



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB 35KV Class B Compact Stranded 8000 series Aluminium Alloy Conductor TRXLPE 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: 35kV AC

### Operation Temperature

Operating temperature: -35°C To 105°C

Emergency Overload Temperature: 140°C

Max. Short Circuit Temperature: 250°C

## CONSTRUCTION

- Conductor: Class B Compact Stranded 8000 series Aluminium Alloy Conductor as per ASTM B800 and ASTM B836
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Extruded TRXLPE Compound, 100% insulation level
- Insulation Screen: Extruded Semi-conductive compound
- Metallic Insulation Screen: Helically applied copper tape with 25% overlap
- Outer Sheath: Extruded Polyvinyl Chloride, Colour: Black

### Bending Radius:

16 x overall diameter of cable

Voltage Rating (kV AC)	High Voltage Test (kV AC)
35	2-2000 (AWG or kcmil) 69

## OUTSTANDING FEATURES

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

## STANDARD FOLLOWS

- ASTM B800 8000 series Aluminium alloy wire
- ASTM B836 Compact Round Stranded Aluminium Conductor
- ICEA S-97-682 Utility and 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)
- CSA C68.10 Shielded power cable for commercial and industrial application, 5-46 KV
- UL 2556 Wire and Cable test method

## COMPLIANCE

- |                         |           |
|-------------------------|-----------|
| Conductor resistance    | UL 1581   |
| Insulation resistance   | UL 1072   |
| Vertical Tray Flame/FT4 | UL 1685   |
| Smoke Release           | UL 1685   |
| Flame Test              | IEEE 1202 |

## OUR ACCREDITATIONS



## APPROVAL



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 20°C	
AWG/kcmil	Nos.	mil	mm	mil	kg/km	ohm/1000ft	Amps	Amps
1/0	19	345	32.86	1294	1204	0.168	225	165
2/0	19	345	33.99	1338	1299	0.133	260	190
3/0	19	345	35.07	1381	1395	0.106	300	215
4/0	19	345	36.37	1432	1517	0.084	345	245
250	37	345	37.68	1483	1638	0.071	380	270
350	37	345	40.07	1578	1890	0.051	475	330
500	37	345	44.50	1752	2405	0.035	590	400
750	61	345	48.95	1927	2993	0.024	765	490
1000	61	345	52.44	2065	3519	0.018	920	565
1250	91	345	55.81	2197	4056	0.014	1055	-
1500	91	345	58.70	2311	4556	0.012	1180	-

#Above values are approximate and subject to standard manufacturing tolerance

\* Ampacities are based on Table 310.60(C)(70) of 2014 National Electrical Code (where ambient air temperature is 40°C).

\*\* Ampacities are based on Table 310.60(C)(78) detail 1. Of 2014 National Electrical Code (where Ambient earth temperature is 20°C and earth thermal resistivity (RHO) is 90).