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Electrical and Electronic Ethylene-Propylene Diene Elastomer (EPDM) Insulated Hook-Up Wire, Types EP (Rated 125°C; 600 V) and EPD (Rated 125°C; 5000 V)

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Foreword

This Standards Publication was developed by the NEMA High Performance Wire and Cable Section to define hook-up cables using low smoke and low- or zero-halogen insulation materials that could be used as a possible alternative to PVC insulated cables for applications requiring these types of characteristics.

In the preparation of this Standards Publication, input of users and other interested parties has been considered. Inquiries, comments, and proposed or recommended revisions should be submitted to the concerned NEMA product Subdivision by contacting:

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CONTENTS

Foreword ......................................................................................................................... i

Section 1 General ........................................................................................................... 1
  1.1 Scope ..................................................................................................................... 1
  1.2 Reference Standards ............................................................................................ 1
  1.3 Recommended Uses Of Wire Types .................................................................... 2
    1.3.1 Type EP ........................................................................................................ 2
    1.3.2 Type EPD ...................................................................................................... 2
  1.4 Part Identification Number (PIN) ...................................................................... 2

Section 2 Conductors ..................................................................................................... 4
  2.1 Conductor Materials ......................................................................................... 4
  2.2 Type TCC Conductor Coatings ........................................................................ 4
    2.2.1 Tin-coated Conductors ............................................................................... 4
  2.3 Stranding ............................................................................................................ 4
  2.4 Wire Diameter ................................................................................................... 4
  2.5 Conductor Splices .............................................................................................. 4

Section 3 Insulation ....................................................................................................... 5
  3.1 General ............................................................................................................... 5
  3.2 EPDM Insulation ................................................................................................ 5

Section 4 Wire Identification .......................................................................................... 6
  4.1 Circuit Identification .......................................................................................... 6
    4.1.1 Lay of Stripes .............................................................................................. 6
  4.2 Identification by Printing ................................................................................ 6
    4.2.1 Identification of Product ........................................................................... 6

Section 5 Physical and Electrical Requirements .......................................................... 7
  5.1 General ............................................................................................................... 7
  5.2 Quality Conformance Inspection of Finished Product ...................................... 7
    5.2.1 Definitions .................................................................................................. 7
    5.2.2 Sampling Inspection .................................................................................. 7
  5.3 Workmanship ...................................................................................................... 7
  5.4 Materials Certification ....................................................................................... 7

Section 6 Test Procedures .............................................................................................. 9
  6.1 Physical Tests ..................................................................................................... 9
    6.1.1 Test Temperature ....................................................................................... 9
    6.1.2 Heat Resistance ......................................................................................... 9
    6.1.3 Insulation Tensile Strength And Elongation ............................................. 9
    6.1.4 Dimensional Inspection .......................................................................... 9
    6.1.5 Heat Aging Test ....................................................................................... 10
    6.1.6 Cold Bend ................................................................................................. 10
  6.2 Electrical Tests .................................................................................................. 10
    6.2.1 Conductor Resistance .............................................................................. 10
    6.2.2 Spark or Impulse Test .............................................................................. 10
    6.2.3 Dielectric Strength ................................................................................... 10
    6.2.4 Insulation Resistance .............................................................................. 10

Section 7 Notes .............................................................................................................. 11
  7.1 Packaging Requirements .................................................................................. 11
  7.2 Labeling ............................................................................................................. 11
7.3 Lengths ................................................................................................................................... 11

Section 8 Ordering Data .................................................................................................................. 12

8.1 Ordering Information .................................................................................................................. 12

Tables
Table 1-1 Conductor Material and Coating ....................................................................................... 2
Table 1-2 AWG Nominal Conductor Size ......................................................................................... 3
Table 1-3 Number of Strands ........................................................................................................... 3
Table 1-4 Color (see 4.1) ............................................................................................................... 3
Table 3-1 Dimensions—Type Wires ............................................................................................... 5
Table 4-1 Length of Lay of Stripes .................................................................................................. 6
Table 5-1 Physical and Electrical Requirements for Type EP and EPD Wires ............................. 8
Table 7-1 Minimum Lengths .......................................................................................................... 11
Section 1
GENERAL

1.1 SCOPE

This Standards Publication covers specific requirements for Ethylene-Propylene Diene Elastomer (EPDM) insulated solid and stranded wire, designed to the internal wiring of high-reliability electrical and electronic equipment. It addresses 600 V (Type EP) and 5000 V (Type EPD) wire and permits continuous conductor temperature ratings of -25°C to +125°C with tin-coated conductors. These types of hook-up wire are used when the following requirements are called for:

a) Moderate temperature resistance  
b) Good flexibility and flex life when stranded conductors are used

1.2 REFERENCE STANDARDS

American Society for Testing and Materials (ASTM)  
100 Barr Harbor Drive  
West Conshohocken, PA 19428-2959

D3032 Methods of Testing Hook-Up Wire Insulation

American Society for Quality Control  
611 E. Wisconsin Ave.  
Milwaukee, WI 53202

ANSI/ASQC Z1.4 Sampling Procedures and Tables for Inspection by Attributes

Electronic Industries Alliance  
2500 Wilson Blvd  
Arlington, VA 22201

EIA-359-A EIA Standard Colors for Color Identification and Coding

DODISS-Customer Service  
Bldg 4D  
700 Robbins Ave.  
Philadelphia, PA 19111-5094

MIL-STD-2223 Test Methods for Insulated Electronic Wire

FED-STD-228 Cable and Wire, Insulated; Methods of Testing

Underwriters Laboratories Inc.  
1285 Walt Whitman Road  
Melville, NY 11747-3081 USA

UL1581 Reference Standard for Electrical Wires, Cables, and Flexible Cords

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