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*American National Standard*  
*Electrical and Electronic Silicone and Silicone Braided Insulated, Hook-Up*  
*Wire, Types S (600 V), ZHS (600 V), SS (1000 V), ZHSS (1000 V), SSB*  
*Braided (1000V) and ZHSSB Braided (1000 V)*

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## Foreword

This Standard publication was developed by the NEMA High Performance Wire and Cable Section. It was developed to assure that these types of hook-up wire can be procured and that they will meet requirements associated with high reliability commercial electrical and electronic equipment in which it is used. Compliance with provisions of this Standards Publication is strictly voluntary, and any certification of compliance is left to the discretion of the buyer and seller.

In the preparation of this Standards publication, the input of users and other interested parties has been sought and evaluated. Inquiries, comments, and proposed or recommended revisions should be submitted to the High Performance Wire and Cable Product Section by contacting the:

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This Standards publication was designed as a non-government Standard for the replacement of MIL-W-16878 Silicone Rubber Insulated Wire Slash Sheets (/7, /8, /29 through /32).

This Standards publication was developed by the NEMA High Performance Wire and Cable Section Aerospace Committee. 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:

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This Standard was processed and approved for submittal to ANSI by the NEMA C8 Committee on Insulated Wire and Cables, Excluding Magnet Wire. Committee approval of the Standard does not necessarily imply that all committee Members voted for its approval. At the time it approved this Standard, the C8 committee had the following Members:

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## **Section 1**

### **General**

#### **1.1 Scope**

This Standard publication covers specific requirements for silicone rubber insulated stranded wire, designed for the internal wiring of high reliability electrical and electronic equipment. This Standards publication addresses 600 V (Type S, ZHS) and 1000 V (Type SS, ZHSS, SSB, and ZHSSB) wire and permits continuous conductor temperature ratings of  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$  with tin-coated copper or  $-55^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$  with silver-coated copper. These types of hook-up wire are used when the following requirements are called for:

- a. High-temperature resistance
- b. Low-temperature resistance
- c. Good flexibility and flex life
- d. Solder iron resistance for easier solder terminations without potential damage
- e. Type ZHS, ZHSS, and ZHSSB are used for applications requiring low smoke and zero halogen requirements