

NEMA WC27500 (MIL-DTL-27500) Cables

Multiple Constructions Available; Common Constructions Listed Below



NEMA WC27500 Example Part Number

Cable Specification	Identification Method	Conductor AWG Size	Primary Wire Type	No. of Conductors	Shield Type	Jacket Type
M27500	-	20	ML	2	T	08

Primary Wire Types

WC27500 Code	Wire Type	Insulation Material	Temperature Rating	Voltage
SA	SAE AS22759/7	PTFE	200°C	600V
TA	SAE AS22759/8	PTFE	260°C	600V
LE	SAE AS22759/9	PTFE	200°C	1000V
LH	SAE AS22759/10	PTFE	260°C	600V
RC	SAE AS22759/11	PTFE	200°C	600V
RE	SAE AS22759/12	PTFE	260°C	600V
TE	SAE AS22759/16	ETFE	150°C	600V
TG	SAE AS22759/18	ETFE	150°C	600V
JC	SAE AS22759/29	PTFE / Polyimide	260°C	600V
SB	SAE AS22759/32	XLETFE	150°C	600V
SC	SAE AS22759/33	XLETFE	200°C	600V
SD	SAE AS22759/34	XLETFE / XLETFE	150°C	600V
SE	SAE AS22759/35	XLETFE / XLETFE	200°C	600V
SM	SAE AS22759/41	XLETFE / XLETFE	200°C	600V
SP	SAE AS22759/43	XLETFE / XLETFE	200°C	600V
SR	SAE AS22759/44	XLETFE	200°C	600V
WJ	SAE AS22759/86	Layered PTFE Tape	200°C	600V
WL	SAE AS22759/88	Layered PTFE Tape	150°C	600V
WR	SAE AS22759/92	Layered PTFE Tape	260°C	600V
JF	MIL-W-25038/3	Polyimide Tape / PTFE Tape	260°C	600V
MH	SAE AS81044/9	XL-Polyalkene / XLPVDF	150°C	600V
ML	SAE AS81044/12	XL-Polyalkene / XLPVDF	150°C	600V
MM	SAE AS81044/13	XL-Polyalkene / XLPVDF	150°C	600V
MW	MIL-DTL-81381/11	Polyimide Tape / Polyimide	200°C	600V

Identification Methods & Shield Coverage

WC27500 Code	Shield Coverage	Identification Method
-	85%	White wires, striped per Color Code III A
F		White wires, striped per Color Code III B
A		Solid wires per Color Code III A
G		Solid wires per Color Code III B
C	90%	White wires, striped per Color Code III A
H		White wires, striped per Color Code III B
D		Solid wires per Color Code III A
J		Solid wires per Color Code III B

Color Codes

Conductor	Color Code III A	Color Code III B
1	White	Red
2	Blue	Blue
3	Orange	Yellow
4	Green	Green
5	Red	White
6	Black	Black
7	Yellow	Brown
8	Violet	Orange
9	Gray	Violet
10	Brown	Brown
11	Blue/Blue	Blue/Blue
12	Orange/Orange	Orange/Orange
13	Green/Green	Yellow/White
14	Red/Red	Red/Red
15	Black/Black	Black/Black

Shield Types

WC27500 Single Shield Code	WC27500 Double Shield Code	Shield Material	Shield Wire Shape	Temperature Rating
U	N/A	No Shield	N/A	N/A
T	V	Tin-plated copper	Round	150°C
S	W	Silver-plated copper		200°C
M	K	Silver-plated copper alloy		200°C
N	Y	Nickel-plated copper		260°C
P	L	Nickel-plated copper alloy		260°C
J	D	Tin-plated copper		150°C
G	A	Silver-plated copper	Flat	200°C
H	B	Silver-plated copper alloy		200°C
E	X	Nickel-plated copper alloy		260°C

Jacket Types

WC27500 Single Jacket Code	WC27500 Double Jacket Code	Jacket Material	Temperature Rating
00	00	No Jacket	-----
01	51	Extruded PVC, white	90°C
02	52	Extruded nylon, clear	105°C
05	55	Extruded FEP, clear	200°C
06	56	Extruded or taped PTFE, white	260°C
07	57	PTFE coated and impregnated glass braid over PTFE tape, white	260°C
08	58	Extruded irradiated XLPVDF, white	150°C
09	59	Extruded FEP, white	200°C
10	60	Extruded PVDF, clear	125°C
12	62	Nylon/FEP tape with nylon outer surface, natural	200°C
14	64	Extruded ETFE, white	150°C
15	65	Extruded ETFE, clear	150°C
20	70	Extruded PFA, white	260°C
21	71	Extruded PFA, clear	260°C
23	73	Extruded irradiated XLETFE, white	200°C
24	74	PTFE tape over nylon/FEP tape, white	200°C

Notes

- Additional primary wire types, color codes, shielding types and jacket materials available; consult the NEMA WC27500 specification for complete configuration options and construction details.

Applications

For use in aerospace & military, electronic and shipboard applications.