



ANSI/NEMA WC 55021-2013

ANSI/NEMA WC 55021-2013 (PA2019)

Standard for Military Internal Electrical Cable

Published by

National Electrical Manufacturers Association

1300 North 17th Street, Suite 900

Rosslyn, Virginia 22209

www.nema.org

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This provisional amendment to WC 55021-2013 was approved on May 3, 2019. It will be in effect for no longer than two years from the date of approval and will be withdrawn when a revised standard is approved.

The purpose of the provisional amendment is to resolve a supply shortage of marker tape printed with the cable part number. This has caused delays in the production of cable and disrupted the manufacture of aerospace equipment.

The alternative marking method proposed is already an accepted industry practice under similar standards such as ANSI/NEMA WC 27500-2015 *Aerospace and Industry Electrical Cable*.

The amendment revises paragraph 3.3.6 of the standard as follows:

3.6.6 Cable Identification

The method of identification shall be compatible with the cable construction as indicated by cable designation (see 2.2). Identification shall be at intervals of 1 to 3 feet and may be by marking of the outer jacket, **or component wires** or tape placed beneath the shield or jacket. **The marking shall be of a contrasting color. Finished shielded, or jacketed or shielded and jacketed cables may have identifying print on any of the component wires, except in no case shall it be applied on wire sizes smaller than 28 AWG.** All materials used for identification shall conform to the environmental requirements of the particular construction. The identification shall be clear and legible and shall include the following:

Cable part Number, manufacturer's name or CAGE code (CAGEC), and year of manufacture.

Example: M55021-S16E-905-904-903-902-901S09 12345 2013

Finished unshielded and unjacketed cable shall be identified with the printed marking of a contrasting color applied to the surface of any of the wires in a multi-conductor cable (see example above), except for cable with conductor sizes smaller than 24 AWG. The size of the printed characters shall be compatible with the basic wire size. No other printed marking shall be applied to the basic wire.

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FOREWORD

In the preparation of this standards publication input of users and other interested parties has been sought and evaluated. Inquiries, comments, and proposed or recommended revisions should be submitted to the concerned NEMA product Sub-division by contacting the:

Senior Technical Director, Operations
National Electrical Manufacturers Association
1300 North 17th Street, Suite 900
Rosslyn, Virginia 22209

This standards publication was developed by the NEMA High Performance Wire and Cable Section. Section approval of the standard does not necessarily imply that all section members voted for its approval or participated in its development. At the time it was approved, the section was composed of the following members:

AFC Cable Systems	New Bedford, MA
Apical Division, Kaneka North America	Pasadena, TX
Belden Inc.	St. Louis, MO
Berk-Tek a Nexans Company	Elm City, NC
Cable USA LLC.	Naples, FL
Champlain Cable Corporation	Colchester, VT
Coleman Cable Inc.	Waukegan, IL
Comtran Cable LLC	Attleboro, MA
Electrolock, Inc.	Hiram, OH
Freeport McMoRan Copper & Gold	Phoenix, AZ
General Cable	Highland Heights, KY
Harbour Industries LLC.	Shelburne, VT
IWG High Performance Conductors	Inman, SC
Lockheed Martin MS2	Morestown, NJ
Marine Tech Wire and Cable, Inc.	York, PA
Nexans AmerCable	El Dorado, AR
Quirk Wire Company, Inc.	West Brookfield, MA
Radix Wire Company	Euclid, OH
RSCC Aerospace and Defense	East Granby, CT
SEA Wire and Cable, Inc.	Madison, AL
Southwire Company	Carrollton, GA
The Monroe Cable Company, Inc.	Middletown, NY
The Okonite Company	Ramsey, NJ
TE Connectivity	Menlo Park, CA
Wiremasters, Inc.	Columbia, TN

SCOPE

This standards publication covers specific requirements for finished cables. The cables are intended for internal wiring of electrical equipment for use in the hook-up of various electronic assemblies. The component wires are covered by other reference standards. Cables constructed with PVC insulated wires or jackets are not to be used for aerospace applications.

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