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**ELECTRIC POWER EQUIPMENT
AND TOWERS**



Catalogue

Products Manual For Electric Power Equipments

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Tower series

We can produce all kinds of special shape electric power fittings, angle steel towers, steel tube towers, microwave towers, and communication towers following your samples' design, OEM welcomed.

Iron towers





Steel tube towers



Communication & Microwave towers





Production process

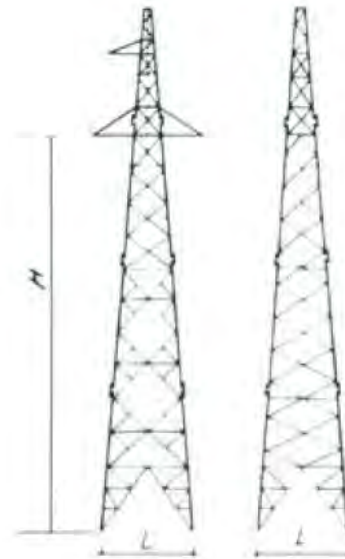


1、 Electric transmission tower

Hot-dip galvanized steel

OEM welcomed for the customers' design

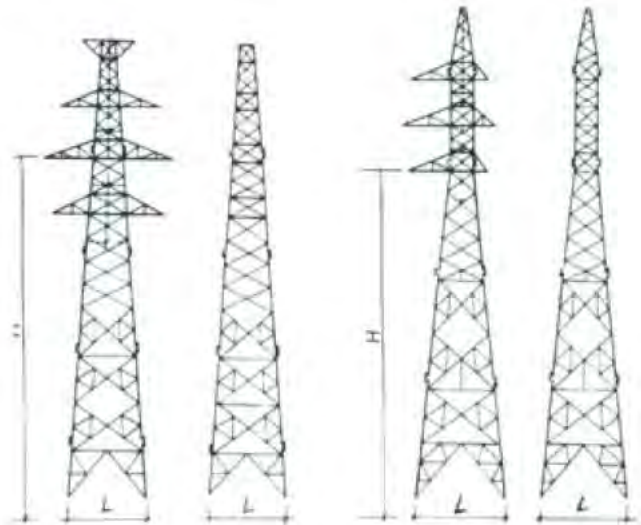
ISO9001:2000



Type	Loop	Conductor	Lightning line	Horizontal Distance of tower	Vertical Distance of tower	The height of sign and interval of the foot				
						12	15	18	21	24
3560ZS2	Single	LGJ-150	GJ-35	350	450	1679	1905	2139	2373	2607
3560ZS4	Single	LGJ-240	GJ-50	350	450	1737	1983	2229	2475	2721
110ZS1	Single	LGJ-150	GJ-35	350	600	1740	1960	2168	2387	2605
110ZS2	Single	LGJ-150	GJ-35	500	800	1866	2100	2334	2568	2802
110ZS3	Single	LGJ-240	GJ-50	350	600	1732	1950	2168	2387	2305
110ZS4	Single	LGJ-240	GJ-50	500	800	1866	2100	2334	2568	2802



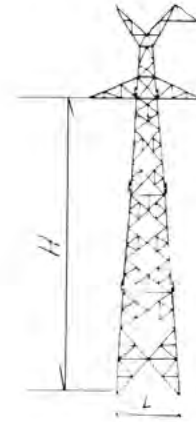
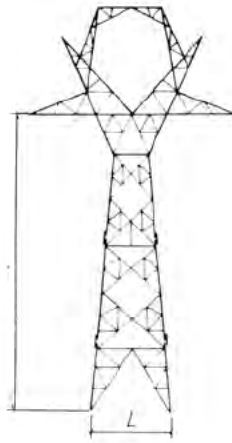
2、Eron tower



Type	Loop	Conductor	Lightning line	Horizontal Distance of tower	Vertical Distance of tower	The height of sign and interval of the foot				Corner
						9	12	15	18	
3560JGU ₁	Double	LGJ-150	GJ-35	250	300	3095	3730	4365	5000	0°-30°
3560JGU ₂	Double	LGJ-240	GJ-50	250	300	3085	3501	3917	4333	0°-30°
110JGU ₃	Double	LGJ-150	GJ-35	250	300	3503	3996	4469	4962	30°-60°
110JGU ₁	Double	LGJ-150	GJ-35	350	500	3580	4000	4420	4840	30°-60°
110JGU ₂	Double	LGJ-240	GJ-50	350	500	3560	3980	4400	4820	0°-30°
110JGU ₃	Double	LGJ-240	GJ-50	350	500	3600	4000	4420	4840	30°-60°

Type	Loop	Conductor	Lightning line	Horizontal Distance of tower	Vertical Distance of tower	The height of sign and interval of the foot				Corner
						9	12	15	18	
3560DGU	Double	LGJ-150	GJ-35	250	300	3095	3730	4365	5000	60°-90°

3、Iron tower

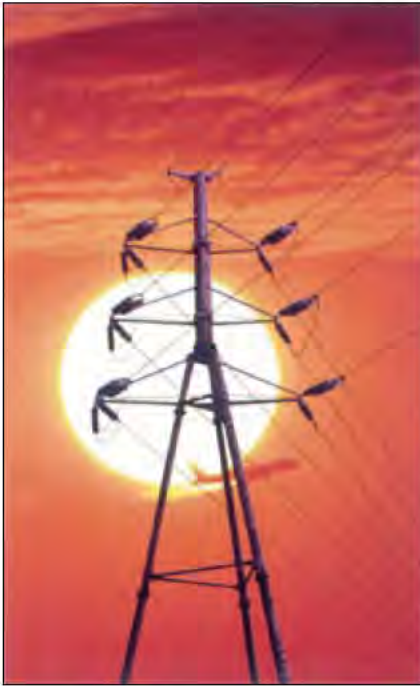


Type	Conductor	Lightning line	M1 Horizontal Distance of tower	M2 Vertical Distance of tower	The height of sign and interval of the foot		Corner
					15	18	
7847	LGJ-300	GJ-70	600	1000	4321	5000	5°-30°
	LGJ-400	GJ-100	400	400	6007	5000	0°-50°

Type	Conductor	Lightning line	M1 Horizontal Distance of tower	M2 Vertical Distance of tower	The height of sign and interval of the foot					Corner
					15	18	19	21	23	
7840	LGJQ400	GJ-50	600	1000	3643		4200		4547	0°-5°
7840	LGJQ400	GJ-70	420/180	1000/500	3660	4080		4500		0°-5°
7842	LGJQ400	GJ-50	600	1000	4000		4600		5191	5°-30°
7843	LGJQ400	GJ-50	600	1000	4339		5000		5661	30°-60°
7844	LGJQ400	GJ-70	420/180	1000/700	4240	4720		5200		5°-30°
7845	LGJQ400	GJ-70	600	1000	4620	5160				30°-60°



4、Circular section steel tube tower specification



Type			110S-SJ ₄ -18				
Voltage X Loop			110KV				
Call height—all height			18-27.5				
Corner			60°-90°				
Affordability grade			A	B	C	D	E
Design load	Horizontal load	Conductor	9.22	11.90	13.81	17.14	20.47
		Lightning rod	5.95	7.01	10.09	12.93	13.18
	Vertical load	Conductor	5.50	6.50	7.50	7.50	3.50
		Lightning rod	3.50	3.70	3.70	4.00	4.00
	Mounting Tension	Conductor	6.93	8.66	10.39	11.69	12.99
		Lightning rod	3.98	4.76	6.06	6.75	6.75
Bending resistance strength	Design Value		2767.4	3491.6	3957.1	4553.5	5377.0
	Standard Value		1979.7	2494.0	2826.5	3538.2	3840.7
	Failure Value		3063.9	3865.7	4381.1	5484.2	5953.1
Shaft Specification	Top of pole		450x8	500x8	500x8	500x8	600x8
	Top basis		1094x14	1114x16	1144x18	1174x22	1244x22
Flange bolt specification			16M64	16M64	20M64	24M64	28M64

5、Thin-walled centrifugal steel concrete tower specification



Type			110SC-SZ-20					110SC-SJ ₄ -18				
Voltage X Loop			110KV double loops with lightning rod					110KV double loops with lightning rod				
Call height-all height			20-28.5					18-29				
Corner			0°-3°					60°-90°				
Affordability grade			A	B	C	D	E	A	B	C	D	E
Design load	Horizontal load	Conductor	1.50	2.00	2.50	3.00	3.50	9.22	11.90	13.81	17.14	20.47
		Lightning rod	1.00	1.35	1.60	1.90	2.15	5.95	7.01	10.09	12.93	13.18
	Vertical load	Conductor	5.50	6.50	6.50	7.50	7.50	5.50	6.50	6.50	7.50	7.50
		Lightning rod	3.50	3.70	3.70	4.00	4.00	3.50	3.70	3.70	4.00	4.00
	Mounting Tension	Conductor	4.00	5.00	6.00	6.75	7.50	6.93	8.66	10.39	11.69	12.99
		Lightning rod	2.30	2.75	3.50	3.90	3.90	3.98	4.76	6.06	6.75	6.75
Bending resistance strength	Design Value		584.4	756.2	895.2	1033.7	1182.5	2553.3	3224.8	3993.6	4414.8	5353.5
	Standard Value		409.4	528.8	626.0	722.9	826.9	1785.5	2255.1	2792.7	3087.3	3743.7
	Failure Value		736.9	951.8	1126.8	1301.2	1488.4	3213.9	4059.2	5026.9	5557.1	6738.7
Shaft Specification	Top of pole		200x5(30)	210x5(30)	210x6(30)	300x5(30)	300x5(30)	400x5(35)	450x5(35)	500x6(35)	550x6(35)	600x6(35)
	Top basis		693x6(35)	693x8(35)	705x8(35)	747x8(35)	798x8(35)	910x14(35)	962x16(35)	1013x18(35)	1065x18(40)	1115x20(40)
Flange bolt specification			16M64	16M64	20M64	24M64	28M64	16M64	16M64	20M64	24M64	28M64



6、 Multi diamond steel tube tower specification



Mains grid x loop			10KV double loop									
Corner			Corner strain pole			Corner pole			Corner pole			
Type			10PS-SN-12	10PS-SN-15	10PS-SN-18	10PS-SJ-12	10PS-SJ-15	10PS-SJ-18	10PS-SJ-12	10PS-SJ-15	10PS-SJ-18	
Design conditions	Conductor	Type					JKYJ-240					
		Safety factor					5					
	Wire	Type					JKYJ-150					
		Safety factor					5					
	Distance of tower	Horizontal distance of tower					60m					
		Vertical distance of tower					70m					
	Weather conditions	Maximum wind speed					25m/s					
			Discharge of ice					5mm				
		Highest temperature						40°				
			Lowest temperature						-10°			
Shaft Specification	Root diameter		250	250	250	300	300	300	300	360	360	
	Root diameter		480	550	620	660	740	820	820	820	940	
Design curve distance			586	776	992	1056	1337	1651	1651	1820	2280	
Deflection			3.5	3.6	4.0	9.4	10.7	12.5	12.5	10.8	11.2	

7、 Substation steel structure





Link fitting

Link fitting are used to link clamps to insulator, or to link insulator and ground wire clamps to tower arms or subjection structures. Link fitting have special type and common type in accordance with mounting condition. The special type includes the ball-eye and socket-clevis linking with insulator. The common type is usually pin connected type. They have different grades according to the load and are exchangeable for the same grade.

The meanings of letter & Arabic figures in the catalog are shown as follow.

Q-ball eye P-plane, parallel W-socket clevis S-double U-U type L-yoke plate, tension rod, rhomb Z-90° angle Y-extension B-plate T-Adjustmentable.





BD ground wire hangers



PH type extension ring



YL, YLP Extension rods



ZH/QH link



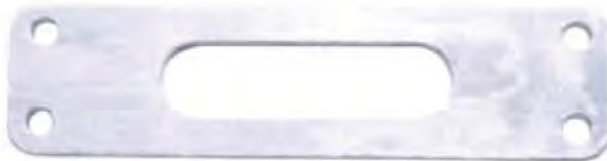
L Yoke plate



LS Yoke plate



PT adjusting plates



LF Yoke plate



LJ Yoke plate



QY Towing plates



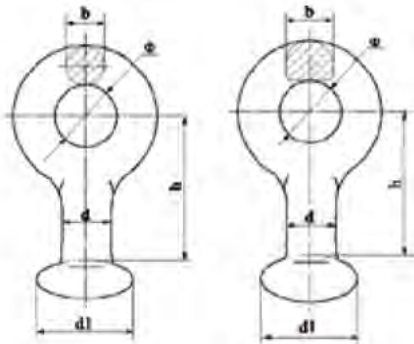
DB Adjusting plates



ZCJ support brackets



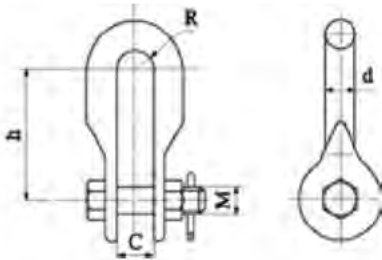
1、Ball Eyes



Catalog No.	Dimensions (mm)					Designated size of coupling	Rated Failing load (kN)	Weight (kg)
	d	Ø	b	d ₁	h			
Q-7	17	22	16	33.3	50	16	70	0.3
QP-7	17	18	16	33.3	50	16	70	0.3
QP-10	17	18	16	33.3	50	16	100	0.3
QP-12	17	24	20	41.0	60	20	120	0.5
QP-12G	17	24	17	33.3	60	16	120	0.4
QP-16	21	26	20	41.0	60	20	160	0.5
QP-16G	21	26	18	41.0	60	20	160	0.5
QP-20	25	30	24	49.0	80	24	200	1.0
QP-21D	21	30	24	41.0	70	20	210	0.9
QP-30	25	39	28	49.0	80	24	300	1.1
QP-2120G	21	26	20	41.0	80	20	210	0.7
QP-3224G	25	33	28	49.0	80	24	320	1.2
QP-4228G	29	39	32	57.0	100	28	420	1.5

Hot-dip galvanized steel.

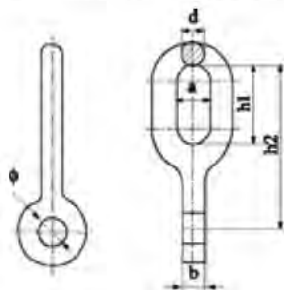
2、Shackles



Catalog No.	Dimensions (mm)					Rated Failure Load (kN)	Weight (kg)
	C	M	d	h	R		
U-7	20	16	16	80	10	70	0.44
U-10	22	18	18	85	11	100	0.54
U-12	24	22	20	90	12	120	0.96
U-16	26	24	22	95	13	160	1.47
U-20	30	27	24	100	15	200	2.2
U-25	34	30	26	110	17	250	2.79
U-30	38	36	30	130	19	300	3.75
U-30G.1	38	30	30	95	19	300	3.0
U-40	42	42	36	150	21	400	6.99
U-50	44	42	36	150	22	500	6.99
U-50G.1	40	36	36	170	20	500	6.55
U-60	50	48	185	38	25	600	10.75
U-60A	46	42	42	172	23	600	7.50
U-21G	24	24	22	100	12	210	1.5
U-32G	32	30	28	100	16	320	3.0
U-42G	36	36	32	110	18	420	4.60
U-50G	36	36	34	120	18	500	5.30

The cotter pin are stainless steel,the other partshot-dip galvanized steel.

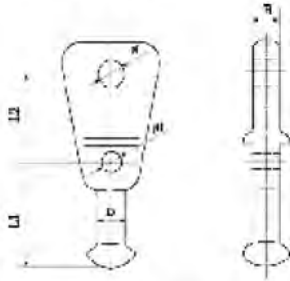
3、Eye Chain Links



Catalog No.	Dimensions (mm)						Rated Failure Load (kN)	Weight (kg)
	a	b	d	h ₁	h ₂	Ø		
ZH-7	24	16	16	57	95	20	70	0.85
ZH-10	24	16	18	55	100	20	100	1.12
ZH-12	24	16	20	65	103	24	120	1.20
ZH-16	26	18	22	75	135	26	160	1.80

Hot-dip galvanized steel.

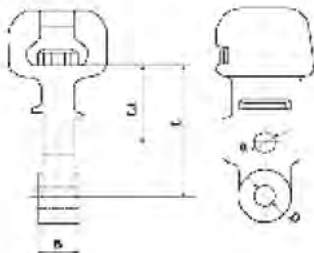
4、Ball Eyes



Catalog No.	Suitable Insulator	Dimensions (mm)						Rated Failure Load (kN)	Weight (kg)
		L ₁	L ₂	D	Ø	Ø ₁	B		
Q-7P	XP-7	70	60	17	20	14	16	70	1.1
Q-12P	XP-12	70	65	17	24	14	18	120	1.3

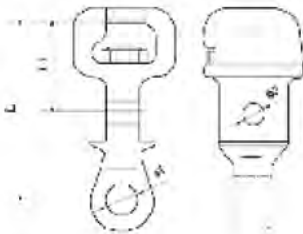
Hot-dip galvanized steel.

5、Socket Eyes(Type W)



Catalog No.	Suitable Insulator	Dimensions(mm)					Rated Failure Load (kN)	Weight (kg)
		L	L ₁	B	D	Ø		
W1-7k	XP-7 XP-4.5	120	70	20	18	14	70	1.0
W1-12k	XP-12	120	70	22	24	14	120	1.3

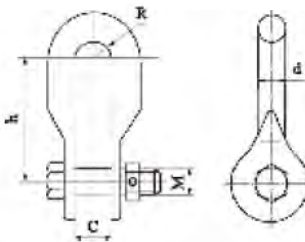
W1-7K socket eye is malleable iron, W1-12K socket eye is casting steel, the security clips are bronze or stainless steel. All ferrous parts are hot-dip galvanized.



Catalog No.	Suitable Insulator	Dimensions(mm)					Rated Failure Load (kN)	Weight (kg)
		L	L ₁	Ø ₁	Ø ₂	B		
W1-7R	XP-7 XP-4.5	120	70	20	14	20	70	1.0
W1-12R	XP-12	120	70	22	14	22	120	1.3

W1-7R socket eye is malleable iron, W1-12R is casting steel, the security clips are bronze or stainless steel. All ferrous parts are hot-dip galvanized.

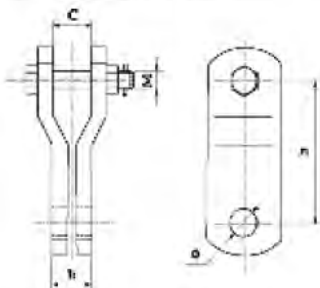
6、Shackles



Catalog No.	Dimensions (mm)					Rated Failure Load (kN)	Weight (kg)
	C	M	d	h	R		
UF-7	20	16	16	60	10	70	0.50
UF-10	22	18	18	70	11	100	0.54

The cotter pin are stainless steel, the other part hot-dip galvanized steel.

7、Clevises

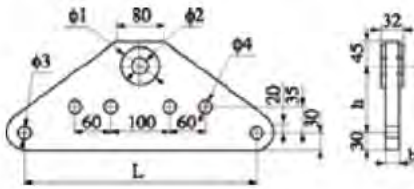


Catalog No.	Dimensions (mm)					Rated Failure Load (kN)	Weight (kg)
	C	b	M	h	Ø		
PS-7	18	16	16	90	20	70	0.60
PS-10	20	20	18	90	20	100	0.80

The cotter pin are stainless steel, the other parts hot-dip galvanized steel.



8、Yoke Plates



Catalog No.	Dimensions (mm)							Weight (kg)
	L	h	ϕ ₁	ϕ ₂	ϕ ₃	ϕ ₄	b	
BN1-30	400	110	70	38	26	18	22	21.7

Hot-dip galvanized steel

9、Yoke Plates

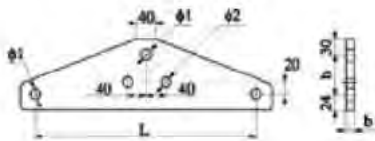


Fig 1

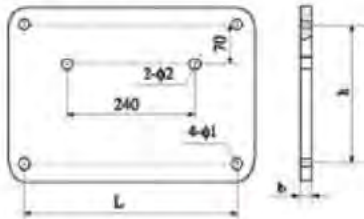
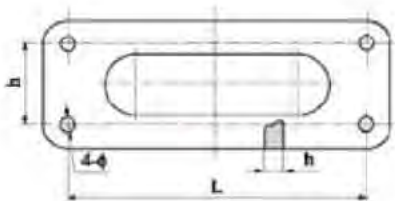


Fig 2

Catalog No.	Fig.No	Dimensions (mm)					Rated Failure Load > (kN)	Weight (kg)
		L	h	b	ϕ ₁	ϕ ₂		
BL-12	1	400	70	16	18	14	120	13.6
BL-1240	2	400	250	16	18	24	120	17

Hot-dip galvanized steel

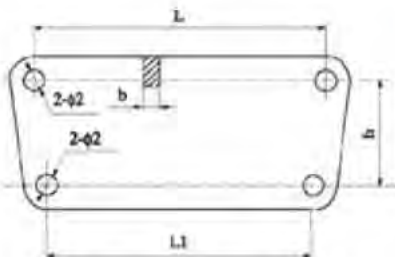
10、Yoke Plates



Catalog No.	Dimensions (mm)				Rated Failure Load (kN)	Weight (kg)
	b	h	ϕ	L		
LF-2040	16	70	20	400	200	5.50
LF-2540	16	110	24	400	250	11.0
LF-3040	18	120	26	400	300	11.2
LF-4055	26	190	30	550	400	26.6

Hot-dip galvanized steel

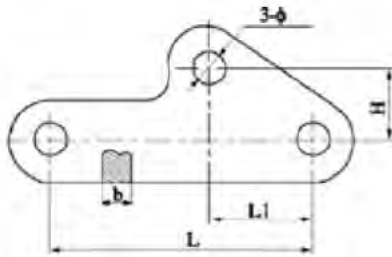
11、Yoke Plates



Catalog No.	Dimensions (mm)						Rated Failure Load (kN)	Weight (kg)
	b	h	ϕ ₁	ϕ ₂	L ₁	L ₂		
LS-1212	16	65	18	20	400	120	5.00	
LS-1221	16	65	18	20	400	210	5.35	
LS-1225	16	65	18	20	400	250	5.54	
LS-1229	16	65	18	20	400	290	5.73	
LS-1223	16	65	18	20	400	330	5.92	
LS-1237	16	65	18	20	400	370	6.11	

Hot-dip galvanized steel.

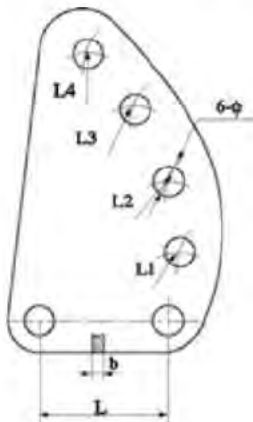
12、Towing Plates



Catalog No.	Dimensions (mm)					Rated Failure Load (kN)	Weight (kg)
	b	ϕ	h	L ₁	L		
QY-7	16	18	22	38	100	70	0.80
QY-10	16	20	25	42	120	100	1.10
QY-12	16	24	30	45	150	120	1.90
QY-16	18	26	35	55	180	160	2.60
QY-20	26	29	45	75	200	200	4.70
QY-50	45	45	70	100	260	500	15.4
QY-60	42	51	80	114	260	600	16.0
QY-21S	20	26	45	75	200	210	3.60
QY-25G	22	33	57	95	220	250	3.0
QY-32G	28	33	57	95	240	320	6.23

Hot-dip galvanized steel

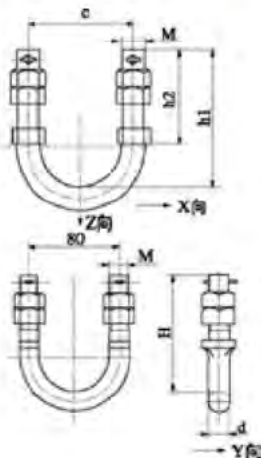
13、Adjusting Plates



Catalog No.	Dimensions (mm)							Rated Failure Load (kN)	Weight (kg)
	ϕ	L	L ₁	L ₂	L ₃	L ₄	b		
DB-7	18	70	95	120	145	170	16	70	1.70
DB-10	20	80	110	140	170	200	16	100	2.70
DB-12	24	100	135	170	205	240	16	120	3.20
DB-16	26	110	125	140	155	170	18	160	4.10
DB-20	30	120	135	150	165	180	26	200	7.40
DB-25	33	135	135	150	165	180	30	250	11.50
DB-30	39	120	140	160	180	200	32	300	12.50
DB-60	51	135	160	185	210	235	42	600	21.60
DB-5024	45	140	165	190	215	240	38	500	18.50
DB-5032	45	140	185	230	275	320	38	500	14.40
DB-21G	26	120	135	150	165	180	20	310	6.20

Hot-dip galvanized steel

14、U Tyre Bolts

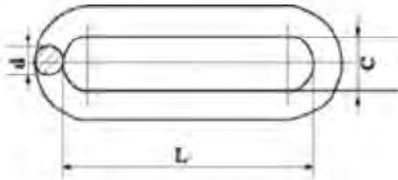


Catalog No.	Dimensions (mm)				Rated Failure Load (kN)			Weight (kg)
	C	M	h ₁	h ₂	X	Y	Z	
U-1880	80	18	90	60	18	3.5	35	0.83
U-2080	80	20	100	70	24	4.9	47	1.08
U-2280	80	22	118	90	28	6.5	57	1.30
UJ-1880	80	18	105	50	18	5.3	35	0.85
UJ-2080	80	20	120	60	24	7.4	47	1.10
UJ-2280	80	22	127	65	28	10.8	57	1.40

The cotter pin are stainless steel.the other parts hot-dip galvanized steel.



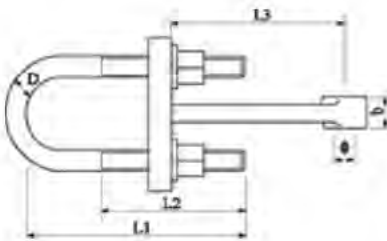
15、Chain Links



Catalog No.	Dimensions(mm)			Rated failure Load > (kN)	Weight (Kg)
	C	d	L		
PH-7	20	16	80	70	0.34
PH-10	22	18	100	100	0.49
PH-12	24	20	120	120	0.73
PH-16	26	22	140	160	0.97
PH-20	30	24	160	200	1.27
PH-25	34	26	160	250	1.62
PH-30	38	30	180	300	2.59
PH-2012	30	24	120	200	0.80

All parts are steel and hot-dip galvanized.

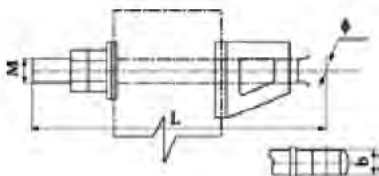
16、Adjusting Links



Catalog No.	Dimensions(mm)						Rated failure Load > (kN)	Weight (Kg)
	L ₁	L ₂	L ₃	b	D	Ø		
DT-6	125	90	110	16	16	18	60	1.7
DT-7	157	106	120	16	18	18	70	2.5
DT-10	160	110	140	16	20	20	100	3.7
DT-12	160	110	140	16	22	24	120	4.0
DT-16	160	110	140	20	24	24	160	4.2
DT-21	220	150	175	26	24	26	200	7.7
DT-30	255	175	220	32	36	39	300	9.2

Hot-dip galvanized steel

17、Ground Wire Hange



Catalog No.	Suitable Range (mm)	Dimensions (mm)				Weight (kg)
		b	Ø	M	L	
BD-1839	Ø190 Vertebral type reinforced concrete	18	18	20	390	4.26
BD-2244	Ø230 Vertebral type reinforced concrete	18	22	20	440	4.77
BD-2451	Ø300 Vertebral type reinforced concrete	18	24	20	510	5.25
BD-2762	Ø400 Vertebral type reinforced concrete	18	27	20	620	7.10

Hot-dip galvanized steel.

Suspension Clamps

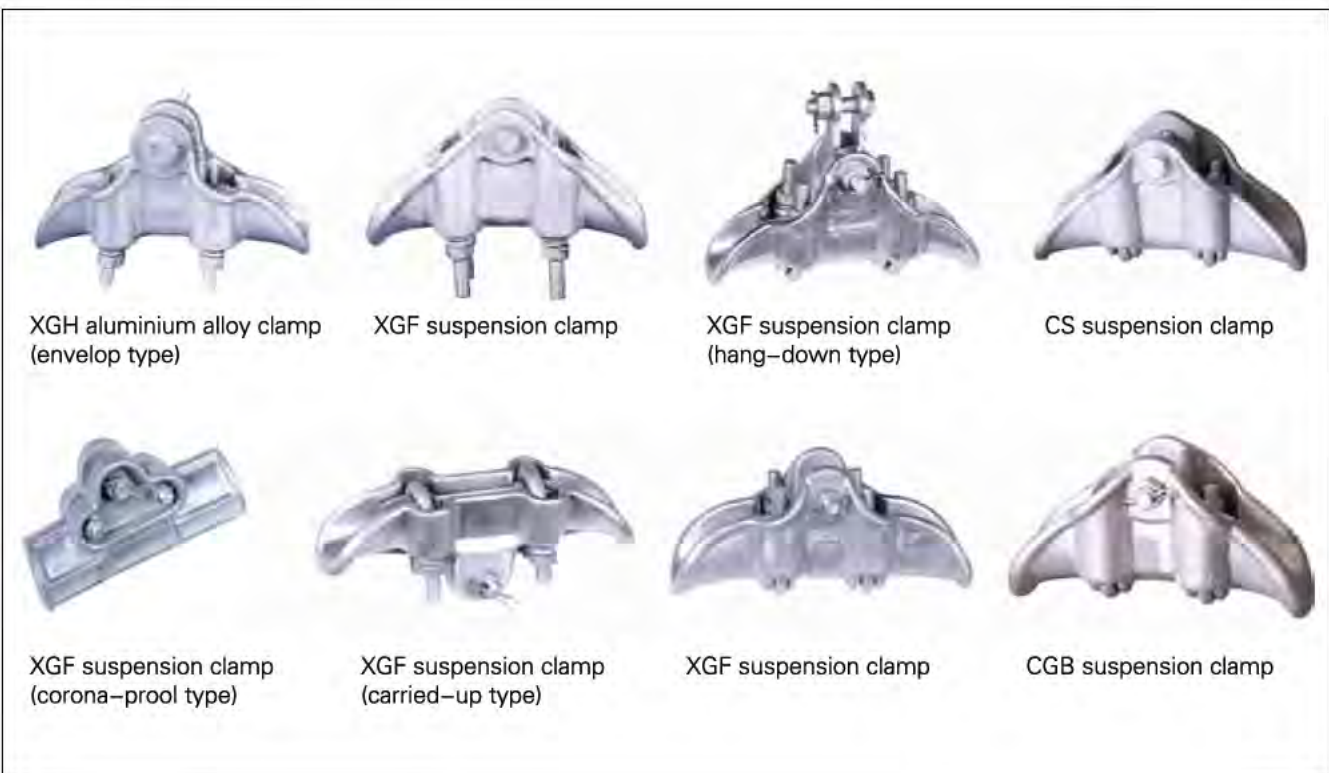
Suspension clamps are used to hang conductor or ground wire through insulators or link fitting to tower arms or substation structures. The clamps are made of malleable iron or aluminium alloy.

The meanings of the letter & arabic figure in the catalog are shown as follow.

X–suspension clamp G–fixed S–double clamp U–U bolt J–strength H–aluminium alloy
F–corona control K–under axle type T–envelope type A–with a socket–clevis
B–with U clevis C–hang–down type

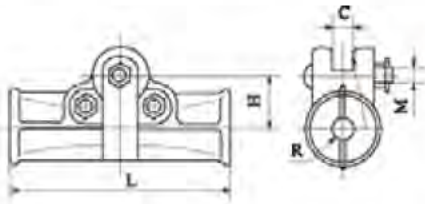
The suspension angle of suspension clamps is not less than 25°, the radius of curvature is not less than the dia. of installed leads by 8–10, and the percentage of the grip on different kinds of leads to the calculating capability of snap shows in following table.

Conductor	Construction(Al/St)	Percentage%
ACSR	>1.7	14
	4.0–4.5	18
	5.0–6.5	20
	7.0–8.0	22
	11.0–20.0	24
Steel wire	(Limit strength 1176–1274N/mm ²)	14
Al–conductor		24





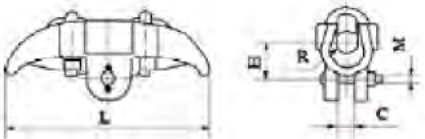
1、 Suspension Clamps(Carried-up & Hang-down Optionally)



Catalog No.	Suitable Conductor Dia.(mm)	Dimensions(mm)				Rated failure Load (kN)	Weight (Kg)
		C	M	H	L		
XGF-300	23.7	24	16	60	250	40	3.0
XGF-400	26.8	24	16	60	250	40	3.5
XGF-1400	51.0	24	16	63	260	60	4.8
XGF-1440N	51.36	24	16	63	300	60	5.5

The clamp body and keepers are aluminium alloy,cotter-pin is stainless steel.the other parts are hot-dip galvanized steel.

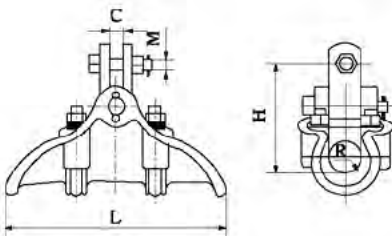
2、 Suspension Clamps(Corona-proof Type)



Catalog No.	Applicable Conductor (mm)	Dimensions(mm)					Rated failure Load (kN)	Weight (Kg)
		H	C	M	R	L		
XGF-5K	23.7~27.6	55	24	16	16	300	60	3.0

The clamp body and keepers are aluminium alloy,cotter-pin is stainless steel,the other parts are hot-dip galvanized steel.

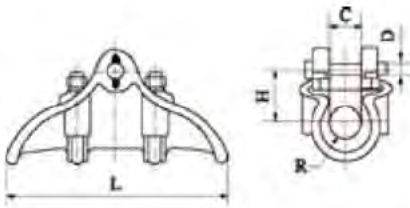
3、 Suspension Clamps(Corona-proof Type)



Catalog No.	Applicable Conductor (mm)	Dimensions(mm)					Rated failure Load (kN)	Weight (Kg)
		H	C	M	R	L		
XGF-5X	23.7~27.6	135	20	16	16	300	60	3.5
XGF-5X/GH	23.7~27.6	150	18	16	17	300	70	4.8
XGF-6X	36.0~43.0	180	20	18	22	300	90	4.8

The clamp body and keepers are aluminium alloy,cotter-pin is stainless steel.The other parts are hot-dip galvanized steel.

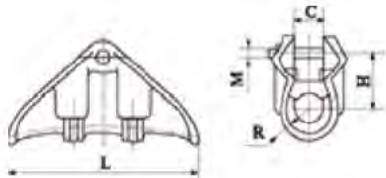
4、Suspension Clamps(Corona-proof Type)



Catalog No.	Applicable Conductor (mm)	Dimensions(mm)					Rated failure Load (kN)	Weight (Kg)
		H	C	D	R	L		
XGH-3	12.4~17.0	50.5	23	16	11.5	200	40	1.5
XGH-4	19.0~23.5	50.5	27	16	13.5	225	40	2.3
XGH-5	24.2~28.0	70	32	16	16	260	60	4.4

The clamp body and keepers are aluminium alloy, cotter-pin is stainless steel. The other parts are hot-dip galvanized steel.

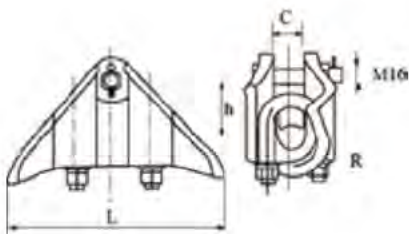
5、Suspension Clamps(Corona-proof Type)



Catalog No.	Applicable Conductor (mm)	Dimensions(mm)					Rated failure Load (kN)	Weight (Kg)
		H	C	M	R	L		
XGF-6	36~43	92	44	18	22	300	80	3.8
XGF-53	43~51	100	56	16	26.5	350	70	5.6

The clamp body and keepers are aluminium alloy, cotter-pin is stainless steel. The other parts are hot-dip galvanized steel.

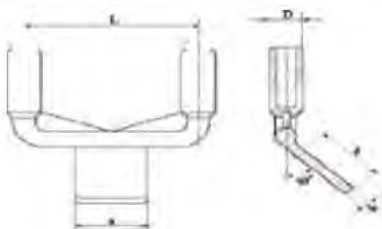
6、Alumimium Alloy Suspension Clamps



Catalog No.	Conductor Dia. (mm)	Dimensions(mm)				Rated failure Load (kN)	Weight (Kg)
		L	h	R	C		
CGB-3	14.0~17.5	200	50	10	22	40	1.5
CGB-4	17.0~22.4	240	62	12.5	28	40	2.2
CGB-5	21.0~28.0	260	72	15	35	60	2.8
CGB-6	27.0~34.0	300	80	19	42	70	3.7
CGB-7	33.0~40.0	300	85	22	44	70	4.2

The clamp body and keepers are aluminium alloy, cotter-pin is stainless steel. The other parts are hot-dip galvanized steel.

7、Alumimium Alloy Suspension Clamps



Catalog No.	Conductor Dia. (mm)	Dimensions(mm)					Rated failure Load (kN)	Weight (Kg)
		L	h	R	C	M		
CS-51	40.0~52.0	350	73	27	56	16	40	5.6
CS-57	53.0~57.0	350	70	30	60	20	70	6.2

The clamp body and keepers are aluminium alloy, cotter-pin is stainless steel. The other parts are hot-dip galvanized steel.



Strain Clamps

Strain clamps are used to fix conductor and ground wire through insulators or link fitting to tower arms or substation structures. According to the clamp construction and mounting way, the clamps include three types as compression type, bolt type and wedge type. The compression type includes hydraulic type and explosive type.

The meaning of letter & Arabic figure in the catalog are shown as follow.

N–strain clamp L–bolt type D–inverse mounting Y–hydraulic type B–explosive type

The figures mean the of assembled leads which apply to each other numbers.

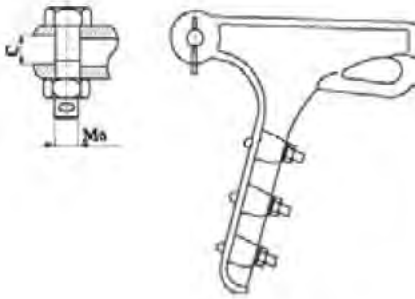
Additional letter: A–jumper 0° B –jumper 300° The radius of curvature is more than eight fold diameter of the suitable conductor, the percentage minimum slip strength of clamp to rated ultimate strength of conductor is shown in the following table.

PLACE	Type	Percentage(%)
Electric power line	Compression	95
	Bolt	90

As the bolt type strain clamp is used to AAC and ACSR, the conductor may be wound by aluminium tape or preformed armour rods for protecting.



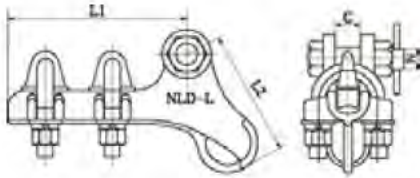
1、Alumimium Alloy Stain Clamp(Bolt Type)



Catalog No.	Applicable Conductor (mm)	C	M	U Bolt		Rated failure Load (kN)
				M	PCS	
NLL-1	5.0-10.0	18	16	M12	2	40
NLL-2	10.0-14.0	18	16	M12	2	40
NLL-3	14.0-18.0	28	18	M14	3	70
NLL-4	18.0-23.0	34	18	M14	3	90
NLL-5	23.0-29.0	36	22	M16	4	120

NLL series is suitable for aerial line up to 10KV, fixing aluminium wire or steel core aluminium wire on the strain pole.

2、Alumimium Alloy Stain Clamps



Catalog No.	Conductor Dia (mm)	Dimensions(mm)				Rated failure Load (kN)
		L ₁	L ₂	C	M	
NLL-2L	35-95	135	95	18	M16	30
NLL-3L	120-150	178	100	24	M16	40
NLL-4L	185-240	223	168	25	M18	50
NLL-5L	240-300	238	180	32	M18	70

Clamp bodies are Aluminium, the other parts are steel and hot dip galvanized.

3、Strain Clamps for heat-resistant aluminum alloy Stranded Conductor

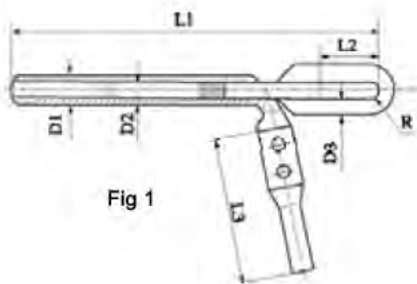


Fig 1

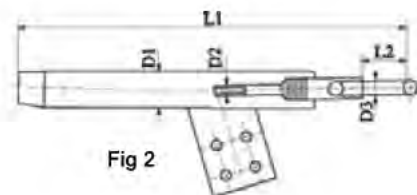


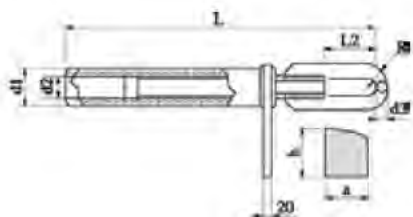
Fig 2

Catalog No.	Suitable Conductor (mm)	Dimensions(mm)							Weight (Kg)	Fig No.
		D ₁	D ₂	D ₃	R	L ₁	L ₂	L ₃		
NY-185/30N	NRLH ⁵⁸ ₆₀ GJ-185/30	36	16	16	10	525	55		4.2	1
NY-240/30N	NRLH ⁵⁸ ₆₀ GJ-240/30	45	18	18	10	545	55		4.4	1
NY-240/40N	NRLH ⁵⁸ ₆₀ GJ-240/40	45	18	18	10.5	545	60		4.4	1
NY-300/40N	NRLH ⁵⁸ ₆₀ GJ-300/40	50	18	18	12	575	65		6.5	1
NY-300/50N	NRLH ⁵⁸ ₆₀ GJ-300/50	50	18	18	12	575	65		6.5	1
NY-400/35N	NRLH ⁵⁸ ₆₀ GJ-400/35	55	18	20	13.5	605	65		7.5	1
NY-400/50N	NRLH ⁵⁸ ₆₀ GJ-400/50	55	20	20	13.5	605	65		7.6	1
NY-500/45N	NRLH ⁵⁸ ₆₀ GJ-500/45	65	20	20	14	615	70	170		2
NY-500/70N	NRLH ⁵⁸ ₆₀ GJ-500/70	65	22	26	17	645	90	357		2
NY-630/45N	NRLH ⁵⁸ ₆₀ GJ-630/45	70	20	22	16	690	70	365		2
NY-630/80N	NRLH ⁵⁸ ₆₀ GJ-630/80	70	26	26	17	720	80	365		2
NY-800/55N	NRLH ⁵⁸ ₆₀ GJ-800/55	72	20	26	19	750	80	345	8.2	2

Clamp bodies are aluminium alloy, the other parts are steel and hot-dip galvanized.



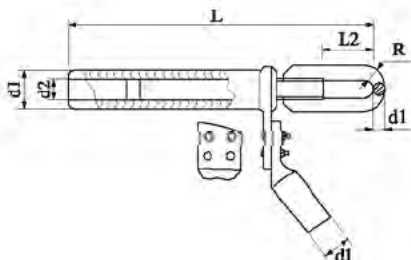
4、 Strain Clamps for Welding Hydraulic Compression Type



Catalog No.	Suitable Conductor Type (mm)	Dimensions(mm)								Holding Strength > (KN)	Weight (Kg)
		d ₁	d ₂	d ₃	L ₁	L ₂	R	a	h		
NYH-600K	LGKK-600	76	-	20	510	75	15	120	120	100	7.4
NYH-900K	LGKK-900	74	-	24	495	85	15	120	120	136	7.0
NYH-1400/120	LGJQT-1400/120	76	30	24	720	100	20	120	120	214	10.2
NYH-1400/135	LGJQT-1400/135	76	30	24	720	100	20	120	120	232	10.2
NYH-500/65N	NRLH58GJ-500/65	60	22	22	660	70	15	125	125	96	9.5
NYH-630N	NRLH58GJ-630/80	70	24	26	710	80	17	125	125	122	8.5
NYH-1000/125N	NRLH58GJ-1000/125	76	32	24	720	85	21	150	150	188	12.0
NYH-1440/120N	NAHLGJQ-1440/120	80	34	24	760	100	20	150	150	210	11.8
NYH-1440/135N	NAHLGJQ-1440/135	80	34	24	760	100	20	150	150	228	11.8

Clamp bodies are aluminium alloy, the other parts are steel and hot-dip galvanized.

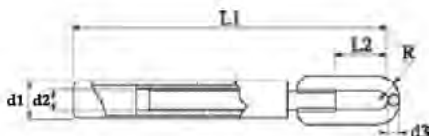
5、 Strain Clamps for Welding Hydraulic Compression Type



Catalog No.	Suitable Conductor Type (mm)	Dimensions(mm)							Holding Strength > (KN)	Weight (Kg)
		d ₁	d ₂	d ₃	L ₁	L ₂	R			
NYH-600K/600K	LGKK-600	76	-	20	510	75	15	100	11.6	
NYH-900K/900K	LGKK-900	74	-	24	495	85	15	136	11.0	
NYH-1400/1400/120	LGJQT-1400/120	76	30	24	720	100	20	214	13.0	
NYH-1400/1400/135	LGJQT-1400/135	76	30	24	720	100	20	232	13.0	
NYH-500/65N/500N	NRLH58GJ-500/65	60	22	22	660	70	15	96	11.5	
NYH-630N/630N	NRLH58GJ-630/80	70	24	26	710	80	17	122	11.0	
NYH-1000/125N/1000N	NRLH58GJ-1000/125	76	32	24	720	85	21	188	14.5	
NYH-1440N/1440/120N	NAHLGJQ-1440/120	80	34	24	760	100	20	210	16.0	
NYH-1440N/1440/135N	NAHLGJQ-1440/135	80	34	24	760	100	20	228	16.0	

Clamp bodies are aluminium alloy, the other parts are steel and hot-dip galvanized.

6、 Terminal Strain Clamps



Catalog No.	Suitable Conductor Type (mm)	Dimensions(mm)						Holding Strength > (KN)	Weight (Kg)
		d ₁	d ₂	d ₃	R	L ₁	L ₂		
NZ-600K	LGKK-600	76		20	15	450	70	100	6.5
NZ-900K	LGKK-900	74		24	15	470	85	136	5.5
NZ-1400/120	LGJQT-1400/120	76	30	24	20	540	100	214	6.8
NZ-1400/135	LGJQT-1400/135	76	30	24	20	540	100	232	6.8
NZ-1440/120N	NAHLGJQ-1440	80	34	24	20	660	100	210	11.0
NZ-1440/135N	NAHLGJQ-1440	80	34	24	20	660	100	228	11.00

Clamp bodies are aluminium alloy, the other parts are steel and hot-dip galvanized.

Terminal Connector

Terminal connectors are used to connect tap conductor to power equipments(transformer,circuit breaker,disconnect switch.etc)or to wall bushing of substation.Aluminium connectors are also used to connect the tap conductor of T–connector.The connectors include compressive–type and bolted,both types have angle of 0°、30° and 90° with the direction of tap conductor.

DTL series Al–Cu connection terminal is suitable for transition joint of distribution device aluminium core cable and electric equipment.DL aluminium is used for aluminium terminal linking of aluminium core cable and electric equipment.DT copper terminal is used for copper terminal electric equipment. DTcopper terminal is used for copper terminal linking of copper core cable and electric equipment,The products adopt friction welding workmanship,Our company supplies Cu–Al terminal and wire clamp made by explosive welding technique.The products have features as high welding strength,excellent electric property,resistance to galvanic corrosion,long service life,never fracture,high safety,etc.





DTGY copper connecting terminal



OT copper passing through terminal



DTGS copper connecting terminal



DTGY copper connecting terminal



JG copper connecting terminal



DTF- copper water proof terminal



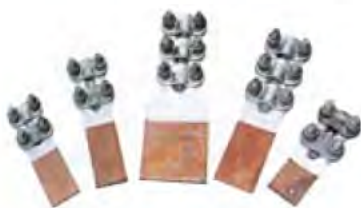
JT,JTL,JL Cu,Cu-Al,Al jointing clamp



Quincunx copper connecting clamp



YZ clamps for hot line work



SLG Cu-Al terminal connector



SLG Cu-Al terminal connector



SLG Cu-Al terminal connector (friction welding)



SLGB Cu-Al terminal connector



SL bolt type aluminium terminal connector



ST bolt type copper terminal connector



SY(T)compression type copper terminal connector



SYG compression type Cu-Al terminal connector (flash welding)



STY/SY compression type aluminium terminal connector



SYSG, SYS, SLS, SLSG terminal connector for double conductor



SBG Cu-Al clamp for transformer



SBT copper transformer clamp



SBT copper clasp rod clamp



Copper, Cu-Al clasp rod clamp (flat plate type)



SBG-1 bolt type transformer clamp



Double head joint clamp



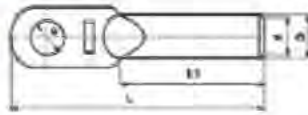
Cu-Al clamp clasp rod clamp



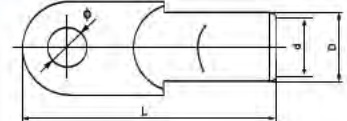
1、Copper Tubular cable lugs



DTG



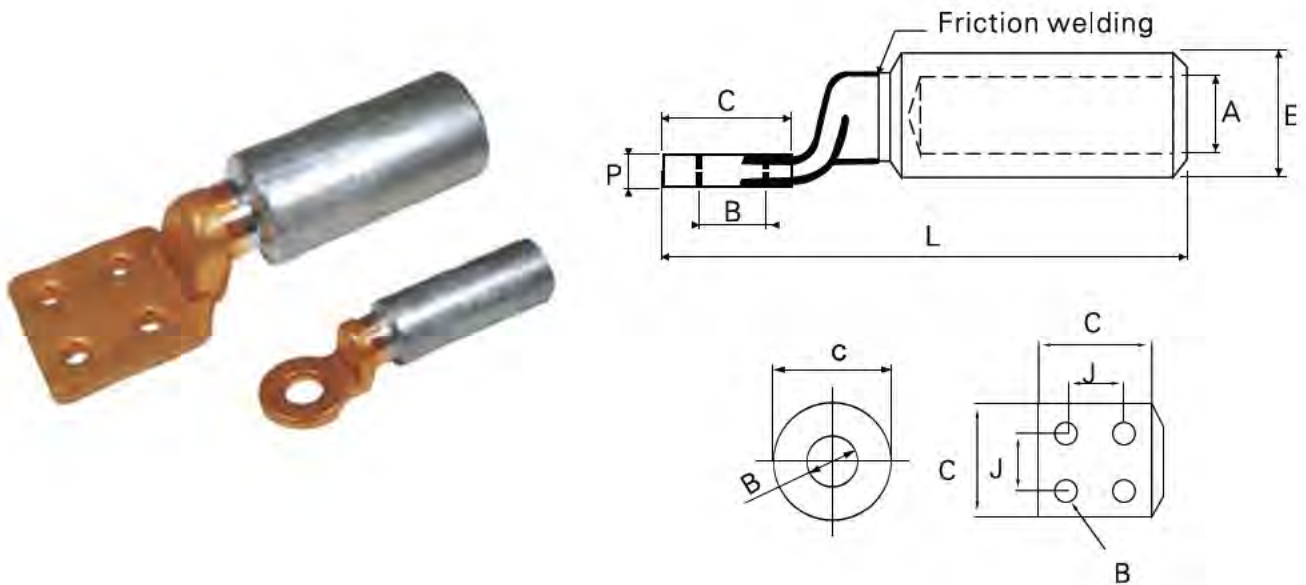
JG



Part No.	Dimensions(mm)				
	ϕ	D	d	L	L ₁
DTG-10	4.5	8	5	50	31
DTG-16	6.5	9	6	57	31
DTG-25	6.5	10	7	62	34
DTG-35	6.5	11	8	66	36
DTG-50	8.5	13	10	72	40
DTG-70	10.5	16	11.5	80	42
DTG-95	10.5	18	13.5	87	46
DTG-120	12.5	20	15	96	48
DTG-150	12.5	22	16.5	103	52
DTG-185	12.5	25	18.5	105	55
DTG-240	12.5	27	21	120	60
DTG-300	17	31	24	135	65
DTG-400	21	34	26.5	150	70
DTG-500	21	38	30	170	75
DTG-630	21	45	35	210	85

Part No.	Dimensions(mm)			
	ϕ	D	d	L
JG-10	6.2	8	5	38
JG-16	8.4	9	6	41
JG-25	8.4	10	7	46
JG-35	8.5	11	8	52
JG-50	8.5	13	10	54
JG-70	10.5	16	12	61
JG-95	10.5	18	14	66
JG-120	12.5	20	15	73
JG-150	12.5	22	17	77
JG-185	14.5	25	19	86
JG-240	16.5	27	21	93
JG-300	16.5	31	24	103
JG-400	18.5	34	26	113

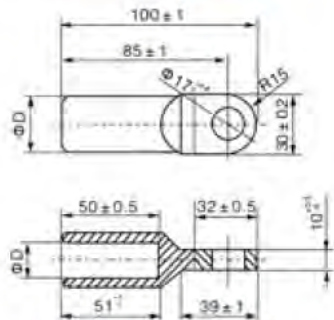
2、Bimetallic cable lug (Cu-Al, A type)



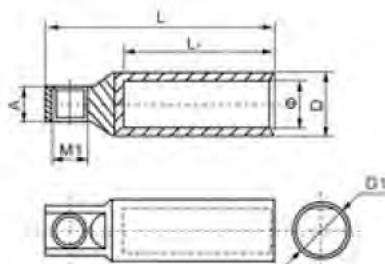
Part No.	Section Area(mm ²)	A(mm)	E(mm)	C(mm)	B(mm)	J(mm)	L(mm)	P(mm)
CAU 16	16	5.5	16	20	10.5	....	79	4.5
CAU 25	25	6.5	16	20	10.5	....	79	4.5
CAU 35	35	8	16	25	12.8	....	86	5
CAU 50	50	9	20	25	12.8	....	86	5
CAU 70	70	11	20	25	12.8	....	86	5
CAU 95	95	12.5	20	25	12.8	....	86	5
CAU 120	120	13.7	25	30	12.8	....	110	6
CAU 150	150	15.5	25	30	12.8	....	110	6
CAU 185	185	17	32	30	12.8	....	110	6
CAU 240	240	19.5	32	30	12.8	....	110	6
CAU 300	300	23.3	40	36	16.5	....	153	7
CAU 400	400	26	40	36	16.5	....	153	7
CAU 500	500	29.1	47	60×60	4φ9	30	200	10
CAU 630	630	32.5	47	60×60	4φ9	30	200	10
CAU 630S	630	33.5	47	60×60	4φ9	30	200	10
CAU 630-36	630	36	47	60×60	4φ9	30	200	10
CAU 800	800	37.5	60	80×80	4φ11	40	260	10
CAU 1000	1000	42	60	80×80	4φ11	40	260	10
CAU 1200	1200	45.5	65	80×80	4φ11	40	270	10



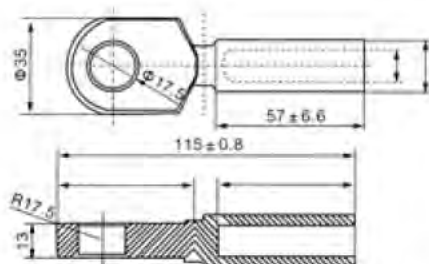
2、Bimetallic cable lug



Type(mm ²)	D(mm)	d(mm)
25	12	7
35	14	8.2
50	16	9.5
70	18	11.5
95	21	12.5
120	23	14
150	25	15.5
185	28	17.5
240	31	19.5
300	35	22
400	40	25

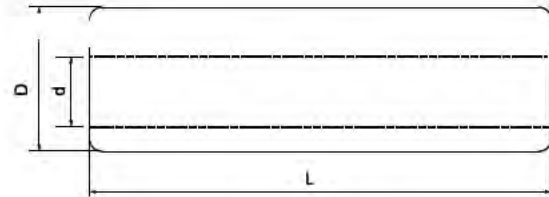


Type(mm ²)	D(mm)	d(mm)	L	L1	A
16	16	6	73	48	11
25	16	7	73	48	11
35	16	8.5	73	48	11
50	16	10	73	48	11
70	16	11.5	73	48	11
95	16	13.5	73	48	11
120	16	15	73	48	11
150	20				
185	20				
240	20				



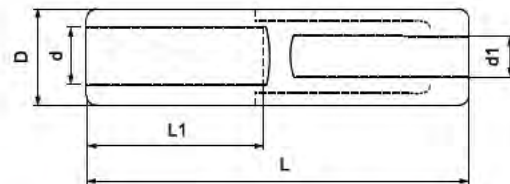
Type(mm ²)	D(mm)	d(mm)
25	12	7
35	14	8.2
50	16	9.5
70	18	11.5
95	21	12.5
120	23	14
150	25	15.5
185	28	17.5
240	31	19.5
300	35	22
400	40	25

3、Copper compression joint



Part No.	Dimensions(mm)		
	d	D	L
GT-G-16	6	9	56
GT-G-25	7	10	60
GT-G-35	8	11	64
GT-G-50	9.7	13	72
GT-G-70	11.5	16	78
GT-G-95	13.5	18	85
GT-G-120	15	20	90
GT-G-150	16.5	22	94
GT-G-185	18.5	25	100
GT-G-240	21	27	110
GT-G-300	24	30	120
GT-G-400	26.5	34	135

4、Aluminum compression joint

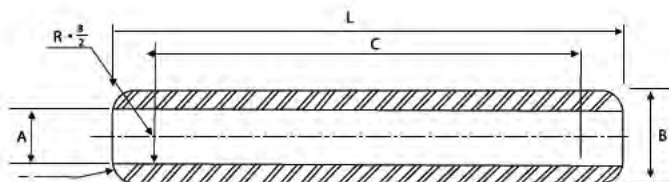


Part No.	Dimensions(mm)			
	D	d	L ₁	L
GL-16	10	5.5	30	70
GL-25	12	7	32	75
GL-35	14	8.5	37	85
GL-50	16	9.7	42	95
GL-70	18	11.5	47	105
GL-95	21	14	50	110
GL-120	23	15	52	115
GL-150	25	16.5	55	120
GL-185	27	18.5	57	125
GL-240	30	21	60	130
GL-300	34	23.5	64	140
GL-400	38	27	69	150

Note: Same wire ranges d1=d Unequal wire ranges on request



5、 Aluminum compression joint

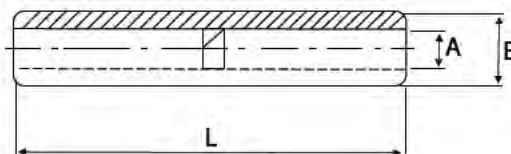


Part No.	A mm	B mm	L mm	C mm
GLB 16	5.5	16	90.5	76.7
GLB 25	6.5	16	90.5	77.4
GLB 35	8	16	90.5	78.8
GLB 50	9	20	106.5	90.3
GLB 70	11	20	106.5	92.2
GLB 95	12.5	20	106.5	94
GLB 120	13.7	25	133	114.3
GLB 150	15.5	25	133	116.2
GLB 195	17	32	143.5	118.3
GLB 240	19.5	32	143.5	120.7
GLB 300	23.3	40	216	189
GLB 400	26	40	216	192
GLB 500	29.1	47	216	185.5
GLB 630	32.5	47	216	191.10

Tolerance on barrel thickness e: $\pm 7\%$

6、 Copper compression joint

Neutral grease filled,extremity closed by a protection cap.



Part No.	Dimensions(mm)		
		E	L
GTA 16	6.3	16	95
GTA 25	7.5	16	95
GTA 35	8.5	16	95
GTA 50	9.5	20	95
GTA 70	11	20	95
GTA 95	13	20	95
GTA 120	14.2	25	102
GTA 150	16	25	102
GTA 185	18	25	102
GTA 240	20	32	102
GTA 300	23	32	102
GTA 400	26	33	102



9、 DC Tape Clip For use With Bare Copper



Conductor mm	Wgt.(kg)each	Part No .
20×3	0.06	CDC203
25×3	0.07	CDC253
25×4	0.07	CDC254
25×6	0.08	CDC256
31×3	0.09	CDC313
31×6	0.10	CDC316
38×3	0.12	CDC383
38×5	0.12	CDC385
38×6	0.14	CDC386
50×3	0.15	CDC503
50×4	0.15	CDC504
50×6	0.16	CDC506

10、 For Use With Bare Aluminium



20×3	0.02	ADC203
25×3	0.03	ADC253
25×6	0.04	ADC256
50×6	0.05	ADC506

11、 Square Tape Clamp



Conductor size mm	Conductor Material	Wgt.(kg)each	Part No .
25×3	Copper	0.23	CSC253
25×6	Copper	0.42	CSC256
50×6	Copper	0.98	CSC506
25×3	Aluminium	0.07	ASC253

12、 Plate Type Test Clamp



Conductor size mm	Conductor Material	Wgt.(kg)each	Part No .
26×12	Copper	0.62	PSC253

13、Tape Clip



(For Copper, Tinned Copper and Aluminium Tape)

Conductor Size	Material	Part No
20×3mm	Copper	TCC 203
20×3mm	Tinned Copper	TCC 203
20×3mm	Aluminium	TCA 203
25×3mm	Copper	TCC 253
25×3mm	Tinned Copper	TCC 253
25×3mm	Aluminium	TCA 253

14、One Hole Cable Clip



Conductor Dia	Conductor Material	Part No
8mm	Copper	HCC8
8mm	Tinned Copper	HCC8T
8mm	Aluminium	HCA8
10mm	Copper	HCC10
10mm	Tinned Copper	HCC10
10mm	Aluminium	HCA10

15、Bimetallic Connector(A Type)



Conductor Size	Part No
25×3mm Aluminium Tape to 25×3mm Copper Tape	BMC253A

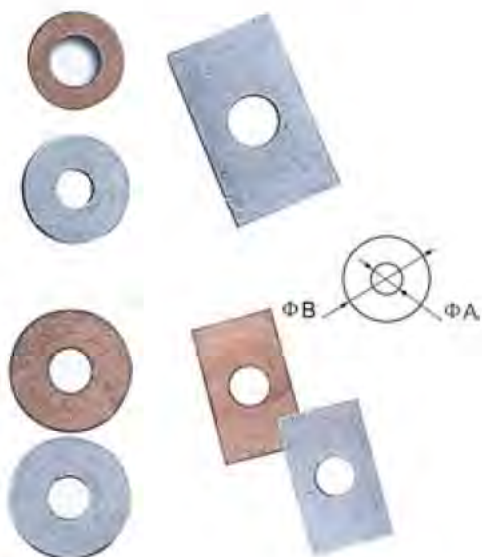
16、Bimetallic Connector(B Type)



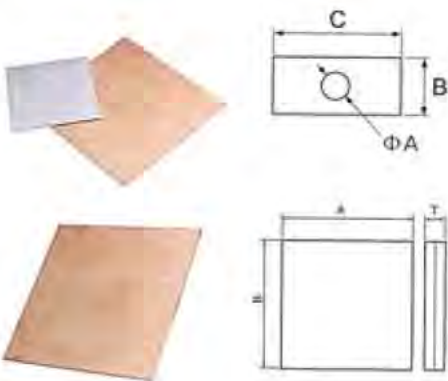
Conductor Size	Part No
25×3mm Aluminium Tape to 25×3mm Copper Tape	BMC253B



14、Cu–Al compound pieces



Catalog No.	Dimensions(mm)		
	∅ A(mm)	∅ B(mm)	(mm)
TLYP ₁ 30-6	6,5	30	2
TLYP ₁ 30-8	8,5	30	2
TLYP ₁ 30-10	10,5	30	2
TLYP ₁ 30-13	13	30	2
TLYP ₁ 30-14	14,6	30	2



Catalog No.	Dimensions(mm)		
	∅ A(mm)	∅ B(mm)	(mm)
TLYP ₂ 2-14	14,5	27	1
TLYP ₂ 2-16	16,5	30	1

Catalog No.	Dimensions(mm)			
	∅ A(mm)	B(mm)	C(mm)	(mm)
TLYP ₁ 2-14	14,5	31	51	1
TLYP ₁ 2-16	16,5	36	55	1



Specification	Dimensions(mm)		
	A	B	T
1x50x50	50	50	1
1x60x60	60	60	1
1x80x0	80	80	1
1x100x100	100	100	1
1x120x120	120	120	1
1x125x125	125	125	1
1x150x150	150	150	1
2x50x50	50	50	2
2x60x60	60	60	2
2x80x0	80	80	2
2x100x100	100	100	2
2x120x120	120	120	2
2x125x125	125	125	2
2x150x150	150	150	2

Splicing Fitting

Splices used for splicing or repairing conductor and ground wire of overhead transmission lines. The splices may be compression type, bolt type performed armoured rods in accordance with the construction and mounting way. The compressive splices have hydraulic, explosive and notched type.

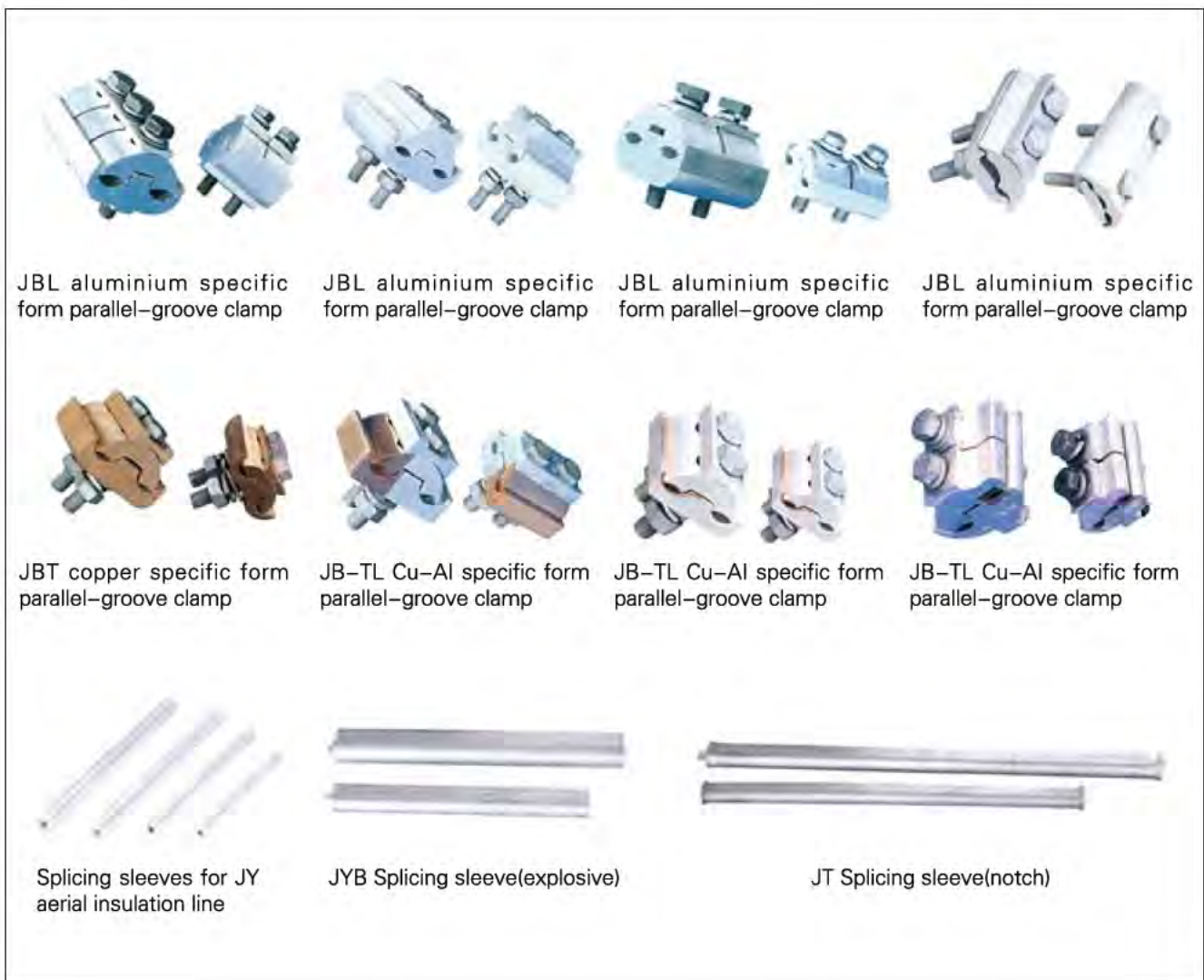
The meanings of letters Arabic figures in the catalog are shown as follow:

J-splice D-overlap joining X-repair B-explosion, parallel, repair or ground wire.

T-oval, jumper M-bus-bar Y-round, preformed S-flexibility equipment.

The arabic figures show sizes of conductor

The DC resistance of all splices must be less than that of the equal-length conductor, the temperature rise of all splices must be less than that of the splicing conductor. The slip strength of the compressive sleeve must be not less than 95% of the rated strength of conductor.





copper connecting clamp



C type copper clamp



(friction welding)



(flash welding)



copper to aluminium adapter board
(explosive wedging)

MG copper to aluminium adapter board



MSS copper to aluminium
expansion joint



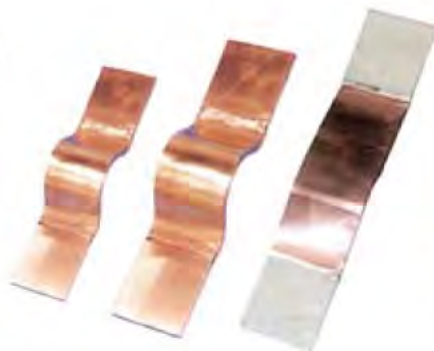
MS Al bus-bar expansion joint



MG copper to aluminium
adapter board



MSS copper aluminium
expansion joint(explosive
wedging)



MST copper bus-bar expansion
joint(Argon-arc welding,macromolecule
diffusion welding)

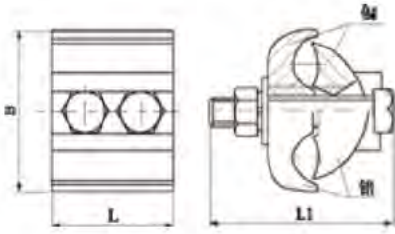


MGS Al bus-bar
expansion joint



JTL Four-Bundle
to Two-Bundle
Clamps

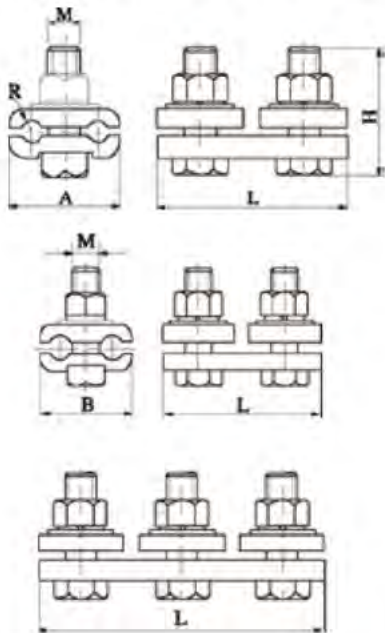
1、 Specific form parallel-groove clamp



Cu-Al specific form parallel-groove clamp

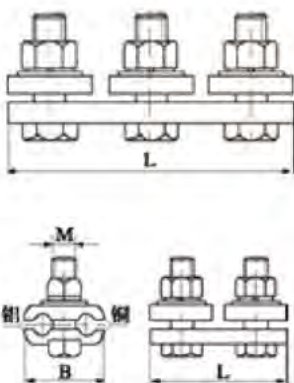
TYPE	Wire core section	Dimensions(mm)		
		L	L ₁	B
JB-TL-35-120	35-120	45	66	48
JB-TL-50-120	50-240	45	71	60

2、 Parallel-groove clamp



Copper parallel-groove clamp

TYPE	Applicable conductor section mm ²	Dimensions(mm)		
		B	M	L
JBT-11	35-50/35-50	40	10	60
JBT-21	70-95/35-50	50	12	99
JBT-22	70-95/70-95			
JBT-31	120-150/35-50	62	12	108
JBT-32	120-150/70-95			
JBT-33	120-150/120-150			
JBT-41	185-240/35-50	65	12	108
JBT-42	185-240/70-95			
JBT-43	185-240/120-150			
JBT-44	185-240/185-240			

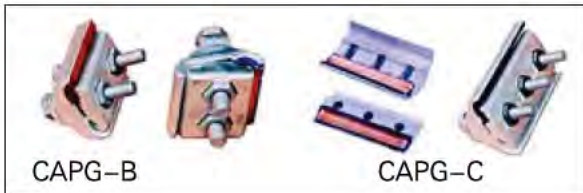


Copper -Aluminium parallel-groove clamp

TYPE	Applicable aluminium model	Applicable copper wire	Dimensions(mm)		
			B	M	L
JB-TL-10	35-50	16-25	40	12	70
JB-TL-11	35-50	35-50	40	12	70
JB-TL-21	70-95	35-50	50	12	100
JB-TL-22	70-95	70-95	50	12	100
JB-TL-31	120-150	35-50	63	12	108
JB-TL-32	120-150	70-95	63	12	108
JB-TL-33	120-150	120-150	63	12	108
JB-TL-41	185-240	35-50	65	12	110
JB-TL-42	185-240	70-95	65	12	110
JB-TL-43	185-240	120-150	65	12	110
JB-TL-44	185-240	185-240	65	12	110



3、Copper–aluminium,aluminium parallel groove clamp



CAPG type Copper–Aluminium parallel groove clamp

Type	Adjusting Range	Bolt No.
CAPG-A1	Cu 6–50mm ² Al16–70/12mm ²	Single bolt
CAPG-A2	Cu 10–95mm ² Al 25–150mm ²	Single bolt
CAPG-B1	Cu 6–50mm ² Al16–70mm ²	Double bolts
CAPG-B2	Cu 10–95mm ² Al 25–150mm ²	Double bolts
CAPG-C	Cu 35–240mm ² Al 35–300mm ²	Tri-bolts

APG–Type Aluminium parallel groove clamp

Type	Adjusting Range	Bolt No.
APG-A	Al 16–17mm ²	Single bolt
APG-B1	Al 16–35mm ²	Double bolts
APG-B2	Al16–70mm ²	Double bolts
APG-B3	Al 16–150mm ²	Double bolts
APG-B4	Al 30–300mm ²	Double bolts

JAPG–Type Aluminium parallel groove clamp

Type	适用范围
JAPG-1	Al 25–35mm ²
JAPG-2	Al 50–70mm ²
JAPG-3	Al95–120mm ²

Molten finished fitting



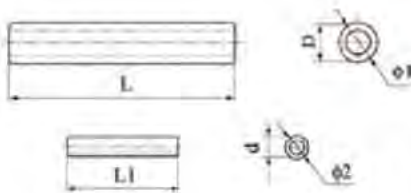
4、 Splicing Sleeves for Aluminium Conductor



Catalog No.	Suitable Conductor(mm)	Dimensions (mm)				Slip Strength > (kN)	Weight (kg)
		D	F	Φ	L		
JY-150L	LJ-150	30	20	17.0	280	22	0.36
JY-185L	LJ-185	32	20	19.0	310	27	0.44
JY-210L	LJ-210	34	20	20.0	330	31	0.60
JY-240L	LJ-240	36	20	21.5	350	34	0.75
JY-300L	LJ-300	40	25	24.0	390	45	0.95
JY-400L	LJ-400	45	25	27.5	450	58	1.50
JY-500L	LJ-500	52	30	30.5	510	73	2.00
JY-630L	LJ-630	60	35	34.0	570	87	2.80
JY-800L	LJ-800	65	40	38.5	650	110	4.80

Material is aluminium.

5、 Splicing Sleeves for ACSR Conductor(Explosive Overlap Joint)



Catalog No.	Suitable Conductor(mm)	Dimensions (mm)						Slip Strength > (kN)	Weight (kg)
		D	Φ ₁	L	L ₁	d	Φ ₂		
JYB-70/40	LGJ-70/40	32	22	410	240	20	8.8	55	0.80
JYB-95/55	LGJ-95/55	38	25	430	150	24	19	93.4	0.92
JYB-120/70	LGJ-120/70	36	25.5	340	160	25	19	51	0.92
JYB-150/25	LGJ-150/25	30	18	320	85	26	12	56.5	0.35
JYB-185/25	LGJ-185/25	32	20.4	330	90	17.2	11.2	61	0.86

The outer sleeve are aluminium, the inner sleeve is hot-dip galvanized steel.

6、 Splicing Sleeves for Aluminium Conductor(Compression With Pliers)

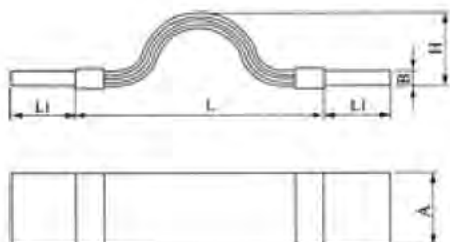


Catalog No.	Suitable Conductor(mm)	Dimensions (mm)				Slip Strength > (kN)	Weight (kg)
		b	C ₁	C ₂	L		
JT-16L	LJ-16	1.7	12.0	6.0	110	2.7	0.02
JT-25L	LJ-25	1.7	14.4	7.2	120	4.1	0.03
JT-35L	LJ-35	1.7	17.0	8.5	140	5.5	0.04
JT-50L	LJ-50	1.7	20.0	10.0	190	7.5	0.05
JT-70L	LJ-70	1.7	23.7	11.7	210	10	0.07
JT-95L	LJ-95	1.7	26.8	13.4	280	14	0.10
JT-120L	LJ-120	2.0	30.0	15.0	300	18	0.15
JT-150L	LJ-150	2.0	34.0	17.0	320	22	0.16
JT-185L	LJ-185	2.0	38.0	19.0	340	27	0.20
JT-240L	LJ-240	3.6	42.0	21.5	380	34.5	0.28

Material is aluminium.



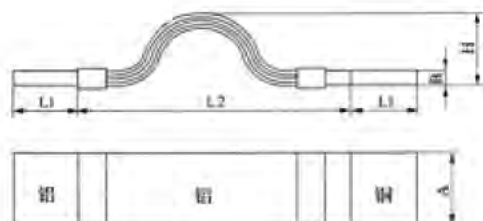
7、Aluminium bus-bar expansion joint(bus-bars connected with each others)



Catalog NO.	Dimensions(mm)					Weight(kg)
	A	B	H	L ₁	L	
MS-63x6.3	63	6.3	50	73	170	0.4
MS-80x6.3	80	6.3	50	90	170	0.5
MS-80x8	80	8.0	50	90	170	0.7
MS-80x10	80	10.0	50	90	170	1.2
MS-100x8	100	8.0	50	115	190	1.0
MS-100x10	100	10.0	60	115	190	1.3
MS-125x8	125	8.0	50	140	170	1.4
MS-125x10	125	10.0	60	140	190	1.8
MS-125x12.5	125	12.5	60	140	190	2.2

Note:aluminum product

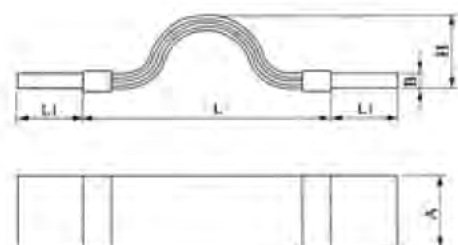
8、Copper-aluminium expansion joint(bus-bars connected with equipment)



Catalog NO.	Dimensions(mm)					Weihtg(kg)
	A	B	H	L ₁	L	
MSS-50x5	50	5.0	50	75	170	0.4
MSS-63x6.3	63	6.3	50	73	170	0.4
MSS-80x6.3	80	6.3	50	90	170	0.8
MSS-80x8	80	8.0	50	90	170	1.1
MSS-100x8	100	8.0	50	115	170	1.5
MSS-100x10	100	10.0	60	115	170	2.0
MSS-125x8	125	8.0	50	140	170	2.2
MSS-125x10	125	10.0	60	140	190	2.9
MSS-125x12.5	125	12.5	60	140	190	3.4

Note:copper aluminium product

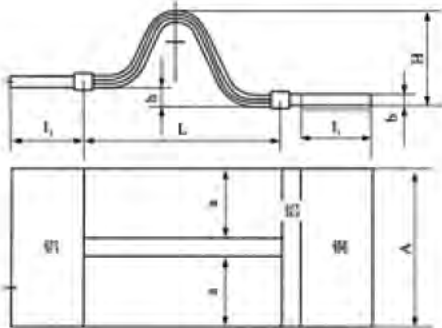
9、Copper-bus-bar expansion joint



Catalog NO.	Dimensions(mm)				
	A	B	H	L ₁	L
MST-63x6.3	63	6.3	50	73	170
MST-80x6.3	80	6.3	50	90	170
MST-80x8	80	8.0	50	90	170
MST-100x8	100	8.0	50	115	170
MST-100x10	100	10.0	60	115	190
MST-125x8	125	8.0	50	140	170
MST-125x10	125	10.0	60	140	190
MST-125x12.5	125	12.5	60	140	190

Note:copper product

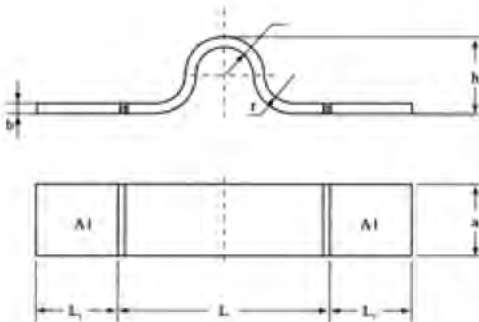
10、 Expansion joint for channel bar



Catalog NO.	Drawing No.	Dimensions(mm)							Weihtg (kg)	
		A	a	b	h	I ₁	L	L ₂		H
MSC-150-1	4-35	150	70	8	-	170	190	170	60	1.75
MSC-150-2		150	70	8	-	170	130	170	60	1.60
MSC-150-3		150	70	8	45	110	190	170	75	2.30
MSC-150-4		150	70	8	45	110	130	170	75	2.00
MSC-150-5		150	70	8	-	110	330	170	60	2.70
MSC-200-1		200	90	12	-	170	190	170	60	3.50
MSC-200-2		200	90	12	-	170	130	170	60	3.20
MSC-200-3		200	90	12	15	120	190	170	75	5.10
MSC-200-4		200	90	12	15	120	130	170	75	4.70
MSC-200-5		200	90	12	-	120	330	170	60	5.80

Note:copper aluminium product

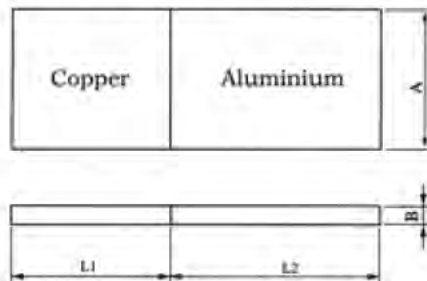
11、 Tubular bus-bar Expansion Joints



Catalog NO.	Dimensions(mm)						Weihtg (kg)
	L	L ₁	a	r	h	b	
MGS-80x8	290	90	80	55	110	8	0.8
MGS-80x10	290	90	80	55	110	10	0.9
MGS-100x10	290	115	100	55	110	10	1.4
MGS-100x15	290	115	100	55	110	10	1.3
MGS-120x10	290	120	120	55	110	15	1.9
MGS-125x10	290	125	125	55	110	10	2.0
MGS-125x12	290	125	125	55	110	12	2.1
MGS-150x10	290	150	150	65	130	10	2.3
MGS-150x12	290	150	150	65	130	12	2.4

Note:copper aluminium product

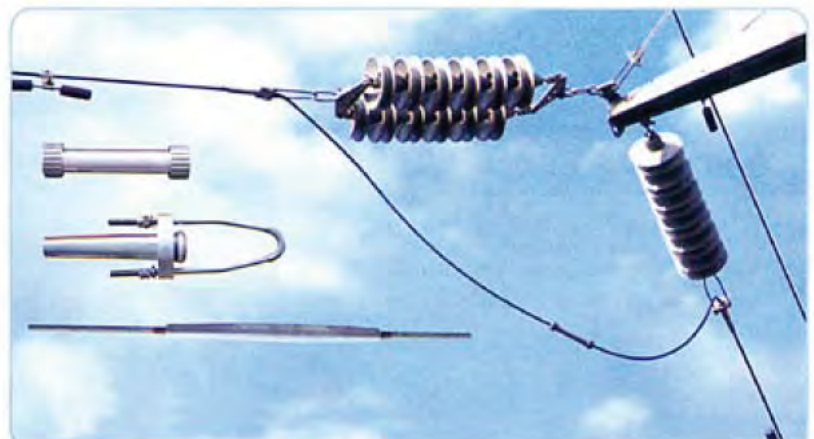
12、 Copper to aluminium adapter board



Catalog NO.	Conductor bus (mm)	Dimensions(mm)				Weihtg (kg)
		A	B	L ₁	L ₂	
MG-50x5	50x5	50	5.0	50	60	0.2
MG-63x6.3	63x6.3	63	6.3	68	85	0.3
MG-63x8	63x8	63	8.0	68	85	0.4
MG-63x10	63x10	63	10.0	68	85	0.5
MG-80x6.3	80x6.3	80	6.3	85	100	0.5
MG-80x8	80x8	80	8.0	85	100	0.7
MG-80x10	80x10	80	10.0	85	100	0.8
MG-100x8	100x8	100	8.0	105	120	1.0



Aerial insulation conductor fitting



1、NLL series aluminium alloy strain clamp and insulation cover(bolt type)

Application:

NLL series aluminium alloy strain clamp(Bolt type) is suitable for aerial line up to 20kv,fixing aluminium wire or steel core minium wire on the strain pole,aerial insulation aluminium conductor and insulation aluminium cover are being used together,and the action is insulation protection.

Structure feature:

- The body is made of high-strength aluminium alloy
- Smooth surface long servile life
- Easy installation
- No waste electric energy

Insulation cover performance feature

- 1-10kV products Withstand voltage: $\geq 18\text{kV}$ keep voltage one minute not breakdown
- 20kV products Withstand voltage: $\geq 30\text{kV}$ keep voltage one minute not breakdown
- Insulation resistance: $>1.0 \times 10^{14} \Omega$
- Environments temperature: $-30^{\circ}\text{c} \sim 90^{\circ}\text{c}$
- Weather proof performance:have good performed after 1008 hours artifical climate aging test.



Specification

(For Line)

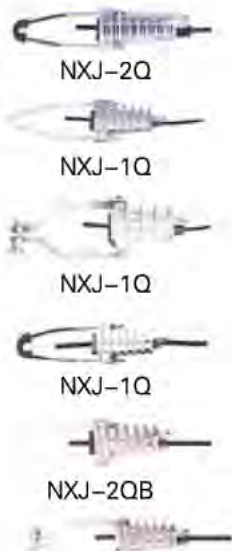
Catalog NO.	Conductor	U bolt		KN
		QTY	DIA	
NLL-1	5.0-10.0	2	12	40
NLL-2	10.1-14.0	2	12	40
NLL-3	14.1-18.0	3	14	70
NLL-4	18.1-23.0	3	14	90
NLL-27	12.48-21.66	4	16	90
NLL-5L	23-26	3	16	90
NLL-5	23-29	4	16	120
NLL-6	23-29	5	16	100

(For Distribution Substation)

Catalog NO.	Applicable aluminum stranded conductor type	U bolt		KN
		QTY	DIA	
NLD-2L	LJ-35-95	2	M12	30
NLD-3L	LJ-120-150	2	M12	40
NLD-4L	LJ-185-240	2	M14	50
NLD-5L	LJ-240-300	2	M14	70
NLD-190	16-70(5.1-11.4)	2	M12	40
NLD-285	70-150(11.4-17.1)	2	M12	70
NLD-320	120-185(13-18.9)	2	M12	70



2、NXJ Series insulation strain clamp(wedge type)



Strain clamps type	Specification (mm ²)	Aerial insulation aluminium conductor/1kv		Aerial insulation aluminium conductor/10kv		Grip strength (KN)	Failure load (KN)
		Dia(mm)	Applicable wedge core	Dia(mm)	Applicable wedge core		
NXJ-1Q	25	Ø 8.4	1kv/25	Ø 14.8	10kv/25/35	2.5	10.8
	35	Ø 9.8	1kv/35	Ø 15.8			
	50	Ø 11.2	1kv/50	Ø 17.1		4.6	
	70	Ø 12.8	1kv/70	/	/	6.7	
NXJ-2Q	70	Ø 12.8	1kv/70	Ø 18.8	10kv/70	6.7	22.1
	95	Ø 14.8	1kv/95	20.4	10kv/95	8.9	
	120	Ø 16.2	1kv/120	Ø 21.8	10kv/120	11.3	
	150	Ø 18.2	1kv/150	Ø 23.4	10kv/150	13.6	
NXJ-2QB	70	Ø 12.8	1kv/70	Ø 18.8	10kv/70	6.7	18.2
	95	Ø 14.8	1kv/95	Ø 20.4	10kv/95	8.9	
	120	Ø 16.2	1kv/120	/	/	11.3	



Catalog No.	Specification (mm ²)	Aerial insulation aluminium conductor/20kv		Grip strength (KN)	Failure load (KN)
		Dia(mm)	Applicable wedge core		
NXJ-2Q (1~20kv)	25	Ø 18.2	20kv/25	2.5	22.1
	35	Ø 19.2	20kv/35	3.4	
	50	Ø 20.5	20kv/50	4.6	
	70	Ø 22	20kv/70	6.7	
NXJ-3Q (1~20kv)	95	Ø 23.7	20kv/95	8.9	36.4
	120	Ø 25.2	20kv/120	11.3	
	150	Ø 26.7	20kv/150	13.6	
NXJ-4Q (1~20kv)	185	Ø 28.3	20kv/185	17.3	45.5
	240	Ø 30.6	20kv/240	22.5	
	300	Ø 32.8	20kv/300	28.2	

3、NXL Series aluminium alloy strain clamp and insulation cover



Catalog No.	section(mm ²)	Length L1(mm)	Grip strength (KN)	Failure load(KN)	Insulation cover type
NXL-1	50	245	5.16	14.50	NXL-95
	70		7.12		
	95		9.40		
NXL-2	120	255	12.70	23.40	NXL-150
	150		15.20		
NXL-3	185	300	18.50	36.30	NXL-240
	240		23.60		
NXL-4	Ø 22.5~27.5mm	320	55	61	NXL-4

4、NXL series four-cores-centralized strain clamp

NXL four-core-centralized strain clamp is suitable for the end of aerial wire terminal, its action is fixing or tightening the insulation conductor. The clamp has been designed four core parallel groove, after clamping the four insulation conductor (not remove the insulation layer) tighten up the bolt to have large grip strength.



Catalog No.	Applicable conductor(mm ²)
NXJ-1A	16- 50
NXJ-2A	70- 120
NXJ-1B	25- 50
NXJ-2B	70- 120
NXJ-3B	150- 185

5、XJG series suspension clamps

XJG Series is suitable for aerial electric wire suspension insulation conductor, it provides steel and aluminium manufacture for users.

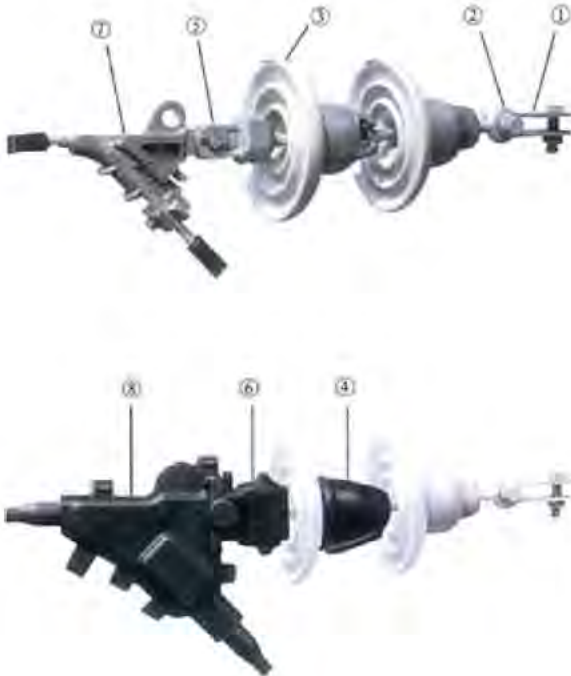


Type	Applicable conductor(mm ²)
XJG-1A	35- 50mm ²
XJG-2A	70- 95mm ²
XJG-3A	120- 150mm ²
XJG-4A	185- 240mm ²
XJG-1B	35- 50mm ²
XJG-2B	70- 95mm ²
XJG-3B	120- 150mm ²



6、 10kv aerial insulation wire strain string installation drawing

1)XP-4 suspension insulation strain wire string.



XP-4 suspension insulation strain wire string material table.

No.	Name	Size	No.
1	Right angle hung plate	Z-7	1
2	Ball-eye	QP-7	1
3	Insulator	XP-4	2
4	Insulator cover	PXP	1
5	Double-link socket-clevis eye	WS-7	1
6	Socket clevis-eye insulation cover	WS(Z)-7	1
7	Strain clamp(wedge type)	NXL-(size choose)	1
8	Strain clamp insulation cover	NXL-(size choose)	1
9	Self-sticky insulation tape	J	Suitable

Note:1.Copper core wire strain clamp NXL change into NXT.
2.0.4KVwire decrease one suspond insulator.

2)52-9A suspension insulation strain wire string(change type)



52-9A suspension insulation strain string(change type) material table.

No.	Name	Size	No.
1	Shackle	U-7	1
2	Suspension insulator	52-9A	2
3	Insulator insulation cover	PXP(Z)	1
4	Parallel clevis	P-7	1
5	Parallel clevis insulation cover	P-7(Z)	1
6	strain clamp(wedge tpe)	NXL-(size choose)	1
7	Strain clamp (wedge type)insulation cover	NXL-(size choose)	1
8	Self-sticky insulation tape	J	Suitable

Note:1.Copper core wire strain clamp NXL change into NXT.
2.0.4KVwire decrease one suspond insulator.

3) Double iron-head porcelain pulling stick strain string.

Double iron-head porcelain pulling stick strain string installation picture material table.



No.	Name	Size	No.
1	Shackle	U-7	1
2	Double iron-head porcelain pulling stick	SL-15/30	1
3	Double iron-head porcelain pulling stick insulation cover	SL(Z)-15/30	1
4	strain clamp wedge type	NXL-(size choose)	1
5	Strain clamp wedge type insulation cover	NXL-(size choose)	1
6	Self-sticky insulation tape	J	Suitable

Note:1.Copper core wire strain clamp NXL change into NXT.

4) Composite insulator strain string (type plateau)

Composite insulator strain string material form

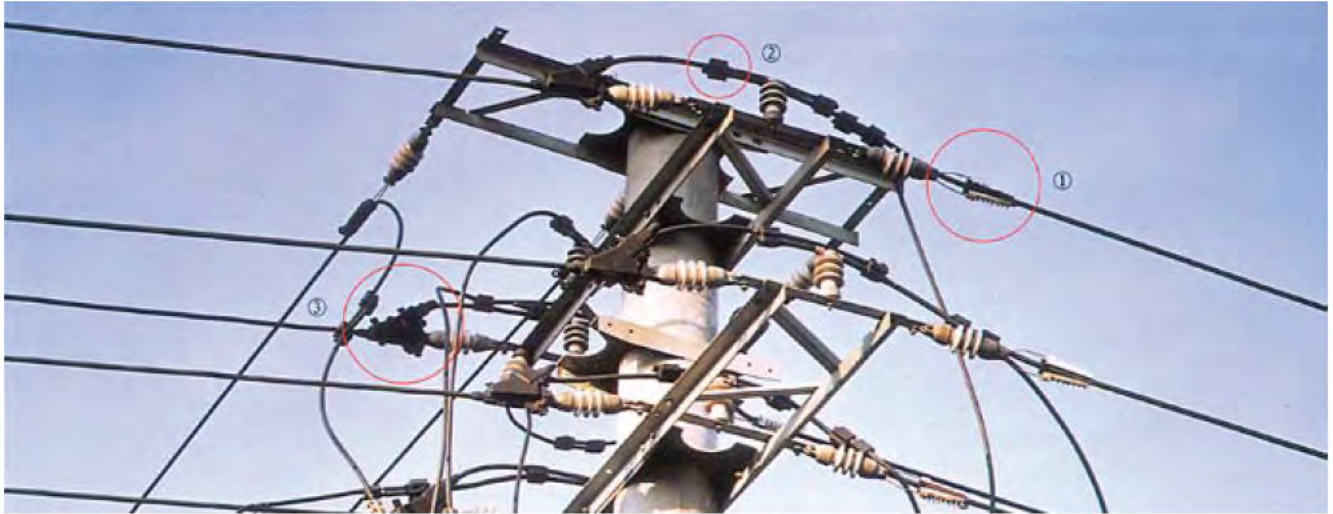


No.	Name	Size	No.
1	Right-angle clevis	Z-7	1
2	Ball-eye	QP-7	1
3	composite insulator	HJII-10/70	1
4	Double-link socket-clevis eye	WS-7	1
5	socket-clevis eye insulation cover	WS(Z)-7	1
6	Strain clamp(wedge type)	NXL-(size choose)	1
7	Strain clamp(wedge type)and insulation cover	NXL-(size choose)	1
8	Shackle	U-7	1
9	Aluminium alloy strain clamp	NXL	1

Note:1.Copper core wire strain clamp NXL change into NXT.



7、Insulation conductor fitting installation drawing



1、NXJ-2Q Insulation strain clamp 2、JBL Insulation parallel groove clamp specific form with insulation cover 3、NXL Aluminium alloy strain clamp with insulation cover



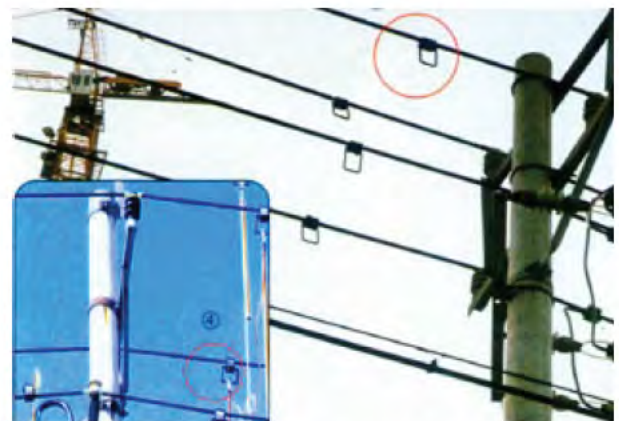
4、NXJ-3Q Insulation strain clamp



5、NXL Insulation strain clamp



2、JDL Earthing clamp



3、BYD Electric-check earthing ring 4、Electric-check ring(attach puncture clamp)

8、Insulation conductor fitting installation drawing



1、NXJ-1、NXJ-3Q insulation strain clamp

2、JBL aluminium specific form parallel groove clamp



3、Transformer cover



Strain guy wire clamps

Guy wire fittings are mainly used for fixing guy wire tower arms, including all parts from tower arms to ground guy wire. Safe traffic of guy wire fittings mainly depends on guy wire and guy wire fittings.

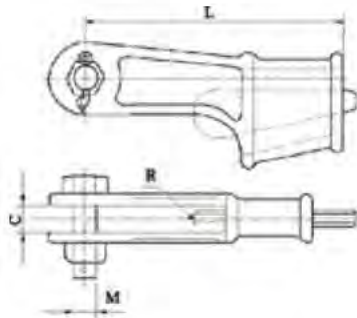
According to the service conditions, guy wire fittings are divided into fastenmg/adikstomg and connecting, containing 12 series to totally.

Strain guy wire clamp has two types which are wedge type and compression joint.

The technical requirement for guy wire fitting needs to be carried out in accordance with the GB and fessional standard.



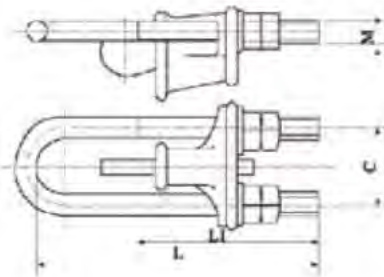
1、Wedge Clamps



Catalog No.	Steel Wire Dia (mm)	Dimensions(mm)				Rated failure load (kN)	Weight (Kg)
		C	M	L	R		
NX-1	6.6-7.8	18	16	150	6.0	45	1.19
NX-2	9.0-11.0	20	18	180	7.3	88	1.76
NLX-3	13.0-14.0	24	24	200	7.3	143	3.20
NLX-4	15.0-16.0	28	27	220	8.0	164	5.30

The body and wedge are malleable iron. The cotter pin is stainless steel. The other parts are steel. All ferrous parts are hot-dip galvanized.

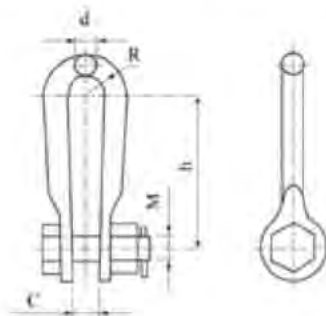
2、UT Wedge Clamps (Adjustable Type)



Catalog No.	Steel Wire Dia (mm)	Dimensions(mm)				Rated failure load (kN)	Weight (Kg)
		C	M	L	L1		
NUT-1	6.6-7.8	56	16	350	200	45	2.10
NUT-2	9.0-11.0	62	18	430	250	88	3.20
NUT-3	3.0-14.0	74	22	500	300	143	5.40
NUT-4	5.0-16.0	82	24	580	300	164	7.20

The body and wedge are malleable iron. The cotter pin is stainless steel. The other parts are steel. All ferrous parts are hot-dip galvanized.

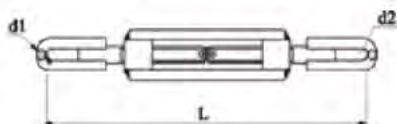
3、Shackles(U Type)



Catalog No.	Dimensions(mm)					Rated Failure Load (kN)	Weight (kg)
	C	R	M	h	d		
UL-7	20	15	16	120	16	70	0.65
UL-10	22	17	18	140	18	100	0.92
UL-16	26	19	24	140	22	160	1.64
UL-20	30	22	27	160	24	200	2.90

The cotter pin are stainless steel, the other part hot-dip galvanized steel.

4、Turnbuckle(Type U)



Catalog No.	Dimensions(mm)			Rated Failure Load	Weight (Kg)
	L	d	r		
LH-10	670-820	18	11	100	6.7

The cotter pin are stainless steel, the other part hot-dip galvanized steel.



T-conector substation fitting & Aluminum tubular bus bar

Bus-bar supports are used to fix or hang bus-bars on insulators at the substation, including rectangular channel, tube bus and cable supports in accordance with bus type.

The meaning of letter & arabic figures in the catalog are shown as follow.

M-bus W-outdoor G-tubular spacer Y-round P-horizontal mounting J-rectangular C-channel N-indoor D-hanging single-cable S-double bus H-ring L-Vertical mounting.

The arabic figures show piece, size of bus and order.

Visible corona for system voltage up to 330KV or higher, test voltage should be 1.05 of the max, operating voltage of the system.



MNL indoor support for bar



MWL outdoor support for bar



MNP indoor support for bus bar



MWP outdoor support for bus bar



MJG Spacers for bus bar



MCN Supports for channel bar



MNP indoor support for bus bar



MWP outdoor support for bus bar



MNL indoor support for bus bar



MWL outdoor support for bus bar



MNP indoor support for bus bar



MWP outdoor support for bus bar



MNL indoor support for bus bar



MWL outdoor support for bus bar



MNP indoor support for bus bar



MWP outdoor support for bus bar



MGJ supports for tubular bar



YH ring supports for bundle cables



MGT T-connector for tubular bar



MGT T-connector for tubular bar



MGTT T-tubular bus



MJ Bus-bar joint



MGZ, MGF Tubular bus end-caps and ball



MGGD Expansion joints for tubular bar



MGS Expansion clamp for tubular bar



MGS Expansion clamp for tubular bar



MG/MR Splicing fitting for tubular and conductor



MJ Bus-bar joint



KLMG Crossing Bus-bar transition fittings



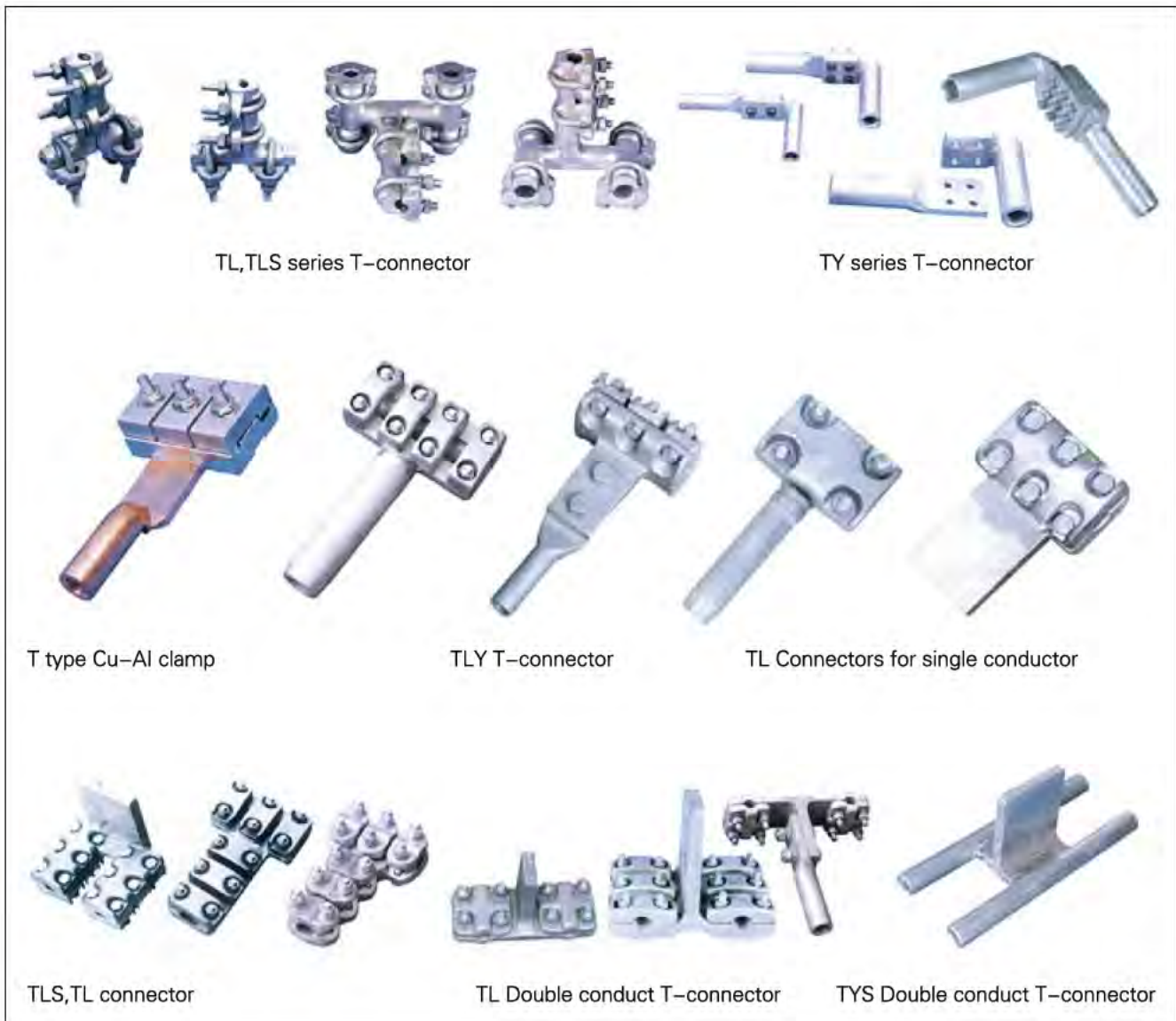
1、 T-connector

T-connectors are used to connect tap conductor with bus line the way of tee joint on overhead transmission lines or substations. The connectors include bolt type and compression type. Actually, parallel groove clamp also can be used as T-connectors for conductor of small size.

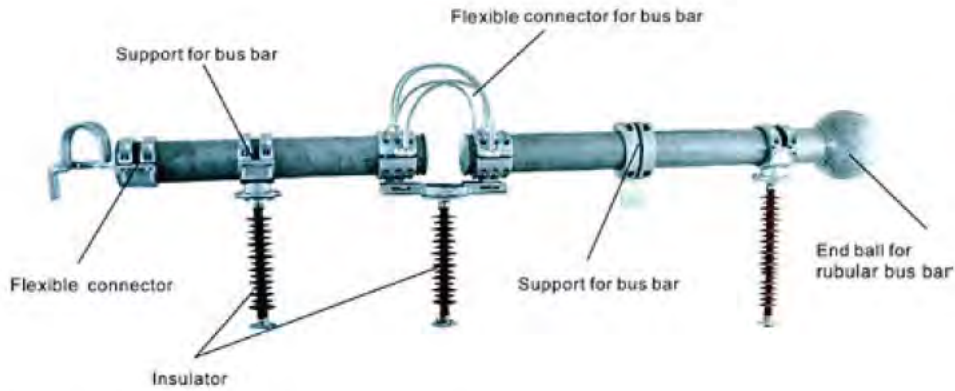
The meaning of letters & Arabic figures in the catalog are shown as follow: T-tee connection M-bus-bar Y-compression G-Tube L-bolt

The arabic figures show conductor size.

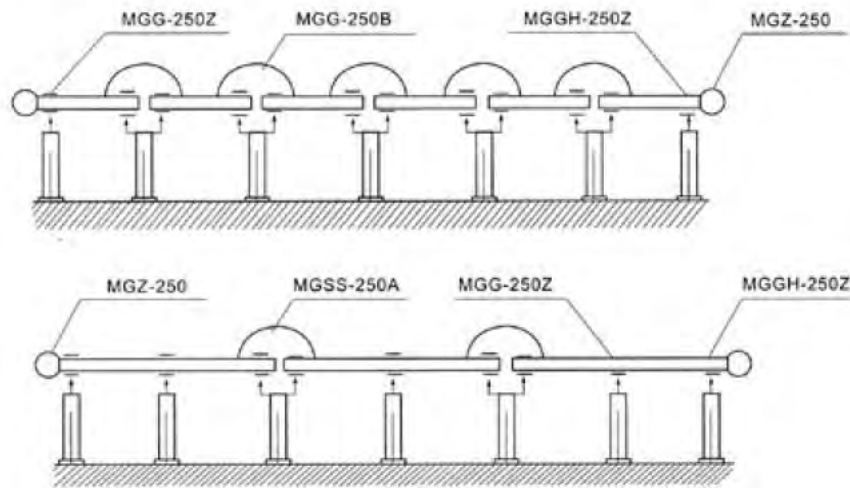
The slip strength of the connector should be not less than 10% rate ultimate strength of the conductor, except that of bolt type connector used for conductor diameter equaling or larger than 49mm, for this case, a slip strength of 3% ultimate strength is allowed. D.C resistance of the connector should be less than that of equi-length conductor the temperature rise of connector should be less than that of the conductor. No visible corona for system voltage up to 330KV or higher, test voltage should be 1.05 of max, operating voltage.



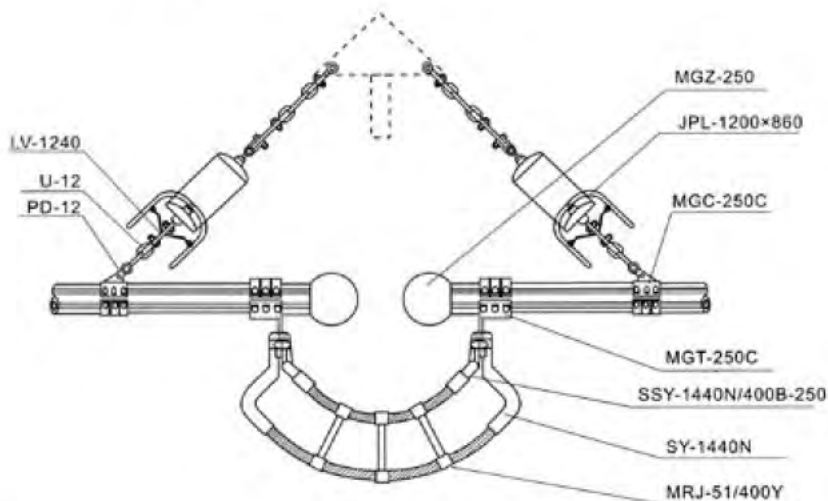
2、Aluminum Tubular bus bar systems



∅ 205 Tubular Bus-bar Fitting Installation Drawing

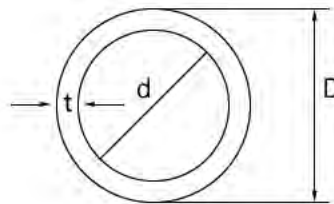


∅ 205 Tubular Bus-bar Jumping String (Type V)





3、 Aluminum Tubular Bus Bar



Standards of aluminum alloy

Dimension of liner tube,ball,and cover of normal bus bar

Standard D/d (mm)	Section area(mm ²)	+70°C (A) Carrying capacity			Section factor w (cm ²)	Radius of inertia ρ ρ (cm)	Moment of inertia I (cm ⁴)	Delivery length M M
		3A21	6063	6063Re				
φ 70/64	631	1560	1645	1700	10.3	2.37	35.5	≤ 15
φ 80/72	955	2100	2226	2289	17.6	2.69	69.2	≤ 15
φ 90/80	1335	2486	2635	2810	27.4	3.01	121	≤ 15
φ 100/90	1491	2810	2979	3063	34.4	3.36	169	≤ 14
φ 110/100	1649	2850	3021	3107	42.2	3.72	228	≤ 13
φ 120/110	1805	3090	3275	3368	50.8	4.07	299	≤ 13
φ 130/116	2703	3900	4134	4251	80.4	4.36	513	≤ 13
φ 150/136	3143	4400	4664	4796	109.4	5.06	806	≤ 13
φ 170/156	3583	4694	4976	5116	142.9	5.77	1193	≤ 13
φ 200/180	5966	7460	7908	8131	275.1	6.73	2701	≤ 13
φ 250/230	7536	8300	8798	9047	443.1	8.49	6487	≤ 12
φ 300/276	9106	9140	9688	9963	611.1	10.25	10273	≤ 10

Main tube			Liner tube			Ball or cover
D, mm	T,mm	Weight, kg/m	D, mm	T,mm	Weight, kg/m	D Outside diameter
80	4	2.62	71	4	2.32	71
90	5	3.66	79	5	3.20	79
100	5	4.10	89	5	3.64	89
110	5	4.53	99	5	4.07	99
120	5	4.96	109	5	4.53	109
130	7	7.43	115	7	6.58	115
130	10	10.29	109	10	8.49	109
150	7	8.64	135	7	7.80	135
170	7	9.88	155	7	9.01	155
170	10	13.72	149	10	12.10	149
200	10	16.40	179	10	14.71	179
250	10	20.74	228	10	18.98	229
300	12	29.62	274	12	26.94	275

4、Technology summary of aluminum and aluminum alloy conductive bus-bars

- 1、Standard:GB/T6893–2003 GB/T3190–1996 YS/T454–2003 Q/YGJS102–2007
- 2、Product grades: 1060 3A21(LF21) 6063(LD31) 6063RE(LDRE)
- 3、Product state: H18 T6 T10



For overhead line which is used in power stations and transformer substations that voltage grades are 110KV、220KV、330KV、500KV、750KV and above

Alloy grades	Chemical Component%								Ai
	Cu	Mg	Si	Fe	Mn	Ti	Re	Others	
6063Re	0.1	0.45–0.90	0.20–0.60	0.35	–	0.05	0.–0.2	0.15 below	Remainder
6063	0.1	0.45–0.90	0.20–0.60	0.35	0.1	0.10	–	0.15 below	
3A21	0.2	0.05	0.6	0.7	1.0–1.6	0.15	–	0.15 below	
1060	0.05	0.03	0.25	0.35	0.03	0.03	–	0.03	99.60

Parameter Technology

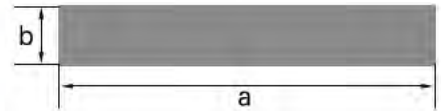
Product grades	6063Re		6063		3A21	1060
	T6	T10	T6	T10	H18	H18
State	T6	T10	T6	T10	H18	H18
Density g/cm ³	2.73		2.73		2.73	2.71
Tensile strength σ_b Mpa	≥ 210	≥ 185	≥ 205	≥ 180	≥ 145	≥ 85
Yield strength $\sigma_{0.2}$ Mpa	≥ 180	≥ 165	≥ 175	≥ 160	–	
Modulus of elasticity E MP a	7.1x10 ⁴		7.1x10 ⁴		7.2x10 ⁴	7.1x10 ⁴
Coefficient of Linear Thermal Expansion 1/°C	24x10 ⁻⁶		23.4x10 ⁻⁶		23.2x10 ⁻⁶	23.6x10 ⁻⁶
Poisson Ratio μ	0.31		0.31		0.31	0.31
Temperature-measuring element 1/°C	0.0032		0.0041		0.0042	0.0042
Resistivity ρ , Ω mm ² /m	0.031		0.033		0.035	0.0283
Relative conductivity /%IACS	52		51		40	61

Conductor Welding material selection and welded joints strength

Metal grades	Metal state	Welding rod、welding wire grades	Coefficient of welded joints strength/%
6063Re	T6、T10	5356	62
6063	T6、T10	5356	62
3A21	H18	1100	75



5、 Aluminum Bus Bar



No.	Dimension(mm)		Weight(kg/m)
	a	b	
Y124001	140	15	5.697
Y124002	120	18	5.860
Y124003	120	16	5.209
Y124004	120	12	3.907
Y124005	125	12.5	4.239
Y124006	120	10	3.256
Y124007	100	12	3.256
Y124008	100	10	2.700
Y124009	100	8	2.170
Y124010	100	6	1.628
Y124011	91	6.2	1.531
YL24012	80	8	1.728
Y16013	80	10	2.170
Y124014	80	6	1.302
Y124015	75	16	3.256
Y124016	60	12	1.953
Y124017	60	8	1.032
Y124018	60	6	0.972
Y124019	60	5	0.814
Y124020	50	16	2.170
Y124021	50	10	1.356
Y124022	50	6	0.814
Y124023	50	5	0.675
Y124024	50	4	0.543
Y124025	40	8	0.864

6、Copper Bus Bar



Products include red copper bars, Thickness; 1–50mm, Width: 20–200mm or according to clients requirement. Which are used in mechanics manufacturing and electric power.



No.	Dimension(mm)		Weight(kg/m)
	a	b	
YT22001	30	3	0.801
YT22002	30	4	1.068
YT22003	40	3	1.068
YT22004	40	4	1.424
YT22005	40	5	1.78
YT22006	50	3	1.335
YT22007	50	4	1.78
YT22008	50	5	2.225
YT22009	50	6	2.67
YT22010	60	5	2.67
YT22011	60	6	3.203
YT22012	60	8	4.272
YT22013	80	6	4.272
YT22014	80	8	5.696
YT22015	80	10	7.12
YT22016	100	8	7.12
YT22017	100	10	8.9
YT22018	100	12	10.68
YT22019	120	10	10.68
YT22020	120	12	12.816
YT22021	125	12.5	13.90625
YT22022	150	10	13.350
YT22023	150	12	16.02
YT22024	160	10	14.24
YT22025	160	12	17.088



7、Copper Round Rod



No.	Dimension(mm)	Weight(kg/m)	No.	Dimension(mm)	Weight(kg/m)
YT21001	10	0.691	XI3015	24	3.981
YT21002	11	0.836	XL3016	25	4.320
YT21003	12	0.995	XL3017	26	4.673
YT21004	13	1.168	XL3018	27	5.039
YT21005	14	1.355	XL3019	28	5.420
YT21006	15	1.555	XL3020	29	5.813
YT21007	16	1.769	XL3021	30	6.221
YT21008	17	1.998	XL3022	32	7.078
YT21009	18	2.239	XL3023	34	7.990
YT21010	19	2.495	XL3024	35	8.467
YT21011	20	2.764	XL3025	36	8.958
YT21012	21	3.048	XL3026	38	9.981
YT21013	22	3.345	XL3027	40	11.059
YT21014	23	3.656			

8、 Electrical copper bus-bar





Preformed line fitting

Protective fittings are used to restrain aeolian vibration of conductor and ground wire foverhead transmission lines.or to grade and to shield the insulator string of 330KV and above transmission lines and substation.For example,dampers,spacers,grading and hielding rings……

M–Bus–bar R–cable F–Protection,end cap Y–preformed armor rod D–conductor
J–space,voltage Z–Damper terminal

Q–ball joint G–steel wireium tapes as installing dampers and spacers on to it.

The conductor can be enwound by aluminium tapes as installing dampers and spacers onto it.



FJQ(FFJQ)spacer for double conductor



TJ jamper spacer dampersfor



FJZ spacer for double conductor



Arcing Horn



FD dampers



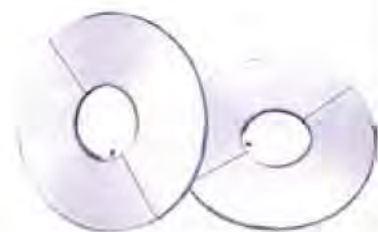
FR dampers



FDZ dampers



FF(FD–L) dampers



FLD aluminium armor tape



FJZ square frame type spacer dampers



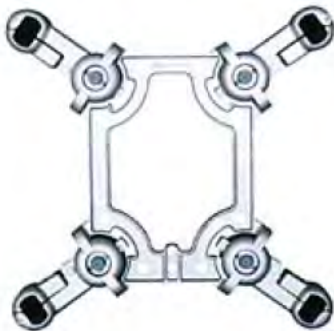
JZF4 square frame type spacer dampers



FJZ Cross type spacer dampers



FYH prformed armor rod



JZF4 ectangular frame spacer dampers



JTZ4 Jumper spacer dampersfor



Acers-dampers for Six-bundle Conductor



JPL grading and shielding rings for 500KV line



JL grading and shielding rings for 500KV line



FP grading and shielding rings for 500KV line



ZC type weights pieces



Suspension counter weight aluminium and accessories

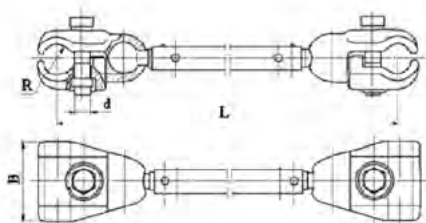


ZC type weights pieces





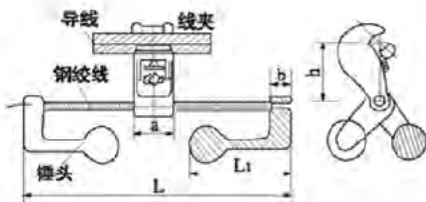
1、 Spacers For Double Conductor



Catalog No.	Applicable Conductor (mm ²)	Dimension(mm)		Axial load \geq (KV)	Weight (kg)
		R	L		
FJQ-403	120-150	9.5	400	7	1.00
FJQ-404	185-240	11.0	400	7	1.00
FJQ-405	300-400	14.5	400	10	1.20
FJQ-204	185-240	11.0	200	7	0.85
FJQ-205	300-400	14.5	200	10	1.05
FJQ-455	300-400	15.4	450	10	2.43

The body is aluminium.the other parts are hot-dip galvanized steel.

2、 Combined Type Spacer-dampers



Catalog No.	Applicable Conductor	Dimensions(mm)				Specification	Weight (kg)	Cables Specification
		a	h	L ₁	L			
FDZ-1	7.00-12.0	50	66	120	320	19/1.8	0.7	1.80
FDZ-2	11.0-15.0	50	66	130	350	19/1.8	0.9	2.30
FDZ-3	14.0-19.0	60	66	150	430	19/2.2	1.7	4.40
FDZ-4	18.0-22.5	60	66	160	470	19/2.2	2.1	5.50
FDZ-5F	22.0-29.0	60	95	180	520	19/2.6	3.0	7.10
FDZ-6F	28.0-35.0	60	95	180	520	19/2.6	3.6	8.30
FDZ-1T	7.8	50	30.7	120	320	19/1.8	0.7	1.80
FDZ-2T	9.0-9.6	50	30.7	130	350	19/1.8	0.9	2.30
FDZ-3T	11.0-11.5	60	44.7	150	430	19/2.2	1.7	4.40
FDZ-4T	13.0	60	44.7	160	470	19/2.2	2.1	5.50

Clamp is aluminium alloy and counter weight piece ys grey cast iron,painted If user demands the counter weight piece will be hot-dip galvanized.

2、Shielding Rings

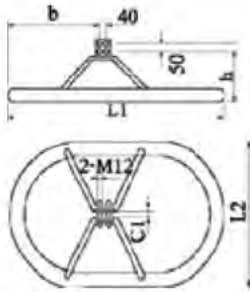


Fig 1

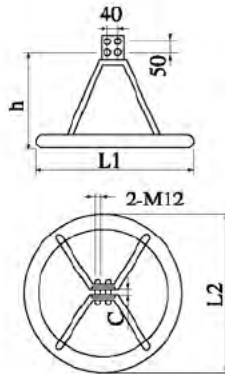


Fig 2

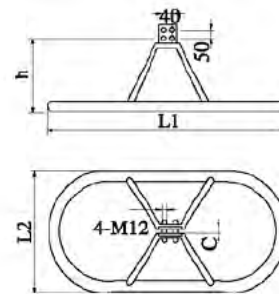
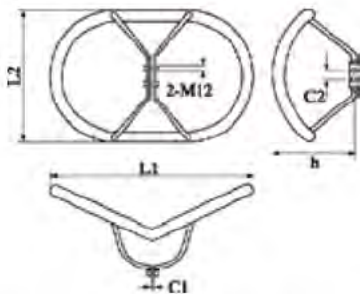


Fig 2

Catalog No.	Fig No.	Dimensions(mm)					Weight (kg)
		L ₁	L ₂	h	b	C	
FP-1060x660SP	Fig 1	1060	660	310	330	18	6.7
FP-820x660S	Fig 1	820	660	150	330	23	5.3
FP-660	Fig 2	660	660	290		18	4.8
FP-1060x660D	Fig 3	1060	660	200		24	6.1
FP-1060x660S	Fig 3	1060	660	410		24	6.5

The bodies are aluminium, the other parts are steel and hot-dip galvanized.

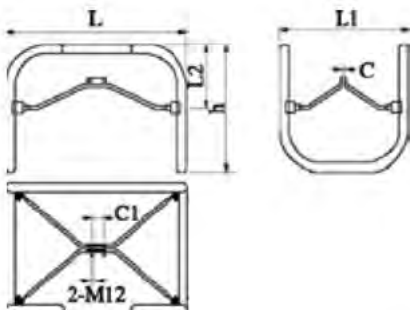
3、Grading Rings



Catalog NO.	Dimensions(mm)					Weight (kg)
	L ₁	L ₂	h	C ₁	C ₂	
FJV-1060x660	1060	660	500	20	80	6.7

The bodies are aluminium, the other parts are steel and hot-dip galvanized.

4、Grading & shielding Rings

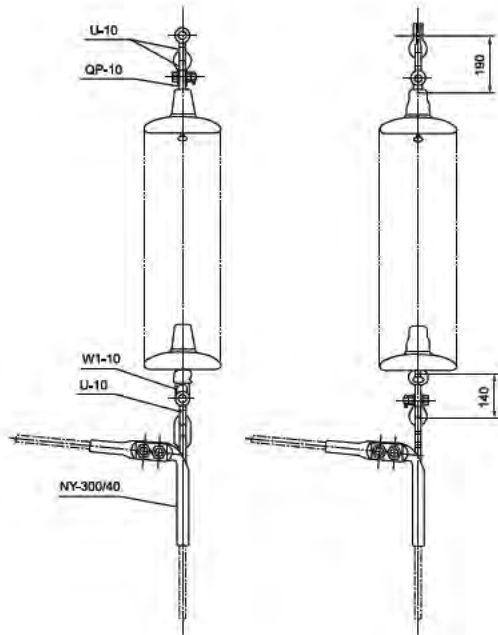


Catalog NO.	Dimensions(mm)						Weight (kg)
	L	L ₁	L ₂	C ₁	C	h	
JPL-1200 × 860	1200	860	425	80	20	850	17.6
JPL-1550 × 860	1550	860	425	100	20	850	18.2

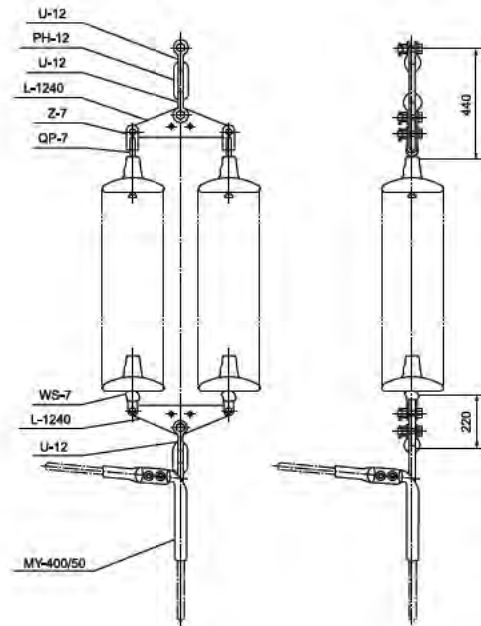
The bodies are aluminium, the other parts are steel and hot-dip galvanized.



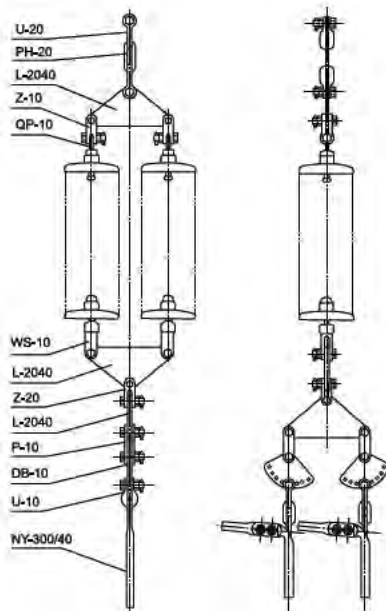
Appendix9:Single Tension String for One Conductor



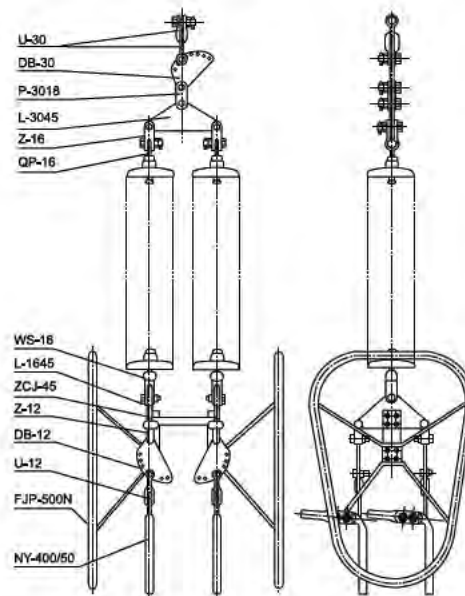
Appendix10:Double Tension Strings for One Conductor



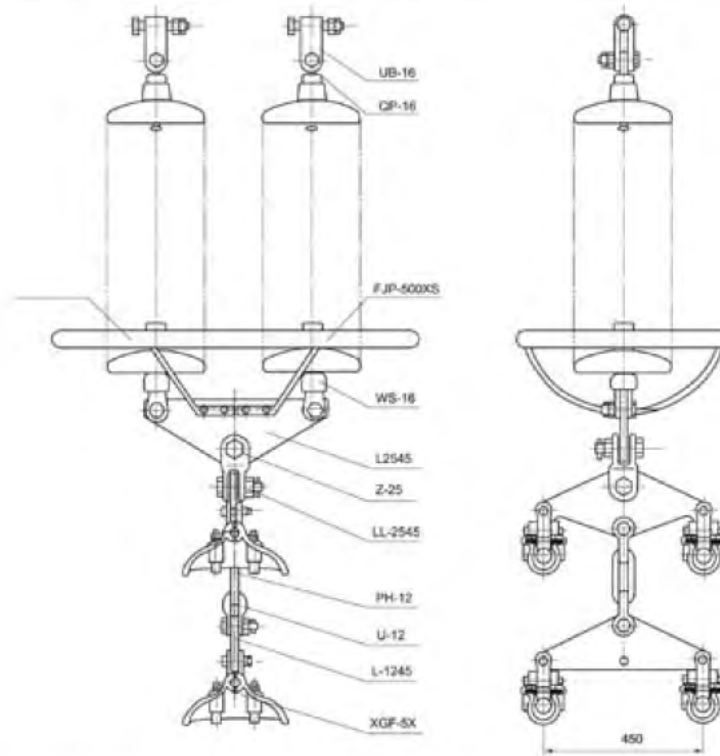
Appendix11:Double Tension Strings for Two-Bundle Conductor



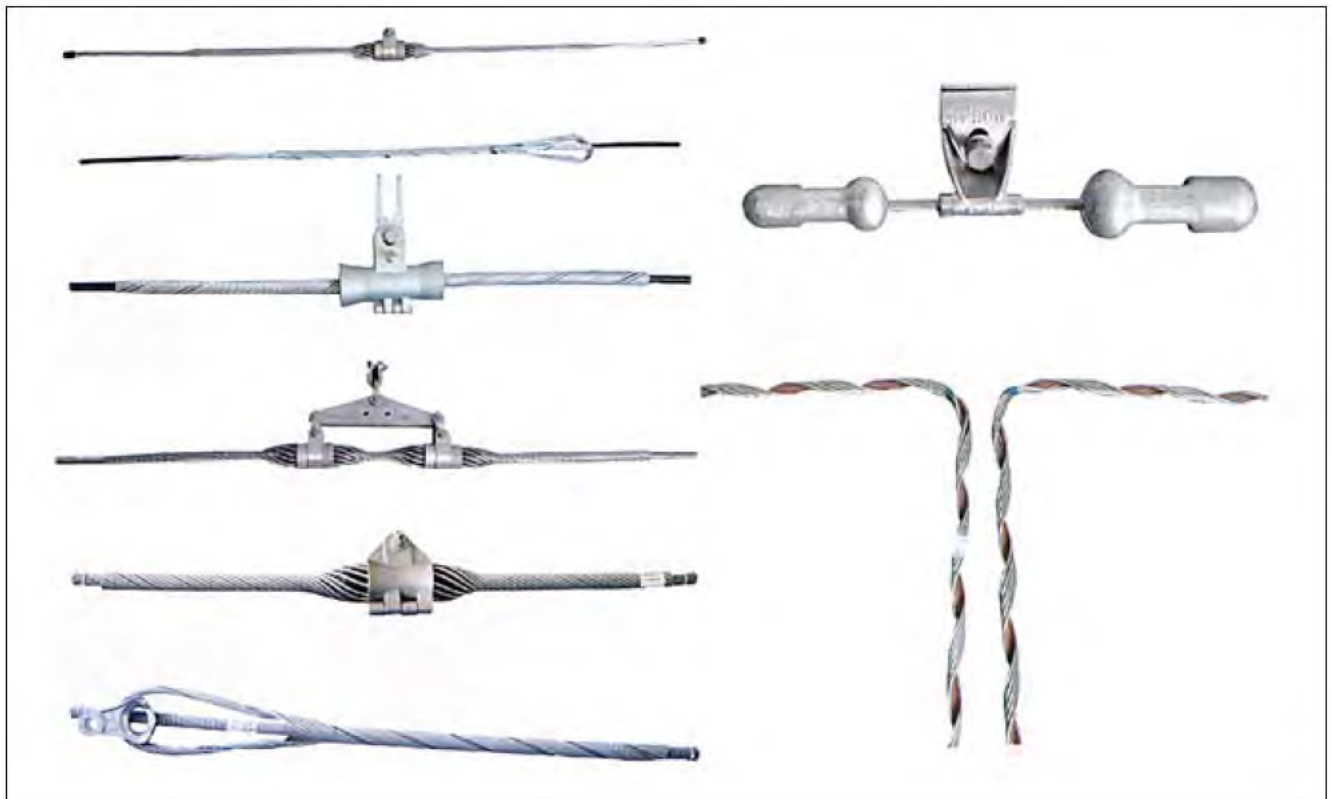
Appendix12:Double Tension Strings for Four-Bundle Conductor



Appendix16-2:Double Suspension String for Four-Bundle Conductor(Corona-proof Clamp)



5、Opgw Fittings

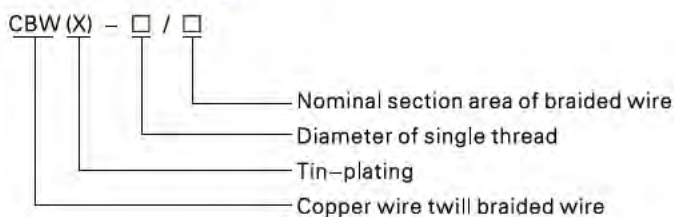




Cables Accessories & Arresters

Copper Braid Wire

Model and Meaning



Usage

- The copper braided wire is used as flexible jointing wire of electric appliance, switch appliance, electric stove and storage battery etc.

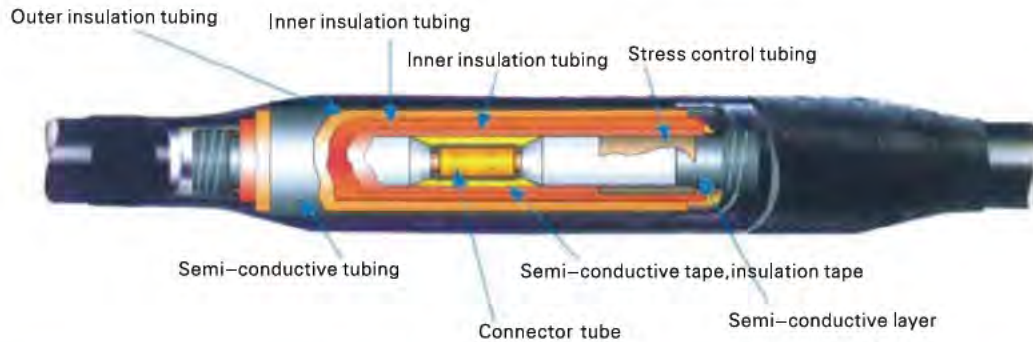
Technique performance

- Copper braided wire adopts super-quality round copper wire or tinning soft round copper wire to be braided in multiple-thread one layer or many layers.
- The DC electrical resistivity(20°C) of copper braided wire is lower than 0.022 Ω .mm²/m, the DC electrical resistivity(20°C) of tinning copper braided wire is lower than 0.234 Ω .mm²/m

CBW20 AND CBWX-20 TYPE

Section (mm ²)		Number of skeins x threads/diameter of a single thread(mm)	Size(mm)		20°C Direct Current resistance Ω/km no more than		Calculating weight (kg/km)
Standard	Calculating		The width no more than	Thickness for reference	CBW-20	CBWX-20	
16	16.59	24×22×1/0.20	16	3.0	1.30	1.36	166
25	24.88	24×33×1/0.20	18	3.5	0.87	0.91	249
35	33.18	24×44×1/0.20	20	4.0	0.65	0.68	331
50	49.77	24×33×2/0.20	22	5.0	0.43	0.45	498
70	66.36	24×44×2/0.20	24	6.5	0.32	0.33	664
95	90.49	24×40×3/0.20	20	–	0.24	0.25	905
120	120.55	24×40×4/0.20	22	–	0.18	0.19	1207
150	150.82	24×40×5/0.20	24	–	0.14	0.15	1508
185	180.98	24×40×6/0.20	26	–	0.12	0.13	1810
240	241.31	24×40×8/0.20	30	–	0.089	0.093	2413
300	301.63	24×40×10/0.20	35	–	0.071	0.075	3016
400	401.17	24×40×10/0.20+36×44×2/0.20	40	–	0.054	0.056	4004
500	500.65	24×40×10/0.20+48×44×3/0.20	45	–	0.043	0.045	5007
630	633.43	24×40×10/0.20+48×44×5/0.20	50	–	0.034	0.036	6334

2、35KV Heat Shrinkable Cable Joint



Name	Part No	Name	Part No
Single core joint	JSY-35/1.1	Three core joint	JSY-35/3.1
	JSY-35/1.2		JSY-35/3.2
	JSY-35/1.3		JSY-35/3.3
	JSY-35/1.4		JSY-35/3.4

3、8.7/15KV Cold Shrinkable Cable Termination



NLS(single core)



WLS(single core)



NLS(three core)



WLS(three core)

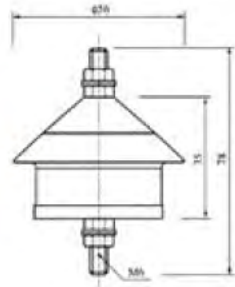
Cable terminal type selection form			
	Part No(indoor)	Part No(outdoor)	Cable Section(mm ²)
8.7/15kv Single-core	NLS-15/1.1	WLS-15/1.1	25-50
	NLS-15/1.2	WLS-15/1.2	70-120
	NLS-15/1.3	WLS-15/1.3	150-240
	NLS-15/1.4	WLS-15/1.4	300-500
8.7/15kv Three-core	NLS-15/3.1	WLS-15/3.1	25-50
	NLS-15/3.2	WLS-15/3.2	70-120
	NLS-15/3.3	WLS-15/3.3	150-240
	NLS-15/3.4	WLS-15/3.4	300-500



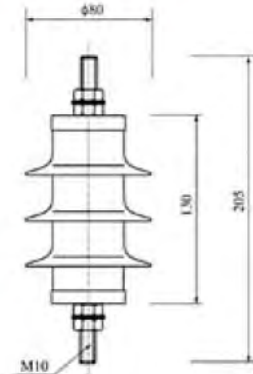
4、 Safety Cover



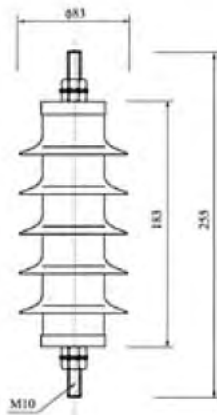
5、 Arresters



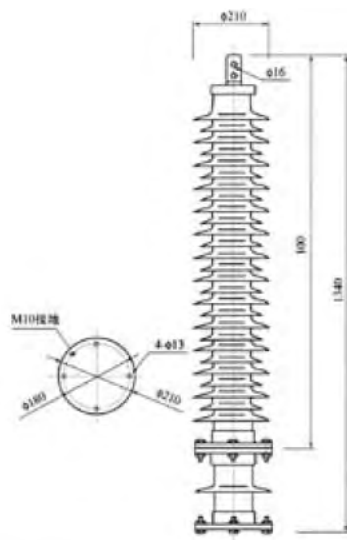
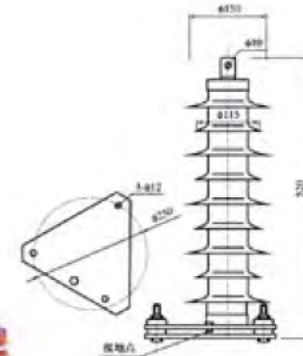
For 0.6-1KV power distribution



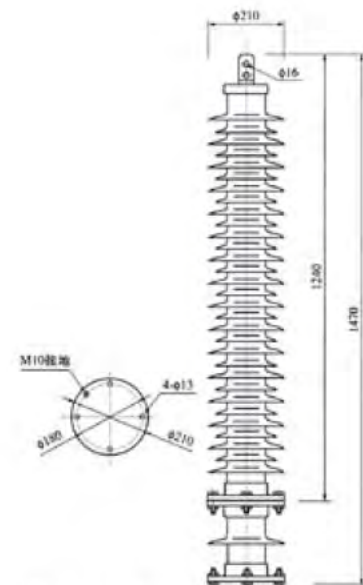
For 6KV power distribution



For 10KV power distribution



For 66KV substation
 For 66KV for overhead line



For 110KV substation
 For 110KV for overhead line



Silicone Rubber Insulator



Equalizing divider rings



FXBUW-12/70

FXB-15/70

FXBW4-22/70

FXB-24/70

FXBU-24/70

FXB-24/70

FXB-24/70



FXBOW-28/70

FXBUW-33/70

FXBW4-35/70

FXBOW36/70

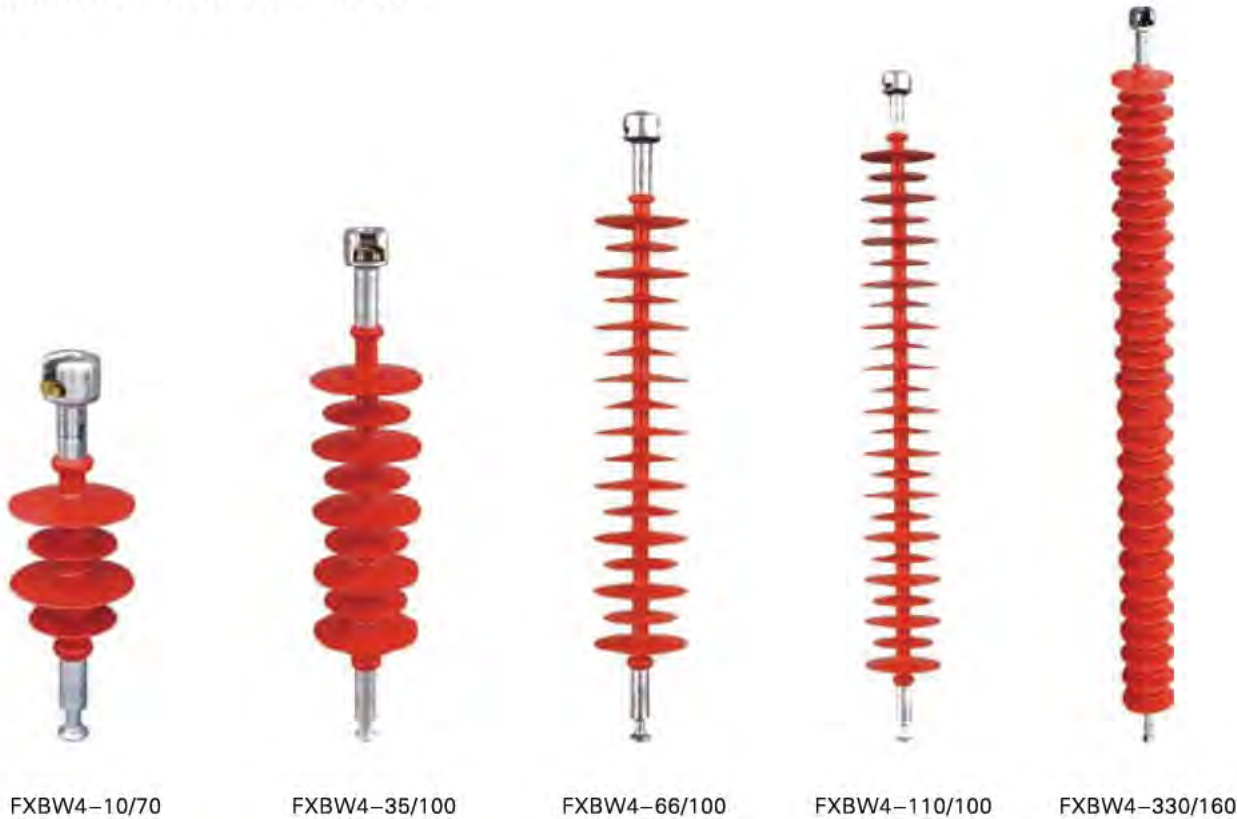
FXBUW-36/70

FXBO-36/70

FXBO-36/70

Part No	Rated voltage	Rated mechanical load	Height	Insulating Distance Li	Min.Nominal Creepage Distance	D Insulators Diameter millimetre	1min electronic source frequency wet withstand voltage	Full wave lightning impulse withstand voltage
FXBUW-12/70	12	12	70	390	460	98/88	42	105
FXBW-15/70	15	15	70	445	620	98/88	42	105
FXBW-22/70	22	22	70	480	620	130/90	42	110
FXB-24/70	24	24	70	500	635	148/118	42	150
FXBOW-28/70	28	28	70	560	1250	88	95	230
FXBUW-33/70	33	33	70	560	1130	92/62	95	230
FXBW-35/70	35	35	70	580	1200	148/118	95	230
FXBUW-36/70	36	36	70	580	1250	88	95	230
FXBO-36/70	36	36	70	650	1320	148/118	95	230

Silicon Rubber Insulator



FXBW4 Type Suspension Rod Insulators

High voltage circuitry rod suspension insulators suit for pollution resistance, especially in the heavy pollution resistance, dilatation intension is high, antisoil capability is good, installation using is convenience and so on, connection configuration form which prescribes ball and socket connection is basic form. general dimension and characteristic as followed:

Part No	Rated voltage	Rated mechanical load	Height	Insulating Distance Li	Min, Nominal Creepage Distance	Full wave lightning impulse withstand voltage(peak value)	Power frequency withstand voltage	Creepage distance
FXBW4-10/70	10	70	400	200	480	110	45	48
FXBW4-10/100	10	100	440	200	480	110	45	48
FXBW4-22/70	22	70	550	370	850	185	95	38
FXBW4-22/100	22	100	590	370	850	185	95	38
FXBW4-35/70	35	70	660	460	1200	230	105	35
FXBW4-35/100	35	70	700	460	1200	230	105	35
FXBW4-66/70	66	70	900	720	1900	410	185	28
FXBW4-66/100	66	100	940	720	1900	410	185	28
FXBW4-110/70	110	70	1200	1000	3150	550	230	28
FXBW4-110/100	110	100	1240	1000	3150	550	230	28
FXBW4-220/100	220	100	2150	1900	6300	1000	395	28
FXBW4-220/160	220	160	2240	1900	6300	1000	395	28
FXBW4-330/160	330	160	2990	2700	10000	1495	600	28



Silicone Rubber Insulator



FZS(W) Type Support Insulators

