



**BEIJING HUAYUAN GAOKE CABLE CO.,LTD.**  
**Daxing Industrial District, Beijing, China**  
 www.bjhygkable.com Tel: +86-010-80261008 Fax: +86-010-89233216

**XLPE Insulated No Halogen Low Smoke Fire Retardant Power Cable For Rated Voltage Up To And Including 35KV**



■ **Product standard:**

Enterprise standard

■ **Application**

This product is produced in accordance with RCCE and NF series standards and IEC60502、IEC60332-3、IEC60754、IEC601034, etc standard. After fired, this product cannot spread combustion and possesses no halogen, low smoke, no toxicity, no corrosion and so on characteristics. It is suitable for nuclear power station, underground facilities, tunnel, high-rise and broadcast television station, etc. fields. It is laid at electric power circuit with 35KV of rated voltage and is used as power transmission/distribution.

■ **Type and Specifications**

Type	Designation
WDZA-YJY WDZA-YJLY WDZB-YJY WDZB-YJLY WDZC-YJY WDZC-YJLY	XLPE insulated no halogen low smoke A (B or C) class fire retardant power cable
WDZA-YJY23 WDZA-YJLY23 WDZB-YJY23 WDZB-YJLY23 WDZC-YJY23 WDZC-YJLY23	XLPE insulated steel tape armored no halogen low smoke A (B or C) class fire retardant power cable
WDZA-YJY33 WDZA-YJLY33 WDZB-YJY33 WDZB-YJLY33 WDZC-YJY33 WDZC-YJLY33	XLPE insulated fine steel wire armored no halogen low smoke A (B or C) class fire retardant power cable
WDZA-YJY43 WDZA-YJLY43 WDZB-YJY43 WDZB-YJLY43 WDZC-YJY43 WDZC-YJLY43	XLPE insulated thick steel wire armored no halogen low smoke A (B or C) class fire retardant power cable

Type	Cores	Rated Voltage KV					
		0.6/1	1.8/3	3.6/6 6/6	6/10 8.7/10	8.7/15	18/20~26/35
Nominal Cross-sectional area mm <sup>2</sup>							
WDZA-YJY WDZB-YJY WDZC-YJY WDZA-YJLY WDZB-YJLY WDZC-YJLY	1	2.5~1000	10~1000	25~1000	25~1000	35~1000	50~1000

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WDZA-YJY33 WDZB-YJY33 WDZC-YJY33 WDZA-YJLY33 WDZB-YJLY33 WDZC-YJLY33		10~10000	10~10000	25~10000	25~10000	35~10000	50~10000
WDZA-YJY43 WDZB-YJY43 WDZC-YJY43 WDZA-YJLY43 WDZB-YJLY43 WDZC-YJLY43		10~10000	10~10000	25~10000	25~10000	35~10000	50~10000
WDZA-YJY WDZB-YJY WDZC-YJY WDZA-YJLY WDZB-YJLY WDZC-YJLY		2.5~400	10~300	25~300	25~300	25~300	25~300
WDZA-YJY23 WDZB-YJY23 WDZC-YJY23 WDZA-YJLY23 WDZB-YJLY23 WDZC-YJLY23	2 3 4 5	4~400	10~300	25~300	25~300	25~300	25~300
WDZA-YJY33 WDZB-YJY33 WDZC-YJY33 WDZA-YJLY33 WDZB-YJLY33 WDZC-YJLY33	3+1 3+2 4+1	4~400	10~300	25~300	25~300	25~300	25~300
WDZA-YJY43 WDZB-YJY43 WDZC-YJY43 WDZA-YJLY43 WDZB-YJLY43 WDZC-YJLY43		4~400	10~300	25~300	25~300	25~300	25~300

#### ■ Operating characteristics

1. (U<sub>0</sub>/U) 0.6/1KV, 3.6/6KV, 6/6KV, 6/10KV, 8.7/10KV, 8.7/15KV, 18/20KV, 21/35 KV, 26/35KV.

The rated voltage (U<sub>0</sub>/U) 0.6/1KV, 3.6/6KV, 6/6KV, 6/10KV, 8.7/10KV, 8.7/15KV, 18/20KV, 21/35 KV, 26/35KV.

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2. Max. permissible continuous operating temperatures of conductor not exceed 90°C, Max. short-circuit temperature of conductor shall not exceed 250°C. (5s Max. duration)
3. The ambient temperature under installation shall not below 0°C, the Min. bending radius: not less than 8 times for the cable of external diameter no more than 40mm; not less than 16 times for the others.
4. Test voltage of cable

<b>Rated Voltage KV</b>	0.6	1.8	3.6	6	8.7	12	18	21	26
<b>Test voltage KV</b>	3.5	6.5	12.5	21	30.5	42	63	73.5	91

5. Combustible and caustic property of cable

Item of test	Unit	Performance		
Density of smoke test Min. light transmittance	%	60		
Causticity of test Min. PH value Max. electric conductivity	μS/mm	4.3 10		
Combustion test of bundled cable grade of test Time of supply fire Total volume of combustible material per meter Length affected by combustion	Min l/m m	A 40 7	B 40 3.5	C 20 1.5
		<2.5		

6. Engine physics performance of insulation and sheath

Test item	Unit	Performance	
		Insulation	Sheath
Before ageing test			
Min. tensile force	N/mm <sup>2</sup>	12.2	9
Min. elongation of rupture	%	200	125
After aged by oven			
Temperature	°C	135±3	100±2
Duration	h	168	168
Max. rate of change of tensile strength	%	±25	
Min. tensile strength	N/mm <sup>2</sup>		9
Max. rate of change of elongation at break	%	±20	
Min. elongation at break	%		110
Test for thermal extension			
Air temperature	°C	200±3	
Loading time	Min	15	
Mechanical tensile force	N/mm <sup>2</sup>	0.2	
Max. elongation when loading	%	175	
Maximum permanent deformation after cool	%	15	

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Water absorption test (weight method)			
Temperature	°C	85±2	85±2
Duration	d	14	14
Maximum weight change	mg/cm <sup>2</sup>	1	25
Shrinkage test			
Temperature	°C	130	
Duration	h	1	
Maximum permitted shrinkage rate	%	4	
Weight-loss test in oven			
Temperature	°C		100±2
Duration	h		168
Maximum permitted weight-loss	mg/cm <sup>2</sup>		0.5

7. DC resistance of conductor

Nominal Cross sectional area of conductor mm <sup>2</sup>	Max. D.C. resistance of conductor at 20°C	
	Copper	Aluminum
1.5	12.1	—
2.5	7.41	12.1
4	4.61	7.41
6	3.08	4.61
10	1.83	3.08
16	1.15	1.91
25	0.727	1.20
35	0.524	0.868
50	0.387	0.641
70	0.268	0.443
95	0.193	0.320
120	0.153	0.253
150	0.124	0.206
185	0.0991	0.164
240	0.0754	0.125
300	0.0601	0.100
400	0.0470	0.0778
500	0.0366	0.0605
630	0.0283	0.0469
800	0.0221	0.0367
1000	0.0176	0.0291

■ **Delivery lengths**

The single length of cable is not less 100m, shortage length more than 20m may be delivered, but not exceed 10% of the

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total length, delivered special requirement to be discussed between the supplier and the buyer, the tolerance of length shall not exceed in  $\pm 0.5\%$ .

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