

Figure 8 Cable – Aerial cable configurations in which the conductors and the steel strand supporting the cable are integrally jacketed. A cross section of the finished cable approximates the “Figure 8.”

Flame Ratings – For flammability tests, refer to regulatory agencies: *FT1, FT2, FT4, FT6, UL 1666 Riser, IEEE1202, IEC 332-3, UL 1685 Vertical-Tray, UL 1581 Section 1061, VW-1, UL 1581 Section 1060 and UL 1581 Section 1090.*

Flame resistant – Ability of a burning material to extinguish its own flame, once its flame-initiating heat source is removed.

Flame retardance – Ability of a material to prevent the spread of combustion by a low rate of travel so the flame will not be conveyed.

Flammability – The measure of the material’s ability to support combustion.

Flex life – Measurement of the ability of a conductor or cable to withstand repeated bending.

Flexibility – The ease with which a cable may be bent.

Flex test – Test to determine the ability of a cable to withstand repeated bending and twisting.

Flexible cord – Internationally recognized - Harmonized standards of the US, Canada and Mexico.

Foil shields – Simplest, price sensitive, and easiest to apply. Consist of two layers, a metal layer and a plastic substrate of polyester.



FOUNDATION™ fieldbus – All-digital, serial, two-way communications system that serves as the base-level network in a plant or factory automation environment.

FPM – Feet Per Minute - Unit of measure for speed.

Frequency – Number of alternating current (AC) cycles occurring in one second.

Frozen Jacket – Jacket that will not strip off core, because it bonded to core.

FRPE – Flame Retardant Polyethylene - Can be used as an insulation or jacket material.

GP – General Purpose - ITC product platform designation for price sensitive applications.

Ground – Conducting connection, intentional or accidental, between an electric circuit or equipment and the earth or some conducting body serving in place of the earth.

Ground potential – Zero potential with respect to the ground or earth.

Grounded neutral – Circuit operates with grounded neutral when the neutral is metallically connected to ground and there is a provision for immediate removal of a faulted element.

Grounding conductor – Conductor used to connect equipment or the grounded circuit of a wiring system to a grounding electrode or electrodes; typically colored green.

GSA – General Services Administration - Independent agency of the United States government, established in 1949 to help manage and

support the basic functioning of federal agencies. The GSA supplies products and communications for U.S. government offices, provides transportation and office space to federal employees, and develops government-wide cost-minimizing policies, and other management tasks.

Halogen – Chemical elements used in compound as flame resistants. Common chemicals are bromine, chlorine and fluorine. These elements release acidic and corrosive gases along with toxic smoke during a fire.

Halogen free – Common flame resistant additives that do not contain halogens include aluminum trihydrate, magnesium hydroxide and phosphorus.

HART® – Highway Addressable Remote Transducer - Protocol is the global standard for sending and receiving digital information across analog wires between smart devices and control or monitoring system.

Hash mark stripe – Non-continuous stripe applied to an insulated conductor for identification.

HDPE – High Density Polyethylene - Can be used as an insulation or jacket material.

Heat endurance – Amount of time that a material can withstand heat before failing a test.

Heat resistance – Ability of a material to maintain physical and chemical identity and electrical integrity under specified temperature conditions.

Heat shock – Test to determine stability of a material by sudden exposure to a high temperature for a short period of time.

Helix – Spiral winding.

Henry (H) – Unit of inductance in which an induced electromotive force of one volt is produced when the current is varied at the rate of one ampere per second.

Hertz (Hz) – A unit of frequency, expressed in cycles per second.

HFFR – Halogen Free Flame Retardant.

High voltage time test – Accelerated life test on a cable sample in which voltage is the factor increased.

HI-pot – Test designed to determine the highest voltage that can be applied to a conductor without electrically breaking down the insulation.

Hygroscopic – Material capable of attracting or absorbing moisture from the ambient atmosphere.

Inductance (H) – Property of a circuit or circuit element that opposes a change in current flow, thus causing current changes to lag behind voltage changed. It is measured in Henrys.

IEC – International Electrotechnical Commission - Non-profit, non-governmental international standards organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

IEEE – Institute of Electrical and Electronics Engineers - Professional association that is dedicated to advancing technological innovation and excellence.