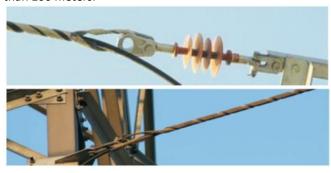
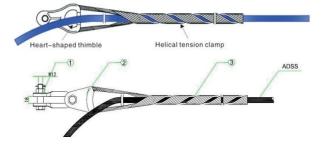


1. Dead-end for Short Span ADSS

Dead-end for Short Span ADSS with a small Tension Clamp material for aluminum-clad steel wire, mainly used for the corner towers, the middle of follow-tower and connecting the terminal tower, the largest installation file from the less than 100 meters.





① U-Clevis ② Thimble ③ Helical Dead-end

Product Selection table

Table 1 selection table of ADSS cable small tension clamp

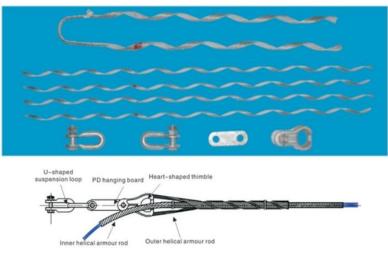
Product model of the Company	Applicable cable diameter (mm)	Reference length of the product (mm)	Grip strength (KN)	Product weight (kg)	Matching fittings
AND-010-0940	9.0-9.4	780	10	0.32	TC-03-E
AND-010-1040	9.5-10.4	830	10	0.40	TC-03-F
AND-010-1150	10.5-11.5	880	10	0.52	TC-03-I
AND-010-1240	11.6-12.4	910	10	0.54	TC-03-1
AND-010-1340	12.5-13.4	980	10	0.69	TC-03-1
AND-010-1490	13.5-14.9	1020	10	0.79	TC-03-I
AND-010-1590	15.0-15.9	1060	10	0.82	TC-03-1

Note:

- 1. Meaning of letters and number in models:
 - A- ADSS cable purpose, N- Tension clamp; D- single layer stranded wire, 010- grip strength 10kN, number suffix- model.
- 2. This table lists only some of the products, for other products, please contact us.

2. Dead-end for Medium /Long Span ADSS

Dead-end for Medium Span ADSS in tension and large tension Clamp material for aluminum-clad steel wire, mainly used for files larger than 100 meters away from the corner tower, the middle tower and Terminal Tower successive connection.





Product Selection table

Table 2 selection table of ADSS cable small tension clamp

Product model	Applicable cable	Installation	Grip	Outer layer helical	Inner layer helical	Weight	Comm	on configura	
of the Company	diameter (mm)	span (m)	strength (KN)	armour rod length (mm)	armour rod length (mm)	(kg)	Heart-shaped thimble	PD hanging board	U-shaped suspension hoop
ANL-020-0940	9.0-9.4	200	20	800	1200	1.06	TC-03-B	PD-7	U-7
ANL-020-1040	9.0-10.4	200	20	800	1200	1.15	TC-03-B	PD-7	U-7
ANL-020-1150	10.5-11.5	200	20	800	1200	1,18	TC-03-B	PD-7	U-7
ANL-020-1240	11.6-12.4	200	20	850	1200	1.20	TC-03-B	PD-7	U-7
ANL-020-1340	12.5-13.4	200	20	850	1200	1.30	TC-03-B	PD-7	U-7
ANL-020-1490	13.5-14.9	200	20	900	1200	1.45	TC-03-B	PD-7	U-7
ANL-020-1590	15.0-15.9	200	20	900	1200	1.50	TC-05-B	PD-7	U-7
ANL-030-0940	9.0-9.4	300	30	1100	1400	1.30	TC-05-B	PD-7	U-7
ANL-030-1040	9.5-10.4	300	30	1100	1400	1.40	TC-05-B	PD-7	U-7
ANL-030-1150	10.5-11.5	300	30	1100	1400	1.45	TC-05-B	PD-7	U-7
ANL-030-1240	11.6-12.4	300	30	1100	1400	1.50	TC-05-B	PD-7	U-7
ANL-030-1340	12.5-13.4	300	30	1100	1400	1.70	TC-05-B	PD-7	U-7
ANL-030-1490	13.5-14.9	300	30	1100	1400	1.75	TC-05-B	PD-7	U-7
ANL-030-1590	15.0-15.9	300	30	1100	1400	1.80	TC-05-B	PD-7	U-7
ANL-040-0940	9.0-9.4	400	40	1260	1700	1.05	TC-05-B	PD-7	U-7
ANL-040-1040	9.5-10.4	400	40	1260	1700	1.65	TC-05-B	PD-7	U-7
ANL-040-1150	10.5-11.5	400	40	1260	1700	1.66	TC-05-B	PD-7	U-7
ANL-040-1240	11.6-12.4	400	40	1260	1700	1.72	TC-05-B	PD-7	U-7
ANL-040-1340	12.5-13.4	400	40	1260	1700	2.00	TC-05-B	PD-7	U-7
ANL-040-1420	13.5-14.2	400	40	1260	1700	2.05	TC-05-B	PD-7	U-7
ANL-040-1490	14.3-14.9	400	40	1260	1700	2.07	TC-05-B	PD-7	U-7
ANL-040-1590	15.0-15.9	400	40	1260	1700	2.10	TC-05-B	PD-7	U-7
ANL-040-1690	16.0-16.9	400	40	1260	1700	2.30		PD-7	U-7
		100000000000000000000000000000000000000	-	-	2000		TC-05-B TC-07-B	100000000000000000000000000000000000000	
ANL-050-1150	10.5-11.5	500	50	1400		2.10		PD-7	U-7
ANL-050-1240	11.6-12.4	500	50	1400	2000	2.25	TC-07-B	PD~7	
ANL-050-1340	12.5-13.4	500	50	1400	2000	2.52	TC-07-B	PD-7	U-7
ANL-050-1420	13.5-14.2	500	50	1400	2000	2.60	TC-07-B	PD-7	U-7
ANL-050-1490	14.3-14.9	500	50	1400	2000	2.65	TC-07-B	PD-7	U-7
ANL-050-1590	15.0-15.9	500	50	1400	2000	2.80	TC-07-B	PD-7	U-7
ANL-050-1690	16.0-16.9	500	50	1400	2000	3.15	TC-07-B	PD-7	U-7
ANL-060-1150	10.5-11.5	600	60	1560	2200	2.30	TC-07-B	PD-7	U-7
ANL-060-1240	11.6-12.4	600	60	1560	2200	2.50	TC-07-B	PD-7	U-7
ANL-060-1340	12.5-13.4	600	60	1560	2200	2.80	TC-07-B	PD-7	U-7
ANL-060-1420	13.5-14.2	600	60	1560	2200	2.90	TC-07-B	PD-7	U-7
ANL-060-1490	14.3-14.9	600	60	1560	2200	2.95	TC-07-B	PD-7	U-7
ANL-060-1590	15.0-15.9	600	60	1560	2200	3.05	TC-07-B	PD-7	U-7
ANL-060-1690	16.0-16.9	600	60	1560	2200	3.40	TC-07-B	PD-7	U-7
ANL-070-1240	11.6-12.4	700	70	1600	2400	2.62	TC-10-B	PD-10	U-10
ANL-070-1340	12.5-13.4	700	70	1600	2400	2.96	TC-10-B	PD-10	U-10
ANL-070-1420	13.5-14.2	700	70	1600	2400	3.05	TC-10-B	PD-10	U-10
ANL-070-1490	14.3-14.9	700	70	1600	2400	3.07	TC-10-B	PD-10	U-10
ANL-070-1590	15.0-15.9	700	70	1600	2400	3.25	TC-10-B	PD-10	U-10
ANL-070-1690	16.0~16.9	700	70	1600	2400	3,60	TC-10-B	PD-10	U-10
ANL-070-1790	17.0-17.9	700	70	1600	2400	3.70	TC-10-B	PD-10	U-10
ANL-070-1890	18.0-18.9	700	70	1600	2400	4.82	TC-10-B	PD-10	U-10
ANL-080-1240	11.6-12.4	800	80	2000	2800	3.20	TC-10-B	PD-10	U-10
ANL-080-1340	12.5-13.4	800	80	2000	2800	4.30	TC-10-B	PD-10	U-10
ANL-080-1420	13.5-14.2	800	80	2000	2800	4.50	TC-10-B	PD-10	U-10
ANL-080-1490	14.3-14.9	800	80	2000	2800	4.85	TC-10-B	PD-10	U-10
ANL-080-1590	15.0-15.9	800	80	2000	2800	5.00	TC-10-B	PD-10	U-10
ANL-080-1690	16.0-16.9	800	80	2000	2800	5.18	TC-10-B	PD-10	U-10
ANL-080-1790	17.0-17.9	800	80	2000	2800	5.70	TC-10-B	PD-10	U-10
ANL-080-1890	18.0-18.9	800	80	2000	2800	6.25	TC-10-B	PD-10	U-10

- 1. Meaning of letters and number in models:
 - A ADSS cable purpose, N- Tension clamp;D- single layer stranded wire, 020- grip strength 20kN, number suffix- model.
- 2. This table lists only some of the products, for other products, please contact us.
 - 3. Tangent Suspension and Single Preformed Rods Suspension for ADSS

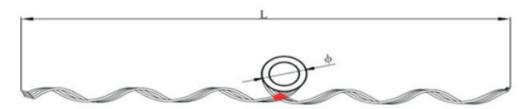


Tangent is mainly used with the tangent clamp connections within a 100m span or < 100m, single pre-twisted wire Suspension is mainly used within a 200m span connection.

3.1 Tangent clamp for span <=50m (AX)



Helical armour rod



Product Selection table

Table 3 selection table of ADSS cable small tension clamp

Product model of the Company	Applicable cable diameter (mm)	ф (mm)	L(mm)	Applicable span (m)	Product weight (kg)	Color
AX-50-10.6/11.6	10.6-11.6				0.25	Blue
AX-50-11.7/12.8	11.7-12.8			50		Green
AX-50-12.9/14.1	12.9-14.1	48	500			Red
AX-50-14.2/15.6	14.2-15.6	**				Yello
AX-50-15.7/17.3	15.7-17.3					Black
AX-50-17.4/19.1	17.4-19.1					Orang

3.2 Tangent clamp for span from 100m to 200m (AXD)

Tangent clamp AXD-100-xx for span <=100m, Line outlet angle not greater than 20 $^{\circ}$.

Tangent clamp AXD-150-xx for span <=150m, Line outlet angle not greater than 20 $^{\circ}$.

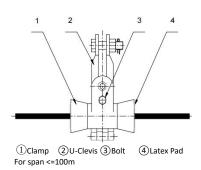


Vertical destructive power of the clamp: 30KN

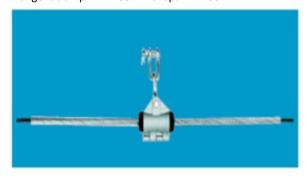
Tangent clamp AXD-100-xx for span <=100m



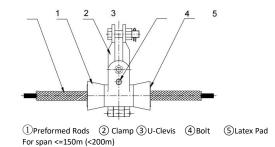




Tangent clamp AXD-150-xx for span <=150m







Product Selection table

Table 4 selection table of ADSS cable for span from 100 to 150m $\,$

Product model of the Company	Applicable monofil diameter (mm)	Length of helical armour rod (mm)	Product weight (kg)	Applicable span (≤m
AXD-010-1000	9.0-10.00	-	0.8	100
AXD-010-1100	10.01-11.00	-	0.8	100
AXD-010-1200	11.01-12.00	_	0.8	100
AXD-010-1300	12.01-13.00	-	0.8	100
AXD-010-1400	13.01-14.00	-	0.8	100
AXD-010-1500	14.01-15.00	-	0.8	100
AXD-010-1600	15.01-16.00	-	0.8	100
AXD-015-0940	9.0-9.4	800	1.0	150
AXD-015-1040	9.5-10.4	800	1.0	150
AXD-015-1150	10.5-11.5	800	1.1	150
AXD-015-1240	11.6-12.4	800	1.02	150
AXD-015-1340	12.5-13.4	800	1.05	150
AXD-015-1420	13.5-14.2	860	1.05	150
AXD-015-1490	14.3-14.9	860	1.1	150
AXD-015-1590	15.0-15.9	860	1.1	150

4. Suspension for ADSS

Suspension Set for ADSS pre-twisted wire with single-and double-twisted wire two kinds of pre-design, single-storey pre-twisted threads within the file folder for the 400m distance connections, double the pre-twisted threads are

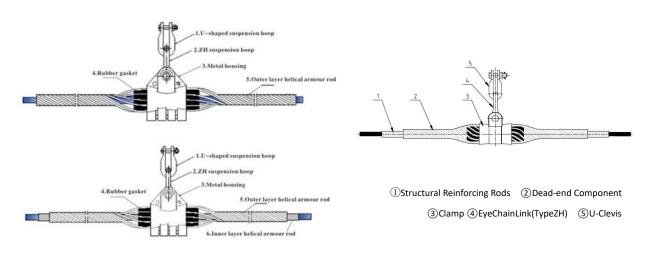


generally used for large file from the folder (within 1000m) the connection between, may be based on actual need to select a different installation method.

Tangent clamp is use for span from 200 to 800m(for span greater than 300m, using double layer preformed cable suspension clamp),the line outlet angle shall be not greater than 30° . With large contact area between the clamp and ADSS cable , the stress is distributed evenly,without stress concentration. Meanwhile. Optical



cable stiffness at the hanging point is increased, to ensure proper protection of the optical cable. The product has features of simple structure, light weight, easy installation and maintenance free. The grip strength of clamp on the cable within 10-20%RST(rate tensile strength of fiber) may ensure that the fiber optic cable is well protected in safe operation under unbalanced load. Clamp vertical destructive power:70kN.



Product Selection Table

Table 5-1 selection table of ADSS cable for span from 200m to 800m(ACL)

Product model		Tour Notice	Outer layer	Inner layer		Common c	onfiguration
of the Company	Applicable cable diameter (mm)	Installation span (m)	helical armour rod length (mm)	helical armour rod length (mm)	Weight (kg)	ZH hanging board	U shaped suspension loop
ACL-020-0960	9.0-9.6	200	900		1.50	ZH-3	U-3
ACL-020-1010	9.7-10.1	200	1000		1.54	ZH-3	U-3
ACL-020-1080	10.2-10.8	200	1000	-	1.58	ZH-3	U-3
ACL-020-1150	10.9-11.5	200	1040	170	1.59	ZH-3	U-3
ACL-020-1220	11.6-12.2	200	1040	-	1.64	ZH-3	U-3
ACL-020-1290	12.3-12.9	200	1060	170	1.64	ZH-3	U-3
ACL-020-1360	13.0-13.6	200	1060	77.5	1.64	ZH-3	U-3
ACL-020-1430	13.7-14.3	200	1200	170	1.75	ZH-3	U-3
ACL-020-1500	14.4-15.0	200	1200	-	1.80	ZH-3	U-3
ACL-020-1570	15.1-15.7	200	1200	150	1.80	ZH-3	U-3
ACL-020-1640	15.8-16.4	200	1200	-	1.80	ZH-3	U-3
ACL-020-1710	16.5-17.1	200	1260	-	1.88	ZH-3	U-3
ACL-020-1780	17.2-17.8	200	1260		1.88	ZH-3	U-3

Table 5-2 selection table of ADSS cable for span from 200m to 800m(ACL)



Product model	Applicable cable	Installation	Outer layer helical	Inner layer helical	W. L. L. C.	Common	onfiguration
of the Company	diameter (mm)	span (m)	armour rod length (mm)	armour rod length (mm)	Weight (kg)	ZH hanging board	U shaped suspension loop
ACL-030-0960	9.0-9.6	300	1020	-	1.51	ZH-3	U~3
ACL-030-1010	9.7-10.1	300	1100	-	1.58	ZH-3	U-3
ACL-030-1080	10.2-10.8	300	1100	-	1.62	ZH-3	U-3
ACL-030-1150	10.9-11.5	300	1200	-	1.65	ZH-3	U-3
ACL-030-1220	11.6-12.2	300	1200	-	0.50	ZH-3	U-3
ACL-030-1290	12.3-12.9	300	1200	-	1.70	ZH-3	U-3
ACL-030-1360	13.0-13.6	300	1200	-	1.70	ZH-3	U-3
ACL-030-1430	13.7-14.3	300	1320	-	1.95	ZH-3	U-3
ACL-030-1500	14.4-15.0	300	1320	-	2.01	ZH-3	U-3
ACL-030-1570	15.1-15.7	300	1320	72	2.01	ZH-3	U-3
ACL-030-1640	15.8-16.4	300	1320	12	2.01	ZH-3	U-3
ACL-030-1710	16.5-17.1	300	1320	12	2.12	ZH-3	U-3
ACL-030-1780	17.2-17.8	300	1320	72	2.12	ZH-3	U-3
ACL-040-0960	9.0-9.6	200-400	1100	1580	1.85	ZH-7	U-7
ACL-040-1010	9.7-10.1	200-400	1100	1580	1.85	ZH-7	U-7
ACL-040-1080	10.2-10.8	200-400	1100	1580	1.9	ZH-7	U-7
ACL-040-1150	10.9-11.5	200-400	1100	1580	2.0	ZH-7	U-7
ACL-040-1220	11.6-12.2	200-400	1200	1700	2.3	ZH-7	U-7
ACL-040-1290	12.3-12.9	200-400	1200	1700	2.4	ZH-7	U-7
ACL-040-1360	13.0-13.6	200-400	1300	1800	2.6	ZH-7	U-7
ACL-040-1430	13.7-14.3	200-400	1300	1800	2.6	ZH-7	U-7
ACL-040-1500	14.4-15.0	200-400	1300	1800	2.7	ZH-7	U-7
ACL-040-1570	15.1-15.7	200-400	1300	1800	2.7	ZH-7	U-7
ACL-050-1220	11.6-12.2	500	1260	1750	2.5	ZH-7	U-7
ACL-050-1290	12.3-12.9	500	1260	1750	2.5	ZH-7	U-7
ACL-050-1360	13.0-13.6	500	1300	1850	2.7	ZH-7	U-7
ACL-050-1430	13.7-14.3	500	1300	1850	2.7	ZH-7	U-7
ACL-050-1500	14.4-15.0	500	1360	1900	3.0	ZH-7	U-7
ACL-050-1570	15.1-15.7	500	1360	1900	3.0	ZH-7	U-7
ACL-050-1640	15.8-16.4	500	1420		3.2	ZH-7	U-7
ACL-050-1710	16.5-17.1	500	1420	2000	3.2	ZH-7	U-7
	11.6-12.2	600	1300	2000	2.9	ZH-7	U-7
ACL-060-1220				1780			
ACL-060-1290	12.3-12.9	600	1300	1780	2.9	ZH-7	U-7
ACL-060-1360	13.0-13.6	600	1360	1900	3.2	ZH-7	U-7
ACL-060-1430	13.7-14.3	600	1360	1900	3.2	ZH-7	U-7
ACL-060-1500	14.4-15.0	600	1400	1980	3.6	ZH-7	U-7
ACL-060-1570	15.1-15.7	600	1400	1980	3.6	ZH-7	U-7
ACL-060-1640	15.8-16.4	600	1500	2100	3.7	ZH-7	U-7
ACL-060-1710	16.5-17.1	600	1500	2100	3.7	ZH-7	U-7
ACL-070-1430	13.7-14.3	700	1460	2100	3.4	ZH-7	U-7
ACL-070-1500	14.4-15.0	700	1460	2100	3.4	ZH-7	U-7
ACL-070-1570	15.1-15.7	700	1480	2100	3.7	ZH-7	U-7
ACL-070-1640	15.8-16.4	700	1580	2150	4.3	ZH-7	U-7
ACL-070-1710	16.5-17.1	700	1580	2150	4.6	ZH-7	U-7
ACL-070-1780	17.2-17.8	700	1580	2150	4.6	ZH-7	U-7
ACL-080-1570	15.1-15.7	800	1600	2200	4.5	ZH-7	U-7
ACL-080-1640	15.8-16.4	800	1600	2200	4.5	ZH-7	U-7
ACL-080-1710	16.5-17.1	800	1700	2300	4.8	ZH-7	U-7
ACL-080-1780	17.2-17.8	800	1700	2300	4.9	ZH-7	U-7
ACL-080-1860	17.9-18.6	800	1700	2300	4.9	ZH-7	U-7

Note: This table lists only some of the products, for other products, please contact us.

5. Double Suspension Set for ADSS

Double Suspension Set for ADSS is mainly used for large height difference, span more than 800 meters or unilateral



overhang angle is 30 º -36 º line tower connection.

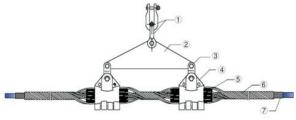
The product are mainly used in large span rivers, high drop valleys and other special places.

Tower with angle of various ADSS lines not greater than $60^{\circ}\,$.

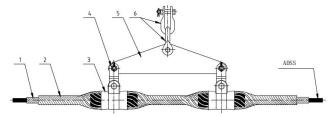
The vertical fracture strength of the clamp is 100kN.







- ①U-Clevis(optional) ②Yoke Plate ③PS link
- $\textcircled{4} \textbf{Clamp} \ \ \textcircled{5} \textbf{RubberLatex pad} \ \ \textcircled{6} \textbf{Dead-end Component}$
- **7**Structural Reinforcing Rods



- ①Structural Reinforcing Rods ②Dead-end Component
- 3 Clamp 4 PS link 5 Yoke Plate 6 U-Clevis

Product Selection Table

Table 6 selection table of ADSS cable double suspension set(ACLS)

	Cable	Outlayer	Inner layer	Span	6	Accessories	
Product Model	Dia.(mm)	length (mm)	length (mm)	(mm)	Yoke Plate	PS-Shackle	U-Clevis
ACLS-450-0960	9.0-9.6			450			
ACLS-450-1010	9.7-10.1				SLB-450		
ACLS-450-1080	10.2-10.8						U-12
3ACL-450-1150	10.9-11.5	1680	2280		2 (2		
ACLS-450-1220	11.6-12.2						
ACLS-450-1290	12.3-12.9				SLB-550		
ACLS-450-1360	13.0-13.6					PS-7	
ACLS-550-1430	13.7-14.3					2634,604	Nº Sicolo
ACLS -550-1500	14.4-15.0	1780	2380	550	SLB-550		
ACLS-550-1570	15.1-15.7		2080 2680				
ACLS- 550-1640	15.8-16.4						
ACLS-600 1710	16.5-17.1	2080		600	SLB-600		
ACLS-600-1780	17.2-17.8						



6. Preformed Dead-end for OPGW

Dead-end for OPGW is mainly used for the corner towers, the middle tower and Terminal Tower successive connections. Screw Clamp materials, primarily for aluminum clad steel wire, with a very strong resistance to tensile strength, protection and support of fiber optic cable to play the role of damping. Clamp grip cable rated tensile strength of not less than 95%, fully meet the installation of mechanical properties of the power cable. Chang Chin-resistant fiber optic cable package with included: outer preformed wire, twisted wire and supporting the inner pre-connect fittings and so on. Preformed Dead-end has excellent fatigue resistance, and the simple structure, easy installation, quick, no special equipment, significantly reducing construction costs.



①Dead-end Component(outer layer helical armour rod) ②Dead-end Component(inner layer helical armour rod) ③U-Clevis ④PD link ⑤thimble ⑥Dead-end Component

Product Selection Table

Table 7 selection table of OPGW cable tension clamp(ONL)

		0.1	Outer layer	Inner layer		Comn	on configurati	ion
Product model of the Company	Applicable cable diameter (mm)	Grip strength (KN)	helical armour rod length (mm)	helical armour rod length (mm)	Weight (kg)	Heart-shaped thimble	PD hanging board	U shaped suspension loop
ONL-070-0780	7.20-7.80	70	1000	1400	1.1	TC-07-B	PD-7	U-7
ONL-070-0850	7.90-8.50	70	1000	1400	1.2	TC-07-B	PD-7	U-7
ONL-070-0920	8.60-9.20	70	1000	1400	1.3	TC-07-B	PD-7	U-7
ONL-070-1010	9.30-10.10	70	1000	1400	1.4	TC-07-B	PD-7	U-7
ONL-090-1080	10.20-10.80	90	1160	1500	1.9	TC-10-B	PD-10	U-10
ONL-100-1140	10.90-11.40	100	1160	1500	2.0	TC-10-B	PD-10	U-10
ONL-120-1200	11.40-12.00	120	1200	1700	2.3	TC-12-B	PD-12	U-12
ONL-120-1270	12.10-12.70	120	1200	1700	2.4	TC-12-B	PD-12	U-12
ONL-120-1330	12.80-13.30	120	1200	1750	2.5	TC-12-B	PD-12	U-12
ONL-120-1390	13.40-13.90	120	1220	1840	2.6	TC-12-B	PD-12	U-12
ONL-120-1450	14.00-14.50	120	1350	1840	2.9	TC-12-B	PD-12	U-12
ONL-120-1500	14.60-15.00	120	1350	1840	3.5	TC-12-B	PD-12	U-12
ONL-120-1560	15.10-15.60	120	1460	1900	3.7	TC-12-B	PD-12	U-12
ONL-120-1630	15.70-16.30	120	1460	1900	3.8	TC-12-B	PD-12	U-12
ONL-120-1680	16.40-16.80	120	1480	2000	4.1	TC-12-B	PD-12	U-12
ONL-120-1730	16.90-17.30	120	1480	2000	4.3	TC-12-B	PD-12	U-12

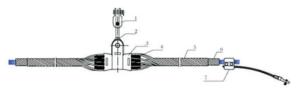
- ${\bf 1.} \ \ {\bf The\ table\ lists\ only\ some\ of\ the\ products.\ For\ other\ products\ ,\ please\ contact\ us.$
- 2. Among standard products of the company,inner layer helical armour rod is left-hand lay and outer layer helical armout rod is right-hand lay. For different lay direction, please notify us in advance.



7. Single Suspension for OPGW

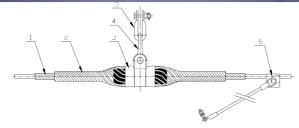
Suspension Set for OPGW used primarily for straight-sided drop tower, or less than 15 º line tower connection. Clamp screw from the inside and outside the two pre-twisted wire, hanging head and supporting the composition of connecting fittings. Clamp grip strength is greater than the tensile strength of fiber optic cable rated 10% -20%, for the transfer axial loads, and distributed radial compressive stress, better protection of fiber optic cable, to avoid the phenomenon of bending stresses and stress concentration. Suspension Set for OPGW with the Suspension has excellent fatigue resistance, the power cable can also play a supporting role in damping.





- ①U-Clevis ②ZH link③clamp ④rubber pad
- ⑤Outer layer helical armour rod
- ⑥inner layer helical armour rod ⑦grounding wire





- ①inner layer helical armour rod ②Outer layer helical armour rod
- ③ clamp ④ZH link ⑤U-Clevis ⑥grounding wire

Product Selection Table

Table 8 selection table of OPGW cable suspension clamp(OCL)

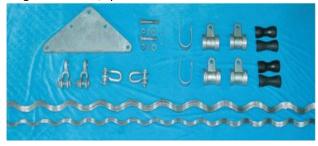
Product model of Applicable cable		Outer layer helical			Common configuration		
the Company	diameter (mm)	armour rod length (mm)	armour rod length (mm)	Weight (kg)	ZH suspension loop	U shaped suspension loo	
OCL-070-0800	7.4-8.0	1067	1670	2.1	ZH-7	U-7	
OCL-070-0890	8.1-8.9	1067	1670	2.2	ZH-7	U-7	
OCL-070-0960	8.9-9.6	1067	1676	2.3	ZH-7	U-7	
OCL-070-1010	9.7-10.1	1067	1676	2.3	ZH-7	U-7	
OCL-070-1080	10.2-10.8	1067	1676	2.6	ZH-7	U-7	
OCL-070-1140	10.9-11.4	1067	1702	2.7	ZH-7	U-7	
OCL-070-1200	11.5-12.0	1168	1829	2.8	ZH-7	U-7	
OCL-070-1270	12.1-12.7	1168	1829	2.9	ZH-7	U-7	
OCL-090-1330	12.8-13.3	1245	1930	3.7	ZH-7	U-7	
OCL-090-1390	13.4-13.9	1245	1956	3.8	ZH-7	U-7	
OCL-090-1450	14.0-14.50	1372	2007	3.9	ZH-7	U-7	
OCL-090-1500	14.6-15.0	1372	2007	4.1	ZH-7	U-7	
OCL-090-1560	15.1-15.6	1372	2057	4.3	ZH-7	U-7	
OCL-090-1630	15.7-16.3	1600	2338	4.5	ZH-7	U-7	
OCL-100-1680	16.4-16.8	1600	2338	5.0	ZH-10	U-10	
OCL-100-1730	16.9-17.3	1600	2338	5.0	ZH-10	U-10	
OCL-100-1780	17.4-17.8	1600	2338	5.2	ZH-10	U-10	
OCL-100-1840	17.9-18.4	1600	2338	5.4	ZH-10	U-10	

- 1. The table lists only some of the products. For other products , please contact us.
- 2. Standard products of the companyare appropriate for right-hand lay rotation OPGW. You may also consult us for ordering left-hand lay.

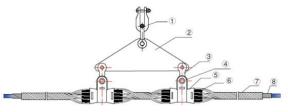


8. Double Suspension for OPGW

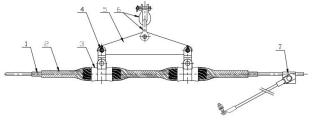
Double Suspension Set For OPGW with the use of double-Suspension design, including the inner and outer pre-twisted wire to connect two sets of hanging head and matching fittings. Clamp has excellent fatigue resistance, mainly for large height difference, span more than 800 meters or unilateral overhang angle is 30-36 $^{\circ}$ line tower connection.







①U-Clevis ②Yoke plate ③SYB link ④metal house ⑤Clamp



①inner layer helical armour rod ②Outer layer helical armour rod

Product Selection Table

Table 9 selection table of OPGW cable double suspension clamp(OCLS)

Product model of	Applicable cable	Outer layer helical	THE COLOR STREET, MAJORITHOUS COLORS OF SHORT	Weight (kg)	Common	n configuration
the Company	diameter (mm)	armour rod length (mm)	armour rod length (mm)	Tregue (Ng)	Y shaped hanging board	Triangle connecting plat
OCLS-0800	7.4-8.0	1600	2100	3.5	YB-15-B	LB-450
OCLS-0890	8.1-8.9	1600	2100	3.7	YB-15-B	LB-450
OCLS-0960	8.9-9.6	1600	2200	3.9	YB-15-B	LB-450
OCLS-1010	9.7-10.1	1600	2200	4.0	YB-15-B	LB-450
OCLS-1080	10.2-10.8	1600	2200	4.2	YB-15-B	LB-450
OCLS-1140	10.9-11.4	1600	2200	4.3	YB-15-B	LB-550
OCLS-1200	11.5-12.0	1700	2300	4.6	YB-15-B	LB-550
OCLS-1270	12.1-12.7	1700	2300	5.3	YB-20-B	LB-550
OCLS-1330	12.8-13.3	1700	2300	5.7	YB-20-B	LB-550
OCLS-1390	13.4-13.9	1700	2300	5.9	YB-20-B	LB-550
OCLS-1450	14.0-14.50	1800	2400	6.0	YB-20-B	LB-550
OCLS-1500	14.6-15.0	1800	2400	6.2	YB-20-B	LB-550
OCLS-1560	15.1-15.6	1800	2400	6.4	YB-20-B	LB-550
OCLS-1630	15.7-16.3	1800	2400	6.6	YB-20-B	LB-650
OCLS-1680	16.4-16.8	2100	2700	7.8	YB-20-B	LB-650
OCLS-1730	16.9-17.3	2100	2700	8.0	YB-20-B	LB-650
OCLS-1780	17.4-17.8	2100	2700	8.2	YB-20-B	LB-650
OCLS-1840	17.9-18.4	2100	2700	8.2	YB-20-B	LB-650

- 1. The table lists only some of the products. For other products , please contact us.
- 2. Standard products of the companyare appropriate for right-hand lay rotation OPGW. You may also consult us for ordering left-hand lay.

 $[\]textcircled{6}$ rubber pad 7Outer layer helical armour rod

[®]inner layer helical armour rod

③clamp ④PS link ⑤Yoke plate ⑥U-Clevis

⁷ grounding wire



9. Down Lead Clamp

Down lead clamp is used to fix the optical cable during down lead and jump connection of optical cable. One set of optical cable shall be installed every 1.5-2.0m. Parallel groove clamp aging resistant rubber or aluminum alloy stainless steel band hoop stainless steel support aluminum alloy U-shaped steel galvanized steel.



Rubber Down Lead Clamp for Pole



Metal Down Lead Clamp for Pole



Rubber Down Lead Clamp for Tower



Metal Down Lead Clamp for Tower

Application:

Down line clamp use for fixing the ADSS or OPGW when come down or jump connection, every 1.5-2.0m need installing one set of down line clamp.

Material:

Parallel groove clamp: Rubber or Alumninum alloy

Hoop: Stainless steel Bracket: Aluminum alloy

U bracket: Hot dip galvanized steel

Table 8.1

Product Name	Model	Cable Dia. Range(mm)	Weight(kg)	Remark
Bullion	TGY 1110-T	9.0-11.1	0.85	
Rubber type Down lead	TGY 1330-T	11.2-13.3	0.85	For ADSS
clamp for Tower	TGY 1550-T	13.4-15.5	0.85	For ADSS
	TGY 1800-T	15.6-18.0	0.85	
Metal type Down lead clamp	TGY 115-T	7.0-11.5	0.85	
for Tower	TGY 160-T	11.6-16.0	0.85	For OPGW
	TGY 200-T	16.1-20.0	0.85	
Dubbaahaa Dawalaad	TGY 1110-H*	9.0-11.1	0.95	
Rubber type Down lead clamp for Pole	TGY 1330-H*	11.2-13.3	0.95	For ADSS
ciamp for Pole	TGY 1850-H*	13.4-15.5	0.95	FOI ADSS
	TGY 1800-H*	15.6-18.0	0.95	
Metal type Down lead clamp	TGY 115-H*	7.0-11.5	0.95	
for Pole	TGY 160-H*	11.6-16.0	0.95	For OPGW
	TGY 200-H*	16.1-20.0	0.95	

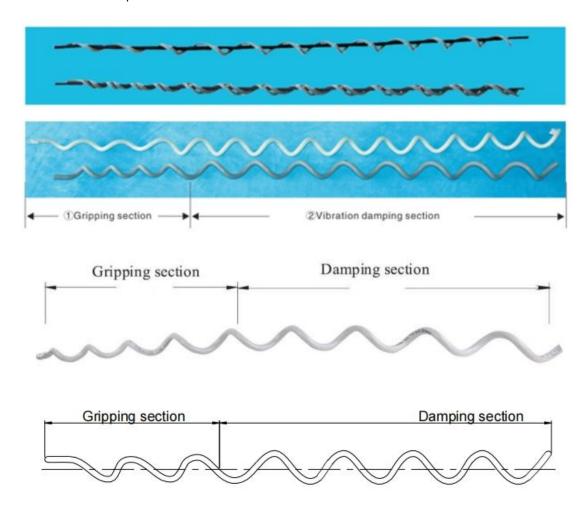
Notes: "H*" in Down line clamp for Pole type mean stainless steel strap, detail type choose from the catalogue.

^{*} if you can not find the code from our table, for quote price, please send us the

^{1.} cable dia.; 2.for tower or for pole; 3.For ADSS or for OPGW; 4. Rubber or metal; we will offer you according to your demand.



10. Helical Vibration Damper



Helical Vibration Damper uses high-strength, anti-aging PVC plastic, It commonly used in the damping device for ADSS, and the heavy ice of the anti-vibration OPGW.

Configuration of anti-vibration whip

Table 11-1 Configuration of anti-vibration whip

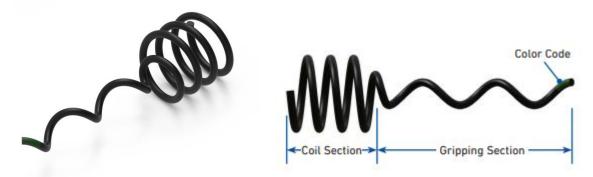
No.	Line span (L) mm	Number of anti-vibration whips each span (pieces)
1	100-250	2
2	251-500	4
3	500-750	6
4	751-1000	8

Table 11-2 Selection table of vibration rod (FL)

Product model of the Company	Applicable cable diameter (mm)	Enchantment length (mm)	Product length (mm)	Weight (kg
FL-0829-125	6.3-8.29	250	1250	0.26
FL-1170-130	8.0-11.70	250	1300	0.28
FL-1430-135	11.71-14.30	250	1350	0.30
FL-1930-167	14.31-19.30	300	1670	0.66
FL-2200-180	19.31-22.2	300	1800	0.71



11. CORONA-Coil for ADSS



The CORONA Coil is designed to reduce the electrical corona which may be caused at terminal hardware fittings when installing ADSS cables on or above 110kV transmission lines. The gripping section secures the unit to the Structural Reinforcing Rods and the coil section encircles the metallic rod ends, providing electrical shielding.

Technical Data:

Material: Aluminum Alloy

Model	Diameter (mm)	Total Length L (mm)	Weight (kg)
COCA-14	15-17	330	0.085
COCA-16	17-19	330	0.09
COCA-18	19-21	330	0.095
COCA-20	21-23	330	0.1
COCA-22	22-24	330	0.11







12. Vibration Damper , Armour Rod

The company offers a 4D series of anti-vibration hammer tuning fork design for Stock bridge, multi-resonance sound damping devices, mainly used for weakening and fragmentation of fiber optic cable due to aerial vibration generated by the impact energy.

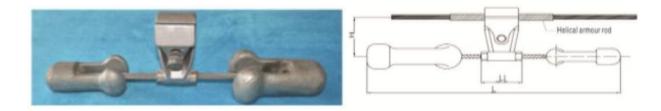


Table 12-1 Selection table of vibration Damper

Product model of the Company	Applicable cable diameter (mm)	L(mm)	L1(mm)	H(mm)	Steel stranded wire (mm)	Weight (kg
4D-40-34.0	29.5-34.0					
4D-40-30.5	27.0-30.5	542	66	96	11	4.7
4D-40-27.0	22.5-27.0					
4D-30-27.0	22.5-27.0	383				
4D-30-23.4	19.5~23.4		52	72	9.0	2.5
4D-30-20.3	16.5-20.3					
4D-20-27.0	22.5-27.0		330 52		7.5	1.4
4D-20-23.4	19.5-23.4			70		
4D-20-20.3	16.5-20.3	330				
4D-20-18.0	15.5-18.0	330				
4D-20-16.0	14.0-16.0			63		
4D-20-14.0	12.2-14.0					
4D-10-18.0	15.0-18.0					1.0
4D-10-16.0	13.7-16.0					
4D-19-14.0	11.0~14.0	310	52	67	7.5	
4D-10-11.0	7.0-11.0					

It is commonly used in the anti vibration device of OPGW cable and ADSS cable.

Table 12-2 Configuration of installation quantity of OPGW damper

Cable Dia.(mm)	Span(m)						
d<12	100~300	300~600	600~900				
12≤d<22	100~350	350~700	700~1000	1000~1200			
Quantity of damper (each span)	2	4	6	8			

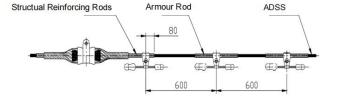
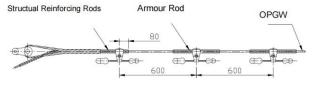


Table 12-3 Configuration of installation quantity of ADSS damper

Cable Dia.(mm)	Span(m)						
d<12	100~250	250~450	450~700				
12≤d<22	100~250	250~500	500~800	800~1000			
Quantity of damper (each span)	1	2	4	6			



Note: on the critical span, for the sake of safety, the number of vibration dampers should be more or less.



Table 12-4 Selection Table for Armour Rod(FZH)

Model	Cable Dia.(mm)	Material	Length (mm)	Weigh t(kg)	Model	Cable Dia.	Material	Length (mm)	Weight (kg)
FZH 0960	9.0-9.6	AL-ALLOY	450	0.15	FZH 1450	14.4-14.5	AL-ALLOY	500	0.23
FZH 1010	9.7-10.1	AL-ALLOY	450	0.15	FZH 1510	14.6-15.1	AL-ALLOY	500	0.25
FZH 1060	10.2-10.6	AL-ALLOY	450	0.17	FZH 1580	15.2-15.8	AL-ALLOY	550	0.28
FZH 1110	10.7-11.1	AL-ALLOY	450	0.17	FZH 1600	15.9-16.0	AL-ALLOY	550	0.30
FZH 1160	11.2-11.6	AL-ALLOY	500	0.19	FZH 1690	16.1-16.9	AL-ALLOY	550	0.30
FZH 1170	11.7-11.7	AL-ALLOY	500	0.21	FZH 1730	17.0-17.3	AL-ALLOY	550	0.30
FZH 1200	11.8-12.0	AL-ALLOY	500	0.21	FZH 1800	17.4-18.0	AL-ALLOY	550	0.33
FZH 1270	12.1-12.7	AL-ALLOY	500	0.21	FZH 1840	18.1-18.4	AL-ALLOY	550	0.33
FZH 1290	12.8-12.9	AL-ALLOY	500	0.23	FZH 1880	18.5-18.8	AL-ALLOY	550	0.35
FZH 1360	13.0-13.6	AL-ALLOY	500	0.23	6		2 2		

13. Closures

Optical fiber closure is used for protecting the optical fiber fusion splicing head between two different optical cabers; a reserved section of optical fiber will be kept in the closure for maintenance purpose. In according to environmental conditions, Optical fiber closure is divided into Closure for pole and Closure for tower; in according to the different shell material, it is divided into plastic Closure and Metal Closure.

- 1) Plastic Closure is used for ADSS Cable
- 2) Compare with Plastic Closure, Metal Closure has many obvious advantages as mechanical strength ,leak tightness and corrosion resistance .it's usually used for OPGW
- 3) Horizontal type Joint-Box is mainly used for underground ,wall cross and pipeline well installation .Apply for direct or multiple connect or diverge of optic fiber cable drop-in,it is mostly used for ordinary optic cable.
 - 13.1 Joint box
 - 13.2 Terminal box

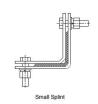
14. Cable Storage Assembly

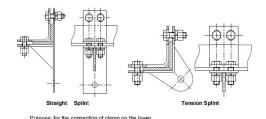




15. Immobility Clamp









16. Immobility Clamp for Pole

Application: it is used for fixing tension and suspension clamp on the pole.

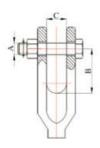


17. Composing Fittings

17.1 Thimble







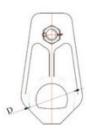
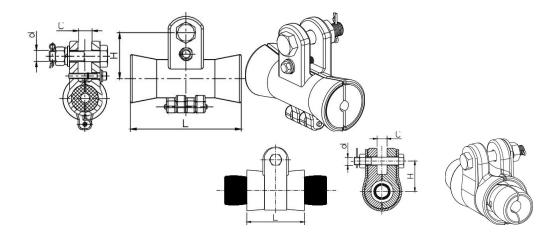


Table 13 Selection Table for Thimble(TC)

Product model of the Company	Breaking	and the second	Dimensions (mm)				
	strength (KN)	Weight (Kg)	A	В	С	D	
TC-05-B	50	0.65	M16	38	18	43	
TC-07-B	70	0.85	M16	38	22	55	
TC-10-B	100	1.00	M16	50	22	62	
TC-12-B	120	1.10	M16	50	22	62	
TC-16-B	160	1.60	M18	60	25	64	

Material: Ductile Cast iron Bolt: Hot dip galvanized steel Cotter pin: stainless steel

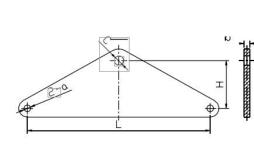
17.2 Aluminum Suspension Clamp





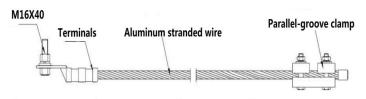
	Ma	ain dimens	sions (mr	10 00			
Name/Model	d	L	Н	С	Weight(kg)	Failing Load (kN)	
AGS Clamp AGS-4	M16	90	50	20	1.17	40	
AGS Clamp AGS-5	M16	95	55	20	1.28	70	
AGS Clamp AGS-6	M16	114	60	22	1.70	100	
AGS Clamp AGS-7	M16	125	65	22	1.97	120	
AGS Clamp AGS-8	M18	140	70	24	2.60	130	

17.3 Yoke Plate



	Model	Mai	n din	nensi	ons (ı	mm)	Failing Load	Weight(kg)	
	Model	а	b	С	Н	L	(kN)		
	L-1240	18	16	24	70	400	120	4.55	
	L-1250	18	16	24	130	500	120	7.66	
- 100	L-1260	18	16	24	160	600	120	10.3	

17.4 Grounding wire clamp



			Conf			
Model	Set Diameter(mm)	Pole Dia.(mm)	Grounding Clamps Length (mm)	SetModel	Weight(kg)	
JDX70/1500			1500		0.95	
JDX70/2000	11.40	70440	2000	D 440	1.09	
JDX70/2500	(79.39mm ²)	7.8-11.6	2500	D-116	1.23	
JDX70/3000			3000		1.37	
JDX95/1500			1500		1.11	
JDX95/2000	13.61		2000		1.30	
JDX95/2500	(109.72mm ²)	11.7-15.0	2500	D-150	1.49	
JDX95/3000		63	3000		1.68	
JDX150/1500			1500		1.56	
JDX150/2000	16.00		2000		1.82	
JDX150/2500	(152.80mm ²)	15.1-18.0	2500	D-180	2.09	
JDX150/3000		5) (8).5	3000	357	2.35	

^{*} detail fitting datasheet, please check CROP catalogue <u>Link fitting 2010,pdf,</u> please ask our salesmen or download from homepage.