



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB 35KV Class B Compact Stranded 8000 series Aluminium Alloy Conductor EPR 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 EPR Compound, 133% 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	84	2-2000 (AWG or kcmil)

## OUTSTANDING FEATURES

- Flame retardant
- High life
- Sunlight resistant
- Corona 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



**POLY CAB 35KV ALUMINIUM UL 1072 EPR 133%  
MV Cable, EPR 133% LEVEL**

**POLY CAB**  
IDEAS. CONNECTED.

Dimensional and Electrical Characteristics:

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
1/0	19	420	37.48	1475	1669	0.168	225
2/0	19	420	38.60	1520	1782	0.133	260
3/0	19	420	39.68	1562	1894	0.106	300
4/0	19	420	40.99	1614	2037	0.084	345
250	37	420	43.49	1712	2318	0.071	380
350	37	420	45.89	1807	2616	0.051	475
500	37	420	48.91	1926	3025	0.035	590
750	61	420	53.17	2093	3662	0.024	765
1000	61	420	56.65	2230	4238	0.018	920
1250	91	420	59.83	2355	4804	0.014	1055
1500	91	420	62.60	2465	5332	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).