# PARAMOUNT WIRES & CABLES



## POLYTHENE INSULATED JELLY FILLED CABLES

PIJF cables are used as feeder and distribution cables for connection between exchanges and subscribers. The range offered is from single pair to 4800 pairs. These cables can be laid in ducts or directly buried. Conforming to standard specifications like DOT spec. no. G/CUG -01/03 AUG 2003, BS 3573, IEC708-1, CW 1128A, IRS-TC/41.Type approved by Dept. of Telecom, Govt of India.

### Configuration

Twisted Pairs/Star quads.

#### **Construction** Conductor

Solid annealed bare copper wire of 0.4, 0.5, 0.63 or 0.9mm. Other sizes can be supplied on request.

#### Insulation

Solid MDPE/HDPE fully color coded. Foam skin insulation provided on request.

#### **Cable Assembly**

In units of 10/20 pairs upto 100 pairs cable. For cables having more than 100 pairs, 5 units of 10 pairs and 20 pairs are laid up to constitute super-units of 50 & 100 pairs respectively.

#### **Filling Compound**

Suitable water resistant compound.

Core Wrap One or more helical/longitudinal paper or plastic tape.

#### **Moisture Barrier & Screen**

Both side plastic coated aluminum tape laid longitudinally, smooth, nominal thickness of aluminum-0.20mm. Minimum overlap 6mm, bonded to the inner surface of the polythene sheath.

#### **Drain Wire**

If required, solid tinned copper 0.5mm.

#### **Mechanical Protection**

If required 2 Steel tapes of 0.5mm or 0.8mm thickness helically laid with maximum gap of 35%.

Sheath & Jacket Black LDPE.



#### **Mutual Capacitance (Average)**

 $52 \pm 3$  nF/Km. when measured at 800 to 1000 Hz.

#### **Conductor Diameter & Resistance Unbalance**

Nominal Dia	Resistance/Km of Cable condr.	Tolerance of Resistance	Maxim Resistance	um % of Unbalance
(mm)	at 20°C (ohm/Km)	(ohm/Km)	Average	Individual
0.4	135	± 8	1.5	3.0
0.5	86	± 6	1.0	2.5
0.63	58	± 4	1.0	2.0
0.9	28	± 2	1.0	2.0

#### Attenuation

Conductor dia	Average attenuation at 20℃ at 150 Khz.
0.40 mm	12.00 dB/Km
0.50 mm	8.25 dB/Km
0.63 mm	6.30 dB/Km
0.90 mm	4.40 dB/Km

Pair No.	1st Wire (Tip)	2nd wire (Ring)
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
11	Black	Blue
12	Black	Orange
13	Black	Green
14	Black	Brown
15	Black	Grey
16	Yellow	Blue
17	Yellow	Orange
18	Yellow	Green
19	Yellow	Brown
20	Yellow	Grey
21	Violet	Blue
22	Violet	Orange
23	Violet	Green
24	Violet	Brown
25	Violet	Grey
Spare Pair	Natural	Blue

# **Capacitance Unbalance**

Between Pair to Ground at 800 to 1000 Hz		
Average	750 pF/Km (max)	
Individual	3000 pF/Km (max)	
Between Pair to Pair		
Average	50 pF/Km (max)	
Ind. Combination	200 pF/Km (max)	

#### Cross-talk at 150 Khz

FE - XT }Ind.	Min. 55 dB/Km
FE - XT }RMS	Min. 67.8 dB/Km.
NE - XT }Ind.	Min. 55 dB/Km.

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#### **Unit Identification**

Unit Number	Color of Binder
1	Blue
2	Orange
3	Green
4	Brown
5	Grey

#### **Super Unit Identification**

Position of Super Unit in the layer	Color of Binder
First (Marker)	Red
Intermediate	White
Last (Reference)	Black

#### **Color Code for conductor insulation**