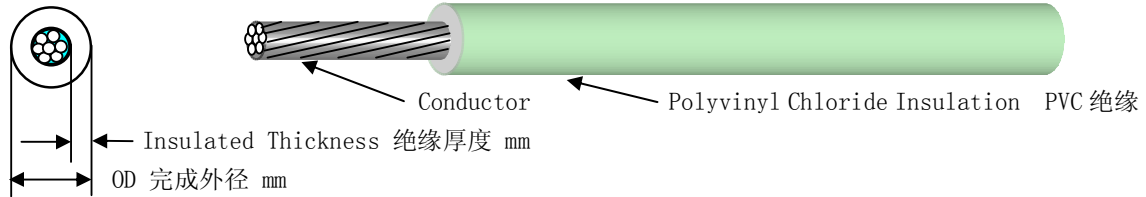


美国军用电线 MIL-DTL-16878/2C



引用标准:

MIL-DTL-16878/2C 11 August 2000

替代

MIL-W-16878/2B (NAVY) 11 September 1992

使用材质:

聚氯乙烯 PVC (POLYVINYL CHLORIDE) 材质绝缘, 额定温度: 105°C; 额定电压: 1000V。

应用范围:

应用于国防部相关的各个部门, 但不能使用于海军舰艇和航空宇宙飞船。

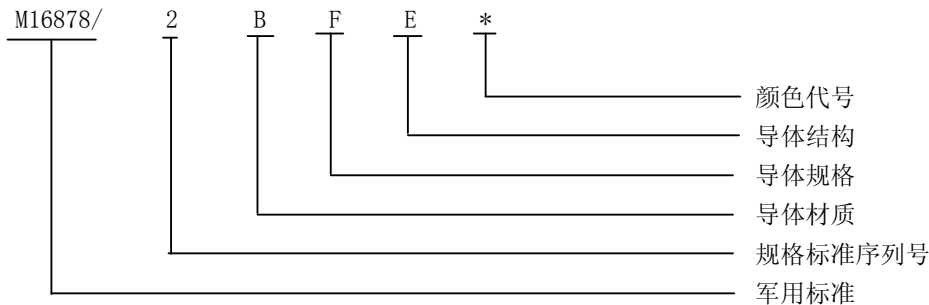
标准规格参数:

PIN	Wire size (AWG)	Stranding	Conductor		Conductor Diameter (mm)	Insulated Thickness Nominal (mm)	Finished Wire Diameter (mm)	
			Material	Coating			Min	Max
M16878/2BDA*	26	1/0.404	Copper	Tin	0.406	0.44	1.168	1.372
M16878/2DDA*	26	1/0.404	H.S.C.A	Silver	0.406	0.44	1.168	1.372
M16878/2CDA*	26	1/0.404	C.C.steel	Tin	0.406	0.44	1.168	1.372
M16878/2BDB*	26	7/0.160	Copper	Tin	0.483	0.44	1.245	1.448
M16878/2DDB*	26	7/0.160	H.S.C.A	Silver	0.483	0.44	1.245	1.448
M16878/2BDE*	26	19/0.102	Copper	Tin	0.533	0.44	1.245	1.448
M16878/2DDE*	26	19/0.102	H.S.C.A	Silver	0.533	0.44	1.245	1.448
M16878/2BEA*	24	1/0.511	Copper	Tin	0.508	0.44	1.270	1.473
M16878/2DEA*	24	1/0.511	H.S.C.A	Silver	0.508	0.44	1.270	1.473
M16878/2CEA*	24	1/0.511	C.C.steel	Tin	0.508	0.44	1.270	1.473
M16878/2BEB*	24	7/0.203	Copper	Tin	0.610	0.44	1.372	1.575
M16878/2DEB*	24	7/0.203	H.S.C.A	Silver	0.610	0.44	1.372	1.575
M16878/2BEE*	24	19/0.127	Copper	Tin	0.660	0.44	1.372	1.575
M16878/2DEE*	24	19/0.127	H.S.C.A	Silver	0.660	0.44	1.372	1.575
M16878/2BFA*	22	1/0.643	Copper	Tin	0.635	0.44	1.397	1.626
M16878/2DFA*	22	1/0.643	H.S.C.A	Silver	0.635	0.44	1.397	1.626
M16878/2CFA*	22	1/0.643	C.C.steel	Tin	0.635	0.44	1.397	1.626
M16878/2BFB*	22	7/0.254	Copper	Tin	0.762	0.44	1.524	1.727
M16878/2DFB*	22	7/0.254	H.S.C.A	Silver	0.762	0.44	1.524	1.727
M16878/2BFE*	22	19/0.160	Copper	Tin	0.838	0.44	1.524	1.727
M16878/2DFE*	22	19/0.160	H.S.C.A	Silver	0.838	0.44	1.524	1.727
M16878/2BGA*	20	1/0.813	Copper	Tin	0.813	0.44	1.575	1.778
M16878/2DGA*	20	1/0.813	H.S.C.A	Silver	0.813	0.44	1.575	1.778
M16878/2BGB*	20	7/0.320	Copper	Tin	0.965	0.44	1.727	1.930
M16878/2DGB*	20	7/0.320	H.S.C.A	Silver	0.965	0.44	1.727	1.930
M16878/2BGC*	20	10/0.254	Copper	Tin	0.965	0.44	1.727	1.930
M16878/2DGC*	20	10/0.254	H.S.C.A	Silver	0.965	0.44	1.727	1.930
M16878/2BGE*	20	19/0.203	Copper	Tin	1.041	0.44	1.727	1.930
M16878/2DGE*	20	19/0.203	H.S.C.A	Silver	1.041	0.44	1.727	1.930
M16878/2BHA*	18	1/1.020	Copper	Tin	1.016	0.44	1.778	2.007
M16878/2BHB*	18	7/0.404	Copper	Tin	1.245	0.44	2.007	2.210
M16878/2BHD*	18	16/0.254	Copper	Tin	1.194	0.44	1.956	2.159

PIN	Wire size (AWG)	Stranding	Conductor		Conductor Diameter (mm)	Insulated Thickness Nominal (mm)	Finished Wire Diameter (mm)	
			Material	Coating			Min	Max
M16878/2BHE*	18	19/0.254	Copper	Tin	1.295	0.44	2.007	2.210
M16878/2BJA*	16	1/1.290	Copper	Tin	1.295	0.44	2.032	2.261
M16878/2BJE*	16	19/0.287	Copper	Tin	1.499	0.44	2.261	2.464
M16878/2BJF*	16	26/0.254	Copper	Tin	1.575	0.44	2.337	2.540
M16878/2BKA*	14	1/1.630	Copper	Tin	1.626	0.44	2.388	2.591
M16878/2BKE*	14	19/0.361	Copper	Tin	1.829	0.44	2.591	2.794
M16878/2BKH*	14	41/0.254	Copper	Tin	2.032	0.44	2.794	2.997
M16878/2BLA*	12	1/2.050	Copper	Tin	2.057	0.44	2.794	3.023
M16878/2BLE*	12	19/0.455	Copper	Tin	2.311	0.44	3.073	3.277
M16878/2BLG*	12	37/0.320	Copper	Tin	2.261	0.44	3.023	3.226
M16878/2BLJ*	12	65/0.254	Copper	Tin	2.489	0.44	3.251	3.454

备注:

- 1、PIN (Part or Identifying Number) 型号
- 2、H.S.C.A(High-Strength Copper Alloy) 高强度铜合金材质。
- 3、C.C.(Copper-Clad) 铜包钢双层金属材质。
- 4、电线型号的表示方法：例如：M16878/2BFE*



技术要求:

- 1、火花机测试电压：5.0kv
- 2、冲击试验电压：10.0kv 或 3.0kHz、7.1kv 火花机测试
- 3、耐压试验电压：3.0kv
- 4、绝缘电阻： $IR_{20^{\circ}C} = K \cdot \log_{10} D/d$ (MΩ/KF)
 $IR_{20^{\circ}C}$:20℃的最小绝缘电阻
 K=2000
 D: 电线最大完成外径
 d: 导体直径
- 5、冷弯曲试验： 试验温度 X 时间：-54±1℃ X 4h
 试验用芯轴直径：

电线规格 (AWG)	最大芯轴直径 (mm)
26AWG~16AWG	50.8
14AWG、12AWG	76.2

- 6、热冲击试验： 试验温度：150℃
- 7、抗张强度 (Min)：1800Ibs/Inch² 或 12.4MPa
- 8、断裂伸长率 (Min)：100%
- 9、热老化试验： 试验温度 X 时间：135℃ X 96h
 变化率 (Max)：25%
- 10、表面电阻： 不作要求

