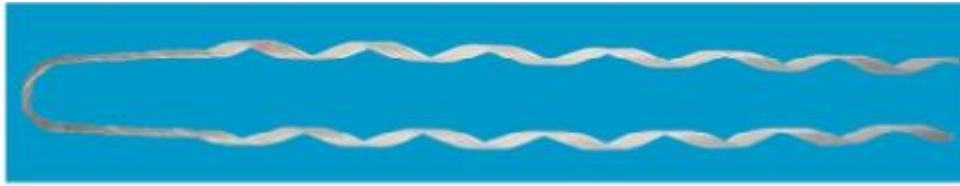


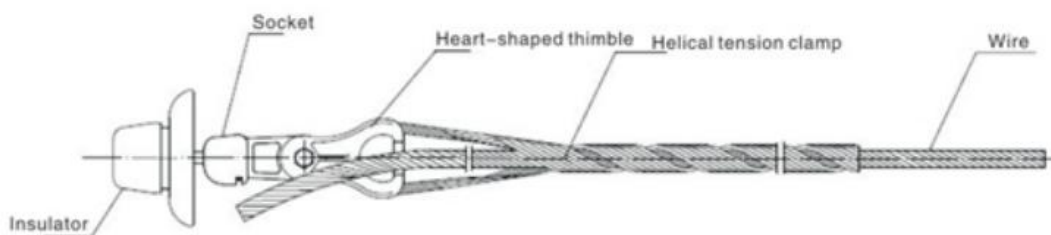
Helical Tension Clamp (NL)



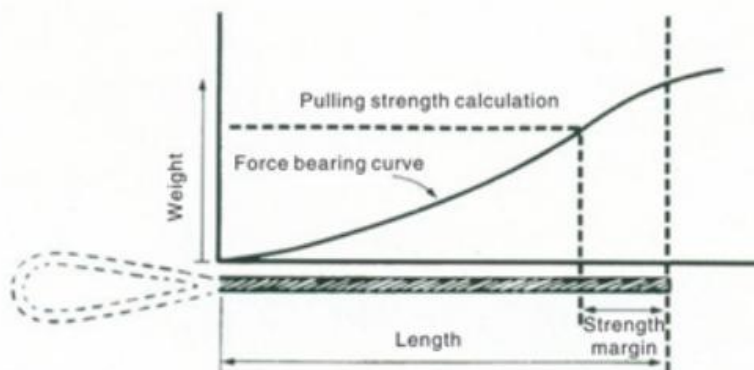
There are varieties of helical tension clamps , such as helical conductor tension clamp, helical earth wire tension clamp and helical stay wire tension clamp etc.

Helical tension clamp can be have follow 4 group:

1. Helical conductor tension clamp
2. Helical earth wire tension clamp
3. Helical stay wire tension clamp
4. Pole Top Make off



The sketch map of pulling strength calculation



1 Helical Conductor Tension Clamp

Material

Clamp is made of galvanized steel wire, aluminum-clad steel wire, aluminum wire, copper clad steel wire and other materials.

Prompt

The rotation direction of NL ground(conductor) tension clamp should be consistent. The rotation direction of standard NL is right-handed lay, if you need left-hand lay , please notify us in advance.

1.1 Helical Conductor Tension Clamp for ACSR

Table A01-1 Type selection table

Product model of the Company	Standard model of the industry	Applicable type of guide wire (GB1179-83)		Reference length of wire clamp (mm)	Wire clamp weight (Kg)	Color code	Optional matching fittings
		Applicable diameter of guide wire (mm)	ACSR (LGJ/LGJF)				
NL-16/3	NL-16/3	5.55	16/3	444	0.1	Brown	TC-05-B
NL-25/4	NL-25/4	6.96	25/4	546	0.15	Yellow	
NL-35/6	NL-35/6	8.16	35/6	622	0.2	Red	
NL-50/8	NL-50/8	9.60	50/8	685	0.3	Yellow	
NL-70/10	NL-70/10	11.40	70/10	736	0.4	Blue	
NL-95/15	NL-95/15	13.61	95/15	876	0.6	Red	TC-07-B
NL-70/40	NL-70/40	13.60	70/40				
NL-95/20	NL-95/20	13.87	95/20				
NL-120/7	NL-120/7	14.50	120/7	889	0.8	Black	TC-10-B
NL-120/20	NL-120/20	15.07	120/20				
NL-120/25	NL-120/25	15.74	120/25				
NL-150/8	NL-150/8	16.00	150/8	1016	1.1	Green	TC-10-B
NL-150/20	NL-150/20	16.67	150/20				
NL-150/25	NL-150/25	17.10	150/25				
NL-150/35	NL-150/35	17.50	150/35	1155	1.8	Orange	TC-10-B
NL-185/10	NL-185/10	18.00	185/10				
NL-185/25	NL-185/25	18.90	185/25				
NL-185/30	NL-185/30	18.88	185/30				
NL-210/10	NL-210/10	19.00	210/10				
NL-185/45	NL-185/45	19.96	185/45	1270	2.3	Blue	TC-10-B
NL-210/25	NL-210/25	19.98	210/25				
NL-210/35	NL-210/35	20.68	210/35				
NL-240/30	NL-240/30	21.60	240/30	1700	3.2	Purple	TC-12-B
NL-240/40	NL-240/40	21.66	240/40				
NL-240/55	NL-240/55	22.40	240/55	1442	2.6	Blue	TC-10-B
NL-300/15	NL-300/15	23.01	300/15				
NL-300/20	NL-300/20	23.43	300/20				
NL-300/25	NL-300/25	23.76	300/25	1620	2.95	Brown	TC-10-B
NL-300/40	NL-300/40	23.94	300/40				
NL-300/50	NL-300/50*	24.26	300/50	1770	3.3	Brown	TC-12-B
NL-400/20	NL-400/20*	26.91	400/20	1860	4.9	Red	TC-12-B
NL-400/25	NL-400/25*	26.64	400/25				
NL-400/35	NL-400/35*	26.82	400/35				

Note:

1. Meaning of letters and number in models:
N- tension clamp; L- helical type; "-" is followed by the applicable model of wire; LGJ- ACSR.
2. The raw material of helical tension clamp for ACSR is galvanized steel wire.
3. Before using model marked with "*" , please consult us.

1.2 Helical Conductor Tension Clamp for AAAC

Table A01-2 Type selection table

Product model of the Company	Standard model of the industry	Applicable diameter of guide wire (mm)		Applicable type of guide wire (GB1179-83) AAAC (LJ)	Reference length of wire clamp (mm)	Wire clamp weight (Kg)	Color code	Optional matching fittings
		Min.	Max.					
NL-16/LJ	NL-16/LJ	4.62	5.16	16	406	0.10	Blue	TC-07-B
NL-25/LJ	NL-25/LJ	5.80	6.53	25	444	0.10	Orange	
NL-35/LJ	NL-35/LJ	7.35	8.26	35	622	0.20	Red	
NL-50/LJ	NL-50/LJ	8.27	9.25	50	685	0.25	Green	
NL-70/LJ	NL-70/LJ	10.40	11.68	70	736	0.40	Blue	
NL-95/LJ	NL-95/LJ	11.69	13.11	95	800	0.40	Orange	
NL-120/LJ	NL-120/LJ	13.12	14.66	120	876	0.60	Red	
NL-150/LJ	NL-150/LJ	14.67	16.59	150	889	0.80	Black	
NL-185/LJ	NL-185/LJ	16.60	18.77	185	1016	1.10	Green	
NL-210/LJ	NL-210/LJ	16.60	18.77	210	1016	1.10	Green	
NL-240/LJ	NL-240/LJ	18.78	21.26	240	1155	1.70	Orange	
NL-300/LJ	NL-300/LJ	21.27	24.05	300	1270	2.30	Blue	TC-10-B
NL-400/LJ	NL-400/LJ	24.06	27.20	400	1422	3.10	Brown	
NL-500/LJ	NL-500/LJ	27.21	30.78	500	1651	4.30	Orange	

Note:

1. Meaning of letters and number in models:
N- tension clamp; L- helical type; "-" is followed by the applicable model of wire; LJ- AAAC.
2. This table lists only some of the products, for other specifications, please contact us.
3. Before suing model marked with "*" , please consult us.

1.3 Helical Conductor Tension Clamp for 1KV Insulated

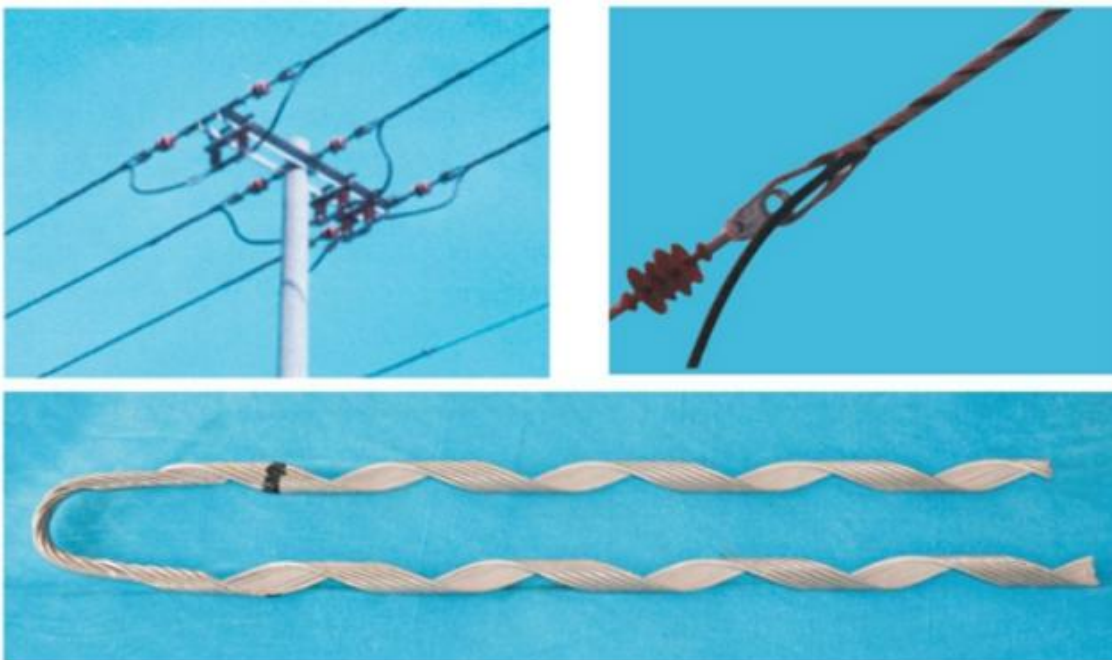


Fig. Insulated Helical Conductor Tension Clamp

Table A01-3 Type selection table

Product model of the Company	Standard model of the industry	Applicable diameter of guide wire (mm)		Applicable wire model below 1KV GB12527-90	10KV Applicable wire model GB14049-93 thinner insulation	Reference length (mm)	Color code	Optional matching fittings
		Min.	Max.					
NL-10/JY-1KV	-	5.82	6.53	10		460	Orange	TC-05-B
NL-16/JY-1KV	-	6.55	7.34	16		530	Yellow	
NL-25/JY-1KV	-	8.28	9.25	25		690	Green	
NL-35/JY-1KV	-	9.26	10.39	35		690	Yellow	
NL-50/JY-1KV	-	10.40	11.68	50		740	Blue	
NL-70/JY-1KV	-	11.60	13.11	70	25 35	790	Orange	
NL-95/JY-1KV	-	13.12	14.66		50	860	Purple	
NL-120/JY-1KV	-	14.67	16.59	95 120	70	889	Blue	TC-07-B
NL-150/JY-1KV	-	16.60	18.77	150	95	980	Red	
NL-185/JY-1KV	-	18.78	21.26	185	120 150	1016	Brown	TC-10-B
NL-240/JY-1KV	-	21.27	24.05	240	185	1016	Green	
NL-300JYQ-10KV	-	24.06	27.20		240 300	1016	Black	

1.4 Helical Conductor Tension Clamp for 10KV Insulated

Table A01-4 Type selection table

Product model of the Company	Standard model of the industry	Applicable diameter of guide wire (mm)		Reference length (mm)	10KV Applicable wire model GB14049-93 ordinary insulation	Color code	Optional matching fittings
		Min.	Max.				
NL-10/JY-10KV		10.40	11.68	740	10	Blue	TC-05-B
NL-16/JY-10KV		11.69	13.11	790	16	Orange	
NL-25/JY-10KV		13.12	14.66	860	25	Purple	
NL-35/JY-10KV	NL-35/JY	14.67	16.59	889	35	Blue	TC-07-B
NL-50/JY-10KV	NL-50/JY				50		
NL-70/JY-10KV	NL-70/JY	16.60	18.77	980	70	Red	
NL-95/JY-10KV	NL-95/JY	18.78	21.26	1016	95	Brown	
NL-120/JY-10KV	NL-120/JY				120		
NL-150/JY-10KV	NL-150/JY	21.27	24.05	1016	150	Green	TCB-10-B
NL-185/JY-10KV	NL-185/JY	24.06	27.20	1016	185	Black	
NL-240/JY-10KV	NL-240/JY				240		
NL-300/JY-10KV	NL-300/JY	27.21	30.78	1016	300	Purple	

Note:

1. Meaning of letters and number in models:

N- tension clamp; L- helical type; "-" is followed by the applicable model of wire;
JY- insulated wire, for circuit of 1KV-1KV and below, and circuit of 10KV-10KV.

2. The type selection of tension clamp should be subject to the actual wire diameter.

2 Helical Earth Wire Tension Clamp

Clamp is for fixing terminals of the ground wire of overhead line.



Material

Ground wire for steel conductor (G.I); wire clamp is used for galvanized steel.

Aluminum-clad steel, good conductor ACSR, wire clamp is used for aluminum-clad steel wire.

2.1 Helical Earth Wire Tension Clamp for Steel Conductor

Table A01-5 Type selection table

Product model of the Company	Standard model of the industry	Applicable diameter of guide wire (mm)	Applicable type of guide wire YB/T 5004-1993(mm ²)	Reference length of wire clamp(mm)	Wire clamp weight (Kg)	Color code
NL-25/G	NL-25/G	6.60	25	635	0.22	Yellow
NL-30/G	-	6.90	30	680	0.23	Purple
NL-35/G	NL-35/G	7.8	35	711	0.30	Black
NL-45/G	-	8.7	45	760	0.40	Blue
NL-50/G	NL-50/G	9.0	50	901	0.53	Orange
NL-55/G	-	9.60	55	920	0.55	Red
NL-60/G	-	10.0	60	950	0.65	Purple
NL-65/G	-	10.5	65	980	0.67	Blue
NL-70/G	NL-70/G	11.0	70	1016	0.82	Green
NL-80/G	-	11.40	80	1170	0.96	Black
NL-90/G	-	12.0	90	1180	1.30	Red
NL-95/G	NL-95/G	12.50	95	1333	1.50	Orange
NL-100/G	NL-100/G	13.0	100	1333	1.50	Yellow
NL-120/G	NL-120/G	14.0	120	1460	2.22	Yellow

Note:

1. N -tension clamp; L- helical type; "-" is followed by the applicable model of wire;

2.2 Helical Earth Wire Tension Clamp for Aluminum-Clad

Table A01-5 Type selection table

Product model of the Company	Standard model of the industry	Applicable range of wire diameter (mm)		Model of good conductor ACSR	Length (mm)	Color
		Min. outer diameter	Max. outer diameter			
NL-0460LB	-	4.42	4.60	-	420	Orange
NL-0585LB	-	5.56	5.85	-	500	Green
NL-0600LB	-	5.86	6.00	-	500	Orange
NL-0628LB	-	6.01	6.28	-	520	Yellow
NL-0656LB	-	6.29	6.56	-	520	Black
NL-0684LB	-	6.57	6.84	-	540	Red
NL-0712LB	-	6.85	7.12	-	570	Blue
NL-0740LB	-	7.13	7.40	-	570	Green
NL-0767LB	-	7.41	7.67	-	580	Yellow
NL-0795LB	-	7.68	7.95	-	650	Black
NL-0823LB	-	7.96	8.23	-	650	Red
NL-0854LB	-	8.24	8.54	-	650	Green
NL-0869LB	-	8.55	8.69	-	720	Orange
NL-0902LB	-	8.70	9.02	-	725	Yellow
NL-0925LB	-	9.03	9.25	-	775	Blue
NL-0963LB	-	9.26	9.63	-	770	Red
NL-1001LB	-	9.64	10.01	-	800	Orange
NL-1039LB	-	10.02	10.39	-	840	Yellow
NL-1082LB	-	10.40	10.82	-	850	Black
NL-1123LB	-	10.83	11.23	-	900	Green
NL-1166LB	-	11.24	11.66	50/30	940	Yellow
NL-1204LB	-	11.67	12.04	-	950	Red
NL-1255LB	-	12.05	12.55	-	980	Blue
NL-1308LB	-	12.56	13.08	-	1080	Green
NL-1361LB	-	13.09	13.61	70/40	1190	Red
NL-1410LB	-	13.62	14.10	-	1220	Yellow
NL-1448LB	-	14.11	14.48	-	1250	Blue
NL-1501LB	-	14.49	15.01	-	1270	Orange
NL-1554LB	-	15.02	15.54	-	1270	Green
NL-1613LB	-	15.55	16.13	95/55	1370	Yellow
NL-1679LB	-	16.14	16.79	-	1420	Black
NL-1742LB	-	16.80	17.42	-	1500	Blue
NL-1808LB	-	17.43	18.08	120/7	1530	Red
NL-1882LB	-	18.09	18.82	-	1570	Black
NL-1961LB	-	18.83	19.61	-	1780	Yellow

Note: 1. N- Tension wire clamp, L-helical type, LB-aluminum-clad

3 Helical Stay Wire Tension Clamp

Helical stay wire tension clamp is used for fixing drawing wires on all kinds of towers.

The structure of wire drawing clamp is very simple, with both ends of helical armor rod being twisted to form blank pipe and the rear forms helical twisted ring. During wire drawing, the blank pipe formed by both ends of helical armor rod will generate strong gripping force and the twisted rings is used for fixing to the ground anchors or the towers.

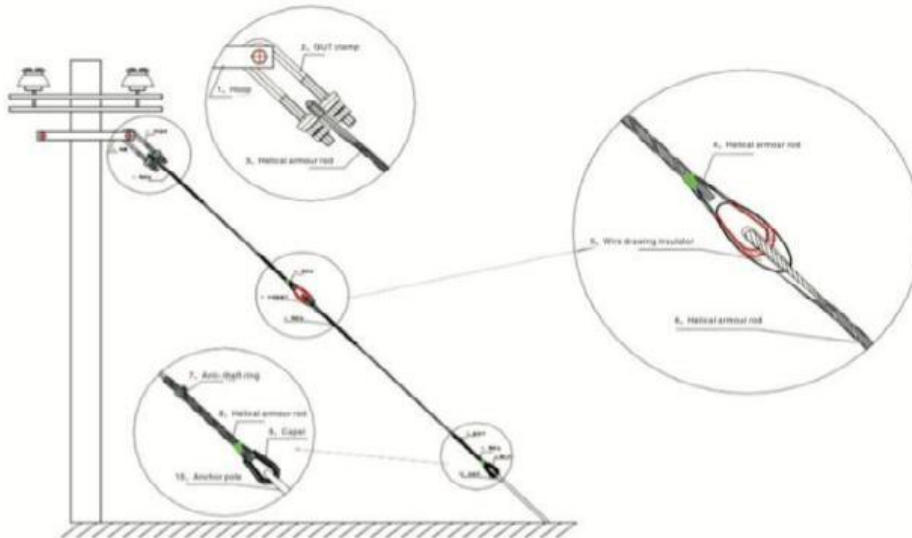


Table A01-6 Type selection table

Product model of the Company	Standard model of the industry	Applicable diameter of guide wire (mm)	Applicable type of guide wire YB/T 5004-1993(mm ²)	Reference length of wire clamp (mm)	Wire clamp weight (Kg)	Color code	Matching fittings
NL-25/G	NL-25/G	6.60	25	635	0.22	Yellow	Caplet, adjustable wire, anti-theft ring clamp
NL-35/G	NL-35/G	7.8	35	711	0.30	Black	
NL-50/G	NL-50/G	9.0	50	901	0.53	Orange	
NL-70/G	NL-70/G	11.0	70	1016	0.82	Green	
NL-95/G	NL-95/G	12.50	95	1333	1.50	Orange	
NL-100/G	NL-100/G	13.0	100	1333	1.50	Yellow	
NL-120/G	NL-120/G	14.0	120	1460	2.22	Yellow	

Notes:

1. N-tension wire clamp, L-helical type, “-” is followed by the model of applicable steel stranded wire

Prompt

The rotation direction of NL wire drawing tension clamp should be consistent. The rotation direction of standard NL is right-hand lay, if you need left-hand lay, please notify us in advance.

4 Pole Top Make Off

Usage:

For fixing poles in the distribution lines.

Features:

1. Simple structure: easy installation and fast installation without the need of special tools, hand installation is enough.
2. High strength: The products are made of high-strength steel wire and products different specifications may meet work environment with requirements of various strength.
3. Strong corrosion resistance: After galvanization treatment, the thickness of galvanized zinc layer meets IEC standards.

Table A01-7 Type selection table:

No.	Product standard	Product mix	Product length (mm)	Color code
1	DL-7/2.4	7/2.403	2290	Black
2	DL-7/2.65	7/2.65	2290	Brown
3	DL-7/2.92	7/2.92	2290	Red
4	DL-7/3.25	7/3.25	2290	Black
5	DL-7/3.27	7/3.267	2290	Black
6	DL-7/3.35	7/3.35	2290	Blue
7	DL-7/3.36	7/3.66	2290	Brown
8	DL-7/4.0	7/4.0	2290	Green
9	DL-19/2.65	19/2.65	2290	Orange
10	DL-19/3.25	19/3.25	2290	Brown

