

HIGH VOLTAGE SINGLE CONDUCTOR CABLE

115 kV XLP 2000 kcmil Cu PVC CFE E0000-17

General Cable

A Brand of Prysmian Group

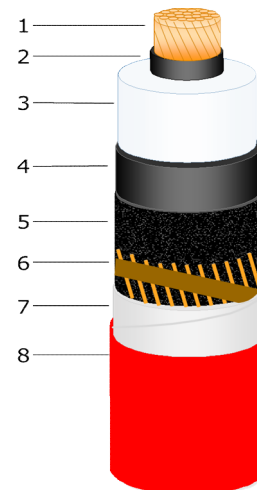
Cable description

The high voltage single conductor cables are made up of blocked compact soft copper conductor, with semiconductive shield over conductor, cross-linked polyethylene (XLP) insulation, extruded shield over insulation, semiconducting water-blocking tape, wire-based metal shield copper with copper tape applied in an open helix, water-blocking tape, and red polyvinyl chloride (PVC) jacket.

Diseño del Cable

Code E223FK442.0KFJRO

CONSTRUCTION	Nominal thickness mm	Nominal diameter mm
1. CONDUCTOR: Class B soft copper compact round conductor, blocked from the longitudinal pass of water by blocking wires. Nominal cross section: 1010 mm ² .	-	39.00
2. EXTRUDED THERMOSET SEMI-CONDUCTING STRESS CONTROL LAYER OVER CONDUCTOR: Thermoset extruded semiconductor compound.	1.20	42.30
3. INSULATION: Cross-linked polyethylene (XLP), extruded in a true triple extrusion process.	13.50	69.30
4. SEMICONDUCTOR SCREEN OVER INSULATION: Thermostable extruded semiconductor compound, with adequate adhesion to insulation.	1.80	72.90
5. SEMICONDUCTIVE WATER-BLOCKING TAPE: Helically applied under the electrostatic screen, avoiding the longitudinal penetration of moisture.	0.3	73.50
6. METALLIC SCREEN: Helically applied soft bare copper wires with against spiral of copper tape. Formed by 30 copper wires of 1,829 mm	1.83	78.01
7. WATER-BLOCKING TAPE: Helically applied on the electrostatic screen, avoiding the longitudinal penetration of moisture.	0.25	79.01
9. JACKET: Extruded red polyvinyl chloride (PVC) jacket.	3.60	87.13



Specifications and special features:

CFE E0000-17 CABLES DE POTENCIA PARA 69 kV A 138 kV CON AISLAMIENTO DE XLP.

NMX-J-142/2-ANCE-2011 CONDUCTORES - CABLES DE ENERGÍA CON PANTALLA METÁLICA, AISLADOS CON POLIETILENO DE CADENA CRUZADA O A BASE DE ETILENO - PROPILENO PARA TENSIONES DE 69 kV HASTA 115 kV - ESPECIFICACIONES Y MÉTODOS DE PRUEBA.

IEC-60840 Power cables with extruded insulation and their accessories for rated voltages above 30 kV (Um = 36 kV) Up to 150 kV (Um = 170 kV) - Test methods and requirements.

Maximum admissible temperature in the conductor in permanent service: 90°C
Maximum admissible temperature in the conductor in the short-circuit regimen: 250°C

Packing

In non-returnable wooden or metallic reels according to the length of the sections. Tolerance on the length of ± 5%.

Applications

- Used in energy sub-transmission networks.
- Trenches.
- Underground ducts.
- Directly buried.
- Galleries.

Technical information

		units
Electrical resistance of the conductor at 20°C d.c.:	0.0174	Ω/km
Nominal capacity:	0.2580	μF/km
Maximum voltage between phases, Um:	123	kV
Impulse voltage, Up:	550	kV
Maximum short-circuit current in the conductor during 0.25 s:	289	kA
Maximum short-circuit current in the metallic screen (Cu wires + Al tape) during 0.25 s:	24.0	kA
Maximum pulling effort:	6 000	kg
Approximate weight:	14 638	kg/km
Bending radius:		
• During the installation:	2.62	m
• Permanent:	1.75	m

Values indicated here are approximate and according to tolerances of manufacturing standards, for which they may vary.

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