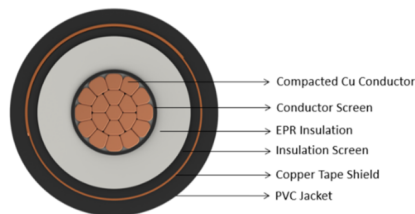
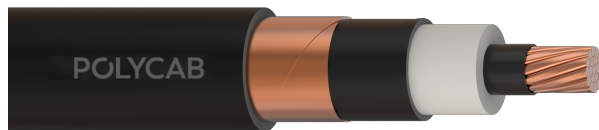


# POLYCAB 35KV COPPER UL 1072 EPR 133% MV - 105, EPR 133% LEVEL



Images not to scale. Follow table for dimensions

## APPLICATION

POLYCAB 35KV Annealed Bare Copper 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: Circular Class B Compressed Copper conductor as per ASTM B3 and B8
- 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)
	2-2000 (AWG or kcmil)
35	84

## OUTSTANDING FEATURES

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

## STANDARD FOLLOWS

- ASTM B3 Soft or Annealed Copper Conductor
- ASTM B8 Concentric-Lay-Stranded Copper 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 (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   |
| • Flame Test              | IEEE 1202 |

## OUR ACCREDITATIONS



## APPROVAL



# POLYCAB 35KV COPPER UL 1072 EPR 133% MV - 105, EPR 133% LEVEL

## 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	420	38.14	1502	2051	0.1022	290	215
2/0	19	420	39.35	1549	2264	0.0811	330	245
3/0	19	420	40.52	1595	2485	0.0643	380	275
4/0	19	420	41.92	1651	2772	0.0510	445	315
250	37	420	44.52	1753	3187	0.0432	490	345
350	37	420	47.10	1854	3815	0.0308	605	415
500	37	420	50.36	1983	4717	0.0216	755	500
750	61	420	54.94	2163	6184	0.0144	970	610
1000	61	420	58.70	2311	7567	0.0108	1160	690
1250	91	420	62.12	2446	8962	0.0086	1320	-
1500	91	420	65.11	2563	10292	0.0072	1465	-

#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).