

GLOSSARY

DIELECTRIC STRENGTH: The voltage which insulation can withstand before breakdown occurs.

DIELECTRIC CURRENT (DC): An electric current which flows in one direction.

DRAIN WIRE: In a cable, the un-insulated wire laid over the component or components and used as a ground connection.

ELASTOMER: A class of long-chain polymers capable of being cross-linked to produce elastic compounds.

ELECTROMAGNETIC: Pertaining to the combined electric and magnetic fields associated with movement of electrons through conductors.

ELECTROSTATIC: Pertaining to static electricity or electricity at rest. A constant intensity electric change.

ELONGATION: The fractional increase in length of material stressed in tension.

EMI: Electromagnetic Interference.

EXPANDED DIAMETER: Diameter of shrink tubing as supplied. When heated, the tubing will shrink to its extruded diameter.

EXTERNAL INTERFERENCE: The effects of electrical waves or fields which cause spurious signals other than the desired intelligence.

FEP: Fluorinated Ethylene Propylene. A Teflon® fluorocarbon resin and is a registered trademark of the DuPont Company.

FILLER: (1) A material used in multi-conductor cables to occupy large interstices formed by the assembled conductors. (2) An inert substance added to a compound to improve properties or decrease cost.

FLAT CABLES: A cable with two smooth or corrugated but essentially flat surfaces.

FLAME RESISTANCE: The ability of a material not to propagate a flame once the heat source is removed.

FLAMMABILITY: The measure of the material's ability to support combustion.

FLEX-LIFE: The time of heat aging that an insulating material can withstand before failure when bent around a specific radius.

FLEXIBILITY: The quality of a cable or cable component which allows for bending under the influence of outside force, as opposed to limpness which is bending due to the cable's own weight.

FREQUENCY: Refers to the number of cycles of an AC signal or an RF signal.

FT1: Flammability rating established by Canadian Standards Association for a vertical flame test of wire and cable.

GAUGE: Physical size of a wire.

GIGAHERTZ (GHz): A unit of frequency equal to one billion hertz.

GROUND: The connection between an electrical circuit and the earth or other large conducting body to serve as an earth thus making a complete electrical circuit.

HARNESS: An arrangement of wires and cables, usually with many breakouts, which have been tied together or pulled into a rubber or plastic sheath, used to interconnect an electric circuit.

HASH MARK STRIPE: A non-continuous helical stripe applied to a conductor for identification.

HERTZ (Hz): A unit of frequency.

HOOK-UP WIRE: A single insulated conductor used for low current, low voltage applications within enclosed electronic equipment.

HYPALON: DuPont's trade name for their chlorosulfonated polyethylene, an ozone-resistant synthetic rubber.

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

INSULATION: A material having high resistance to the flow of an electronic current.

IEC: International Electrotechnical Commission.

IEEE: Institute of Electrical and Electronics Engineers.

INTERCONNECTING CABLE: The wiring between modules, between units or the other larger portions of a system.

INTERFERENCE: Electrical or electromagnetic disturbances which introduce undesirable responses into other electronic equipment.

IPCEA: Insulated Power Cable Engineers Association.

IRRADIATION: In insulations, the exposure of the material to high energy emissions for the purpose of favorably altering the molecular structure.

ISA: Instrument Society of America

ISO: International Standards Organization.

JACKET: An outer covering, usually non-metallic, mainly used for protection against the environment.

KYNAR: Elf Atochem, North American trade name for polyvinyl fluoride, a fluorocarbon material typically used as insulation for wire wrap wire.

MCM: One thousand circular mils.

MHz: Megahertz (One million cycles per second).

MOISTURE ABSORPTION: The amount of moisture, in percentage, that material will absorb under specified conditions.

MONOMER: The basic chemical unit used in building a polymer.

MTW: Magnet Tool Wire

MYLAR: DuPont's trade name for a polyester material.

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