

銅包铝线 (CCAW) Copper-Clad Aluminum Wires

高张力铜包铝线 (HCCAW) High-Tension Copper-Clad Aluminum Wires



铜包铝漆包线是采用了铝·铝合金为主材的复合材料的漆包线。是一种兼有铝的轻的特性，铜的良好焊接特性、抗腐蚀性的轻型复合材料。

The enameled copper-clad aluminum wire has a composite conduction made of aluminum or aluminum alloy clad with copper. It possesses lightness in weight as aluminum as well as solderability and corrosion resistance of copper.

特长 FEATURES

- ① 最适合于减轻线圈重量
Helps reduce the weight of coil
- ② 铜的包覆率可选 10、15% 等
The ratio of copper cladding can be selected among 10, 15% or the like
- ③ 导体的最外层为铜，所以具有和铜线一样的焊接性能
The copper cladding gives the wire the same degree of solderability as that of copper

■ 用途 Applications

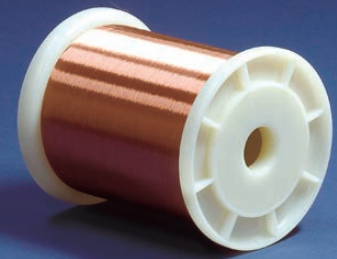
VCM线圈、光学拾波线圈、空心线圈、音圈
VCM coils, Optical pickup coils, Empty core coils, Voice coils

铜包铝线 (CCAW)

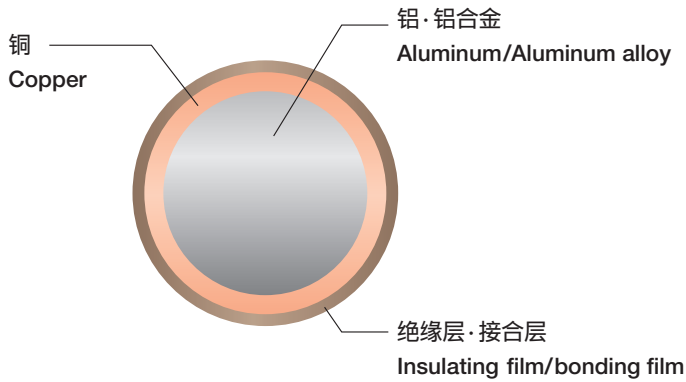
Copper-Clad Aluminum Wires

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High-Tension Copper-Clad Aluminum Wires



结构 CONSTRUCTION



标准型 (铜包覆盖率 15%)

Standard type (15% copper cladding)

- CCAW (Copper-Clad Aluminum Wire) 铜包铝线
- HCCAW (High-Tension Copper-Clad Aluminum Wire) 高张力铜包铝线

特性 Characteristics

特性项目 Items	铜线 Cooper Wire	CCAW	HCCAW	铝线 Aluminum Wire
铜面积比 (%) Ratio of Sectional Area Copper	100	15	15	0
比重 Specific Gravity	8.89	3.63	3.63	2.70
导电率 (% IACS) Electrical Conductivity	100	68	64	62
比电阻 (Ω·m) Specific Resistance	1.724 × 10 ⁻⁸	2.535 × 10 ⁻⁸	2.694 × 10 ⁻⁸	2.781 × 10 ⁻⁸
抗拉强度 (N/mm ²) Tensile Strength	215 ~ 264	98 ~ 137	147 ~ 196	68 ~ 107
伸长率 (%) Elongation	20 or over	10 or over	15 or over	8 or over

型号说明 Product name

2 - PE LOCKCCA W

(A) (B) (C)

- (A) 被覆层厚度的 JIS 规格 (1 类、2 类、3 类)
- (B) 绝缘层的种类 (C) 接合层的种类
- (A) JIS standard of film thickness (class 1. 2. 3)
- (B) Type of insulating film (C) Type of bonding film

制造范围 Range of manufacture

标识号 Code	绝缘层 Insulating Film	接合层 Bonding Film	制造范围 (mm) Range of Manufacture
CCA W	UE SF.B PE SF.EI	MZW LOCK LOCK Y1, Y3, Y5	0.05 ~ 0.40
HCCAW	UE SF.B PE SF.EI	MZW LOCK LOCK Y1, Y3, Y5	0.15 ~ 0.40

特性项目 Items	铜线 Cooper Wire	CCAW	HCCAW	铝线 Aluminum Wire
绕线性 Windability	◎	○	◎	○
重量 Weight	△	○	○	◎
焊接性能 Solderability	◎	◎	◎	△
直流电阻 D.C. Resistance	◎	○	○	○

◎: 优良 ○: 良好 △: 普通
◎: Excellent ○: Good △: Inferior

● 技术相关询问处

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