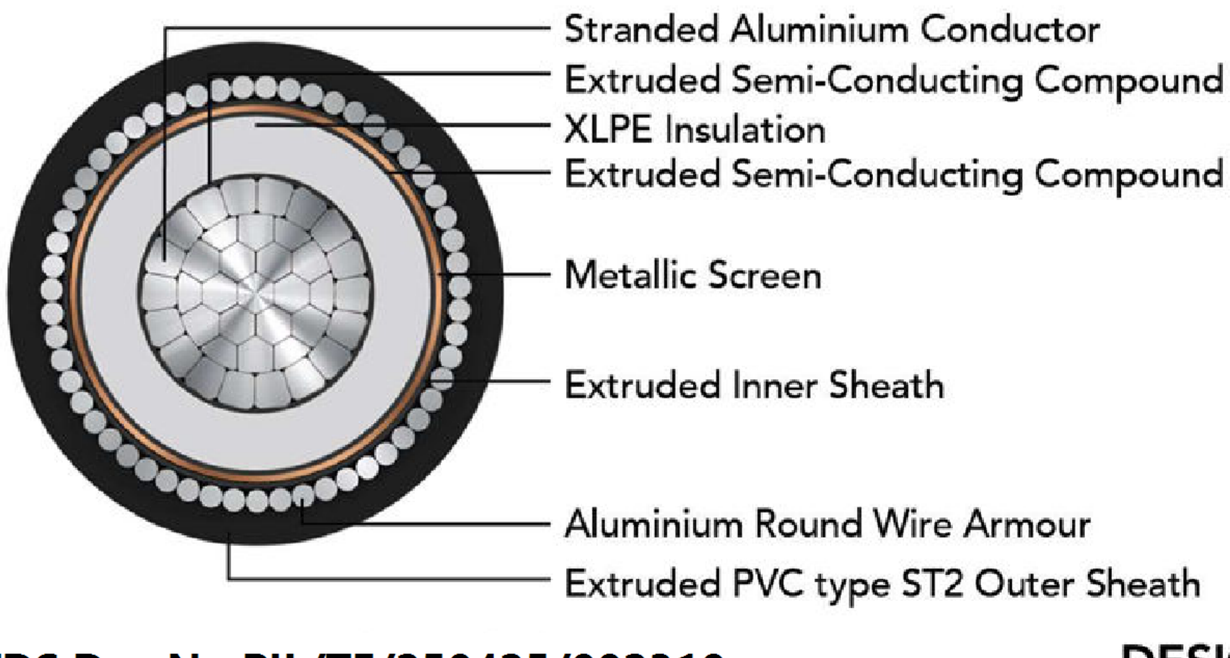
POLYCAB

# CABLES







# HT XLPE CABLE

**TDS Doc.No:PIL/TE/250425/002310**

**DESIGN CODE :MVIS12AXAWY2001C300SA001S**

| Particulars | | 1 Core X 300 Sqmm |
|---|---|---|
| Name of Manufacturer | | Polycab India Ltd |
| Type of Cable | | A2XWaY |
| Voltage Grade kV | | 12.7/22 |
| No of cores X size in sqmm | | 1 X 300 |
| a) | Maximum conductor temperature under normal operating conditions | 90°C |
| b) | Maximum conductor temperature at the termination of short circuit | 250°C |
| a) | Permissible Voltage Variation | ± 10% |
| b) | Permissible Frequency Variation | ± 5% |
| c) | Combined Voltage & Frequency variation | ± 10% |
| **Conductor** | | |
| a) | Material | H4 Grade Aluminium as per Class 2 of IS: 8130/2013, latest |
| b) | Maximum d.c. resistance of conductor at 20° C (ohm/km) | 0.1 |
| c) | Shape | Stranded Compacted Circular |
| **Conductor Screening** | | |
| a) | Material | Extruded Semi-conducting Compound |
| b) | Nominal thickness (mm) | 0.3 |
| **Insulation** | | |
| a) | Material | XLPE as per IS 7098(Pt-2)/2011 |
| b) | Nominal thickness (mm) | 6.0 |
| c) | Core identification | Natural |
| **Insulation Screening** | | |
| (i) | Non - Metallic | |
| a) | Material | Extruded Semi-conducting Compound |
| b) | Nominal thickness (mm) | 0.3 |
| (ii) | Metallic | |
| a) | Material | Single Layer of Copper Tape |
| b) | Approximate thickness (mm) | 0.03 |

Format ID: TE/QMS/F/07, R-00, Date: 16/03/2025

# CABLES

POLYCAB

| | | |
|---|---|---|
| c) | Earth fault Current withstand capacity of Cu Tape kA for 1 sec | 0.15 kA for 1 Sec |
| **Inner Sheath** | | |
| a) | Material | Extruded PVC Type ST2 to IS:5831, latest |
| b) | Minimum thickness (mm) | 0.4 |
| c) | Colour of sheath | Black |
| **Armouring** | | |
| a) | Material | Aluminium |
| b) | Type of armouring | Round Wire |
| c) | Nominal size of armour (mm) | 2.0 |
| d) | Tolerance on armour dimensions | ± 0.050 mm |
| **Outer Sheath** | | |
| (i) | Material | Extruded PVC Type 'ST2' as per IS:5831, latest |
| (ii) | Thickness (mm) | 1.72 (Min.) |
| (iii) | Colour of sheath | Black |
| **Electrical Parameters** | | |
| a) | Max. a.c. resistance of conductor at 90° C (ohm/km) | 0.129 |
| b) | Approx. Cable Capacitance (mfd/km) | 0.3 |
| c) | Approx. Cable reactance (ohm/km) | 0.108 |
| d) | Impedance of cable (ohm/km) | 0.168 |
| **Continuous Current carrying capacities :-** | | |
| (a) | In Ground at 30°C (A) | 355 |
| (b) | In Air at 40°C (A) | 515 |
| Short Circuit rating of conductor for the duration of 1 sec (kA) | | 28.350 |
| Standard to which the cables confirm | | IS 7098 Part 2/2011, IS 8130, IS 5831, IS 3975 etc. with latest up to date amendments |
| Approx. Overall diameter (mm) | | 44.0 ± 3.0 |
| Embossing | | YEAR POLYCAB ELECTRIC 12.7 /22 KV (E) GRADE XLPE |
| Printing | | YEAR POLYCAB ELECTRIC 12.7/22 KV (E) GRADE XLPE , CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval. |



Note:-The values given above are subject to tolerances as per the relevant standards