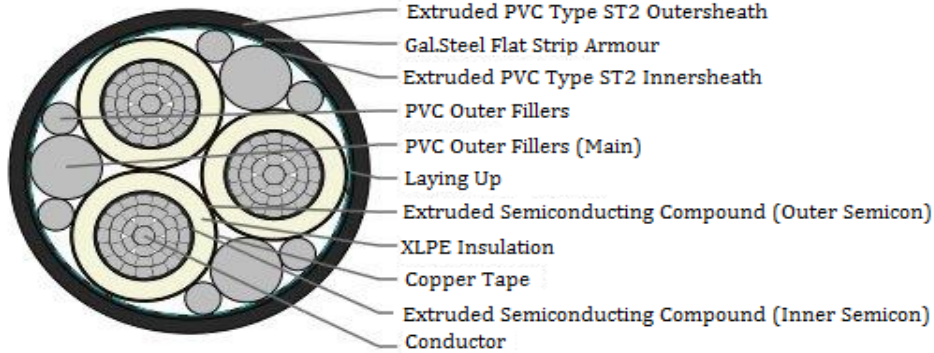


**Manufacturing Data Sheet:**
**High Voltage XLPE Cable**
**Design Code : MVIS12AXSFY2003C150SA001S**
**Date :**
**Rev No. :**


S.No	Particulars	3 X 150 MM <sup>2</sup>
1	Name of Manufacturer	Polycab Wires Pvt. Ltd
2	Type of Cable	A2XFY
3	Voltage Grade kV	12.7/22
4	No of cores X size in sqmm	3 X 150
5 a)	Maximum conductor temperature under normal operating conditions	90°C
b)	Maximum conductor temperature at the termination of short circuit	250°C
6 a)	Permissible Voltage Variation	± 10%
b)	Permissible Frequency Variation	± 5%
c)	Combined Voltage & Frequency variation	± 10%
7	<b>Conductor</b>	
a)	Material	H4 Grade Aluminium as per Class 2 of IS: 8130/84, latest
b)	Maximum d.c. resistance of conductor at 20° C (ohm/km)	0.206
c)	Shape	Stranded Compact Circular
8	<b>Conductor Screening</b>	
a)	Material	Extruded Semi-conducting Compound
b)	Nominal thickness (mm)	0.3
9	<b>Insulation</b>	
a)	Material	XLPE as per IS 7098(Pt-2)/2011, latest
b)	Nominal thickness (mm)	6.0
c)	<b>Core Identification</b>	By coloured strips (Red, Yellow & Blue)
10	<b>Insulation Screening</b>	
(i)	<b>Non - Metallic</b>	
a)	Material	Extruded Semi-conducting Compound
b)	Nominal thickness (mm)	0.3
(ii)	<b>Metallic</b>	
a)	Material	Single layer of copper tape
11	<b>Inner Sheath</b>	

S.No	Particulars	3 X 150 MM <sup>2</sup>
a)	Material	Extruded PVC Type ST2 to IS:5831/84
b)	Minimum thickness (mm)	0.7
12	<b>Armouring</b>	
a)	Material	Gal.Steel
b)	Type of armouring	Flat Strip
c)	Nominal size of armour (mm) $\pm$ 10%	4.0 x 0.8
13	<b>Outer Sheath</b>	
a)	Material	Extruded PVC Type ST2 to IS:5831/84
b)	Thickness (mm)	2.68 (Min.)
c)	Outer Sheath Colour	Black
14	<b>Electrical Parameters</b>	
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.265
b)	Approx. Cable Capacitance (mfd/km)	0.22
c)	Approx. Cable reactance (ohm/km)	0.106
d)	Impedance of cable (ohm/km)	0.285
15	<b>Continuous Current carrying capacities :-</b>	
(a)	In Ground at 30°C (A)	239
(b)	In Air at 40°C (A)	294
16	Short Circuit rating of conductor for the duration of 1 sec (kA)	14.17
17	Standard to which the cables confirm	IS 8130/84, IS 7098 Part 2/2011, IS 5831/84, IS 3975/88 etc. with latest up to date amendments
18	Nominal Overall diameter (mm)	<b>69.0 <math>\pm</math> 3.0</b>
19	Standard Drum Length with $\pm$ 5% tolerance (m)	500 $\pm$ 5%
20	Non-Standard Drum Length mtrs	Max. 5% Order Quantity
22	<b>Printing</b>	<b>YEAR POLYCAB ELECTRIC 12.7/22 KV (E) GRADE XLPE, CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.</b>

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