This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

Designation: D1050 – 05 (Reapproved 2022)

Standard Specification for Rubber Insulating Line Hose[1]

This standard is issued under the fixed designation D1050; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope

1.1 This specification covers acceptance testing of rubber insulating line hose for use as a portable protective device for protection of workers from accidental contact with live electrical conductors.

1.2 Two types of line hose are provided and are designated as Type I, non-resistant to ozone, and Type II and Type III, resistant to ozone.

1.3 Five classes of line hose, differing in electrical characteristics, are provided and are designated as Class 0, Class 1, Class 2, Class 3, and Class 4.

1.4 Four styles of line hose, differing in design characteristics, are provided and are designated as Style A, Style B, Style C, and Style D.

1.5 The following precautionary caveat pertains only to the test method portion, Sections 16, 17, 18, 19, of this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.* For specific precautionary statements, see 18.1.1.

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D297 Test Methods for Rubber Products—Chemical Analysis
D412 Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension
D570 Test Method for Water Absorption of Plastics
D573 Test Method for Rubber—Deterioration in an Air Oven
D624 Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
D2865 Practice for Calibration of Standards and Equipment for Electrical Insulating Materials Testing
F819 Terminology Relating to Electrical Protective Equipment for Workers

2.2 *Federal Specification:*[3]
PPP-B-636 Box, Shipping, Filterboard

2.3 *ANSI Standards:*[4]
C 2 National Electrical Safety Code, Section 44
C 39.5 Safety Requirements for Electrical and Electronic Measuring and Controlling Instrumentation
C 84.1 Electric Power Systems and Equipment-Voltage Ratings

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *breakdown*—the electrical discharge or arc occurring between the electrodes and through the equipment being tested.

3.1.2 *flashover*—the electrical discharge or arc occurring between electrodes and over or around, but not through, the equipment being tested.

3.1.3 *electrical testing facility*—a location with qualified personnel, testing equipment, and procedures for the inspection and electrical testing of electrical insulating protective equipment.

3.1.4 *electrode clearance*—the shortest path from the energized electrode to the ground electrode.

[1] This specification is under the jurisdiction of ASTM Committee F18 on Electrical Protective Equipment for Workers and is the direct responsibility of Subcommittee F18.25 on Insulating Cover-Up Equipment. This standard replaces ANSI Standard J 6.1, which is no longer available

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] Available from Standardization Documents, Order Desk, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, ATTN: NPODS.

[4] Available from American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036.

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