

MIL-W-16878 wire

MIL-W-16878 (NEMA HP3, HP4) wires are general-purpose, medium and high-temperature hookup wires, with PTFE or FEP insulation. Each insulation type is available in thin, medium, or heavy wall thickness, for voltage ratings from 250 to 1,000 volts.

Conductor choices within MIL-W-16878 are solid or stranded copper, high-strength copper alloy, or copper-covered steel; with silver, nickel, or tin plating.

Construction characteristics—MIL-W-16878 wires

MIL-W-16878 Slant Sheet	Type	Voltage	Insulation Material	Insulation Wall Thickness	Conductor Plating	Temperature Rating (Max.)	Page
MIL-W-16878/4	E	600	PTFE (Extruded)	.010	Silver	200	27
MIL-W-16878/5	EE	1,000	PTFE (Extruded)	.015	Silver	200	28
MIL-W-16878/6	ET	250	PTFE (Extruded)	.006	Silver	200	29
MIL-W-16878/11	K	600	FEP (Extruded)	.010	Silver	200	30***
MIL-W-16878/12	KK	1,000	FEP (Extruded)	.015	Silver	200	31***
MIL-W-16878/13	KT	250	FEP (Extruded)	.006	Silver	200	32***
MIL-W-16878/20	—	250	PTFE (Tape)	.006	Silver	200	**
MIL-W-16878/21	—	600	PTFE (Tape)	.010	Silver	200	**
MIL-W-16878/22	—	1,000	PTFE (Tape)	.015	Silver	200	**
MIL-W-16878/23	ET	250	PTFE (Extruded)	.006	Nickel	260	**
MIL-W-16878/24	—	250	PTFE (Tape)	.006	Nickel	260	**
MIL-W-16878/25	E	600	PTFE (Extruded)	.010	Nickel	260	**
MIL-W-16878/26	—	600	PTFE (Tape)	.010	Nickel	260	**
MIL-W-16878/27	EE	1,000	PTFE (Extruded)	.015	Nickel	260	**
MIL-W-16878/28	—	1,000	PTFE (Tape)	.015	Nickel	260	**

Temperature in °C. Wall thickness in inches. All values are nominal unless otherwise indicated.

** Contact factory for availability. *** Commercial equivalents (with tin-plated copper conductor). MIL-spec versions available.

MIL-W-16878 part numbering and example

MIL-W-16878/5 **B** **C** **B** **903**

Insulation color, followed by color for up to two stripes.

Conductor material	
Letter	Material
B	Coated copper
C	Coated copper-clad steel
D	Coated high-strength copper alloy

Conductor size			
Letter	AWG	Letter	AWG
A	32	M	10
B	30	N	8
C	28	P	6
D	26	R	4
E	24	S	2
F	22	T	1
G	20	U	0
H	18	W	2/0
J	16	Y	3/0
K	14	Z	4/0
L	12		

Conductor stranding			
Letter	Strands	Letter	Strands
A	1	L	133
B	7	M	168
C	10	N	259
D	16	P	665
E	19	R	817
F	26	S	1045
G	37	T	1330
H	41	V	1672
J	65	W	2109
K	105		

Color code	
Number	Color
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Violet
8	Gray
9	White