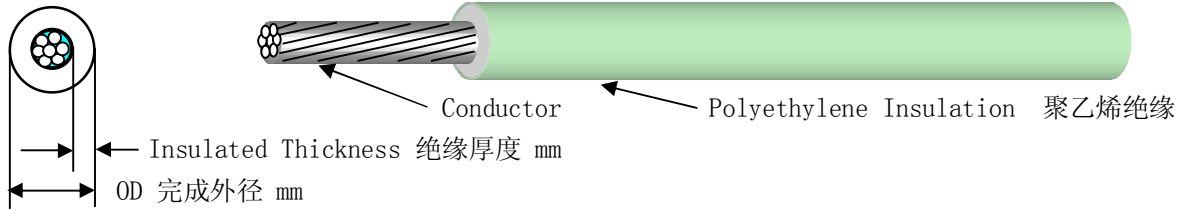


美国军用电线 MIL-DTL-16878/10E



引用标准:

MIL-DTL-16878/10E 11 August 2000

替代

MIL-W-16878/10D(NAVY) 11 September 1992

使用材质:

聚乙烯 (POLYETHYLENE) 材质绝缘, 额定温度: 75°C; 额定电压: 600V。

应用范围:

应用于国防部相关的各个部门。

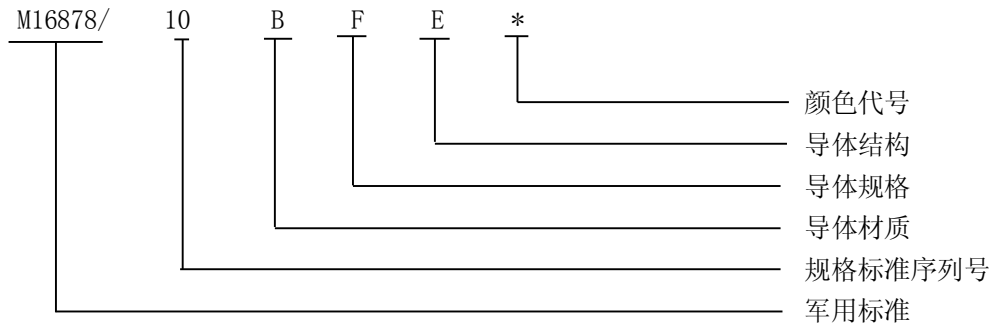
标准规格参数:

PIN	Wire size (AWG)	Stranding	Conductor		Conductor Diameter (mm)	Insulated Thickness Nominal (mm)	Finished Wire Diameter (mm)	
			Material	Coating			Min	Max
M16878/10BEA*	24	1/0.511	Copper	Tin	0.511	0.33	1.041	1.245
M16878/10CEA*	24	1/0.511	C.C.steel	Tin	0.511	0.33	1.041	1.245
M16878/10BEB*	24	7/0.203	Copper	Tin	0.610	0.33	1.143	1.346
M16878/10BEE*	24	19/0.127	Copper	Tin	0.635	0.33	1.143	1.346
M16878/10BFA*	22	1/0.643	Copper	Tin	0.645	0.33	1.194	1.397
M16878/10CFA*	22	1/0.643	C.C.steel	Tin	0.645	0.33	1.194	1.397
M16878/10BFB*	22	7/0.254	Copper	Tin	0.762	0.33	1.321	1.524
M16878/10BFE*	22	19/0.160	Copper	Tin	0.813	0.33	1.321	1.524
M16878/10BGA*	20	1/0.813	Copper	Tin	0.813	0.35	1.422	1.626
M16878/10BGB*	20	7/0.320	Copper	Tin	0.965	0.35	1.575	1.778
M16878/10BGE*	20	19/0.203	Copper	Tin	1.016	0.35	1.575	1.778
M16878/10BHA*	18	1/1.020	Copper	Tin	1.024	0.35	1.626	1.829
M16878/10BHB*	18	7/0.404	Copper	Tin	1.219	0.35	1.829	2.032
M16878/10BHD*	18	16/0.254	Copper	Tin	1.194	0.35	1.803	2.007
M16878/10BHE*	18	19/0.254	Copper	Tin	1.270	0.35	1.829	2.032
M16878/10BJA*	16	1/1.290	Copper	Tin	1.290	0.38	1.956	2.159
M16878/10BJE*	16	19/0.287	Copper	Tin	1.448	0.38	2.108	2.311
M16878/10BJF*	16	26/0.254	Copper	Tin	1.524	0.38	2.184	2.388
M16878/10BKA*	14	1/1.630	Copper	Tin	1.628	0.43	2.388	2.591
M16878/10BKE*	14	19/0.361	Copper	Tin	1.829	0.43	2.591	2.794
M16878/10BLE*	12	19/0.455	Copper	Tin	2.311	0.43	3.073	3.277
M16878/10BLJ*	12	65/0.254	Copper	Tin	2.362	0.43	3.124	3.327
M16878/10BMG*	10	37/0.404	Copper	Tin	2.819	0.51	3.708	3.962
M16878/10BMK*	10	105/0.254	Copper	Tin	3.048	0.51	3.937	4.191
M16878/10BNL*	8	133/0.287	Copper	Tin	4.293	0.66	5.486	5.740
M16878/10BPL*	6	133/0.361	Copper	Tin	5.410	0.80	6.858	7.163
M16878/10BRL*	4	133/0.455	Copper	Tin	6.833	0.93	8.509	8.865
M16878/10BSL*	2	133/0.574	Copper	Tin	8.509	0.93	10.135	10.541
M16878/10BTM*	1	259/0.455	Copper	Tin	9.601	1.00	11.354	11.811
M16878/10BUM*	0	259/0.511	Copper	Tin	10.770	1.00	12.573	12.979
M16878/10BWM*	00	259/0.574	Copper	Tin	12.116	1.25	14.351	14.859

PIN	Wire size (AWG)	Stranding	Conductor		Conductor Diameter (mm)	Insulated Thickness Nominal (mm)	Finished Wire Diameter (mm)	
			Material	Coating			Min	Max
M16878/10BYM*	000	259/0.643	Copper	Tin	13.538	1.25	15.824	16.078
M16878/10BZM*	0000	259/0.724	Copper	Tin	15.265	1.25	17.526	18.034

备注:

- 1、PIN (Part or Identifying Number) 型号
- 2、C.C. (Copper-Clad) 铜包钢双金属材质
- 3、电线型号表示方法: 例如: M16878/10BFE*



技术要求:

- 1、火花机测试电压: 3.4kv
- 2、冲击试验电压: 8.0kv 或 3.0kHz、5.7kv 火花机测试
- 3、耐压试验电压: 2.2kv
- 4、绝缘电阻: $IR_{20^{\circ}C} = K \cdot \log_{10} D/d$ (MΩ/KF)
 $IR_{20^{\circ}C}$: 20°C 的最小绝缘电阻
 K=50000
 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: $-65 \pm 1^{\circ}C$ X 4h
 试验用芯轴直径:

电线规格 (AWG)	最大芯轴直径 (mm)
24AWG、22AWG	25.4
20AWG~12AWG	50.8
10AWG~6AWG	76.2
4AWG~1AWG	114.3
0AWG、00AWG	152.4
000AWG、0000AWG	254

- 6、热冲击试验: 试验温度 X 时间: $95^{\circ}C$ X 48h
- 7、抗张强度 (Min): 1400Ibs/Inch² 或 9.65 MPa
- 8、断裂伸长率 (Min): 100%
- 9、热老化试验: 试验温度 X 时间: $95^{\circ}C$ X 48h
 变化率 (Max): 25%
- 10、表面电阻: 不作要求
- 11、标记耐擦性: 不作要求