TITLE : **GENERAL TECHNICAL PARTICULARS FOR SOLID ANNEALED COPPER CONDUCTOR, PE INSULATED, FR PVC INNER SHEATH, SINGLE LAYER G.I. ROUND WIRE, FR PVC SHEATHED ARMOURED COMMUNICATION UNSCREENED CABLE**

Sl.No.	TECHNICAL DESCRIPTION	DETAILS
1.	Make	Polycab India Ltd.
2.	Place of Manufacture	Daman (UT)
3.	Cable Type	Switch Board Unscreened Cable
4.	Applicable Standards	Generally Spec. No. GR/WIR-06/03 MAR 2002
5.	Number of Pairs	10, 20 & 50 Pairs
6.	Conductor a) Material b) Size	 Solid Annealed Copper 0.50mm
7.	Insulation a) Material b) Min. Thickness of insulation (mm) c) Method of Application d) Colour scheme for identification of cores	Solid Polythene HDPE (Type III, Conforming to ASTM D 1248) The thickness of insulation shall be adequate to meet the electrical requirement Extrusion As per IS – 9938
8.	Colours Combination	Table – 2 of GR/WIR-06/03 & Table – 2 of GR/CUG-01/03AUG.2003 for 50Pr
9.	Twining	Two insulated conductors uniformly twisted together to form a pair. With suitable right hand lay
10.	Group Twining	10 Pr Twisted together to for Laid-up of 10 Pr,, 20 Pr Twisted together to for Laid-up of 20 Pr,, In sub-units of 10 pairs for Laid-up of 50 pairs. (5 x 10Pair)
11.	Unit Identification	Unit is identified by wrapping coloured polypropylene binder. (except 2Pr)
12	Laid up	The units shall be laid up as per cable size and construction. Cable core is wrapped by longitudinally application of non hygroscopic Polyester tape with suitable overlap (applicable for 50 Pr)
13.	Rip Cord	A non metallic suitable Rip cord shall be laid-up longitudinally under the sheath. It shall provide an effective means of slitting the sheath longitudinally to facilitate removal.
14.	Inner Sheath a) Material b) Colour c) Type d) Thickness (Minimum)	 FR PVC Grey ST 1 conforming to (As per IS – 5831) For 10 & 20 Pr → 0.75mm, For 50 Pr → 1.10mm,
15.	Armouring a) Material **b)** Wire Dia (mm)	 G.I.WIRE (As per IS 3975) For 10 & 20 Pr → 0.90mm, For 50 Pr → 1.40mm
16.	Outer Sheath a) Material b) Type c) Colour d) Thickness (Minimum)	 FR PVC (As per IS – 5831) ST1 Grey For 10 & 20 Pr → 1.24mm, For 50 Pr → 1.40mm,
17.	Electrical Test a) Conductor Resistance (Max) b) Capacitance Unbalance (Pr to Pr) (Max) c) Insulation Resistance (Min.) d) Dielectric Strength (DC Voltage) 3 kV DC or 2 kV RMS Applied between each conductor and the remaining conductor bunch and earth	0.50 mm Conductor 92.2 Ω/Km 230 pF/km 50 MΩ/Km Withstand for 1 Minutes. There should not any breakdown of the insulation.
18.	Standard Length in Coil/drum	1000mtr ± 10%
19.	Length Marking	Every one meter marking
20.	Prominently Printing Marking on the Cable	<YEAR> <CABLE SIZE> <POLYCAB DAMAN> <FR> +Seq.mtr marking

SANDEEP DABHELKAR