

NEMA WC 55021

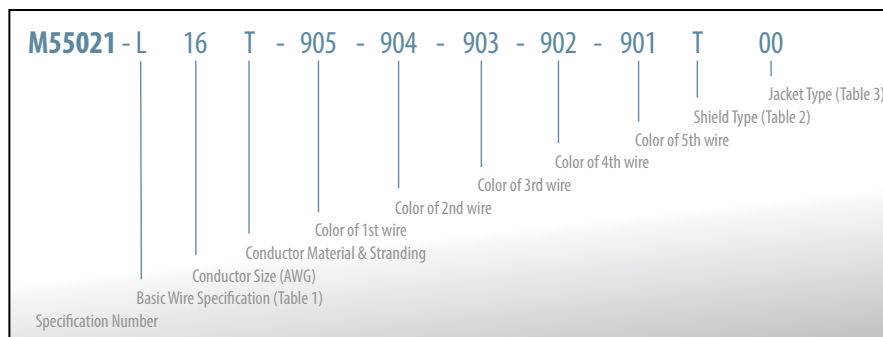
Shielded and Unshielded Military

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.

Marmon 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 Marmon Aerospace & Defense produces. Please refer to NEMA WC 55021 for complete performance details.

ANATOMY OF A PART NUMBER



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

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

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





NEMA WC 55021

Recommended Shield and Jacket Types for Components Listed

CONDUCTOR

Various platings and strandings

INSULATION

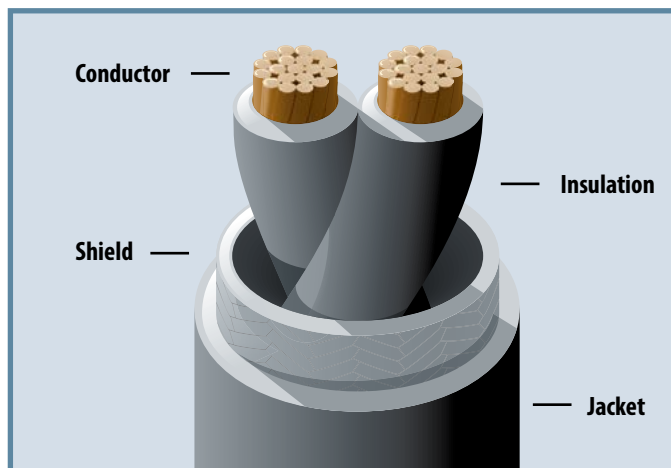
Various insulation types

SHIELD

Various materials
(available unshielded)

JACKET

Various materials
(available unshielded)



Symbol	Basic Wire Specifications	Shield Material	Jacket Material	Temperature Rating	Voltage Rating
Table 1	Table 1	Table 2	Table 3		
L	NEMA HP5 (MIL-DTL-16878/14)				600V
LL	NEMA HP5 (MIL-DTL-16878/15)	U	00	105°C	1000V
LX	NEMA HP5 (MIL-DTL-16878/16)	T	27		3000V
ZHS	NEMA HP6	U	00	150°C	600V
ZHSS	NEMA HP6	T	30		1000V
ZH	NEMA HP8	U	00	125°C	600V
ZHX	NEMA HP8				1000V
LS	NEMA HP8	T	28		600V

The above products represent the more popular constructions. However, other designs are available upon request.
All products are manufactured to meet RoHS compliance. For exceptions, please contact our sales department.