

Glossary

OXYGEN INDEX — A test to rate flammability of materials in a mixture of oxygen and nitrogen. More formally referred to as Limiting Oxygen Index (LOI).

OZONE — An extremely reactive form of oxygen, normally occurring around electrical discharges and present in the atmosphere in small but active quantities. In sufficient concentrations it can break down certain insulations.

P

PAIR — Two insulated wires of a single circuit associated together; also known as a "balanced" transmission line.

PARALLEL CIRCUIT — A circuit in which identical voltage is presented to all components, and the current divides among the components according to the resistances or the impedances of the components.

PARALLEL STRIPE — A stripe applied longitudinally on a wire or cable parallel to the axis of the conductor.

PARALLEL TRANSMISSION — A type of data transfer in which all bits of a character, or multiple-bit data blocks, are sent simultaneously, either over separate communications lines or circuits, over a single channel using multiple frequencies, or over a multiple-conductor cable.

PARTIAL DISCHARGE (CORONA) EXTINCTION VOLTAGE — The voltage at which partial discharge (corona) is no longer detectable on instrumentation adjusted to a specific sensitivity, following the application of a specified higher voltage.

PATCH CABLE — A cable with plugs or terminals on each end of the conductors to temporarily connect circuits of equipment together.

PAYOFF — The process of feeding a cable or wire from a bobbin, reel, or other package.

PCB — Printed Circuit Board.

PCP — Polychloroprene (Neoprene).

PDN — Public Data Network. A packet switched or circuit switched network available for use by many customers. PDNs may offer value-added services at a reduced cost because of communications resource sharing, and usually provide increased reliability due to built-in redundancy.

PE — Polyethylene. A widely used thermoplastic insulation and jacket compound.

PEAK — The maximum instantaneous value of a varying current or voltage. Also called crest.

PEEK — Poly ether ether ketone.

PEEL STRENGTH — The force necessary to peel a flexible member from another member which may be either flexible or rigid.

PERCENT CONDUCTIVITY — The ratio of the resistivity of the International Annealed Copper Standard (IACS) at 20°C to the resistivity of a material at 20°C, expressed in percent. Results are calculated on a weight basis or volume basis and so specified.

PERCENT PLATING — Quantity of plating on a conductor expressed as a percentage by weight.

PERCENTAGE CONDUCTIVITY — Conductivity of a material expressed as a percentage of that of copper.

PFA — Perfluoroalkoxy. Teflon is DuPont's trademark for this material.

PHASE — The location of a position on a waveform of an alternating current, in relation to the start of a cycle. Measured in degrees, with 360 corresponding to one complete cycle.

PHASE SEQUENCE — The order in which successive members of a periodic wave set reach their positive maximum values: a) zero phase sequence — no phase shift, b) plus/minus phase sequence — normal phase shift.

PHASE SHIFT — A change in the phase relationship between two alternating quantities. The phase angle between the input and output signals of a system.

PICK — Distance between two adjacent crossover points of braid filaments. The measurement in picks per inch indicates the degree of coverage.

PICO — Prefix meaning one-millionth of one-millionth (10^{-12}).

PICOFARAD — One-millionth of one-millionth of a farad. A micromicrofarad, or picofarad (abbreviation pf).

PIGTAIL WIRE — Fine stranded, extra flexible, rope lay lead wire attached to a shield for terminating purposes.

PILC CABLE — Paper insulated, lead covered.

PIN ASSIGNMENT — A predetermined relationship between the terminals in a connector and the conductors in a cable that specifies the terminals to which each conductor is to be terminated.

PITCH — In flat cable, the nominal distance between the index edges of two adjacent conductors.

PITCH DIAMETER — Diameter of a circle passing through the center of the conductors in any layer of a multiconductor cable.

PLANETARY TWISTER — 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 so the wire will not kink as it is twisted.

PLASTICIZER — A chemical added to plastics to make them softer and more flexible.

PLATED HOLE — A hole with walls that have been plated with conductive material to provide an electrical connection between the conductive patterns on both sides of a printed circuit or an anchor for soldering an inserted wire.

PLENUM — The air return path of a central air handling system, either ductwork or open space over a suspended ceiling.

PLENUM CABLE — Cable approved by a recognized agency such as UL for installation in plenums without the need for conduit.

PLTC — Power Limited Tray Cable, rated 300 volts.

PLUG — The part of the two mating halves of a connector which is movable when not fastened to the other mating half.

PLY — The number of individual strands or filaments twisted together to form a single thread.

POINT-TO-POINT WIRING — An interconnecting technique wherein the connections between components are made by wires routed between connecting points.

POLARIZATION — The orientation of a flat cable or a rectangular connector.

POLISHING — Act of smoothing ends of optical fibers to an "optically smooth" finish, generally using abrasives.