



## Glossary

|                 |   |                  |   |
|-----------------|---|------------------|---|
| Inductance      | Inductance is measured in henries. A property of an electric circuit by which an electromotive force is induced in it by a variation of current either in the circuit itself or in a neighboring circuit.                               | Marker Tape      | A tape laid parallel to the conductors under the jacket in a cable, imprinted with manufacturer's name and/or specification to which the cable is made.   |
| Insulated Wire  | A conductor of electricity covered with a nonconducting material.   | MCM              | Thousand circular mils.   |
| IPCEA           | Insulated Power and Cable Engineers Association   | Mfd              | Microfarad, one millionth of a farad, the unit of capacitance.  |
| Iron-Constantan | A combination of metals used in thermocouples, thermocouple wires and thermocouple lead wires. Constantan is an alloy of copper, nickel, manganese, and iron. The iron wire is positive, the constantan negative.                       | Microfarad       | One millionth of a farad.   |
| Irradiation     | The process of cross linking the insulation.  | MIL              | Military specifications for wire.   |
| Jacket          | A covering extruded over a cable core or shield.  | Mil              | 0.001" (1/1000 inch) one 1000th of an inch. A unit used in measuring diameter of wire or thickness of an insulation over a conductor.   |
| Kapton          | DuPont Company registered trademark for Polyimide film.   | Multi            | 1000 volts 1000 volts   |
| Kilovolt        | 1000 volts  | Conductor Cable  | A combination of two or more conductors cabled together and insulated from one another and from sheath or armor where used.   |
| Kilowatt        | 1000 watts  | NEC              | National Electrical Code, which covers the use of wire and cable in many applications.  |
| KYNAR           | Registered trademark of Penwalt Corporation. Polyvinylidene fluoride (PVF2) is rated at 135 °C.   | NEMA             | National Electrical Manufacturers Association   |
| Lacquer Finish  | A finish applied over braided wire or cable for protection against fraying, wicking, moisture, absorption, abrasion, etc.   | Nylon            | The generic name for synthetic fiber-forming polyamides. Available in two forms for wires and cables: as a yarn for wire serving and braid; as an extrusion material (primarily for jackets).                       |
| Lay             | The twist of a cable. It is measured as the length along the cable of one turn of a conductor.  | OD               | Outside Diameter  |
| Limpness        | The ability of a cable to lay flat or conform to a bend.  | Ohm              | Unit of electrical resistance. Resistance of a circuit in which a potential difference of one volt produces a current of one ampere.  |
| Line Voltage    | The voltage at a wall outlet or other terminals of a power line system. The line voltage is usually 120 volts in the USA and 220 volts in Europe.   | Percent Plating  | Quantity of plating on a conductor expressed as percentage by weight; thus, for the same percentage, as the conductor diameter increases, so does the thickness of the plating.                                     |
| Litz Wire       | Wire made from a number of fine, separately-insulated strands specially braided or woven together for reduced skin effect and hence lower resistance to high frequency currents for lower RF losses. The full name is Litzendraht Wire. | Picks Per Inch   | The number of times the carriers in a braid cross over each other in the same direction along the longitudinal axis for each inch of length.  |
| Low Noise Cable | Cable configuration specially constructed to eliminate spurious electrical disturbances caused by capacitance changes or self-generated triboelectric noise.  | Planetary Cabler | A cabling machine whose payoff spools are mounted in rotating cradles that hold the axis of the spool in a fixed direction as the spools are revolved about one another so the wire will not kink as it is twisted. |