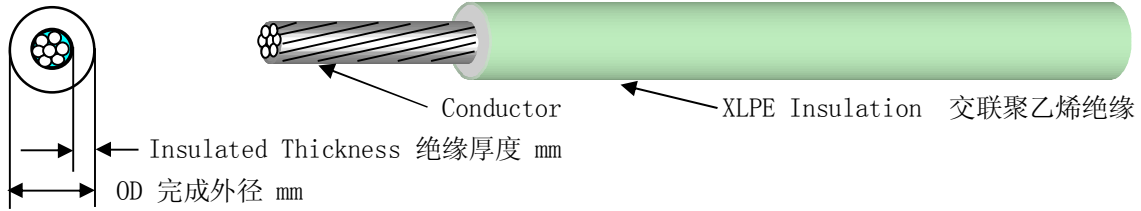


美国军用电线 MIL-DTL-16878/16C



引用标准:

MIL-DTL-16878/16C 11 August 2000 And Amendment 1 7 December 2001

替代

MIL-W-16878/16B(NAVY) 11 September 1992

使用材质:

交联聚乙烯 (CROSSLINKED POLYETHYLENE) 材质绝缘, 额定温度: 125°C; 额定电压: 3000V。

应用范围:

应用于国防部相关的各个部门。

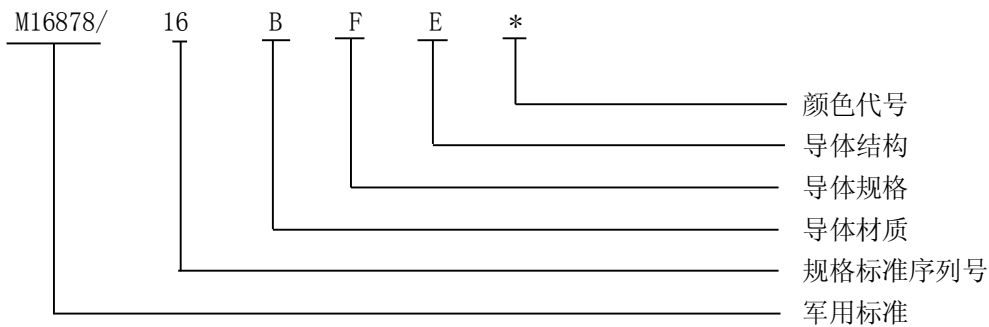
标准规格参数:

PIN	Wire size (AWG)	Stranding	Conductor		Conductor Diameter (mm)	Insulated Thickness Nominal (mm)	Finished Wire Diameter (mm)	
			Material	Coating			Min	Max
M16878/16BDA*	26	1/0.404	Copper	Tin	0.404	0.75	1.702	2.083
M16878/16BDB*	26	7/0.160	Copper	Tin	0.483	0.75	1.778	2.159
M16878/16BDE*	26	19/0.102	Copper	Tin	0.508	0.75	1.778	2.159
M16878/16BEA*	24	1/0.511	Copper	Tin	0.511	0.75	1.803	2.184
M16878/16BEB*	24	7/0.203	Copper	Tin	0.610	0.75	1.905	2.286
M16878/16BEE*	24	19/0.127	Copper	Tin	0.635	0.75	1.905	2.286
M16878/16BFA*	22	1/0.643	Copper	Tin	0.645	0.75	1.930	2.311
M16878/16BFB*	22	7/0.254	Copper	Tin	0.762	0.75	2.057	2.489
M16878/16BFE*	22	19/0.160	Copper	Tin	0.813	0.75	2.057	2.489
M16878/16BGA*	20	1/0.813	Copper	Tin	0.813	0.75	2.108	2.489
M16878/16BGB*	20	7/0.320	Copper	Tin	0.965	0.75	2.261	2.667
M16878/16BGE*	20	19/0.203	Copper	Tin	1.016	0.75	2.261	2.667
M16878/16BHA*	18	1/1.020	Copper	Tin	1.024	0.75	2.311	2.692
M16878/16BHB*	18	7/0.404	Copper	Tin	1.219	0.75	2.515	2.896
M16878/16BHE*	18	19/0.254	Copper	Tin	1.194	0.75	2.515	2.896
M16878/16BJA*	16	1/1.290	Copper	Tin	1.290	0.75	2.591	2.972
M16878/16BJE*	16	19/0.287	Copper	Tin	1.448	0.75	2.743	3.124
M16878/16BJF*	16	26/0.254	Copper	Tin	1.524	0.75	2.819	3.175
M16878/16BKA*	14	1/1.630	Copper	Tin	1.628	0.75	2.921	3.302
M16878/16BKE*	14	19/0.361	Copper	Tin	1.829	0.75	3.124	3.505
M16878/16BKH*	14	41/0.254	Copper	Tin	1.930	0.75	3.226	3.607
M16878/16BLE*	12	19/0.455	Copper	Tin	2.337	0.91	3.962	4.343
M16878/16BLG*	12	37/0.320	Copper	Tin	2.261	0.91	3.886	4.267
M16878/16BLJ*	12	65/0.254	Copper	Tin	2.362	0.91	3.988	4.369
M16878/16BMG*	10	37/0.404	Copper	Tin	2.819	0.91	4.420	4.801
M16878/16BNL*	8	133/0.287	Copper	Tin	4.242	1.00	6.071	6.452
M16878/16BNM*	8	168/0.254	Copper	Tin	4.293	1.00	6.071	6.452
M16878/16BPL*	6	133/0.361	Copper	Tin	5.334	1.00	7.188	7.569
M16878/16BRL*	4	133/0.455	Copper	Tin	6.807	1.00	8.788	9.296
M16878/16BSL*	2	133/0.574	Copper	Tin	9.017	1.00	10.541	11.049
M16878/16BSP*	2	665/0.254	Copper	Tin	8.687	1.00	10.541	11.049

PIN	Wire size (AWG)	Stranding	Conductor		Conductor Diameter (mm)	Insulated Thickness Nominal (mm)	Finished Wire Diameter (mm)	
			Material	Coating			Min	Max
M16878/16BTN*	1	259/0.455	Copper	Tin	9.601	1.25	11.887	12.395
M16878/16BTR*	1	817/0.254	Copper	Tin	9.703	1.25	11.887	12.395
M16878/16BUN*	0	259/0.511	Copper	Tin	10.770	1.25	13.157	13.665
M16878/16BUS*	0	1045/0.254	Copper	Tin	10.947	1.25	13.157	13.665
M16878/16BWT*	00	1330/0.254	Copper	Tin	12.065	1.42	14.605	15.215
M16878/16BYV*	000	1672/0.254	Copper	Tin	13.589	1.42	16.688	17.297
M16878/16BZW*	0000	2109/0.254	Copper	Tin	15.240	1.42	17.526	18.618

备注:

- 1、PIN (Part or Identifying Number) 型号
- 2、电线型号表示方法: 例如: M16878/16BFE*



技术要求:

- 1、火花机测试电压: 8.0kv
- 2、冲击试验电压: 12.0kv 或 3.0kHz、8.5kv 火花机测试
- 3、耐压试验电压: 6.0 kv
- 4、绝缘电阻: $IR_{20c} = K \cdot \log_{10} D/d$ (MΩ/KF)
 IR_{20c} : 20°C 的最小绝缘电阻
 K=10000
 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: $-55 \pm 1^\circ\text{C} \times 4\text{h}$
 试验用芯轴直径:

电线规格 (AWG)	最大芯轴直径 (mm)
26AWG~22AWG	50.8
20AWG~14AWG	76.2
12AWG、10AWG	114.3
8AWG	152.4
6AWG、4AWG	254
2AWG、1AWG、0AWG	457.2
00AWG、000AWG、0000AWG	508

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

