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**Qualification Reference: 15404201.AA/1-20-2015**

**Cage Code: 67050**

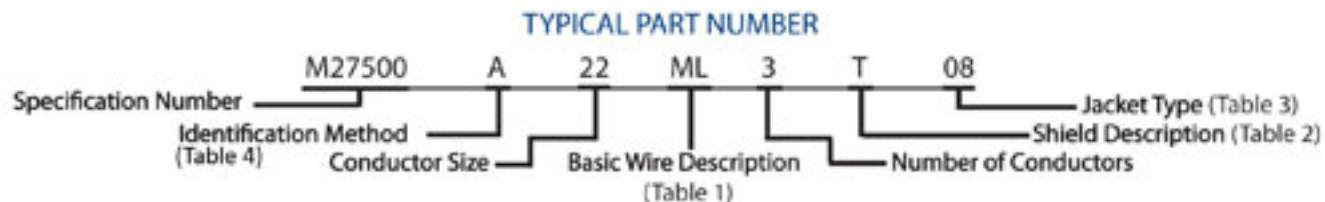
## MIL-C-27500 Cables | NEMA WC27500 Part Number Builder

MIL-C-27500 Cables | NEMA WC 27500 Part Number Builder

**MIL-C-27500 Wire (M27500 Cable)**  
**MIL Spec Wire**  
**NEMA WC27500**



The WC27500 Cable specification is commonly used to describe both shielded and unshielded cable constructions for avionics, aerospace and airframe applications. 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, and multiconductor cables through 10 components are all included.





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**Table 1: Basic WC27500 Cable Description**

Code	SAE Component	Code	SAE Component	Code	SAE Component
CA	AS22759/13	MK	AS81044/11	SV	AS22759/47
CB	AS22759/14	ML	AS81044/12	SW	AS22759/48
CC	AS22759/15	MM	AS81044/13	SE	AS22759/35
E	AS22759/2	RA	AS22759/3	SX	AS22759/49
EA	AS822759/1	RB	AS22759/4	SY	AS22759/50
JB	AS22759/28	RC	AS22759/11	TA	AS22759/8
JC	AS22759/29	RE	AS22759/12	TE	AS22759/16
JD	AS22759/30	SA	AS22759/7	TF	AS22759/17
JE	AS22759/31	SB	AS22759/32	TG	AS22759/18
LE	AS22759/9	SC	AS22759/33	TH	AS22759/19
LH	AS22759/10	SD	AS22759/34	TK	AS22759/20
MD	AS81044/5	SM	AS22759/41	TL	AS22759/21
ME	AS81044/6	SN	AS22759/42	TM	AS22759/22
MF	AS81044/7	SP	AS22759/43	TN	AS22759/23
MG	AS81044/8	SR	AS22759/44	VA	AS22759/5
MH	AS81044/9	SS	AS22759/45	WA	AS22759/6
MJ	AS81044/10	ST	AS22759/46		



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**Table 2: WC27500 Cable's Shield Description**

<b>Single Shield Code</b>	<b>Double Shield Code</b>	<b>Shield Material Description</b>	<b>Max. Temperature for Shield</b>
<b>U</b>	<i>N/A</i>	Not Shielded	<i>N/A</i>
<b>T</b>	<b>V</b>	Tinned Copper, Round	150°C
<b>S</b>	<b>W</b>	Silver-Coated Copper, Round	200°C
<b>N</b>	<b>Y</b>	Nickel-Coated Copper, Round	260°C
<b>F</b>	<b>Z</b>	Stainless Steel, Round	400°C
<b>C</b>	<b>R</b>	Nickel-Clad Copper, Round	400°C
<b>M</b>	<b>K</b>	Silver-Coated High Strength Copper Alloy, Round	200°C
<b>\$</b>	<b>+</b>	Heavy Silver-Coated Copper, Round	200°C
<b>P</b>	<b>L</b>	Nickel-Coated High Strength Copper Alloy, Flat	260°C
<b>G</b>	<b>A</b>	Silver-Coated Copper, Flat	200°C
<b>H</b>	<b>B</b>	Silver-Coated High Strength Copper Alloy, Flat	260°C
<b>*</b>	<b>#</b>	Nickel-Coated Copper, Flat	260°C
<b>J</b>	<b>D</b>	Tinned Copper, Flat	150°C
<b>E</b>	<b>X</b>	Nickel-Coated High Strength Copper Alloy, Flat	260°C
<b>I</b>	<b>Q</b>	Nickel-Chromium Alloy, Flat	400°C



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**Table 3: WC27500 Cable Jacket Type**

Single Jacket Code	Double Jacket Code	Jacket Material Description	Max. Temperature for Jacket
0	0	No Jacket	N/A
5	55	Extruded FEP, Clear	200°C
6	56	Extruded or Taped PTFE, White	260°C
7	57	PTFE Coated Glass Braid over PTFE	260°C
9	59	Extruded FEP, White	150°C
10	60	Extruded PVDF, Clear	125°C
11	61	Polyimide Tape, FEP	200°C
12	62	Polyimide Tape, FEP, Polyimide	200°C
14	64	Extruded ETFE, White	150°C
15	65	Extruded ETFE, Clear	150°C
17	67	Extruded ECTFE, White	150°C
18	68	Extruded ECTFE, Clear	150°C
20	70	Extruded PFA, White	260°C
21	71	Extruded PFA, Clear	260°C
24	74	PTFE Tape over TFE/Polyimide	200°C



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**Table 4: WC27500 Cable's Shield Covering and Color Coding (see table A, B, C, D)**

85% Shield Coverage Code	90% Shield Coverage Code	M27500 Cable Terminology	Component Wire ID Method
-	C	Preferred Method, Table 4A	White wire with colored stripes per Table 4A. Wire 1 has no stripe. Wires 11-15 have double stripes.
F	H	Preferred Method, Table 4B	White wire with colored stripes per Table 4B. Wire 5 has no stripe. For wires 11-15, insulation is first color, stripe is second color.
A	D	Optional Method A, Table 4A	Solid Colored Wire. Wires 11-15 have a stripe in a lighter shade of base color.
G	J	Optional Method A, Table 4B	Solid Colored Wire. Wires 11-15, insulation is first color, stripe is second color.
B	E	Optional Method B, Table 4C	Wire insulation color is based on AWG size. Bands of contrasting color denote wire number (per table 4D)
K	M	Optional Method C, Table 4C	Wires are all same color based on AWG size. Numbers of contrasting color printed to denote wire number
L	N	Optional Method D	White wires with numbers of contrasting color printed to denote wire number



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**Table 4A: WC27500 Cable's Color Code Chart**

Wire Number	Color	Wire Number	Color	Wire Number	Color
1	White	6	Black	11	Blue/Blue
2	Blue	7	Yellow	12	Orange/Orange
3	Orange	8	Violet	13	Green/Green
4	Green	9	Gray	14	Red/Red
5	Red	10	Brown	15	Black/Black

**Table 4B: WC27500 Cable's Color Code Chart**

Wire Number	Color	Wire Number	Color	Wire Number	Color
1	Red	6	Black	11	Red/White
2	Blue	7	Brown	12	Blue/White
3	Yellow	8	Orange	13	Yellow/White
4	Green	9	Violet	14	Green/White
5	White	10	Gray	15	Black/White

**Table 4C: WC27500 Cable's Color Code By AWG Size**

AWG Size	Color	AWG Size	Color	AWG Size	Color	AWG Size	Color
26	Black	24	Blue	22	Green	20	Red
18	White	16	Blue	14	Green	12	Yellow
10	Brown	8	Red	6	Blue	4	Yellow
2	Red	1	White	00	Blue	00	Green



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**Table 4D: WC27500 Cable's Color Code Band Configuration**

Wire Number	Band Configuration	Wire Number	Band Configuration	Wire Number	Band Configuration
1	None	6	6 Narrow	11	1 Wide, 4 Narrow
2	2 Narrow	7	7 Narrow	12	1 Wide, 5 Narrow
3	3 Narrow	8	1 Wide, 1 Narrow	13	2 Wide, 1 Narrow
4	4 Narrow	9	1 Wide, 2 Narrow	14	2 Wide, 2 Narrow
5	5 Narrow	10	1 Wide, 3 Narrow	15	2 Wide, 3 Narrow