Glossary

K-FIBER — Asbestos free substitute for heat resistant high temperature applications. K-Fiber jacketed high temperature cable equals or exceeds the abrasion resistance of a comparable asbestos jacketed cable.

KILO — Prefix meaning thousand.

kV — Kilovolt (1,000 volts).

kVA — Kilovolt ampere.

kW — Kilowatt. 1,000 watts of power.

KYNAR — Atochem trademark for polyvinylidene fluoride (PVDF).

L

L — Symbol for inductance.

LACING AND HARNESSING — A method of grouping wires by securing them in bundles of designated patterns.

LACQUER — A liquid resin or compound applied to textile braid to prevent fraying, moisture absorption, etc.

LAMINATED TAPE — A tape consisting of two or more layers of different materials bonded together.

LAN — Local Area Network. A user-owned, user-operated, high-volume data transmission facility connecting a number of communicating devices within a single building or campus of buildings.

LASER DIODE — A semiconductor diode that, when pulsed, emits coherent light.

LAUNCH ANGLE — The angle between the radiation vector and the axis of an optical fiber.

LAY — Pertaining to wire and cable, the axial distance required for one cabled conductor or conductor strand to complete one revolution about the axis around which it is cabled.

LAY DIRECTION — The twist in the cable as indicated by the top strands while looking along the axis of the cable away from the observer. Described as “right hand” or “left hand.”

LAYER — Consecutive turns of a coil lying in a single plane.

L Band — The band of frequencies between 390 and 1,550 megahertz.

LEACHING AND NONLEACHING — In a leaching wire the plasticizer will migrate when exposed to heat. A nonleaching wire will retain its plasticizer under extreme temperature conditions and remain flexible after baking.

LEAD — A wire, with or without terminals, that connects two points in a circuit.

LEAD CURED — A cable that is cured or vulcanized in a metallic lead mold.

LEAD-IN — The conductor or conductors that connect the antenna proper to electronic equipment.

LEAKAGE CURRENT — An undesirable flow of current through or over the surface of an insulating material.

LEAKAGE DISTANCE — The shortest distance along an insulation surface between conductors.

LED — Light-Emiting Diode; device that accepts electrical signals and converts the energy to a light signal; with lasers, the main light source for optical-fiber transmission, used mainly with multimode fiber.

LENGTH OF LAY — The axial length of one turn of the helix of a wire or member. See Lay.

LEVEL — A measure of the difference between a quantity or value and an established reference.

LF — Low frequency. A band of frequencies extending from 30 to 300 kHz in the radio spectrum, designated by the Federal Communications Commission.

LIFE CYCLE TESTING — A test to determine the length of time before failure in a controlled, usually accelerated environment.

LIGHTNING GROUND CABLE — A specially stranded single conductor cable used to connect lightning rods (air terminals) to grounding rods.

LIGHT SOURCE — An object capable of emitting light. In fiber optics, the light source is normally a LED or a laser.

LIMITS OF ERROR — The maximum deviation (in degrees or percent) of the indicated temperature of a thermocouple from the actual temperature.

LIMPNESS — The ability of a cable to lay flat or conform to a surface.

LINE BALANCE — The degree to which the conductors of a cable are alike in their electrical characteristics with respect to each other, to other conductors, and to ground.

LINE DROP — A voltage loss occurring between any two points in a power transmission line. Such loss, or drop, is due to the resistance, or leakage of the line.

LINE EQUALIZER — A reactance (inductance and/or capacitance) connected in series with a transmission line to alter the frequency-response characteristics of the line.

LINE FAULT — A fault such as an open circuit, short circuit or ground in an electrical line or circuit.

LINE LEVEL — The level of a signal at a certain point on a transmission line. Usually expressed in decibels.

LINE LOSS — A total of the various energy losses occuring in a transmission line.

LINE VOLTAGE — The value of the potential existing on a supply or power line.

LITZ WIRE — Very fine, usually #44 bare copper, each strand is enamel insulated and nylon wrapped (formerly silk). Used for low inductance coil windings.

LOAD — A device that consumes or converts the power delivered by another device.

LOAD CELL CABLE — Small multiconductor shielded cables for connecting load cells with instruments in electronic strain gauges. Also used for weighing and force measurement applications.

LOADED LINE — A transmission line that has lumped elements (inductance or capacitance) added at uniformly spaced intervals. Loading is used to provide a given set of characteristics to a transmission line.

LOC TRAC — Alpha’s registered trademark for a zipper tubing closure track which does not require any sealants to keep it closed, even during extreme flexing.

LOCAL AREA NETWORK (LAN) — A network that is located in a localized geographical area (e.g., an office, building, complex of buildings, or campus), and whose communications technology provides a high-bandwidth, low-cost medium to which many nodes can be connected.