

PeT Cellular Local Network Cable

Plain Annealed Copper Wire/Cellular PE Insulation/PJ Filled/PE Sheathed External Telephone Cable (Complies with BT Specifications CW1128)

Application

The cable is designed primarily for installing in ducts in the 'D' or Secondary side of local telecommunications networks. Various options are available including cable incorporating an aluminium/co-polymer-coated tape applied longitudinally over the paper core wrap acting as a moisture barrier (Compliant with BT Specification CW1179), aerial self supporting cable incorporating a steel support member for use in overhead applications (Compliant with BT Specification CW1252), and galvanised steel wire armoured version suitable for direct burial (Compliant with BT Specification CW1198). The product is also available with filling compound suitable for tropical climates with a drop point greater than 80°C.

Construction

Twisted pairs in 10 Pair Units. The pair range is 2 - 100.

| No. Prs | Cu Size (mm) | Nom Ins Dia (mm) | Min Sheath Radial | Resistance @ 20°C (ohms/km) | | Mutual Capacitance (nF/km) | | Maximum Overall Diameter (mm) | | | |
|------------|--------------------|------------------------|-------------------------|--------------------------------|-----------|----------------------------------|-------|-------------------------------|--------|----------|--------|
| | | | | | | | | Un-armoured | | Armoured | |
| | | | | Max | Max Max N | | Max | No | With | No | With |
| | | | | Ave (99%) | | Ave | (99%) | Screen | Screen | Screen | Screen |



Product Description

Plain annealed solid copper wire, cellular polyethylene insulation, twisted pairs, petroleum jelly filling, paper core wrap and black low-density polyethylene sheath.

| | | | | | | -, , , , , , , , | , | | | | |
|-----|------|------|-----|-----|-----|------------------|-----|------|------|------|------|
| 5 | 0.40 | 0.75 | 1.1 | 143 | 150 | 56 | 64 | 7.5 | 9.0 | 12.7 | 14.2 |
| 10 | 0.40 | 0.75 | 1.1 | 143 | 150 | 56 | 64 | 8.5 | 10.0 | 13.7 | 15.2 |
| 20 | 0.40 | 0.75 | 1.1 | 143 | 150 | 56 | 64 | 10.0 | 11.5 | 15.2 | 16.7 |
| 30 | 0.40 | 0.75 | 1.1 | 143 | 150 | 56 | 64 | 11.0 | 12.0 | 16.5 | 17.8 |
| 50 | 0.40 | 0.75 | 1.2 | 143 | 150 | 56 | 64 | 14.0 | 15.5 | 19.9 | 22.3 |
| 100 | 0.40 | 0.75 | 1.3 | 143 | 150 | 56 | 64 | 18.5 | 20.0 | 25.3 | 26.8 |
| | 0.50 | 0.00 | 1.1 | 01 | 0.0 | F.C. | C 1 | 7.5 | 0.0 | 12.7 | 14.2 |
| 2 | 0.50 | 0.90 | 1.1 | 91 | 96 | 56 | 64 | 7.5 | 9.0 | 12.7 | 14.2 |
| 5 | 0.50 | 0.90 | 1.1 | 91 | 96 | 56 | 64 | 8.0 | 9.5 | 13.2 | 14.7 |
| 6 | 0.50 | 0.90 | 1.1 | 91 | 96 | 56 | 64 | 9.0 | 10.0 | 13.8 | 15.3 |
| 10 | 0.50 | 0.90 | 1.1 | 91 | 96 | 56 | 64 | 9.5 | 11.0 | 14.7 | 16.9 |
| 20 | 0.50 | 0.90 | 1.2 | 91 | 96 | 56 | 64 | 12.0 | 13.5 | 17.2 | 19.4 |
| 50 | 0.50 | 0.90 | 1.3 | 91 | 96 | 56 | 64 | 16.5 | 18.0 | 23.3 | 24.8 |
| 100 | 0.50 | 0.90 | 1.4 | 91 | 96 | 56 | 64 | 22.0 | 23.5 | 29.0 | 30.5 |
| 2 | 0.60 | 1.35 | 1.1 | 63 | 67 | 42 | 46 | 8.5 | 10.0 | 13.7 | 15.2 |
| 5 | 0.60 | 1.35 | 1.2 | 63 | 67 | 42 | 46 | 11.0 | 12.5 | 16.2 | 18.4 |
| 10 | 0.60 | 1.35 | 1.2 | 63 | 67 | 42 | 46 | 13.0 | 14.5 | 18.9 | 20.4 |
| 20 | 0.60 | 1.35 | 1.3 | 63 | 67 | 42 | 46 | 16.0 | 17.5 | 22.8 | 24.3 |
| 50 | 0.60 | 1.35 | 1.4 | 63 | 67 | 42 | 46 | 24.0 | 25.5 | 31.0 | 33.5 |
| 100 | 0.60 | 1.35 | 1.6 | 63 | 67 | 42 | 46 | 32.0 | 33.5 | 40.2 | 41.7 |
| | 0.63 | 1.15 | 1 1 | F0 | | F.C. | C 4 | 0.0 | 0.5 | 12.2 | 147 |
| 2 | 0.63 | 1.15 | 1.1 | 58 | 60 | 56 | 64 | 8.0 | 9.5 | 13.2 | 14.7 |
| 5 | 0.63 | 1.15 | 1.1 | 58 | 60 | 56 | 64 | 9.5 | 11.0 | 14.7 | 16.2 |
| 10 | 0.63 | 1.15 | 1.2 | 58 | 60 | 56 | 64 | 11.5 | 13.0 | 16.7 | 18.9 |
| 20 | 0.63 | 1.15 | 1.2 | 58 | 60 | 56 | 64 | 14.0 | 15.5 | 19.9 | 22.3 |
| 50 | 0.63 | 1.15 | 1.4 | 58 | 60 | 56 | 64 | 20.5 | 22.0 | 27.5 | 29.0 |
| 100 | 0.63 | 1.15 | 1.5 | 58 | 60 | 56 | 64 | 27.5 | 29.0 | 35.5 | 37.0 |
| 2 | 0.90 | 1.50 | 1.1 | 28 | 30 | 59 | 65 | 9.0 | 10.5 | 14.2 | 15.7 |
| 5 | 0.90 | 1.50 | 1.2 | 28 | 30 | 59 | 65 | 11.5 | 13.0 | 16.7 | 18.9 |
| 10 | 0.90 | 1.50 | 1.2 | 28 | 30 | 59 | 65 | 14.0 | 15.5 | 19.9 | 22.3 |
| 20 | 0.90 | 1.50 | 1.3 | 28 | 30 | 59 | 65 | 18.0 | 19.5 | 24.8 | 26.3 |
| 50 | 0.90 | 1.50 | 1.5 | 28 | 30 | 59 | 65 | 26.5 | 28.0 | 34.5 | 36.0 |
| 100 | 0.90 | 1.50 | 1.7 | 28 | 30 | 59 | 65 | 36.0 | 37.5 | 44.4 | 45.9 |
| | | | | 1 | 1 | 1 | 1 | 1 | | 1 | |

N.B.: For screened cables of 20 pairs or less the maximum average mutual capacitance shall not apply and the maximum for 99% of cases shall be increased by 3nF.

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Insulation Resistance

Insulation resistance measurements shall be made with not less than 500 volts D.C. After steady electrification for one minute the insulation resistance measured between each conductor and the remaining conductors connected together shall be not less than 1500 megohms per 1000 metres at 20°C.

Capacitance Unbalance

Not more than 1% of the corrected capacitance unbalance measurements between adjacent pairs shall exceed the following values:

Two-Pair (Quad) Cable 800pF. All other sizes 275pF.

CW1128 Pair Colour Scheme, Unit Binder Colours and Cable Make-up

| Cabling Element No. | a-wire | b-wire | Unit | Binder Colour | | Cable Size | No. and Pair Size of Unit in Centre and 1 st Layer | | |
|------------------------|--------|--------|--------|------------------|----|---------------|--|-----------------------|--|
| Element No. | a-wire | D-WIFE | Number | | | Size | Centre | 1 st layer | |
| 1 | WHITE | BLUE | 1 | BLUE | | 2 | 1 x 2 | - | |
| 2 | WHITE | ORANGE | 2 | ORANGE | | 5 | 1 x 5 | - | |
| 3 | WHITE | GREEN | 3 | GREEN | 11 | 10 | 1 x 10 | - | |
| 4 | WHITE | BROWN | 4 | BROWN | 11 | 20 | 4 x 5 | - | |
| 5 | WHITE | GREY | 5 | GREY | 11 | | 2 x 10 | - | |
| 6 | RED | BLUE | 6 | WHITE | 11 | 50 | 5 x 10 | - | |
| 7 | RED | ORANGE | 7 | RED | 11 | | 1 x 10 | 4 x 10 | |
| 8 | RED | GREEN | 8 | BLACK | 11 | 100 | 2 x 10 | 8 x 10 | |
| 9 | RED | BROWN | 9 | YELLOW | | | 3 x 10 | 7 x 10 | |
| 10 | RED | GREY | 10 | VIOLET | | | 4 x 5 | 8 x 10 | |

Note: Options for the 2 pair cable are -

Manufactured as a pair cable with cabling elements coloured as above.

Manufactured as a quad, coloured Orange Green, White, Black in order of rotation.