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FOR TELECOMMUNICATIONS
MAY 2010

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Telecommunications Cables

This catalog contains in-depth information on the most comprehensive line of Telecommunications cables for the distribution of telecommunication signals for outside use.

The product and technical sections have been developed with an easy-to-use “spec-on-a-page” format. It features the latest information on Telecommunications cables, from applications and construction to detailed technical and specification data. There’s also a numerical part number index.

Our cables are readily available through our network of authorized stocking distributors and distribution centers.

We are dedicated to customer service and satisfaction—so call our team of professionally trained sales personnel to meet your application needs.



All information in this catalog is presented solely as a guide to product selection and is believed to be reliable. All printing errors are subject to correction in subsequent releases of this catalog. Although General Cable has taken precautions to ensure the accuracy of the product specifications at the time of publication, the specifications of all products contained herein are subject to change without notice.

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Our Cables

KEEP INFORMATION FLOWING

QUALITY



General Cable is committed to meeting customer requirements through continuous quality improvements. As a significant part of our commitment to quality, General Cable’s manufacturing facilities are certified to the ISO 9001:2000 quality standard. Our telecommunications cable manufacturing facility has received TL 9000 quality standards registration as a supplement to the ISO program. This quality system is

based on the ISO 9001 program with added telecommunications-specific performance metrics. We strive to provide value optimization through innovation and quality solutions.

- Our in-house testing capabilities are extensive, with strict adherence to our product specifications as well as industry standards.
- Cables are safety listed and verified.
- Third-party testing labs like ETL are utilized to quantify and confirm our quality and provide final qualification data that sets the foundation for our extended product warranty.
- General Cable products have stood the test of time with proven reliability and performance.

CUSTOMER SERVICE



General Cable is dedicated to customer service and satisfaction. Call our team of professionally trained sales associates at

800-424-5666

with any questions to meet your application needs.

Product Selection Locator

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Directing Traffic without Gridlock

General Cable is a leader in the development, design, manufacture, marketing and distribution of copper, aluminum and fiber optic wire and cable for the energy, industrial, specialty and communications markets.

Our products inspire progress worldwide ... customers use our value-added products to create global infrastructure that improves the standard of living for people everywhere.

Each day we're building business momentum — developing ideas into innovative solutions and industry-leading products, expanding geographic access and furthering our investment in highly capable associates, Lean Manufacturing, material science and technology resources.

General Cable is influencing the world ... with more than two-thirds of our sales generated outside North America and more than 11,000 associates in 45 manufacturing facilities throughout 22 countries. As one of the largest wire and cable manufacturers, we are the *One Company Connecting the World*.

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Our cables carry energy across the world — through the air, underground and under the sea. Increasing demand for energy is accelerating investment in exploration, extraction, power generation, transmission and distribution — whether based on coal, natural gas, oil, nuclear, wind, solar or water.

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World Headquarters

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General Cable
Telecommunications

Air Core Cables

1

Plastic insulated Air Core Cables provide a broad range of pair sizes for the distribution of telecommunication signals for outside use. These cables can be installed in underground ducts or strung between poles, lashed to a steel messenger or equipped with a built-in messenger wire.

An industry-standard color-coding system provides full identification of every pair through the use of 10 different insulating colors and non-hygroscopic unit binders.

Different optional sheath designs provide electrical shielding necessary for proper grounding and mechanical protection against rodents and other physical damage. A black, weather-resistant polyethylene jacket is used on all constructions for protection against long-term outdoor exposure.

The temperature range that Telecommunications cable can withstand is:

For storage and operation:
-45°C to 80°C
-49°F to 176°F

For installation:
-30°C to 60°C
-22°F to 140°F

All cables are equipped with surface-printed identification and sequential footage markings.

The cable design for 19, 22 and 24 AWG sizes has the transmission performance capability of 100Ω, Category 3 Backbone UTP Cables specified in TIA/EIA-568-C.

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Air Core Cable

RDUP (RUS) PE-22 AL

Spec. 2003

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22 and 24 AWG

Insulation:

- Solid, high density polyethylene, 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

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

Jacket:

- Black, linear low density polyethylene

Application(s):

- For aerial installation by attachment to a support strand
- For underground installation when placed in a duct (pressurization is recommended)

Compliance:

- RDUP (RUS) Specification PE-22
- RoHS Compliant (effective 1/1/10)

Packaging:

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



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7527757	6/19	0.49	105	5000
7527765	12/19	0.62	185	5000
7527781	25/19	0.79	310	5000
7527799	50/19	1.10	580	2500
7527005	6/22	0.40	70	5000
7527013	12/22	0.49	105	5000
7527021	25/22	0.63	180	5000
7527039	50/22	0.90	315	5000
7527054	100/22	1.10	570	2500
7527062	200/22	1.40	1100	2500
7527112	6/24	0.37	55	5000
7527120	12/24	0.43	80	5000
7527138	25/24	0.54	130	5000
7527146	50/24	0.67	215	5000
7527161	100/24	0.88	385	5000
7527187	200/24	1.20	720	2500
7527195	300/24	1.40	1060	2500
7527203	400/24	1.60	1375	2500
7527211	600/24	1.90	2070	1250

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Figure 8 Air Core Cable

RDUP (RUS) PE-38 AL

Spec. 2003-F8



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
2012020	6/19	0.49	235	5000
2012021	12/19	0.62	335	5000
2012023	25/19	0.81	485	5000
2012010	6/22	0.40	245	5000
2012011	12/22	0.49	275	5000
2012000	25/22	0.61	355	5000
2012001	50/22	0.81	480	5000
2012015	6/24	0.37	230	5000
2012016	12/24	0.43	255	5000
2012004	25/24	0.54	300	5000
2012005	50/24	0.67	395	5000
2012006	100/24	0.90	550	5000

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

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22 and 24 AWG

Insulation:

- Solid, high density polyethylene, 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

Core Wrap:

- Non-hygroscopic dielectric tape applied longitudinally with an overlap

Figure 8 Sheath:

Aluminum Shield:

- Corrugated, copolymer coated, 0.008" aluminum tape applied longitudinally with an overlap

Support Messenger:

- A 1/4", 7 strand, extra high strength galvanized steel wire, fully flooded for corrosion protection

Jacket:

- Black, linear low density polyethylene is jacketed in an integral extrusion with the shielded core and support messenger to form a "Figure 8" configuration

Application(s):

- Intended for aerial installation

Compliance:

- RDUP (RUS) Specification PE-38
- RoHS Compliant (effective 1/1/10)

Packaging:

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

Air Core ALPETH Cable

Spec. 2101

BELL SYSTEM TYPE BHBA (19 AWG) BKMA (24 AWG)
BHAA (22 AWG) BKTA (26 AWG)

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22, 24 and 26 AWG

Insulation:

- Solid, high density polyethylene, 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

Core Wrap:

- Non-hygroscopic dielectric tape applied longitudinally with an overlap

ALPETH Sheath:

Aluminum Shield:

- Corrugated 0.008" aluminum tape applied longitudinally with an overlap

Jacket:

- Black, linear low density polyethylene

Application(s):

- Intended for aerial installation by attachment to a support strand

Compliance:

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

Packaging:

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



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7506975	50/19	1.10	590	3000
7506983	100/19	1.50	1097	3000
7506991	200/19	1.90	2122	1000
7510506	300/19	2.40	3148	1000
7506876	25/22	0.61	180	5000
7506884	50/22	0.79	315	3000
7506892	100/22	1.10	587	5000
6968770	200/22	1.50	1107	3000
7506900	300/22	1.70	1623	2500
6968762	400/22	1.90	2140	2500
6987275	600/22	2.30	3187	1000
6937817	900/22	2.80	4713	700
7506918	25/24	0.52	128	5000
7506926	50/24	0.65	217	10000
6937064	100/24	0.86	390	3000
6964803	200/24	1.10	728	1000
6964811	300/24	1.40	1058	5000
6964795	400/24	1.50	1385	1000
6964787	600/24	1.90	2068	1000
6983381	900/24	2.20	3030	1600
6937833	1200/24	2.50	4020	1000
7506777	1500/24	2.80	4973	800
6937841	1800/24	3.10	5960	800
7503485	400/26	1.30	897	1000
6987218	600/26	1.50	1317	1000
7508252	900/26	1.80	1957	2200
6937858	1200/26	2.10	2575	1000
6937866	1500/26	2.30	3193	1000
7506785	1800/26	2.50	3805	1000
6937767	2100/26	2.70	4430	1000

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

Figure 8 Air Core ALPETH Cable

BELL SYSTEM TYPE BHBS (19 AWG) BKMS (24 AWG)
BHAS (22 AWG) BKTS (26 AWG)

Spec. 2102



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7516461	25/19	0.88	477	5000
7516479	50/19	1.20	746	2500
7516487	25/22	0.70	342	5000
7516495	50/22	0.88	480	5000
7517261	100/22	1.20	748	5000
7517279	25/24	0.63	291	10000
7517287	50/24	0.76	380	10000
7517303	100/24	0.97	556	5000
7517329	200/24	1.20	884	5000

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

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22, 24 and 26 AWG

Insulation:

- Solid, high density polyethylene, 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

Core Wrap:

- Non-hygroscopic dielectric tape applied longitudinally with an overlap

Figure 8 Alpeth Sheath:

Aluminum Shield:

- Corrugated 0.008" aluminum tape applied longitudinally with an overlap

Support Messenger:

- A 1/4", 7 strand, extra high strength galvanized steel wire, fully flooded for corrosion protection

Jacket:

- Black, linear low density polyethylene is jacketed in an integral extrusion with the shielded core and support messenger to form a "Figure 8" configuration

Application(s):

- Intended for aerial installation

Compliance:

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

Packaging:

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

Figure 8 Air Core ALPETH-GP Cable

Spec. 2108

BELL SYSTEM TYPE BHBP (19 AWG) BKMP (24 AWG)
BHAP (22 AWG) BKTP (26 AWG)

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22, 24 and 26 AWG

Insulation:

- Solid, high density polyethylene, 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

Core Wrap:

- Non-hygroscopic dielectric tape applied longitudinally with an overlap

Figure 8 ALPETH-GP Sheath:

Aluminum Shield:

- Corrugated, 0.008" aluminum tape applied longitudinally with an overlap

First Jacket:

- Black, linear low density polyethylene jacket over the aluminum tape

Steel Tape:

- Corrugated, 0.006" steel tape flooded on both sides applied longitudinally over the first jacket with an overlap

Support Messenger:

- A 1/4", 7 strand, extra high strength galvanized steel wire, fully flooded for corrosion protection

Outer Jacket:

- Black, linear low density polyethylene is applied in an integral extrusion over the steel tape and support messenger to form a "Figure 8" configuration

Application(s):

- Intended for aerial installation where additional mechanical protection is required

Compliance:

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

Packaging:

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



Nominal Cable Data

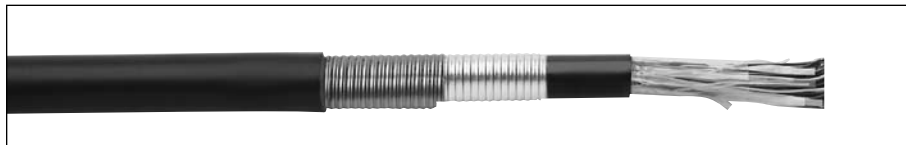
CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7517394	25/19	1.10	675	5000
7517410	25/22	0.95	505	5000
7517428	50/22	1.10	676	5000
7517444	100/22	1.40	986	2500
7517451	25/24	0.88	447	5000
7517469	50/24	1.00	557	5000
7517485	100/24	1.20	771	5000
7517501	200/24	1.50	1129	2500

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

Air Core Bonded PASP Cable

BELL SYSTEM TYPE BHBH (19 AWG) BKMH (24 AWG)
BHAH (22 AWG) BKTH (26 AWG)

Spec. 2107



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7502180	25/19	0.90	440	5000
7502198	50/19	1.20	750	3000
7502214	100/19	1.60	1365	3000
7502230	200/19	2.10	2475	1000
7502248	300/19	2.50	3593	1000
7503543	25/22	0.72	280	5000
7503550	50/22	0.90	445	3000
7503576	100/22	1.20	750	3000
7503592	200/22	1.60	1360	4000
7503600	300/22	1.80	1925	1000
7503618	400/22	2.10	2490	2000
7503626	600/22	2.50	3640	1500
7503634	900/22	3.00	5265	700
7503659	25/24	0.64	220	10000
7503667	50/24	0.77	325	10000
7503683	100/24	0.98	530	10000
7503709	200/24	1.30	900	5000
7503717	300/24	1.50	1287	2500
7503725	400/24	1.70	1663	2500
7502073	600/24	2.00	2385	2000
7502040	900/24	2.40	3470	1600
7502081	1200/24	2.70	4497	900
7502065	1500/24	3.00	5518	900
7502057	1800/24	3.30	6580	800
7503816	400/26	1.40	1110	2500
7502024	600/26	1.70	1575	1000
7502032	900/26	2.00	2273	2200
7502099	1200/26	2.20	2973	1000
7503824	1500/26	2.40	3618	1000
7503832	1800/26	2.60	4272	1000
7503840	2100/26	2.80	4908	900

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

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22, 24 and 26 AWG

Insulation:

- Solid, high density polyethylene, 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

Core Wrap:

- Non-hygroscopic dielectric tape applied longitudinally with an overlap

Bonded PASP Sheath:

Inner Jacket:

- Black, linear low density polyethylene jacket over the core wrap

Aluminum Shield:

- Corrugated, 0.008" aluminum tape applied longitudinally

Steel Shield:

- Corrugated, copolymer coated, 0.006" steel tape applied longitudinally over the aluminum tape with an overlap

Outer Jacket:

- Black, linear low density polyethylene jacket bonded to the coated steel

Application(s):

- Intended for pressurized direct buried installation in situations in which resistance to lightning and mechanical damage is required

Compliance:

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

Packaging:

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

Air Core Foam Skin Bonded STALPETH Cable

Spec. 2106

BELL SYSTEM TYPE DCAZ (22 AWG) DCTZ (26 AWG)
DCMZ (24 AWG)

Core Construction:

Conductors:

- Solid, annealed copper; sizes 22, 24 and 26 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:

- 3600 pairs and less: made up of 100 pair super-units consisting of four (4) 25 pair sub-units
- 4200 pair design: made up of 300 pair super-units consisting of twelve (12) 25 pair sub-units
- Each group is individually identifiable by color-coded unit binders
- All sizes are mirror image color code

Core Wrap:

- Non-hygroscopic dielectric tape applied longitudinally with an overlap

Bonded STALPETH Sheath:

Aluminum Shield:

- Corrugated, 0.008" aluminum tape applied longitudinally

Steel Shield:

- Corrugated, copolymer coated, 0.006" steel tape applied longitudinally over the aluminum tape with an overlap

Outer Jacket:

- Black, linear low density polyethylene jacket bonded to the coated steel

Application(s):

- Intended for pressurized urban underground duct installation
- Designed for large pair-count subscriber-serving cables leaving Central Offices where duct congestion is a prime concern

Compliance:

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

Packaging:

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



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
2010083	900/22	2.5	4572	1000
2010084	1200/22	2.9	6027	1000
2010078	600/24	1.7	2022	1000
2010079	900/24	2.1	2960	1000
7516438	1200/24	2.3	3881	1000
7510712	1500/24	2.5	4795	1000
7502008	1800/24	2.8	5698	1000
7502107	2100/24	2.9	6583	1000
7510720	2400/24	3.2	7502	1000
2010080	600/26	1.4	1342	1000
7512510	900/26	1.7	1937	1000
6987374	1200/26	1.9	2524	1000
7513351	1500/26	2.1	3116	2000
6987382	1800/26	2.2	3687	1000
7513252	2100/26	2.4	4263	1000
6987390	2400/26	2.5	4832	1000
2010081	2700/26	2.7	5409	1000
6987408	3000/26	2.8	5978	1000
6987416	3600/26	3.1	7116	1000
6987424	4200/26	3.3	8246	1000

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

Filled Core Cables

2

Plastic insulated Filled Core Cables provide a broad range of pair sizes for the distribution of telecommunication signals for outside use. 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.

An industry standard color-coding system provides full identification of every pair through the use of 10 different insulating colors and non-hygroscopic unit binders. Designs are available using either a solid, polyolefin insulation or foamed polyolefin with a solid polyolefin skin. The solid insulation provides a more robust Core Construction, whereas the foam skin insulation offers space saving advantages.

A variety of sheath designs are available that provide electrical shielding necessary for proper grounding and mechanical protection against rodents and other physical damage. A black, weather-resistant polyethylene jacket is used on all constructions for protection against long-term outdoor exposure.

The temperature range that Telecommunications cable can withstand is:

For storage and operation:
-45°C to 80°C
-49°F to 176°F

For installation:
-30°C to 60°C
-22°F to 140°F

All cables are equipped with surface-printed identification and sequential footage markings.

The cable design for 19, 22 and 24 AWG sizes has the transmission performance capability of 100Ω, Category 3 Backbone UTP Cables specified in TIA/EIA-568-C.

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Filled Solid Cable

RDUP (RUS) PE-39 AL

Spec. 2002

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22 and 24 AWG

Insulation:

- Solid, high density polyethylene, 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

Compliance:

- Rural Development Utility Program (RDUP) 7 CFR 1755.390 (RUS PE-39)
- RoHS Compliant (effective 1/1/10)

Packaging:

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



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7524507	6/19	0.60	140	5000
7524515	12/19	0.75	250	5000
7524523	25/19	0.97	450	5000
7524556	6/22	0.45	90	5000
7524564	12/22	0.56	165	5000
7524572	25/22	0.71	245	5000
7524580	50/22	0.95	425	5000
7524598	100/22	1.20	765	2500
7524606	200/22	1.70	1465	2500
7524614	6/24	0.43	70	5000
7524622	12/24	0.51	105	5000
7524648	25/24	0.61	170	5000
7524655	50/24	0.81	285	5000
7524663	75/24	0.92	415	5000
7524671	100/24	1.00	525	5000
7524689	150/24	1.20	745	5000
7524697	200/24	1.30	960	2500
7524705	300/24	1.60	1380	2500
7524713	400/24	1.90	1810	2500
7524721	600/24	2.20	2750	1250
7524739	900/24	2.70	4010	1250
7524960	1200/24	3.10	5400	1000

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

Filled Solid 5-Mil Copper Cable

RDUP (RUS) PE-39 CU

Spec. 2002



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7525009	6/19	0.60	160	5000
7525017	12/19	0.75	270	5000
7525025	25/19	0.97	480	5000
7525033	50/19	1.30	850	2500
7525058	6/22	0.45	100	5000
7525066	12/22	0.56	150	5000
7525074	25/22	0.71	265	5000
7525082	50/22	0.95	450	5000
7525073	75/22	1.10	640	5000
7525090	100/22	1.20	805	2500
7525081	150/22	1.40	1175	2500
7525108	200/22	1.70	1515	2500
7525116	6/24	0.43	80	5000
7525124	12/24	0.51	115	5000
7525140	25/24	0.61	185	5000
7525157	50/24	0.81	305	5000
7525165	75/24	0.92	440	5000
7525173	100/24	1.00	555	5000
7525181	150/24	1.20	775	5000
7525199	200/24	1.30	995	2500
7525207	300/24	1.60	1425	2500
7525215	400/24	1.90	1870	2500
7525223	600/24	2.20	2810	1250
7525231	900/24	2.70	4050	1250
7525231	1200/24	3.10	5480	1000

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

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22 and 24 AWG

Insulation:

- Solid, high density polyethylene, 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:

Copper Shield:

- Corrugated 0.005" copper 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

Compliance:

- Rural Development Utility Program (RDUP) 7 CFR 1755.390 (RUS PE-39)
- RoHS Compliant (effective 1/1/10)

Packaging:

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

Filled Solid Copper-Bearing Gopher-Resistant Cable Spec. 2002

RDUP (RUS) PE-39 GR

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22 and 24 AWG

Insulation:

- Solid, high density polyethylene, 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:

Copper-Bearing Shield:

- Corrugated, copper-bearing gopher-resistant 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
- The copper-bearing tape provides increased mechanical protection and gopher resistance

Compliance:

- Rural Development Utility Program (RDUP) 7 CFR 1755.390 (RUS PE-39)
- RoHS Compliant (effective 1/1/10)

Packaging:

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



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7528755	6/19	0.60	155	5000
7528763	12/19	0.75	265	5000
7528789	25/19	0.97	475	5000
7528797	50/19	1.30	845	2500
7528003	6/22	0.45	105	5000
7528011	12/22	0.56	150	5000
7528037	25/22	0.71	260	5000
7528045	50/22	0.95	445	5000
7528060	100/22	1.20	795	2500
7528078	150/22	1.40	1170	2500
7528086	200/22	1.70	1505	2500
7528102	6/24	0.43	80	5000
7528110	12/24	0.51	115	5000
7528136	25/24	0.61	180	5000
7528144	50/24	0.81	300	5000
7528151	75/24	0.92	435	5000
7528169	100/24	1.00	550	5000
7528177	150/24	1.20	775	5000
7528185	200/24	1.30	985	2500
7528193	300/24	1.60	1410	2500
7528201	400/24	1.90	1855	2500
7528219	600/24	2.20	2805	1250
7528227	900/24	2.70	4050	1250
7528235	1200/24	3.10	5945	1000

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

Filled Foam Skin Cable

RDUP (RUS) PE-89 AL

Spec. 2007



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7525504	6/19	0.57	140	5000
7525512	12/19	0.65	215	5000
7525538	25/19	0.85	395	5000
7525595	6/22	0.42	85	5000
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
7525678	200/22	1.36	1255	2500
7525686	300/22	1.70	1830	1250
7525751	6/24	0.39	65	5000
7525769	12/24	0.43	90	5000
7525785	25/24	0.53	145	5000
7525793	50/24	0.64	240	5000
7525819	100/24	0.84	435	5000
7525827	150/24	1.00	635	5000
7525835	200/24	1.10	795	2500
7525843	300/24	1.30	1145	2500
7525850	400/24	1.48	1510	2500
7525868	600/24	1.79	2260	1250
7525876	900/24	2.22	3390	1250
7526973	1200/24	2.54	4430	1000
7526981	1500/24	2.80	5500	1000
7526999	1800/24	3.03	6660	1000

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

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22 and 24 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

Compliance:

- Rural Development Utility Program (RDUP) 7 CFR 1755.890 (RUS PE-89)
- RoHS Compliant (effective 1/1/10)

Packaging:

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

Filled Foam Skin CACSP Cable

RDUP (RUS) PE-89 CACSP

Spec. 2007

Core Construction:

Conductors:

- Solid, annealed copper; sizes 22 and 24 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

CACSP Sheath:

Aluminum Shield:

- Corrugated, copolymer-coated, 0.008" aluminum tape applied longitudinally over the core wrap

Steel Shield:

- Corrugated, copolymer-coated, 0.006" steel tape applied longitudinally over the aluminum tape with an overlap
- The sheath interfaces are flooded with an adhesive water-blocking compound

Jacket:

- Black, linear low density polyethylene

Application(s):

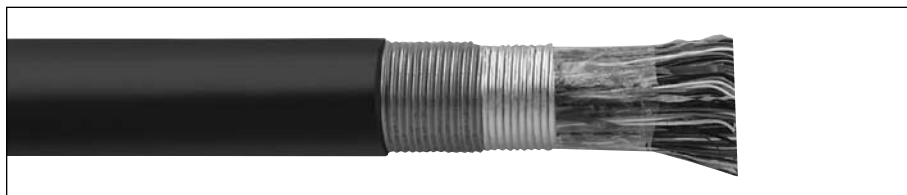
- Intended for duct and direct buried installations where protection against water and moisture entry is required and may also be installed aerially
- The addition of the steel tape armor provides increased mechanical protection and gopher resistance

Compliance:

- Rural Development Utility Program (RDUP) 7 CFR 1755.890 (RUS PE-89)
- RoHS Compliant (effective 1/1/10)

Packaging:

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



Nominal Cable Data

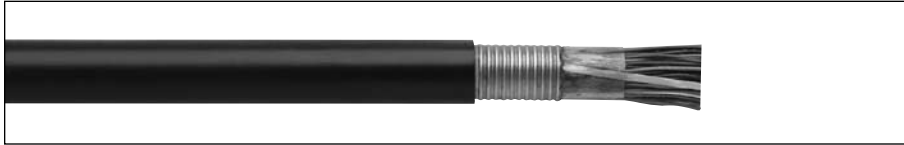
CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7526551	6/22	0.46	120	5000
7526569	12/22	0.55	170	5000
7526577	25/22	0.66	265	5000
7526585	50/22	0.85	440	5000
7526601	100/22	1.07	765	2500
7526619	200/22	1.41	1380	2500
7526627	300/22	1.67	1985	1250
7071608	6/24	0.41	95	5000
7526668	12/24	0.46	125	5000
7526684	25/24	0.57	190	5000
7526692	50/24	0.68	300	5000
7526718	100/24	0.88	510	5000
7526726	150/24	1.04	735	5000
7526734	200/24	1.13	900	2500
7526742	300/24	1.32	1265	2500
7526759	400/24	1.52	1655	2500
7526767	600/24	1.82	2435	1250
7526775	900/24	2.20	3585	1250
7071616	1200/24	2.52	4635	1000

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

Filled Foam Skin ALPETH Cable

BELL SYSTEM TYPE ANBA (19 AWG) ANMA (24 AWG)
ANAA (22 AWG) ANTA (26 AWG)

Spec. 2111



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
2036300	25/19	0.83	406	5000
2036301	50/19	0.98	743	2500
2036302	100/19	1.50	1342	2500
2036303	200/19	2.00	2608	1250
2036304	300/19	2.40	3839	1250
2036307	25/22	0.61	219	5000
2036308	50/22	0.77	383	5000
2036309	100/22	1.02	710	2500
2036310	200/22	1.37	1286	2500
2036311	300/22	1.66	1930	1250
2036312	400/22	1.95	2539	1250
2036313	600/22	2.40	3912	1250
2036314	900/22	3.00	5793	1000
2036320	25/24	0.53	162	5000
2036321	50/24	0.64	265	5000
2036322	100/24	0.83	467	5000
2036323	200/24	1.10	859	2500
2036324	300/24	1.31	1228	2500
2036325	400/24	1.50	1616	2500
2036326	600/24	1.81	2386	1250
2036327	900/24	2.21	3545	1250
2036328	1200/24	2.50	4675	1000
2036329	1500/24	2.84	5853	1000
2036330	1800/24	3.20	6380	1000
2036331	2100/24	3.50	8150	750
2036334	25/26	0.49	114	5000
2036335	50/26	0.61	191	5000
2036336	100/26	0.78	329	5000
2036337	200/26	0.96	570	5000
2036338	300/26	1.20	847	2500
2036339	400/26	1.30	1075	2500
2036340	600/26	1.60	1564	1250
2036341	900/26	1.90	2312	1250
2036342	1200/26	2.10	3039	1250
2036343	1500/26	2.40	3789	1250
2036344	1800/26	2.60	4456	1000
2036345	2100/26	2.90	5352	1000
2036346	2400/26	3.00	6013	1000

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

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22, 24 and 26 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

Compliance:

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

Packaging:

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

Filled Foam Skin ASP Cable

Spec. 2100

BELL SYSTEM TYPE ANBW (19 AWG) ANMW (24 AWG)
ANAW (22 AWG) ANTW (26 AWG)

Core Construction:

Conductors:

- Solid, annealed copper; sizes 19, 22, 24 and 26 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

ASP Sheath:

Aluminum Shield:

- Corrugated, 0.008" aluminum tape applied longitudinally over the core wrap

Steel Shield:

- Corrugated, 0.006" steel tape applied longitudinally over the aluminum tape 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

Compliance:

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

Packaging:

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



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
6987481	25/19	0.87	460	5000
6987499	50/19	1.15	810	2500
6987507	100/19	1.45	1432	2500
6987515	200/19	2.03	2748	1250
6987523	300/19	2.45	3980	1250
6987572	25/22	0.65	270	5000
6987580	50/22	0.82	452	5000
6987606	100/22	1.06	790	2550
6987622	200/22	1.41	1397	2550
6987630	300/22	1.69	2035	1250
6987648	400/22	1.96	2682	1250
6987655	600/22	2.38	3993	1250
6987663	900/22	2.87	5857	1000
6987671	1200/22	3.32	7667	750
6987705	25/24	0.55	193	5000
6987713	50/24	0.66	310	5000
6987721	100/24	0.87	525	5000
6987739	200/24	1.14	932	2500
6987747	300/24	1.34	1317	2500
6987754	400/24	1.54	1728	2500
6987762	600/24	1.83	2513	1250
6987770	900/24	2.25	3705	1250
6987788	1200/24	2.55	4829	1000
6987796	1500/24	2.82	5945	1000
6987804	1800/24	3.09	7152	1000
6987812	25/26	0.50	147	5000
6987820	50/26	0.61	227	5000
6987838	100/26	0.80	385	5000
6987846	200/26	1.00	658	5000
6987853	300/26	1.19	928	5000
6987861	400/26	1.30	1208	2500
6987879	600/26	1.55	1687	3300
6987887	900/26	1.87	2437	2500
6987895	1200/26	2.10	3180	2000
7507007	1500/26	2.40	3940	1250
7507015	1800/26	2.60	4625	1400
7502958	2100/26	2.74	5435	1000
7507023	2400/26	2.95	6111	1000
7512650	2700/26	3.10	6915	1000
7512668	3000/26	3.32	7528	750

Data subject to change without notice. Contact your Customer Service Representative for latest information. This design is for duct installation only.

Filled Foam Skin "S" Screened ASP Cable

Spec. 2109-F

BELL SYSTEM TYPE KNAW (22 AWG)
KNMW (24 AWG)



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7528250	28/22	0.74	321	9000
7528268	54/22	0.92	516	9000
7528276	106/22	1.20	871	6000
7528284	158/22	1.40	1209	4500
7528292	210/22	1.60	1550	3000
7528300	314/22	1.90	2220	3000
7528318	418/22	2.10	3008	2000
7528326	616/22	2.50	4140	1500
2039061	28/24	0.62	222	9000
2039062	54/24	0.75	335	9000
2039063	106/24	0.96	547	6000
2039064	210/24	1.30	970	4500

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

Core Construction:

Conductors:

- Solid, annealed copper; size 22 and 24 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:

- Twisted pairs are assembled into 12, 13 and 25 pair units, or into 50 pair multi-units
- Service pair units of 4 to 18 pairs are assembled for inclusion into the cable

"S" Screen:

- Each half of the cable core is separated from the other by use of a 0.004" plastic-coated aluminum screen which divides the core into two electrically isolated compartments

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

ASP Sheath:

Aluminum Shield:

- Corrugated, 0.008" aluminum tape applied longitudinally over the core wrap

Steel Shield:

- Corrugated, 0.006" steel tape applied longitudinally over the aluminum tape with an overlap
- The sheath interfaces are flooded with an adhesive water-blocking compound

Jacket:

- Black, linear low density polyethylene

Application(s):

- Intended for direct buried installation
- Designed for digital two-way T-Carrier signal operation under one cable sheath

Compliance:

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

Packaging:

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

Wire Products

3

Wire products are small size distribution wires used as the last link in bringing telecommunication services to the subscriber. These services can incorporate voice, data and video channels.

Wire products are used in constructions from one pair to six pairs. They are made for either self-supported aerial or for buried service applications.

Aerial Services Wires are supported by either an integral steel wire, glass fibers imbedded in the jacket, or by the use of high tensile copper-clad steel conductors.

Buried Service Products are water-resistant and can be made with different shielding materials for mechanical protection during installation and against damage by rodents. All Buried Service Wire is equipped with sequential footage markings.

The temperature range that Telecommunications cable can withstand is:

For storage and operation:

-45°C to 80°C

-49°F to 176°F

For installation:

-30°C to 60°C

-22°F to 140°F

Multi-pair Aerial and Filled Service Wires have the transmission performance capability of 100Ω, Category 3 Horizontal UTP Cables specified in TIA/EIA-568-C.

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C Rural Wire Bell System Type Spec. 4283	20
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Multiple Pair Aerial Service Wire Bell System Type Spec. 4298	22
Buried Service Wire Outdoor Category 5e ICEA S-90-661 GenSPEED® 5000	23
Buried Service Wire Gopher-Resistant RDUP (RUS) PE-86 ICEA S-86-634 Spec. 4284	24
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Glass Supported Drop Wire 2, 3 and 6 Pair

BELL SYSTEM TYPE AND RDUP (RUS)

Spec. 4292-4294



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
2090021	2/22	0.20 x 0.40	50	500 RS
2090008*	2/22	0.20 x 0.40	55	750 PP
2090012	2/22	0.20 x 0.40	50	750 CL
2090010	2/22	0.20 x 0.40	45	1000 CL
2090053	2/22	0.20 x 0.40	50	3500 RL
2090052*	3/22	0.28 x 0.44	60	600 PP
2090018*	6/22	0.27 x 0.50	105	400 PP
2090014	6/22	0.27 x 0.50	85	400 CL
2090055	6/22	0.27 x 0.50	85	500 CL
2090051	6/22	0.27 x 0.50	100	1000 RL
2090056	6/22	0.27 x 0.50	100	2500 RL
2090013	6/22	0.27 x 0.50	100	3500 RL

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

* These Telecommunications wire items have sequential markings.

Product Construction:

Conductors:

- 22 AWG solid annealed copper

Insulation:

- Color-coded high density polyethylene

Assembly:

- 2, 3 or 6 twisted pairs and rip cord placed parallel between the glass strength members

Jacket:

- Black, flame-retardant, weather- and abrasion-resistant PVC compound extruded over core assembly

Application(s):

- Self-supporting drop wire intended for aerial service connection to the subscriber
- Compatible with "P" Clamp/Wedge type hardware
- Glass strength member is lightweight, easy to install
- No need for support wire grounding
- Not affected by salt air and corrosive environments

Compliance:

- Telcordia (Bellcore) Specification GR-3163-CORE
- Rural Development Utility Program (RDUP) Bulletin 1753 F-204
- RoHS Compliant (effective 1/1/10)

Packaging:

- Available in Pull-Pac™ cartons (PP), coils (CL), reels (RL) and reelsaver (RS)



Passes UL VW-1
Flame Test

Underwriters Laboratories Inc.



Drop Wire

BELL SYSTEM TYPE F DROP AND RDUP (RUS) PE-7

Spec. 4295

Product Construction:

Conductors:

- 18½ AWG solid 30% conductivity extra high strength copper-covered steel

Sheath:

- Black, flame-, weather- and abrasion-resistant PVC compound extruded over two conductors in a parallel configuration

Polarity Identification:

- Polarity ridge on one leg of the web located at 45° above the major axis of the wire cross-section

Application(s):

- Self-supporting one pair parallel conductor drop wire intended for aerial service connection to the subscriber

Compliance:

- Telcordia (Bellcore) Specification GR-3163-CORE
- Rural Development Utility Program (RDUP) Bulletin 1753 F-204 (RUS PE-7)
- ANSI/ICEA S-89-648-1993
- RoHS Compliant (effective 1/1/10)

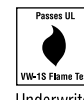
Packaging:

- Available in Pull-Pac™ cartons (PP), coils in cartons (CL/CTN) and reels (RL)



CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7021421	1/18½	0.130 x 0.255	25	1000 CL
7021496	1/18½	0.130 x 0.255	30	1000 PP

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



Passes UL VW-1
Flame Test
Underwriters Laboratories Inc.



C Rural Wire

BELL SYSTEM TYPE

Spec. 4283

Product Construction:

Conductors:

- 14 or 12 AWG solid 30% conductivity extra high strength copper-covered steel

Sheath:

- Black, high density polyethylene compound extruded over two conductors in a parallel configuration

Polarity Identification:

- Polarity ridge on one minor face of the insulation located at 45° above the major axis of the wire cross-section

Application(s):

- Self-supporting one pair parallel conductor drop wire intended for aerial distribution in rural exchange areas

Compliance:

- Telcordia (Bellcore) Specification TA-TSY-000125
- RoHS Compliant (effective 1/1/10)

Packaging:

- Available in coils (CL) and reels (RL)



Nominal Cable Data

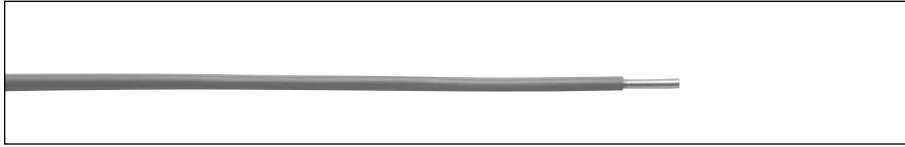
CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
6307482	1/14	0.160 x 0.280	40	1000 CL
3114733	1/14	0.160 x 0.280	45	5000 (21") RL
7013881	1/14	0.160 x 0.280	45	5500 (29") RL
2091013	1/12	0.190 x 0.315	60	4000 (21") RL

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

PVC Insulated Ground Wire

BELL SYSTEM TYPE

Spec. 2621



Product Construction:

Conductor:

- Solid annealed copper

Insulation:

- Light olive gray, flame-retardant, weather- and abrasion-resistant PVC compound extruded over the conductor

Application(s):

- Single conductor for connection to ground for customer premises or network equipment and station protectors

Compliance:

- Telcordia (Bellcore) Specification TA-TSY-000120
- UL Listed VW-1
- RoHS Compliant (effective 1/1/10)

Packaging:

- Available in coils (CL), coils in cartons (CL/CTN) and reels (RL)

Nominal Cable Data

CATALOG NUMBER	AWG	CABLE CODE	NOM. O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
7515307	6	V-61-C	0.22	95	600 CL
7515257	6	V-61-C	0.22	100	4000 RL
7515265	10	V-101-C	0.15	45	200 CL/CTN

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



Passes UL VW-1
Flame Test

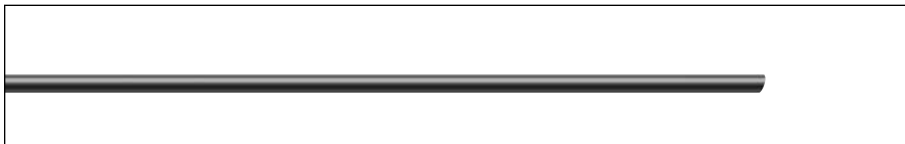
Underwriters Laboratories Inc.



Bare Ground Wire

BELL SYSTEM TYPE

Spec. 2622



Product Construction:

Conductor:

- Solid annealed copper

Application(s):

- Single conductor for grounding aerial cables and pole-mounted equipment. Proper telephone co. grounding practices must be followed

Compliance:

- Telcordia (Bellcore) Specification TA-TSY-000120
- ASTM B-3
- RoHS Compliant (effective 1/1/10)

Packaging:

- Available in coils (CL), coils in cartons (CL/CTN) and reels (RL)

Nominal Cable Data

CATALOG NUMBER	AWG	CABLE CODE	NOM. O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
2091090	6	B-6	0.16	90	50 CL/CTN
2091093	6	B-6	0.16	85	600 CL
2091095	6	B-6	0.16	90	4000 RL

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



Multiple Pair Aerial Service Wire

BELL SYSTEM TYPE

Spec. 4298

Product Construction:

Conductors:

- 22 AWG solid annealed copper

Insulation:

- Color-coded high density polyethylene

Jacket:

- The pairs and a .083" diameter galvanized steel messenger are enclosed in a black flame-retardant, weather- and abrasion-resistant PVC jacket in a Figure 8 configuration

Application(s):

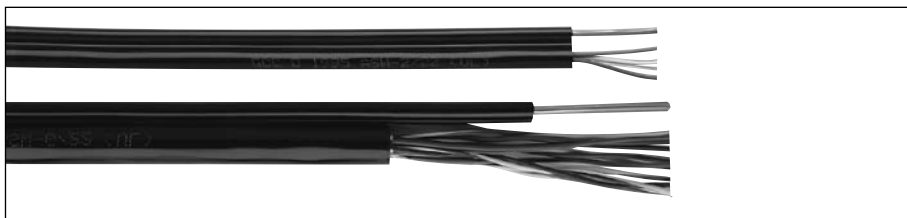
- Provides multiple line telecommunication service connection to the subscriber

Compliance:

- Telcordia (Bellcore) Specification GR-3163-CORE
- RoHS Compliant (effective 1/1/10)

Packaging:

- Available in coils (CL) and reels (RL)



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
2091018	2/22	0.30 x 0.50	50	600 CL
2091021	6/22	0.35 x 0.55	85	400 CL
2091015	6/22	0.35 x 0.55	100	500 RL
2091016	6/22	0.35 x 0.55	90	3500 RL

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

Outdoor Category 5e 4 Pair 24 AWG Buried Service Wire

ICEA S-90-661

GenSPEED® 5000



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	ARMOR
5136100	4/24	0.230	25	NONE
5136101	4/24	0.340	75	Aluminum

Data subject to change without notice. Contact your Customer Service Representative for latest information.
GenSPEED® 5000 Outdoor Category 5e cable with armor can be installed directly in the ground, in a duct, or aerially lashed to a strength member. The non-armored design is for duct installation only.

Electrical Characteristics

DC Resistance (max) Ohms/100 m (328 ft) @ 20°C	9.38	Propagation Delay (max) ns @ 100 MHz	583
Mutual Capacity (nom) pF/ft @ 1 kHz	17	Delay Skew (max) ns/100 m	45
Nominal Velocity of Propagation (NVP) % Speed of Light	69	Characteristic Impedance Frequency (f): 1-100 MHz	Ohms 100 ± 15

Electrical Characteristics

Frequency (MHz)	Attenuation (max)	NEXT (min)	PSNEXT (min)	ELFEXT (min)	PSELFEXT (min)	Return Loss (min)
1	2.0	65.3	62.3	63.8	60.8	20.0
4	4.1	56.3	53.3	51.7	48.7	23.0
8	5.8	51.3	48.3	45.7	42.7	24.5
10	6.5	50.3	47.3	43.8	40.8	25.0
16	8.2	47.3	44.4	39.7	36.7	25.0
20	9.3	45.3	42.8	37.7	34.7	25.0
25	10.4	44.3	41.3	35.8	32.8	24.3
31.25	11.7	42.9	39.9	33.9	30.9	23.6
62.5	17.0	38.4	35.4	27.8	24.8	21.5
100	22.0	35.3	32.3	23.8	20.8	20.1
155	28.1	32.4	29.4	20.0	17.0	—
200	32.4	30.8	27.8	17.8	14.8	—
250	36.9	29.3	26.3	15.8	12.8	—
300	41.0	28.1	25.1	14.3	11.3	—
350	44.9	27.1	24.1	12.9	9.9	—

Note: Values are expressed in dB per 100m (328ft.) length.

Product Construction:

Conductors:

- 24 AWG solid bare annealed copper

Insulation:

- Color-coded polyolefin

Flooding Compound:

- Waterproof gel prevents moisture migration

Jacket:

- Black UV- and abrasion-resistant polyethylene (PE)
- TRU-Mark® print legend (1000' to 0')
- The jacket is designed to withstand low and high temperatures
-30°C to 60°C per installation
-45°C to 80°C per operation

Application(s):

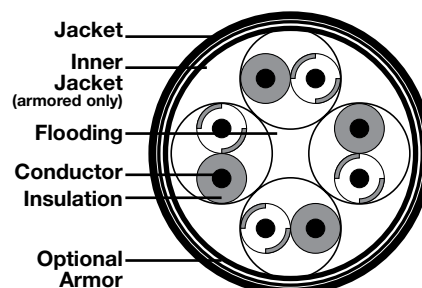
- GenSPEED® 5000 outdoor category 5e cable with armor can be installed directly in the ground, in a duct or aerially lashed to a strength member. The non-armored design is for duct installation only
- 1000 BASE-T (Gigabit Ethernet)
- 100/10BASE-T (IEEE 802.3)
- 52/155 Mbps ATM
- Voice/T1

Compliance:

- MIL-C-24640A water penetration requirements
- ANSI/TIA/EIA 568B.2 (Category 5e)
- ANSI/ICEA S-90-661 (Category 5e)
- NEMA WC63.1 (Category 5e)
- ISO 11801 (Category 5e)
- RoHS Compliant Directive 2002/95/EC

Packaging:

- 1000' Reels (RL)
- Non-standard packaging is also available



Double Jacketed Buried Service Wire

Spec. 4284

GOPHER-RESISTANT RDUP (RUS) PE-86
ICEA S-86-634

Product Construction:

Conductors:

- Solid annealed copper

Insulation:

- High density polyethylene

Pairing:

- Varying pair lays

Core Filling:

- 80°C filling and flooding compounds

Inner Jacket:

- Linear low density polyethylene

Shield:

- 0.005" corrugated copper-clad alloy steel tape

Rip Cord:

- Under the outer jacket

Outer Jacket:

- Black, linear low density polyethylene

Application(s):

- Intended for use in buried service application to the subscriber loops
- The shielding material provides resistance to gopher damage

Compliance:

- ICEA S-86-634
- RDUP 7 CFR 1755.860 (RUS PE-86) for 2 and 3 pair constructions, formerly PE-54 CCS
- RoHS Compliant (effective 1/1/10)

Packaging:

- Standard coils or on non-returnable plywood reels in lengths as shown above



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. INCHES	WEIGHT LBS/MFT	STANDARD LENGTH (FT)
2095061	2/22	0.32	70	2500
2095002	2/22	0.32	70	5000
2095151	3/22	0.34	85	1000
2095064	3/22	0.34	85	2500
2095016	3/22	0.34	85	5000
2095150	6/22	0.40	125	1000
2095065	6/22	0.40	120	2500
2095063	6/22	0.40	115	5000
2095067	3/24	0.31	60	2500
2095066	3/24	0.31	65	5000
2095068	6/24	0.36	80	2500
2095069	6/24	0.36	80	5000

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

Double Jacketed Buried Service Wire

WITH ALUMINUM SHIELD ICEA S-86-634

Spec. 4287**Nominal Cable Data**

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
2095138	2/22	0.33	55	1000
2095125	2/22	0.33	55	2500
2095126	2/22	0.33	55	5000
2095127	3/22	0.35	65	2500
2095128	3/22	0.35	65	5000
2095137	6/22	0.41	95	1000
2095129	6/22	0.41	95	2500
2095130	6/22	0.41	95	5000
2095131	2/24	0.30	50	2500
2095132	2/24	0.30	50	5000
2095133	3/24	0.32	55	2500
2095134	3/24	0.32	55	5000
2095135	6/24	0.37	75	2500
2095136	6/24	0.37	75	5000

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

Product Construction:**Conductors:**

- Solid annealed copper

Insulation:

- High density polyethylene

Pairing:

- Varying pair lays

Core Filling:

- 80°C filling and flooding compounds

Inner Jacket:

- Linear low density polyethylene

Shield:

- Polymer-coated 0.008" aluminum tape

Rip Cord:

- Under the outer jacket

Outer Jacket:

- Black, linear low density polyethylene

Application(s):

- Intended for use in buried service application to the subscriber loops

Compliance:

- ICEA S-86-634
- RoHS Compliant (effective 1/1/10)

Packaging:

- Standard coils or on non-returnable plywood reels in lengths as shown above

Double Jacketed Buried Service and Distribution Wire Spec. 3503

BELL SYSTEM TYPE—GOPHER-RESISTANT

Product Construction:

Conductors:

- 22 or 19 AWG solid annealed copper

Insulation:

- High density polyethylene

Pairing:

- Varying pair lays

Core Filling:

- 80°C filling compound

Inner Jacket:

- Linear low density polyethylene

Shield:

- 0.005" corrugated copper-clad alloy steel tape

Rip Cords:

- Under each jacket

Outer Jacket:

- Black, linear low density polyethylene

Application(s):

- Intended for use in buried service application to the subscriber loops
- The shielding material provides resistance to gopher damage

Compliance:

- Telcordia (Bellcore) Specification GR-3163-CORE
- RoHS Compliant (effective 1/1/10)

Packaging:

- Standard coils or on non-returnable plywood reels in lengths as shown above



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
2095093	3/22	0.34	70	500 Coil
2095089	3/22	0.34	80	1200 Reel
2095090	3/22	0.34	80	3000 Reel
2095091	3/22	0.34	75	5000 Reel
2095094	6/22	0.40	115	800 Reel
2095095	6/22	0.40	105	3000 Reel
2095096	6/22	0.40	110	5000 Reel
2095100	3/19	0.42	115	1200 Reel
2095101	3/19	0.42	110	3000 Reel
2095102	3/19	0.42	120	5000 Reel
2095105	6/19	0.51	160	800 Reel
2095107	6/19	0.51	155	3000 Reel
2095106	6/19	0.51	160	5000 Reel

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

Single Jacketed Buried Service Wire

BELL SYSTEM TYPE C SERVICE

Spec. 3502



Nominal Cable Data

CATALOG NUMBER	PAIRS AWG	O.D. (INCHES)	WEIGHT (LBS/MFT)	STANDARD LENGTH (FT)
2095088	3/22	0.30	60	500 Coil
2095160	3/22	0.30	65	1200 Reel
2095084	3/22	0.30	65	3000 Reel
2095086	3/22	0.30	60	5000 Reel
2095087	3/22	0.30	60	8000 Reel
2095161	6/22	0.37	95	800 Reel
2095098	6/22	0.37	95	3000 Reel
2095099	6/22	0.37	90	5000 Reel

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

Product Construction:

Conductors:

- 22 AWG solid annealed copper

Insulation:

- High density polyethylene

Pairing:

- Varying pair lays

Core Filling:

- 80°C filling and flooding compounds

Core Wrap:

- Polyester tape

Shield:

- 0.004" corrugated commercial bronze or copper-clad steel tape

Rip Cord:

- Under the jacket

Jacket:

- Black, linear low density polyethylene

Application(s):

- Intended for use in buried service application to the subscriber loops

Compliance:

- Telcordia (Bellcore) Specification GR-3163-CORE
- RoHS Compliant (effective 1/1/10)

Packaging:

- Standard coils or on non-returnable plywood reels in lengths as shown above

Technical Information

4

The complexity of today's Outside Voice and Data transmissions has generated an increasing demand for more technical information. In the current business world, customer service representatives, engineers, distributors and end-users do not have time to search for answers to their technical questions.

To this end, General Cable is including a limited technical section to help simplify these decisions and enable you to more expeditiously locate the products you need and answer product-specific questions.

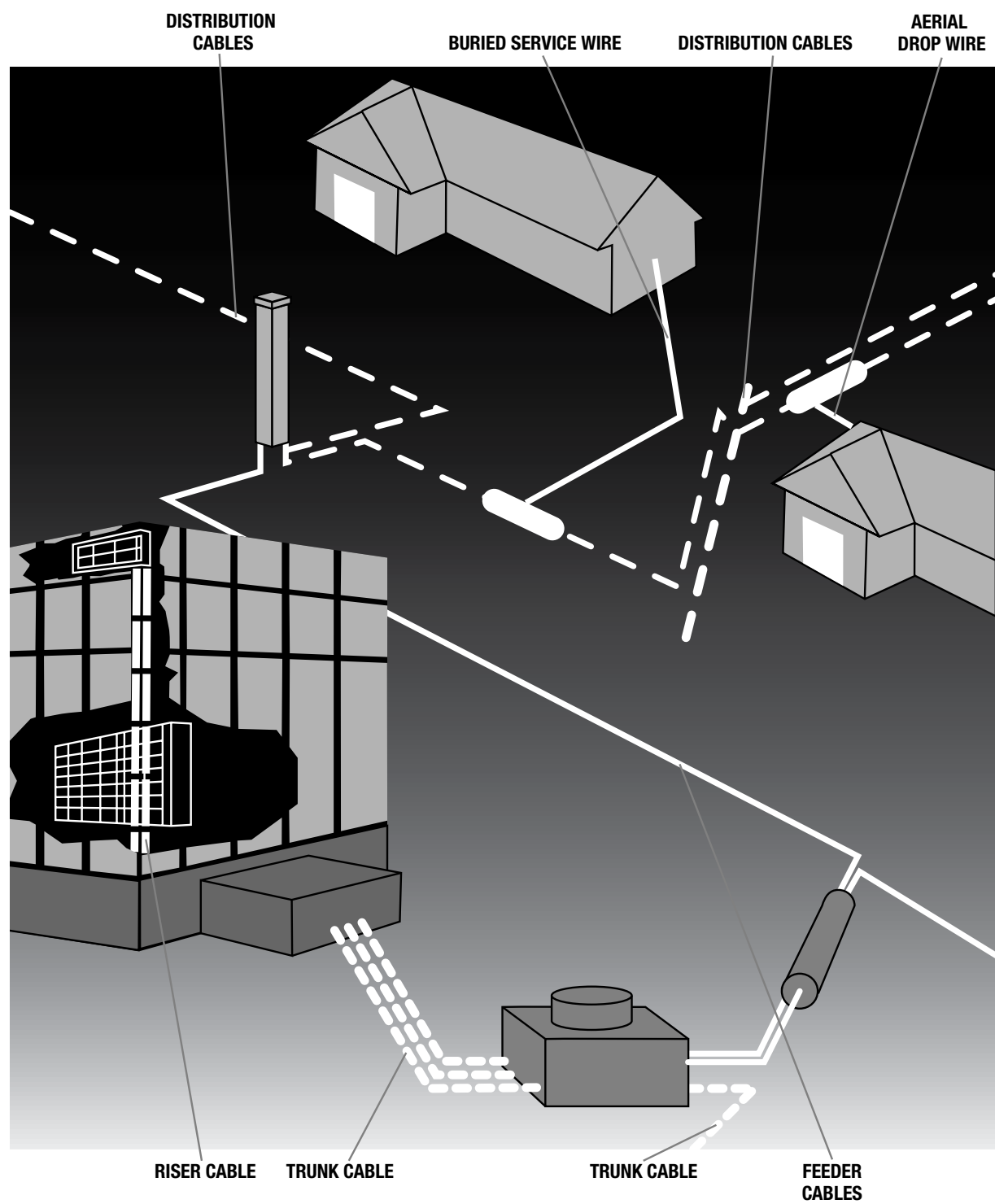
Reel size and weight charts based on O.D. are available upon request from your Customer Service Representative.

Sag and Tension tables are available on the Telecommunications Web page under "Resource/Services."

For additional technical information, please contact your sales representative or our customer service department.

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Glossary	32-34
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Local Distribution Network



Color Code Chart

PLASTIC INSULATED COMMUNICATION CABLES

25 PAIR UNIT COLORS

PAIR NUMBER	RING COLOR	TIP COLOR	PAIR NUMBER	RING COLOR	TIP COLOR
1	Blue	White	13	Green	Black
2	Orange	White	14	Brown	Black
3	Green	White	15	Slate	Black
4	Brown	White	16	Blue	Yellow
5	Slate	White	17	Orange	Yellow
6	Blue	Red	18	Green	Yellow
7	Orange	Red	19	Brown	Yellow
8	Green	Red	20	Slate	Yellow
9	Brown	Red	21	Blue	Violet
10	Slate	Red	22	Orange	Violet
11	Blue	Black	23	Green	Violet
12	Orange	Black	24	Brown	Violet
			25	Slate	Violet

UNIT BINDER COLORS FOR FULL COLOR CODE

GROUP NUMBER	BINDER COLORS	PAIR RANGE
1	White - Blue	1 - 25
2	White - Orange	26 - 50
3	White - Green	51 - 75
4	White - Brown	76 - 100
5	White - Slate	101 - 125
6	Red - Blue	126 - 150
7	Red - Orange	151 - 175
8	Red - Green	176 - 200
9	Red - Brown	201 - 225
10	Red - Slate	226 - 250
11	Black - Blue	251 - 275
12	Black - Orange	276 - 300
13	Black - Green	301 - 325
14	Black - Brown	326 - 350
15	Black - Slate	351 - 375
16	Yellow - Blue	376 - 400
17	Yellow - Orange	401 - 425
18	Yellow - Green	426 - 450
19	Yellow - Brown	451 - 475
20	Yellow - Slate	476 - 500
21	Violet - Blue	501 - 525
22	Violet - Orange	526 - 550
23	Violet - Green	551 - 575
24	Violet - Brown	576 - 600

UNIT BINDER COLORS FOR MIRROR IMAGE 100 PAIR SUPER-UNIT

GROUP NUMBER	BINDER COLORS	PAIR RANGE
1	Blue	1 - 25
2	Orange	26 - 50
3	Green	51 - 75
4	Brown	76 - 100

300 PAIR SUPER-UNIT

GROUP NUMBER	BINDER COLORS	PAIR RANGE
1	White - Blue	1 - 25
2	White - Orange	26 - 50
3	White - Green	51 - 75
4	White - Brown	76 - 100
5	White - Slate	101 - 125
6	Red - Blue	126 - 150
7	Red - Orange	151 - 175
8	Red - Green	176 - 200
9	Red - Brown	201 - 225
10	Red - Slate	226 - 250
11	Black - Blue	251 - 275
12	Black - Orange	276 - 300

SUPER-UNIT BINDER COLORS FOR MIRROR IMAGE (See drawings on the next page)

SPARE PAIRS FOR MIRROR IMAGE

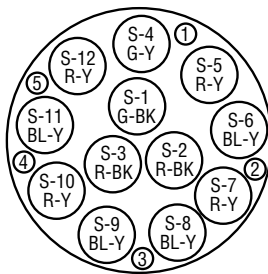
PAIR NUMBER	PAIR COLORS
1	White - Red
2	White - Black
3	White - Yellow
4	White - Violet
5	Red - Black
6	Red - Yellow
7	Red - Violet
8	Black - Yellow
9	Black - Violet
10	Yellow - Violet
11	Blue - Orange
12	Blue - Green
13	Blue - Brown
14	Blue - Slate
15	Orange - Green

SUPER-UNIT BINDER COLORS FOR FULL COLOR CODE

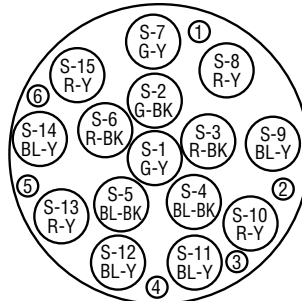
S.U. BINDER COLOR	PAIR RANGE
White	1 - 600
Red	601 - 1200
Black	1201 - 1800
Yellow	1800 - 2400

Color Code Chart

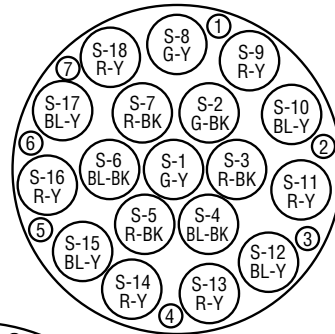
SUPER-UNIT BINDER COLORS FOR MIRROR IMAGE



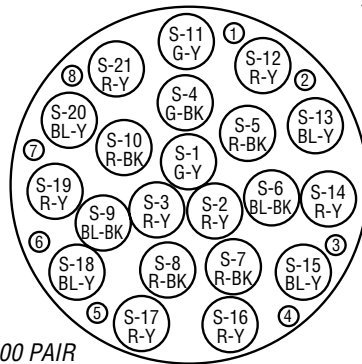
1200 PAIR



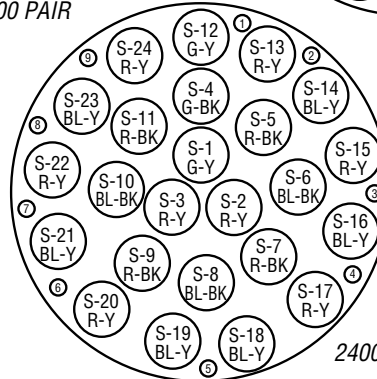
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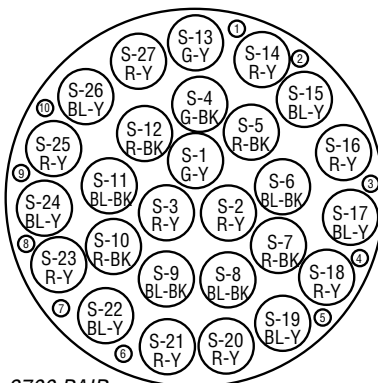
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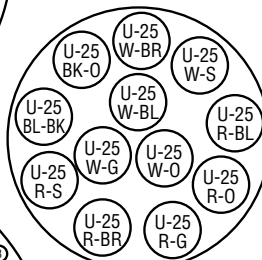
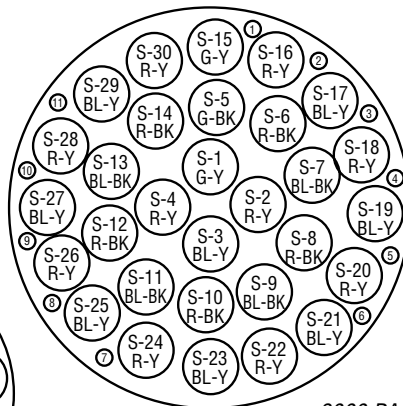
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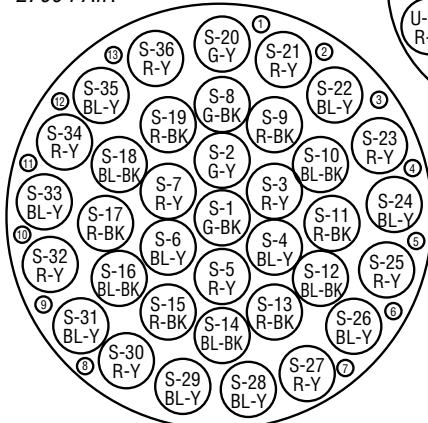
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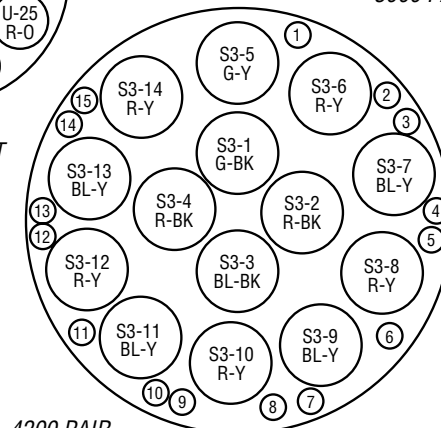
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300 PAIR
SUPER-UNIT

3000 PAIR



3600 PAIR



4200 PAIR

Glossary

Access Line: A local access connection (fixed or wireless) between a customer's premises and a carrier's central office switch.

Aerial Cable: Cable suspended in the air on poles or other overhead structures.

Air Core: A telephone outside plant cable construction for aerial and duct installation in which the insulated conductors in the cable core are surrounded by air.

Alloy: A combination of two or more metals to form a new or different metal, having specific or desirable qualities.

ALPETH: Telephone cable sheath employing a corrugated aluminum shield and an outer polyethylene jacket.

American Wire Gauge: (AWG)
A standard used in the determination of the physical size of a conductor determined by its circular mil area. AWG is used in the U.S. to designate the size of wire and conductors. The gauge numbers are retrogressive—the larger the gauge number the smaller the wire.

Analog Signal: A signal in which the intelligence is represented by continuously varying quantities.

Anneal: The act of softening a metal, such as copper, by means of heat to render it less brittle.

Armor: Mechanical protection usually accomplished by a metallic layer of tape, braid or served wires. Normally found only over the outer sheath.

ASP: A cable sheath consisting of a corrugated aluminum (A) shield, corrugated steel (S) shield, flooding compound and an outer polyethylene (P) jacket.

ASTM: Abbreviation of the American Society for Testing and Materials, a non-profit industry-wide organization which publishes standards, methods of test, recommended practices, definitions and other related material.

Attenuation: Power loss in an electrical system. In cables, generally expressed in dB per unit length, usually 1,000 feet.

Bandmarking: A circumferential color band applied to an insulated conductor at regular intervals for identification.

Bandwidth: The frequency range of electrical signals transmitted.

Binder: Usually spirally wrapped tape or thread used for holding assembled cable components in place.

Buried Cable: A cable installed directly in the earth without use of underground conduit. Also called direct buried cable.

Cable: Insulated conductors or twisted group of insulated conductors used for the transmission of electrical energy.

Cabling: The act of twisting together two or more insulated components by machine to form a cable.

Capacitance: The ratio of the electrostatic charge on a conductor to a potential difference between the conductors required to maintain that charge.

Carrier: A telco that owns and operates its own network and provides transmission services to other service providers through its facilities.

Central Office: A building housing the telephone switching apparatus.

Cold Bend: A laboratory test procedure whereby a sample of wire or cable is wound around a mandrel of a specified size at a specified temperature for a given number of turns at a given rate of speed and examined for defects.

Color Code: A color system for circuit identification by use of solid colors, tracers, braids, surface marking, etc.

Compound: A term used to designate an insulating or jacketing material made by mixing two or more ingredients. To Compound: the combining of two or more different materials to make one material.

Conductivity: A term used in describing the capability of a material to carry an electrical charge. Usually expressed as a percentage of copper conductivity—copper being one hundred (100%) percent. Conductivity is expressed for a standard configuration of conductor.

Conductor: Any material capable of easily carrying an electrical charge.

Conduit: A tube or trough for protecting electrical wires and cables. It may be a rigid or flexible tube into which insulated electrical wires are pulled.

Core: In cables, a component or assembly of components over which additional components (shield, sheath, etc.) are applied.

Crosstalk: Signal interference between nearby conductors caused by the pickup of stray energy.

Decibel (dB): A standard of unit based on a logarithmic scale for expressing transmission gain or loss and relative power levels.

Dielectric: Any insulating medium which intervenes between two conductors and permits electrostatic attraction and repulsion to take place across it.

Dielectric Constant: The ratio of the capacitance of an insulated wire with that of the same wire uninsulated in air.

Dielectric Strength: The voltage which an insulation can withstand before breakdown occurs. Usually expressed as a voltage gradient (such as volts per mil).

Dielectric Test: A test in which a voltage higher than the rated voltage is applied for a specified time to determine the adequacy of the insulation under normal conditions.

Digital Signal: A signal in which the data is represented by a series of discrete steps or pulses.

Digital Subscriber Line (DSL): A technology used to increase the capacity of copper telephone lines.

Distribution Cable: The cable portion of the local outside plant network between the feeder cable and the subscriber.

Drain Wire: An uninsulated wire in a cable used to facilitate shield connection.

Drawing: In the manufacture of wire, pulling the metal through a die or series of dies in order to reduce the diameter to a specified size.

Drop Wire: A wire designed for use as service drops from aerial distribution terminals to subscriber station protectors.

Duct: An underground or overhead tube for carrying electrical conductors.

Elongation: The fractional increase in length of a material stressed in tension.

Embossing: A means of marker identification by means of thermal indentation leaving raised lettering on a cable's sheath material.

Ethernet: A local area network (LAN) which uses the CSMA/CD (Carrier Sense Multiple Access with Collision Detection) access method on a bus topography.

Extrusion: Method of continuously forcing plastic, rubber, or elastomer material through an orifice to apply insulation or jacketing over a conductor or cable core.

Figure 8 Cable: An aerial cable configuration in which the conductors and steel strand, which supports the cable, are integrally jacketed. A cross-section of the finished cable approximates the figure "eight".

Glossary

Filled Cable: A telephone outside plant cable construction for direct buried installation in which the cable core is filled with a material that will prevent moisture from entering or passing through the cable.

Flame Resistance: Measure of a material's ability not to propagate flame once the source of heat is removed.

Flammability: Measure of a material's ability to support combustion.

Foam Skin Cable: A cable utilizing a foamed polyolefin inner layer covered by a solid polyolefin skin as the conductor insulation.

Frequency: The number of cycles, now expressed as hertz, by an alternating current in one second. The hertz is equivalent to the older unit cycles per second.

Gauge: A term used to denote the physical size of a wire.

Ground: 1) An electrical term meaning to connect to the earth or other large conducting body to serve as an earth thus making a complete electrical circuit; 2) A wire intended to be used for grounding (also called grounding conductor).

Helical Stripe: A continuous, colored, spiral stripe applied over the outer perimeter of an insulated conductor for circuit identification purposes.

Hygroscopic: Capable of absorbing moisture from the air.

Impact Strength: A test designed to ascertain the abuse a cable configuration can absorb, without physical or electrical breakdown, by impacting with a given weight, dropped from a given height, in a controlled environment.

Impedance: The total opposition that a circuit offers to the flow of alternating current at a particular frequency. It is a combination of resistance R and reactance X, measured in ohms.

Inductance: The property of a circuit or circuit element that opposes a change in current flow, thus causing current changes to lag behind voltage changes. It is measured in henrys.

Insulated Wire: A conductor of electricity covered with a non-conducting material.

Insulation: A non-conductive material usually surrounding or separating two conductive materials. Often called the dielectric in a radio frequency cable.

Insulation Resistance: That property of an insulating material which resists electrical current flow through the insulating material when a potential difference is applied.

Integrated Service Digital Network (ISDN): A digital data communications network providing full integration of data, voice and video.

Interconnect Companies: Companies which sell, install and maintain telephone systems for end users.

Interexchange Carrier (IXC): A long-distance telephone carrier authorized to carry transmissions between local access and transport areas.

Internet Protocol (IP): The set of rules that defines how information is packaged and addressed for delivery across the Internet.

Internet Service Provider (ISP): A company that offers consumers and businesses access to the internet and other related services.

Interstices: In cable construction, the spaces, valleys or voids between or around the cable's components.

Jacket: A material covering over a wire insulation or an assembly of components. An overall jacket on a complex cable grouping. Also called a sheath.

Lay: A term used in cable manufacturing to denote the distance of advance of one member of a group of spirally twisted members, in one turn, measured axially.

Local Area Network (LAN): A network spanning a limited geographical area, providing data communications between computers and peripherals, and switching equipment.

Local Exchange Carrier (LEC): A telephone company that provides the dial tone to the end consumer. Incumbent local exchange carriers (ILECs) are the Bell Operating companies and smaller independent phone companies that originally provided local phone services to specific geographic communities on a regulated, monopoly basis. CLECs are competitive local carriers created out of the Telecommunications Act of 1996.

Local Number Portability (LNP): The practice of letting a customer switch service from one local company to another without having to change their telephone number.

Longitudinal Wrap: A tape applied longitudinally with the axis of the core being covered, as opposed to a helical, or spiral, tape wrapped core.

Marker Thread: A colored thread laid parallel and adjacent to the strands of an insulated conductor which identifies the cable manufacturer. It may also denote a temperature rating or the specification to which the cable is made.

Mil: 1/1000 of an inch.

Moisture Resistance: The ability of a material to resist absorbing moisture from the air or when immersed in water.

Mutual Capacitance (Cm): The capacitance between two conductors when all other conductors, including the shield, are short circuited to ground.

National Electrical Code (NEC): A consensus standard published by the National Fire Protection Association (NFPA) and incorporated in OSHA regulations.

Network: 1) Series of points connected by communications channels; 2) Network of telephone lines normally used for dialed telephone calls; 3) Network of communications channels connected to the use of one customer. For purposes of data communications applications, components in a common geographical area, served by a common computer, or performing a common function may be defined as one network. Also defined as one or more interconnected data links.

Ohm: A unit of electrical resistance, the resistance of a circuit in which a potential difference of one volt produces a current of one ampere.

Outside Plant (OSP): All cables and wires extending outward from the network protectors on the main distribution frame to connect the terminal equipment to the Outside Plant.

Pair: Two wires forming a single circuit, held together by twisting, binding, or a common jacket.

Parallel: A construction in which two or more conductors are laid parallel and surrounded and separated by an insulating material.

PASP: A cable sheath consisting of an inner polyethylene (P) jacket, corrugated aluminum (A) shield, corrugated steel (S) and an outer polyethylene (P) jacket.

PIC: An abbreviation for Plastic Insulated Conductor: conductors covered with an extruded coating of plastic.

Plasticizer: A chemical agent added in compounding plastics to make them softer and more flexible.

Glossary

Polyethylene: A family of insulating materials derived from polymerization of ethylene gas. They are basically pure hydrocarbon resins with excellent dielectric properties.

Polyvinyl Chloride (PVC): A general purpose thermoplastic widely used for wire and cable insulations and jackets.

Pressurization: The use of pressurized gas or dry air inside Air Core cables to prevent the entry of water at faulty splices or minor sheath cracks. It can also trigger an alarm when major faults occur and can assist in locating the damaged areas.

Pulling Eye: A device which may be fastened to the conductor(s) or jacket of a cable or formed by or fastened to the wire armor and to which a hook or rope may be directly attached in order to pull the cable through a duct.

Put-Up: Refers to the packaging of wire and cable. The term itself refers to the quantity of product that is ready to be stored or shipped.

Regional Bell Operating Company (RBOC): A holding company formed by the divestiture of AT&T to provide both regulated and non-regulated telephone services.

Resistance: The property of an electric circuit which determines for a given current the rate at which electric energy is converted into heat and has a value such that the current squared multiplied by the resistance gives the power converted.

Restriction on Hazardous Substances (RoHS): The European Commission's Directive 2002/95/EC adopted January 27, 2003, also known as "RoHS," which restricts the use of certain hazardous substances in electrical and electronic equipment.

Ring Banding: See Bandmarking.

Rip Cord: A cord placed directly under the jacket of a cable in order to facilitate stripping (removal) of the jacket.

Screened Cables: A cable core design where an aluminum shield divides the cable core into two electrically separate compartments.

Sheath: The combination of a metallic shield and an extruded plastic jacket applied as the outermost covering on a cable. In the absence of a shield, the extruded jacket may be designated as a sheath.

Shield: A metallic layer placed around an insulated conductor or group of conductors to prevent electrostatic or electromagnetic interference between the enclosed wires and external fields. This shield can be braided or served wires, foil wrap, foil backed tape, a metallic tube, or conductive vinyl or rubber. When a metallic braid of tinned or bare copper is applied over the insulated conductor, the shielding effectiveness is in proportion to the amount of coverage, usually expressed as a percentage.

Spark Test: A test designed to locate pinholes in a wire's insulation by application of an electrical potential across the material for a very short period of time while the wire is drawn through an electrode field with one end of the wire grounded.

STALPETH: A cable sheath consisting of a corrugated steel (ST) shield applied over a corrugated aluminum (AL) shield and an outer polyethylene (PETH) jacket.

Stranding: The manufacturing process by which cable components are assembled around a central piece, forming a round core.

Tank Test: A voltage dielectric test in which the wire or cable test sample is submerged in water and voltage is applied between the conductor and water as ground.

Temperature Rating: The maximum temperature at which the insulating material may be used in continuous operation without loss of its basic properties.

Tensile Strength: A term denoting the greatest longitudinal tensile stress a substance can bear without tearing apart or rupturing.

Thermoplastic: Material that will resoften and distort from its formed shape by heating above a critical temperature peculiar to the material.

Tinned Wire: Copper wire that has been coated with a layer of tin or solder to simplify soldering.

Tracer Stripe: When more than one color coding stripe is required, the first, or widest, stripe is the base stripe; the other, usually narrower stripes, being termed tracer stripes.

Twisted Pair: Two insulated conductors spiraled together.

UL: Abbreviation for Underwriters Laboratories, a non-profit independent organization, which operates a listing service for electrical and electronic materials and equipment.

Unbundled Network Element Provider

(UNE-P): The wholesale purchase of all network elements from the RBOC, with the CLEC retaining the responsibility for integrating the elements together in order to complete connections and provide service.

Voice Frequency: Any of the frequencies that are audible to the human ear. For telephone transmission the range is generally from 300 to 3,400 Hz.

Volt: The standard unit of electromotive force or electrical pressure. One volt is the amount of pressure that will cause one ampere of current to flow through one ohm of resistance.

Voltage Rating: The highest voltage that may be continuously applied to a wire in conformance with standards or specifications.

VW-1: A test used by Underwriters Laboratories to classify wires and cables with regard to their resistance to burning. (Formerly designated as FR-1.)

Wall Thickness: A term expressing the thickness of a layer of applied insulation or jacket.

Wide Area Network (WAN): A network spanning a broad geographical area, providing data communications between computers and peripherals, and switching equipment.

Wire: 1) A single piece of slender, flexible metal, ranging in approximate size from a piece that is difficult to bend by hand to a fine thread. 2) Several wires as in (1) twisted together.

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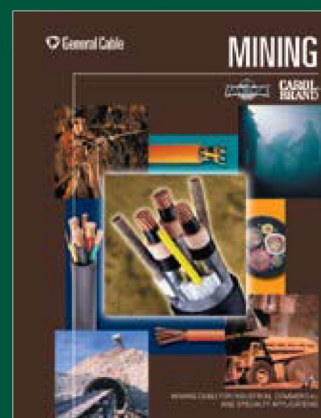
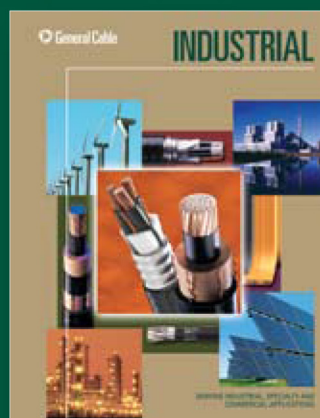
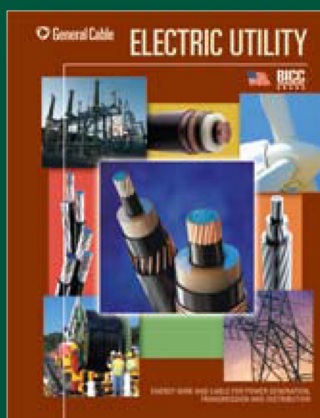
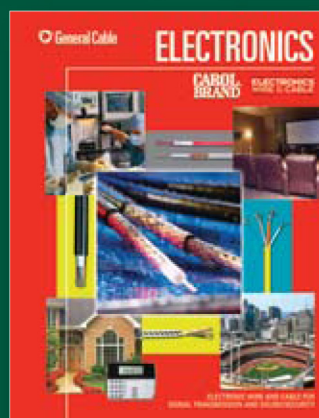
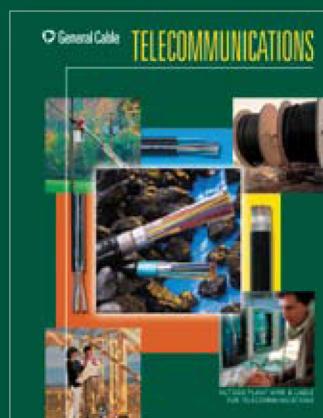
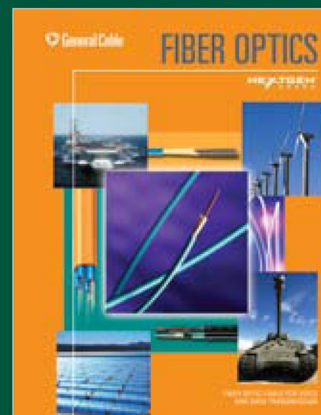
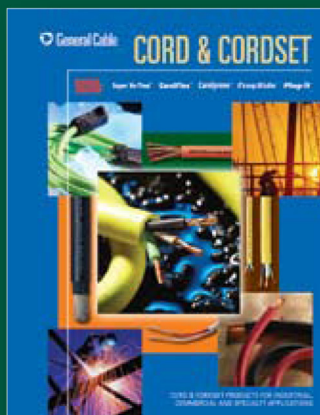
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