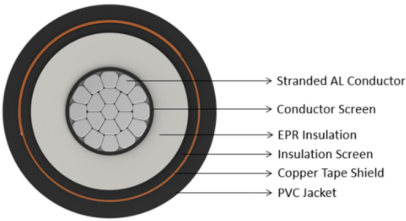
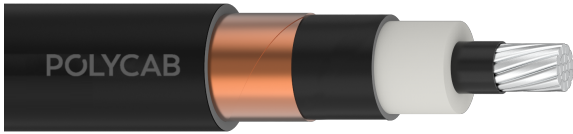


# POLYCAB 15KV ALUMINIUM UL 1072 EPR 100% MV Cable, EPR 100% LEVEL



Images not to scale. Follow table for dimensions

## APPLICATION

POLYCAB 15KV 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: 15kV 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, 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<br>(kV AC) | High Voltage             |                                | Partial Discharge<br>Extinction level<br>(kV AC) |
|---------------------------|--------------------------|--------------------------------|--|
|                           | Test                     |                                |  |
|                           | (kV AC)                  |                                |  |
|                           | 2-1000<br>(AWG or kcmil) | 1001-2000<br>(AWG or<br>kcmil) |  |
| 15                        | 35                       | 44                             | 100% Insulation<br>Level                         |
|                           |                          |                                | 11   |

## 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



# POLYCAB 15KV ALUMINIUM UL 1072 EPR 100% MV Cable, EPR 100% LEVEL

## 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                     | Amps                       |
| 1/0            | 19            | 175                          | 24.96                             | 983  | 824           | 0.168                               | 225                      | 165                        |
| 2/0            | 19            | 175                          | 26.09                             | 1027 | 909           | 0.133                               | 260                      | 190                        |
| 3/0            | 19            | 175                          | 27.17                             | 1070 | 995           | 0.106                               | 300                      | 215                        |
| 4/0            | 19            | 175                          | 28.47                             | 1121 | 1105          | 0.084                               | 350                      | 245                        |
| 250            | 37            | 175                          | 29.58                             | 1165 | 1202          | 0.071                               | 385                      | 270                        |
| 350            | 37            | 175                          | 31.98                             | 1259 | 1432          | 0.051                               | 480                      | 330                        |
| 500            | 37            | 175                          | 35                                | 1378 | 1756          | 0.035                               | 600                      | 400                        |
| 750            | 61            | 175                          | 39.26                             | 1546 | 2271          | 0.024                               | 780                      | 490                        |
| 1000           | 61            | 175                          | 44.14                             | 1738 | 2909          | 0.018                               | 940                      | 565                        |
| 1250           | 91            | 220                          | 49.58                             | 1952 | 3630          | 0.014                               | 1080                     | -                          |
| 1500           | 91            | 220                          | 52.35                             | 2061 | 4102          | 0.012                               | 1215                     | -                          |

#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).