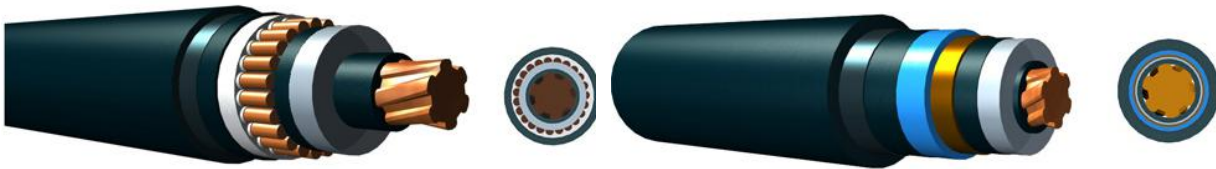




**BEIJING HUAYUAN GAOKE CABLE CO.,LTD.**  
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## No Halogen Fire Retardant Fire Resisting Power Cable



### ■ Product standard

Enterprise standard

### ■ Application

This product is suitable for AC 0.6/1kV of power frequency or below equipment, fire hazard and fire fighting equipment, emergency passage transportation, lighting, etc emergency facilities where the power supply requires fireproof fields. Particularly it is suitable for subway, under-ground shop, high-rise, intelligence communication building, power station and so on fields with high safe requirements.

### ■ Product characteristics

1. With all characteristics of no halogen low smoke fire retardant power cable.
2. Burn at 800°C and below flame environment, can guarantee to electrify over 180 min. compared with ordinary cable, its time of fireproof can prolong two times, the safety is better.

### ■ Type and Specifications

Type	No. of Core	Nom. area Cross-Section area mm <sup>2</sup>
WDZN-YJY	1	2.5~1000
WDZN-YJY23	2,3,4,5	4~240
WDZN-YJY33		

Note: When 1-core cable needs to armor, the cross section should not be less than 10mm<sup>2</sup>. Meanwhile it should use non-magnetic material or reduce magnetic loss structure.

Type	Designation
WDZN-YJY	Copper-conductor XLPE insulated PO sheathed no halogen low smoke fire retardant fire resisting power cable
WDZN-YJY23	Copper-conductor XLPE insulated steel tape armored PO sheathed no halogen low smoke fire retardant fire resisting power cable
WDZN-YJY33	Copper-conductor XLPE insulated fine steel wire armored PO sheathed no halogen low smoke fire retardant fire resisting power cable

### ■ Construction

1. Conductor
2. Fire-resisting insulation layer
3. XLPE insulation
4. Insulation
5. Inner covering
6. Armor

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7. Oversheath

■ **Main performance**

1. Combustion property

- (1) Halogen gases releasing amount test, pH value  $\geq 4.3$ , electrical conductivity  $\leq 10$ ms/mm
- (2) Cable combustion smoking amount test, light transmittance  $\geq 60\%$
- (3) Cable fireproof test: pass B kind fireproof test specified in IEC6033 and GB12666.6
- (4) Cable fire retardant test: pass bundling (or B kind or C kind) combustion test specified in IEC 60332 and GB12666.5

2. Electric property

- (1) D.C. conductor resistance complies with the stipulations of the nether table;
- (2) Working frequency voltage test for cable with 3500V/5min without puncture.
- (3) Constant of insulation resistance at 90°C should not more than 3.67 MΩ·Km.

Nominal Cross-sectional area mm <sup>2</sup>	Max. resistance of copper conductor (20°C)
2.5	7.41
4	4.61
6	3.08
10	1.83
16	1.15
25	0.727
35	0.524
50	0.387
70	0.268
95	0.193
120	0.153
150	0.124
185	0.0991
240	0.0754

3. Approximate diameter and weight of cable

WDZN-YJY 型									
Nominal Cross-sectional area mm <sup>2</sup>		Approximate diameter mm				Approximate weight kg/km			
Main mm <sup>2</sup>	Earth mm <sup>2</sup>	No. of Core				Copper core			
		1	2	3	4	1	2	3	4
2.5	—	—	—	18.0	18.5	—	—	371	501
4	—	12.4	19.1	19.3	19.9	165	373	445	597
6	—	12.9	20.2	20.4	21.1	196	435	531	710
10	—	13.9	22.2	22.6	23.6	255	577	703	947
16	—	14.9	24.2	24.7	26.8	331	694	930	1308
25	—	16.5	28.1	28.8	31.5	450	1060	1368	1938

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35	—	17.5	30.1	31.0	34.2	564	1279	1726	2460
50	—	19.1	28.4	30.4	34.6	740	1594	2186	3055
70	—	20.7	32.8	33.8	38.8	965	2156	2928	4014
95	—	22.5	35.1	38.0	44.5	1232	2715	3820	5295
120	—	25.2	37.6	41.7	49.5	1527	3314	4710	6526
150	—	27.2	41.9	47.7	55.7	1904	4083	5932	8110
185	—	30.4	57.4	51.8	59.6	2380	5593	7132	9730
240	—	33.2	63.0	60.9	62.74	2986	6941	9239	12037

Nominal Cross-sectional area mm <sup>2</sup>		Approximate diameter mm				Approximate weight kg/km			
Main mm <sup>2</sup>	Earth mm <sup>2</sup>	No. of Core				Copper core			
		5	3+1	3+2	4+1	5	3+1	3+2	4+1
2.5	—	18.8	—	—	—	431	—	—	—
4	2.5	20.1	20.7	21.5	22.2	566	435	477	521
6	4	21.4	21.8	27.2	27.8	702	539	708	745
10	6	25.7	25.6	31.5	32.6	1039	792	1021	1095
16	10	28.6	28.0	35.6	36.5	1433	1067	1369	1481
25	16	34.5	33.0	41.3	43.9	2150	1563	1880	2263
35	16	38.1	35.8	44.8	47.2	2813	1902	2634	2732
50	25	41.5	37.6	41.9	45.7	3689	2751	3415	3912
70	35	47.5	41.1	47.1	49.7	5026	3579	4503	4937
95	50	52.7	47.6	52.8	55.8	6504	4730	5704	6507
120	70	59.3	51.1	58.5	59.4	8209	5873	7327	7925
150	70	64.8	56.7	62.3	65.4	10077	7005	8306	9395
185	95	71.2	61.8	68.6	71.4	12233	8463	10220	11336
240	120	78.7	68.2	75.7	78.9	15412	10679	12659	14122

WDZN-YJY23、WDZN-YJY33 型									
Nominal Cross-sectional area mm <sup>2</sup>		Approximate diameter mm				Approximate weight kg/km			
Main mm <sup>2</sup>	Earth mm <sup>2</sup>	No. of Core				Copper core			
		1	2	3	4	1	2	3	4
2.5	—	—	—	20.8	22.1	—	—	754	886
4	—	15.8	22.7	22.1	23.5	—	479	990	1027
6	—	16.3	23.7	24.0	24.7	—	556	1012	1188
10	—	17.6	26.3	26.2	27.1	488	669	1238	1495
16	—	18.6	29.2	28.3	30.3	612	879	1528	1924
25	—	20.3	32.8	32.7	35.0	763	1251	2056	2631
35	—	21.5	36.9	34.8	37.9	898	1528	2468	3196

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50	—	22.9	33.9	34.4	38.4	1109	1807	2977	3858
70	—	22.9	38.0	37.8	42.6	1358	2403	3785	4920
95	—	24.3	41.7	41.8	48.5	1662	2979	4767	6355
120	—	27.4	43.9	45.5	53.7	2245	3617	5743	7732
150	—	28.5	48.7	51.8	60.1	2630	4442	7119	9486
185	—	30.4	61.7	56.2	64.1	3183	6148	8359	11240
240	—	36.8	67.4	65.8	67.7	3864	7567	10788	13704

Nominal Cross-sectional area mm <sup>2</sup>		Approximate diameter mm				Approximate weight kg/km			
Main mm <sup>2</sup>	Earth mm <sup>2</sup>	No. of Core				Copper core			
		5	3+1	3+2	4+1	5	3+1	3+2	4+1
2.5	—	20.5	—	—	—	778	—	—	—
4	2.5	21.6	23.0	23.8	27.3	921	729	768	839
6	4	22.9	24.1	29.6	33.1	1085	853	1001	1167
10	6	25.0	27.9	34.1	38.1	1487	1174	1356	1848
16	10	29.3	31.3	38.9	42.0	1942	1709	1946	2329
25	16	32.4	36.5	44.9	49.7	2750	2330	2582	3214
35	16	38.3	39.1	48.4	54.1	3468	2750	3425	3812
50	25	41.9	40.9	45.5	49.4	4762	3519	4323	4956
70	35	45.7	44.6	50.8	53.5	6263	4436	5542	6086
95	50	51.7	51.3	56.7	59.7	7882	5678	6918	7758
120	70	57.1	54.8	62.7	63.6	9783	6967	8691	9352
150	70	63.9	61.1	66.7	69.4	11839	8247	9792	10953
185	95	69.9	65.9	73.2	76.0	14218	9832	11952	13098
240	120	76.2	72.7	80.6	85.2	17740	12218	14454	17104

■ **Operating characteristics**

1. The Max. rated temperature of conductor is 90°C.
2. Max. short-circuit temperature of conductor shall not exceed 250°C (5s max. duration)
3. The Min. ambient temperature of cable laying is 0°C
4. The Min. bending radius of cable: Single-core cable is 20 times of cable diameter; Multi-core cable is 15 times of cable diameter.

■ **Delivery lengths**

The delivery length is not less than 100m, delivered special requirement to be discussed between the supplier and the buyer, the tolerance of length shall not exceed in ±0.5%.

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