



# CHUNG KWANG

ELECTRIC WIRE AND CABLE CO., LTD.

## Underground Low-Energy Circuit Cables

We are one of the few manufacturers that can make underground low-energy circuit cable in the world.





## CHUNG KWANG ELECTRIC WIRE AND CABLE CO., LTD.

WE ARE 45 YEARS EXPERIENCE PROFESSIONAL MANUFACTURERS.

Chung Kwang Electric Wire & Cable was founded in 1979 with more than 40 years of experience in the wire & cable industry. OEM/ODM Customers design their cables based on industry and appliance requirements.

WE HAVE ESG CERTIFICATION AND MULTI-INTERNATIONAL CERTIFICATES.





## PROFESSIONAL PRODUCTION LINE

Manufacturing Capabilities.

1. AC Charging Connector and Cables for EV
  - (1) One Connector / Two Connectors EV assembly
  - (2) Portable EV Charge Set
  - (3) EVJE, EVJT, EVE, EVT      (4) EV Inlet
2. PV Connectors and Cables
  - (1) PV Connectors      (2) PV Cables
3. Power Supply Cords
  - (1) Europe Standard      (2) USA Standard
  - (3) Japan Standard
4. Underground Low-Energy Circuit Cables
  - Low Voltage Landscape Lighting Cable
5. Submersible Pump Lines
  - (1) Submersible Pump Cables
  - (2) Winding Wire for Submersible Pump
6. Industrial Cables
  - TC, TC-ER, DG

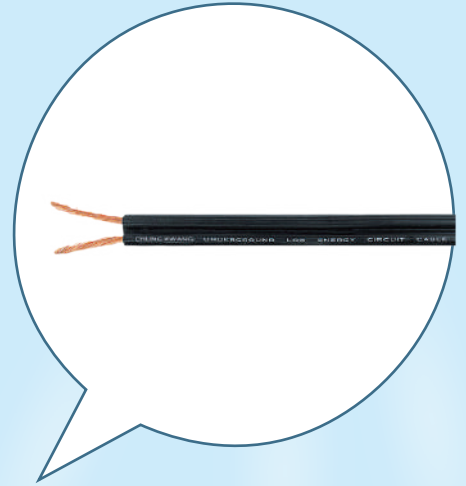






# Underground Low-Energy Circuit Cables

Waterproof and Moistureproof  
Buried under the Ground Directly



## Advantages

- Flexible Products.
- Certified Supplier in Taiwan
- Easy to install.
- Easy to distinguish the wires.
- The package and length can be modified according to the requirements of customer.
- CHUNG KWANG Cables are exported to overseas more than 20 countries, and are widely praised and trusted by customers.

# Underground low-energy circuit cables

## Construction

Conductor : Stranded Bare/ Tinned Copper

Insulation : W Type PVC

Sheath (for round cable only) : W Type PVC (Black)

## Approval and Technical specification

Approvals : UL1493/ CSA C22.2 NO.35

Certificate No. : E324553

Rated temperature : 60 °C

Bend radius : 20 x D

Operating Temperature Range : -20°C ~ 60°C

Rated Voltage : 150 V ( for UL ), 30 V( for CUL )

Insulation Resistance : min. 30.5 MΩ-km.

Conductor Size : AWG 18~8

Special Approval : Sun Resistant, Direct Burial.

Comply to the Requirements of NEC.

RoHS Compliant

## Structure & Dimensions for flat, parallel cable

Size(AWG/ NO. of conductors)	Conductor (PCS/AWG)	Insulation Thickness (Nom.)	Dimensions (Nom.)
18/2C	16/30	1.14 mm.	3.6 X 7.3 mm
16/2C	26/30	1.14 mm.	4.0 X 8.1 mm
14/2C	41/30	1.14 mm.	4.4 X 8.9 mm
12/2C	65/30	1.14 mm.	5.1 X 10.1 mm
10/2C	105/30	1.14 mm.	5.2 X 10.5 mm
8/2C	165/30	1.52 mm.	7.4 X 15.0 mm

## Structure & Dimensions for round cable

Size(AWG/NO. of conductors)	Conductor (PCS/AWG)	Insulation Thickness(Nom.)	Insulation Diameter(Nom.)	Jacket Thickness(Nom.)	Overall Diameter(Nom.)
22/3C	17/34	0.23 mm	1.36 mm	0.58 mm	4.6 mm
22/4C	17/34	0.23 mm	1.36 mm	0.58 mm	4.6 mm

## Applications

- Suitable for outdoor focusing on lighting, landscape lighting and security lighting applications, not exceeding 150 volts. ( UL )
- Suitable for use in direct burial landscaping and lighting .
- Suitable for long-term audio, and outdoor speakers.

# Certificates

## CERTIFICATE OF COMPLIANCE

**Certificate Number** UL-US-L324553-111-61218002-0  
**Report Reference** E324553-20081216  
**Date** 28-Nov-2023

**Issued to:** CHUNG KWANG ELECTRIC WIRE & CABLE CO LTD  
33 Suey Tien Rd  
San Ho Village  
Wu Jih District  
Taichung 414  
Taiwan

**This is to certify that representative samples of** ZLIA - Underground Low-energy Circuit Cable  
See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** Power-Limited Circuit Cables - UL 13  
Outline of Investigation for Underground Low-Energy Circuit Cable - 1493

**Additional Information:** See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

  
Deborah Jennings-Conner, VP Regulatory Services  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



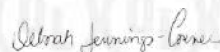
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**Report Reference** E324553-20081216  
**Date** 28-Nov-2023

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
Underground low-energy circuit cable	Underground Low-Energy Circuit Cable

  
Deborah Jennings-Conner, VP Regulatory Services

UL LLC

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# Certificates

## CERTIFICATE OF COMPLIANCE

**Certificate Number** UL-CA-L324553-212-71218002-0  
**Report Reference** E324553-20081217  
**Date** 28-Nov-2023

**Issued to:** CHUNG KWANG ELECTRIC WIRE & CABLE CO LTD  
33 Suey Tien Rd  
San Ho Village  
Wu Jih District  
Taichung 414  
Taiwan

**This is to certify that  
representative samples of**

ZLIA7 - Underground Low-energy Circuit Cable Certified for  
Canada

See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the  
Standard(s) indicated on this Certificate.

**Standard(s) for Safety:**

Subject 1493 Outline of Investigation for Underground Low-  
Energy Circuit Cable, Issue Number 1

**Additional Information:**

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**Report Reference** E324553-20081217  
**Date** 28-Nov-2023

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
Low-voltage landscape lighting cable (LVLL)	Underground Low-Energy Circuit Cable
Underground low-energy circuit cable (ULEC)	Underground Low-Energy Circuit Cable

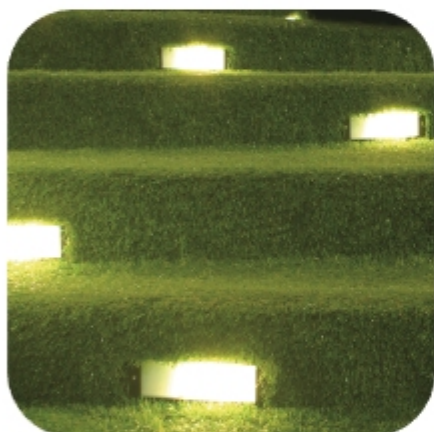
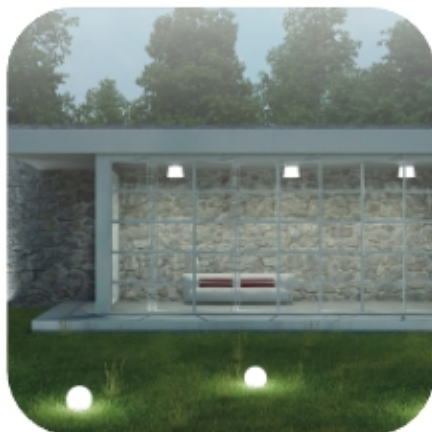


*Deborah Jennings-Conner*  
Deborah Jennings-Conner, VP Regulatory Services  
UL LLC

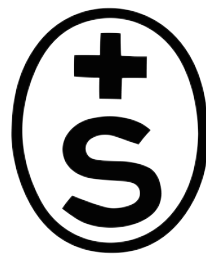
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## Application Effect Of Products



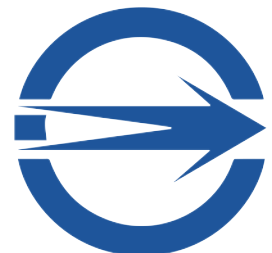
## Certificates



SAA



  
**RoHS**  
compliant







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URL  
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