

NEMA WC 55021

Shielded and Unshielded Military

APPLICATION

The NEMA WC 55021 specification is used to describe both shielded and unshielded cable constructions for internal wiring for electronic equipment. The specification allows the user a wide variety of construction choices. Circuit identification, conductor size, insulation type, number of conductors, shielding material, and jacket compound may all be specified using this document. Single conductor, twisted pairs, triple, quad, quintuple, and multi-conductor cables through 5 components are all included.

RSCC Aerospace & Defense® is able to provide a wide range of NEMA WC 55021 constructions. Although this brief catalog sheet cannot list all the detailed testing and specification requirements contained in the complete NEMA WC 55021 document, we have summarized the major construction features of the specification and listed those that RSCC Aerospace & Defense® produces. Please refer to NEMA WC 55021 for complete performance details.

ANATOMY OF A PART NUMBER

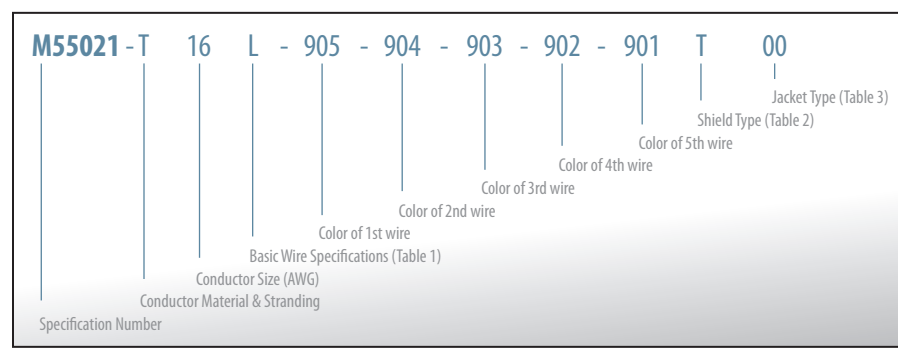


TABLE 1 - Basic Wire Specifications

| Symbol | Basic Wire Specifications | Insulation Type | Temp. Rating | Voltage |
|--------|----------------------------|-----------------|--------------|---------|
| L | NEMA HP 5 (XLPE) | TPC | 125°C | 600V |
| LL | NEMA HP 5 (XLPE) | TPC | 125°C | 1000V |
| LS | NEMA HP 8 (XLPO) | TPC | 125°C | 600V |
| LX | NEMA HP 5 (XLPE) | TPC | 125°C | 3000V |
| S | NEMA HP 6 (SILICONE) | TPC/SPC | 150°C/200°C | 600V |
| SS | NEMA HP 6 (SILICONE) | TPC/SPC | 150°C/200°C | 1000V |
| SSB | NEMA HP 6 (SILICONE/GLASS) | TPC/SPC | 150°C/200°C | 1000V |
| ZH | NEMA HP 8 (ZH-POLYOLEFIN) | TPC | 125°C | 600V |
| ZHDM | NEMA HP 8 (ZH-POLYOLEFIN) | TPC | 125°C | 600V |
| ZHDH | NEMA HP 8 (ZH-POLYOLEFIN) | TPC | 125°C | 600V |
| ZHS | NEMA HP 6 (ZH-SILICONE) | TPC/SPC | 150°C/200°C | 600V |
| ZHSS | NEMA HP 6 (ZH-SILICONE) | TPC/SPC | 150°C/200°C | 1000V |
| ZHX | NEMA HP 8 (POLYOLEFIN) | TPC | 125°C | 1000V |

TABLE 2 - Shield Descriptions

| Letter Symbol Type | Shield Material | Maximum Temperature Limit for Shield Material (Information only) |
|--------------------|----------------------|--|
| U | Unshielded | --- |
| N | Nickel Plated Copper | 260°C |
| S | Silver Plated Copper | 200°C |
| T | Tin Plated Copper | 150°C |

TABLE 3 - Jacket Types

| Letter Symbol Type | Jacket Material Type and Color | Maximum Temperature Limit for Jacket Material (Information only) |
|--------------------|---|--|
| 00 | Unjacketed | --- |
| 01 | Extruded white polyvinyl chloride (PVC) | 90°C |
| 02 | Extruded clear polyamide | 90°C |
| 27 | Extruded white Cross-linked Polyolefin | 105°C |
| 28 | Extruded white Cross-Linked Zero Halogen Polyolefin | 105°C |
| 29 | Extruded white Silicone | 200°C |
| 30 | Extruded white Zero Halogen Silicone | 200°C |

