PE Insulated & PE Sheathed Non Metallic Reinforced Drop Wires to RUS (REA) PE-7

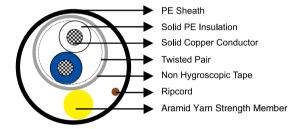
APPLICATION

The drop wires are one or two pair aerial service wires designed for use in extending telephone service to subscriber premises from the cable terminal.



STANDARDS

• RUS (REA) PE-7



CONSTRUCTION

- Conductors: Solid annealed bare copper 0.5/0.8mm as per ASTM B-3/IEC 60228 Class 1.
- Insulation: Solid polyethylene as per ASTM D 1248/IEC 60708.
- Cable Core Assembly & Core Wrapping: Individual conductors are twisted into pairs and wrapped with PETP tape.
- Strength Member: Aramid yarn as non-metallic strength member is placed inside the sheath to provide longitudinal strength.
- **Sheath:** PE is extruded over the core to provide protection against mechanical damage, degradation by sunlight and water ingress.
- Ripcord: A ripcord made of polyamide is placed parallel to the core to facilitate sheath removal.

ELECTRICAL PROPERTIES

| Conductor Diameter | mm | 0.5 | 0.8 |
|--|-----------------|------------|------------|
| Conductor Gauge Size | AWG | 24 | 20 |
| Maximum Conductor Resistance @20°C | Ω/km / Ω/mile | 91/145.78 | 34.6/55.72 |
| Minimum Insulation Resistance @500V DC | MΩ·km / MΩ·mile | 10000/6214 | 10000/6214 |
| Maximum Resistance Unbalance | % | 2 | 2 |
| Average Mutual Capacitance @1000Hz | nF/km / nF/kft | 55/16.8 | 55/16.8 |
| Maximum Capacitance Unbalance pair-to-pair | pF/km / pF/kft | 300/91 | 300/91 |
| Maximum Capacitance Unbalance pair-to-ground | pF/km / pF/kft | 1000/303.4 | 1000/303.4 |
| Impedance @0.8KHz | Ω/km / Ω/mile | 600/965.6 | 600/965.6 |
| Impedance @64KHz | Ω/km / Ω/mile | 125/201.2 | 125/201.2 |



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| Impedance @772KHz | Ω/km / Ω/mile | 100/160.9 | 100/160.9 |
|-------------------------------------|---------------|---------------|---------------|
| Maximum Average Attenuation @0.8KHz | Ω/km / Ω/mile | 1.5/2.4 | 1.5/2.4 |
| Maximum Average Attenuation @64KHz | Ω/km / Ω/mile | 8.0/12.87 | 8.0/12.87 |
| Maximum Average Attenuation @772KHz | Ω/km / Ω/mile | 18/28.97 | 18/28.97 |
| Dielectric Strength 1min | V | 1000DC/1500AC | 1000DC/1500AC |

MECHANICAL AND THERMAL PROPERTIES

Temperature range during operation (fixed state): $-30^{\circ}\text{C} - +70^{\circ}\text{C}$ Temperature range during installation (mobile state): $-20^{\circ}\text{C} - +50^{\circ}\text{C}$

Minimum bending radius: 10 x Overall Diameter

COLOUR CODE

A wire B Wire

1 PR White Blue

2 PR Yellow Black

DIMENSIONS AND WEIGHT

| Cable Code | Number of Pairs | Insulation Thickness mm/inch | Sheath Thickness mm/inch | Nominal Overall Diameter mm/inch | Nominal Weight kg/km / lbs/kft | | | |
|--|-----------------|---------------------------------|--------------------------------|--|-----------------------------------|--|--|--|
| 0.5mm Conductor, 0.9mm Insulated Wire | | | | | | | | |
| TP7-2Y2Y-2P05-SS-A | 2 | 0.2/0.0079 | 1.2/0.047 | 5.0/0.197 | 26.2/17.6 | | | |
| 0.8mm Conductor, 1.36mm Insulated Wire | | | | | | | | |
| TP7-2Y2Y-1P08-SS-A | 1 | 0.28/0.0110 | 1.2/0.047 | 5.3/0.209 | 26.6/17.9 | | | |



