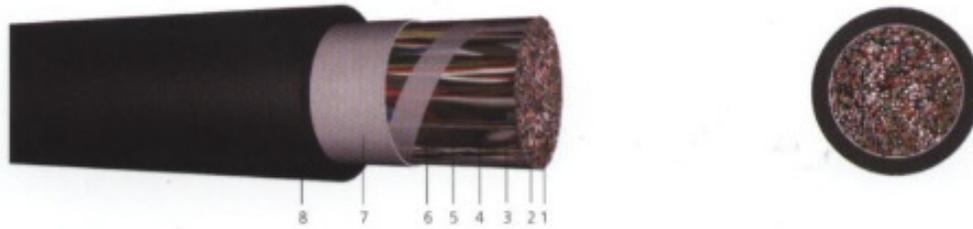




# Filled Underground Cables



## A. APPLICATION

Designed to use in ducts and also directly buried into ground. Cables having 0.4 and 0.5 mm conductor diameter are used for distribution network. Cables having 0.6 and 0.9 mm conductor diameter are used for long distance network.

## B. CONSTRUCTION

### 1. Conductor

Solid annealed copper having the diameter of 0.4, 0.5, 0.6 and 0.9 mm. (CCITT Yellow Book Vol. III-2-G.541 b article, IEC 28 and ASTM B3).

### 2. Insulation

Dual insulation of cellular polyethylene covered with a solid skin layer of medium or high-density polyethylene compound (BS 6234 Type 03 - ASTM D 1248).

### 3. Cable Assembly

Quads, each having special lay length to minimize the crosstalk and capacitance unbalance, are assembled into 10 pairs units. Superunits having 50 pairs or 100 pairs are assembled into cable core.

### 4. Filling Compound

The water resistant filling compound is applied to the air spaces within the cable core to provide the water-proofness.

### 5. Core Covering

A non-hygroscopic dielectric plastic tape having suitable overlap is applied longitudinally or helically over the cable core.

### 6. Flooding Compound

Sufficient flooding compound shall be applied between the core covering material and screen.

### 7. Screen (Shield)

A flat aluminium foil coated with copolymer on both sides is applied longitudinally over the core covering as screen.

### 8. Outer Jacket (Sheath)

Black linear-low density or medium-density polyethylene compound (acc. to ASTM D 1248) is extruded over the screen.

### 9. 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. Alternatively, these details may be printed on the outside of jacket.

### 10. Length Marking

Sequentially numbered length markings are located at alternate 1 meter intervals on the outside of the jacket.

Conductor diameter in mm	Number of pairs	Overall diameter in mm	Approx net weight(Kg/Km)	Drum length(m)
0.5	10	10.3	120	2000
0.5	20	12.8	194	2000
0.5	30	14.1	250	2000
0.5	50	16.4	368	1000

0.5	100	21.4	673	500
0.5	150	26.4	1014	500
0.5	200	28.8	1266	500
0.5	300	35.0	1869	500
0.5	400	39.2	2422	500
0.5	600	47.8	3594	500
0.5	900	56.9	5237	400
0.5	1200	65.2	6925	300
0.6	10	11.2	145	1200
0.6	20	14.6	260	1200
0.6	30	16.2	340	1200
0.6	50	19.0	504	1200
0.6	100	25.3	944	800
0.6	150	31.4	1428	400
0.6	200	34.5	1803	400
0.6	300	42.0	2668	400
0.6	400	47.1	3452	400
0.6	600	57.3	5127	400