





Stranded Aluminium Conductor

XLPE Insulation

Inner Sheath

Gal. Steel Flat Strip Armour



Extruded FR-LSH PVC type ST2 Outer Sheath

LT XLPE CABLE

Document ID: TE/QMS/F/02 DESIGN CODE: LVIS09AXSFYL004C016SA001S

Name of Manufacturer				
Type of cable Voltage Grade V No of cores X size in sqmm Conductor a) Material b) Max. d.c. resistance of conductor at 20° C (ohm/km) c) Shape of the conductor a) Material b) Nominal thickness (mm) c) Core identification Auterial a) Material b) Nominal thickness (mm) c) Core identification Armouring a) Material b) Minimum thickness (mm) c) Core armouring a) Material b) Type of armouring a) Material b) Type of armouring Calvanised Steel B) Type of armouring Auterial Calvanised Steel Calvanised Steel Core the first	Partio	culars	4 Core X 16 Sq.mm	
Voltage Grade V No of cores X size in sqmm 4 Core X 16 Sq.mm Conductor a) Material H2/H4 Grade Aluminium as per Class 2 of IS: 8130/2013, latest b) Max. d.c. resistance of conductor at 20° C (ohm/km) c) Shape of the conductor Stranded Compacted Sector Insulation a) Material XLPE as per IS 7098(Pt-1)/88, Latest b) Nominal thickness (mm) 0.7 c) Core identification Red, Yellow, Blue, Black Inner Sheath a) Material Wrapping of Tapes b) Minimum thickness (mm) 0.3 Armouring a) Material Galvanised Steel b) Type of armouring Flat Strip c) Nominal size of armour (mm) 4.0 x 0.8 d) Tolerance on armour dimensions ± 10% Outer Sheath a) Material Extruded FR-LSH PVC Type 'ST2' as per IS:5831 b) Thickness (mm) 1.40 (Min.) c) Colour of outer sheath. Black Electrical Parameters	Name of Manufacturer		Polycab India Ltd	
No of cores X size in sqmm	Type of cable		A2XFY	
Conductor a) Material	Voltage Grade V		1100	
a) Material H2/H4 Grade Aluminium as per Class 2 of IS: 8130/2013, latest b) Max. d.c. resistance of conductor at 20° C (ohm/km) c) Shape of the conductor Stranded Compacted Sector Insulation a) Material XLPE as per IS 7098(Pt-1)/88, Latest b) Nominal thickness (mm) 0.7 c) Core identification Red, Yellow, Blue, Black Inner Sheath a) Material Wrapping of Tapes b) Minimum thickness (mm) 0.3 Armouring a) Material Galvanised Steel b) Type of armouring Flat Strip c) Nominal size of armour (mm) 4.0 x 0.8 d) Tolerance on armour dimensions ± 10% Outer Sheath a) Material Extruded FR-LSH PVC Type 'ST2' as per IS:5831 b) Thickness (mm) 1.40 (Min.) c) Colour of outer sheath. Black Electrical Parameters Max. a.c. resistance of conductor at 90° C 2.45	No of cores X size in sqmm		4 Core X 16 Sq.mm	
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Insulation a) Material	b)		1.91	
a) Material XLPE as per IS 7098(Pt-1)/88, Latest b) Nominal thickness (mm) 0.7 c) Core identification Red,Yellow,Blue,Black Inner Sheath a) Material Wrapping of Tapes b) Minimum thickness (mm) 0.3 Armouring a) Material Galvanised Steel b) Type of armouring Flat Strip c) Nominal size of armour (mm) 4.0 x 0.8 d) Tolerance on armour dimensions ± 10% Outer Sheath a) Material Extruded FR-LSH PVC Type 'ST2' as per IS:5831 b) Thickness (mm) 1.40 (Min.) c) Colour of outer sheath. Black Electrical Parameters	c)	Shape of the conductor	Stranded Compacted Sector	
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c) Nominal size of armour (mm) d) Tolerance on armour dimensions ± 10% Outer Sheath a) Material b) Thickness (mm) c) Colour of outer sheath. Extruded FR-LSH PVC Type 'ST2' as per IS:5831 1.40 (Min.) Black Electrical Parameters	a)	Material	Galvanised Steel	
d) Tolerance on armour dimensions ± 10% Outer Sheath a) Material Extruded FR-LSH PVC Type 'ST2' as per IS:5831 b) Thickness (mm) 1.40 (Min.) c) Colour of outer sheath. Black Electrical Parameters Max. a.c. resistance of conductor at 90° C 2.45	b)	Type of armouring	Flat Strip	
Outer Sheath a) Material Extruded FR-LSH PVC Type 'ST2' as per IS:5831 b) Thickness (mm) 1.40 (Min.) c) Colour of outer sheath. Black Electrical Parameters Max. a.c. resistance of conductor at 90° C 2.45	c)	Nominal size of armour (mm)	4.0×0.8	
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b) Thickness (mm) c) Colour of outer sheath. Electrical Parameters Max. a.c. resistance of conductor at 90° C 2.45	Outer Sheath			
c) Colour of outer sheath. Black Electrical Parameters Max. a.c. resistance of conductor at 90° C 2.45	a)	Material	Extruded FR-LSH PVC Type 'ST2' as per IS:5831	
Electrical Parameters Max. a.c. resistance of conductor at 90° C 245	b)	Thickness (mm)	1.40 (Min.)	
Max. a.c. resistance of conductor at 90° C	c)	Colour of outer sheath.	Black	
a) / 45	Electrical Parameters			
	a)		2.45	
b) Calculated Cable reactance (ohm/km) 0.0805	b)	Calculated Cable reactance (ohm/km)	0.0805	
c) Impedance of cable (ohm/km) 2.45	c)	Impedance of cable (ohm/km)	2.45	
d Approx. Cable Capacitance (mfd/km) 0.43	d	Approx. Cable Capacitance (mfd/km)	0.43	





Maximum conductor temperature under normal 90°C operating conditions Maximum conductor temperature at the termination of 250°C short circuit Short Circuit rating of conductor for the duration of 1 sec 1.51 (kA) **Continuous Current carrying capacities:** (a) In Ground at 30°C (A) 74 In Air at 40°C 69 (b) (A) IS 7098 Part I/88, IS 8130/2013, IS 5831/84, IS Applicable Standard 3975/1999 etc. with latest up to date amendments Approx. overall diameter of the cable in mm 20.0 +/- 2.0 12 times Overall diameter Minimum bending radius Max. Tensile strength for Cables pulled with stocking (Newtons) $9 \times D^2$, D is the cable OD in mm for Cables pulled with pulling eyes (N) 1,920 POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR-LSH **Embossing** YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR-Printing LSH CABLE SIZE CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval. Standard Drum Length (Mtr.) 1000 ± 5% Non-Standard Drum Length (Mtr.) Maximum 5% of order quantity **FR-LSH PROPERTIES** Min. 29% as per ASTM D- 2863 Oxygen Index Min. 250 Deg.C as per ASTM D-2863 Temperature Index b) c) **Smoke Density Rating** Max. 60% as per ASTM D- 2843 Max. 20% as per IEC- 754-1 d) Acid Gas Generation Flammability Test As per IEC:332-I

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