

INCH-POUND

A-A-59608

13 May 2004

SUPERSEDING

MIL-C-915/20F

29 September 1989

## COMMERCIAL ITEM DESCRIPTION

## CABLE, POWER AND WELDING, SPECIAL PURPOSE

The General Services Administration has authorized the use of this commercial item description, for all federal agencies.

## 1. SCOPE.

1.1 Scope. This Commercial Item Description covers a flexible, single conductor cable, rated at 600 volts. This cable is intended for shipboard use.

## 2. SALIENT CHARACTERISTICS.

2.1 Product certification. This product shall be certified by a nationally recognized testing laboratory (NRTL) accredited for testing cable by the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor for compliance with Underwriters Laboratories (UL), Inc. Standard for *Appliance Wire Material Specification*, UL 1276 and the requirements specified herein.

2.2 Materials. Materials shall be as specified herein.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data that may improve this document should be sent to: Commander, Naval Sea Systems Command, ATTN: SEA 05Q, 1333 Isaac Hull Avenue, SE, Stop 5160, Washington Navy Yard DC 20376-5160 or emailed to [commandstandards@navsea.navy.mil](mailto:commandstandards@navsea.navy.mil), with the subject line "Document Comment". Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at [www.dodssp.daps.mil](http://www.dodssp.daps.mil).

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2.3 Physical requirements.

2.3.1 Conductor. The conductor shall be stranded, Class H, bare copper per ASTM B173, with a separator. The size and number of strands shall be as follows:

<u>AWG</u>	<u>Number of Strands</u>
0	259
00	259
000	259

2.3.2 Insulation. The insulation shall be a type of synthetic rubber per NEMA WC 70 with a 0.080-inch minimum wall thickness.

2.3.3 Jacket. The cable shall be jacketed with black hypalon or neoprene per UL 62 with a nominal 0.080-inch wall thickness and reinforced to create the following maximum cable OD of:

<u>AWG</u>	<u>Diameter (inches)</u>
0	0.760
00	0.810
000	0.860

2.4 Performance requirements.

2.4.1 Voltage. The voltage shall be uninterrupted and the cable jacket undamaged with a minimum bend radius of:

<u>AWG</u>	<u>Bend Radius (inches)</u>
0	6.0
00	6.5
000	7.0

2.4.2 Conductor resistance. Conductor resistance per 1000 feet of cable shall not exceed the following:

<u>AWG</u>	<u>Resistance (ohms)</u>
0	0.107
00	0.0847
000	0.0675

2.4.3 Voltage withstand. The cable shall be designed for a minimum voltage withstand of 1200 volts root mean square (rms).

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### 3. REGULATORY REQUIREMENTS.

3.1 Recovered materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent possible, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

### 4. PRODUCT CONFORMANCE PROVISIONS.

4.1 Product conformance. The products provided shall meet the salient characteristics of this Commercial Item Description, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The government reserves the right to require proof of such conformance.

4.2. Metric products. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, provided they fall within specified tolerances using conversion tables contained in the latest revision of FED-STD-376 and all other requirements of this Commercial Item Description are met. If a product is manufactured to metric dimensions and those dimensions exceed the tolerances specified in the inch-pound units, a request shall be made to the contracting officer to determine if the product is acceptable. The contracting officer has the option of accepting or rejecting the product.

### 5. PACKAGING.

5.1 Preservation, packing, and marking. Preservation, packing, and marking shall be as specified in the contract or order.

### 6. NOTES.

6.1 Ordering data. Purchaser shall specify the following:

- (a) Title, number and date of this commercial item description.
- (b) Conductor size.
- (c) Amount, footage required (continuous length).

6.2 Source of documents.

6.2.1 FED-STD-376 is available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4/D, Philadelphia, PA 19111-5094, <http://assist.daps.dla.mil/quicksearch/> or [www.dodssp.daps.mil](http://www.dodssp.daps.mil).

6.2.2 NEMA Standard WC 70 is available from National Electrical Manufacturers Association, 1300 North 17<sup>th</sup> Street, Suite 1847, Rosslyn, VA 22209, or [www.nema.org](http://www.nema.org).

6.2.3 UL Standards 62 and 1276 are available from Underwriters Laboratories, Inc., 12 Laboratory Drive, Research Triangle Park, NC 27709-3995, or [www.ul.com](http://www.ul.com).

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6.2.4 ASTM B173 is available from ASTM International, 100 Barr Harbor Dr., West Conshohocken, PA 19428, or [www.astm.org](http://www.astm.org).

6.3 National stock numbers (NSNs). The following is a list of NSNs assigned that correspond to this CID. The list may not be indicative of all possible NSNs associated with the CID.

6145-00-928-9103  
6145-00-943-7407  
6145-00-956-3451

6.4 Potential sources. Based on information available at the time this document was developed, the following companies manufacture products that are believed to comply with the salient characteristics of this Commercial Item Description.

Manufacturers

BICC Brand-Rex  
1600 West Main Street  
Willimantic, CT 06226-1128

BIW Cable Systems, Inc.  
22 Joseph E. Warner Blvd.  
No. Dighton, MA 02764

The Okonite Company  
P.O. Box 340  
Ramsey, NJ 07446

6.5 Key words.

Cable  
Power  
Welding  
Special Purpose  
Single Conductor  
600 Volts  
Shipboard Use

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MILITARY INTERESTS

Custodians:

Army – MI

Navy – SH

Review activities:

Army - CR

Navy - CG, EC

DLA – CC, IS

CIVIL AGENCY COORDINATING ACTIVITY:  
GSA-FSS

Preparing activity:

Navy - SH

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