

耐火电缆

Fire Resistant Cable

本产品适用于高层建筑、油田、电站、电厂、矿山、化工、地铁等要求防火条件高的场合，以及应急电源、消防泵、电梯通讯信号系统的应备电缆。该产品具有较高的耐火能力，在经受火焰直接燃烧情况下，在一定的时间内（不小于3h）不发生短路和断路故障，确保继续供电以维持照明和传输信号，保护人员有足够的时间安全撤离，且有利于灭火和减少损失。

一、生产执行标准

GB/T19666-2005及相应的国家标准。

二、使用条件

- 1、交流额定电压：U0/U（V系列：600/1000V，K系列：450/750V，B系列300/500V）；
- 2、电缆最高长期工作温度
 - ① 聚氯乙烯绝缘：70℃和105℃两种；
 - ② 交联聚乙烯绝缘：90℃；
- 3、电缆安装敷设温度应不低于0℃；
- 4、敷设推荐的允许弯曲半径：铠装型为电缆外径的20倍，无铠装为电缆外径的12倍。

三、基本型号、名称如表1

Table 1

型号 Type	名称 Description	备注 Note
NH-BV NH-BVV	铜芯聚氯乙烯绝缘耐火电线 Fire resistant wire with Cu core, PVC insulation 铜芯聚氯乙烯绝缘聚氯乙烯护套圆形耐火电线 Round type fire resistant wire with Cu core, PVC insulation and sheath	
NH-KVV NH-KVV22	铜芯聚氯乙烯绝缘聚氯乙烯护套耐火控制电缆 Fire resistant control cable with Cu core, PVC insulation and sheath 铜芯聚氯乙烯绝缘聚氯乙烯护套钢带铠装耐火控制电缆 Fire resistant control cable with Cu core, PVC insulation and sheath, steel tape armor	注：本公司还可以向用户提供钢丝铠装结构的耐火电缆，订货时可将原型号中的“22”改为“32”即可。 Note: We also produce fire resistant cable with steel wire armor. “22” should be replaced by “32” when ordering
NH-VV NH-VV22	铜芯聚氯乙烯绝缘聚氯乙烯护套耐火电力电缆 Fire resistant power cable with Cu core, PVC insulation and sheath 铜芯聚氯乙烯绝缘聚氯乙烯护套钢带铠装耐火电力电缆 Fire resistant power cable with Cu core, PVC insulation and sheath, steel tape armor	
NH-YJV NH-YJV22	铜芯交联聚乙烯绝缘聚氯乙烯护套耐火电力电缆 Fire resistant power cable with Cu core, XLPE insulation and PVC sheath 铜芯交联聚乙烯绝缘聚氯乙烯护套钢带铠装耐火电力电缆 Fire resistant power cable with Cu core, XLPE insulation and PVC sheath, steel tape armor	

It is used in the environment with high demand on fire resistant performance such as high-rise building, oil field, power station, power plant, mine, chemical industry, subway and so on. It is also necessary cable prepared for emergency power, fire-flight pump and communication system for elevator. In time of being directly fired by flame, it could endure continually supplying power and transmitted signal to keep lighting within certain time (no less than 3 hours) for people to retreat safely and also to benefit to extinguish fire and reduce loss.

Executive standard

GB/T19666-2005.

Operational performance

- 1.AC rated voltage: U0/U（V series:600/1000V,K series:450/750V; Bseries 450/750V）
- 2.Max temperature of long term working is 70℃&105℃ for cable with PVC insulation and 90℃ for cable with XLPE insulation.
- 3.Temperature for installation is no lower than 0℃.
- 4.Recommended Bending Radius for laying:Armored,20 times of cable diameter.Unarmored,12times of cable outside diameter.

Type and Description in Table 1

四、规格范围如表2

Specication Range in Table 2

Table 2

型号 Type	电压等级 V Voltage degree	规格、截面 Specification Cross section area
NH-VV、NH-VV22 NH-YJV、NH-YJV22	600/1000	芯数：1~5芯，3+2芯 截面：2.5~240 mm ² Core No.: 1~5 core, 3+2 core Cross section area: 2.5~240 mm ²
NH-KVV、NH-KVV22	450/750	芯数：2~61芯，截面：2.5~10 mm ² Core No.:2~61 core, Cross section area: 2.5~10 mm ²
NH-BV、NH-BVV	450/750 300/500	芯数：1~5芯，截面：2.5~240 mm ² Core No.:1~5, Core Cross section area: 2.5~240 mm ²

五、技术特性

- 1、产品的电气性能和物理机械性能与普通同类产品相同；
- 2、电缆的载流量和普通同类产品相同；
- 3、耐火特性应符合GB/T19666-2005标准要求：电缆在燃烧试验期间2A熔丝不熔断；
- 4、耐火电缆的参考外径，截面在25mm²及以下的比普通同型号的产品规格大15%，截面在25mm²以上的比普通同型号产品规格大25%。

六、使用注意事项

- 1、电缆接头时，导体和绝缘之间应用云母带重叠绕包扎紧作为耐火层，其它施工方法与同类产品一致；
- 2、电缆应严格避免锐器损坏，否则会降低电缆的耐火性能。

七、交货要求

- 允许根据双方协议长度交货；
长度计量误差不超过±0.5%。

Technical Performance

- 1.Electric performance and mechanical&physical performance of cable is the same to common cable in similar category.
- 2.Current-loading capacity of cable is the same to common cable in similar category.
- 3.Fire resistant performance shall meet the requirement of GB/T19666-2005 standard. 2A fuse wire won't break during burning test period.
- 4.Outside diameter of fire resistant cable with cross section 25mm² or lower is bigger than that of common cable by 15%. Outside diameter of fire resistant cable with cross section more than 25mm² is bigger than that of common cable by 25%.

Cautions

- 1.Mica tape should be wrapped around between insulation and conductor as fire resistant layer in connection of cable. Other installing measures may be taken according to that for similar type cable.
- 2.User should strictly avoid damage on cable with sharp-edged objects. Otherwise it would affect fire resistant performance of cable.

Delivery length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%.