

无卤低烟阻燃、耐火电缆

LSOH Flame Retardant and Fire-Resisting Cables

本产品适用于额定电压600/1000V及以下低烟无卤要求的电力系统或控制及监控回路中。

This product is suitable for power systems or control & monitoring circuits with low smoke and halogen-free requirements, with the rated voltages up to and including 600/1000V.

一、生产执行标准

参照GB/T 9330-2008、GB/T 12706-2008、GB/T 19666-2005。

Executive standard

According to GB/T 9330-2008, GB/T 12706-2008, GB/T 19666-2005 standard.

二、使用特性

1. 电缆长期允许工作温度90°C。
2. 电缆敷设温度应不低于0°C，推荐弯曲半径：无卤阻燃控制电缆：

燃控制电缆：

①有铠装和屏蔽结构的电缆：其弯曲半径不小

于电缆外径的12倍；

②其它结构电缆：其弯曲半径不小于电缆外径的6倍

3、无卤阻燃电力电缆：

①单芯电缆：其弯曲半径不小于电缆外径的20倍；

②多芯电缆：其弯曲半径不小于电缆外径的15倍。

Operational performance

1. Long-term working temperature of cable is 90°C, and the installation temperature should not lower than 0°C.

2. Recommended bending radius is as following: No halogen flame retardant control cable:

The bending radius is not less than 12 times of the outer diameter of the cable with structure of armoring shielding.

The bending radius is not less than 6 times of the outer diameter of the cable, with other structure.

3. No halogen flame retardant power cable:

Bending radius is no less than 20 times that of cable outer diameter for cable with single core

Bending radius is no less than 15 times that of cable outer diameter for cable with multi cores.

三、型号名称

1、电缆的型号名称如下表

Cable type & name

Cable type & name as following

型号 Type		名称 Description
铜芯 Copper core	铝芯 Aluminum core	
WDZ-YJY	WDZ-YJLY	铜芯（铝芯）交联聚乙烯绝缘无卤低烟阻燃电力电缆 Copper core (aluminum core) XLPE insulation low smoke no halogen flame retardant power cable
WDZ-YJY23	WDZ-YJLY23	铜芯（铝芯）交联聚乙烯绝缘无卤低烟阻燃电力电缆 Copper core (aluminum core) XLPE insulation low smoke no halogen flame retardant power cable
WDZ-YJY33	WDZ-YJLY33	铜芯（铝芯）交联聚乙烯绝缘细钢丝铠装无卤低烟阻燃电力电缆 Copper core (aluminum core) XLPE insulation thin steel wire armoring low smoke no halogen flame retardant power cable
WDZN-YJY	/	铜芯交联聚乙烯绝缘无卤低烟阻燃耐火电力电缆 Copper core XLPE insulation low smoke no halogen flame retardant fire resistant power cable
WDZN-YJY23	/	铜芯交联聚乙烯绝缘钢带铠装无卤低烟阻燃耐火电力电缆 Copper core XLPE insulation steel tape armoring low smoke no halogen flame retardant fire resistant power cable
WDZN-YJY33	/	铜芯交联聚乙烯绝缘细钢丝铠装无卤低烟阻燃耐火电力电缆 Copper core XLPE insulation thin steel wire armoring low smoke no halogen flame retardant fire resistant power cable

型号 Type	名称 Description
WDZ-KYJY	铜芯交联聚乙烯绝缘无卤低烟阻燃控制电缆 Copper core XLPE insulation low smoke no halogen flame retardant control cable
WDZ-KYJYP	铜芯交联聚乙烯绝缘铜丝屏蔽无卤低烟阻燃控制电缆 Copper core XLPE insulation copper wire shielding low smoke no halogen flame retardant control cable
WDZ-KYJYP2	铜芯交联聚乙烯绝缘铜带屏蔽无卤低烟阻燃控制电缆 Copper core XLPE insulation copper tape shielding low smoke no halogen flame retardant control cable
WDZ-KYJYP2-23	铜芯交联聚乙烯绝缘铜带屏蔽钢带铠装无卤低烟阻燃控制电缆 Copper core XLPE insulation copper tape shielding steel tape armoring low smoke no halogen flame retardant control cable
WDZ-KYJY33	铜芯交联聚乙烯绝缘细钢丝铠装无卤低烟阻燃控制电缆 Copper core XLPE insulation thin steel wire armoring low smoke no halogen flame retardant control cable
WDZN-KYJY	铜芯交联聚乙烯绝缘无卤低烟阻燃耐火控制电缆 Copper core XLPE insulation low smoke no halogen flame retardant fire resistant control cable
WDZN-KYJYP2	铜芯交联聚乙烯绝缘铜带屏蔽无卤低烟阻燃耐火控制电缆 Copper core XLPE insulation copper tape shielding low smoke no halogen flame retardant fire resistant control cable
WDZN-KYJYP2-23	铜芯交联聚乙烯绝缘铜带屏蔽钢带铠装无卤低烟阻燃耐火控制电缆 Copper core XLPE insulation copper tape shielding steel tape armoring low smoke no halogen flame retardant fire resistant control cable

2、主要名词术语解释

低烟：在规定试验条件下，试样受热分解或燃烧释放出的烟比较少，符合规定指标的特性；

无卤：在规定试验条件下，试样燃烧时放出的卤化氢气体的含量极少，符合规定指标的特性；

阻燃：在一定的试验条件下，试样被燃烧，在撤去火源后，火焰的蔓延仅在规定的范围内，残焰或残灼在规定的时间内能自行熄灭的特性。

Definition of main noun glossary

Low smoke: cable sample discharges little smoke when be heated or be burn under stipulated test condition, meeting the requirement of stipulated target.

No halogen: The amount of hydrogen halide gas released during the sample combustion is very small, with under stipulated test condition, meeting the requirement of stipulated target.

Flame retardant: under certain test condition, cable sample is burn. When fire resource is withdrawn, flame spreading is controlled within stipulated range. Remnant spark or burning can put out by itself within stipulated time.

四、电缆的规格

Cable specification

型号 Type	额定电压 V Rated voltage	导体标称截面mm ² Nominal cross section area of conductor				
		0.5	0.75	1.0、1.5	2.4、4.6	10
WDZ-KYJY、WDZ-KYJYP	450/750 600/1000	芯数 Core number				
WDZ-KYJYP2、WDZ-KYJY33 WDZ-KYJYP2-23		2~61		2~37	2~14	
WDZN-KYJY		4~61				
WDZN-KYJYP2 WDZN-KYJYP2-23		/	2~61			
WDZ-YJY、WDZ-YJLY			4~61			
WDZ-YJY23、WDZ-YJLY23		单芯single core : 2.5mm ² ~500mm ² 2、3、4、5、3+1、3+2、4+1芯core : 2.5~300mm ²				
WDZ-YJY33、WDZ-YJLY33						
WDZN-YJY、WDZN-YJLY23						
WDZN-YJY33						

五、主要技术指标

- 1、导体直流电阻符合GB/T3956的规定；
- 2、90°C绝缘电阻常数不小于3.67MΩ.km，体积电阻率不小于10Ω.Cm；
- 3、电力电缆均应经受3.5kV交流电压试验，5min绝缘不击穿；
- 4、控制电缆应经受3kV交流电试验，5min绝缘不击穿；
- 5、无卤低烟阻燃性能指标：

Main technical parameter

- 1.Conductor DC resistance is in accordance with GB/ T3956 standard.
- 2.Insulated resistance constant is no less than 3.67MΩ.km at 90°C. Volume resistance ratio is no less than 10Ω.Cm.
- 3.Power cable shall endure 3.5kV A.C. voltage test for 5 minutes without puncture.
- 4.performance target of no halogen, low smoke and flame retardant.

试验项目 Test item	单位 Unit	性能要求 Performance requirement	试验方法 Test method
烟密度试验 Smoke density test 最小透光率 Min. luminousness	%	60	GB/T17651-1998
腐蚀性试验 Corrosive test 最小PH值 Min. PH value 电导率最大值 Max. conductive ratio	μ S/mm	4.3 10	GB/T17650.2-1998 (IEC60754)
卤化氢气体含量 Hydrogen halide gas content	mg/g	≤5	GB/T17650.1-1998 (IEC60754)
成束试验 Bundle burning test	-	-	GB/T18380.3-2008
试验级别 Test class	-	A、B、C	
供火时间 Time for fire	min	40、40、20	
每米可燃物总体积 Total volume of combustible per meter	L/m	7、3.5、1.5	
炭化高度 Carboniaed height	m	2.5、2.5、2.5	

六、交货长度

允许根据双方协议长度交货，
长度计量误差不超过±0.5%。

Delivery length

Delivery length depends on both agreement with length error
no more than ±0.5%.