

Primary UD Flat Strap PILC Replacement, EPR/PE

15 kV – 35 kV

CME[®]
wire and cable

A Viakable Company

Features

Reduced overall OD.

True Triple extrusion system, for optimum concentricity, and excellent electric field control.

Closed handling raw materials system, to eliminate any contact with ambient, until extrusion of insulation and shields.

Sealed conductor passes the Production Water Penetration tests per ICEA-T-31-610 at 15 psi for 60 minutes.

Heavy duty mechanical and sunlight resistance jacket.

Application

Underground primary distribution circuits where existing duct spacing is limited and reduced cable OD is desired.

May be used in wet or dry locations, installed in underground ducts, or direct burial.

Standards

ICEA S-94-649: Standard for Concentric Neutral Rated Cables 5 kV– 46 kV.

AEIC CS8: Specifications for Extruded Dielectric, Shielded Power Cable, rated 5 kV – 46 kV.

Specifications

Maximum operating voltage:

- 15 kV – 35 kV, 100% and 133% IL

Maximum conductor operation temperatures:
Wet and dry locations

- Normal: 105 °C
- Emergency: 140 °C
- Short Circuit: 250 °C

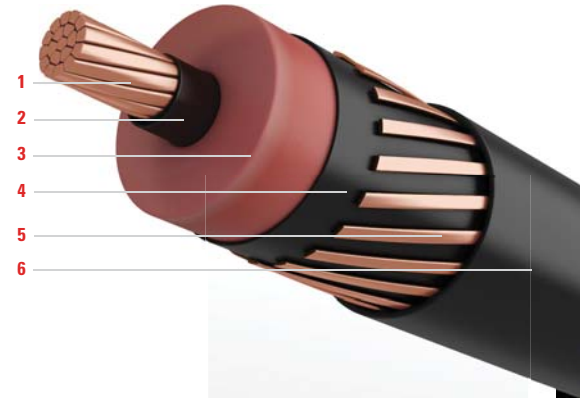
Engineering Information

1. Conductor: Uncoated soft annealed copper Class B compacted stranding per ASTM B496.

On request, Filled strand conductor.

Sizes: 4/0 AWG – 1000 kcmil.

2. Conductor Shield: Extruded semiconducting cross-linked polyethylene per ICEA and AEIC.



3. Insulation: High quality, heat, moisture, ozone and corona resistant, thermosetting ethylene propylene rubber (EPR) per ICEA and AEIC..

4. Insulation Shield: Extruded Semiconducting cross-linked polyethylene per ICEA and AEIC.

5. Shield: Flat wires straps of annealed uncoated copper per ICEA, helically applied and uniformly spaced.

Note: Specific flat strap constructions and configuration will vary per customer fault current requirements.

6. Jacket: Extruded to fill of Black Liner Low Density Polyethylene (LLDPE) sunlight resistant thermoplastic compound, per ICEA S-97-682.

On request, XLPE jacket.

Technical Data

15 kV EPR Insulated

Size AWG or kcmil	Number of Strands	100% Insulation Level (175 mils)					133% Insulation Level (220 mils)				
		Flat Straps		Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight	Flat Straps		Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight
		No. of Wires	Dimensions				No. of Wires	Dimensions			
mil	mil	mil	in	lb/kft	mil	mil	mil	in	lb/kft		
4/0	19	12	20 x 175	50	1.08	1185	12	20 x 175	50	1.17	1267
250	37	14	20 x 175	50	1.12	1353	14	20 x 175	50	1.22	1439
350	37	14	20 x 175	50	1.25	1742	14	20 x 175	50	1.35	1838
500	37	14	20 x 175	50	1.37	2270	14	20 x 175	50	1.47	2376
750	61	16	20 x 175	50	1.56	3176	16	20 x 175	50	1.65	3295
1000	61	16	20 x 175	50	1.71	4041	16	20 x 175	50	1.83	4214

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.

25 kV EPR Insulated

Size AWG or kcmil	Number of Strands	100% Insulation Level (260 mils)				
		Flat Straps		Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight
		Number of Wires	Dimensions			
mil	mil	mil	in	lb/kft		
4/0	19	12	20 x 175	50	1.27	1368
250	37	14	20 x 175	50	1.32	1544
350	37	14	20 x 175	50	1.43	1929
500	37	14	20 x 175	50	1.55	2475
750	61	16	20 x 175	50	1.73	3406
1000	61	16	20 x 175	50	1.91	4338

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.

35 kV EPR Insulated

Size AWG or kcmil	Number of Strands	100% Insulation Level (345 mils)				
		Flat Straps		Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight
		Number of Wires	Dimensions			
mil	mil	mil	in	lb/kft		
4/0	19	12	20 x 175	50	1.45	1558
250	37	14	20 x 175	50	1.49	1741
350	37	14	20 x 175	50	1.60	2142
500	37	14	20 x 175	50	1.72	2705
750	61	16	20 x 175	50	1.93	3707
1000	61	16	20 x 175	50	2.08	4620

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.