XTND 0.5mm CS1 cable

Jelly filled/ Screened/ Unarmoured Telephone Cable

General Description

- Telephone Cable with cellular polyethylene insulation, jelly filled with petroleum jelly and a polyethylene coating.
- For use in the Local Distribution network.
- Insulated conductors uniformly twisted together to form a pair.
- The water resistant filling compound is applied to the air spaces within the cable core to provide the water-proofness
- Wrapping is applied over the cable core.
- A flat aluminium foil coated with copolymer on both sides is applied longitudinally over the core covering as screen.
- Black linear-low density polyethylene compound is extruded over the screen.

Physical Description

Conductors	Solid annealed bare copper conductors conforming to CCITT Yellow Book Vol. III – 2-G.541 b article, IEC 28 and ASTM B3
Insulation	Foam-skin polyolefin conforming to ASDM D1248 to BS 6234 Type 03
Cable Assembly	Twisted pairs, cabled into sub-units, cabled in a circular form
Color Code	As indicated below
Filling Compound	Water resistant filling compound, applied to the gaps between the pairs
Tape wrap	Non hygroscopic polyester tape, wrapped with 30% overlap
Identification tape	A suitable tape, durably marked with the manufacturer's name, year of manufacture and type of cable is placed under the core covering
Flooding compound	Water resistant flooding compound, applied between the core wrap and the aluminum foil
Screen (Shield)	Copolymer coated aluminum foil having thickness of 0.3mm, bonded to the outer jacket, conforming to ASTM B736
Outer Jacket	Black PE compound
Surface Marking	As per request

Mechanical Parameters of basic conductors

Nominal Conductor Diameter (mm)	0.5
Maximum Conductor Diameter (mm)	0.51
Minimum Conductor Elongation, %	15
Insulated Conductor Diameter (mm)	0.9
Insulation ultimate tensile force minimum (N)	2

Electrical Properties

DC resistance @20˚C Ohm/km Maximum Average	91
DC resistance @20˚C Ohm/km Maximum for 1% of cases	96
Mutual Capacitance nF/km, max Average	53
Mutual Capacitance nF/km, max for 1% of cases	60
Pair to pair capacitance unbalance, pF max	275
Insulation Resistance, 500V DC Minimum Mohm.km	1500

Colour codes of units

Pair No	**Colour of conductor insulation**	
	A – wire	**B – wire**
1	White	Blue
2	White	Orange
3	White	Green
4	White	Brown
5	White	Grey
6	Red	Blue
7	Red	Orange
8	Red	Green
9	Red	Brown
10	Red	Grey

Colur codes of tape lappings, Unit

Unit Number	Colour
1	Blue
2	Orange
3	Green
4	Brown
5	Grey
6	White
7	Red
8	Black
9	Yellow
10	Violet

Colur scheme, Concentric

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
Pair Number	**1**		**2**		**3**		**4**		**5**		**Last**	
Wire	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**
Cable												
5 pairs	Orange	White	Red	Grey	Blue	Brown	Red	Grey	Green	Black		
Centre												
1pr	Orange	White										
2pr	Orange	White	Green	Black								
3pr	Orange	White	Red	Grey	Green	Black						
Layers	Orange	White	Red	Grey	Blue	Brown	Red	Grey	Blue	Brown		
						With even and odd pairs to					Green	Black

Makeup, Concentric

Cable Size	No. of Pair Size of Units in Centre and Layers					
	Centre	1st	2nd	3rd	4th	5th
2prs	2	-	-	-	-	-
5prs	-	5	-	-	-	-
10prs	2	8	-	-	-	-
20prs	1	6	13	-	-	-
50prs	3	9	16	22	-	-
100prs	2	8	14	20	25	31

Thickness, Diameter and Weight

Number of pairs	Minimum sheath thickness (mm)	App. Outer diameter (mm)	App. Weight (kg/km)
5	1.1	8.0	87
10	1.1	9.5	120
20	1.2	12.0	194
30	1.2	14.1	250
50	1.3	16.5	368
100	1.4	22.0	673
200	1.7	28.8	1266