

通信电源用阻燃耐火软电缆

Flame Retardant and Fire Resistant Flexible Cable for Telecommunication Power supply

本产品适用于通信局站及建筑等输、配电系统中的通信电源用阻燃耐火电缆。产品除具有聚氯乙烯绝缘电缆已有的优良性能外，还具有柔软、易弯曲等特点。

Flame retardant and fire resistant cable is used in telecommunication power supply and distribution system of telecommunications agencies/stations/buildings It has not only better performance of PVC insulation power cable, but also advantages of softness and flexibility as well.

一、生产执行标准

YD/T1173-2016。

Executive standard

YD/T1173-2016.

二、型号及名称

Type and Description

型号 Type	名称 Description	适用范围 Application
ZA-RV	聚氯乙烯绝缘阻燃A类软电缆 Category A,flame retardant flexible cable with PVC insulation	架空、管道、室内、电缆沟、设备安装，铠装电缆可地下直埋。 To be installed overhead, indoor in the pipe, cable furrow, equipment,armored cable can be directly buried.
ZA-RVV	铜芯聚氯乙烯绝缘聚氯乙烯护套阻燃A类软电缆 Category A,flame retardant flexible cable with PVC insulation ,PVC sheath	
ZA-RVVV	铜芯聚氯乙烯绝缘双层聚氯乙烯护套阻燃A类软电缆 Category A,flame retardant flexible cable with PVC insulation ,double PVC sheath	
ZA-RVV22	聚氯乙烯绝缘双钢带铠装聚氯乙烯护套阻燃A类软电缆 Category A,flame retardant flexible cable with PVC insulation , steel tape armored,PVC sheath	
WDZ-RY	聚烯烃绝缘无卤低烟单根阻燃软电缆 Single vertical flame retardant flexible cable with LSZH PO insulation	
WDZC-RYY	聚烯烃绝缘聚烯烃护套无卤低烟阻燃C类软电缆 Category C, flame retardant flexible cable with LSZH PO insulation and sheath	
WDZC-RYY23	聚烯烃绝缘双钢带铠装聚烯烃护套无卤低烟阻燃C类软电缆 Category C, flame retardant flexible cable with LSZH PO insulation, steel tape armored and LSZH PO sheath	
WDZN-RY	聚烯烃绝缘无卤低烟单根阻燃耐火软电缆 Single vertical fire resistant flexible cable with LSZH PO insulation	
WDZCN-RYY	聚烯烃绝缘聚烯烃护套无卤低烟阻燃C类耐火软电缆 Category C,flame retardant and Fire resitant flexible cable with LSZH PO insulation and sheath	
WDZCN-RYY23	聚烯烃绝缘双钢带铠装聚烯烃护套无卤低烟阻燃C类耐火软电缆 Category C,flame retardant and Fire resitant flexible cable with LSZH PO insulation, steel tape armored and LSZH PO sheath.	

三、生产范围

Production Scope

型号 Type	芯数 Core No.	标称截面 mm² Nominal cross section area	额定电压 Rated voltage
ZA-RV、WDZ-RY	1	1.5~500	450/750V
WDZN-RY		4~500	
ZA-RVV、WDZC-RYY	1	1.5~500	0.6/1kV
WDZCN-RYY		4~500	
ZA-RVV、WDZC-RYY	2、3、3+1、4、4+1、3+2、5	2.5~300	0.6/1kV
ZA-RVV22、WDZC-RYY23		10~300	0.6/1kV
WDZCN-RYY			
WDZCN-RYY23			
ZA-RVVV	2、3、4	2.5~35	300/500V

四、使用条件

- 1、电缆额定工作电压：
300/500V, 450/750V, 600/1000V;
- 2、电缆导体长期允许最高工作温度应不大于70℃；
- 3、电缆敷设时最低环境温度为0℃；
- 4、电缆允许弯曲半径：非铠装电缆中， 阻燃型不小于电缆外径的6倍， 耐火型为电缆外径的12倍； 铠装型电缆， 不小于电缆外径的20倍；
- 5、短路时（最长持续时间不超过5S）， 电缆导体的最高工作温度为160℃。

五、主要技术参数

- 1、20℃时导体最大直流电阻值应满足下面的规定：

标称截面 mm ² Nominal cross section area	1.5	2.5	4	6	10	16	25	35	50
20℃时导体最大直流电阻 Ω/km Max. DC resistance of conductor at 20℃	13.3	7.98	4.95	3.30	1.91	1.21	0.780	0.554	0.386
标称截面 mm ² Nominal cross section area	70	95	120	150	185	240	300	400	500
20℃时导体最大直流电阻 Ω/km Max. DC resistance of conductor at 20℃	0.272	0.206	0.161	0.129	0.106	0.0801	0.0641	0.0486	0.0384

- 2、70℃时最小绝缘电阻

Working Condition

- 1.Rated working voltage of cable:
300/500V、450/750V、600/1000V.
- 2.Max long-term working temperature of cable conductor: 70℃.
- 3.Min. ambient temperature for cable installation: 0℃.
- 4.Allowed bending radium:Unarmored cable,Flame retardant cable is not less than 6 times of OD of cable.Fire resistant cable is not less than 12 times of OD of cable.Armores cable is not less than 20 times of OD of cable.
- 5.Max. working temperature of cable conductor is 160℃ during short circuit(the longest lasting time shall be no more than 5s).

Main Technical Parameter

Max.DC resistance value of conductor at 20℃ shall meet the requirements of the following table:

Min.insulation resistance at 70℃

标称截面 mm ² Nominal cross section area	70℃时最小绝缘电阻 MΩ.km Min.insulation resistance at 70℃	标称截面 mm ² Nominal cross section area	70℃时最小绝缘电阻 MΩ.km Min.insulation resistance at 70℃
1.5	0.010	70	0.0032
2.5	0.009	95	0.0032
4	0.007	120	0.0029
6	0.006	150	0.0029
10	0.0056	185	0.0029
16	0.0046	240	0.0028
25	0.0044	300	0.0028
35	0.0038	400	0.0026
50	0.0037	500	0.0026
试验条件： ① 试验长度：5m； ② 浸水时间：1h； ③ 水温：70℃。		Testing condition Testing length: 5m. Time for immersion in the water is one hour. Temperature of water is 70℃	

- 3、工频交流耐压试验

成品电缆应经受下表规定的交流50Hz耐电压试验而不应击穿。

A.C. voltage test under power frequency
The finished cable shall bear A.C. voltage test of 50Hz listed in the following table without puncture.

电压 V Voltage		持续时间 Lasting time
额定电压 Rated voltage	试验电压 Testing voltage	
450/750	2500	5min
300/500	2000	
600/1000	3500	