



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB 5KV Annealed Bare Copper Conductor XLPE Insulated (Lead free), tape shielded, PVC jacket Single core MV cable as per UL 1072 is suitable to use for transmission and distribution of electrical energy. This cable may be used in wet and dry areas, conduits, ducts, troughs, trays, direct burial for power supply to wide network.

## CHARACTERISTICS

### Voltage Rating

Nominal Voltage: 5kV AC

### Operation Temperature

Operating temperature: 90°C

Emergency Overload Temperature: 130°C

Max. Short Circuit Temperature: 250°C

## CONSTRUCTION

- Conductor: Circular Class B Compressed Copper conductor as per ASTM B3 and B8
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded XLPE Compound, 100% or 133% insulation level
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape with 25% overlap
- Outer Sheath: Sunlight resistant extruded Polyvinyl Chloride, Colour: Black As per UL standard 1072

### Bending Radius:

16 x overall diameter of cable

Voltage Rating (kV AC)	High Voltage		Partial Discharge Extinction level (kV AC)
	Test (kV AC)	2-1000 (AWG or kcmil)	
	1001-2000 (AWG or kcmil)	100% or 133% Insulation Level	
5	18	28	4

## OUTSTANDING FEATURES

- Flame retardant
- High life
- Sunlight resistant
- Corona resistant
- Moisture resistant

## STANDARD FOLLOWS

- ASTM B3 Soft or Annealed Copper Conductor
- ASTM B8 Class B Stranded Copper Conductor
- ICEA S-97-682 Utility and ANSI/NEMA WC 74/ICEA S-93-639 Shielded power cable rated 5 through 46 KV
- UL 1072 Medium Voltage power cable
- UL 1685 / FT4 Vertical Tray fire propagation and smoke release (1/0 AWG and larger)
- IEEE 1202 Vertical tray flame test (1/0 AWG and larger)
- UL 2556 Wire and Cable test method

## COMPLIANCE

Conductor resistance	UL 1581
Insulation resistance	UL 1072
Vertical Tray Flame/FT4	UL 1685
Flame Test	IEEE 1202

## OUR ACCREDITATIONS



## APPROVAL



## NOTES

This cable can be available with Copper wire + helix tape screen as well

Dimensional and Electrical Properties:

CONDUCTOR SIZE	NO OF STRANDS	NOMINAL INSULATION THICKNESS	NOMINAL OVERALL DIAMETER (APPROX)	APPROX WEIGHT	MAX CONDUCTOR DC RESISTANCE AT 20°C	*AMPACITY IN AIR at 40°C	**AMPACITY IN DUCT at 40°C	
AWG/kcmil	No.	mil	mm	inch	kg/km	ohm/1000ft	Amps	Amps
8	7	90	13.7	0.541	283	0.6535	83	64
6	7	90	14.7	0.579	351	0.4112	110	85
4	7	90	16.2	0.639	473	0.2585	145	110
2	7	90	17.8	0.701	632	0.1626	190	145
1	19	90	18.9	0.743	749	0.1289	225	170
1/0	19	90	19.9	0.785	885	0.1022	260	195
2/0	19	90	22.3	0.878	1116	0.08108	300	220
3/0	19	90	23.7	0.934	1339	0.06431	345	250
4/0	19	90	25.3	0.997	1620	0.05099	400	290
250	37	90	25.8	1.014	1666	0.04316	445	320
350	37	90	28.4	1.118	2201	0.03082	550	385
500	37	90	31.6	1.244	2952	0.02158	695	470
750	61	90	35.6	1.400	3992	0.01438	900	585
1000	61	90	41.3	1.626	5582	0.01079	1075	670

#Above values are approximate and subject to standard manufacturing tolerance

\* Ampacities are based on Table 310.60(C)(69) of 2014 National Electrical Code (where ambient air temperature is 40°C).

\*\* Ampacities are based on Table 310.60(C)(77) detail 1. Of 2014 National Electrical Code (where Ambient earth temperature is 20°C and earth thermal resistivity (RHO) is 90).