E1 (IEC 60331) or the 840℃x30min fire resistance test (CNS 11174), and has obtained the Ministry of the Interior's type approval certificate for fire-fighting equipment and materials, and has been awarded National Quality Certification No. 6403. E2 Round 600V XLPE Insulated LSHF Coated Fire-Resistant Cable (FR-CL)

E2>>: Nominal voltage below 600V, mica-coated XLPE insulated low-smoke non-toxic (LSHF) coated fire-resistant cable (marked HR-CL), used for fire equipment wiring, referring to CNS 11359 standard.

Structure: (1) Conductor – soft copper stranded wire or single wire (2) Fire-resistant mica tape (3) Insulation – XLPE (4) Two or more cores filled and twisted with appropriate wrapping (5) Coated – LSHF.

>Features: 600V mica-coated XLPE insulated PVC-coated fire-resistant cable (FR-CV) has passed the 950℃x90min fire resistance test (IEC 60331) or the 840℃x30min fire resistance test (CNS 11174), and has obtained the Ministry of the Interior's type approval certificate for fire-fighting equipment and materials, and has been awarded National Quality Certification No. 6403.

E3>>:XLPE insulated PVC-coated heat-resistant cable (marked HR-CV) with a nominal voltage below 600V, used for wiring in control circuits of fire-fighting equipment.

>**Construction:**(1) Conductor – Soft copper stranded wire or single wire (2) Insulation – XLPE (3) Two or more cores filled and stranded with appropriate wrapping (4) Coating – PVC.

>**Features**: The 600V mica-coated XLPE insulated low-smoke non-toxic (LSHF) fire-resistant cable (FR-CL) has passed the 750℃x90min fire resistance test (IEC60331) or the 840℃x30min fire resistance test (CNS 11174) and obtained the Ministry of the Interior's type approval certificate for fire-fighting equipment and materials. It possesses the following

>characteristics:

(1) Low toxicity index: According to NES 713; Toxicity Index≦5
(2) No halogen acid gas production: According to IEC 60754-1; HCl gas content≦0.5%
(3) Low smoke emission: According to ASTM E662; smoke density test Ds≦250, VOF4≦100
(4) Excellent flame retardancy: According to ASTM D2863; oxygen index OI≧30; passed the IEEE 383 vertical flame retardancy test. Low-smoke non-toxic (LSHF) cables minimize fire damage, therefore they are essential for protecting life and property in public places such as underground tunnels, subways, public buildings, underground shopping malls, ships, power plants, schools, hospitals, and mass transit systems.

Classification F: Low-smoke non-toxic wires and cables

F1>> >Structure: (1)Conductor: The conductor is soft copper; the bare, flexible soft copper stranded wire conforms to JCS 1222. (2)Insulation: The insulation is heat- and moisture-resistant, filled or unfilled cross-linked thermosetting polyethylene (XLPE). The insulation material properties, average thickness, and minimum thickness conform to IEC 60502-1. (3)Outer Sheath: The outer sheath is low-smoke halogen-free (LSHF). Its material properties conform to IEC 60502-1, and its average thickness and minimum thickness conform to IEC 60502-1.4. Factory Testing: The completed cable is tested according to the relevant provisions of IEC 60502-1.

F2>>: 600V~25kV cross-linked PE insulated low smoke non-toxic (LSHF) sheathed armored power cable (marked CL-SWA), used for wiring in power distribution systems, conforming to IEC60502 standard.

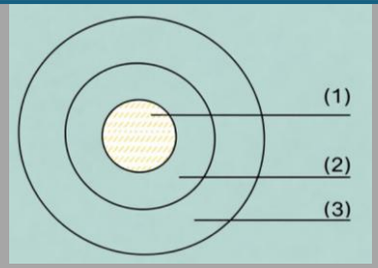
>Structure: (1) Conductor – soft copper stranded wire or single wire (2) Conductor shielding (voltage greater than 2kV) (3) Insulation – XLPE (4) Insulation shielding (voltage greater than 2kV) (5) Copper tape shielding (voltage greater than 2kV) (6) Two or more cores filled stranded and appropriately wrapped (7) Inner sheath – LSHF (8) Steel wire armor (9) Sheath – LSHF. **>Features:** 600V~25kV cross-linked PE insulated low-smoke non-toxic (LSHF) armored power cable (CL-SWA) has the following

>Characteristics:

(1) Low toxicity index: according to NES 713; Toxicity Index≦5
(2) No halogen acid gas production: according to IEC 60754-1; HCl gas content≦0.5%
(3) Low smoke emission: according to ASTM E662; smoke density test Ds≦250, VOF4≦100
(4) Excellent flame retardancy: according to ASTM D2863; oxygen index OI≧30; passed the vertical flame retardancy test according to IEEE 383. Low-smoke non-toxic (LSHF) cables can minimize fire losses. Therefore, they are required in public places such as underground passages, tunnels, subways, public buildings, underground streets, ships, power plants, schools, hospitals, and mass transit systems to ensure the safety of life and property.

Solar DC Cable

AQUILA



Cable structure:
1.Tin-plated Copper Stranded Wire
2.XLPO Isolation
3.XLPO Outer Sheath

>Meet EU standard EN 50618:2014, TÜV SÜD certified.
>Halogen-free, UV resistant, double insulation, ozone resistant
>Conductor: EN 60228 class 5 tinned copper stranded wire. Temperature range: -40℃~90℃.
>Flammability test: Passed EN 60332-1.
>Specified in EN 50618:2014, the expected service life is at least 25 years.

	Item	Unit	Size						
Conductor	Specification	mm2	2.5	4	6	10	16	25	35
	AWG	#	14			8	6	4	2
	Construction	#/mm	49/ 0.254	52/ 0.30± 0.008	84/ 0.30± 0.008	196/ 0.254	315/ 0.254	490/ 0.254	686/ 0.254
Insulation	Average Thickness	mm	1.14	0.7	0.7	1.39	1.39	1.39	1.39
	Diameter (Approx)	mm	4.4 ±0.15	3.9 ±0.1	4.6 ±0.15	7.3 ±0.15	8.5 ±0.2	9.9 ±0.3	11.20 ±0.3
Jacket	Average Thickness	mm	0.8	0.8	0.8	0.8	1.14	1.14	1.14
	Overall Diameter	mm	6.0 ±0.2	5.5 ±0.2	6.2 ±0.3	8.9 ±0.3	10.8 ±0.3	12.2 ±0.5	13.5 ±0.5
Properties	Conductor Resistance (Max.)	Ω/km (20℃)	8.21	3.39	3.39	1.95	1.24	0.795	0.565
	Dielectric Strength	kV/ 5min (AC.)	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	Rated Voltage	kV	1.0/ 2.0	1.5	1.5	1.0/ 2.0	1.0/ 2.0	1.0/ 2.0	1.0/ 2.0

>Rated Temperature:90℃ >Vertical Flame Propagation: pass

	Price (US$/ meter)	M.O.Q.	Item Price (US$)	Remark	
4 mm^2	1.704	160,000	272,640	1000 meter/Roll	>F.O.B. Taiwan >Price does not include tax and transportatioin fee yet >Payment: 80% at order placement. 20% before shipping. >Price changes frequently
6 mm^2	2.591	80000	207,280	1000 meter/Roll	

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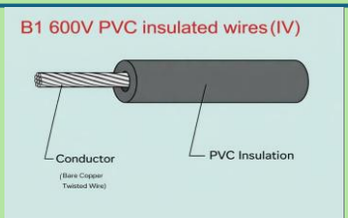
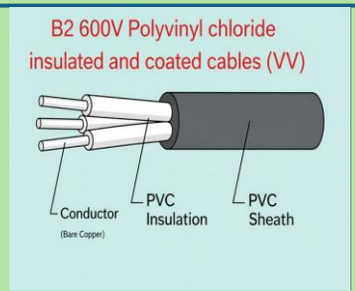
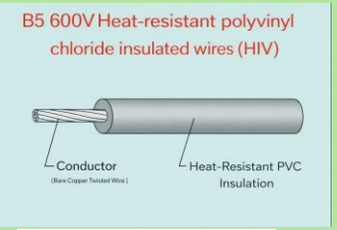








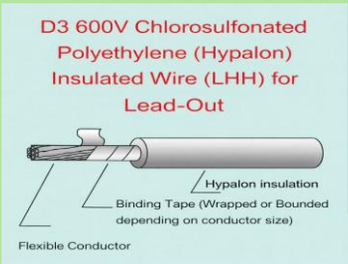


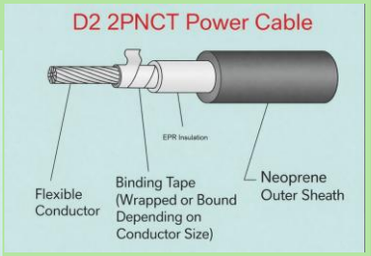




C1 Cross-linked Polyethylene Power Cable

D1 600V TO 15kV EPRN Power Cable

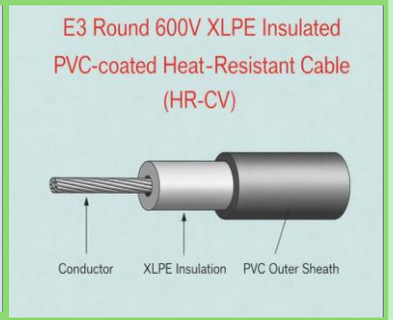


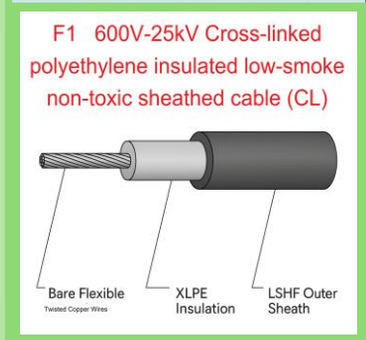


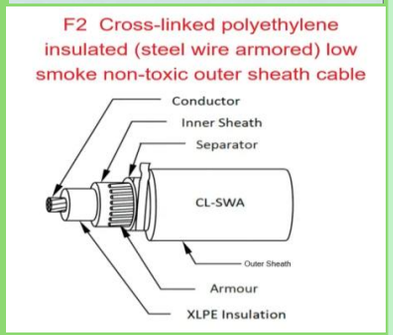












Category B: PVC Wires and Cables

B1>> 600V polyvinyl chloride insulated wire (marked: IV), used for fixed wiring in buildings and equipment.
>Structure:(1) Conductor – Soft copper stranded wire or single wire (2) Insulation – Polyvinyl chloride (PVC)
>Features:Polyvinyl chloride (PVC) is a highly insulating polymer with excellent abrasion resistance and weather resistance.
B2>> Nominal voltage 600V (inclusive) and below, PVC insulated and coated cable (marked VV), used for wiring of electrical equipment, >Structure: (1) Conductor – Soft copper stranded wire or single wire (2) Insulation – PVC (3) Two or more cores, filled and twisted with appropriate wrapping (4) Coating – PVC.
>Features:Polyvinyl chloride (PVC) is a highly insulating polymer with high insulation, abrasion resistance, and weather resistance.
B3 >> Nominal voltage below 600V, PVC insulated and coated control cable (marked CVV), used for control circuit wiring.
>Structure: (1) Conductor – Soft copper stranded wire or single wire (2) Insulation – PVC (3) Two or more cores, filled and twisted with appropriate wrapping (4) Sheath – PVC.
>Features: Polyvinyl chloride (PVC) is a highly insulating polymer with high insulation, abrasion resistance, and weather resistance.
B4 >> Control cables with nominal voltage below 600V, PVC insulated and copper-tape shielded
(Marked CVV-S) Used for control circuit wiring.
>Structure: (1) Conductor – Soft copper stranded wire or single wire (2) Insulation – PVC (3) Two or more cores, filled stranded and appropriately wrapped (4) Copper tape shielding (5) Sheath – PVC.
>Features:Polyvinyl chloride (PVC) is a highly polymerized material with high insulation, abrasion resistance, and weather resistance. It is wrapped with a layer of copper tape as a shielded control cable.
B5 >> Heat-resistant PVC insulated wire (marked HIV) with a nominal voltage below 600V, used for fixed wiring of electrical machinery and motors.
>Structure: (1) Conductor – Soft copper stranded wire or single wire (2) Insulation – Heat-resistant PVC.
>Features: Polyvinyl chloride (PVC) is a highly polymeric material with high insulation, abrasion resistance, and weather resistance, as well as heat resistance.

Classification C: Cross-linked Polyethylene Power Cable

C1>>Nominal voltage 600V~25kV, cross-linked PE insulated PVC-coated cable (marked CV), used for wiring in power transmission and distribution systems.
>Structure:(1) Conductor – Soft copper stranded wire or single wire (2) Conductor shielding layer (voltage greater than 2 kV) (3) Insulation – XLPE (4) Insulator shielding layer (voltage greater than 2 kV) (5) Copper tape shielding (voltage greater than 2 kV) (6) Two or more cores filled stranded and appropriately wrapped (7) Coated – PVC.
>Features: 600V~25kV cross-linked PE cable.

Category D : 600V TO 15kV EPRN Power Cable

D1>> Nominal voltage 600V~15kV EPR (ethylene propylene rubber) insulated Neoprene (chloroprene) coated power cable (marked EPRN) for wiring in electrical equipment.
>**Construction**: (1) Conductor – Tinned or untinned soft copper stranded wire (2) Conductor shielding (voltage greater than 2kV) (3) Insulation-EPR (4) Insulator shielding (voltage greater than 2kV) (5) Tinned copper tape shielding (voltage greater than 2kV) (6) Two or more cores filled stranded and appropriately wrapped (7) Sheath – Neoprene.
>**Features**: EPRN power cables are used in power distribution systems. They have excellent insulation resistance, excellent impact resistance, bending resistance, abrasion resistance and tensile properties, as well as good oil resistance, chemical resistance, heat resistance and weather resistance.
D2>> Flexible cables (marked 2PNCT) with EPR (ethylene propylene rubber) insulation and Neoprene (chloroprene) sheath, rated for voltages below 600V, conforming to CNS10741 standards.
>**Structure**: (1) Conductor – Tinned flexible soft copper stranded wire (2) Insulation – EPR (3) Two or more cores filled and appropriately wrapped (4) Sheath – Neoprene.
>**Features**: 2PNCT is used for flexible portable electrical equipment. This EPR-insulated, Neoprene-sheathed portable cable offers excellent flexibility, withstands impact, bending, abrasion, and tensile stress, and exhibits excellent oil resistance, chemical resistance, heat resistance, and weather resistance.
D3>>Nominal voltage below 600V, Hybalon (chlorosulfonated polyethylene) rubber insulated lead-out wire (marked LHH), used for lead-out wires of generators, motors and other motors, conforming to CNS 5747 standard.
>**Structure**: (1) Conductor – Tinned or untinned flexible copper stranded wire (2) Insulation – Hybalon.
>**Features**: Chlorosulfonated polyethylene (Hybaron rubber) insulated leads have good flexibility, can withstand impact, bending, abrasion and tensile stress, and have excellent oil resistance, chemical resistance, heat resistance and weather resistance.
D4>>Nominal voltage below 600V, EPR rubber insulated leads (marked LP) are used for electrical tool leads and comply with CNS 5747 specifications.
>**Structure**: (1) Conductor – Tin-plated or unplated flexible copper stranded wire
(2) Insulation – EPR.
>**Features**:EPR rubber-insulated leads have excellent flexibility, capable of withstanding impact, bending, abrasion, and tensile stress. They also possess excellent oil resistance, chemical resistance, heat resistance, and weather resistance.

Classification E: Fire-resistant and heat-resistant wires and cables

E1>>: Nominal voltage below 600V, mica-coated XLPE insulated PVC-coated fire-resistant cable (marked FR-CV), used for fire protection system wiring, conforming to CNS 11359 standard.
>**Structure**: (1) Conductor – Soft copper stranded wire or single wire (2) Fire-resistant mica tape (3) Insulation – XLPE (4) Two or more cores filled and stranded with appropriate wrapping tape (5) Sheath – PVC.
>**E1 Features:** The 600V mica-coated XLPE insulated PVC-coated fire-resistant cable (FR-CV) has passed the 950℃x90min fire resistance test