HELLENIC CABLES

Member of CENERGY HOLDINGS

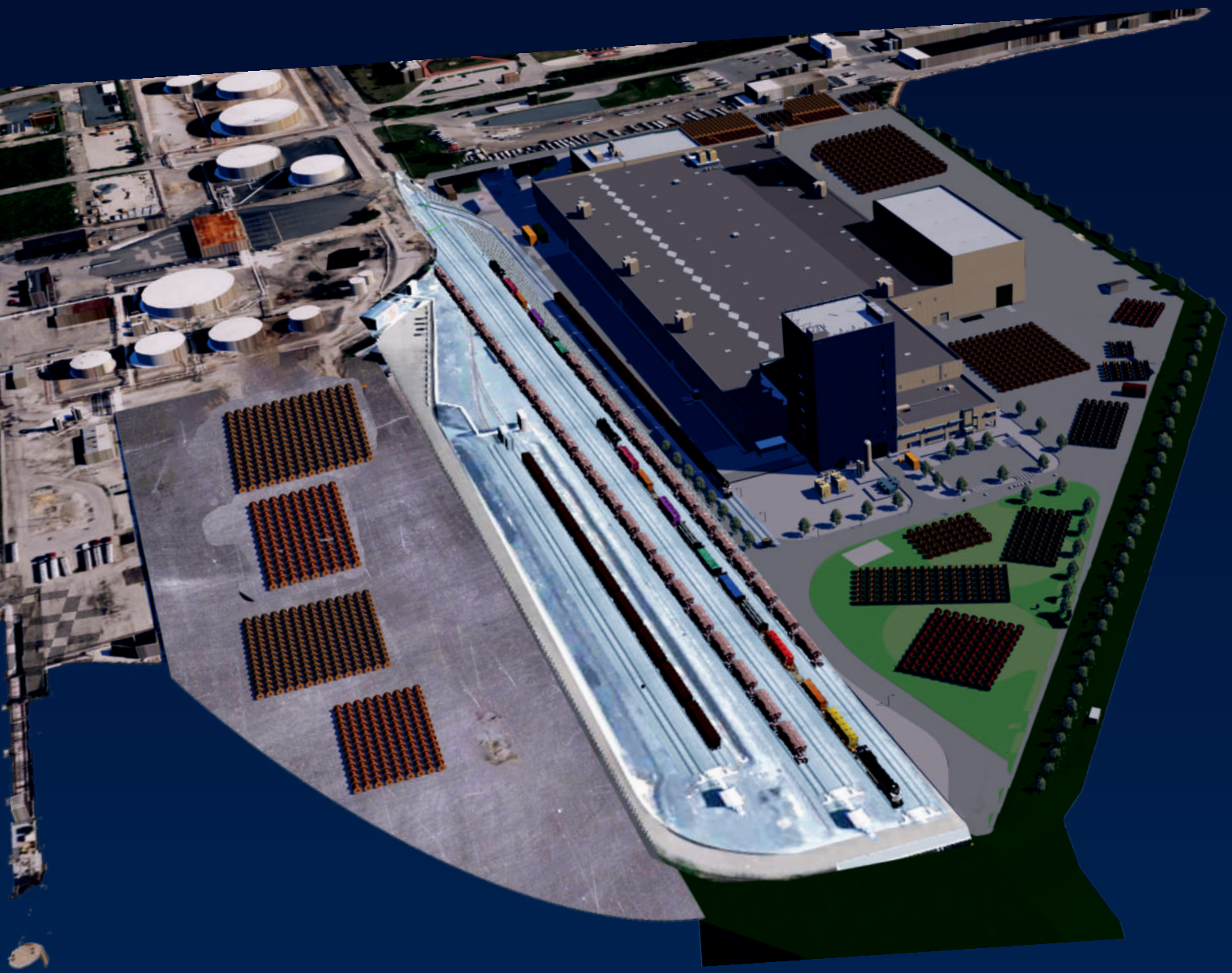
Your Grid Partner for North American

Low Voltage, Medium Voltage, High and Extra High Voltage Cables for the North American Transmission and Distribution Market

www.hellenic-cables.com

Hellenic Cables at a Glance

- **70+ years** of experience in power cable manufacturing
- Specialized production for Transmission & Distribution (T&D) applications
- **5** manufacturing plants in **3** countries
- **> €** 940 million USD investments in production upgrades
- Exports to **50+** countries
- Proven supplier Utility, Commercial, Industrial, Renewables and Emerging markets



Future medium- and high-voltage land cables manufacturing facility.
|Baltimore,Maryland

With a wide portfolio of reliable and sustainable cable solutions for international customers, Hellenic Cables is one of the largest cable producers.

The Company is globally active in the energy transmission and distribution markets in the renewable energy sources, telecommunications and data transmission, construction and industry sectors, and is distinguished for its strong exports orientation.

Hellenic Cables represents the cable production and marketing sector of Viohalco S.A. The Company started its activities in 1950 as a Viohalco plant and in 1973 was incorporated as an independent subsidiary under the name Hellenic Cables, expanding its production and trade operations. Today, Hellenic Cables consists of Hellenic Cables S.A. which operates two plants in Greece that produce cables, and plastic and elastomer compounds the Fulgor S.A. plant in Corinth, Greece, which manufactures power cables, power and fibre optic submarine cables and copper wires, Icme Ecab S.A., a power and telecommunication cable manufacturer in Bucharest, Romania and Lesco Ltd Blagoevgrad, Bulgaria which manufactures wooden reels and pallets.

With a strong focus on development of value added products, such as high and extra-high voltage cables and submarine cables, the Company implements significant investments towards enriching its product portfolio and enhancing its sustainability profile. The The company has implemented a more than USD 940 million investment plan since 2012 for the production of high and extra-high voltage submarine and underground cables.

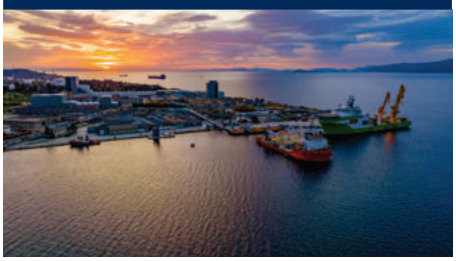
The Company's wide product range extends to PVC, EPR and XLPE insulated power cables (rated up to 500 kV),marine and low smoke halogen free cables, fire resistant cables, telecommunication, signal and data cables with copper conductors or optical fibres, as well as fire retardant halogen free plastic and elastomer compounds. Cables are supplied to a variety of international standards, such as VDE, CEI, ICEA, NF, SEN, BS, UL, NEMA, JIS, ASTM, DIN, IEC, ITU and ELDT. Many of the Company's products are certified by BASEC, VDE, IMQ, NF-USE, NETWORK RAIL, KEMA, DNV and UL.

Technical know-how is combined with continual investment in state-of-the-art machinery, to ensure levels of efficiency and quality which meet the strictest standards. The Company's Quality Management System is certified to ISO 9001:2015, its Environmental Management System to ISO 14001:2015 and its Occupational Health and Safety to ISO 45001:2018. Hellenic Cables has the necessary expertise to develop and offer turnkey solutions that meet specific demands of its customers.

Commitment to quality and sustainable development has been a key factor in enabling Hellenic Cables to establish a strong market position internationally. The Company's highly experienced technical and managerial staff have a strong commitment to innovation, technological excellence and outstanding quality, which ensures that users of Hellenic Cables' products have made a reliable and sustainable choice.

Hellenic Cables aims to constantly improve its offering and respond swiftly to changes in customer requirements around the world with reliable and safe products, based on environmentally friendly technologies. At the same time, the Company places strong emphasis on the development of its people and the creation of value for its shareholders, partners and the communities in which it operates. Looking ahead, the Company plans additional investments in technology and innovative cable solutions, as a way of contributing to the creation of a sustainable future for its stakeholders.

Submarine & Power Cables.
| Corinth , Greece



Power Cables.
| Thiva, Greece

Power & Telecommunications Cables.
| Eleonas, Greece

Telecommunication & Data Cables.
| Bucharest, Romania

Future medium- and high-voltage land cables manufacturing facility.
| Baltimore,Maryland

>940 million USD investments (since 2012)

Sales in more than 50 countries

Established 1950

5 manufacturing plants in 3 countries

State of the art facilities

Why Hellenic Cables

We support utilities and contractors with dependable, high-performance cable solutions for safer, stronger power networks.

Focused Expertise in Power Distribution

- Dedicated plant capacity and capabilities per voltage class of manufactured cables for Low Voltage, Medium Voltage, High and Extra High Voltage
- State of the art Quality Management with 100% production process inspection
- High manufacturing capacity & stable lead times
- Extensive experience leading to industry leading expertise
- Utility-grade reliability for demanding T&D applications
- Ability to deliver custom configurations
- Fully compliant with ANSI/ICEA, UL, AEIC, CSA standards and RUS

Powering the North American Distribution Grid

Medium Voltage Feeder Lines (5-46 kV)

- Primary distribution circuits
- Substation-to-load connections
- Underground grid modernization

Utility Underground (600V)

- Secondary distribution
- Residential/commercial service entrances
- Network reinforcement projects

Industrial & Commercial Infrastructure

- Plants, logistics hubs, airports
- Energy-intensive facilities

Renewables Connected to Distribution Grid

- Solar collection systems
- Interconnections to MV feeders

PRODUCT PORTFOLIO

- MV TRXLPE Cables (5-46 kV)
- MV EPR Cables (5-46 kV)
- LV Underground Aluminum & Copper Cables (XLPE)
- Portable Power Cables (SOOW, SJOOW)
- Welding Cables
- DLO Flexible Power Cables

www.hellenic-cables.com

Reliable MV Cable Systems for Modern Distribution Networks

- Our MV EPR and TRXLPE cables are designed for primary distribution circuits and substation connections.

MV TRXLPE CN LLDPE
(5-46 kV)

Features
- TRXLPE insulation
- Concentric neutral with copper wires
- LLDPE jacket

Applications
- MV grids (5-46 kV)
- Direct burial, ducts, concrete, cable channels and air installation

MV TRXLPE CN PVC
(5–46 kV)

Features
- TRXLPE insulation
- Copper wire concentric neutral
- PVC flame-retardant & sunlight-resistant jacket

Applications
- MV grids (5–46 kV)
- Direct burial, ducts, concrete, cable channels and air installation

MV TRXLPE CN XLPE
(5–46 kV)

Features
- TRXLPE insulation
- Copper wire concentric neutral
- XLPE sunlight-resistant jacket

Applications
- MV grids (5–46 kV)
- Direct burial, ducts, concrete, cable channels and air installation
- Suitable for renewable energy constructions

MV TRXLPE LCS LLDPE
(5–46 kV)

Medium Voltage Cable with TRXLPE Insulation — Copper Corrugated Shield

Features
- TRXLPE insulation
- Corrugated copper tape shield
- LLDPE jacket

Applications
- MV grids (5–46 kV)
- Direct burial, ducts, concrete, cable channels, air or messenger-supported

MV EPR CTS PVC (5-46 kV)

Features
- EPR insulation
- Copper tape metallic shield
- PVC flame-retardant & sunlight-resistant jacket

Applications
- MV grids (5-46 kV)
- Direct burial, ducts, concrete, cable channels and cable tray

MV EPR FS LLDPE (5-46 kV)

Features
- EPR insulation
- Concentric neutral with copper flat straps
- LLDPE jacket

Applications
- MV grids (5-46 kV)
- PILC-replacement installations

Medium Voltage Cables with TRXLPE insulation

- Cable type CU or AL TRXLPE (100% or 133%) CN LLDPE 5-46 kV
  Standards ANSI/ICEA S-94-649, AEIC CS-8, UL 1072 MV-90 (UL)

1. Conductor: Concentric lay stranded Copper per ASTM B-3 class B round compressed per ASTM B-8 or compacted per ASTM B-496 according to ICEA S-94-649, AEIC CS-8 and UL 1072 Or concentric lay stranded Aluminum per ASTM B-609 or ASTM B-230 class B round compressed per ASTM B-231 or compacted per ASTM B-400 according to ICEA S-94-649, AEIC CS-8 and UL 1072
2. Conductor Shield: Extruded semiconducting compound according to ICEA S-94-649, AEIC CS-8 and UL 1072
3. Insulation: Tree Retardant Cross Linked Polyethylene (TRXLPE) according to ICEA S-94-649, AEIC CS-8 and UL 1072
4. Insulation Shield: Extruded semiconducting compound strippable with insulation shield marking according to ICEA S-94-649, AEIC CS-8 and UL 1072
5. Concentric Neutral: Annealed round copper wires per ASTM B-3 helically applied over insulation shield
6. Jacket: LLDPE extruded to fill spaces between copper wires according to ICEA S-94-649, AEIC CS-8 and UL 1072

Application:

Cables are designed for transfer of electrical energy for use in dry or wet locations in MV grids with rated voltage 15 kV, 25 kV or 35 kV. Dedicated for fixed installation directly in ground, in concrete, in cable channel, in ducts or conduits made of non-magnetic material and directly in air.

Properties

Rated voltage	15-46 kV,
Conductor Sizes	2 AWG - 2000 KCMIL
Maximum conductor temperature (°C) Normal Operation/ Emergency Overload	90/130
Maximum short-circuit temperature (°C)	250
Frequency (Hz)	60
Insulation Level	100% or 133%
Minimum/Maximum ambient temperature during installation (°C)	-10/70
Jacket Color	Black with three longitudinal red stripes or Black or Other upon request

Alternative designs:

The cables can also be designed with:

1. Round solid Aluminum conductors per ASTM B-609
2. Conductor center strand identification
3. Filled Strand conductors tested in accordance with ICEA T-31-610
4. Full or 1/3 or other concentric neutral
   The concentric neutral can be designed to fit the customer's fault current and time duration requirements.
5. Longitudinally waterblocked concentric neutral tested in accordance with ICEA T-34-664
6. SCPE jacket black colored
7. Overlaying jacket

The cables can be provided in triplex or parallel assembly, as well.

Medium Voltage Cables with TRXLPE insulation

- Cable type CU or AL TRXLPE (100% or 133%) CN PVC 5-46 kV
  Standards ANSI/ICEA S-97-682, ANSI/NEMA WC 74/ICEA S-93-639, AEIC CS-8

Construction:

1. Conductor: Concentric lay stranded Copper per ASTM B-3 class B round compressed per ASTM B-8 or compacted per ASTM B-496 according to ICEA S-97-682 and AEIC CS-8 or concentric lay stranded Aluminum per ASTM B-609 or ASTM B-230 class B round compressed per ASTM B-231 or compacted per ASTM B-400 according to ICEA S-97-682 and AEIC CS-8
2. Conductor Shield: Extruded semiconducting compound according to ICEA S-97-682 and AEIC CS-8
3. Insulation: Tree Retardant Cross Linked Polyethylene (TRXLPE) according to ICEA S-97-682 and AEIC CS-8
4. Insulation Shield: Extruded semiconducting compound strippable with insulation shield marking according to ICEA S-97-682 and AEIC CS-8
5. Concentric Neutral: Annealed round copper wires per ASTM B-3 helically applied over insulation shield
6. Jacket: PVC flame retardant and sunlight resistant extruded to fill spaces between copper wires according to ICEA S-97-682, NEMA WC 74/ICEA S-93-639 and AEIC CS-8

Application:

Cables are designed for transfer and distribution of electrical energy for use in dry or wet locations in MV grids with rated voltage 5-46 kV. Dedicated for fixed installation directly in ground, in concrete, in cable channel, in ducts or conduits made of non-magnetic material and directly in air.

Properties:

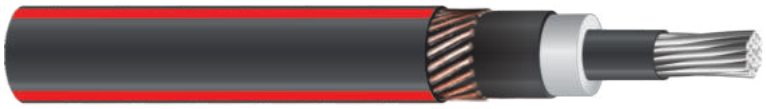
Rated voltage	5-46 kV
Conductor Sizes	2 AWG - 2000 KCMIL
Maximum conductor temperature (°C) Normal Operation/ Emergency Overload	105/140
Maximum short-circuit temperature (°C)	250
Frequency (Hz)	60
Insulation Level	100% or 133%
Minimum/Maximum ambient temperature during installation (°C)	-10/70
Jacket Color	Black or Other upon request
Flame retardance	FT1

Alternative designs:

The cables can also be designed with:
1. Round solid Aluminum conductors per ASTM B-609
2. Conductor center strand identification
3. Filled Strand conductors tested in accordance with ICEA T-31-610
4. Full or 1/3 or other concentric neutral

Medium Voltage Cables with TRXLPE insulation

- Cable type CU or AL TRXLPE (100% or 133%) CN XLPE or 5-46 kV
  Standards ANSI/ICEA S-94-649, AEIC CS-8



Construction:

1. Conductor: Concentric lay stranded Copper per ASTM B-3 class B round compressed per ASTM B-8 or compacted per ASTM B-496 according to ICEA S-94-649 and AEIC CS-8 or concentric lay stranded Aluminum per ASTM B-609 or ASTM B-230 class B round compressed per ASTM B-231 or compacted per ASTM B-400 according to ICEA S-94-649 and AEIC CS-8
2. Conductor Shield: Extruded semiconducting compound according to ICEA S-94-649 and AEIC CS-8
3. Insulation: Tree Retardant Cross Linked Polyethylene (TRXLPE) according to ICEA S-94-649 and AEIC CS-8
4. Insulation Shield: Extruded semiconducting compound strippable with insulation shield marking according to ICEA S-94-649 and AEIC CS-8
5. Concentric Neutral: Annealed round copper wires per ASTM B-3 helically applied over insulation shield
6. Jacket: Cross Linked Polyethylene (XLPE) sunlight resistant extruded to fill spaces between copper wires according to ICEA S-94-649 and AEIC CS-8

Application:

Cables are designed for transfer of electrical energy for use in dry or wet locations in MV grids with rated voltage 5-46 kV. Dedicated for fixed installation directly in ground, in concrete, in cable channel, in ducts or conduits made of non-magnetic material and directly in air. Typically used for renewable energy constructions.

Properties

Rated voltage	5-46 kV
Conductor Sizes	2 AWG - 2000 KCMIL
Maximum conductor temperature (°C) Normal Operation/ Emergency Overload	105/140
Maximum short-circuit temperature (°C)	350
Frequency (Hz)	60
Insulation Level	100% or 133%
Minimum/Maximum ambient temperature during installation (°C)	-10/70
Jacket Color	Black with three longitudinal red stripes or Black or Other upon request

Alternative designs:

The cables can also be designed with:

1. Round solid Aluminum conductors per ASTM B-609
2. Conductor center strand identification
3. Filled Strand conductors tested in accordance with ICEA T-31-610
4. Full or 1/3 or other concentric neutral

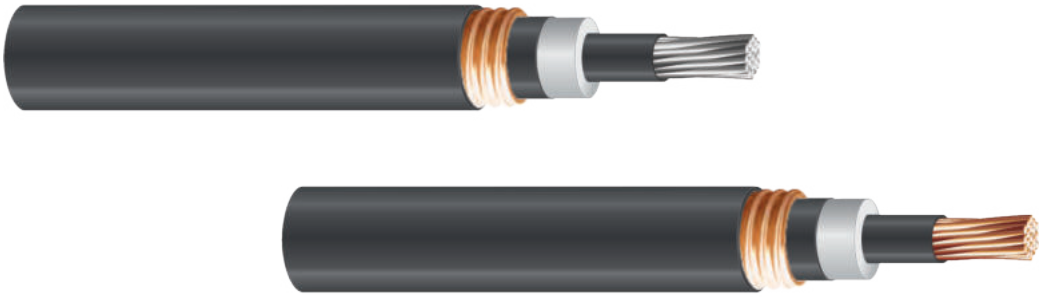
The concentric neutral can be designed to fit the customer's fault current and time duration requirements.

5. Bare annealed flat straps per ASTM B-3
6. Longitudinally waterblocked concentric neutral tested in accordance with ICEA T-34-664
7. Overlaying jacket

The cables can be provided in triplex or parallel assembly, as well.

Medium Voltage Cables with TRXLPE insulation

Cable type CU or AL TRXLPE (100% or 133%) LCS LLDPE 5-46 kV
Standards ANSI/ICEA S-97-682, AEIC CS-8



Construction:

1. Conductor: Concentric lay stranded Copper per ASTM B-3 class B round compressed per ASTM B-8 or compacted per ASTM B-496 according to ICEA S-97-682 and AEIC CS-8 or concentric lay stranded Aluminum per ASTM B-609 or ASTM B-230 class B round compressed per ASTM B-231 or compacted per ASTM B-400 according to ICEA S-97-682 and AEIC CS-8
2. Conductor Shield: Extruded semiconducting compound according to ICEA S-97-682 and AEIC CS-8
3. Insulation: Tree Retardant Cross Linked Polyethylene (TRXLPE) according to ICEA S-97-682 and AEIC CS-8
4. Insulation Shield: Extruded semiconducting compound strippable with insulation shield marking according to ICEA S-97-682 and AEIC CS-8
5. Metallic Shielding: Bare annealed copper corrugated tape shield longitudinally applied over insulation shield with overlap
6. Jacket: LLDPE applied over the LCS shield according to ICEA S-97-682 and AEIC CS-8

Application:

Cables are designed for transfer of electrical energy for use in dry or wet locations in MV grids with rated voltage 5-46 kV. Dedicated for fixed installation directly in ground, in concrete, in cable channel, in ducts or conduits made of non-magnetic material and directly in air or messenger supported.

Properties

Rated voltage	5-46 kV
Conductor Sizes	2 AWG - 2000 KCMIL
Maximum conductor temperature (°C) Normal Operation/ Emergency Overload	90/130
Maximum short-circuit temperature (°C)	250
Frequency (Hz)	60
Insulation Level	100% or 133%
Minimum/Maximum ambient temperature during installation (°C)	-10/70
Jacket Color	Black with three longitudinal red stripes or Black or Other upon request

Alternative designs:
The cables can also be designed with:

1. Round solid Aluminum conductors per ASTM B-609
2. Conductor center strand identification
3. Filled Strand conductors tested in accordance with ICEA T-31-610
4. The LC shield can be designed to fit the customer's fault current and time duration requirements.
5. Longitudinally waterblocked LC shield tested in accordance with ICEA T-34-664
6. SCPE jacket black colored

The cables can be provided in triplex or parallel assembly, as well.

Medium Voltage Cables with EPR insulation

- Cable type CU or AL EPR (100% or 133%) CTS PVC 5-46 kV for Cable Tray Use, MV-105
  Standards ANSI/ICEA S-97-682, ANSI/NEMA WC 74/ICEA S-93-639, AEIC CS-8, UL 1072

Construction:

1. Conductor: Concentric lay stranded Copper per ASTM B-3 class B round compressed per ASTM B-8 or compacted per ASTM B-496 according to ICEA S-97-682 and AEIC CS-8 or concentric lay stranded Aluminum per ASTM B-609 or ASTM B-230 class B round compressed per ASTM B-231 or compacted per ASTM B-400 according to ICEA S-97-682 and AEIC CS-8
2. Conductor Shield: Extruded semiconducting compound according to ICEA S-97-682 and AEIC CS-8
3. Insulation: Ethylene propylene rubber (EPR) according to ICEA S-97-682 and AEIC CS-8
4. Insulation Shield: Extruded semiconducting compound strippable with insulation shield marking according to ICEA S-97-682 and AEIC CS-8
5. Metallic Shielding: Bare annealed copper tape(s) helically applied over insulation shield
6. Jacket: PVC flame retardant and sunlight resistant applied over the copper tape(s) according to ICEA S-97-682, NEMA WC 74/ICEA S-93-639 and AEIC CS-8

Application:

Cables are designed for transfer of electrical energy for use in dry or wet locations in MV grids with rated voltage 5-46 kV. Dedicated for CT use, fixed installation directly in ground, in concrete, in cable channel, in ducts or conduits made of non-magnetic material and directly in air or messenger supported.

Properties:

Rated voltage	5-46kV
Conductor Sizes	2 AWG - 2000 KCMIL
Maximum conductor temperature (°C) Normal Operation/ Emergency Overload	105/40
Maximum short-circuit temperature (°C)	250
Frequency (Hz	60
Insulation Level	100% or 133%
Minimum/Maximum ambient temperature during installation (°C)	-35/70
Jacket Color	Black or Other upon request
Flame retardance (UL 1072 and IEEE 1202)	FT4 / FOR CT USE
Smoke emission	ST1

Alternative designs:

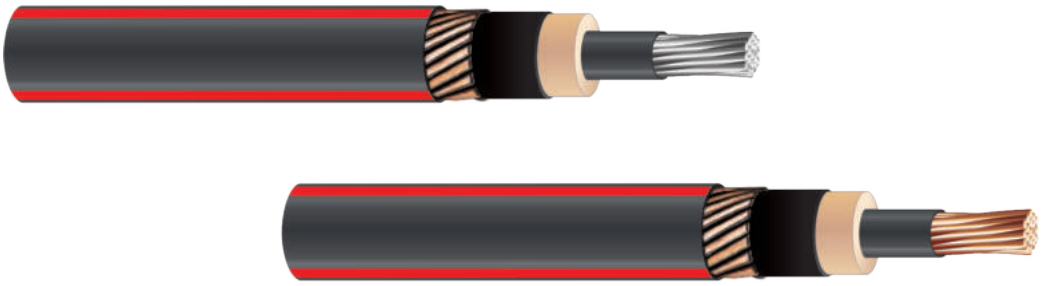
The cables can also be designed with:

1. Round solid Aluminum conductors per ASTM B-609
2. Conductor center strand identification
3. Filled Strand conductors tested in accordance with ICEA T-31-610
4. TRXLPE insulation
5. Tin-coated copper tape(s)
6. Longitudinally waterblocked copper tape(s) in accordance with ICEA T-34-664

The cables can be provided in triplex or parallel assembly, as well.

Medium Voltage Cables with EPR insulation

- Cable type CU or AL EPR (100% or 133%) FS LLDPE 5-46 kV
  Standards ANSI/ICEA S-94-649, AEIC CS-8



Construction:

1. Conductor: Concentric lay stranded Copper per ASTM B-3 class B round compressed per ASTM B-8 or compacted per ASTM B-496 according to ICEA S-94-649 and AEIC CS-8 or concentric lay stranded Aluminum per ASTM B-609 or ASTM B-230 class B round compressed per ASTM B-231 or compacted per ASTM B-400 according to ICEA S-94-649 and AEIC CS-8
2. Conductor Shield: Extruded semiconducting compound according to ICEA S-94-649 and AEIC CS-8
3. Insulation: Ethylene propylene rubber (EPR) according to ICEA S-94-649 and AEIC CS-8
4. Insulation Shield: Extruded semiconducting compound strippable with insulation shield marking according to ICEA S-94-649 and AEIC CS-8
5. Concentric Neutral: Bare annealed copper flat straps per ASTM B-3 helically applied over insulation shield
6. Jacket: LLDPE extruded to fill spaces between flat copper straps according to ICEA S-94-649 and AEIC CS-8

Application:

Cables are designed for transfer of electrical energy for use in dry or wet locations in MV grids with rated voltage 5-46 kV. Dedicated for fixed installation directly in ground, in concrete, in cable channel, in ducts or conduits made of non-magnetic material and directly in air. Typically used as PILC replacement cables.

Properties

Rated voltage	5-46 kV
Conductor Sizes	2 AWG - 2000 KCMIL
Maximum conductor temperature (°C) Normal Operation/ Emergency Overload	90/130
Maximum short-circuit temperature (°C)	250
Frequency (Hz)	60
Insulation Level	100% or 133%
Minimum/Maximum ambient temperature during installation (°C)	-10/70
Jacket Color	Black with three longitudinal red stripes or Black or Other upon request

Alternative designs:

The cables can also be designed with:

1. Round solid Aluminum conductors per ASTM B-609
2. Conductor center strand identification
3. Filled Strand conductors tested in accordance with ICEA T-31-610
4. Reduced insulation wall thickness
5. TRXLPE insulation
6. The concentric neutral can be designed to fit the customer's fault current and time duration requirements.
7. Longitudinally waterblocked concentric neutral tested in accordance with ICEA T-34-664
8. Tin-coated copper flat straps
9. HDPE, PP jacket or other upon request
10. Overlaying jacket

The cables can be provided in triplex or parallel assembly, as well.

www.hellenic-cables.com

LV Underground

Dependable LV Cables for Secondary Underground Distribution

Our LV XLPE cables are engineered for residential, commercial and light-industrial feeders across the North American distribution grid.

Key Features

- XLPE insulation offering high thermal performance
  UV, impact and abrasion resistance
- Suitable for direct burial or installation in ducts/conduits
- Copper or aluminum conductor options
- Available as single, duplex, triplex or quadruplex assemblies

Typical Applications

- Underground service entrance
- Residential distribution networks
- Utility secondary feeders

Single, Duplex, Triplex or Quadruplex Low Voltage Cables with XLPE insulation

- Cable type AL XLPE 600 Volt Underground Service Entrance
  Standards ANSI/ICEA S-105-692

Construction:

1. Conductor: Concentric lay stranded Aluminum per ASTM B-609 or ASTM B-230 class B round compressed per ASTM B- 231 according to ICEA S-105-692
2. Insulation: Cross-Linked Polyethylene (XLPE) according to ICEA S-105-692

Application:

Cables are designed for secondary underground distribution of electrical energy for use in dry or wet locations in LV grids with rated voltage 600 V or less. Dedicated for fixed installation directly in ground, in ducts or conduits made of non-magnetic material and are resistant to abrasion, impact and sunlight.

Properties:

Rated voltage	600 V or less
Conductor Sizes	8 AWG – 1000 KCMIL
Maximum conductor temperature (°C) Normal Operation/ Emergency Overload	90/130
Maximum short-circuit temperature (°C)	250
Frequency (Hz)	60
Phase/Neutral Insulation Color	Black / Black with three longitudinal yellow stripes or solid yellow upon request

Alternative designs:

The cables can also be designed with:

1. Concentric lay stranded Copper conductor per ASTM B-3 class B round compressed per ASTM B-8 according to ICEA S-105-692
2. Separator tape under insulation
3. A reduced neutral conductor for triplex and quadruplex assemblies according to ICEA S-105-692

Flexible Power Cable for Industrial & Utility Applications

Key Benefits

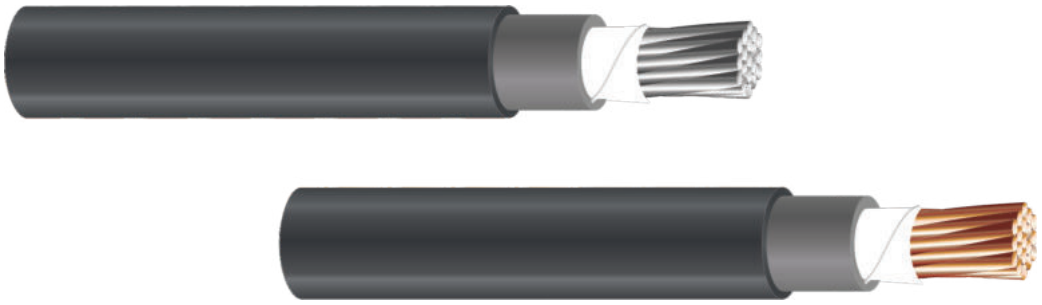
- Flexible stranded rope-lay copper or aluminum conductor
- EPR insulation and CPE jacket for durability
- Oil, weather, impact and flame resistant
- Suitable for motor and generator leads, battery leads and power supply systems

Typical Applications

- Diesel-electric locomotives
- Drilling rigs & shipyards
- Earth-moving equipment
- Industrial and mobile power systems
- Utility truck applications
- Mining, drilling & industrial sites

Single-core Low Voltage Cable with EPR insulation – Diesel Locomotive (DLO)

- Cable type: DLO (EPR CPE) 2000V covering RHH/RHW-2 types
  Standards: UL 44



Construction:

1. Conductor: Flexible stranded rope-lay coated/uncoated copper conductor according to ASTM B-172 or Concentric lay stranded Copper per ASTM B-3 class B round compressed per ASTM B-8 or compacted per ASTM B-496 or concentric lay stranded Aluminum per ASTM B-609 or ASTM B-230 class B round compressed per ASTM B-231 or compacted per ASTM B-400 (AA 8000 series alloy)
2. Tape: Polyester tape
3. Insulation: Ethylene propylene rubber (EPR) according to UL 44
4. Jacket: Thermoset Chlorinated Polyethylene (CPE) according to UL 44

Application:

DLO (Diesel Locomotive) cables are suitable for use in various heavy-duty, flexible power applications, including diesel-electric locomotives, drilling rigs, shipyards and earth-moving equipment. Their flexible, rugged construction makes them ideal for motor and generator leads, battery leads, and power supply systems in demanding industrial and mobile environments, and they are suitable for use in conduit or raceways.

Properties:

Rated voltage	2000 V
Maximum conductor temperature (°C) at normal operation	90
Frequency (Hz)	60
Insulation colour	Black or other upon request
Jacket colour	Black or other upon request
Cold bend (°C)	-25
Cold impact (°C)	-40
Flame retardance	FT2, VW-1 / FT4
Jacket	Weather and oil resistant

Welding Cable (600 V, 105°C)

- Durable, flexible cable for welding connections in demanding environments

Features

- Class K flexible stranded copper conductor
- TPV insulation (105°C)
- Resistant to sunlight, crush, impact and abrasion
- Performs at very low temperatures (-50°C)
- Halogen-free

Applications

- Connections from electrode holders and clamps to arc welders
- Bus welding boxes
- Transformer welding connections

Single-core Low Voltage Cable with TPV insulation – Welding cable

- Cable type: Welding Cable 105°C 600V
  Standards: UL 1276, UL 1581, UL 2556

Construction:

1. Conductor: Flexible stranded rope-lay class K copper conductor according to ASTM B-172
2. Tape: Paper tape
3. Insulation: Thermoplastic vulcanizate (TPV) 105°C meeting the requirements of Table 50.55 according to UL 1581

Application:

Welding cables are suitable for use on connections from electrode holders and clamps to arc welders, bus welding box or transformers.

Properties:

Rated voltage	600 V
Maximum conductor temperature (°C) at normal operation	105
Minimum operating temperature (°C)	-50
Frequency (Hz)	60
Insulation color	Black or other upon request
Halogen-free	Yes
Flame retardance	Vertical tray flame
Insulation	Sunlight, crush, impact, abrasion resistant

SJOOW / SOOW

- Portable Power Cables for Utility Crews & Industrial Sites

Features

- Flexible stranded copper conductor
- EPR insulation
- CPE jacket
- Weather and oil resistant
- Flame retardant FT2

Applications

- Portable tools and equipment
- Small motors and machinery
- Appliances exposed to oils, solvents, moisture and flame

Multi-core Low Voltage Cable with EPR insulation – SJOOW

- Cable type: SJOOW 300V 105°C
  Standards: UL 62

Construction:

1. Conductor: Flexible stranded bunch or rope-lay copper conductor according to ASTM B-174 and UL 62
2. Tape: Polyester tape
3. Insulation: Ethylene propylene rubber (EPR) class 19 according to Table 8 of UL 62
4. Jacket: Thermoset Chlorinated Polyethylene (CPE) class 1.12 according to Table 11 of UL 62

Application:

SJOOW cables are suitable for portable tools, equipment, small motors and associated machinery, appliances, equipment exposed to oils, solvents, flame, moisture and other electrical equipment where flexibility and durability are required.

Properties:

Rated voltage	300 V
Maximum conductor temperature (°C) at normal operation	105
Minimum operating temperature (°C)	-40
Frequency (Hz)	60
Insulation color	According to ICEA S-58-679 Method 1, Table 1
Jacket colour	Black or other upon request
Flame retardance	FT2
Jacket	Weather resistant

Multi-core Low Voltage Cable with EPR insulation – SOOW

- Cable type: SOOW 600V 90°C
  Standards: UL 62

Construction:

1. Conductor: Flexible stranded bunch or rope-lay copper conductor according to ASTM B-3 and UL 62
2. Tape: Polyester tape
3. Insulation: Ethylene propylene rubber (EPR) class 3 according to Table 8 of UL 62
4. Jacket: Thermoset Chlorinated Polyethylene (CPE) class 1.4 according to Table 11 of UL 62

Application:

SOOW cables are suitable for portable tools, equipment, small motors and associated machinery, industrial equipment, marine dockside power, appliances, equipment exposed to oils, solvents, flame, moisture and other electrical equipment where flexibility and durability are required.

Properties:

Rated voltage	600 V
Maximum conductor temperature (°C) at normal operation	90
Minimum operating temperature (°C)	-40
Frequency (Hz)	60
Insulation color	According to ICEA S-58-679 Method 1, Table 1
Jacket colour	Black or other upon request
Flame retardance	FT2
Jacket	Weather resistant

Why Thiva MV Production

- Advanced insulation extrusion lines
- Triple-layer co-extrusion
- Full or 1/3 other concentric neutrals
- Water-blocked designavailable
- Continuous monitoring & AEIC, ANSI/ICEA, CSA & UL compliant testing

SUSTAINABILITY

Responsible Manufacturing

- Energy-efficient production lines
- High recycling rate of metals
- Reduced emissions & optimized material use
- Compliance with EU and U.S. environmental standards
- Ongoing investments in greener processes

HELLENIC CABLES

Notes

HELLENIC CABLES

Notes

HELLENIC CABLES

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