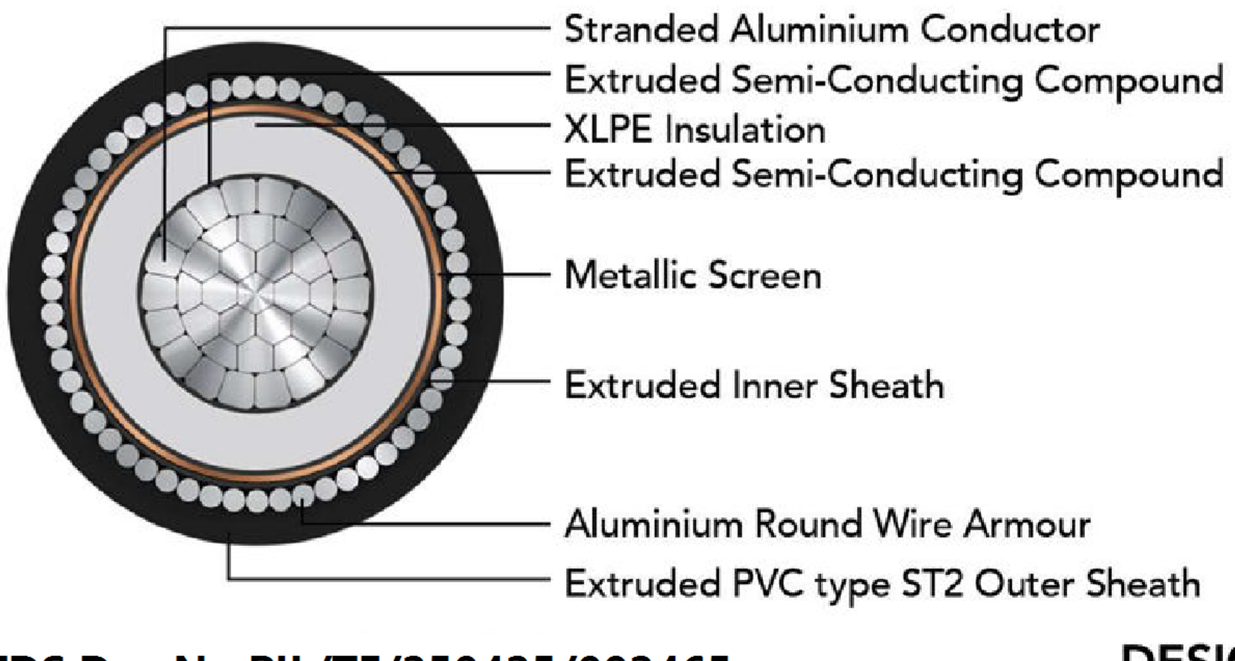
CABLES

POLYCAB





HT XLPE CABLE

TDS Doc.No:PIL/TE/250425/002465

DESIGN CODE : MVIS12AXAWY2001C500SA001S

Particulars		1 Core X 500 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 500
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)	0.0605
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

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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)	0.5
c)	Colour of sheath	Black
Armouring		
a)	Material	Aluminium
b)	Type of armouring	Round Wire
c)	Nominal size of armour (mm)	3
d)	Tolerance on armour dimensions	± 0.065 mm
Outer Sheath		
(i)	Material	Extruded PVC Type 'ST2' as per IS:5831, latest
(ii)	Thickness (mm)	2.04 (Min.)
(iii)	Colour of sheath	Black
Electrical Parameters		
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.080
b)	Approx. Cable Capacitance (mfd/km)	0.35
c)	Approx. Cable reactance (ohm/km)	0.1020
d)	Impedance of cable (ohm/km)	0.130
Continuous Current carrying capacities :-		
(a)	In Ground at 30°C (A)	447
(b)	In Air at 40°C (A)	678
Short Circuit rating of conductor for the duration of 1 sec (kA)		47.24
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)		52.0 ± 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