

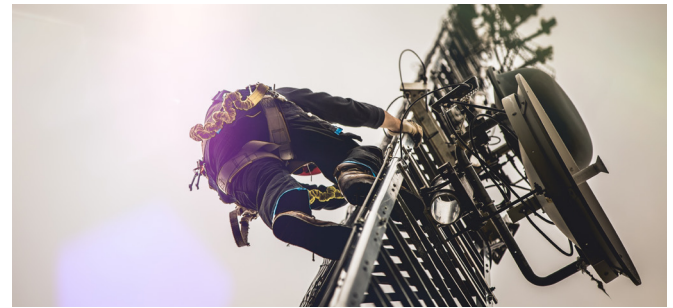
# Outside Plant Copper Cables for Line Powering

## Telco Filled Core Cables

General Cable

A Brand of Prysmian Group

Prysmian Group manufactures a broad range of wire and cable for the distribution of telecommunication signals for outside use. Our Outside Plant Copper Cables are designed for Telco Line Powering applications. Its Plastic Insulated Filled Core Cable ensures protection from moisture ingress. These cables can be installed in underground ducts and direct buried applications where protection against water and moisture entry is required and may also be installed aerially.



### APPLICATIONS

- Telecom Class 2 Line Powering
- Low risk direct burial and underground duct
- Aerial installations when appropriately attached to a support strand

### FEATURES

- ETPR filled core
- Aluminum shield with fully flooded interfaces
- LLDPE black jacket

### BENEFITS

- ETPR filling compound provides thermal protection and prevents corrosion and water ingress
- Black LLDPE jacket for UV resistance and protection from environmental stresses expected in standard installations

## RDUP (RUS) PE-89 AL Cables - Spec. 2007



Electrical Characteristics	22 AWG
DC Conductor Resistance: [max.] Ohms/mile. @ 68°F	
Individual Conductor	91.0
DC Resistance Unbalance: [max.]	
Average Cable Percent	1.5
Individual Pair Percent	5.0
Attn at 772 kHz: [nom.] dB/kft	4.5
1 kHz Mutual Capacitance:	
6 and 12 pairs (avg. max)	83 +/- 7 nF/mile : 94 nF/mile
Over 12 pairs (avg. max)	83 +/- 4 nF/mile : 92 nF/mile
1 kHz Capacitance Unbal. [max.] Pair-to-Pair:	
rms average: > 12 pairs	25 pF/1000 Ft.
Individual	80 pF/1000 Ft
Pair-to-Ground: Over 13 Pairs	
Cable average: > 13 Pairs	175 pF/1000 Ft. avg.
Individual pair	800 pF/1000 Ft.

All additional electrical and physical characteristics either meet or exceed those specified in RDUP RUS PE-89

### Nominal Cable Data

Catalog Number	Pairs	AWG	O.D. (inches)	Weight (Lbs/Mft)	Standard Length (Ft)
7525603	12	22	0.52	125	5000
7525629	25	22	0.62	205	5000
7525637	50	22	0.78	365	5000
7525652	100	22	1.01	665	2500

Data subject to change without notice. Contact your Customer Service Representative for latest information.

## Product Description

Filled Foam Skin ALPETH and PE-89 Cables are designed for use in Telco Line Powering applications. The copper core makes use of ETPR filling compound, filling in the interstices between the pairs and the core wrap tape to ensure protection from moisture ingress. These cables can be used in low risk direct burial or duct applications. They may be used aerially, but must be attached to a support strand.

## Core Construction:

### Conductors:

- Solid, annealed copper; size 22 AWG

### Insulation:

- Dual insulation consisting of an inner layer of foamed polyolefin surrounded by a solid polyolefin skin, color-coded in accordance with telephone industry standards

### Twisted Pairs:

- Insulated conductors are twisted into pairs with varying lay lengths to minimize crosstalk

### Core Assembly:

- 25 pairs and less: pairs are assembled together in a single group
- More than 25 pairs: pairs are arranged in groups, each group having a color-coded unit binder

### Filling Compound:

- The entire core assembly is completely filled with ETPR compound, filling the interstices between the pairs and under the core tape

### Core Wrap:

- Non-hygroscopic dielectric tape applied longitudinally with an overlap

### Sheath:

#### Aluminum Shield:

- Corrugated, copolymer-coated, 0.008" aluminum tape applied longitudinally with an overlap
- The sheath interfaces are flooded with an adhesive water-blocking compound

#### Jacket:

- Black, linear low density polyethylene

### Application(s):

- Intended for duct and direct buried installations where protection against water and moisture entry is required and may also be installed aerially

### Compliances:

- Rural Development Utility Program (RDUP) 7 CFR 1755.890 (RUS PE-89)
- RoHS Compliant (effective 1/1/10)
- ANSI/ICEA S-84-608-2007

### Packaging:

- Standard lengths are shipped on non-returnable wood reels
- Non-standard packaging is available upon request

### Configurations:

- Available in additional pair counts and gauges

# Outside Plant Copper Cables for Line Powering

## BELL SYSTEM TYPE ANAA (22 AWG) – Spec. 2111



Electrical Characteristics	22 AWG
<b>DC Conductor Resistance: [max.] Ohms/mile. @ 68°F</b>	
Individual Conductor	91.0
<b>DC Resistance Unbalance: [max.]</b>	
Average Cable Percent	1.5
Individual Pair Percent	5.0
<b>Attn at 772 kHz: [nom.] dB/kft</b>	4.5
<b>1 kHz Mutual Capacitance:</b>	
6 and 12 pairs (avg: max)	83 ± 7 nF/mile : 94 nF/mile
Over 12 pairs (avg: max)	83 ± 4 nF/mile : 92 nF/mile
<b>1 kHz Capacitance Unbal. [max.] Pair-to-Pair:</b>	
rms average: > 12 pairs	25 pF/1000 Ft.
Individual	80 pF/1000 Ft.
<b>Pair-to-Ground:</b>	
Cable average: > 13 Pairs	175 pF/1000 Ft. avg.
Individual pair	800 pF/1000 Ft.

All additional electrical and physical characteristics either meet or exceed those specified in GR-421-CORE

### Nominal Cable Data

Catalog Number	Pairs AWG		O.D. (inches)	Weight (Lbs/Mft)	Standard Length (Ft)
2036307	25	22	0.61	208	5000
2036308	50	22	0.77	367	5000
2036309	100	22	1.02	683	2500

Data subject to change without notice. Contact your Customer Service Representative for latest information.

### Product Description

Filled Foam Skin ALPETH and PE-89 Cables are designed for use in Telco Line Powering applications. The copper core makes use of ETPR filling compound, filling in the interstices between the pairs and the core wrap tape to ensure protection from moisture ingress. These cables can be used in low risk direct burial or duct applications. They may be used aerially, but must be attached to a support strand.

### Core Construction:

#### Conductors:

- Solid, annealed copper; size 22 AWG

#### Insulation:

- Dual insulation consisting of an inner layer of foamed polyolefin surrounded by a solid polyolefin skin, color-coded in accordance with telephone industry standards

#### Twisted Pairs:

- Insulated conductors are twisted into pairs with varying lay lengths to minimize crosstalk

#### Core Assembly:

- 25 pairs and less: pairs are assembled together in a single group
- More than 25 pairs: pairs are arranged in groups, each group having a color-coded unit binder
- 1200 pairs and larger are mirror image color code

#### Filling Compound:

- The entire core assembly is completely filled with ETPR compound, filling the interstices between the pairs and under the core tape

#### Core Wrap:

- Non-hygroscopic dielectric tape applied longitudinally with an overlap

#### Sheath:

##### Aluminum Shield:

- Corrugated, 0.008" aluminum tape applied longitudinally with an overlap
- The sheath interfaces are flooded with an adhesive water-blocking compound

##### Jacket:

- Black, linear low density polyethylene

#### Application(s):

- Intended for duct and direct buried installations where protection against water and moisture entry is required and may also be installed aerially

#### Compliances:

- Telcordia (Bellcore) Specification GR-421-CORE
- RoHS Compliant (effective 1/1/10)

#### Packaging:

- Standard lengths are shipped on non-returnable steel reels or on non-returnable wood reels when requested
- Non-standard packaging is available upon request

#### Configurations:

- Available in additional pair counts and gauges

**General Cable**

A Brand of Prysmian Group

**Prysmian Group**

4 Tesseneer Drive, Highland Heights, KY 41076  
+1-859-572-8000 / na.prysmiangroup.com  
TLC-0001-0520