

Attenuation – Ratio of the magnitude of the signal strength in transmission between a designated distance. Attenuation is very dependent on signal frequency and distance.

Automated Imaging Association (AIA) – World's largest machine vision trade association.

AWM – Appliance Wiring Materials - UL 758 is the Standard for Safety of Appliance Wiring Material.

AWS – American Welding Society - Non-profit organization with a goal to advance the science, technology and application of welding and related joining disciplines.

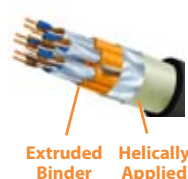
Band marking – Continuous circumferential band applied to a conductor at regular intervals for identification.

Bare copper – Appearance of a shiny new penny, utilized for sonic welding, has pure electrical signal over long distances, and withstands temperature 150°C.

Barrel-packed – Method of coiling insulated wire into a drum for shipment or further processing.

BEV – Battery Electric Vehicle.

Binder – Spirally served tape or thread used for holding assembled cable components in place awaiting subsequent manufacturing operations.



Bend radius – Radius of curvature that a wire or cable can be bent without any adverse effects.

BOM – Bill of Materials.

Braid – Fibrous or metallic group of filaments interwoven in cylindrical form to form a covering over one or more wires.



Braid angle – Smaller of the two angles formed by the shielding strand and the axis of the cable being shielded.

Braid carrier – Spool or bobbin on a braider which holds one group of strands or filaments consisting of a specific number of ends. The carrier revolves during braiding operations.

Braid shields – Conductors woven or braided around a core.



Breakdown of insulation – Failure of an insulation resulting in a flow of current through the insulation. It may be caused by the application of too high voltage or by defects or decay in the dielectric.

Breakdown voltage – Voltage at which the insulation between two conductors, or a conductor and a ground, breaks down.

Building wire – Wire used for light and power in permanent installations utilizing 600 volts or less. Usually in an enclosure and not exposed to outdoor environments.

Bunch stranding – Group of wires of the same diameter twisted together in the same direction, with the same lay, without a predetermined pattern.

Bus – Bare, tinned or insulated wire used to connect two terminals inside an electrical unit. This is a common point for electrical circuits to return.

Butt joint – Splice or connection formed by placing the ends of two conductors together and joining them by welding, brazing or soldering.

Butt wrap – Tape wrapped in an edge-to-edge manner with no overlapping between adjacent turns.

C4ISR – Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance - US Department of Defense systems, procedures and techniques used to collect and disseminate information.

Cable – A group of individually insulated conductors in twisted or parallel configuration, with or without an overall covering known as a jacket.

Cable assembly – Completed cable and its associated hardware (lugs, connectors, terminal blocks, etc.) ready to install.

Cable core – Any cabled component containing inners, twisted pairs, triads, or other twisted constructions, including jacketed subcomponent materials. Jacketed subcomponents in-and-of themselves are considered core.

Cable electrical characteristics – Properties include attenuation, capacitance, impedance and shielding.

Cable filler – Material used in multiple conductor cables to occupy the spaces formed by the assembly of components, thus forming a core of the desired shape (typically cylindrical). Filler can be paper, polyethylene or solid extruded rod (PVC, PE or PP).

Caliper – Device used to measure internal and external dimensions.

Camera LINK® – Serial communication protocol standard designed for computer vision applications based on the National Semiconductor interface Channel-link. The standard is maintained and administered by the AIA and is their registered trademark.

CANbus® – Controller Area Network Bus - Rugged, digital serial bus designed for industrial environments. Introduced by Bosch in the mid-1980s for in-vehicle communications, it is used in a myriad of applications including factory automation, building automation, aircraft and aerospace as well as in cars, trucks and buses. CAN bus replaced bulky wiring harnesses with a two-wire differential cable (the two wires carry inverted voltages to decrease interference).

CANopen® – Controller Area Network - Network technology optimized for the usage in industrial control environments, in machine internal networks and in embedded systems (any control unit deeply "embedded" in a device with electronics).

Capacitance (pF) – Property of a system of conductors, electronic components and dielectrics that allows the storage of electricity when potential differences exist between the conductors. Capacitance is a measure, expressed in picofarads per foot, which indicates how much charge the cable can store within itself.

Carbon black – Additive used in cable compounds to improve weatherability (UV exposure), color consistency and electrical conductivity.

Category cables – Standard four twisted pairs, unshielded network cables suitable for use in data and communication applications.