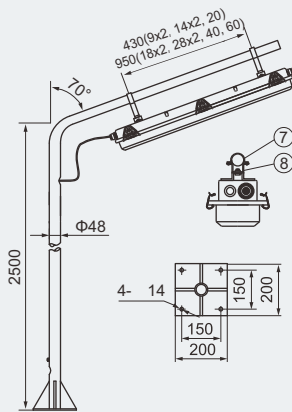
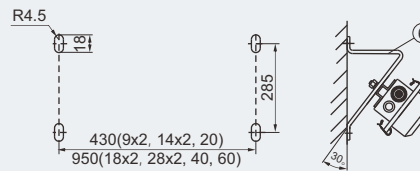
g: pendant pole type



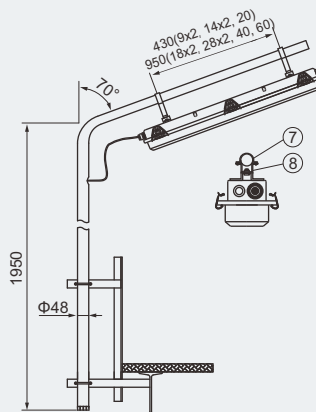
x: ceiling type



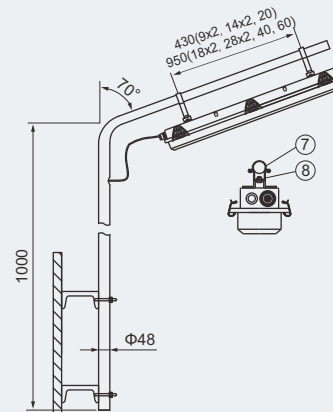
b: wall type



f: flange type



h: fence type



W: bend pole type

### Mounting Accessories & Spare Parts Table

Supplied according to the mounting type

Mounting type	Accessories			Ordering code	Weight (kg)
	Name	Qty	Illustration		
L: pendant chain type	.Sucker	2	See P2/6	5136017	0.15
	.Chain	2	Length: 450mm	5136016	0.08
g: pendant pole type	.Mounting bracket	2	Stainless steel, see P2/6	51S01G1	0.04
	.M8 Screw	2	Stainless steel, length: 350mm	51S01G2	0.12
x: ceiling type	.Mounting bracket	2	Stainless steel	5136015	0.20
b: wall type	.Wall bracket	2	Stainless steel, welded sheet steel	5236B02	0.25
f: flange type	.G1 1/2" Pipe clamp	2	Stainless steel, see P2/7	5136014	0.04
	.Mounting bracket	2	Stainless steel, see P2/7	5136012	0.04
h: fence type	.G1 1/2" Pipe clamp	2	Stainless steel, see P2/7	5136014	0.04
	.Mounting bracket	2	Stainless steel, see P2/7	5136012	0.04
W: bend pole type	.G1 1/2" Pipe clamp	2	Stainless steel, see P2/7	5136014	0.04
	.Mounting bracket	2	Stainless steel, see P2/7	5136012	0.04

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

