POLYCAB
Connection Zindagi Ka

Technical Particulars of LT Cables

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S.No	Particulars	3C X 1.5 mm2	3C X 2.5 mm2	3C X 4 mm2	3C X 6 mm2	3C X 10 mm2	3C X 16 mm2	3C X 25 mm2	3C X 35 mm2	3C X 50 mm2	3C X 70 mm2	3C X 95 mm2	3C X 120 mm2	3C X 150 mm2	3C X 185 mm2	3C X 240 mm2	3C X 300 mm2	3C X 400 mm2
1	Name of Manufacturer	Polycab India Ltd																
2	Type of cable	Armoured XLPE insulated cable																
3	Voltage Grade V	600/1000																
4	No of cores X size in sqmm	3 X 1.5	3 X 2.5	3 X 4	3 X 6	3 X 10	3 X 16	3 X 25	3 X 35	3 X 50	3 X 70	3 X 95	3 X 120	3 X 150	3 X 185	3 X 240	3 X 300	3 X 400
5	**Conductor**																	
a)	Material	Plain annealed Stranded Copper Class 2 to BS EN 60228																
b)	Max. d.c. resistance of conductor at 20° C (ohm/km)	12.1	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047
c)	Shape of the main conductor	Circular Stranded	Circular Stranded	Circular Stranded	Circular Stranded	Circular Stranded	Compact circular Stranded	Sector shaped stranded	Sector shaped stranded	Sector shaped stranded	Sector shaped stranded	Sector shaped stranded	Sector shaped stranded	Sector shaped stranded	Sector shaped stranded	Sector shaped stranded	Sector shaped stranded	Sector shaped stranded
6	**Insulation**																	
a)	Material	XLPE (GP 8) as per BS 7655: Section 1.3																
b)	Nominal Thickness of insulation (mm)	0.6	0.7	0.7	0.7	0.7	0.7	0.9	0.9	1.0	1.1	1.1	1.2	1.4	1.6	1.7	1.8	2.0
c)	Core Identification Color	Brown, Black, Grey																
7	**Bedding**																	
a)	Material	Extruded polymeric material as per clause 9 of BS 6724:2016																
b)	Minimum thickness of extruded bedding (mm)	0.44	0.44	0.44	0.44	0.44	0.44	0.60	0.60	0.60	0.60	0.76	0.76	0.92	0.92	0.92	1.08	1.08
8	**Armouring**																	
a)	Material	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel
b)	Type of armouring	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire	Round Wire
c)	Nominal diameter of armour (mm)	0.90	0.90	0.90	0.90	1.25	1.25	1.60	1.60	1.60	1.60	2.00	2.00	2.50	2.50	2.50	2.50	2.50
9	**Oversheath**																	
a)	Material	Extruded polymeric material Type LTS 1 as per BS 7655: Section 6.1																
b)	Minimum Thickness of oversheath (mm)	0.84	0.92	0.92	0.92	1.00	1.08	1.16	1.24	1.24	1.32	1.48	1.56	1.64	1.72	1.88	1.96	2.12
c)	Colour of outer sheath.	Black																
10	**Electrical Parameters**																	
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	15.4	9.45	5.88	3.93	2.33	1.47	0.927	0.669	0.494	0.342	0.247	0.196	0.16	0.128	0.0988	0.08	0.0641
b)	Calculated Cable reactance (ohm/km)	0.101	0.0989	0.093	0.0888	0.084	0.0817	0.0808	0.0787	0.078	0.0742	0.0725	0.0713	0.0718	0.072	0.0713	0.0703	0.0702
c)	Impedance of cable (ohm/km)	15.4	9.45	5.88	3.93	2.34	1.47	0.931	0.673	0.5	0.35	0.258	0.209	0.175	0.147	0.122	0.107	0.0951
d)	Approx. Cable Capacitance (mfd/km)	0.17	0.19	0.22	0.25	0.31	0.35	0.37	0.42	0.45	0.49	0.55	0.57	0.55	0.55	0.6	0.62	0.64
11	Maximum conductor temperature under normal operating conditions	90°C																
12	Maximum conductor temperature at the termination of short circuit	250°C																
13	Short Circuit rating of conductor for the duration of 1 sec (kA)	0.21	0.36	0.57	0.86	1.43	2.29	3.58	5.01	7.15	10.02	13.59	17.17	21.46	26.47	34.34	42.93	57.23
14	Applicable Standard	BS 6724 : 2016																
15	Approx. overall diameter of the cable (mm)	13.0	14.5	16.0	17.0	20.0	22.0	24.5	26.5	29.0	32.5	37.5	40.5	45.5	49.5	54.5	59.5	66.0
16	Minimum bending radius	12 times Overall diameter																
17	Max. Tensile strength																	
(i)	for Cables pulled with stocking (kg.)	7x D^2 where D is the overall diameter of the cable																
ii)	for Cables pulled with pulling eyes (kg)	23	38	61	92	153	245	382	535	765	1071	1453	1835	2294	2830	3671	4589	6118
18	Embossing	POLYCAB BASEC ELECTRIC CABLE 600/1000 V BS 6724 CABLE SIZE YEAR H																
19	Printing	POLYCAB BASEC ELECTRIC CABLE 600/1000 V BS 6724 CABLE SIZE YEAR H CE marking with sequential meter marking																

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

Note for embossing : 2) The Distance between the end of one elements of marking & the beginning of the next identical elements of marking shall be not greater than 550 mm (the letter and figures shall consist of upright block characters with a minimum height of 3 mm)

3) Two lines of embossing shall be provided over the outer sheath along the axis of the cable approximately equally space around the circumference of the cable