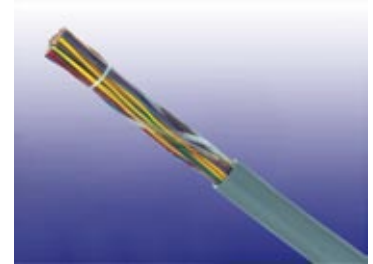


PE Insulated Category 3 UTP/FTP Cables

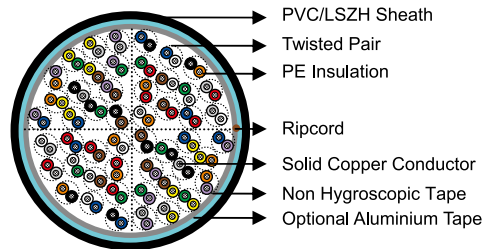
APPLICATION

The cables are designed for medium frequency data or telephone systems, suitable for indoor or outdoor insulations.



STANDARDS

- TIA/EIA-568B
- IEC 61156-4
- UL-444
- ANSI/ICEA S-80-576



CONSTRUCTION

- **Conductors:** Solid annealed bare copper sized 0.5mm (24 AWG) as per ASTM-B3/class 1 of IEC 60228.
- **Insulation:** Solid polyethylene as per ASTM D 1248/IEC 60708.
- **Twisted Pairs:** Insulated conductors are twisted into pairs with varying lay length to minimize crosstalk.
- **Cable Core Assembly:** The 50-pair cable is composed of 4 units having 12 or 13 pairs each. All other cables are composed of 25-pair units. Units are identified by colour coded binders.
- **Core Wrapping:** Non-hygroscopic dielectric tape fully enclosing the core with an overlap.
- **Screen (optional):** An optional Aluminium/Polyester tape placed in contact with solid copper drain wire may be provided as an option.
- **Sheath:** PVC or LSZH.
- **Ripcord:** Nylon ripcord may be placed parallel to the cores to facilitate sheath removal.

ELECTRICAL PROPERTIES

| | | |
|--|---------------|----------|
| Nominal Conductor Diameter | mm | 0.5 |
| Maximum DC Resistance | $\Omega/100m$ | 9.38 |
| Maximum Resistance Unbalance | % | 5 |
| Maximum Capacitance Unbalance pair-to-ground @1KHz | pF/100m | 330 |
| Minimum Worst Pair Structural Return Loss (SRL): | | |
| Up to 10 MHz | dB | 12 |
| Between 10 and 16 MHz | dB | 10 |
| Impedance @1-16 MHz | Ω | 85 - 115 |
| Maximum Attenuation at 20°C | | |
| @64KHz | dB/100m | 0.9 |
| @256KHz | dB/100m | 1.3 |



Caledonian

INDOOR/OUTDOOR TELEPHONE CABLES

www.caledonian-cables.co.uk www.addison-cables.com

(Continued from previous page)

| | | |
|---|---------|-------|
| @512KHz | dB/100m | 1.8 |
| @772KHz | dB/100m | 2.2 |
| @1MHz | dB/100m | 2.6 |
| @4MHz | dB/100m | 5.6 |
| @8MHz | dB/100m | 8.5 |
| @10MHz | dB/100m | 9.7 |
| @16MHz | dB/100m | 13.1 |
| Minimum Worst pair-to-pair NEXT Loss | | |
| @772KHz | dB | 43 |
| @1MHz | dB | 41 |
| @4MHz | dB | 32 |
| @8MHz | dB | 28 |
| @10MHz | dB | 26 |
| @16MHz | dB | 23 |
| Minimum Relative Velocity of Propagation @10MHz | dB | 0.585 |

MECHANICAL AND THERMAL PROPERTIES

Temperature range during operation (fixed state): -30°C – +70°C

Temperature range during installation (mobile state): -20°C – +50°C

Minimum bending radius: 10 x Overall Diameter (unarmoured cables); 15 x Overall Diameter (armoured cables)

COLOUR CODE

Standard Colour Code is per TIA/EIA 568B or ICEA S-80-576 as given in Colour Code Chart.

DIMENSIONS AND WEIGHT

PE INSULATED CATEGORY 3 UTP CABLES

| Cable Code | Number of Pairs | Nominal Sheath Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|---|-----------------|-----------------------------|-----------------------------|----------------------|
| 0.5mm Conductor, 0.9mm Insulated Wire, UTP, PVC Sheathed, Indoor | | | | |
| TP568-2YY-10P05-UTPC3 | 10 | 0.9 | 9.5 | 77 |
| TP568-2YY-25P05-UTPC3 | 25 | 0.9 | 12.5 | 155 |
| TP568-2YY-50P05-UTPC3 | 50 | 1.0 | 17.0 | 260 |
| TP568-2YY-100P05-UTPC3 | 100 | 1.1 | 21.5 | 530 |
| TP568-2YY-200P05-UTPC3 | 200 | 1.2 | 29.5 | 1100 |
| TP568-2YY-300P05-UTPC3 | 300 | 1.3 | 33.5 | 1550 |
| 0.5mm Conductor, 0.9mm Insulated Wire, UTP, LSZH Sheathed, Indoor & Outdoor | | | | |
| TP568-2YH-10P05-UTPC3 | 10 | 0.9 | 10.0 | 80 |
| TP568-2YH-25P05-UTPC3 | 25 | 0.9 | 14.0 | 150 |

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| Cable Code | Number of Pairs | Nominal Sheath Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|--|-----------------|-----------------------------|-----------------------------|----------------------|
| TP568-2YH-50P05-UTPC3 | 50 | 1.1 | 16.5 | 280 |
| TP568-2YH-100P05-UTPC3 | 100 | 1.4 | 21.5 | 530 |
| TP568-2YH-200P05-UTPC3 | 200 | 1.7 | 30.0 | 900 |
| TP568-2YH-300P05-UTPC3 | 300 | 1.7 | 36.0 | 1300 |
| 0.5mm Conductor, 0.9mm Insulated Wire, UTP, PE Sheathed, Outdoor | | | | |
| TP568-2Y2Y-10P05-UTPC3 | 10 | 0.9 | 9.5 | 80 |
| TP568-2Y2Y-25P05-UTPC3 | 25 | 0.9 | 13.0 | 150 |
| TP568-2Y2Y-50P05-UTPC3 | 50 | 1.0 | 16.0 | 280 |
| TP568-2Y2Y-100P05-UTPC3 | 100 | 1.1 | 21.5 | 550 |
| TP568-2Y2Y-200P05-UTPC3 | 200 | 1.2 | 28.5 | 1050 |
| TP568-2Y2Y-300P05-UTPC3 | 300 | 1.3 | 34.5 | 1550 |

PE INSULATED CATEGORY 3 FTP CABLES

| Cable Code | Number of Pairs | Nominal Sheath Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|--|-----------------|-----------------------------|-----------------------------|----------------------|
| 0.5mm Conductor, 0.9mm Insulated Wire, FTP, PVC Sheathed, Indoor | | | | |
| TP568-2Y(St)Y-10P05-FTPC3 | 10 | 0.9 | 10.0 | 85 |
| TP568-2Y(St)Y-25P05-FTPC3 | 25 | 0.9 | 13.5 | 170 |
| TP568-2Y(St)Y-50P05-FTPC3 | 50 | 1.0 | 17.0 | 300 |
| TP568-2Y(St)Y-100P05-FTPC3 | 100 | 1.1 | 22.0 | 570 |
| TP568-2Y(St)Y-200P05-FTPC3 | 200 | 1.2 | 30.0 | 1120 |
| TP568-2Y(St)Y-300P05-FTPC3 | 300 | 1.3 | 36.6 | 1630 |
| 0.5mm Conductor, 0.9mm Insulated Wire, FTP, LSZH Sheathed, Indoor& Outdoor | | | | |
| TP568-2Y(St)H-25P05-FTPC3 | 25 | 0.9 | 14.0 | 170 |
| TP568-2Y(St)H-50P05-FTPC3 | 50 | 1.0 | 17.5 | 300 |
| TP568-2Y(St)H-100P05-FTPC3 | 100 | 1.2 | 23.0 | 580 |
| TP568-2Y(St)H-200P05-FTPC3 | 200 | 1.6 | 32.0 | 1120 |
| TP568-2Y(St)H-300P05-FTPC3 | 300 | 1.6 | 35.0 | 1320 |
| 0.5mm Conductor, 0.9mm Insulated Wire, FTP, PE Sheathed, Outdoor | | | | |
| TP568-2Y(St)2Y-10P05-FTPC3 | 10 | 0.9 | 11.0 | 85 |
| TP568-2Y(St)2Y-25P05-FTPC3 | 25 | 0.9 | 13.5 | 170 |
| TP568-2Y(St)2Y-50P05-FTPC3 | 50 | 1.0 | 16.5 | 300 |
| TP568-2Y(St)2Y-100P05-FTPC3 | 100 | 1.1 | 22.6 | 570 |
| TP568-2Y(St)2Y-200P05-FTPC3 | 200 | 1.2 | 31.0 | 1070 |
| TP568-2Y(St)2Y-300P05-FTPC3 | 300 | 1.3 | 35.5 | 1570 |