



HONG TAI ELECTRIC INDUSTRIAL CO., LTD. Since 1968

Low Smoke Non-Halogen



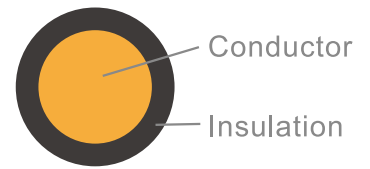
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■ **Standard(s)** 【LSNH-Wire】 CNS 679, IEC 60502-1

■ **Application** Circuit wiring in general electrical equipment, building and indoor wiring, machine power distribution wiring.

■ **Characteristics** Excellent electrical and mechanical properties.
Characteristics include low smoke emission, no generation of halogen acid gas, high flame resistance, and non-toxicity.

■ **Insulation colors:** Black, white, red, green, yellow, blue, orange, purple, and others



Construction and properties table / 600V

Diameter or nominal cross- sectional area mm ²	Conductor		Insulation thickness mm	Finished external diameter (approx.) mm	Approximate wire weight (reference value) kg/km	Maximum conductor resistance (20°C) Ω/km	Test voltage (A.C.) V/1min	Minimum insulation resistance		Standard length m
	Construction (number of strands/strand diameter in mm) or shape	External diameter (approx.) mm						20°C	60°C	
---	1/0.8	0.8	0.8	2.4	11	35.7	1500	50	0.20	300
---	1/1.0	1.0	0.8	2.6	15	22.8	1500	50	0.20	
---	1/1.2	1.2	0.8	2.8	18	15.8	1500	50	0.20	
---	1/1.6	1.6	0.8	3.2	28	8.92	1500	50	0.20	
---	1/2.0	2.0	0.8	3.6	39	5.65	1500	50	0.15	
---	1/2.6	2.6	1.0	4.6	65	3.35	1500	50	0.15	
---	1/3.2	3.2	1.2	5.6	98	2.21	1500	50	0.15	
---	1/4.0	4.0	1.4	6.8	149	1.41	2000	50	0.15	
---	1/5.0	5.0	1.6	8.2	227	0.904	2000	40	0.10	200
0.9	7/0.4	1.2	0.8	2.8	17	20.9	1500	50	0.20	300
1.25	7/0.45	1.4	0.8	3.0	19	16.5	1500	50	0.20	
2	7/0.6	1.8	0.8	3.4	29	9.24	1500	50	0.20	
3.5	7/0.8	2.4	0.8	4.0	46	5.20	1500	50	0.15	
5.5	7/1.0	3.0	1.0	5.0	72	3.33	1500	50	0.15	
8	7/1.2	3.6	1.2	6.0	103	2.31	1500	50	0.15	
14	Round compact	4.4	1.4	7.2	168	1.31	2000	40	0.10	200
22		5.5	1.6	8.7	258	0.832	2000	40	0.10	
30		6.4	1.6	9.6	331	0.610	2000	40	0.10	100
38		7.3	1.8	10.7	415	0.481	2500	40	0.10	
50		8.4	1.8	11.8	525	0.366	2500	30	0.10	300
60		9.3	1.8	12.7	633	0.305	2500	30	0.07	
80		10.7	2.0	14.5	840	0.229	2500	30	0.07	
100		12.0	2.0	15.8	1039	0.183	2500	30	0.07	
125		13.5	2.2	17.6	1296	0.146	3000	20	0.07	
150		14.7	2.2	19.1	1546	0.122	3000	20	0.05	
200		17.0	2.4	21.4	1966	0.0915	3000	20	0.05	200
250		19.0	2.4	23.7	2487	0.0739	3000	20	0.05	
325		21.7	2.6	26.5	3166	0.0568	3500	20	0.05	
400		24.1	2.6	29.2	3917	0.0462	3500	20	0.05	
500		26.9	2.8	32.3	4759	0.0369	3500	20	0.05	

- **Standard(s)** 【XLPE-LSNH】 CNS 2655, IEC 60502-1
- **Application** Suitable for general indoor wiring, public buildings, stations, and power transmission, as well as composite buildings.
- **Characteristics** The temperature of the conductor can reach 90°C during normal use, 130°C during emergencies, and 250°C during short circuits. The cable's light weight makes it easy to lay. In addition, the cable can be terminated simply. Characteristics such as low smoke emission, no generation of halogen acid gas, high flame resistance, non-toxicity, and freedom from heavy metals help to prevent the spread of fires.

■ **Reference picture:**



Construction and properties table / 600V Single-core cable

Diameter or nominal cross- sectional area mm ²	Conductor		Insulation thickness mm	Sheathing thickness mm	Finished external diameter (approx.) mm	Approximate cable weight (reference value) kg/km	Maximum conductor resistance (20°C) Ω/km	Test voltage (A.C.) kV/5min	Minimum insulation resistance (20°C) MΩ-km	Standard length m
	Construction (number of strands/strand diameter in mm) or shape	External diameter (approx.) mm								
---	1/1.2	1.2	0.76	0.38	3.70	22	15.8	3.5	2500	300
---	1/1.6	1.6	0.76	0.38	4.10	32	8.92	3.5	2500	
---	1/2.0	2.0	0.76	0.38	4.50	44	5.65	3.5	2000	
2	7/0.6	1.8	0.76	0.38	4.30	33	9.24	3.5	2500	
3.5	7/0.8	2.4	0.76	0.38	4.90	50	5.20	3.5	2000	
5.5	7/1.0	3.0	0.76	0.38	5.50	71	3.33	3.5	2000	
8	7/1.2	3.6	1.14	0.38	7.00	105	2.31	5.5	1500	
14	Round compact	4.4	1.14	0.76	8.50	177	1.30	5.5	1500	
22		5.5	1.14	0.76	9.63	259	0.824	5.5	1500	
30		6.4	1.14	0.76	10.5	330	0.623	5.5	1000	
38		7.1	1.40	0.76	11.7	413	0.487	7.0	1000	
50		8.2	1.40	1.14	13.7	552	0.378	7.0	1000	
60		9.1	1.40	1.14	14.6	661	0.303	7.0	1000	
80		10.5	1.40	1.14	16.0	855	0.229	7.0	1000	
100		11.8	1.40	1.14	17.3	1,054	0.180	7.0	800	
125		13.2	1.65	1.65	20.4	1,365	0.144	8.0	800	
150		14.7	1.65	1.65	21.9	1,621	0.118	8.0	800	
200		16.6	1.65	1.65	23.8	2,024	0.0922	8.0	800	200
250		18.9	1.65	1.65	26.1	2,551	0.0722	8.0	600	
325		21.3	2.03	1.65	29.2	3,239	0.0565	10.0	600	
400		24.0	2.03	1.65	31.9	3,994	0.0454	10.0	600	
500		26.7	2.03	1.65	34.6	4,809	0.0373	10.0	600	
600		30.2	2.41	2.41	40.6	6,122	0.0304	10.0	600	150

Construction and properties table/ 600V 2-core cable

Diameter or nominal cross- sectional area mm ²	Conductor		Insulation thickness mm	Sheathing thickness mm	Finished external diameter (approx.) mm	Approximate cable weight (reference value) kg/km	Maximum conductor resistance (20°C) Ω/km	Test voltage (A.C.) kV/5min	Minimum insulation resistance (20°C) MΩ-km	Standard length m
	Construction (number of strands/strand diameter in mm) or shape	External diameter (approx.) mm								
---	1/1.2	1.2	0.76	1.14	9.0	108	16.1	3.5	2500	300
---	1/1.6	1.6	0.76	1.14	9.8	138	9.10	3.5	2500	
---	1/2.0	2.0	0.76	1.14	10.6	173	5.76	3.5	2000	
2	7/0.6	1.8	0.76	1.14	9.7	120	9.42	3.5	2500	
3.5	7/0.8	2.4	0.76	1.14	10.9	159	5.30	3.5	2000	
5.5	7/1.0	3.0	0.76	1.14	12.1	212	3.40	3.5	2000	
8	7/1.2	3.6	1.14	1.52	15.9	339	2.36	5.5	1500	
14	Round compact	4.4	1.14	1.52	17.5	475	1.33	5.5	1500	
22		5.5	1.14	1.52	19.7	665	0.840	5.5	1500	
30		6.4	1.14	2.03	22.5	881	0.635	5.5	1000	
38		7.1	1.40	2.03	24.9	1,083	0.497	7.0	1000	
50		8.2	1.40	2.03	27.1	1,340	0.386	7.0	1000	
60		9.1	1.40	2.03	28.9	1,588	0.309	7.0	1000	
80		10.5	1.40	2.03	31.7	2,020	0.234	7.0	1000	
100		11.8	1.40	2.03	34.3	2,462	0.184	7.0	800	
125		13.2	1.65	2.03	38.3	3,053	0.147	8.0	800	
150		14.7	1.65	2.03	41.3	3,623	0.120	8.0	800	
200		16.6	1.65	2.79	46.8	4,692	0.0940	8.0	800	200
250		18.9	1.65	2.79	51.3	5,862	0.0736	8.0	600	
325		21.3	2.03	2.79	57.6	7,412	0.0576	10.0	600	

Construction and properties table / 600V 3-core cable

Diameter or nominal cross- sectional area mm ²	Conductor		Insulation thickness mm	Sheathing thickness mm	Finished external diameter (approx.) mm	Approximate cable weight (reference value) kg/km	Maximum conductor resistance (20°C) Ω/km	Test voltage (A.C.) kV/5min	Minimum insulation resistance (20°C) MΩ-km	Standard length m
	Construction (number of strands/strand diameter in mm) or shape	External diameter (approx.) mm								
---	1/1.2	1.2	0.76	1.14	9.43	123	16.1	3.5	2500	300
---	1/1.6	1.6	0.76	1.14	10.3	161	9.10	3.5	2500	
---	1/2.0	2.0	0.76	1.14	11.2	207	5.76	3.5	2000	
2	7/0.6	1.8	0.76	1.14	10.2	148	9.42	3.5	2500	
3.5	7/0.8	2.4	0.76	1.14	11.5	204	5.30	3.5	2000	
5.5	7/1.0	3.0	0.76	1.14	12.8	272	3.40	3.5	2000	
8	7/1.2	3.6	1.14	1.52	16.8	434	2.36	5.5	1500	
14	Round compact	4.4	1.14	1.52	18.5	625	1.33	5.5	1500	
22		5.5	1.14	2.03	22.0	947	0.840	5.5	1500	
30		6.4	1.14	2.03	23.9	1,181	0.635	5.5	1000	

Construction and properties table / 600V 3-core cable

Diameter or nominal cross- sectional area mm ²	Conductor		Insulation thickness mm	Sheathing thickness mm	Finished external diameter (approx.) mm	Approximate cable weight (reference value) kg/km	Maximum conductor resistance (20°C) Ω/km	Test voltage (A.C.) kV/5min	Minimum insulation resistance (20°C) MΩ-km	Standard length m
	Construction (number of strands/strand diameter in mm) or shape	External diameter (approx.) mm								
38	Round compact	7.1	1.40	2.03	26.4	1,459	0.497	7.0	1000	300
50		8.2	1.40	2.03	28.8	1,823	0.386	7.0	1000	
60		9.1	1.40	2.03	30.8	2,172	0.309	7.0	1000	
80		10.5	1.40	2.03	33.8	2,792	0.234	7.0	1000	
100		11.8	1.40	2.03	36.6	3,425	0.184	7.0	800	
125		13.2	1.65	2.03	40.9	4,257	0.147	8.0	800	
150		14.7	1.65	2.79	45.8	5,248	0.120	8.0	800	
200		16.6	1.65	2.79	49.9	6,530	0.0940	8.0	800	200
250		18.9	1.65	2.79	54.8	8,199	0.0736	8.0	600	
325		21.3	2.03	2.79	61.5	10,399	0.0576	10.0	600	

Construction and properties table / 600V 4-core cable

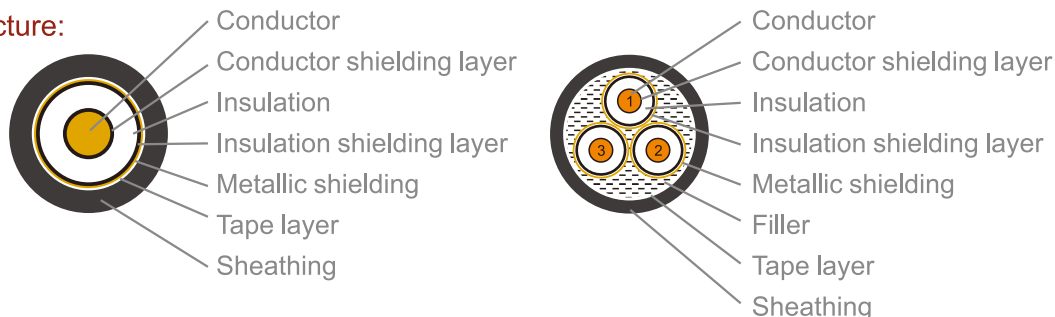
Diameter or nominal cross- sectional area mm ²	Conductor		Insulation thickness mm	Sheathing thickness mm	Finished external diameter (approx.) mm	Approximate cable weight (reference value) kg/km	Maximum conductor resistance (20°C) Ω/km	Test voltage (A.C.) kV/5min	Minimum insulation resistance (20°C) MΩ-km	Standard length m
	Construction (number of strands/strand diameter in mm) or shape	External diameter (approx.) mm								
---	1/1.2	1.2	0.76	1.14	10.2	146	16.1	3.5	2500	300
---	1/1.6	1.6	0.76	1.14	11.1	194	9.10	3.5	2500	
---	1/2.0	2.0	0.76	1.14	12.1	252	5.76	3.5	2000	
2	7/0.6	1.8	0.76	1.14	11.1	174	9.42	3.5	2500	
3.5	7/0.8	2.4	0.76	1.14	12.5	258	5.30	3.5	2000	
5.5	7/1.0	3.0	0.76	1.52	14.8	375	3.40	3.5	2000	
8	7/1.2	3.6	1.14	1.52	18.4	544	2.36	5.5	1500	
14	Round compact	4.4	1.14	1.52	20.3	796	1.33	5.5	1500	
22		5.5	1.14	2.03	24.1	1,198	0.840	5.5	1500	
30		6.4	1.14	2.03	27.4	1,546	0.635	5.5	1000	
38		7.1	1.40	2.03	29.1	1,861	0.497	7.0	1000	
50		8.2	1.40	2.03	31.7	2,337	0.386	7.0	1000	
60		9.1	1.40	2.03	33.9	2,791	0.309	7.0	1000	
80		10.5	1.40	2.03	37.3	3,601	0.234	7.0	1000	
100		11.8	1.40	2.79	42.1	4,596	0.184	7.0	800	
125		13.2	1.65	2.79	46.9	5,706	0.147	8.0	800	
150		14.7	1.65	2.79	50.6	6,770	0.120	8.0	800	200
200		16.6	1.65	2.79	55.1	8,448	0.0940	8.0	800	
250		18.9	1.65	2.79	60.6	10,640	0.0736	8.0	600	
325		21.3	2.03	3.56	69.8	13,783	0.0576	10.0	600	

■ **Type of standard(s)** 【XLPE-LSNH】 CNS 2655, IEC 60502-1

■ **Application** Suitable for power transmission and distribution systems, as well as overhead, direct burial, or underground pipelines.

■ **Characteristics** The insulation offers excellent heat resistance and low failure rate. The temperature of the conductor can reach 90°C during normal use, 130°C during emergencies, and 250°C during short circuits. Characteristics such as low smoke emission, no generation of halogen acid gas, high flame resistance, non-toxicity, and freedom from heavy metals help to prevent the spread of fires.

■ **Reference picture:**



Construction and properties table / 25000V Neutral grounding cableSingle-core cable

Nominal cross-sectional area mm ²	Conductor		Insulation thickness mm	Sheathing thickness mm	Finished external diameter (approx.) mm	Approximate cable weight (reference value) kg/km	Maximum conductor resistance (20°C) Ω/km	Test voltage (A.C.) kV/5min	Minimum insulation resistance (20°C) MΩ-km	Standard length m
	Shape	External diameter (approx.) mm								
30	Round compact	6.4	6.6	2.03	28.1	996	0.623	52	3600	300
38		7.1	6.6	2.03	28.8	1,091	0.487	52	3600	
50		8.2	6.6	2.03	29.9	1,236	0.378	52	3000	
60		9.1	6.6	2.03	30.8	1,370	0.303	52	3000	
80		10.5	6.6	2.03	32.8	1,642	0.229	52	3000	
100		11.8	6.6	2.03	34.1	1,877	0.180	52	2800	200
125		13.2	6.6	2.03	35.5	2,157	0.144	52	2000	
150		14.7	6.6	2.03	37.0	2,455	0.118	52	2000	
200		16.6	6.6	2.03	38.9	2,908	0.0922	52	2000	
250		18.9	6.6	2.03	41.2	3,498	0.0722	52	1800	
325		21.3	6.6	2.79	45.5	4,420	0.0565	52	1500	150
400		24.0	6.6	2.79	49.5	5,355	0.0454	52	1500	
500		26.7	6.6	2.79	52.2	6,253	0.0373	52	1500	

Construction and properties table/ 25000VNeutral grounding cable3-core cable

Nominal cross-sectional area mm ²	Conductor		Insulation thickness mm	Sheathing thickness mm	Finished external diameter (approx.) mm	Approximate cable weight (reference value) kg/km	Maximum conductor resistance (20°C) Ω/km	Test voltage (A.C.) kV/5min	Minimum insulation resistance (20°C) MΩ-km	Standard length m
	Shape	External diameter (approx.) mm								
30	Round compact	6.4	6.6	2.79	56.9	3,335	0.635	52	3600	200
38		7.1	6.6	2.79	58.4	3,644	0.497	52	3600	
50		8.2	6.6	2.79	60.8	4,116	0.386	52	3000	
60		9.1	6.6	2.79	62.8	4,555	0.309	52	3000	
80		10.5	6.6	2.79	67.1	5,448	0.234	52	3000	
100		11.8	6.6	2.79	69.9	6,205	0.184	52	2800	150

Construction and properties table/ 25000V Neutral grounding cable3-core cable

Nominal cross-sectional area mm ²	Conductor		Insulation thickness mm	Sheathing thickness mm	Finished external diameter (approx.) mm	Approximate cable weight (reference value) kg/km	Maximum conductor resistance (20°C) Ω/km	Test voltage (A.C.) kV/5min	Minimum insulation resistance (20°C) MΩ-km	Standard length m
	Shape	External diameter (approx.) mm								
125	Round compact	13.2	6.6	3.56	74.5	7,401	0.147	52	2000	150
150		14.7	6.6	3.56	77.7	8,369	0.120	52	2000	
200		16.6	6.6	3.56	81.8	9,836	0.0940	52	2000	
250		18.9	6.6	3.56	86.7	11,742	0.0736	52	1800	
325		21.3	6.6	3.56	92.4	14,122	0.0576	52	1500	

Construction and properties table / 25000V Isolated neutral cableSingle-core cable

Nominal cross-sectional area mm ²	Conductor		Insulation thickness mm	Sheathing thickness mm	Finished external diameter (approx.) mm	Approximate cable weight (reference value) kg/km	Maximum conductor resistance (20°C) Ω/km	Test voltage (A.C.) kV/5min	Minimum insulation resistance (20°C) MΩ-km	Standard length m
	Shape	External diameter (approx.) mm								
30	Round compact	6.4	8.76	2.03	32.9	1,250	0.623	64	4500	200
38		7.1	8.76	2.03	33.6	1,350	0.487	64	4500	
50		8.2	8.76	2.03	34.7	1,503	0.378	64	4000	
60		9.1	8.76	2.03	35.6	1,643	0.303	64	3800	
80		10.5	8.76	2.03	37.0	1,887	0.229	64	3500	
100		11.8	8.76	2.03	38.3	2,130	0.180	64	3500	150
125		13.2	8.76	2.03	39.7	2,418	0.144	64	3500	
150		14.7	8.76	2.03	41.2	2,725	0.118	64	3200	
200		16.6	8.76	2.79	44.8	3,372	0.0922	64	2800	
250		18.9	8.76	2.79	47.7	4,041	0.0722	64	2800	
325		21.3	8.76	2.79	50.3	4,807	0.0565	64	2400	
400		24.0	8.76	2.79	53.7	5,709	0.0454	64	2000	
500		26.7	8.76	2.79	56.4	6,624	0.0373	64	2000	

Construction and properties table/ 25000V Isolated neutral cable3-core cable

Nominal cross-sectional area mm ²	Conductor		Insulation thickness mm	Sheathing thickness mm	Finished external diameter (approx.) mm	Approximate cable weight (reference value) kg/km	Maximum conductor resistance (20°C) Ω/km	Test voltage (A.C.) kV/5min	Minimum insulation resistance (20°C) MΩ-km	Standard length m
	Shape	External diameter (approx.) mm								
30	Round compact	6.4	8.76	2.79	67.3	4,269	0.635	64	4500	150
38		7.1	8.76	2.79	68.8	4,593	0.497	64	4500	
50		8.2	8.76	3.56	71.2	5,096	0.386	64	4000	
60		9.1	8.76	3.56	73.4	5,690	0.309	64	3800	
80		10.5	8.76	3.56	77.7	6,654	0.234	64	3500	
100		11.8	8.76	3.56	80.5	7,453	0.184	64	3500	
125		13.2	8.76	3.56	83.5	8,399	0.147	64	3500	
150		14.7	8.76	3.56	86.8	9,409	0.120	64	3200	
200		16.6	8.76	3.56	90.9	10,925	0.0940	64	2800	
250		18.9	8.76	3.56	97.0	13,080	0.0736	64	2800	
325		21.3	8.76	3.56	102.7	15,531	0.0576	64	2400	



HONG TAI ELECTRIC INDUSTRIAL CO., LTD. Since 1968

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